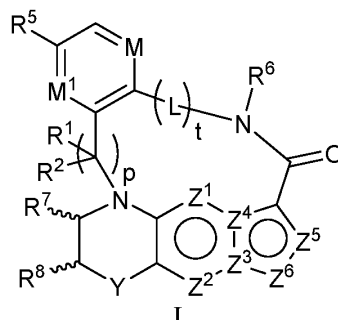


WHAT IS CLAIMED IS:

1. A compound of the formula I



wherein

each L is independently $-C(R^1)(R^2)-$ or X; with the proviso that, when t is 1, then L is $-C(R^1)(R^2)-$;

X is O, S, S(O) or S(O)₂;

each R¹ and R² is independently H, deuterium, halogen, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl, 3- to 7-membered heterocycloalkyl, C₆-C₁₀ aryl, or mono- or bicyclic heteroaryl, -OR^a, -OC(O)R^a, -OC(O)R^a, -OC(O)NR^aR^b, -OS(O)R^a, -OS(O)₂R^a, -SR^a, -S(O)R^a, -S(O)₂R^a, -S(O)NR^aR^b, -S(O)₂NR^aR^b, -OS(O)NR^aR^b, -OS(O)₂NR^aR^b, -NR^aR^b, -NR^aC(O)R^b, -NR^aC(O)OR^b, -NR^aC(O)NR^aR^b, -NR^aS(O)R^b, -NR^aS(O)₂R^b, -NR^aS(O)NR^aR^b, -NR^aS(O)₂NR^aR^b, -C(O)R^a, -C(O)OR^a, -C(O)NR^aR^b, -PR^aR^b, -P(O)R^aR^b, -P(O)₂R^aR^b, -P(O)NR^aR^b, -P(O)₂NR^aR^b, -P(O)OR^a, -P(O)₂OR^a, -CN, or -NO₂, or R¹ and R² taken together with the carbon or carbons to which they are attached form a C₃-C₆ cycloalkyl or a 4- to 6-membered heterocycloalkyl, wherein each hydrogen atom in C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl, 3- to 7-membered heterocycloalkyl, C₆-C₁₀ aryl, mono- or bicyclic heteroaryl, 4- to 6-membered heterocycloalkyl is independently optionally substituted by deuterium, halogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, 3- to 7-membered heterocycloalkyl, -OR^c, -OC(O)R^c, -OC(O)NR^cR^f, -OC(=N)NR^cR^f, -OS(O)R^c, -OS(O)₂R^c, -OS(O)NR^cR^f, -OS(O)₂NR^cR^f, -SR^c, -S(O)R^c, -S(O)₂R^c, -S(O)NR^cR^f, -S(O)₂NR^cR^f, -NR^cR^f, -NR^cC(O)R^f, -NR^cC(O)OR^f, -NR^cC(O)NR^cR^f, -NR^cS(O)R^f, -NR^cS(O)₂R^f, -NR^cS(O)NR^cR^f, -NR^cS(O)₂NR^cR^f, -C(O)R^c, -C(O)OR^c, -C(O)NR^cR^f, -PR^cR^f, -P(O)R^cR^f, -P(O)₂R^cR^f, -P(O)NR^cR^f, -P(O)₂NR^cR^f, -P(O)OR^c, -P(O)₂OR^c, -CN, or -NO₂;

M is CR³ or N;

M¹ is CR⁴;

each R^3 , R^4 , and R^5 is independently hydrogen, deuterium, halogen, $-OR^c$, $-OC(O)R^c$, $-OC(O)NR^cR^d$, $-OC(=N)NR^cR^d$, $-OS(O)R^c$, $-OS(O)_2R^c$, $-OS(O)NR^cR^d$, $-OS(O)_2NR^cR^d$, $-SR^c$, $-S(O)R^c$, $-S(O)_2R^c$, $-S(O)NR^cR^d$, $-S(O)_2NR^cR^d$, $-NR^cR^d$, $-NR^cC(O)R^d$, $-NR^cC(O)OR^d$, $-NR^cC(O)NR^cR^d$, $-NR^cC(=N)NR^cR^d$, $-NR^cS(O)R^d$, $-NR^cS(O)_2R^d$, $-NR^cS(O)NR^cR^d$, $-NR^cS(O)_2NR^cR^d$, $-C(O)R^c$, $-C(O)OR^c$, $-C(O)NR^cR^d$, $-C(=N)NR^cR^d$, $-PR^cR^d$, $-P(O)R^cR^d$, $-P(O)_2R^cR^d$, $-P(O)NR^cR^d$, $-P(O)_2NR^cR^d$, $-P(O)OR^c$, $-P(O)_2OR^c$, $-CN$, $-NO_2$, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_6 cycloalkyl, 3- to 7-membered heterocycloalkyl, C_6 - C_{10} aryl, or mono- or bicyclic heteroaryl, or R^4 and R^5 taken together with the ring to which they are attached form a C_5 - C_8 cycloalkyl, or a 5- to 8-membered heterocycloalkyl, wherein each hydrogen atom in C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_6 cycloalkyl, 3- to 7-membered heterocycloalkyl, C_6 - C_{10} aryl, mono- or bicyclic heteroaryl, C_5 - C_8 cycloalkyl, or 5- to 8-membered heterocycloalkyl is independently optionally substituted by deuterium, halogen, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, $-OR^e$, $-OC(O)R^e$, $-OC(O)NR^eR^f$, $-OC(=N)NR^eR^f$, $-OS(O)R^e$, $-OS(O)_2R^e$, $-OS(O)NR^eR^f$, $-OS(O)_2NR^eR^f$, $-SR^e$, $-S(O)R^e$, $-S(O)_2R^e$, $-S(O)NR^eR^f$, $-S(O)_2NR^eR^f$, $-NR^eR^f$, $-NR^eC(O)R^f$, $-NR^eC(O)OR^f$, $-NR^eC(O)NR^eR^f$, $-NR^eS(O)R^f$, $-NR^eS(O)_2R^f$, $-NR^eS(O)NR^eR^f$, $-NR^eS(O)_2NR^eR^f$, $-C(O)R^e$, $-C(O)OR^e$, $-C(O)NR^eR^f$, $-PR^eR^f$, $-P(O)R^eR^f$, $-P(O)_2R^eR^f$, $-P(O)NR^eR^f$, $-P(O)_2NR^eR^f$, $-P(O)OR^e$, $-P(O)_2OR^e$, $-CN$, or $-NO_2$;

