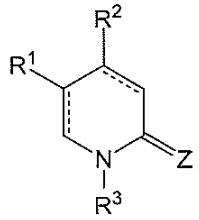
CLAIMS

1. A compound having the structure of formula (I):



(I)

or a pharmaceutically acceptable salt thereof, wherein

R^1 is selected from the group consisting of halogen, -CN, $-C(O)R^8$, $-SO_2R^{16}$, C_{1-6} alkyl optionally substituted with one or more R^4, C_{2-6} alkenyl optionally substituted with one or more R^4, C_{2-6} alkynyl optionally substituted with one or more R^4, C_{6-10} aryl optionally substituted with one or more R^4, 5-10 membered heteroaryl optionally substituted with one or more R^4, C_{3-10} carbocyclyl optionally substituted with one or more R^4, and 3-10 membered heterocyclyl optionally substituted with one or more R^4;

R^2 is selected from the group consisting of halogen, -CN, $-OR^5$, $-SR^5$, $-NR^6R^7$, and $-C(O)R^8$;

R^3 is selected from the group consisting of hydrogen, phenyl, $-(CH_2)_n$-(5-10 membered heteroaryl), $-(CH_2)_n$-(C_{3-10} carbocyclyl), and $-(CH_2)_n$-(3-10 membered heterocyclyl), each optionally substituted with one or more R^9;

each R^4 is independently selected from the group consisting of halogen, -CN, -OH, $-C(O)R^8$, $-SO_2R^{16}$, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkoxy, optionally substituted C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, 5-10 membered heteroaryl optionally substituted with one or more R^{11}, or independently two geminal R^4 together are oxo;

each R^5 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{2-8} alkoxyalkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, and $-(CH_2)_n$-(3-10 membered heterocyclyl) optionally substituted with one or more R^{10};

R^6 is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl

optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, $-C(O)R^8$, and $-C(O)OR^5$;

R^7 is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, $-C(O)R^8$, and $-C(O)OR^5$;

or R^6 and R^7 together with the nitrogen to which they are attached form a 3-10 membered heterocyclyl optionally substituted with one or more R^{10};

each R^8 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

each R^9 is independently selected from the group consisting of hydroxy, halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkylthio, optionally substituted C_{2-8} alkoxyalkyl, optionally substituted C_{3-10} carbocyclyl, optionally substituted C_{6-10} aryl, $-OR^5$, $-NR^{14}R^{15}$, $-C(O)R^8$, $-SO_2R^{16}$, -CN, and $-NO_2$;

each R^{10} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, and optionally substituted C_{2-6} alkynyl, or independently two geminal R^{10} together are oxo;

each R^{11} is independently selected from the group consisting of halogen, -CN, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, $-O-(CH_2)_n-C_{1-8}$ alkoxy, $-C(O)R^8$, and optionally substituted C_{1-6} alkoxy;

each R^{12} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

each R^{13} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

R^{14} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

R^{15} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

each R^{16} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

Z is selected from oxygen and sulfur;

each n is independently an integer from 0 to 4; and

the bonds represented by a solid and dashed line are independently selected from the group consisting of a single bond and a double bond, provided that

when R^3 is H, then R^1 is selected from C_{6-10} aryl optionally substituted with one or more R^4, or 5-10 membered heteroaryl optionally substituted with one or more R^4;

when R^3 is a phenyl; R^2 is OR^5 or NR^6R^7; then R^1 is not triazolyl;

when R^3 is 4-methyl phenyl, R^2 is morpholinyl, and Z is O; then R^1 is not methyl; and

when R^3 is 4-methyl phenyl, R^2 is $-N(CH_3)_2$, Z is O; then R^1 is not methyl.

2. The compound of Claim 1, wherein

R^2 is selected from the group consisting of halogen, $-OR^5$, $-NR^6R^7$, and $-C(O)R^8$;

R^3 is selected from the group consisting of phenyl, $-(CH_2)_n$-(5-10 membered heteroaryl), $-(CH_2)_n$-(C_{3-10} carbocyclyl), and $-(CH_2)_n$-(3-10 membered heterocyclyl), each optionally substituted with one or more R^9;

each R^9 is independently selected from the group consisting of halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkylthio, optionally substituted C_{2-8} alkoxyalkyl, optionally substituted C_{3-10} carbocyclyl, optionally substituted C_{6-10} aryl, $-OR^5$, $-NR^{14}R^{15}$, $-C(O)R^8$, $-SO_2R^{16}$, and $-NO_2$; and

each R^{11} is independently selected from the group consisting of halogen, -CN, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, and optionally substituted C_{1-6} alkoxy.

3. The compound of Claim 1 or 2, wherein R^1 is a C_{6-10} aryl optionally substituted with one or more R^4.

4. The compound of Claim 3, wherein R^1 is a phenyl optionally substituted with one or more R^4.

5. The compound of Claim 1 or 2, wherein R^1 is a 5-10 membered heteroaryl optionally substituted with one or more R^4.

6. The compound of Claim 5, wherein R^1 is a pyrazolyl or 1-methyl pyrazolyl optionally substituted with one or more R^4.

7. The compound of any one of Claims 1 to 6, wherein each R^4 is independently selected from halogen, or optionally substituted C_{1-6} alkyl.

8. The compound of Claim 7, wherein R^4 is fluoro.

9. The compound of Claims 7, wherein R^4 is methyl.

10. The compound of any one of Claims 1 to 9, wherein R^2 is halogen.

11. The compound of Claim 10, wherein R^2 is selected from bromo or chloro.

12. The compound of any one of Claims 1 to 9, wherein R^2 is –CN.

13. The compound of any one of Claims 1 to 9, wherein R^2 is $-OR^5$.

14. The compound of Claim 13, wherein R^5 is selected from hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-8} alkoxyalkyl, C_{7-14} aralkyl optionally substituted with one or more R^{11}, C_{6-10} aryl optionally substituted with one or more R^{11}, and $-(CH_2)_n$-(3-10 membered heterocyclyl) optionally substituted with one or more R^{10}.

15. The compound of Claim 14, wherein R^5 is hydrogen.

16. The compound of Claim 14, wherein R^5 is optionally substituted C_{1-6} alkyl.

17. The compound of Claim 16, wherein R^5 is methyl or halogen substituted ethyl.

18. The compound of Claim 14, wherein R^5 is C_{6-10} aryl optionally substituted with one or more R^{11}.

19. The compound of Claim 18, wherein R^5 is phenyl optionally substituted with one or more R^{11}.

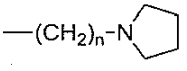
20. The compound of Claim 14, wherein R^5 is C_{7-14} aralkyl optionally substituted with one or more R^{11}.

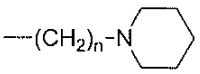
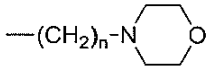
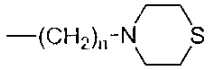
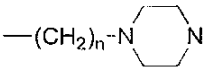
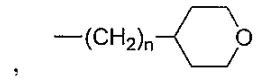
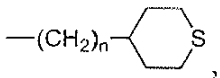
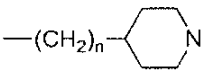
21. The compound of Claim 20, wherein R^5 is benzyl optionally substituted with one or more R^{11}.

22. The compound of Claim 14, wherein R^5 is optionally substituted C_{2-8} alkoxyalkyl.

23. The compound of Claim 22, wherein R^5 is selected from $-(CH_2)_2OCH_3$, $-(CH_2)_2OC_3H_7$ or $-(CH_2)_2O(CH_2)OCH_3$.

24. The compound of Claim 14, wherein R^5 is $-(CH_2)_n$-(5 or 6 membered heterocyclyl) optionally substituted with one or more R^{10}.

25. The compound of Claim 24, wherein R^5 is  optionally substituted with one or more R^{10}.

26. The compound of Claim 24, wherein R^5 is selected from , , , or , , , or , each optionally substituted with one or more R^{10}.

27. The compound of any one of Claims 1 to 9, wherein R^2 is $-NR^6R^7$.

28. The compound of Claim 27, wherein each R^6 and R^7 is independently selected from hydrogen, C_{1-6} alkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, $-C(O)R^8$, or $-C(O)OR^5$.

29. The compound of Claim 28, wherein R^6 is hydrogen or C_{1-6} alkyl.

30. The compound of Claim 28 or 29, wherein R^7 is hydrogen.

31. The compound of Claim 28 or 29, wherein R^7 is C_{1-6} alkyl.

32. The compound of Claim 28 or 29, wherein R^7 is C_{6-10} aryl optionally substituted with one or more R^{11}.

33. The compound of Claim 32, wherein R^7 is phenyl optionally substituted with one or more R^{11}.

34. The compound of Claim 32, wherein R^7 is unsubstituted phenyl.

35. The compound of Claim 28 or 29, wherein R^7 is C_{7-14} aralkyl optionally substituted with one or more R^{11}.

36. The compound of Claim 35, wherein R^7 is benzyl or $-(CH_2)_2Ph$, each optionally substituted with one or more R^{11}.

37. The compound of Claim 35, wherein R^7 is unsubstituted benzyl or unsubstituted $-(CH_2)_2Ph$.

38. The compound of Claim 28 or 29, wherein R^7 is (6 membered heteroaryl)alkyl optionally substituted with one or more R^{11}.

39. The compound of Claim 38, wherein R^7 is $-CH_2$-pyridyl, $-CH_2$-pyrazinyl, or $-CH_2$-pyrimidinyl, each optionally substituted with one or more R^{11}.

40. The compound of Claim 38, wherein R^7 is $-CH_2$-pyridyl, $-CH_2$-pyrazinyl or - CH_2-pyrimidinyl, each unsubstituted.

41. The compound of Claim 28 or 29, wherein R^7 is $-C(O)R^8$.

42. The compound of Claim 41, wherein R^8 is selected from C_{1-6} alkyl, C_{6-10} aryl, or $-NR^{12}R^{13}$.

43. The compound of Claim 42, wherein R^8 is selected from methyl, ethyl, propyl, isopropyl, butyl, pentyl or phenyl.

44. The compound of Claim 42, wherein R^8 is $-NR^{12}R^{13}$.

45. The compound of Claim 44, wherein each R^{12} and R^{13} is independently selected from hydrogen, C_{1-6} alkyl, or benzyl.

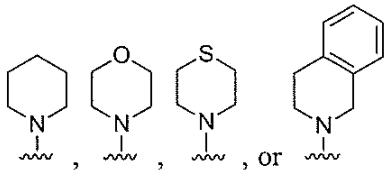
46. The compound of Claim 28 or 29, wherein R^7 is $-C(O)OR^5$.

47. The compound of Claim 46, wherein R^5 is selected from hydrogen, C_{1-6} alkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, or C_{7-14} aralkyl optionally substituted with one or more R^{11}.

48. The compound of Claim 47, wherein R^5 is selected from methyl, ethyl, isopropyl, butyl.

49. The compound of Claim 47, wherein R^5 is selected from phenyl or benzyl, each optionally substituted with one or more R^{11}.

50. The compound of Claim 27, wherein R^6 and R^7 together with the nitrogen to which they are attached form a 6-10 membered heterocyclyl optionally substituted with one or more R^{10}.

51. The compound of Claim 50, wherein the heterocyclyl formed by R^6 and R^7 together with the nitrogen to which they are attached is selected from , each optionally substituted with one or more R^{10}.

52. The compound of Claim 50 or 51, wherein the heterocyclyl formed by R^6 and R^7 together with the nitrogen to which they are attached is unsubstituted.

53. The compound of any one of Claims 1 to 52, wherein R^{10} is C_{1-6} alkyl.

54. The compound of any one of Claims 1 to 52, wherein two geminal R^{10} together are oxo.

55. The compound of any one of Claims 1 to 9, wherein R^2 is $-SR^5$.

56. The compound of Claim 55, wherein R^5 is C_{6-10} aryl optionally substituted with one or more R^{11}.

57. The compound of Claim 55 or 56, wherein R^5 is optionally substituted phenyl.

58. The compound of any one of Claims 1 to 9, wherein R^2 is $-C(O)R^8$.

59. The compound of Claim 58, wherein R^8 is selected from $-NR^{12}R^{13}$.

60. The compound of Claim 59, wherein each R^{12} and R^{13} is independently selected from hydrogen, optionally substituted C_{1-6} alkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, or C_{7-14} aralkyl optionally substituted with one or more R^{11}.

61. The compound of Claim 60, wherein each R^{12} and R^{13} is independently selected from hydrogen, C_{1-6} alkyl, phenyl optionally substituted with one or more R^{11}, or benzyl optionally substituted with one or more R^{11}.

62. The compound of Claim 61, wherein the phenyl or benzyl is unsubstituted.

63. The compound of any one of Claims 1 to 9, wherein R^2 is $-C(O)OR^5$.

64. The compound of Claim 63, wherein R^5 is hydrogen or C_{1-6} alkyl.

65. The compound of any one of Claims 1 to 64, wherein each R^{11} is independently selected from –CN, halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{1-6} alkoxy, $-O-(CH_2)_n-C_{1-8}$ alkoxy, or $-C(O)\ NR^{12}R^{13}$.

66. The compound of Claim 65, wherein R^{11} is selected from –CN, –Cl, –F, $-CH_3$, $-OCH_3$, $-OC_2H_5$, $-CF_3$, $-OCF_3$, $-O-(CH_2)_2-OCH_3$, or $-C(O)NH_2$.

67. The compound of any one of Claims 1 to 66, wherein R^3 is phenyl optionally substituted with one or more R^9.

68. The compound of Claim 67 , wherein R^9 is selected from hydroxy, halogen, optionally substituted C_{1-6} alkyl, $-OR^5$, or $-NR^{14}R^{15}$.

69. The compound of Claim 68, wherein R^9 is selected from hydroxy, fluoro, chloro, methyl, ethyl, or trifluoromethyl.

70. The compound of Claim 68, wherein R^9 is $-OR^5$.

71. The compound of Claim 70, wherein R^5 is selected from hydrogen, C_{1-6} alkyl, halo substituted C_{1-6} alkyl, or C_{2-8} alkoxyalkyl.

72. The compound of Claim 71, wherein R^5 is selected from trifluoromethyl, ethyl or $-(CH_2)_2OCH_3$.

73. The compound of Claim 68, wherein R^9 is $-NH-C(O)R^8$.

74. The compound of Claim 73, wherein R^9 is selected from $-NH-C(O)-C_{1-6}$ alkyl, or $-NH-C(O)-NH_2$.

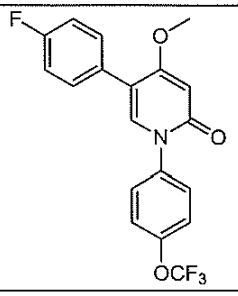
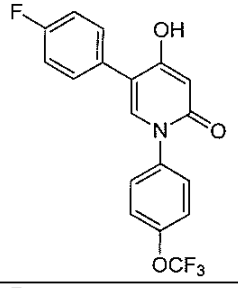
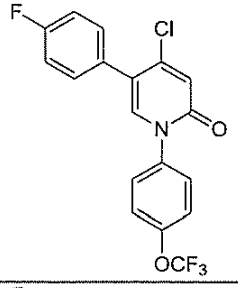
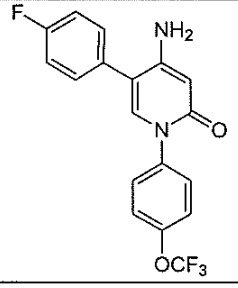
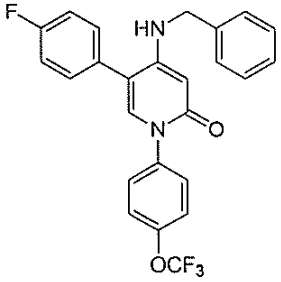
75. The compound of Claims 67 , wherein R^3 is unsubstituted.

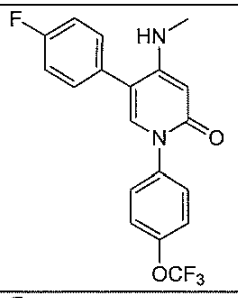
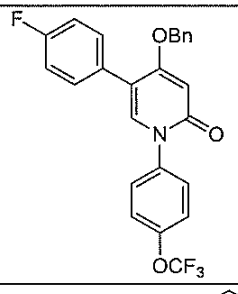
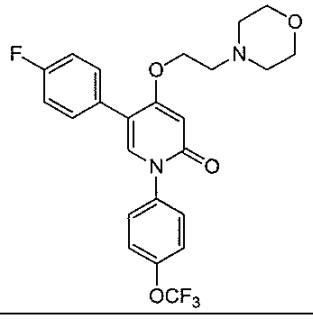
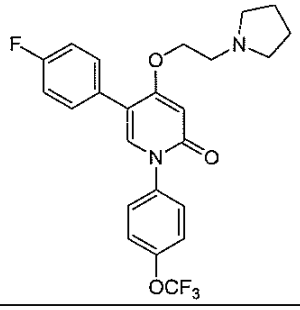
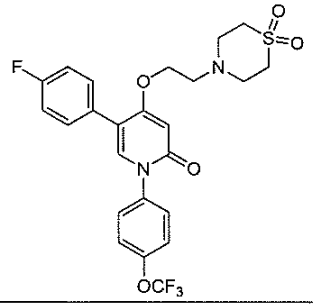
76. The compound of any one of Claims 1 and 3 to 66, wherein R^3 is hydrogen.

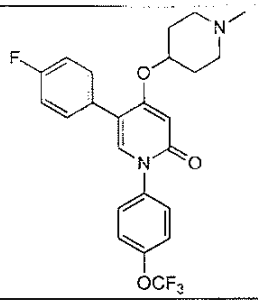
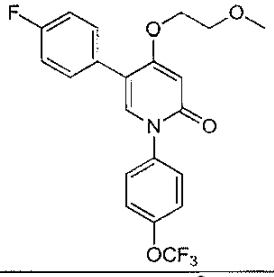
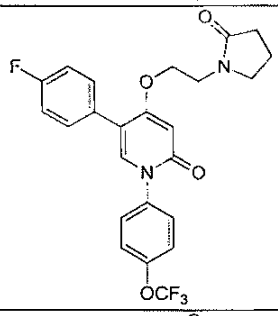
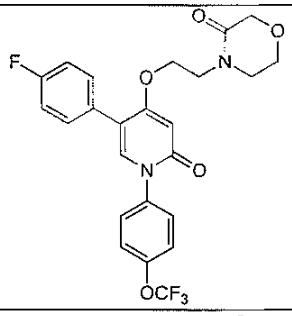
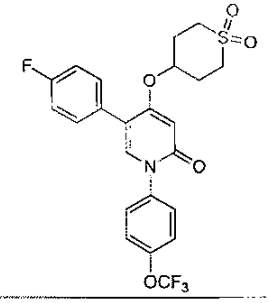
77. The compound of any one of Claims 1 to 75, wherein Z is oxygen.

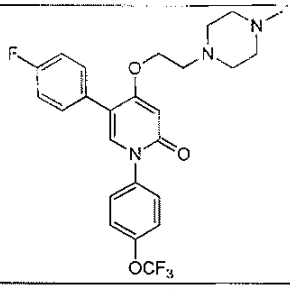
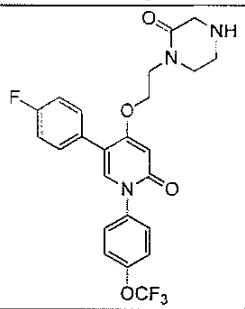
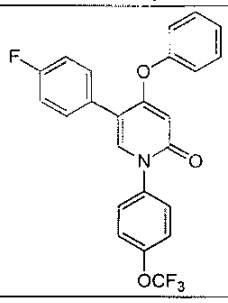
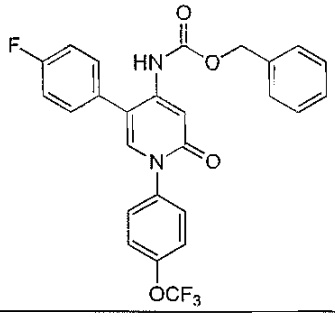
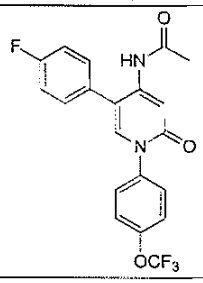
78. The compound of any one of Claims 1 to 77, wherein the bonds represented by a solid and dashed line are double bonds.

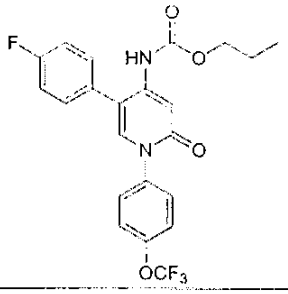
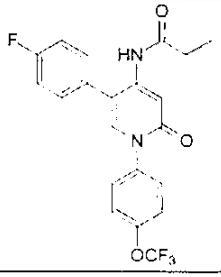
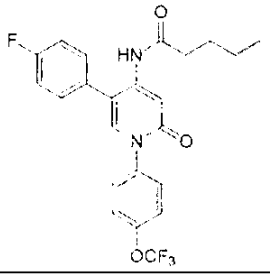
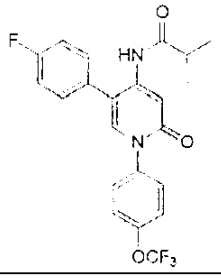
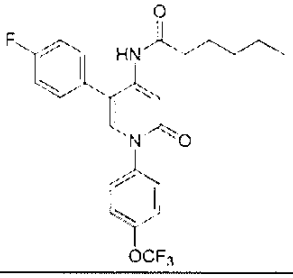
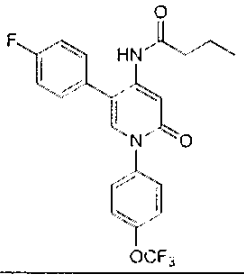
79. The compound of Claim 1, wherein the compound is selected from the group consisting of **Compounds 85-162, 401-414, 523-545, 550, 551, 664** and **696-707** as shown below, or pharmaceutically acceptable salts thereof

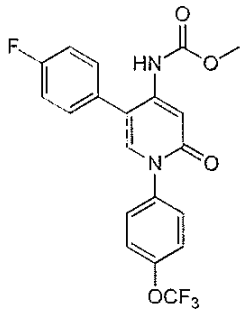
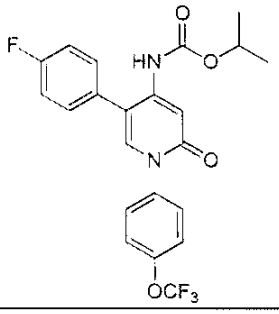
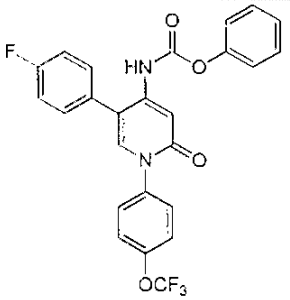
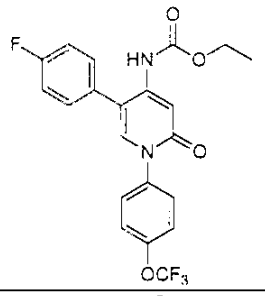
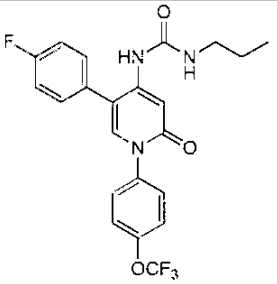
Compd. #	Structure
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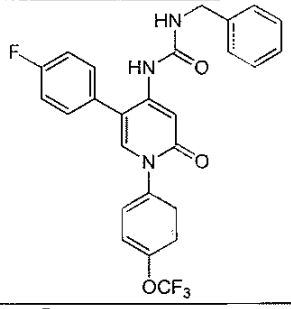
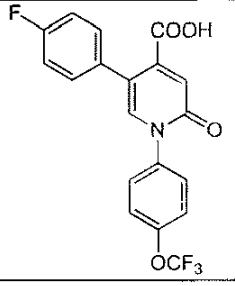
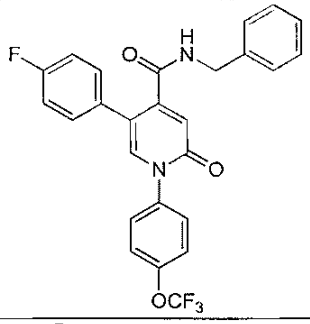
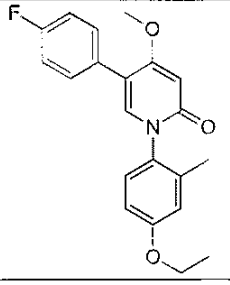
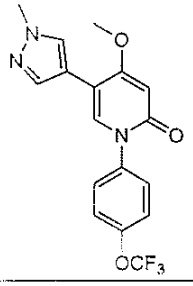
Compd. #	Structure
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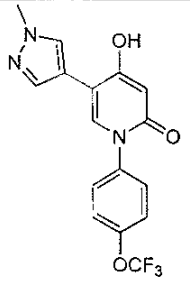
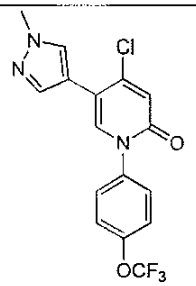
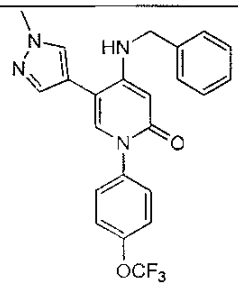
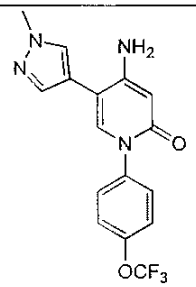
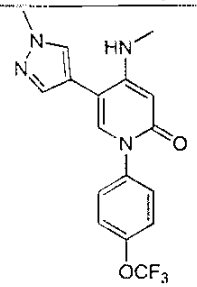
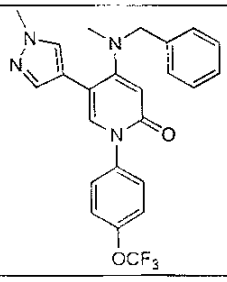
Compd. #	Structure
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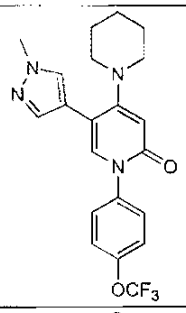
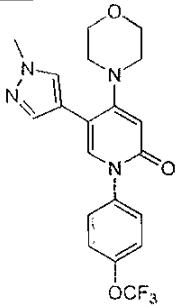
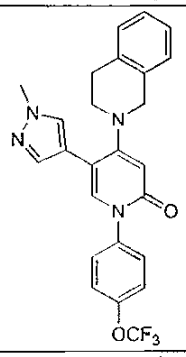
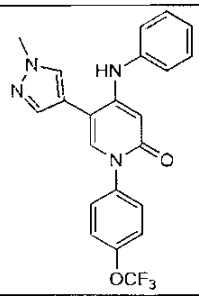
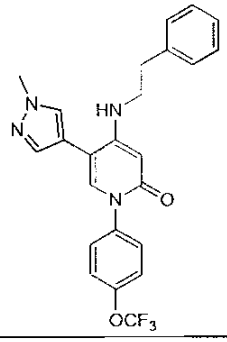
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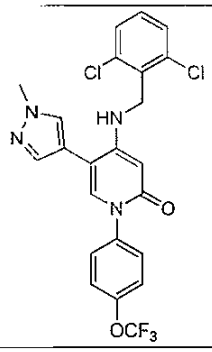
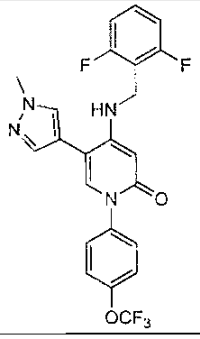
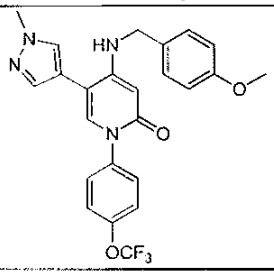
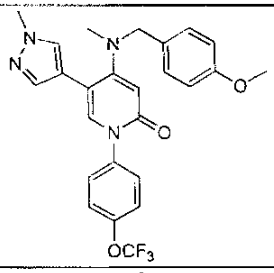
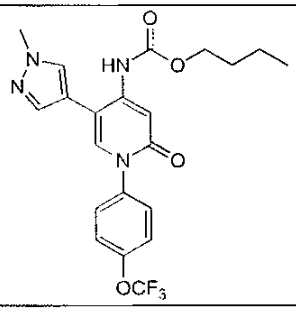
Compd. #	Structure
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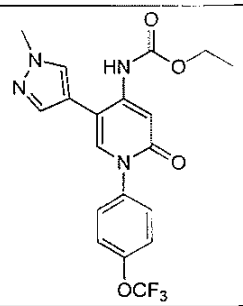
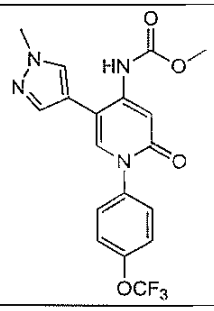
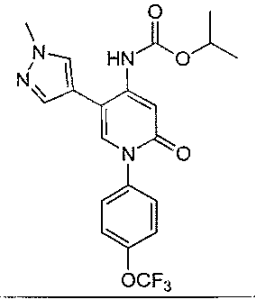
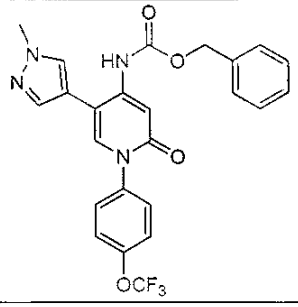
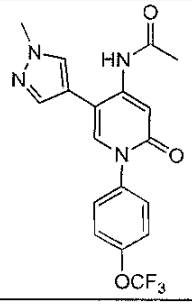
Compd. #	Structure
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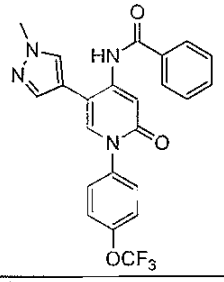
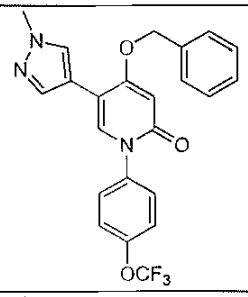
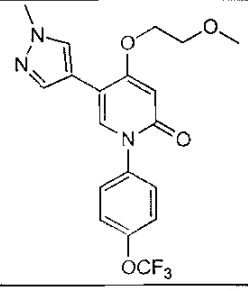
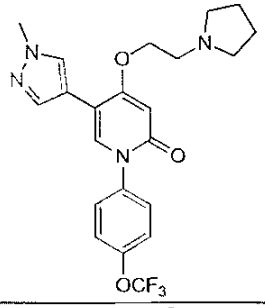
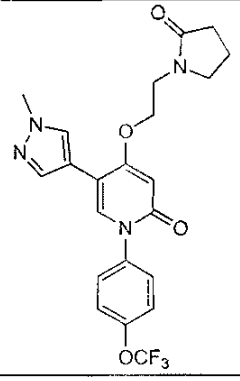
Compd. #	Structure
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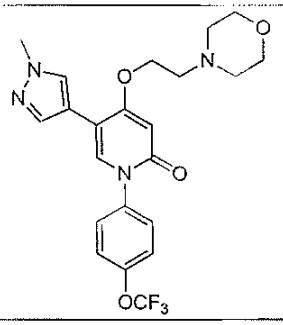
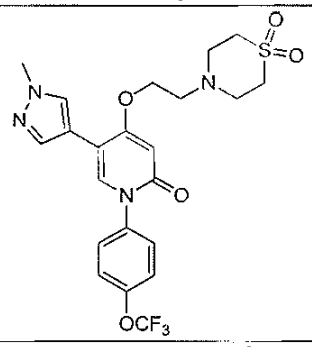
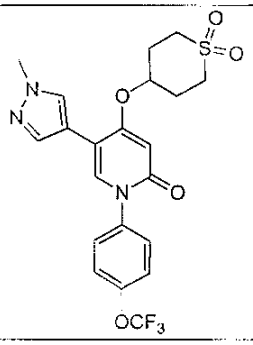
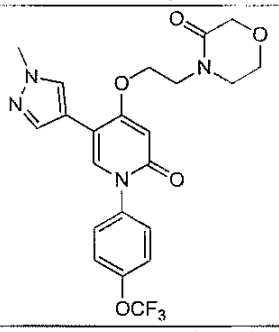
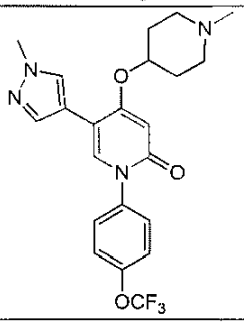
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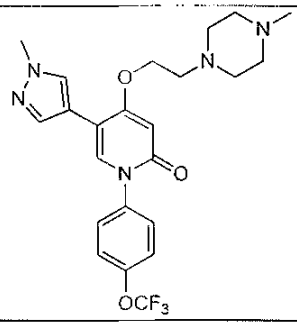
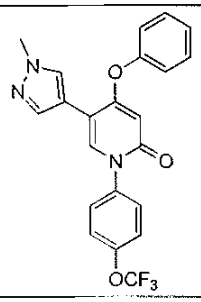
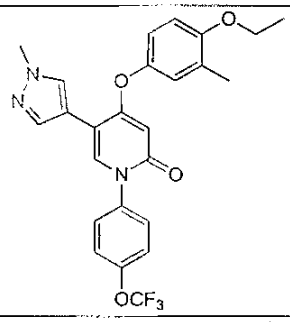
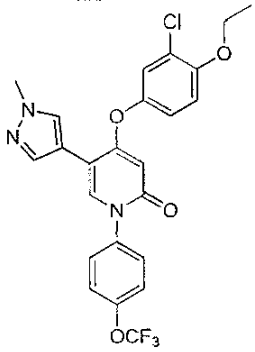
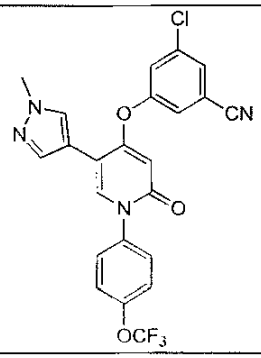
Compd. #	Structure
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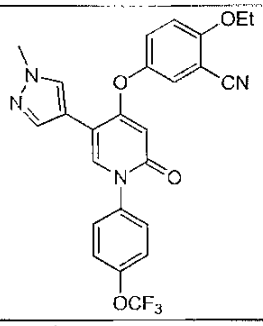
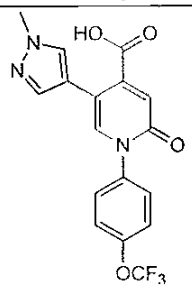
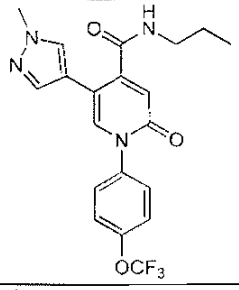
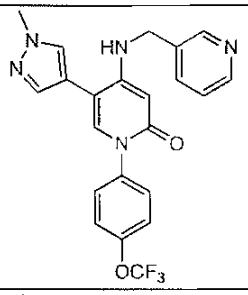
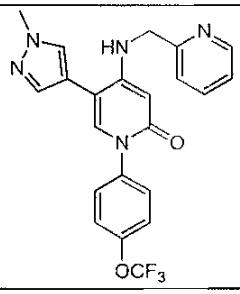
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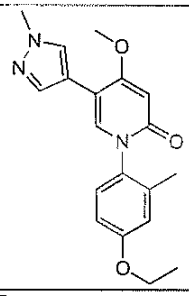
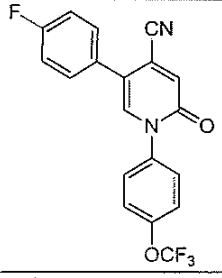
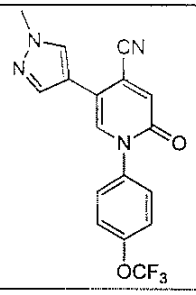
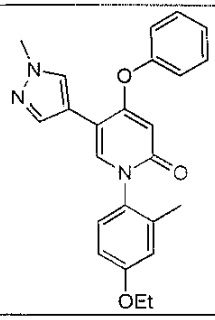
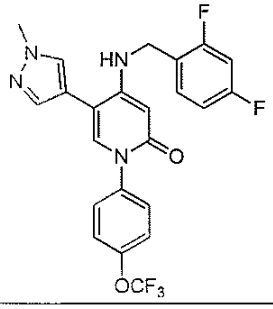
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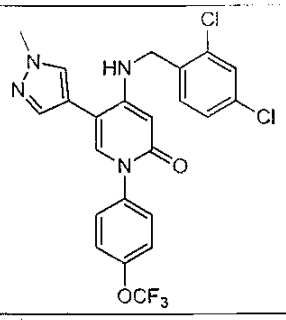
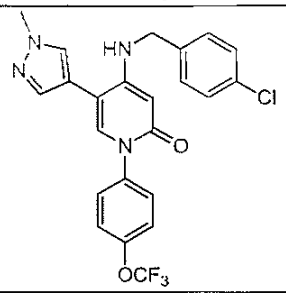
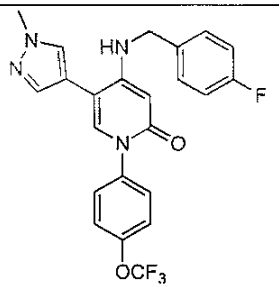
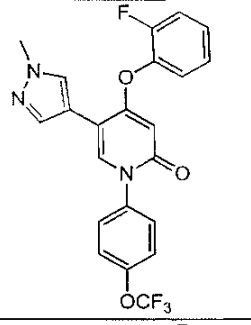
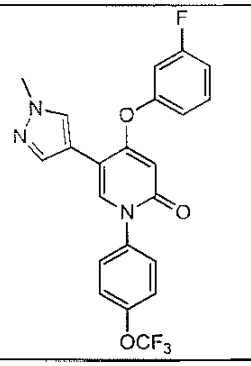
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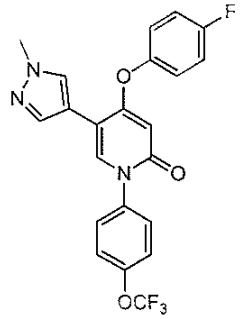
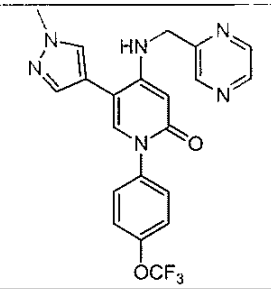
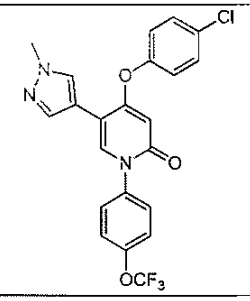
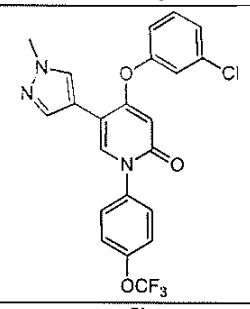
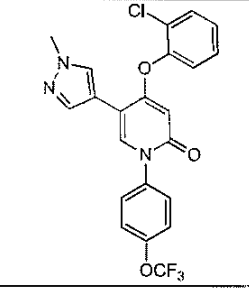
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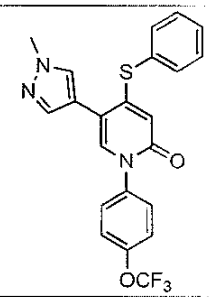
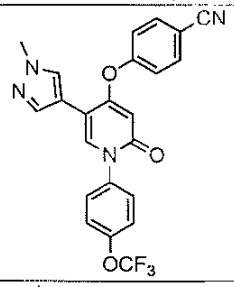
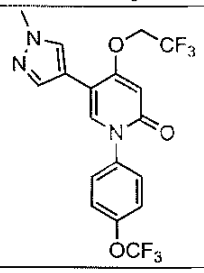
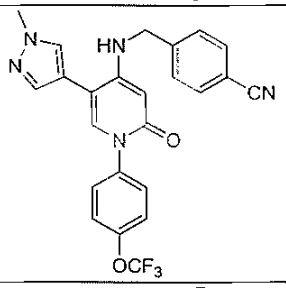
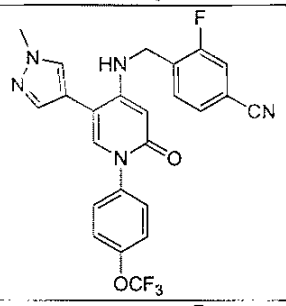
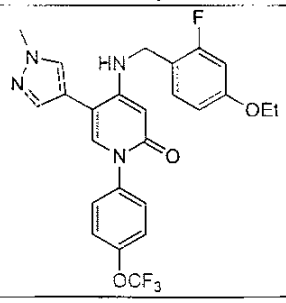
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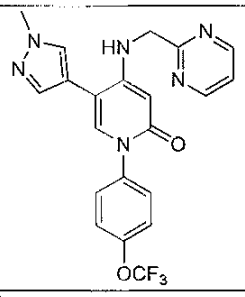
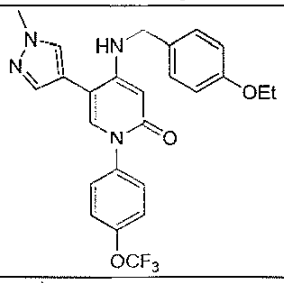
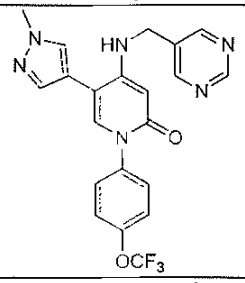
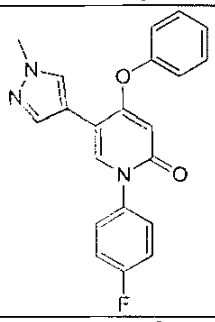
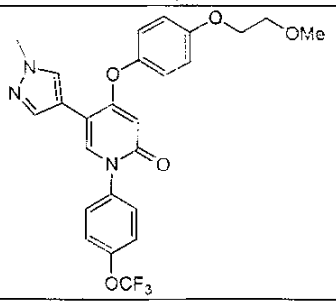
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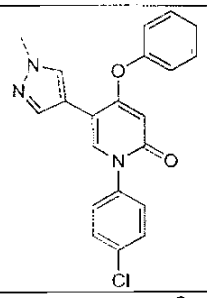
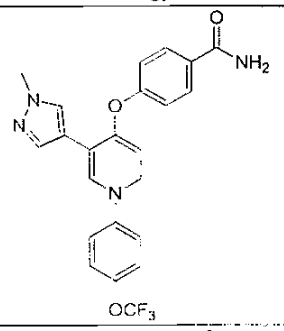
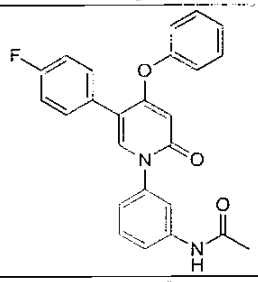
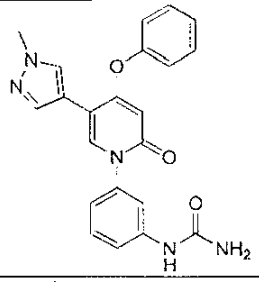
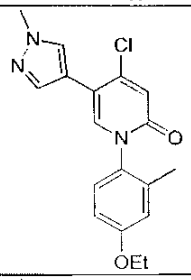
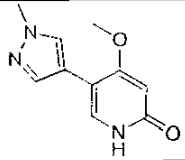
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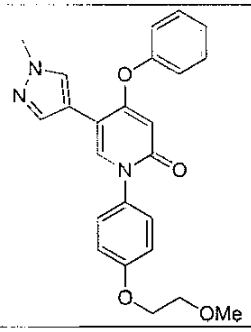
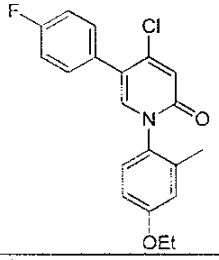
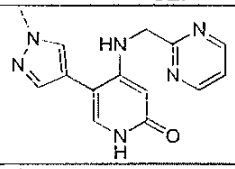
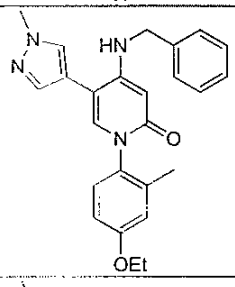
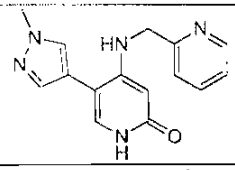
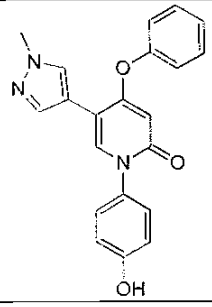
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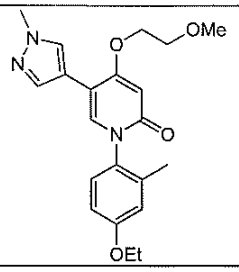
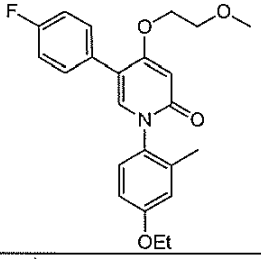
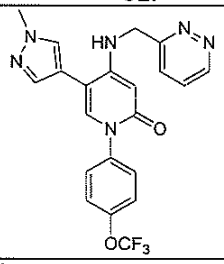
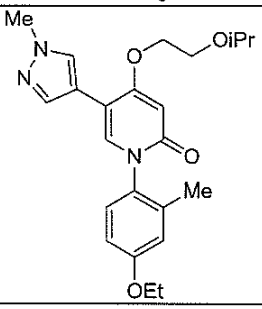
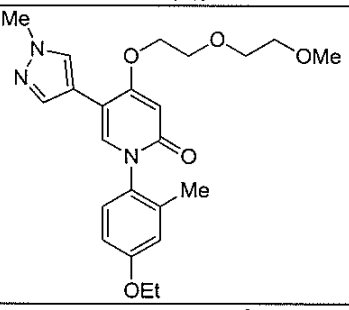
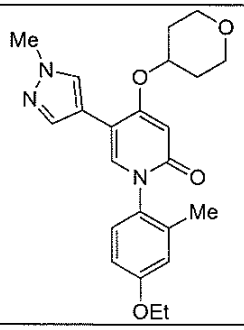
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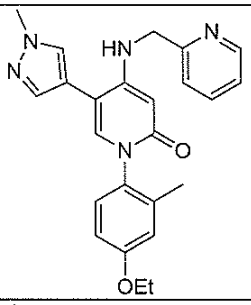
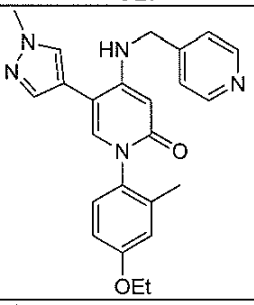
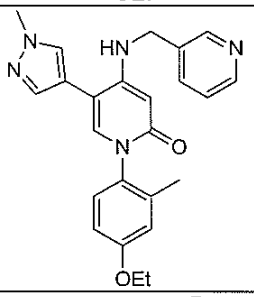
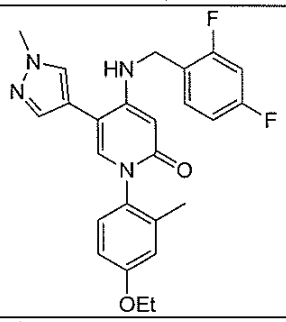
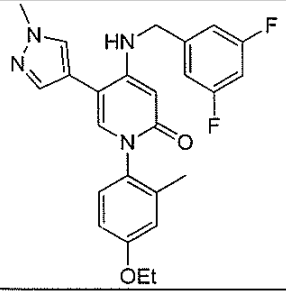
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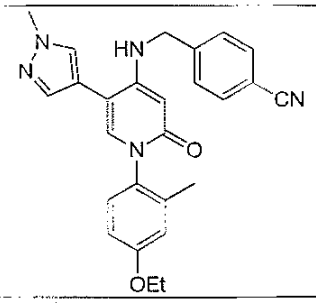
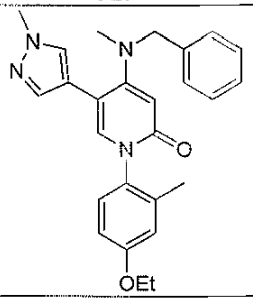
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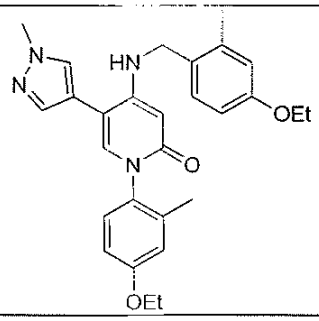
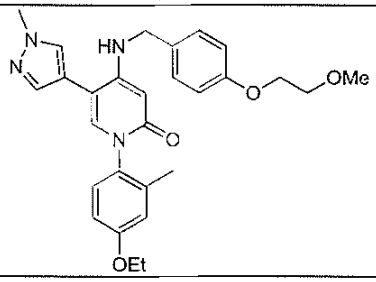
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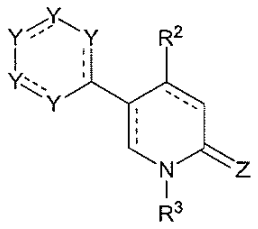
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Compd. #	Structure
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Compd. #	Structure
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Compd. #	Structure
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80. A compound having the structure of formula (II):