R^6 is H, deuterium, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_6 cycloalkyl, 3- to 7-membered heterocycloalkyl, C_6 - C_{10} aryl, or mono- or bicyclic heteroaryl, wherein each hydrogen atom in C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_6 cycloalkyl, 3- to 7-membered heterocycloalkyl, C_6 - C_{10} aryl, or mono- or bicyclic heteroaryl is independently optionally substituted by deuterium, halogen, C_3 - C_6 cycloalkyl, or 5- to 7-membered heterocycloalkyl, $-OR^e$, $-OC(O)R^e$, $-OC(O)NR^eR^f$, $-OC(=N)NR^eR^f$, $-OS(O)R^e$, $-OS(O)_2R^e$, $-OS(O)NR^eR^f$, $-OS(O)_2NR^eR^f$, $-SR^e$, $-S(O)R^e$, $-S(O)_2R^e$, $-S(O)NR^eR^f$, $-S(O)_2NR^eR^f$, $-NR^eR^f$, $-NR^eC(O)R^f$, $-NR^eC(O)OR^f$, $-NR^eC(O)NR^eR^f$, $-NR^eS(O)R^f$, $-NR^eS(O)_2R^f$, $-NR^eS(O)NR^eR^f$, $-NR^eS(O)_2NR^eR^f$, $-C(O)R^e$, $-C(O)OR^e$, $-C(O)NR^eR^f$, $-PR^eR^f$, $-P(O)R^eR^f$, $-P(O)_2R^eR^f$, $-P(O)NR^eR^f$, $-P(O)_2NR^eR^f$, $-P(O)OR^e$, $-P(O)_2OR^e$, $-CN$, or $-NO_2$;

R^7 and R^8 combine to form a C_3 - C_7 cycloalkyl, a 5- to 8-membered heterocycloalkyl, C_6 - C_{10} aryl, or 5- to 7-membered heteroaryl; wherein each hydrogen atom in C_3 - C_7 cycloalkyl, a 5- to 8-membered heterocycloalkyl, C_6 - C_{10} aryl, or 5- to 7-membered heteroaryl is independently optionally substituted by deuterium, halogen, $-OR^e$, $-OC(O)R^e$, $-OC(O)NR^eR^f$, $-OC(=N)NR^eR^f$, $-OS(O)R^e$, $-OS(O)_2R^e$, $-OS(O)NR^eR^f$, $-OS(O)_2NR^eR^f$, $-SR^e$, $-S(O)R^e$, $-S(O)_2R^e$, $-S(O)NR^eR^f$, $-S(O)_2NR^eR^f$, $-NR^eR^f$, $-NR^eC(O)R^f$, $-NR^eC(O)OR^f$, $-NR^eC(O)NR^eR^f$, $-NR^eS(O)R^f$, $-NR^eS(O)_2R^f$, $-NR^eS(O)NR^eR^f$, $-NR^eS(O)_2NR^eR^f$, $-C(O)R^e$, $-C(O)OR^e$, $-C(O)NR^eR^f$, $-PR^eR^f$, $-P(O)R^eR^f$, $-P(O)_2R^eR^f$, $-P(O)NR^eR^f$, $-P(O)_2NR^eR^f$, $-P(O)OR^e$, $-P(O)_2OR^e$, $-CN$, or $-NO_2$;

Y is O, S, NR⁹, or CR⁹R¹⁰;

R⁹ and R¹⁰ are each independently H, deuterium, halogen, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl, 3- to 7-membered heterocycloalkyl, C₆-C₁₀ aryl, or mono- or bicyclic heteroaryl, wherein each hydrogen atom in C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl, 3- to 7-membered heterocycloalkyl, C₆-C₁₀ aryl, or mono- or bicyclic heteroaryl is optionally substituted by a halogen, -OR^c, -OC(O)R^c, -OC(O)NR^cR^f, -OC(=N)NR^cR^f, -OS(O)R^c, -OS(O)₂R^c, -OS(O)NR^cR^f, -OS(O)₂NR^cR^f, -SR^c, -S(O)R^c, -S(O)₂R^c, -S(O)NR^cR^f, -S(O)₂NR^cR^f, -NR^cR^f, -NR^cC(O)R^f, -NR^cC(O)OR^f, -NR^cC(O)NR^cR^f, -NR^cS(O)R^f, -NR^cS(O)₂R^f, -NR^cS(O)NR^cR^f, -NR^cS(O)₂NR^cR^f, -C(O)R^c, -C(O)OR^c, -C(O)NR^cR^f, -PR^cR^f, -P(O)R^cR^f, -P(O)₂R^cR^f, -P(O)NR^cR^f, -P(O)₂NR^cR^f, -P(O)OR^c, or -P(O)₂OR^c;

each R^a, R^b, R^c, R^d, R^e, and R^f is independently selected from the group consisting of H, deuterium, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl, 3- to 7-membered heterocycloalkyl, C₆-C₁₀ aryl, 5- to 7- membered heteroaryl;

each of Z¹, Z², Z³, Z⁴, Z⁵, and Z⁶ is independently N, NH, C or CH;

p is 1, 2, 3, or 4; and

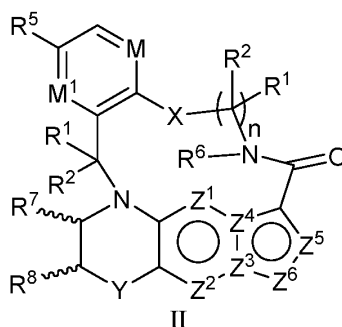
t is 1, 2, 3, 4, or 5;

or a pharmaceutically acceptable salt thereof.