(II)

or a pharmaceutically acceptable salt thereof, wherein

R^2 is selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, and optionally substituted C_{2-6} alkynyl;

R^3 is selected from the group consisting of hydrogen, $-(CH_2)_n-(C_{6-10}$ aryl), $-(CH_2)_n-(5$-10 membered heteroaryl), $-(CH_2)_n-(C_{3-10}$ carbocyclyl), and $-(CH_2)_n-(3$-10 membered heterocyclyl), each optionally substituted with one or more R^9;

Y is selected from N and CR^4;

each R^4 is independently selected from the group consisting of hydrogen, halogen, -CN, -OH, $-C(O)R^8$, $-SO_2R^{16}$, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkoxy, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, 5-10 membered heteroaryl optionally substituted with one or more R^{11},

or independently two adjacent R^4 together with the carbon atoms to which they are attached form a fused ring selected from the group consisting of optionally substituted phenyl, optionally substituted 5-6 membered heteroaryl, optionally substituted C_{3-7} carbocyclyl, and optionally substituted 3-7 membered heterocyclyl;

each R^9 is independently selected from the group consisting of hydroxy, halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkylthio, optionally substituted C_{2-8} alkoxyalkyl, optionally substituted C_{3-10} carbocyclyl, optionally substituted C_{6-10} aryl, $-OR^5$, $-NR^{14}R^{15}$, $-C(O)R^8$, $-SO_2R^{16}$, -CN, and $-NO_2$;

R^{14} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

R^{15} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

each R^8 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally

substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

each R^{12} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

each R^{13} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

each R^5 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{2-8} alkoxyalkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, and $-(CH_2)_n$-(3-10 membered heterocyclyl) optionally substituted with one or more R^{10};

each R^{10} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, and optionally substituted C_{2-6} alkynyl, or independently two geminal R^{10} together are oxo;

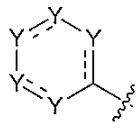
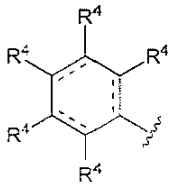
each R^{11} is independently selected from the group consisting of halogen, -CN, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, and optionally substituted C_{1-6} alkoxy;

each R^{16} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

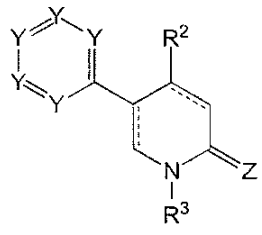
Z is selected from oxygen and sulfur;

each n is independently an integer from 0 to 4; and

the bonds represented by a solid and dashed line are independently selected from the group consisting of a single bond and a double bond.

81. The compound of Claim 80, wherein if R^3 is hydrogen, then  is , and the two adjacent R^4 together with the carbon atoms to which they are attached form a fused ring selected from optionally substituted 5 or 6 membered heteroaryl or optionally substituted 5 or 6 membered heterocyclyl.

82. The compound of Claim 80, wherein formula (II) is also represented by formula (IIa):



(IIa)

R^3 is selected from the group consisting of -$(CH_2)_n$-(C_{6-10} aryl), -$(CH_2)_n$-(5-10 membered heteroaryl), -$(CH_2)_n$-(C_{3-10} carbocyclyl), and -$(CH_2)_n$-(3-10 membered heterocyclyl), each optionally substituted with one or more R^9; and

each R^9 is independently selected from the group consisting of halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkylthio, optionally substituted C_{2-8} alkoxyalkyl, optionally substituted C_{3-10} carbocyclyl, optionally substituted C_{6-10} aryl, -OR^5, -$NR^{14}R^{15}$, -$C(O)R^8$, -SO_2R^{16}, and –NO_2.

83. The compound of any one of Claims 80 to 82, wherein R^2 is selected from optionally substituted C_{1-6} alkyl.

84. The compound of Claim 83, wherein R^2 is selected from methyl, ethyl, isopropyl, or trifluoromethyl.

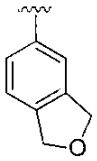
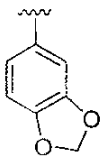
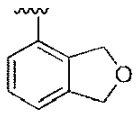
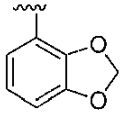
85. The compound of Claim 84, wherein R^2 is methyl.

86. The compound of any one of Claims 80, 81, and 83 to 85, wherein R^3 is hydrogen.

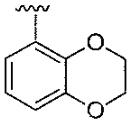
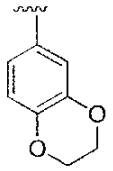
87. The compound of any one of Claims 80 to 85, wherein R^3 is selected from -$(CH_2)_n$-(C_{6-10} aryl), optionally substituted with one or more R^9.

88. The compound of Claim 87, wherein R^3 is -$(CH_2)_n$-phenyl optionally substituted with one or more R^9.

89. The compound of any one of Claims 80 and 82 to 85, wherein R^3 is selected from -$(CH_2)_n$-(9 membered heterocyclyl), optionally substituted with one or more R^9.

90. The compound of Claim 89, wherein R^3 is selected from , ,  or , each optionally substituted with one or more R^9.

91. The compound of any one of Claims 80 and 82 to 85, wherein R^3 is selected from -$(CH_2)_n$-(10 membered heterocyclyl), optionally substituted with one or more R^9.

92. The compound of Claim 91, wherein R^3 is selected from  or , each optionally substituted with one or more R^9.

93. The compound of any one of Claims 87 to 92, wherein n is 0.

94. The compound of any one of Claims 80 to 93, wherein each R^9 is independently selected from cyano, halogen, optionally substituted C_{1-6} alkyl, -OR^5, -$NR^{14}R^{15}$ or -$C(O)R^8$.

95. The compound of Claim 94, wherein R^9 is selected from methyl, ethyl, propyl isopropyl, or trifluoromethyl.

96. The compound of Claim 94, wherein R^9 is selected from fluoro or chloro.

97. The compound of Claim 94, wherein R^9 is -OR^5, and wherein R^5 is selected from optionally substituted C_{1-6} alkyl.

98. The compound of Claim 94 or 97, wherein R^5 is selected from methyl, ethyl, propyl, isopropyl or trifluoromethyl.

99. The compound of Claim 94, wherein R^9 is -$NR^{14}R^{15}$, and wherein each R^{14} and R^{15} is independently selected from hydrogen, C_{1-6} alkyl or -$C(O)R^8$.

100. The compound of Claim 99, wherein R^8 is selected from optionally substituted C_{1-6} alkyl, -OR^5 or -$NR^{12}R^{13}$.

101. The compound of Claim 100, wherein each R^{12} and R^{13} is independently selected from hydrogen or C_{1-6} alkyl.

102. The compound of Claim 100, wherein R^5 is selected from hydrogen or C_{1-6} alkyl.

103. The compound of any one of Claims 94 and 99 to 101, wherein each R^{14} and R^{15} is independently selected from hydrogen, methyl, ethyl, -$C(O)NH_2$, -$C(O)NHCH_3$, -$C(O)N(CH_3)_2$,-C(O)OH or –C(O)OEt.

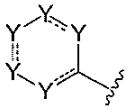
104. The compound of Claim 94, wherein R^9 is $-C(O)R^8$.

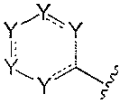
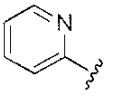
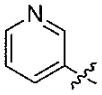
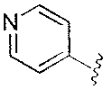
105. The compound of Claim 94 or 104, wherein R^8 is selected from optionally substituted C_{1-6} alkyl or $-NR^{12}R^{13}$.

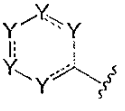
106. The compound of Claim 105, wherein each of R^{12} or R^{13} is independently selected from hydrogen or C_{1-6} alkyl.

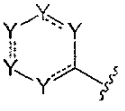
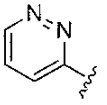
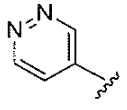
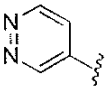
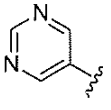
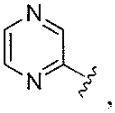
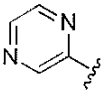
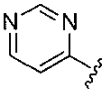
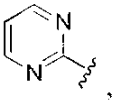
107. The compound of any one of Claims 87 to 93, wherein R^3 is unsubstituted.

108. The compound of any one of Claims 80 to 107, wherein all Y is CR^4.

109. The compound of any one of Claims 80 to 107, wherein at least one Y in  is N.

110. The compound of Claim 109, wherein  is selected from , , or , each optionally substituted with one to four R^4.

111. The compound of Claim 109, wherein two of Y in  are N.

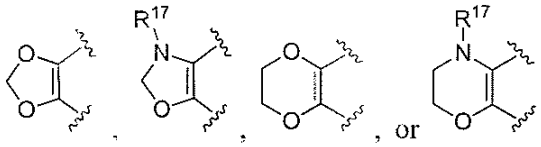
112. The compound of Claim 111, wherein  is selected from , , , , , , , or , each optionally substituted with one to three R^4.

113. The compound of any one of Claims 80 to 112, wherein R^4 is selected from hydrogen, halogen, -CN, optionally substituted C_{1-6} alkyl, optionally substituted C_{1-6} alkoxy or 5 membered heteroaryl optionally substituted with one or more R^{11}.

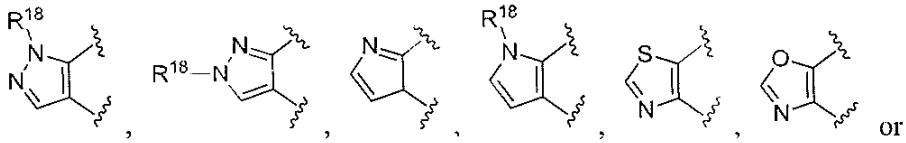
114. The compound of Claim 113, wherein R^4 is selected from hydrogen, fluoro, chloro, methyl, ethyl, methoxy, ethoxy or thiazolyl.

115. The compound of any one of Claims 80 to 112, wherein two adjacent R^4 together with the carbon atoms to which they are attached form a fused ring selected from optionally substituted 5 or 6 membered heteroaryl or optionally substituted 5 or 6 membered heterocyclyl.

116. The compound of Claim 115, wherein the optionally substituted 5 or 6 membered heterocyclyl formed by two adjacent R^4 together with the carbon atoms to which they are

attached is selected from , wherein each R^{17} is independently selected from hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{3-6} cycloalkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, or optionally substituted C_{2-8} alkoxyalkyl.

117. The compound of Claim 116, wherein R^{17} is selected from hydrogen, methyl, ethyl, $-(CH_2)_2OH$ or $-(CH_2)_2OCH_3$.

118. The compound of Claim 115, wherein the optionally substituted 5 or 6 membered heteroaryl formed by two adjacent R^4 together with the carbon atoms to which they are attached is selected from , , wherein each R^{18} is independently selected from hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{3-6} cycloalkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, or optionally substituted C_{2-8} alkoxyalkyl.

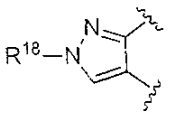
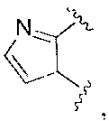
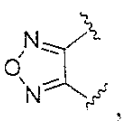
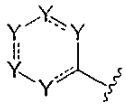
119. The compound of Claim 118, wherein R^{18} is selected from hydrogen or methyl.

120. The compound of any one of Claims 115 to 119, wherein the substituent on the 5 or 6 membered heteroaryl or 5 or 6 membered heterocyclyl formed by two adjacent R^4 together with the carbon atoms to which they are attached is selected from C_{1-6} alkyl, C_{1-6} alkoxy, oxo or halogen.

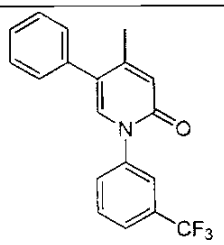
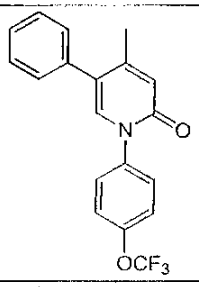
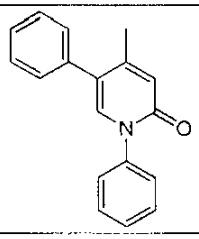
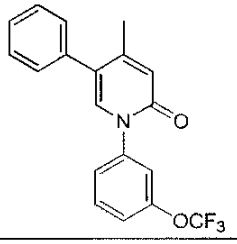
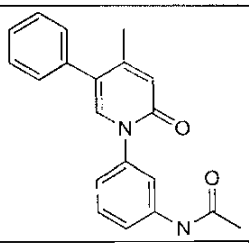
121. The compound of Claim 120, wherein the substituent on the 5 or 6 membered heteroaryl or 5 or 6 membered heterocyclyl formed by two adjacent R^4 together with the carbon atoms to which they are attached is selected from methyl, fluoro, or oxo.

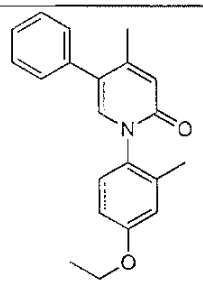
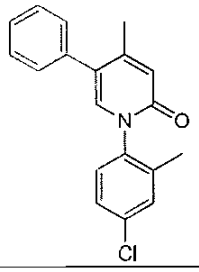
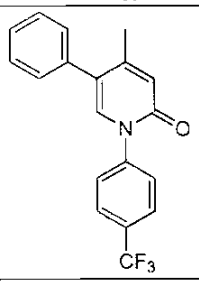
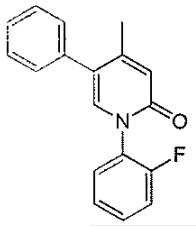
122. The compound of any one of Claims 80 to 121, wherein Z is oxygen.

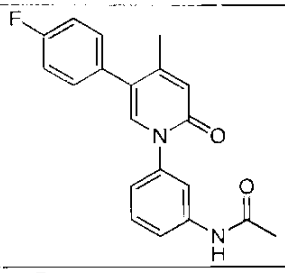
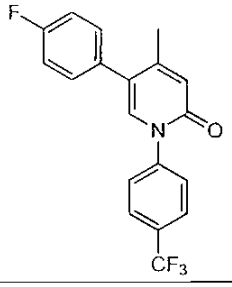
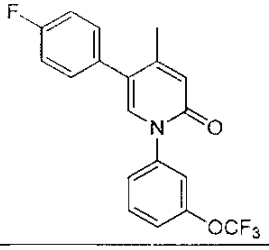
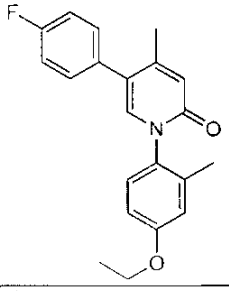
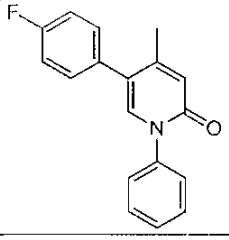
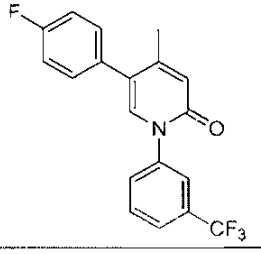
123. The compound of any one of Claims 80, 81 and 83 to 122, wherein the bonds represented by a solid and dashed line are double bonds, provided that when the optionally substituted 5 or 6 membered heteroaryl formed by two adjacent R^4 together with the carbon

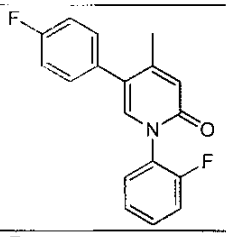
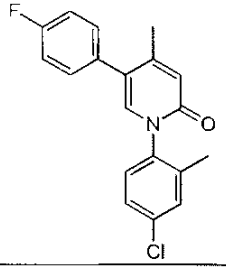
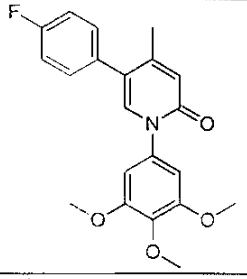
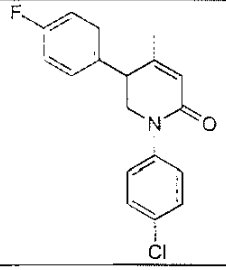
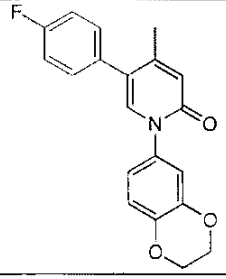
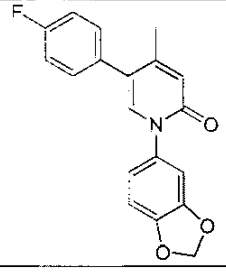
atoms to which they are attached is selected from , , or , one of the bonds represented by a solid and dashed line in  is a single bond.

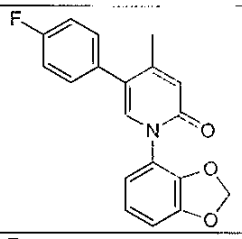
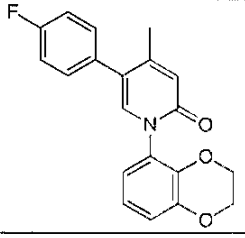
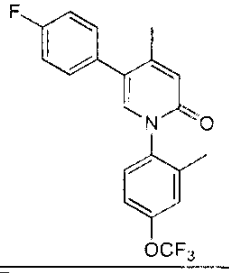
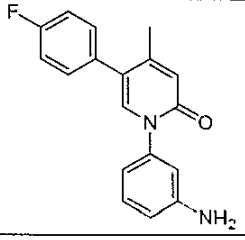
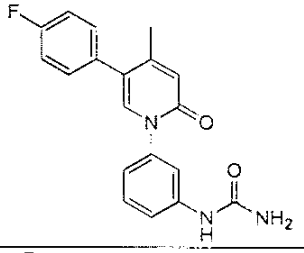
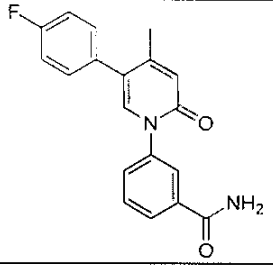
124. The compound of Claim 80, wherein the compound is selected from the group consisting of **Compounds 163-216, 241-243, 245, 246, 248-252, 254, 255, 258-261, 263, 415-430, 552-561, 566** and **629** as shown below, or pharmaceutically acceptable salts thereof

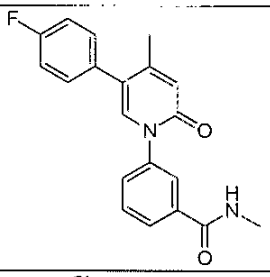
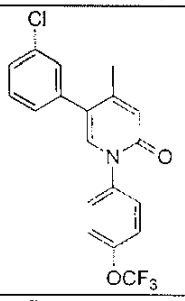
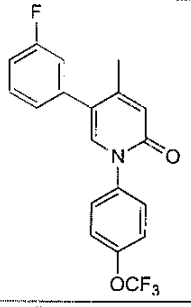
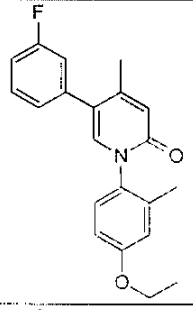
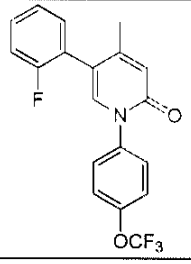
Compd. #	**Structure**
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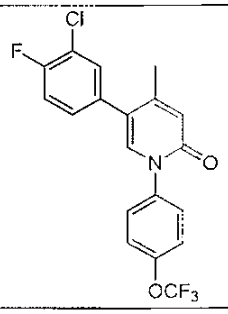
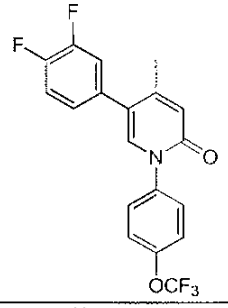
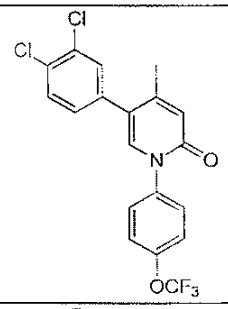
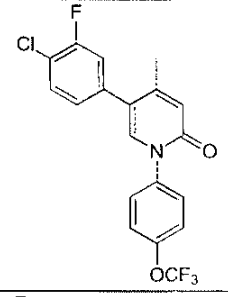
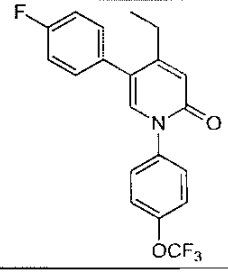
Compd. #	**Structure**
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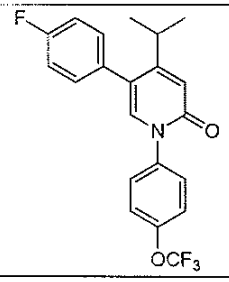
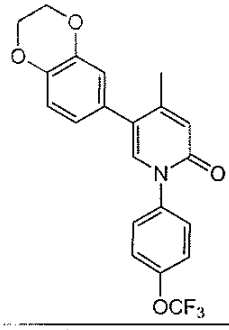
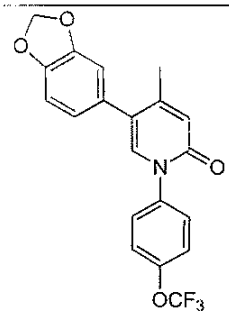
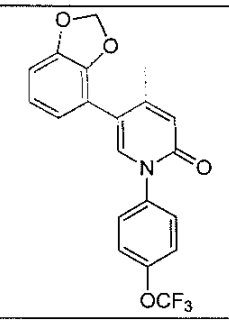
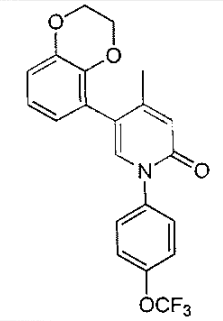
Compd. #	Structure
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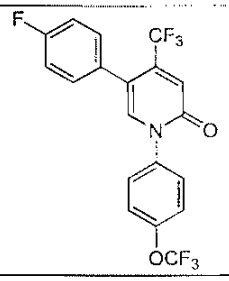
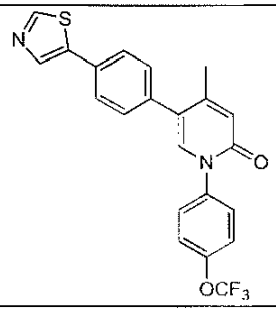
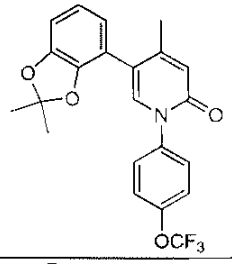
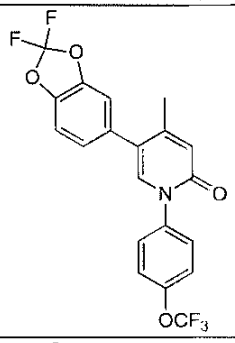
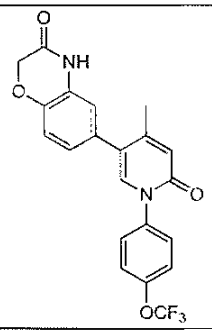
Compd. #	Structure
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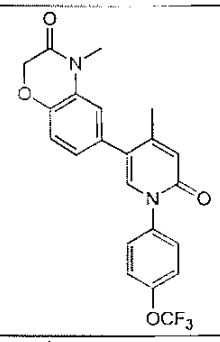
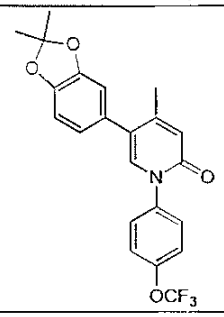
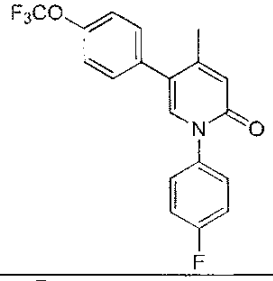
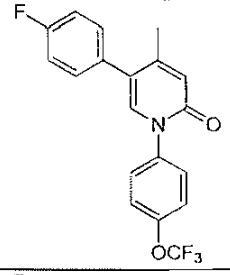
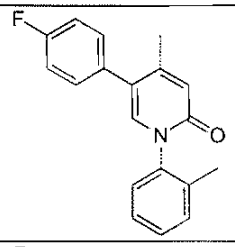
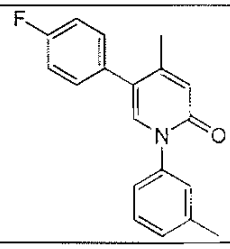
Compd. #	Structure
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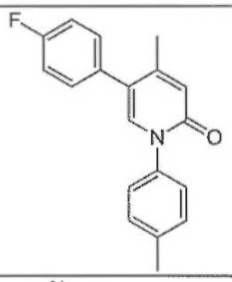
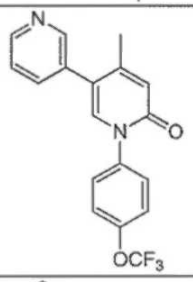
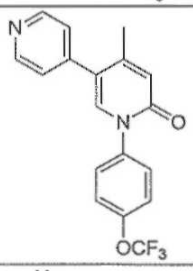
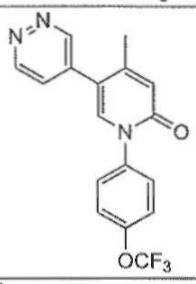
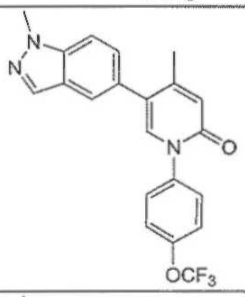
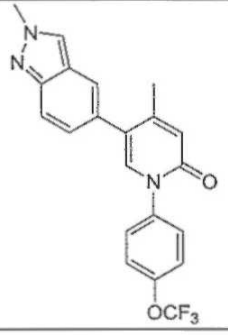
Compd. #	Structure
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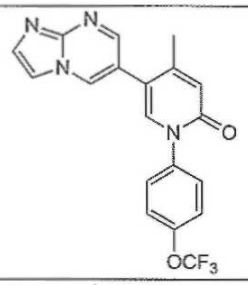
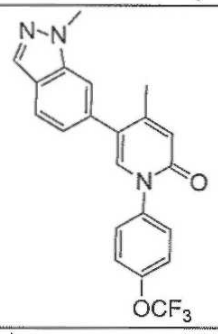
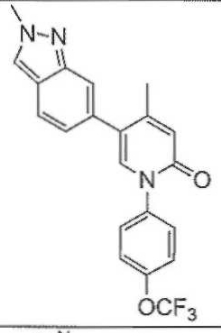
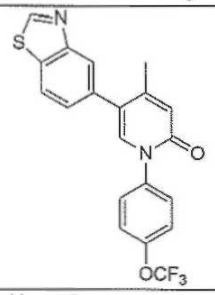
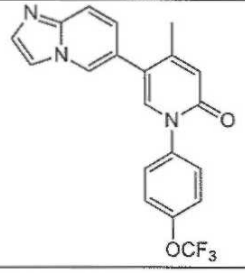
Compd. #	Structure
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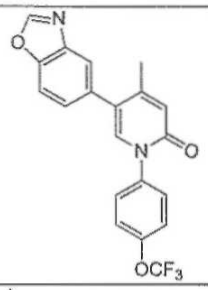
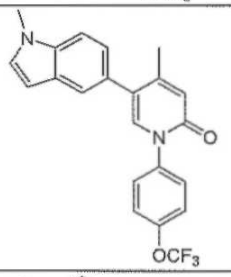
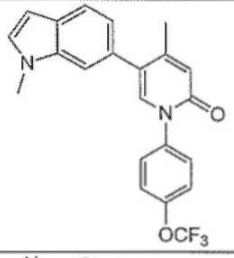
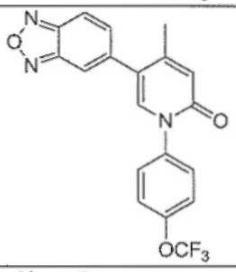
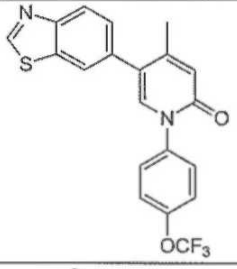
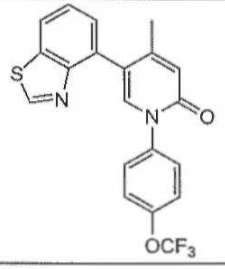
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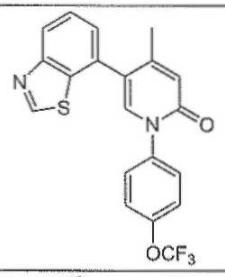
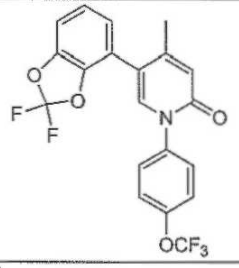
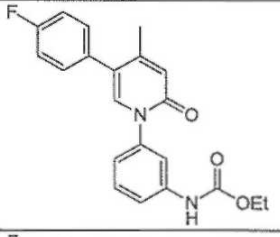
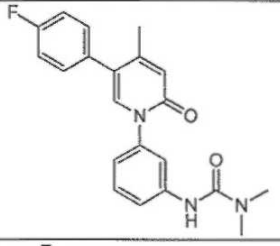
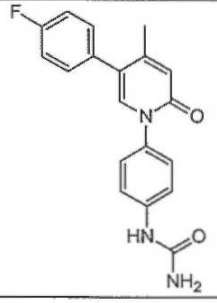
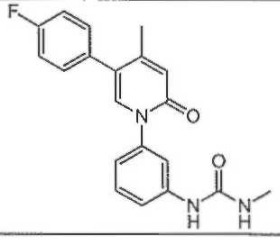
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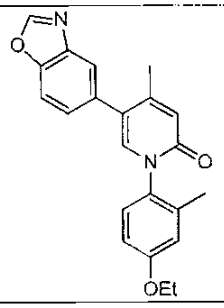
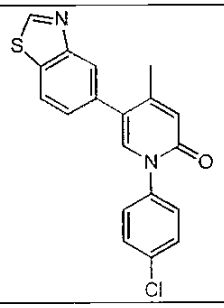
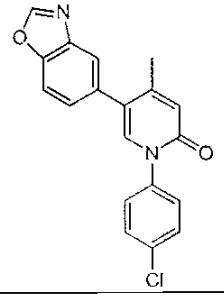
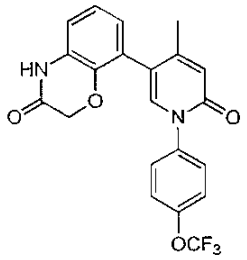
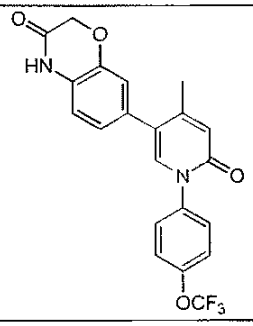
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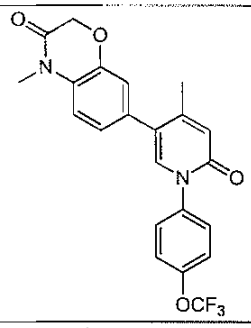
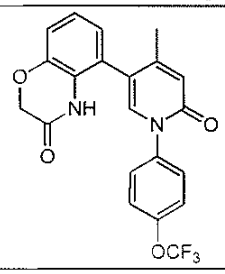
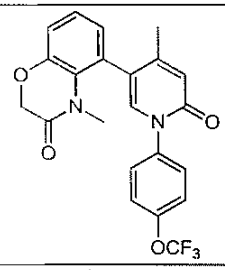
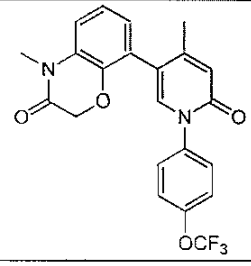
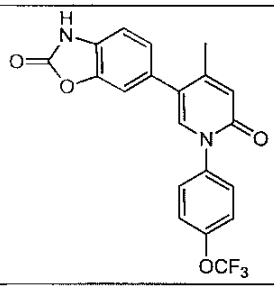
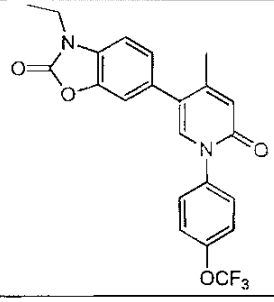
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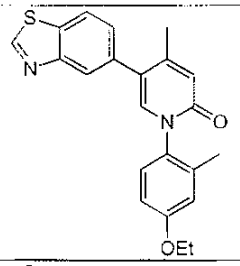
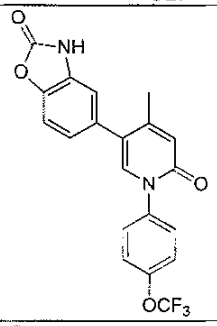
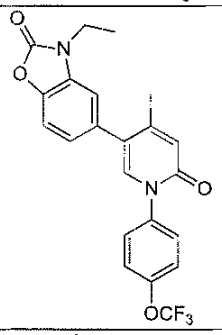
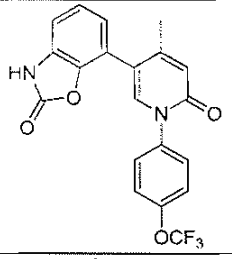
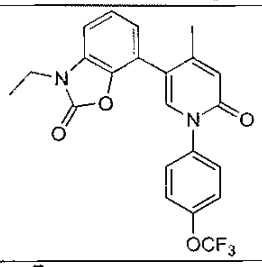
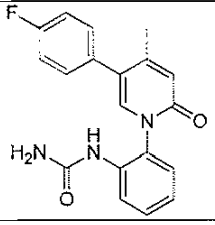
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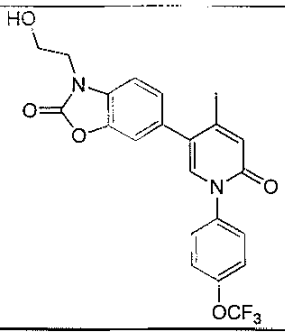
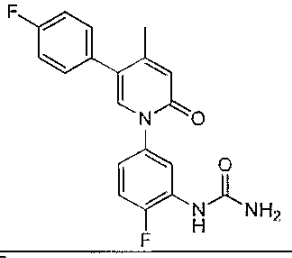
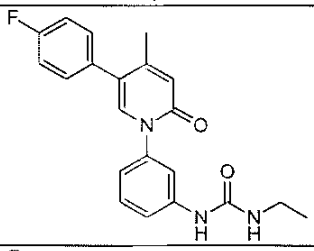
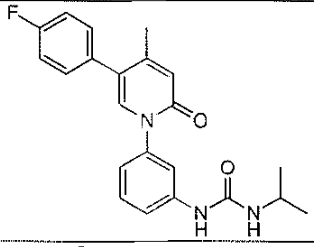
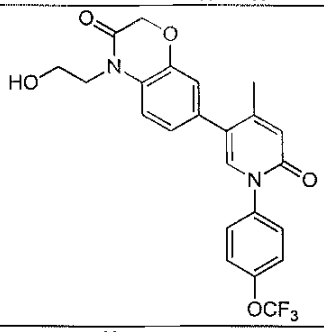
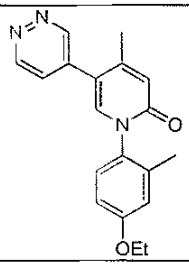
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Compd. #	Structure
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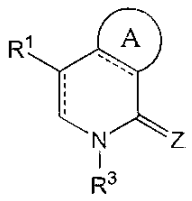
Compd. #	Structure
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Compd. #	Structure
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Compd. #	Structure
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125. A compound having the structure of formula (III):