2. The compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein p is 1.

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

4. The compound of claim 1, or a pharmaceutically acceptable salt thereof, having the formula II



wherein

M is CR³ or N;

M¹ is CR⁴;

X is O, S, S(O), or S(O)₂;

each R¹ and R² is independently H, deuterium, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl, C₆-C₁₀ aryl, -OR^a, -SR^a, -NR^aR^b, -C(O)OR^a, -C(O)NR^aR^b; or R¹ and R² taken together with the carbon or carbons to which they are attached form a C₃-C₆ cycloalkyl or a 4- to 6-membered heterocycloalkyl; wherein each hydrogen atom in C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl and C₆-C₁₀ aryl is independently optionally substituted by deuterium, halogen, -OH, -CN, -OC₁-C₆ alkyl, -NH₂, -OC(O)C₁-C₆ alkyl, -OC(O)N(C₁-C₆ alkyl)₂, -OC(O)NH(C₁-C₆ alkyl), -OC(O)NH₂, -OC(=N)N(C₁-C₆ alkyl)₂, -OC(=N)NH(C₁-C₆ alkyl), -OC(=N)NH₂, -OS(O)C₁-C₆ alkyl, -OS(O)₂C₁-C₆ alkyl, -NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)₂, -NHC(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)C₁-C₆ alkyl, -NHC(O)NH₂, -NHC(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)C(O)NH₂, -N(C₁-C₆ alkyl)C(O)NH(C₁-C₆ alkyl), -NHC(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)C(O)N(C₁-C₆ alkyl)₂, -NHC(O)OC₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)OC₁-C₆ alkyl, -NHC(O)OH, -N(C₁-C₆ alkyl)C(O)OH, -NHS(O)C₁-C₆ alkyl, -NHS(O)₂C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)₂C₁-C₆ alkyl, -NHS(O)NH₂, -NHS(O)₂NH₂, -N(C₁-C₆ alkyl)S(O)NH₂, -N(C₁-C₆ alkyl)S(O)₂NH₂, -NHS(O)NH(C₁-C₆ alkyl), -NHS(O)₂NH(C₁-C₆ alkyl), -NHS(O)N(C₁-C₆ alkyl)₂, -NHS(O)₂N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)₂NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)₂N(C₁-C₆ alkyl)₂, -C(O)C₁-C₆ alkyl, -CO₂H, -C(O)OC₁-C₆ alkyl, -C(O)NH₂, -C(O)NH(C₁-C₆ alkyl), -C(O)N(C₁-C₆ alkyl)₂, -SC₁-C₆ alkyl, -S(O)C₁-C₆ alkyl, -S(O)₂C₁-C₆ alkyl, -S(O)NH(C₁-C₆ alkyl), -S(O)₂NH(C₁-C₆ alkyl), -S(O)N(C₁-C₆ alkyl)₂, -S(O)₂N(C₁-C₆ alkyl)₂, -S(O)NH₂, -S(O)₂NH₂, -OS(O)N(C₁-C₆ alkyl)₂, -OS(O)₂N(C₁-C₆ alkyl)₂, -OS(O)NH(C₁-C₆ alkyl), -OS(O)₂NH(C₁-C₆ alkyl), -OS(O)NH₂, -OS(O)₂NH₂, -P(C₁-C₆ alkyl)₂, -P(O)(C₁-C₆ alkyl)₂, C₃-C₆ cycloalkyl, or 3- to 7-membered heterocycloalkyl;

R³, R⁴, and R⁵ are each independently H, fluoro, chloro, bromo, C₁-C₆ alkyl, -OH, -CN, -OC₁-C₆ alkyl, -NHC₁-C₆ alkyl, -N(C₁-C₆ alkyl)₂ or -CF₃;

R⁶ is H, C₁-C₆ alkyl or 3- to 7-membered heterocycloalkyl, wherein each hydrogen atom in C₁-C₆ alkyl or 3- to 7-membered heterocycloalkyl is independently optionally substituted by halogen, -OH, -CN, -OC₁-C₆ alkyl, -NH₂, -NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)₂, -CO₂H, -C(O)OC₁-C₆ alkyl, -C(O)NH₂, -C(O)NH(C₁-C₆ alkyl), -C(O)N(C₁-C₆ alkyl)₂, C₃-C₆ cycloalkyl, or monocyclic 5- to 7-membered heterocycloalkyl;

R⁷ and R⁸ combine to form a C₃-C₇ cycloalkyl, a 5- to 8-membered heterocycloalkyl, C₆-C₁₀ aryl, or 5- to 7-membered heteroaryl; wherein each hydrogen atom in C₃-C₇ cycloalkyl,

a 5- to 8-membered heterocycloalkyl, C₆-C₁₀ aryl, or 5- to 7-membered heteroaryl is independently optionally substituted by deuterium, halogen, -OH, -OC₁-C₆ alkyl, -OC(O)C₁-C₆ alkyl, -OC(O)NH₂, -OC(O)NH(C₁-C₆ alkyl), -OC(O)N(C₁-C₆ alkyl)₂, -OC(=N)NH₂, -OC(=N)NH(C₁-C₆ alkyl), -OC(=N)N(C₁-C₆ alkyl)₂, -OS(O)C₁-C₆ alkyl, -OS(O)₂C₁-C₆ alkyl, -OS(O)NH₂, -OS(O)NH(C₁-C₆ alkyl), -OS(O)N(C₁-C₆ alkyl)₂, -OS(O)₂NH₂, -OS(O)₂NH(C₁-C₆ alkyl), -OS(O)₂N(C₁-C₆ alkyl)₂, -SH, -SC₁-C₆ alkyl, -S(O)C₁-C₆ alkyl, -S(O)₂C₁-C₆ alkyl, -S(O)NH₂, -S(O)NH(C₁-C₆ alkyl), -S(O)(C₁-C₆ alkyl)₂, -S(O)₂NH₂, -S(O)₂NH(C₁-C₆ alkyl), -S(O)₂N(C₁-C₆ alkyl)₂, -NH₂, -NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)₂, -NHC(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)C₁-C₆ alkyl, -NHC(O)OH, -NHC(O)OC₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)OH, -N(C₁-C₆ alkyl)C(O)OC₁-C₆ alkyl, -NHC(O)NH₂, -NHC(O)NH(C₁-C₆ alkyl), -NHC(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)C(O)NH₂, -N(C₁-C₆ alkyl)C(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)C(O)N(C₁-C₆ alkyl)₂, -NHS(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)C₁-C₆ alkyl, -NHS(O)₂C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)₂C₁-C₆ alkyl, -NHS(O)NH₂, -NHS(O)NH(C₁-C₆ alkyl), -NHS(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)NH₂, -N(C₁-C₆ alkyl)S(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)N(C₁-C₆ alkyl)₂, -NHS(O)₂NH₂, -NHS(O)₂NH(C₁-C₆ alkyl), -NHS(O)₂N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)₂NH₂, -N(C₁-C₆ alkyl)S(O)₂NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)₂N(C₁-C₆ alkyl)₂, -C(O)C₁-C₆ alkyl, -C(O)OC₁-C₆ alkyl, -C(O)NH₂, -C(O)NH(C₁-C₆ alkyl), -C(O)N(C₁-C₆ alkyl)₂, -P(C₁-C₆ alkyl)₂, -P(O)(C₁-C₆ alkyl)₂, -P(O)₂(C₁-C₆ alkyl)₂, -P(O)NH₂, -P(O)NH(C₁-C₆ alkyl), -P(O)N(C₁-C₆ alkyl)₂, -P(O)₂NH₂, -P(O)₂NH(C₁-C₆ alkyl), -P(O)₂N(C₁-C₆ alkyl)₂, -P(O)OH, -P(O)OC₁-C₆ alkyl, -P(O)₂OH, -P(O)₂OC₁-C₆ alkyl, -CN, or -NO₂;