(III)

or a pharmaceutically acceptable salt thereof, wherein

R^1 is selected from the group consisting of bromo, chloro, fluoro, -CN, $-SO_2R^{16}$, C_{1-6} alkyl optionally substituted with one or more R^4, C_{2-6} alkenyl optionally substituted with one or more R^4, C_{2-6} alkynyl optionally substituted with one or more R^4, C_{6-10} aryl optionally substituted with one or more R^4, 5 to 6 membered heteroaryl optionally substituted with one or more R^4, C_{3-10} carbocyclyl optionally substituted with one or more R^4, and 3-10 membered heterocyclyl optionally substituted with one or more R^4;

R^3 is selected from the group consisting of phenyl, $-(CH_2)_n$-(5-10 membered heteroaryl), and 3-10 membered heterocyclyl, each optionally substituted with one or more R^9;

ring A is selected from the group consisting of 5-6 membered heteroaryl, cyclohexyl, cyclohexenyl, C_7 carbocyclyl, and 3-7 membered heterocyclyl, each optionally substituted with one or more R^4;

each R^4 is independently selected from the group consisting of halogen, -CN, -OH, $-C(O)R^8$, $-SO_2R^{16}$, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkoxy, optionally substituted C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, 5-10 membered heteroaryl optionally substituted with one or more R^{11}, or independently two geminal R^4 together are oxo;

each R^9 is independently selected from the group consisting of hydroxy, halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkylthio, optionally substituted C_{2-8} alkoxyalkyl, optionally substituted C_{3-10} carbocyclyl, optionally substituted C_{6-10} aryl, $-OR^5$, $-NR^{14}R^{15}$, $-C(O)R^8$, $-SO_2R^{16}$, -CN, and $-NO_2$;

R^{14} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

R^{15} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

each R^8 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

each R^{12} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

each R^{13} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

each R^5 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{2-8} alkoxyalkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, and $-(CH_2)_n$-(3-10 membered heterocyclyl) optionally substituted with one or more R^{10};

each R^{10} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, and optionally substituted C_{2-6} alkynyl, or independently two geminal R^{10} together are oxo;

each R^{11} is independently selected from the group consisting of halogen, -CN, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, and optionally substituted C_{1-6} alkoxy;

each R^{16} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

Z is selected from oxygen and sulfur;

each n is independently an integer from 0 to 4; and

the bonds represented by a solid and dashed line are independently selected from the group consisting of a single bond and a double bond, provided that

when ring A is selected from optionally substituted pyrrolyl or optionally substituted dihydropyrrolidinyl, R^3 is phenyl optionally substituted with one or more R^9,

and Z is O; then R^1 is not bromo, chloro, fluoro, 3-methoxy phenyl or 3,5-dimethoxy phenyl;

when ring A is pyridyl, R^1 is optionally substituted phenyl, and Z is O; then n in R^3 is zero and R^3 is not halogen substituted phenyl;

when ring A is optionally substituted pyrimidyl, R^3 is phenyl, and Z is O; then R^1 is not methyl or benzyl;

when ring A is optionally substituted furanyl, R^3 is phenyl optionally substituted with one or more R^9, and Z is O; then R^1 is not fluoro;

when ring A is optionally substituted pyrrolyl, R^3 is phenyl optionally substituted with one or more R^9, and Z is O; then R^1 is not methyl;

when ring A is tetrahydrofuranyl, R^3 is phenyl, and Z is O; then R^1 is not methyl or phenyl; and

when ring A is pyradizinyl, R^3 is 4-NO_2-phenyl, and Z is O; then R^1 is not methyl.

126. The compound of Claim 125, wherein

R^3 is selected from the group consisting of phenyl, -$(CH_2)_n$-(5-10 membered heteroaryl), and 3-10 membered heterocyclyl, each optionally substituted with one or more R^9; and

each R^9 is independently selected from the group consisting of halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkylthio, optionally substituted C_{2-8} alkoxyalkyl, optionally substituted C_{3-10} carbocyclyl, optionally substituted C_{6-10} aryl, -OR^5, -$NR^{14}R^{15}$, -$C(O)R^8$, -SO_2R^{16}, and –NO_2.

127. The compound of Claim 125, wherein R^1 is selected from bromo, chloro, fluoro, C_{1-6} alkyl optionally substituted with one or more R^4, C_{6-10} aryl optionally substituted with one or more R^4, or 5 to 6 membered heteroaryl optionally substituted with one or more R^4.

128. The compound of Claim 127, wherein R^1 is bromo or fluoro.

129. The compound of Claim 127, wherein R^1 is methyl optionally substituted with one or more R^4.

130. The compound of Claim 127, wherein R^1 is phenyl optionally substituted with one or more R^4.

131. The compound of Claim 127, wherein R^1 is pyridazinyl optionally substituted with one or more R^4.

132. The compound of Claim 127, wherein R^1 is pyrazolyl or 1-methyl pyrazolyl optionally substituted with one or more R^4.

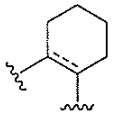
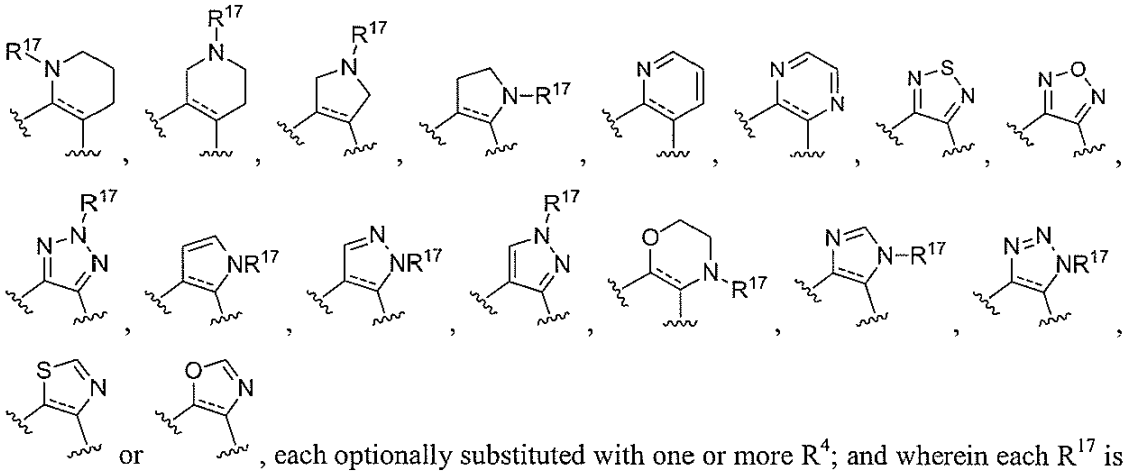
133. The compound of any one of Claims 125 to 132, wherein R^3 is selected from phenyl optionally substituted with one or more R^9.

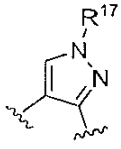
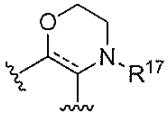
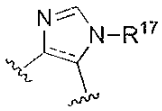
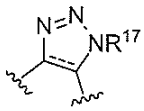
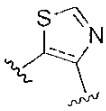
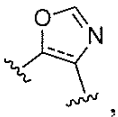
134. The compound of Claim 133, wherein R^3 is unsubstituted.

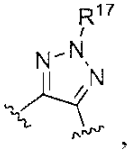
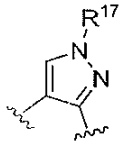
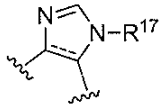
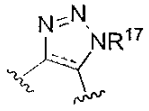
135. The compound of Claim 133, wherein each R^9 is independently selected from cyano, halogen, optionally substituted C_{1-6} alkyl, or OR^5, wherein R^5 is optionally substituted C_{1-6} alkyl or C_{2-8} alkoxyalkyl.

136. The compound of Claim 135, wherein R^9 is selected from cyano, fluoro, chloro, methyl, ethyl, ethoxy, methoxy, trifluoromethyl, trifluoromethoxy or difluoromethoxy.

137. The compound of any one of Claims 125 to 136, wherein ring A is selected from cyclohexyl, cyclohexenyl C_7 carbocyclyl, 5-membered heteroaryl, 6-membered heteroaryl, 5-membered heterocyclyl or 6-membered heterocyclyl, each optionally substituted with one or more R^4.

138. The compound of Claim 137, wherein ring A is selected from , , ,

, , , ,  or , each optionally substituted with one or more R^4.

140. The compound of Claim 138 or 139, wherein ring A is selected from , ,  or , each optionally substituted with one or more R^4.

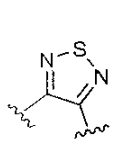
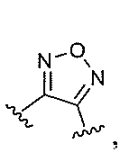
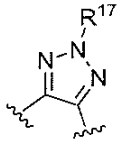
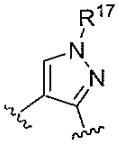
141. The compound of any one of Claims 138 to 140, wherein R^{17} is selected from hydrogen, methyl, ethyl, isopropyl, $-(CH_2)_2F$, $-(CH_2)_2OH$, $-(CH_2)_2OCH_3$, $-(CH_2)_2OC_2H_5$, $-(CH_2)_2OC_3H_7$, -C(O)O-*t*-Bu, $-C(O)CH_3$ or benzyl.

142. The compound of any one of Claims 125 to 141, wherein R^4 is selected from halogen, optionally substituted C_{1-6} alkyl, or C_{7-14} aralkyl optionally substituted with one or more R^{11}, or two geminal R^4 together are oxo.

143. The compound of Claim 142, wherein R^4 is selected from fluoro, methyl, trifluoromethyl, $-(CH_2)_2OH$, benzyl, or two geminal R^4 together are oxo.

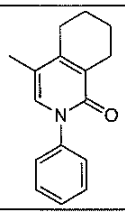
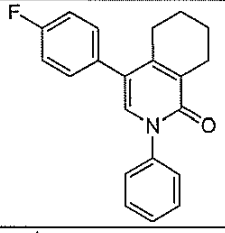
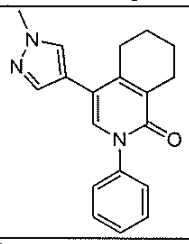
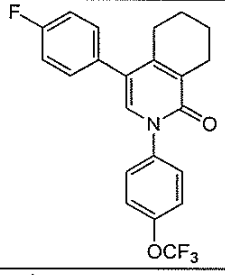
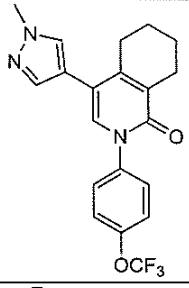
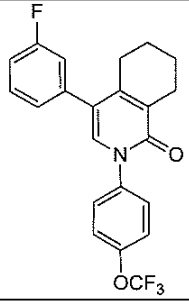
144. The compound of any one of Claim 137 to 141, wherein ring A is unsubstituted.

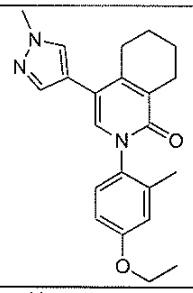
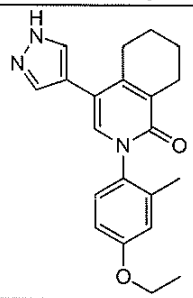
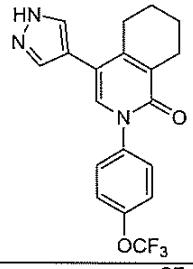
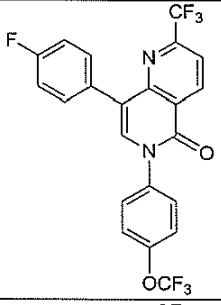
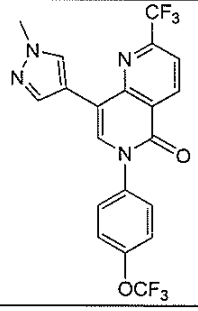
145. The compound of any one of Claims 125 to 144, wherein Z is oxygen.

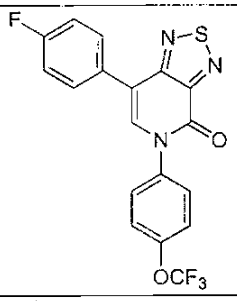
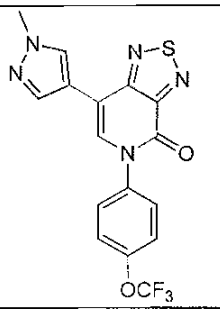
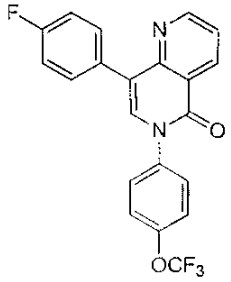
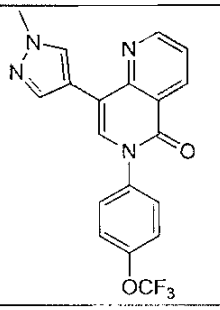
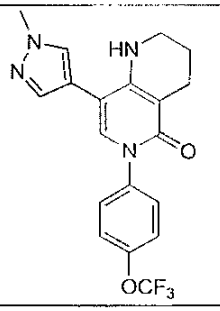
146. The compound of any one of Claims 125 to 145, wherein the bonds represented by a solid and dashed line in formula (III) are double bonds, provided that when ring A is , , , or , one of the bonds represented by a solid and dashed line is a single bond.

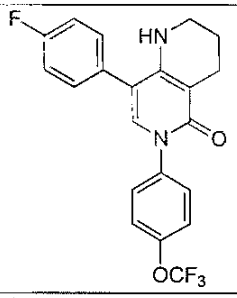
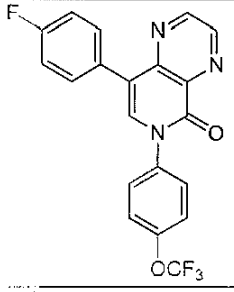
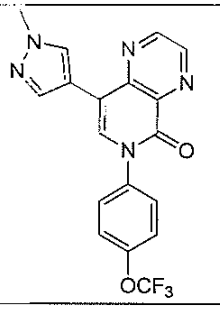
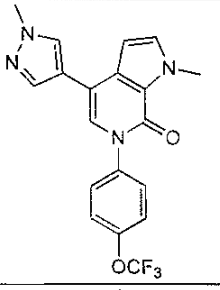
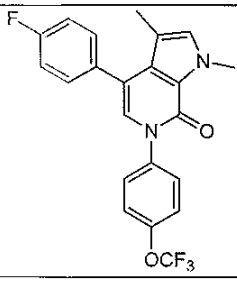
147. The compound of Claim 125, wherein the compound is selected from the group consisting of **Compounds 29-63, 392-400, 568, 569, 571-574, 577, 579-584, 586-589, 591-594, 596-608, 614, 615, 617, 619, 620, 624-626, 631, 634-636, 640, 642-655, 657-661, 665,** and **669-695** as shown below, or pharmaceutically acceptable salts thereof

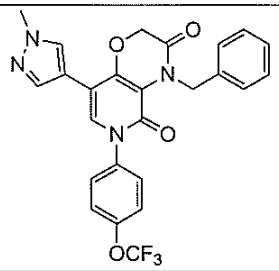
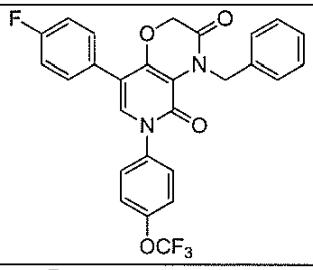
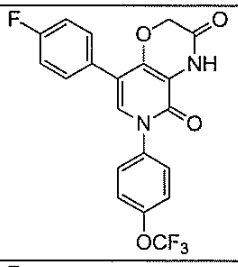
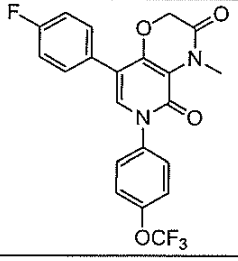
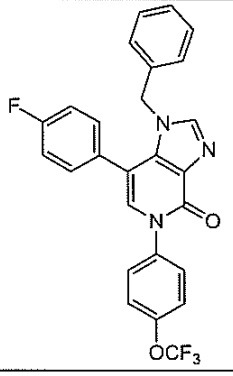
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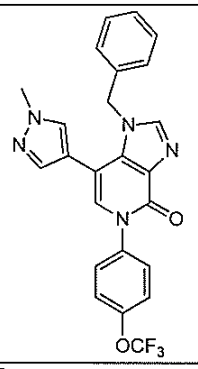
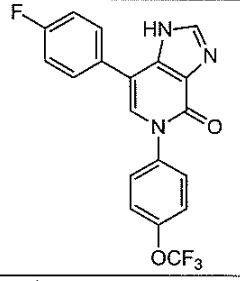
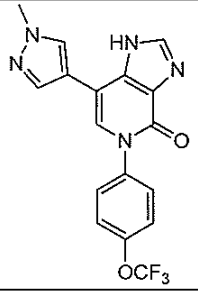
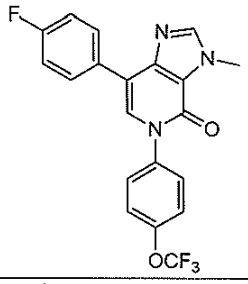
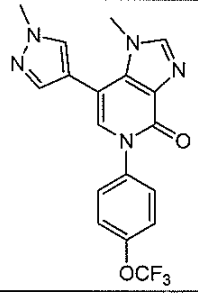
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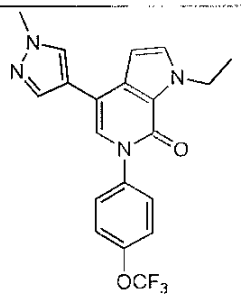
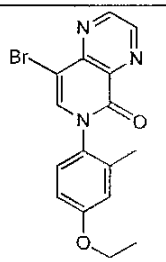
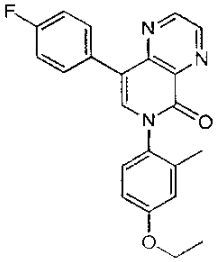
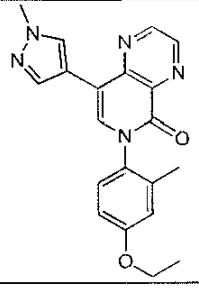
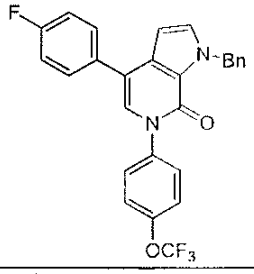
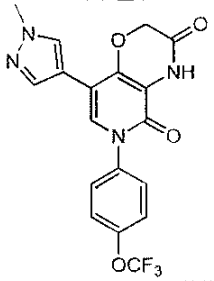
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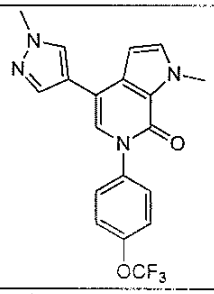
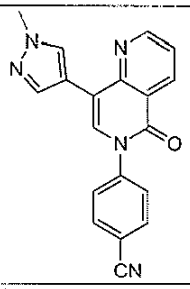
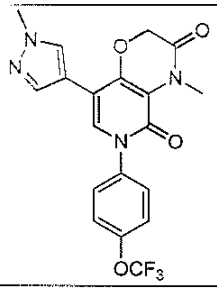
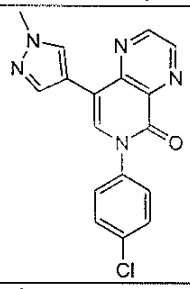
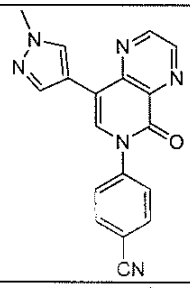
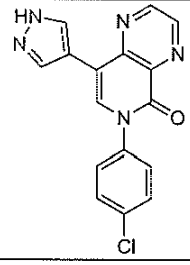
Compd. #	Structure
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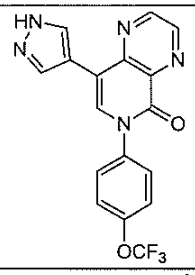
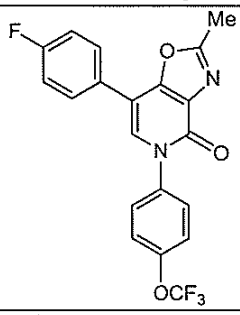
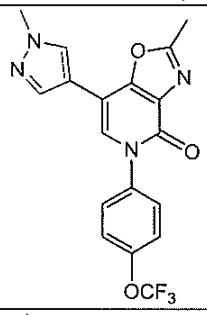
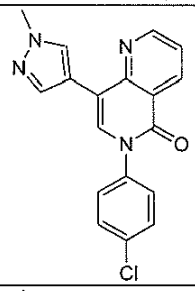
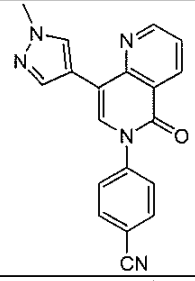
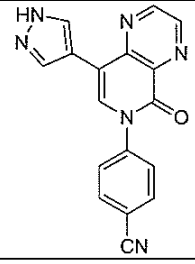
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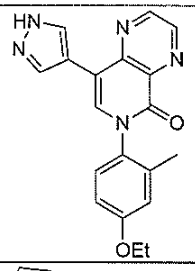
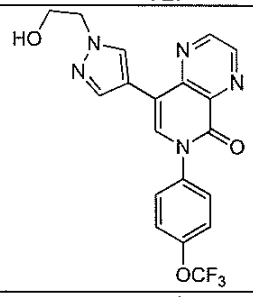
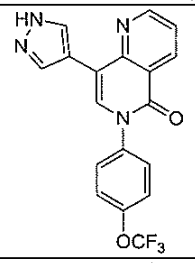
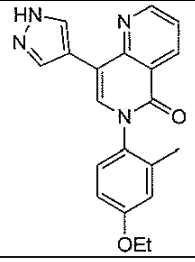
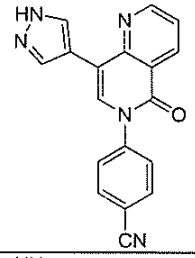
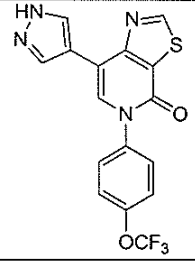
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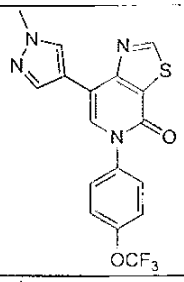
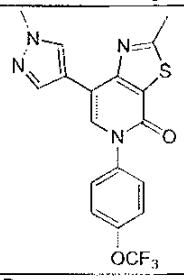
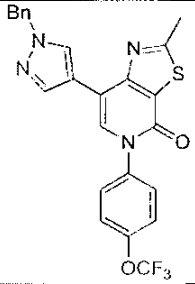
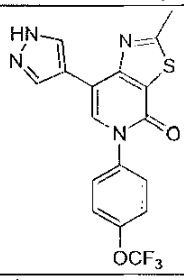
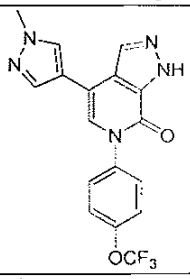
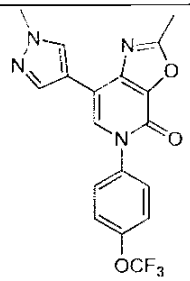
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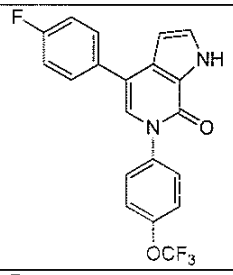
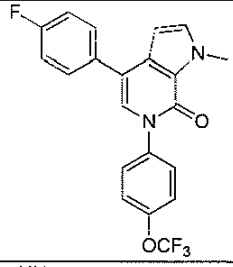
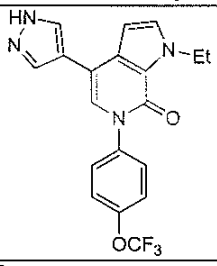
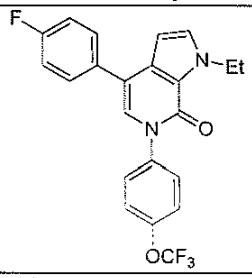
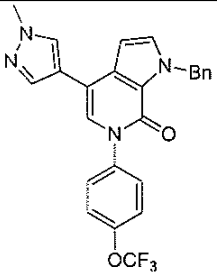
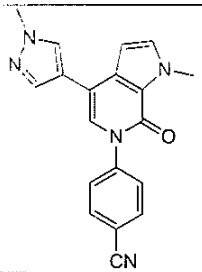
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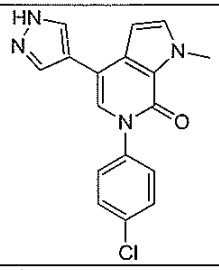
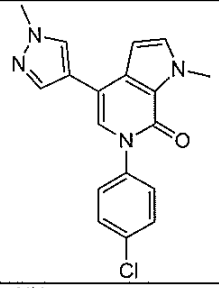
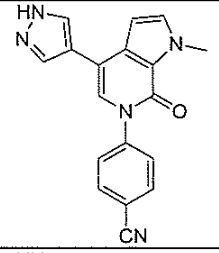
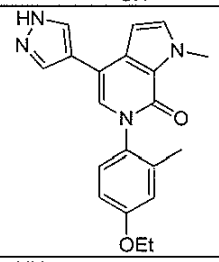
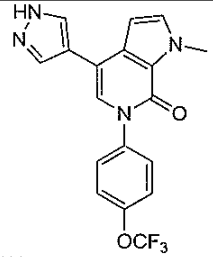
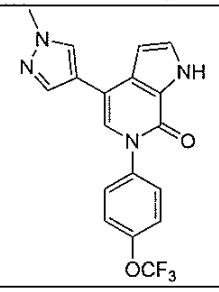
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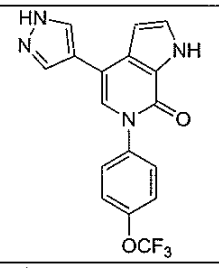
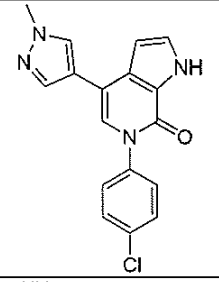
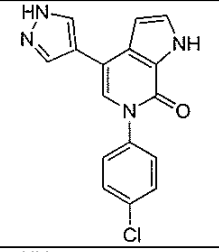
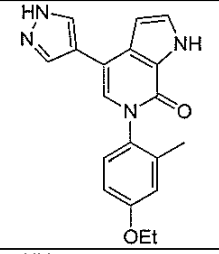
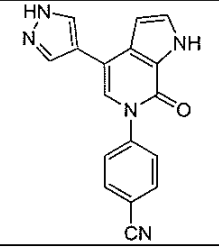
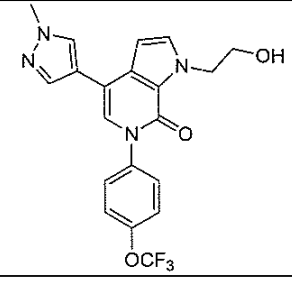
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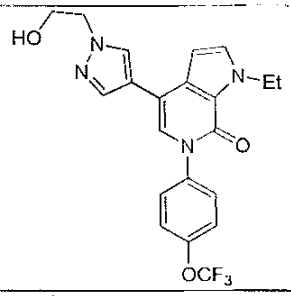
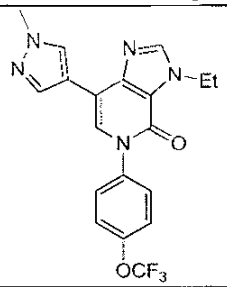
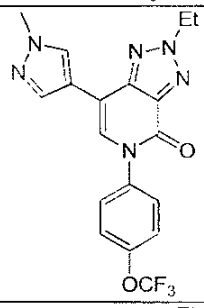
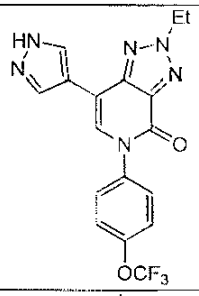
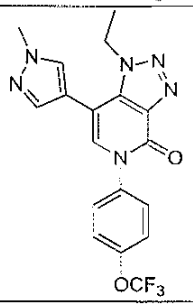
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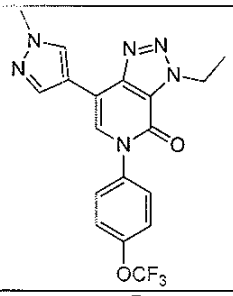
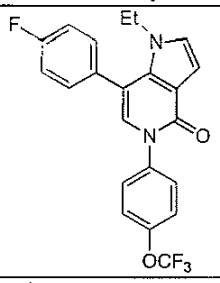
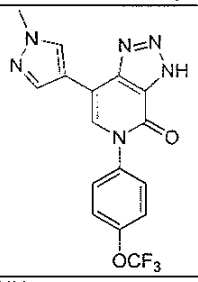
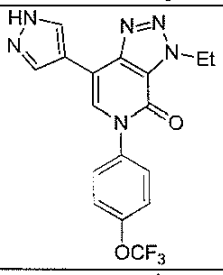
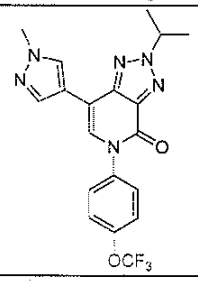
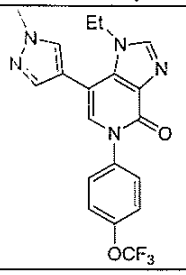
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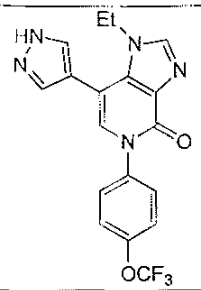
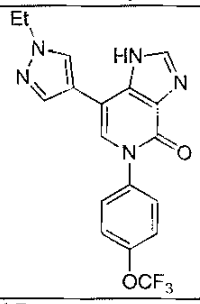
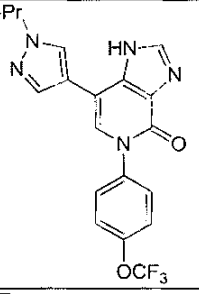
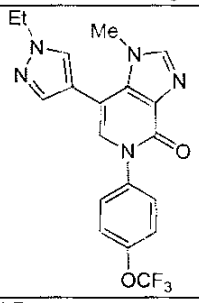
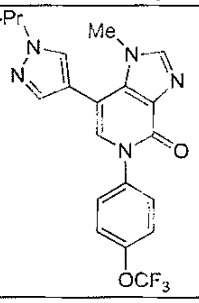
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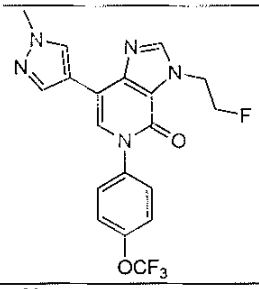
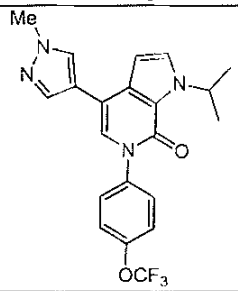
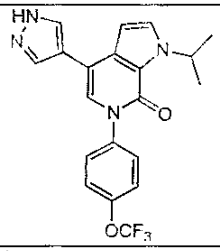
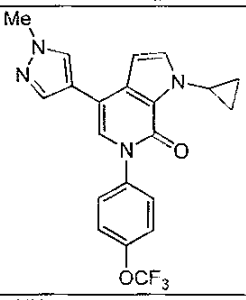
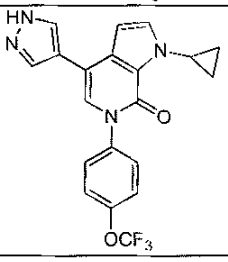
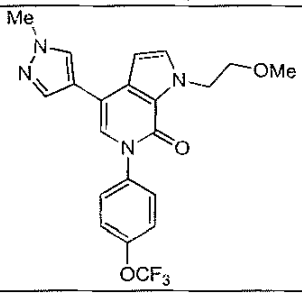
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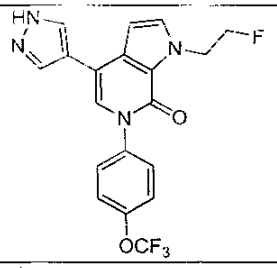
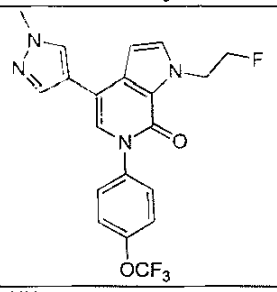
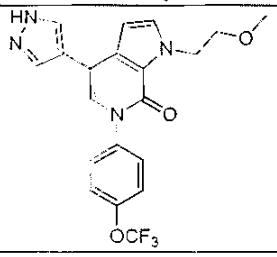
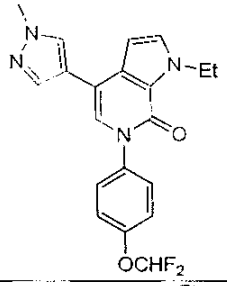
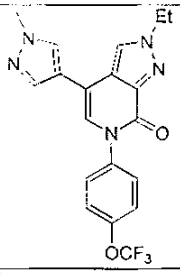
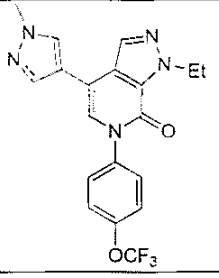
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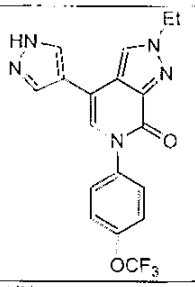
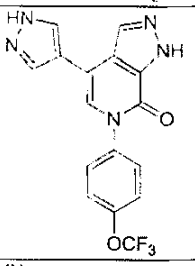
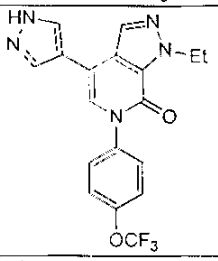
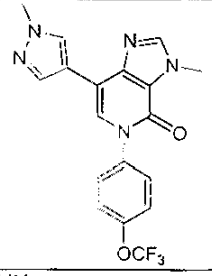
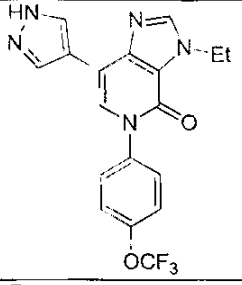
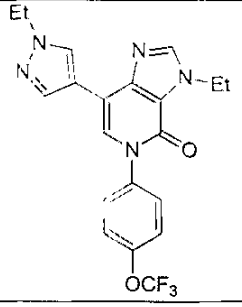
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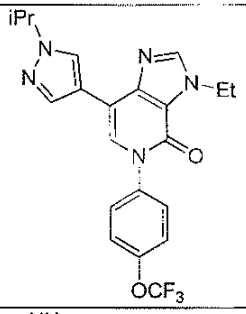
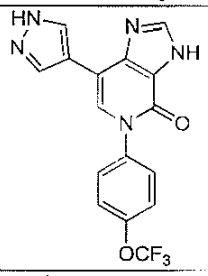
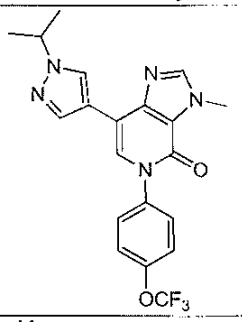
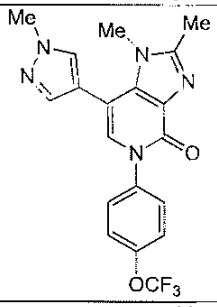
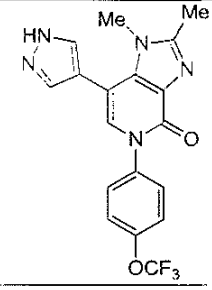
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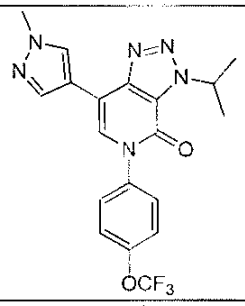
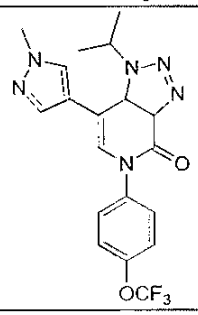
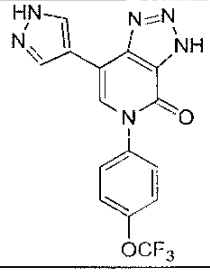
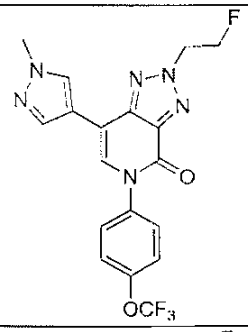
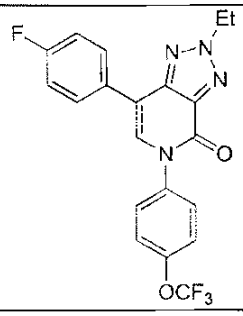
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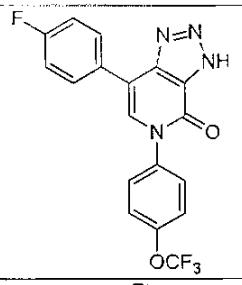
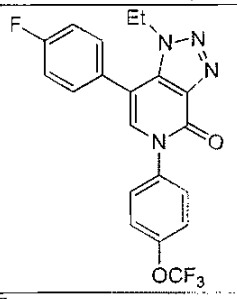
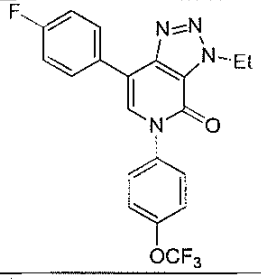
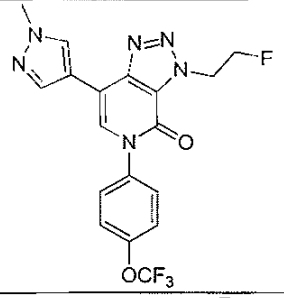
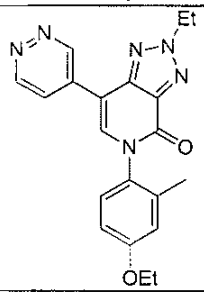
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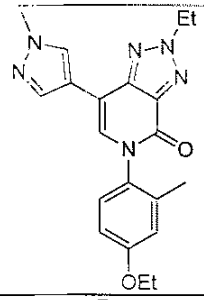
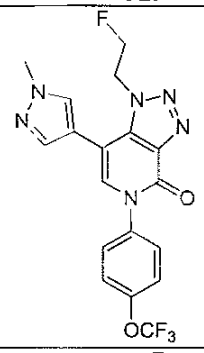
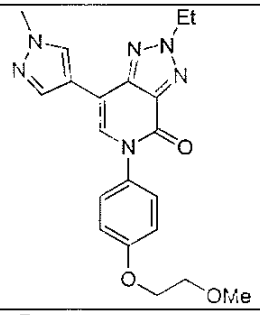
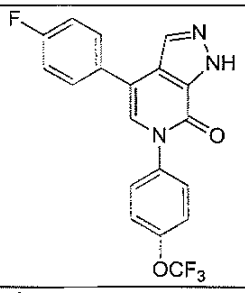
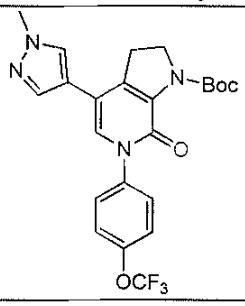
Compd. #	Structure
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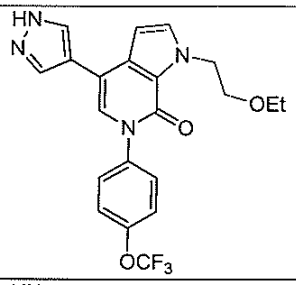
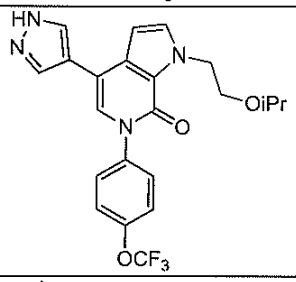
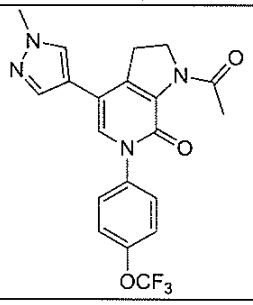
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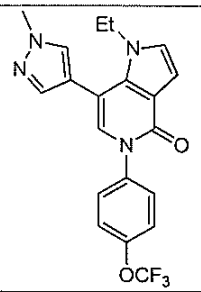
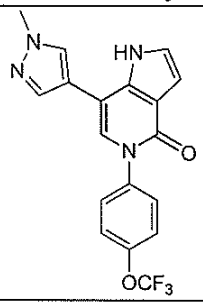
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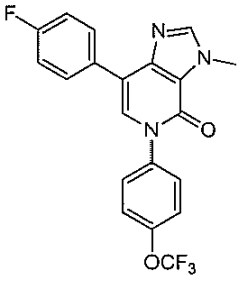
Compd. #	Structure
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Compd. #	Structure
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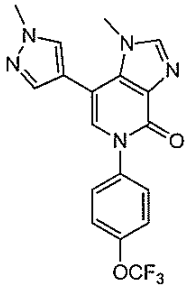
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Compd. #	Structure
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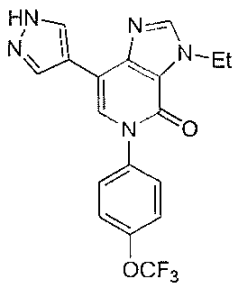
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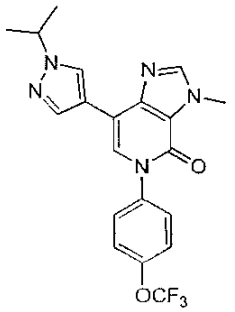