Y is O, S, NR⁹, or CR⁹R¹⁰;

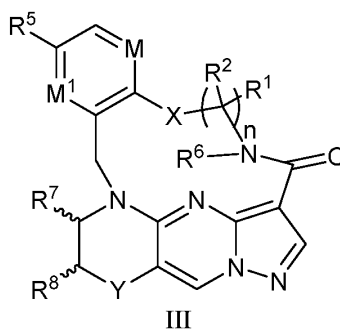
R⁹ and R¹⁰ are each independently H, deuterium, halogen, or C₁-C₆ alkyl, wherein each hydrogen atom in C₁-C₆ alkyl is optionally substituted by a halogen, -OH, -OC₁-C₆ alkyl, -OC(O)C₁-C₆ alkyl, -OC(O)N(C₁-C₆ alkyl)₂, -OC(O)NH(C₁-C₆ alkyl), -OC(O)NH₂, -OC(=N)N(C₁-C₆ alkyl)₂, -OC(=N)NH(C₁-C₆ alkyl), -OC(=N)NH₂, -OS(O)C₁-C₆ alkyl, -OS(O)₂C₁-C₆ alkyl, -OS(O)N(C₁-C₆ alkyl)₂, -OS(O)NH(C₁-C₆ alkyl), -OS(O)NH₂, -OS(O)₂N(C₁-C₆ alkyl)₂, -OS(O)₂NH(C₁-C₆ alkyl), -OS(O)₂NH₂, -SH, -SC₁-C₆ alkyl, -S(O)C₁-C₆ alkyl, -S(O)₂C₁-C₆ alkyl, -S(O)N(C₁-C₆ alkyl)₂, -S(O)NH(C₁-C₆ alkyl), -S(O)NH₂, -S(O)₂N(C₁-C₆ alkyl)₂, -S(O)₂NH(C₁-C₆ alkyl), -S(O)₂NH₂, -N(C₁-C₆ alkyl)₂, -NH(C₁-C₆ alkyl), -NH₂, -N(C₁-C₆ alkyl)C(O)C₁-C₆ alkyl, -NHC(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)OC₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)OH, -NHC(O)OC₁-C₆ alkyl, -NHC(O)OH, -N(C₁-C₆ alkyl)C(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)C(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)C(O)NH₂, -NHC(O)N(C₁-C₆ alkyl)₂, -NHC(O)NH(C₁-C₆ alkyl), -NHC(O)NH₂, -N(C₁-C₆ alkyl)S(O)C₁-C₆ alkyl, -NHS(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)₂C₁-C₆ alkyl, -NHS(O)₂C₁-C₆ alkyl, -N(C₁-C₆

alkyl)S(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)NH₂,
 -NHS(O)N(C₁-C₆ alkyl)₂, -NHS(O)NH(C₁-C₆ alkyl), -NHS(O)NH₂, -N(C₁-C₆
 alkyl)S(O)₂N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)₂NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)₂NH₂,
 -NHS(O)₂N(C₁-C₆ alkyl)₂, -NHS(O)₂NH(C₁-C₆ alkyl), -NHS(O)₂NH₂, -C(O)C₁-C₆ alkyl,
 -C(O)OC₁-C₆ alkyl, -C(O)N(C₁-C₆ alkyl)₂, -C(O)NH(C₁-C₆ alkyl), -C(O)NH₂, -P(C₁-C₆ alkyl)₂,
 -P(O)(C₁-C₆ alkyl)₂, -P(O)₂(C₁-C₆ alkyl)₂, -P(O)N(C₁-C₆ alkyl)₂, -P(O)₂N(C₁-C₆ alkyl)₂,
 -P(O)OC₁-C₆ alkyl, or -P(O)₂OC₁-C₆ alkyl;

each of Z¹, Z², Z³, Z⁴, Z⁵, and Z⁶ is independently N, NH, C or CH; and

n is 1, 2 or 3.

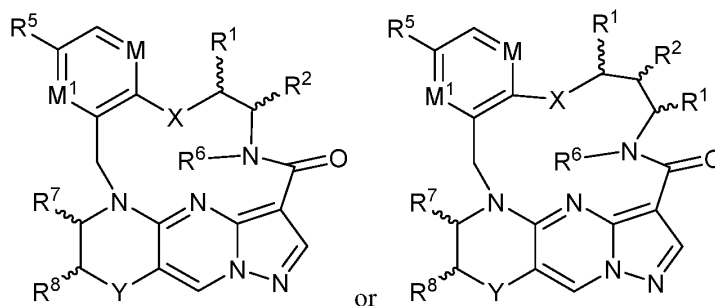
5. The compound of claim 1, having the formula III



or a pharmaceutically acceptable salt thereof.

6. The compound of claim 4 or 5, or a pharmaceutically acceptable salt thereof, wherein n is 2 or 3.

7. The compound of claim 1, having the formula IV or V



IV

V

or a pharmaceutically acceptable salt thereof.

8. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein Y is O.

9. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein M is CR³.

10. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein R³ is H, deuterium, C₁-C₆ alkyl or halogen.

11. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein R³ is H or F.

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

13. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein M¹ is CR⁴.

14. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein R⁴ is H, deuterium, C₁-C₆ alkyl or halogen.

15. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein R⁴ is H or Cl.

16. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein R⁵ is F.

17. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein R² is H.

18. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein R¹ is H.

19. The compound of any one of claims 1 to 17, or a pharmaceutically acceptable salt thereof, wherein R¹ is C₁-C₆ alkyl.

20. The compound of any one of claims 1 to 16, or a pharmaceutically acceptable salt thereof, wherein R¹ is H, and R² is C₁-C₆ alkyl; or R¹ is C₁-C₆ alkyl, and R² is H; or R¹ is H or C₁-C₆ alkyl, and R² is H; or R¹ is H, and R² is C₃-C₇ cycloalkyl; or R¹ is C₃-C₇ cycloalkyl, and R² is H.

21. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein R⁷ and R⁸ combine to form a 4-, 5- or 6-membered cycloalkyl, wherein each hydrogen atom in the 5- or 6-membered cycloalkyl is independently optionally substituted by deuterium, halogen, -OH, -CN, -OC₁-C₆ alkyl, -OC₁-C₆ alkyl(C₆-C₁₀ aryl), -NH₂, -OC(O)C₁-C₆ alkyl, -OC(O)N(C₁-C₆ alkyl)₂, -OC(O)NH(C₁-C₆ alkyl), -OC(O)NH₂, -OC(=N)N(C₁-C₆ alkyl)₂, -OC(=N)NH(C₁-C₆ alkyl), -OC(=N)NH₂, -OS(O)C₁-C₆ alkyl, -OS(O)₂C₁-C₆ alkyl, -NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)₂, -NHC(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)C₁-C₆ alkyl, -NHC(O)NH₂, -NHC(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)C(O)NH₂, -N(C₁-C₆ alkyl)C(O)NH(C₁-C₆ alkyl), -NHC(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)C(O)N(C₁-C₆ alkyl)₂, -NHC(O)OC₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)OC₁-C₆ alkyl, -NHC(O)OH, -N(C₁-C₆ alkyl)C(O)OH, -NHS(O)C₁-C₆ alkyl, -NHS(O)₂C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)₂C₁-C₆ alkyl, -NHS(O)NH₂, -NHS(O)₂NH₂, -N(C₁-C₆ alkyl)S(O)NH₂, -N(C₁-C₆ alkyl)S(O)₂NH₂, -NHS(O)NH(C₁-C₆ alkyl), -NHS(O)₂NH(C₁-C₆ alkyl), -NHS(O)N(C₁-C₆ alkyl)₂, -NHS(O)₂N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)₂NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)₂N(C₁-C₆ alkyl)₂, -C(O)C₁-C₆ alkyl, -CO₂H, -C(O)OC₁-C₆ alkyl, -C(O)NH₂, -C(O)NH(C₁-C₆ alkyl), -C(O)N(C₁-C₆ alkyl)₂, -SC₁-C₆ alkyl, -S(O)C₁-C₆ alkyl, -S(O)₂C₁-C₆ alkyl, -S(O)NH(C₁-C₆ alkyl), -S(O)₂NH(C₁-C₆ alkyl), -S(O)N(C₁-C₆ alkyl)₂, -S(O)₂N(C₁-C₆ alkyl)₂, -S(O)NH₂, -S(O)₂NH₂, -OS(O)N(C₁-C₆ alkyl)₂, -OS(O)₂N(C₁-C₆ alkyl)₂, -OS(O)NH(C₁-C₆ alkyl), -OS(O)₂NH(C₁-C₆ alkyl), -OS(O)NH₂, -OS(O)₂NH₂, -P(C₁-C₆ alkyl)₂, -P(O)(C₁-C₆ alkyl)₂, C₃-C₆ cycloalkyl, or 3- to 7-membered heterocycloalkyl.

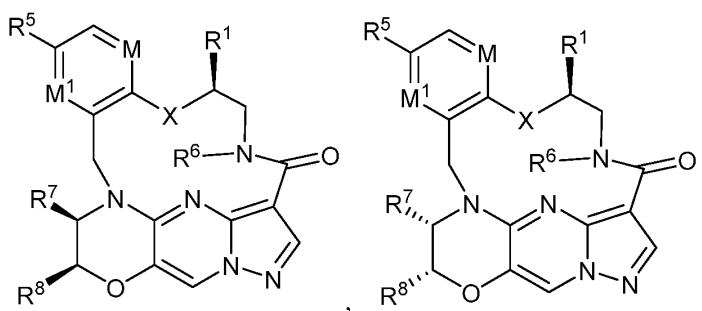
22. The compound of any one of claims 1 to 20, or a pharmaceutically acceptable salt thereof, wherein R⁷ and R⁸ combine to form a 3-, 4-, 5- or 6-membered heterocycloalkyl, wherein each hydrogen atom in the 3-, 4-, 5- or 6-membered heterocycloalkyl is independently optionally substituted by deuterium, halogen, -OH, -CN, -OC₁-C₆ alkyl, -OC₁-C₆ alkyl(C₆-C₁₀ aryl), -NH₂, -OC(O)C₁-C₆ alkyl, -OC(O)N(C₁-C₆ alkyl)₂, -OC(O)NH(C₁-C₆ alkyl), -OC(O)NH₂,