148. A compound of structure , or a pharmaceutically acceptable salt thereof.

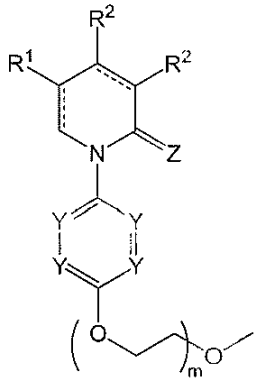


149. A compound of structure , or a pharmaceutically acceptable salt thereof.

150. A compound of structure , or a pharmaceutically acceptable salt thereof.

151. A compound of structure , or a pharmaceutically acceptable salt thereof

152. .A compound having the structure of formula (IV):



(IV)

or a pharmaceutically acceptable salt thereof, wherein

R^1 is selected from the group consisting of hydrogen, C_{1-6} alkyl optionally substituted with one or more R^4, C_{2-6} alkenyl optionally substituted with one or more R^4, C_{2-6} alkynyl optionally substituted with one or more R^4, C_{6-10} aryl optionally substituted with one or more R^4, 5-10 membered heteroaryl optionally substituted with one or more R^4, C_{3-10} carbocyclyl optionally substituted with one or more R^4, and 3-10 membered heterocyclyl optionally substituted with one or more R^4;

each R^2 is independently selected from the group consisting of hydrogen, halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, -CN, $-OR^5$, $-NR^6R^7$, and $-C(O)R^8$,

or both R^2 together with the carbon atoms to which they are attached form a fused ring selected from the group consisting of phenyl, 5-6 membered heteroaryl, C_{3-7} carbocyclyl, and 3-7 membered heterocyclyl, each optionally substituted with one or more R^4;

each R^4 is independently selected from the group consisting of halogen, -CN, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, and optionally substituted C_{1-6} alkoxy;

each R^5 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{2-8} alkoxyalkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-(CH_2)_n$-(3-10 membered heterocyclyl) optionally substituted with one or more R^{10}, and $-(CH_2)_n$-(C_{6-10} aryl) optionally substituted with one or more R^{11};

R^6 is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, $-C(O)R^8$, and $-C(O)OR^5$;

R^7 is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, $-C(O)R^8$, and $-C(O)OR^5$;

or R^6 and R^7 together with the nitrogen to which they are attached form an 3-10 membered heterocyclyl optionally substituted with one or more R^{10};

each R^8 is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, $-NR^{12}R^{13}$, and $-OR^5$;

each Y is independently N or CR^9;

each R^9 is independently selected from the group consisting of hydrogen, halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkoxy, and $-NR^{14}R^{15}$,

or independently two adjacent R^9 together with the ring atoms to which they are attached form a fused optionally substituted 3-10 membered heterocyclyl or a fused optionally substituted 5-10 membered heteroaryl;

each R^{10} is independently selected from the group consisting of oxo, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, and optionally substituted C_{2-6} alkynyl;

each R^{11} is independently selected from the group consisting of halogen, -CN, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, and optionally substituted C_{1-6} alkoxy;

each R^{12} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

each R^{13} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

R^{14} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

R^{15} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

Z is selected from oxygen and sulfur;

n is an integer from 0 to 4;

m is an integer from 1 to 4; and

the bonds represented by a solid and dashed line are independently selected from the group consisting of a single bond and a double bond.

153. The compound of Claim 152, wherein R^1 is selected from the group consisting of hydrogen, C_{1-6} alkyl optionally substituted with one or more R^4, or 5-membered heteroaryl optionally substituted with one or more R^4.

154. The compound of Claim 153, wherein R^1 is selected from methyl, phenyl, pyrazolyl, or 1-methyl pyrazolyl, each optionally substituted with one or more R^4.

155. The compound of Claim 154, wherein R^1 is unsubstituted.

156. The compound of any one of Claims 152 to 154, wherein R^2 is selected from hydrogen or optionally substituted C_{1-6} alkyl.

157. The compound of any one of Claims 152 to 156, wherein all Y are CR^9.

158. The compound of any one of Claims 152 to 156, wherein at least one Y is N.

159. The compound of any one of Claims 152 to 158, wherein R^4 is selected from halogen, C_{1-6} alkyl or C_{1-6} alkoxy.

160. The compound of Claim 159, wherein R^4 is selected from fluoro or methyl.

161. The compound of any one of Claims 152 to 160, wherein m is 1.

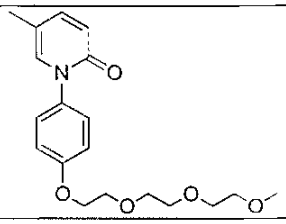
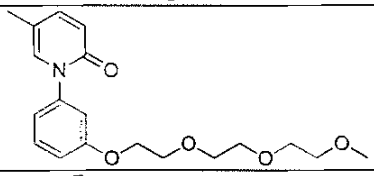
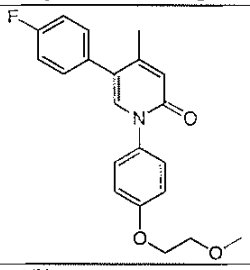
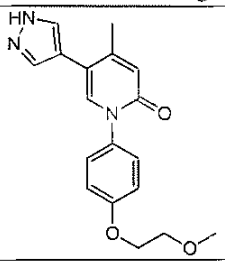
162. The compound of any one of Claims 152 to 160, wherein m is 2.

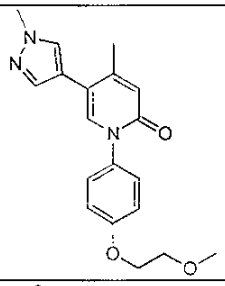
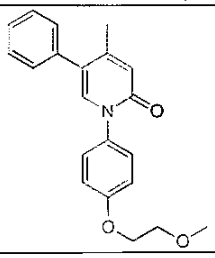
163. The compound of any one of Claims 152 to 160, wherein m is 3.

164. The compound of any one of Claims 152 to 163, wherein Z is oxygen.

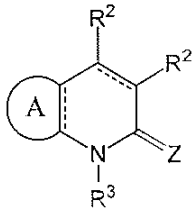
165. The compound of any one of Claims 152 to 164, wherein the bonds represented by a solid and dashed line are double bonds.

166. The compound of Claim 152, wherein the compound is selected from the group consisting of **Compounds 21-26** as shown below, or pharmaceutically acceptable salts thereof

Compd. #	Structure
21	
22	
23	
24	

Compd. #	Structure
25	
26	

167. A compound having the structure of formula (V):



or a pharmaceutically acceptable salt thereof, wherein

A is a C_{5-7} carbocyclyl optionally substituted with one or more R^4;

each R^2 is independently selected from the group consisting of hydrogen, halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, -CN, $-OR^5$, $-NR^6R^7$, and $-C(O)R^8$,

or both R^2 together with the carbon atoms to which they are attached form a fused ring selected from the group consisting of phenyl, 5-6 membered heteroaryl, C_{3-7} carbocyclyl, and 3-7 membered heterocyclyl, each optionally substituted with one or more R^4;

R^3 is selected from the group consisting of phenyl, $-(CH_2)_n$-(5-10 membered heteroaryl), and $-(CH_2)_n$-(3-10 membered heterocyclyl), each optionally substituted with one or more R^9;

each R^4 is independently selected from the group consisting of halogen, -CN, -OH, $-C(O)R^8$, $-SO_2R^{16}$, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkoxy, optionally substituted C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, 5-10 membered heteroaryl optionally substituted with one or more R^{11}, or independently two geminal R^4 together are oxo;

each R^5 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{2-8} alkoxyalkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, and $-(CH_2)_n$-(3-10 membered heterocyclyl) optionally substituted with one or more R^{10};

R^6 is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, $-C(O)R^8$, and $-C(O)OR^5$;

R^7 is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, $-C(O)R^8$, and $-C(O)OR^5$;

or R^6 and R^7 together with the nitrogen to which they are attached form an 3-10 membered heterocyclyl optionally substituted with one or more R^{10};

each R^8 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

each R^9 is independently selected from the group consisting of halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkylthio, optionally substituted C_{2-8} alkoxyalkyl, optionally substituted C_{3-10} carbocyclyl, optionally substituted C_{6-10} aryl, $-OR^5$, $-NR^{14}R^{15}$, $-C(O)R^8$, $-SO_2R^{16}$, and $-NO_2$;

each R^{10} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, and optionally substituted C_{2-6} alkynyl, or independently two geminal R^{10} together are oxo;

each R^{11} is independently selected from the group consisting of halogen, -CN, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, and optionally substituted C_{1-6} alkoxy;

each R^{12} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

each R^{13} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

R^{14} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

R^{15} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

each R^{16} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

Z is selected from oxygen and sulfur;

each n is independently an integer from 0 to 4; and

the bonds represented by a solid and dashed line are independently selected from the group consisting of a single bond and a double bond.

168. The compound of Claim 167, wherein each R^2 is independently selected from hydrogen, C_{1-6} alkyl or $-OR^5$.

169. The compound of Claim 168, wherein R^2 is hydrogen.

170. The compound of any one of Claims 167 to 169, wherein R^3 is phenyl, optionally substituted with one or more R^9.

171. The compound of Claim 170, wherein R^9 is selected from halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-8} alkoxyalkyl, $-OR^5$, or $-NR^{14}R^{15}$.

172. The compound of Claim 171, wherein R^9 is selected from fluoro, chloro, methyl, ethyl, methoxy, ethoxy, trifluoromethyl, trifluoromethoxy, $-NHCH_3$, $-NH_2$, or $-NHC(O)CH_3$.

173. The compound of Claim 172, wherein R^9 is trifluoromethoxy.

174. The compound of any one of Claims 167 to 173, wherein ring A is a C_5 carbocyclyl optionally substituted with one or more R^4.

175. The compound of any one of Claims 167 to 173, wherein ring A is a C_6 carbocyclyl optionally substituted with one or more R^4.

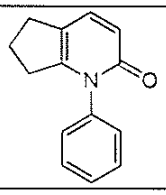
176. The compound of any one of Claims 167 to 175, wherein R^4 is selected from halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{1-6} alkoxy, or independently two geminal R^4 together are oxo.

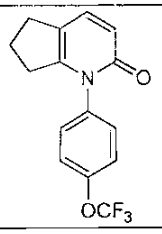
177. The compound of any one of Claims 167, 174 and 175, wherein ring A is unsubstituted.

178. The compound of any one of Claims 167 to 177, wherein Z is oxygen.

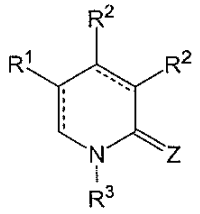
179. The compound of any one of Claims 167 to 178, wherein the bonds represented by a solid and dashed line are double bonds.

180. The compound of Claim 167, wherein the compound is selected from the group consisting of **Compounds 27** and **28** as shown below, or pharmaceutically acceptable salts thereof

Compd. #	**Structure**
27	

28	

181. A compound having the structure of formula (VIa):



(VIa)

or a pharmaceutically acceptable salt thereof, wherein

R^1 is a C_{4-7} carbocyclyl optionally substituted with one or more R^4;

each R^2 is independently selected from the group consisting of hydrogen, halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, -CN, $-OR^5$, $-NR^6R^7$, and $-C(O)R^8$,

or both R^2 together with the carbon atoms to which they are attached form a fused ring selected from the group consisting of phenyl, 5-6 membered heteroaryl, C_{3-7} carbocyclyl, and 3-7 membered heterocyclyl, each optionally substituted with one or more R^4;

R^3 is selected from the group consisting of $-(CH_2)_n-(C_{6-10}$ aryl), $-(CH_2)_n-(5$-10 membered heteroaryl), $-(CH_2)_n-(C_{3-10}$ carbocyclyl), and $-(CH_2)_n-(3$-10 membered heterocyclyl), each optionally substituted with one or more R^9;

each R^4 is independently selected from the group consisting of halogen, -CN, -OH, $-C(O)R^8$, $-SO_2R^{16}$, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkoxy, optionally substituted C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, 5-10 membered heteroaryl optionally substituted with one or more R^{11}, or independently two geminal R^4 together are oxo;

each R^5 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{2-8} alkoxyalkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more

R^{11}, and -$(CH_2)_n$-(3-10 membered heterocyclyl) optionally substituted with one or more R^{10};

R^6 is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, -C(O)R^8, and -C(O)OR^5;

R^7 is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, -C(O)R^8, and -C(O)OR^5;

or R^6 and R^7 together with the nitrogen to which they are attached form an 3-10 membered heterocyclyl optionally substituted with one or more R^{10};

each R^8 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, -$NR^{12}R^{13}$, and -OR^5;

each R^9 is independently selected from the group consisting of halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkylthio, optionally substituted C_{2-8} alkoxyalkyl, optionally substituted C_{3-10} carbocyclyl, optionally substituted C_{6-10} aryl, -OR^5, -$NR^{14}R^{15}$, -C(O)R^8, -SO_2R^{16}, and –NO_2;

each R^{10} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, and optionally substituted C_{2-6} alkynyl, or independently two geminal R^{10} together are oxo;

each R^{11} is independently selected from the group consisting of halogen, -CN, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, and optionally substituted C_{1-6} alkoxy;

each R^{12} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

each R^{13} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally

substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

R^{14} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

R^{15} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

each R^{16} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

Z is selected from oxygen and sulfur;

each n is independently an integer from 0 to 4; and

the bonds represented by a solid and dashed line are independently selected from the group consisting of a single bond and a double bond.

182. The compound of Claim 181, wherein R^1 is a C_4 carbocyclyl optionally substituted with one or more R^4.

183. The compound of Claim 181, wherein R^1 is a C_5 carbocyclyl optionally substituted with one or more R^4.

184. The compound of Claim 181, wherein R^1 is a C_6 carbocyclyl optionally substituted with one or more R^4.

185. The compound of any one of Claims 181 to 184, wherein R^4 is selected from halogen, optionally substituted C_{1-6} alkyl, or optionally substituted C_{1-6} alkoxy.

186. The compound of Claim 185, wherein R^4 is selected from fluoro, chloro, methyl, methoxy, ethoxy, trifluoromethyl, or trifluoromethoxy.

187. The compound of Claim 181, wherein R^1 is unsubstituted.

188. The compound of any one of Claims 181 to 187, wherein each R^2 is independently selected from hydrogen, halogen, optionally substituted C_{1-6} alkyl, $-OR^5$ or $-NR^6R^7$.

189. The compound of Claim 188, wherein R^2 is hydrogen.

190. The compound of Claim 188, wherein R^2 is halogen.

191. The compound of Claim 188, wherein R^2 is optionally substituted C_{1-6} alkyl.

192. The compound of Claim 191, wherein R^2 is selected from methyl or trifluoromethyl.

193. The compound of any one of Claims 181 to 192, wherein R^3 is selected from $-(CH_2)_n-(C_{6-10}$ aryl), optionally substituted with one or more R^9.

194. The compound of Claim 193, wherein R^3 is phenyl, optionally substituted with one or more R^9.

195. The compound of Claim 194, wherein R^9 is selected from halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-8} alkoxyalkyl, $-OR^5$, or $-NR^{14}R^{15}$.

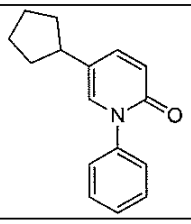
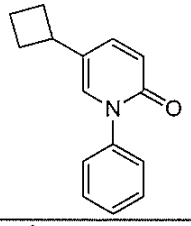
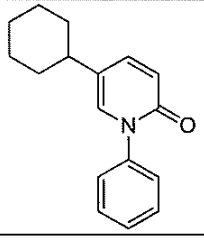
196. The compound of Claim 195, wherein R^9 is selected from fluoro, chloro, methyl, ethyl, methoxy, ethoxy, trifluoromethyl, trifluoromethoxy, $-NHCH_3$, $-NH_2$, or $-NHC(O)CH_3$.

197. The compound of Claim 194, wherein R^3 is unsubstituted phenyl.

198. The compound of any one of Claims 181 to 197, wherein Z is oxygen.

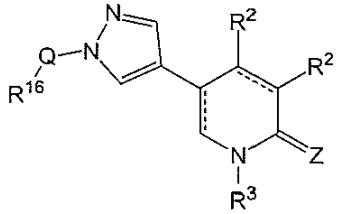
199. The compound of any one of Claims 181 to 198, wherein the bonds represented by a solid and dashed line are double bonds.

200. The compound of Claim 181, wherein the compound is selected from the group consisting of **Compounds 64-66** as shown below, or pharmaceutically acceptable salts thereof

Compd. #	**Structure**
64	
65	
66	

.

201. A compound having the structure of formula (VII):



(VII)

or a pharmaceutically acceptable salt thereof, wherein

each R^2 is independently selected from the group consisting of hydrogen, halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, -CN, $-OR^5$, $-NR^6R^7$, and $-C(O)R^8$,

or both R^2 together with the carbon atoms to which they are attached form a fused ring selected from the group consisting of phenyl, 5-6 membered heteroaryl, C_{3-7} carbocyclyl, and 3-7 membered heterocyclyl, each optionally substituted with one or more R^4;

R^3 is selected from the group consisting of $-(CH_2)_n-(C_{6-10}$ aryl), $-(CH_2)_n-(5$-10 membered heteroaryl), $-(CH_2)_n-(C_{3-10}$ carbocyclyl), and $-(CH_2)_n-(3$-10 membered heterocyclyl), each optionally substituted with one or more R^9;

each R^4 is independently selected from the group consisting of halogen, -CN, -OH, $-C(O)R^8$, $-SO_2R^{16}$, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkoxy, optionally substituted C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, 5-10 membered heteroaryl optionally substituted with one or more R^{11}, or independently two geminal R^4 together are oxo;

each R^5 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{2-8} alkoxyalkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, and $-(CH_2)_n-(3$-10 membered heterocyclyl) optionally substituted with one or more R^{10};

R^6 is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, $-C(O)R^8$, and $-C(O)OR^5$;

R^7 is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, $-C(O)R^8$, and $-C(O)OR^5$;

or R^6 and R^7 together with the nitrogen to which they are attached form an 3-10 membered heterocyclyl optionally substituted with one or more R^{10};

each R^8 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

each R^9 is independently selected from the group consisting of halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkylthio, optionally substituted C_{2-8} alkoxyalkyl, optionally substituted C_{3-10} carbocyclyl, optionally substituted C_{6-10} aryl, $-OR^5$, $-NR^{14}R^{15}$, $-C(O)R^8$, $-SO_2R^{16}$, and $-NO_2$;

each R^{10} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, and optionally substituted C_{2-6} alkynyl, or independently two geminal R^{10} together are oxo;

each R^{11} is independently selected from the group consisting of halogen, -CN, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, and optionally substituted C_{1-6} alkoxy;

each R^{12} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

each R^{13} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

R^{14} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

R^{15} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

Q is selected from C(O) and $S(O)_t$;

each R^{16} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

Z is selected from oxygen and sulfur;

each n is independently an integer from 0 to 4;

t is 1 or 2; and

the bonds represented by a solid and dashed line are independently selected from the group consisting of a single bond and a double bond.

202. The compound of Claim 201, wherein each R^2 is independently selected from hydrogen, halogen, optionally substituted C_{1-6} alkyl, $-OR^5$ or $-NR^6R^7$.

203. The compound of Claim 202, wherein R^2 is hydrogen.

204. The compound of Claim 202, wherein R^2 is halogen.

205. The compound of Claim 202, wherein R^2 is optionally substituted C_{1-6} alkyl.

206. The compound of Claim 205, wherein R^2 is methyl or trifluoromethyl.

207. The compound of any one of Claims 201 to 206, wherein R^3 is selected from $-(CH_2)_n-(C_{6-10}$ aryl), optionally substituted with one or more R^9.

208. The compound of Claim 207, wherein R^3 is phenyl optionally substituted with one or more R^9.

209. The compound of Claim 208, wherein R^9 is selected from halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-8} alkoxyalkyl, $-OR^5$, or $-NR^{14}R^{15}$.