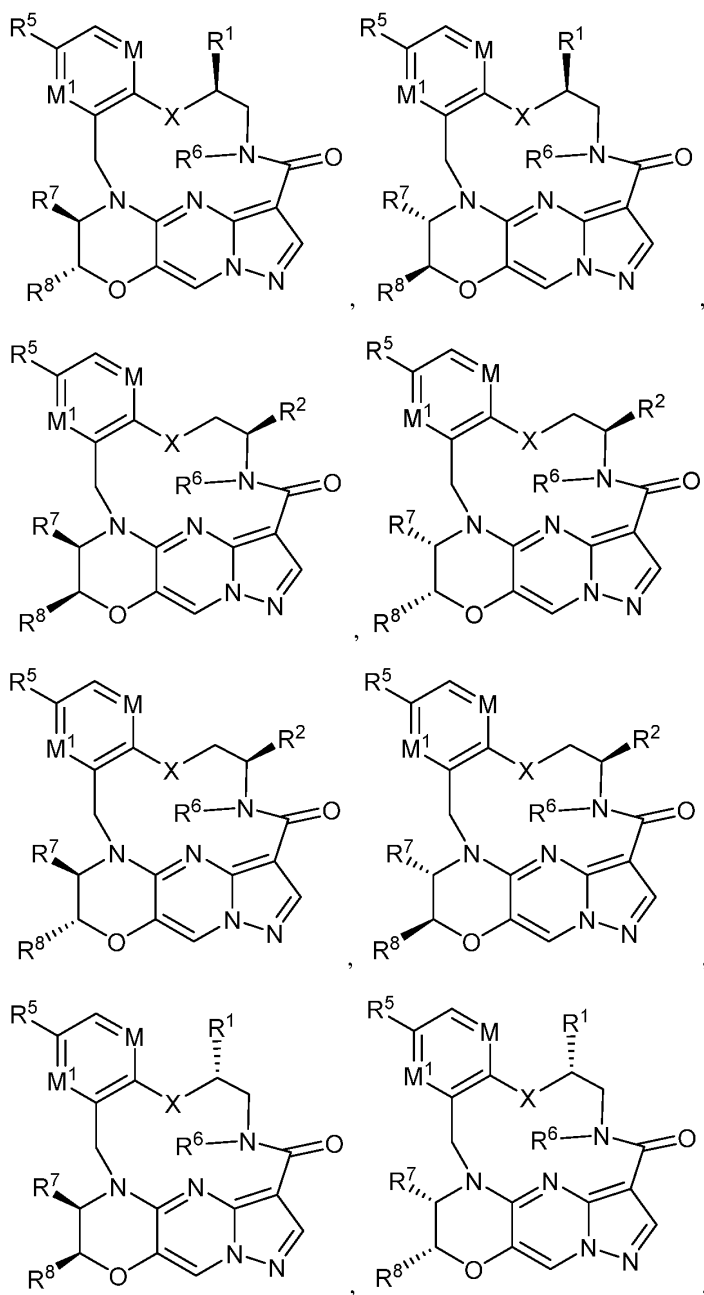
-OC(=N)N(C₁-C₆ alkyl)₂, -OC(=N)NH(C₁-C₆ alkyl), -OC(=N)NH₂, -OS(O)C₁-C₆ alkyl, -OS(O)₂C₁-C₆ alkyl, -NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)₂, -NHC(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)C₁-C₆ alkyl, -NHC(O)NH₂, -NHC(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)C(O)NH₂, -N(C₁-C₆ alkyl)C(O)NH(C₁-C₆ alkyl), -NHC(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)C(O)N(C₁-C₆ alkyl)₂, -NHC(O)OC₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)OC₁-C₆ alkyl, -NHC(O)OH, -N(C₁-C₆ alkyl)C(O)OH, -NHS(O)C₁-C₆ alkyl, -NHS(O)₂C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)₂C₁-C₆ alkyl, -NHS(O)NH₂, -NHS(O)₂NH₂, -N(C₁-C₆ alkyl)S(O)NH₂, -N(C₁-C₆ alkyl)S(O)₂NH₂, -NHS(O)NH(C₁-C₆ alkyl), -NHS(O)₂NH(C₁-C₆ alkyl), -NHS(O)N(C₁-C₆ alkyl)₂, -NHS(O)₂N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)₂NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)₂N(C₁-C₆ alkyl)₂, -C(O)C₁-C₆ alkyl, -CO₂H, -C(O)OC₁-C₆ alkyl, -C(O)NH₂, -C(O)NH(C₁-C₆ alkyl), -C(O)N(C₁-C₆ alkyl)₂, -SC₁-C₆ alkyl, -S(O)C₁-C₆ alkyl, -S(O)₂C₁-C₆ alkyl, -S(O)NH(C₁-C₆ alkyl), -S(O)₂NH(C₁-C₆ alkyl), -S(O)N(C₁-C₆ alkyl)₂, -S(O)₂N(C₁-C₆ alkyl)₂, -S(O)NH₂, -S(O)₂NH₂, -OS(O)N(C₁-C₆ alkyl)₂, -OS(O)₂N(C₁-C₆ alkyl)₂, -OS(O)NH(C₁-C₆ alkyl), -OS(O)₂NH(C₁-C₆ alkyl), -OS(O)NH₂, -OS(O)₂NH₂, -P(C₁-C₆ alkyl)₂, -P(O)(C₁-C₆ alkyl)₂, C₃-C₆ cycloalkyl, or 3- to 7-membered heterocycloalkyl.

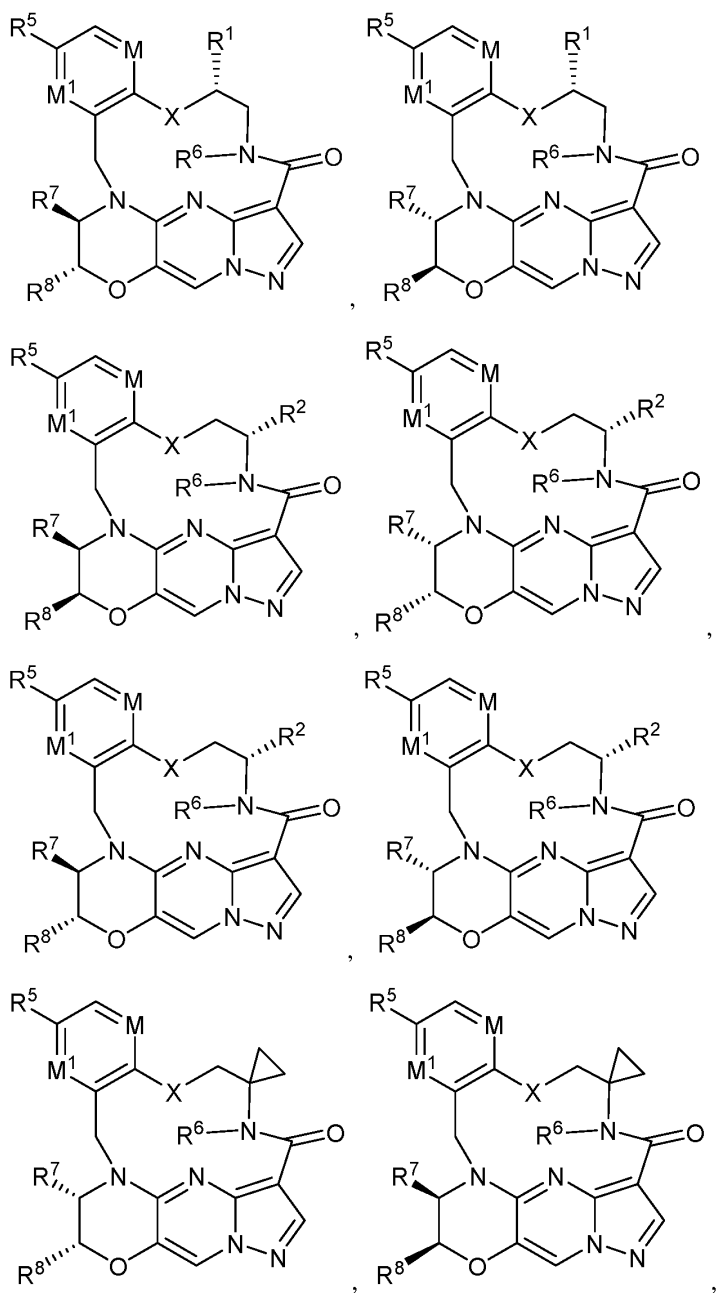
23. The compound of claim 22, or a pharmaceutically acceptable salt thereof, wherein R⁷ and R⁸ combine to form a tetrahydrofuran ring.

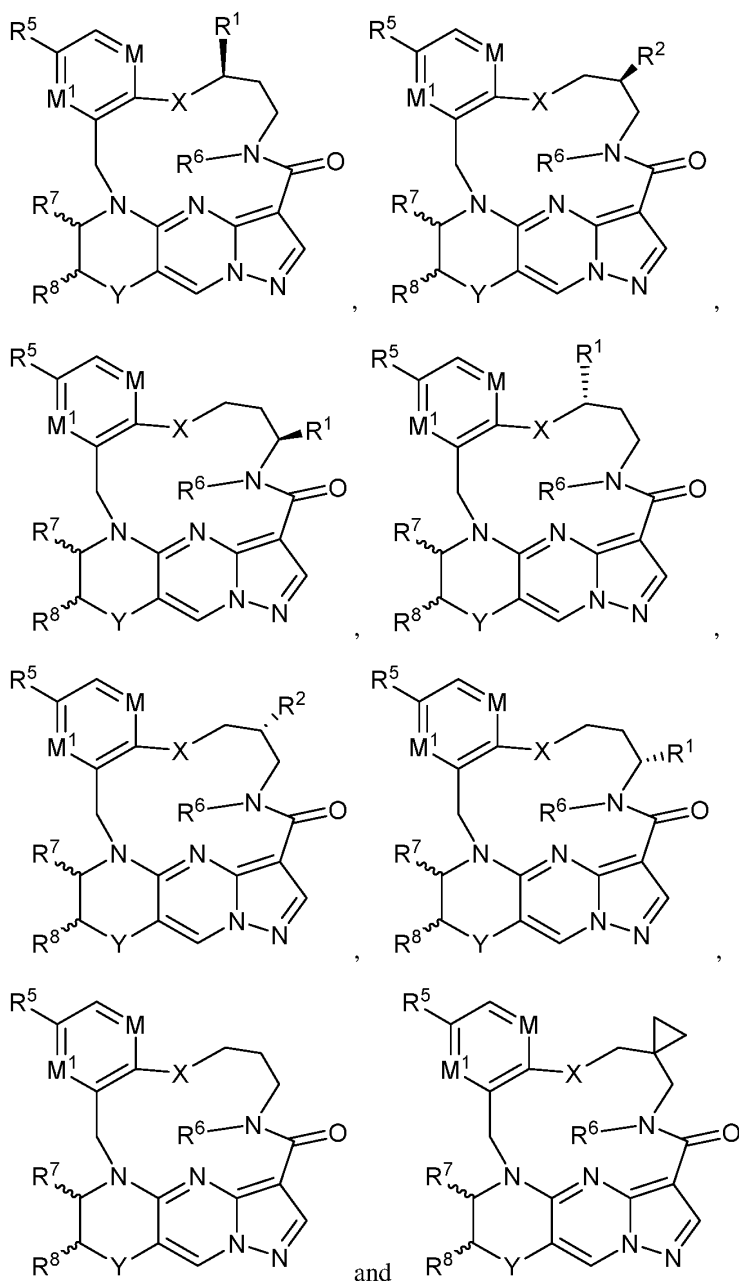
24. The compound of claim 21, or a pharmaceutically acceptable salt thereof, wherein R⁷ and R⁸ combine to form a cyclobutane ring, cyclopentane ring, or cyclohexane ring.

25. The compound of claim 1, selected from the group consisting of









wherein

M is $\mathbb{C}R^3$ or N ;

 M^1 is $\mathbb{C}R^4$;

X is O, S, S(O), or S(O)₂;

R¹ and R² are each independently H, deuterium, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl, C₆-C₁₀ aryl, -OR^a, -SR^a, -NR^aR^b, -C(O)OR^a, -C(O)NR^aR^b; wherein each hydrogen atom in C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl and C₆-C₁₀ aryl is independently optionally substituted by deuterium, halogen, -OH, -CN, -OC₁-C₆ alkyl, -OC₁-C₆ alkyl(C₆-C₁₀ aryl), -NH₂, -OC(O)C₁-C₆ alkyl, -OC(O)N(C₁-C₆ alkyl)₂, -OC(O)NH(C₁-C₆ alkyl), -OC(O)NH₂, -OC(=N)N(C₁-C₆ alkyl)₂, -OC(=N)NH(C₁-C₆ alkyl), -OC(=N)NH₂, -OS(O)C₁-C₆ alkyl, -OS(O)₂C₁-C₆ alkyl, -NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)₂, -NHC(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)C₁-C₆ alkyl, -NHC(O)NH₂, -NHC(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)C(O)NH₂, -N(C₁-C₆ alkyl)C(O)NH(C₁-C₆ alkyl), -NHC(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)C(O)N(C₁-C₆ alkyl)₂, -NHC(O)OC₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)OC₁-C₆ alkyl, -NHC(O)OH, -N(C₁-C₆ alkyl)C(O)OH, -NHS(O)C₁-C₆ alkyl, -NHS(O)₂C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)₂C₁-C₆ alkyl, -NHS(O)NH₂, -NHS(O)₂NH₂, -N(C₁-C₆ alkyl)S(O)NH₂, -N(C₁-C₆ alkyl)S(O)₂NH₂, -NHS(O)NH(C₁-C₆ alkyl), -NHS(O)₂NH(C₁-C₆ alkyl), -NHS(O)N(C₁-C₆ alkyl)₂, -NHS(O)₂N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)₂NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)₂N(C₁-C₆ alkyl)₂, -C(O)C₁-C₆ alkyl, -CO₂H, -C(O)OC₁-C₆ alkyl, -C(O)NH₂, -C(O)NH(C₁-C₆ alkyl), -C(O)N(C₁-C₆ alkyl)₂, -SC₁-C₆ alkyl, -S(O)C₁-C₆ alkyl, -S(O)₂C₁-C₆ alkyl, -S(O)NH(C₁-C₆ alkyl), -S(O)₂NH(C₁-C₆ alkyl), -S(O)N(C₁-C₆ alkyl)₂, -S(O)₂N(C₁-C₆ alkyl)₂, -S(O)NH₂, -S(O)₂NH₂, -OS(O)N(C₁-C₆ alkyl)₂, -OS(O)₂N(C₁-C₆ alkyl)₂, -OS(O)NH(C₁-C₆ alkyl), -OS(O)₂NH(C₁-C₆ alkyl), -OS(O)NH₂, -OS(O)₂NH₂, -P(C₁-C₆ alkyl)₂, -P(O)(C₁-C₆ alkyl)₂, C₃-C₆ cycloalkyl, or 3- to 7-membered heterocycloalkyl;