210. The compound of Claim 209, wherein R^9 is selected from fluoro, chloro, methyl, ethyl, methoxy, ethoxy, trifluoromethyl, trifluoromethoxy, $-NHCH_3$, $-NH_2$, or $-NHC(O)CH_3$.

211. The compound of Claim 208, wherein R^3 is unsubstituted phenyl.

212. The compound of any one of Claims 201 to 211, wherein Q is C(O).

213. The compound of any one of Claims 201 to 211, wherein Q is $S(O)_t$.

214. The compound of Claim 213, wherein t is 2.

215. The compound of any one of Claims 201 to 214, wherein R^{16} is selected from optionally substituted C_{1-6} alkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, or $-OR^5$.

216. The compound of Claim 215, wherein R^{16} is optionally substituted C_{1-6} alkyl.

217. The compound of Claim 216, wherein R^{16} is selected from methyl, ethyl, propyl, isopropyl, or butyl.

218. The compound of Claim 215, wherein R^{16} is phenyl optionally substituted with one or more R^{11}.

219. The compound of Claim 218, wherein R^{16} is unsubstituted phenyl.

220. The compound of Claim 215, wherein R^{16} is benzyl optionally substituted with one or more R^{11}.

221. The compound of Claim 220, wherein R^{16} is unsubstituted benzyl.

222. The compound of Claim 215, wherein R^{16} is $-NR^{12}R^{13}$.

223. The compound of Claim 222, wherein each R^{12} and R^{13} is independently selected from hydrogen or optionally substituted C_{1-6} alkyl.

224. The compound of Claim 215, wherein R^{16} is $-OR^5$.

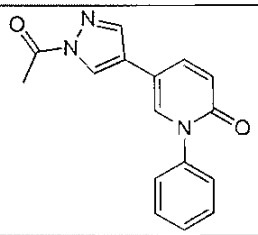
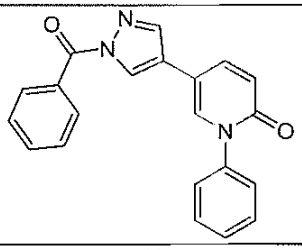
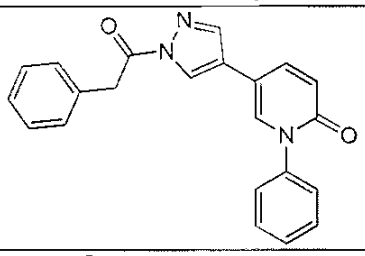
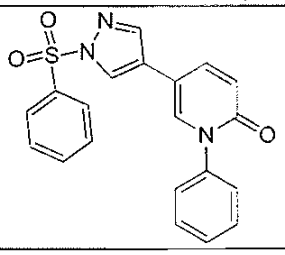
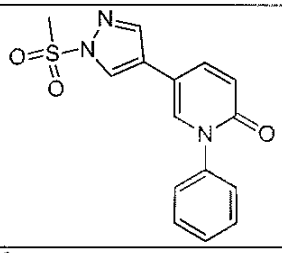
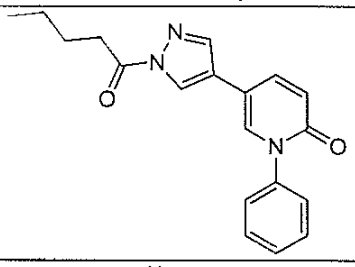
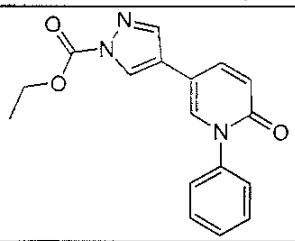
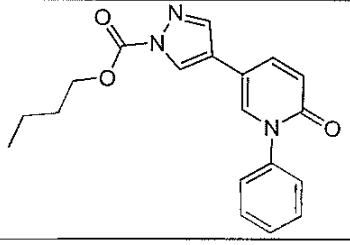
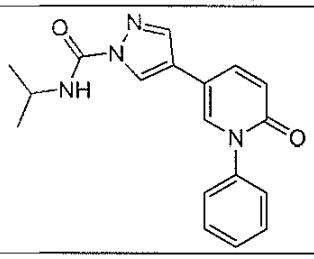
225. The compound of Claim 224, wherein R^5 is selected from hydrogen or optionally substituted C_{1-6} alkyl.

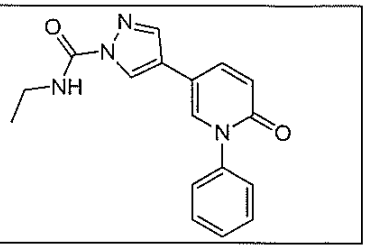
226. The compound of Claim 225, wherein R^5 is selected from methyl, ethyl, propyl, isopropyl, or butyl.

227. The compound of any one of Claims 201 to 226, wherein Z is oxygen.

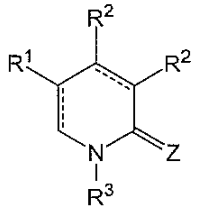
228. The compound of any one of Claims 201 to 227, wherein the bonds represented by a solid and dashed line are double bonds.

229. The compound of Claim 201, wherein the compound is selected from the group consisting of **Compounds 67-76** as shown below, or pharmaceutically acceptable salts thereof

Compd. #	Structure
67	
68	
69	
70	
71	
72	
73	
74	
75	

76	

230. A compound having the structure of formula (VIb):



(VIb)

R^1 is selected from the group consisting of bromo, chloro, fluoro, -CN, $-C(O)R^8$, $-SO_2R^{16}$, C_{1-6} alkyl, C_{2-6} alkenyl optionally substituted with one or more R^4, C_{2-6} alkynyl optionally substituted with one or more R^4, C_{6-10} aryl optionally substituted with one or more R^4, 5 to 6 membered heteroaryl optionally substituted with one or more R^4, C_{3-10} carbocyclyl optionally substituted with one or more R^4, and 3-10 membered heterocyclyl optionally substituted with one or more R^4;

each R^2 is independently selected from the group consisting of hydrogen, halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, -CN, $-OR^5$, $-NR^6R^7$, and $-C(O)R^8$,

or both R^2 together with the carbon atoms to which they are attached form a fused ring selected from the group consisting of 5-6 membered heteroaryl, C_{3-7} carbocyclyl, and 3-7 membered heterocyclyl, each optionally substituted with one or more R^4;

R^3 is selected from the group consisting of $-(CH_2)_{1-4}$-(C_{6-10} aryl), $-(CH_2)_{1-4}$-(5-10 membered heteroaryl), $-(CH_2)_{1-4}$-(C_{3-10} carbocyclyl), and $-(CH_2)_{1-4}$-(3-10 membered heterocyclyl), each optionally substituted with one or more R^9;

each R^4 is independently selected from the group consisting of halogen, -CN, -OH, $-C(O)R^8$, $-SO_2R^{16}$, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkoxy, optionally substituted C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, 5-10 membered heteroaryl optionally substituted with one or more R^{11};

each R^5 is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{2-8} alkoxyalkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, and $-(CH_2)_n$-(3-10 membered heterocyclyl) optionally substituted with one or more R^{10};

R^6 is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, $-C(O)R^8$, and $-C(O)OR^5$;

R^7 is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, $-C(O)R^8$, and $-C(O)OR^5$;

or R^6 and R^7 together with the nitrogen to which they are attached form an 3-10 membered heterocyclyl optionally substituted with one or more R^{10};

each R^8 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

each R^9 is independently selected from the group consisting of halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkylthio, optionally substituted C_{2-8} alkoxyalkyl, optionally substituted C_{3-10} carbocyclyl, optionally substituted C_{6-10} aryl, $-OR^5$, $-NR^{14}R^{15}$, $-C(O)R^8$, $-SO_2R^{16}$, and $-NO_2$;

each R^{10} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, and optionally substituted C_{2-6} alkynyl, or independently two geminal R^{10} together are oxo;

each R^{11} is independently selected from the group consisting of halogen, -CN, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, and optionally substituted C_{1-6} alkoxy;

each R^{12} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally

substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

each R^{13} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

R^{14} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

R^{15} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

each R^{16} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

Z is selected from oxygen and sulfur;

each n is independently an integer from 0 to 4; and

the bonds represented by a solid and dashed line are independently selected from the group consisting of a single bond and a double bond; provided that

when R^1 is selected from the group consisting of optionally substituted C_{6-10} aryl, optionally substituted 5 to 6 membered heteroaryl, optionally substituted 6 to 10 membered heterocyclyl, optionally substituted hexyl, C_{1-6}alkyl, optionally substituted C_{2-6} alkenyl; each of R^2 is hydrogen or one of R^2 is hydrogen and the other R^2 is methyl; and Z is O; then R^3 is not $-CH_2$-phenyl substituted with one or more halogen atoms; and provided that

R^1 is not 4-methoxy phenyl.

231. The compound of Claim 230, wherein R^1 is selected from C_{1-6} alkyl optionally substituted with one or more R^4, C_{6-10} aryl optionally substituted with one or more R^4, or 5to 6 membered heteroaryl optionally substituted with one or more R^4.

232. The compound of Claim 231, wherein R^1 is selected from C_{1-6} alkyl.

233. The compound of Claim 232, wherein R^1 is selected from methyl, ethyl, propyl, or isopropyl.

234. The compound of Claim 231, wherein R^1 is phenyl optionally substituted with one or more R^4.

235. The compound of Claim 231, wherein R^1 is selected from 5 or 6 membered heteroaryl, each optionally substituted with one or more R^4.

236. The compound of Claim 235, wherein R^1 is selected from pyrazolyl or 1-methyl pyrazolyl, each optionally substituted with one or more R^4.

237. The compound of any one of Claims 230 to 236, wherein R^4 is selected from halogen or optionally substituted C_{1-6} alkyl.

238. The compound of Claim 237, wherein R^4 is fluoro.

239. The compound of any one of Claims 230 to 236, wherein R^1 is unsubstituted.

240. The compound of any one of Claims 230 to 239, wherein each R^2 is independently selected from hydrogen, halogen, or optionally substituted C_{1-6} alkyl.

241. The compound of Claim 240, wherein R^2 is hydrogen.

242. The compound of any one of Claims 230 to 241, wherein R^3 is $-(CH_2)_{1-4}-(C_{6-10}$ aryl), optionally substituted with one or more R^9.

243. The compound of Claim 242, wherein R^3 is $-(CH_2)_{1-4}$-phenyl, optionally substituted with one or more R^9.

244. The compound of Claim 243, wherein R^3 is $-(CH_2)$-phenyl, optionally substituted with one or more R^9.

245. The compound of Claim 243, wherein R^3 is $-(CH_2)_2$-phenyl, optionally substituted with one or more R^9.

246. The compound of any one of Claims 230 to 245, wherein R^9 is selected from halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-8} alkoxyalkyl, $-OR^5$, $-C(O)R^8$ or $-NR^{14}R^{15}$.

247. The compound of Claim 246, wherein R^9 is selected from fluoro, chloro, methyl, ethyl, methoxy, ethoxy, trifluoromethyl, trifluoromethoxy, $-C(O)CH_3$, $-NHCH_3$, $-NH_2$, or $-NHC(O)CH_3$.

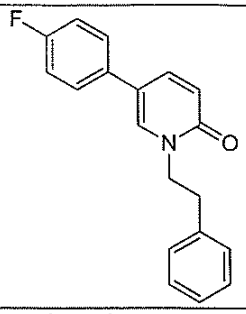
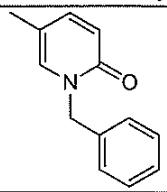
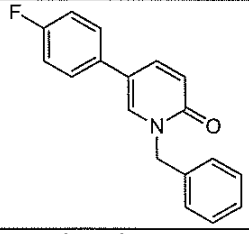
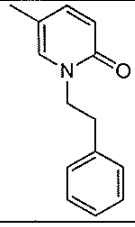
248. The compound of any one of Claims 242 to 245, wherein R^3 is unsubstituted.

249. The compound of any one of Claims 230 to 248, wherein Z is oxygen.

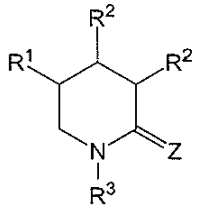
250. The compound of any one of Claims 230 to 249, wherein the bonds represented by a solid and dashed line are double bonds.

251. The compound of Claim 230, wherein the compound is selected from the group consisting of **Compounds 77-80** as shown below, or pharmaceutically acceptable salts thereof

Compd. #	**Structure**

77	
78	
79	
80	

252. A compound having the structure of formula (IX):



(IX)

R^1 is selected from the group consisting of hydrogen, halogen, -CN, $-C(O)R^8$, $-SO_2R^{16}$, C_{1-6} alkyl optionally substituted with one or more R^4, C_{2-6} alkenyl optionally substituted with one or more R^4, C_{2-6} alkynyl optionally substituted with one or more R^4, C_{6-10} aryl optionally substituted with one or more R^4, 5-10 membered heteroaryl optionally substituted with one or more R^4, C_{3-10} carbocyclyl optionally substituted with one or more R^4, and 3-10 membered heterocyclyl optionally substituted with one or more R^4;

each R^2 is independently selected from the group consisting of hydrogen, halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, -CN, $-OR^5$, $-NR^6R^7$, and $-C(O)R^8$,

or both R^2 together with the carbon atoms to which they are attached form a fused ring selected from the group consisting of C_{3-7} carbocyclyl and 3-7 membered heterocyclyl, each optionally substituted with one or more R^4;

R^3 is selected from the group consisting of $-(CH_2)_n-(C_{6-10}$ aryl), 5-10 membered heteroaryl, $-(CH_2)_n-(C_{3-10}$ carbocyclyl), and $-(CH_2)_n$-(3-10 membered heterocyclyl), each optionally substituted with one or more R^9;

each R^4 is independently selected from the group consisting of halogen, -CN, -OH, $-C(O)R^8$, $-SO_2R^{16}$, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkoxy, optionally substituted C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, 5-10 membered heteroaryl optionally substituted with one or more R^{11}, or independently two geminal R^4 together are oxo;

each R^5 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{2-8} alkoxyalkyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, and $-(CH_2)_n$-(3-10 membered heterocyclyl) optionally substituted with one or more R^{10};

R^6 is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, $-C(O)R^8$, and $-C(O)OR^5$;

R^7 is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, (5-10 membered heteroaryl)alkyl optionally substituted with one or more R^{11}, $-C(O)R^8$, and $-C(O)OR^5$;

or R^6 and R^7 together with the nitrogen to which they are attached form an 3-10 membered heterocyclyl optionally substituted with one or more R^{10};

each R^8 is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally

substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

each R^9 is independently selected from the group consisting of halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{1-6} alkylthio, optionally substituted C_{2-8} alkoxyalkyl, optionally substituted C_{3-10} carbocyclyl, optionally substituted C_{6-10} aryl, $-OR^5$, $-NR^{14}R^{15}$, $-C(O)R^8$, $-SO_2R^{16}$, and $-NO_2$;

each R^{10} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, and optionally substituted C_{2-6} alkynyl, or independently two geminal R^{10} together are oxo;

each R^{11} is independently selected from the group consisting of halogen, -CN, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, and optionally substituted C_{1-6} alkoxy;

each R^{12} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

each R^{13} is independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, and C_{7-14} aralkyl optionally substituted with one or more R^{11};

R^{14} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

R^{15} is selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{6-10} aryl, and $-C(O)R^8$;

each R^{16} is independently selected from the group consisting of optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, C_{6-10} aryl optionally substituted with one or more R^{11}, C_{7-14} aralkyl optionally substituted with one or more R^{11}, $-NR^{12}R^{13}$, and $-OR^5$;

Z is selected from oxygen and sulfur; and

each n is independently an integer from 0 to 4.

253. The compound of Claim 252, wherein R^1 is selected from C_{1-6} alkyl optionally substituted with one or more R^4, C_{6-10} aryl optionally substituted with one or more R^4, or 5-10 membered heteroaryl optionally substituted with one or more R^4.

254. The compound of Claim 253, wherein R^1 is C_{1-6} alkyl optionally substituted with one or more R^4.

255. The compound of Claim 253, wherein R^1 is C_{6-10} aryl optionally substituted with one or more R^4.

256. The compound of Claim 255, wherein R^1 is phenyl optionally substituted with one or more R^4.

257. The compound of Claim 253, wherein R^1 is 5 or 6 membered heteroaryl optionally substituted with one or more R^4.

258. The compound of Claim 257, wherein R^1 is pyrazolyl or 1-methyl pyrazolyl optionally substituted with one or more R^4.

259. The compound of any one of Claims 253 to 258, wherein R^4 is selected from halogen, optionally substituted C_{1-6} alkyl or optionally substituted C_{1-6} alkoxy.

260. The compound of any one of Claims 253 to 258, wherein R^1 is unsubstituted.

261. The compound of any one of Claims 252 to 260, wherein each R^2 is independently selected from hydrogen, halogen or optionally substituted C_{1-6} alkyl.

262. The compound of Claim 261, wherein R^2 is hydrogen.

263. The compound of any one of Claims 252 to 262, wherein R^3 is $-(CH_2)_n-(C_{6-10}$ aryl), optionally substituted with one or more R^9.

264. The compound of Claim 263, wherein R^3 is phenyl optionally substituted with one or more R^9.

265. The compound of Claim 263 or 264, wherein R^9 is selected from halogen, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-8} alkoxyalkyl, $-OR^5$, $-C(O)R^8$ or $-NR^{14}R^{15}$.

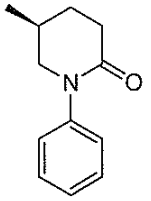
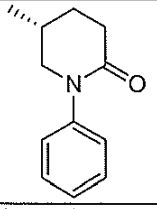
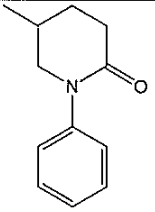
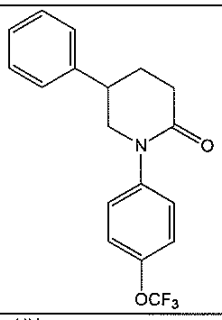
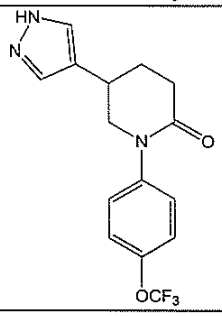
266. The compound of Claim 265, wherein R^9 is selected from fluoro, chloro, methyl, ethyl, methoxy, ethoxy, trifluoromethyl, trifluoromethoxy, $-C(O)CH_3$, $-NHCH_3$, $-NH_2$, or $-NHC(O)CH_3$.

267. The compound of Claim 263 or 264, wherein R^3 is unsubstituted.

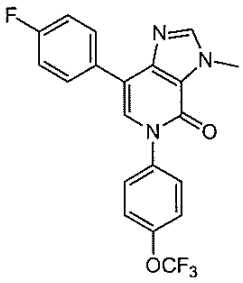
268. The compound of any one of Claims 252 to 267, wherein Z is oxygen.

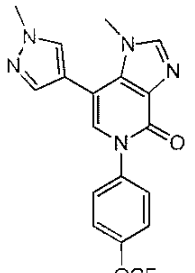
269. The compound of Claim 252, wherein the compound is selected from the group consisting of **Compounds 83, 84, 520-522** as shown below, or pharmaceutically acceptable salts thereof

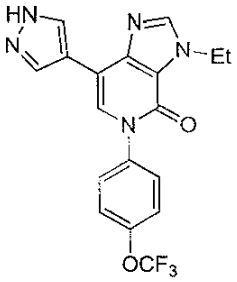
Compd. #	**Structure**

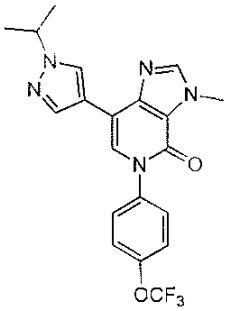
83	
84	
520	 **(racemic form of 83/84)**
521	
522	

.

270. A compound of structure  , or a pharmaceutically acceptable salt thereof.

271. A compound of structure , or a pharmaceutically acceptable salt thereof.

272. A compound of structure , or a pharmaceutically acceptable salt thereof.

273. A compound of structure , or a pharmaceutically acceptable salt thereof.

274. A pharmaceutical composition comprising an effective amount of a compound of any one of Claims 1 to 273, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier, diluent, excipient or combination thereof.

275. A therapeutically effective amount of a compound of any one of Claims 1 to 273, a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 274 for use in the treatment of a fibrotic condition.

276. The compound for use of Claim 275, wherein the fibrotic condition is selected from pulmonary fibrosis, dermal fibrosis, pancreatic fibrosis, liver fibrosis, and renal fibrosis.

277. The compound for use of Claim 276, wherein the fibrotic condition is idiopathic pulmonary fibrosis.

278. The compound for use of any one of Claims 275 to 277, wherein the compound, the pharmaceutical acceptable salt thereof, or the pharmaceutical composition is for use by inhalation.

279. Use of a therapeutically effective amount of a compound of any one of Claims 1 to 273, a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 274 in the preparation of a medicament for treating a fibrotic condition.