R³, R⁴, and R⁵ are each independently H, fluoro, chloro, bromo, C₁-C₆ alkyl, -OH, -CN, -OC₁-C₆ alkyl, -NHC₁-C₆ alkyl, -N(C₁-C₆ alkyl)₂ or -CF₃;

R⁶ is H, C₁-C₆ alkyl or 3- to 7-membered heterocycloalkyl, wherein each hydrogen atom in C₁-C₆ alkyl or 3- to 7-membered heterocycloalkyl is independently optionally substituted by halogen, -OH, -CN, -OC₁-C₆ alkyl, -NH₂, -NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)₂, -CO₂H, -C(O)OC₁-C₆ alkyl, -C(O)NH₂, -C(O)NH(C₁-C₆ alkyl), -C(O)N(C₁-C₆ alkyl)₂, C₃-C₆ cycloalkyl, or monocyclic 5- to 7-membered heterocycloalkyl;

R⁷ and R⁸ combine to form a C₃-C₇ cycloalkyl, a 5- to 8-membered heterocycloalkyl, C₆-C₁₀ aryl, or 5- to 7-membered heteroaryl; wherein each hydrogen atom in C₃-C₇ cycloalkyl, a 5- to 8-membered heterocycloalkyl, C₆-C₁₀ aryl, or 5- to 7-membered heteroaryl is independently optionally substituted by deuterium, halogen, -OH, -OC₁-C₆ alkyl, -OC(O)C₁-C₆ alkyl, -OC(O)NH₂, -OC(O)NH(C₁-C₆ alkyl), -OC(O)N(C₁-C₆ alkyl)₂, -OC(=N)NH₂, -OC(=N)NH(C₁-C₆ alkyl), -OC(=N)N(C₁-C₆ alkyl)₂, -OS(O)C₁-C₆ alkyl, -OS(O)₂C₁-C₆ alkyl,

-OS(O)NH₂, -OS(O)NH(C₁-C₆ alkyl), -OS(O)N(C₁-C₆ alkyl)₂, -OS(O)₂NH₂, -OS(O)₂NH(C₁-C₆ alkyl), -OS(O)₂N(C₁-C₆ alkyl)₂, -SH, -SC₁-C₆ alkyl, -S(O)C₁-C₆ alkyl, -S(O)₂C₁-C₆ alkyl, -S(O)NH₂, -S(O)NH(C₁-C₆ alkyl), -S(O)(C₁-C₆ alkyl)₂, -S(O)₂NH₂, -S(O)₂NH(C₁-C₆ alkyl), -S(O)₂N(C₁-C₆ alkyl)₂, -NH₂, -NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)₂, -NHC(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)C₁-C₆ alkyl, -NHC(O)OH, -NHC(O)OC₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)OH, -N(C₁-C₆ alkyl)C(O)OC₁-C₆ alkyl, -NHC(O)NH₂, -NHC(O)NH(C₁-C₆ alkyl), -NHC(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)C(O)NH₂, -N(C₁-C₆ alkyl)C(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)C(O)N(C₁-C₆ alkyl)₂, -NHS(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)C₁-C₆ alkyl, -NHS(O)₂C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)₂C₁-C₆ alkyl, -NHS(O)NH₂, -NHS(O)NH(C₁-C₆ alkyl), -NHS(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)NH₂, -N(C₁-C₆ alkyl)S(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)N(C₁-C₆ alkyl)₂, -NHS(O)₂NH₂, -NHS(O)₂NH(C₁-C₆ alkyl), -NHS(O)₂N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)₂NH₂, -N(C₁-C₆ alkyl)S(O)₂NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)₂N(C₁-C₆ alkyl)₂, -C(O)C₁-C₆ alkyl, -C(O)OC₁-C₆ alkyl, -C(O)NH₂, -C(O)NH(C₁-C₆ alkyl), -C(O)N(C₁-C₆ alkyl)₂, -P(C₁-C₆ alkyl)₂, -P(O)(C₁-C₆ alkyl)₂, -P(O)₂(C₁-C₆ alkyl)₂, -P(O)NH₂, -P(O)NH(C₁-C₆ alkyl), -P(O)N(C₁-C₆ alkyl)₂, -P(O)₂NH₂, -P(O)₂NH(C₁-C₆ alkyl), -P(O)₂N(C₁-C₆ alkyl)₂, -P(O)OH, -P(O)OC₁-C₆ alkyl, -P(O)₂OH, -P(O)₂OC₁-C₆ alkyl, -CN, or -NO₂;

Y is O, S, NR⁹, or CR⁹R¹⁰; and

R⁹ and R¹⁰ are each independently H, deuterium, halogen, or C₁-C₆ alkyl, wherein each hydrogen atom in C₁-C₆ alkyl is optionally substituted by a halogen, -OH, -OC₁-C₆ alkyl, -OC(O)C₁-C₆ alkyl, -OC(O)N(C₁-C₆ alkyl)₂, -OC(O)NH(C₁-C₆ alkyl), -OC(O)NH₂, -OC(=N)N(C₁-C₆ alkyl)₂, -OC(=N)NH(C₁-C₆ alkyl), -OC(=N)NH₂, -OS(O)C₁-C₆ alkyl, -OS(O)₂C₁-C₆ alkyl, -OS(O)N(C₁-C₆ alkyl)₂, -OS(O)NH(C₁-C₆ alkyl), -OS(O)NH₂, -OS(O)₂N(C₁-C₆ alkyl)₂, -OS(O)₂NH(C₁-C₆ alkyl), -OS(O)₂NH₂, -SH, -SC₁-C₆ alkyl, -S(O)C₁-C₆ alkyl, -S(O)₂C₁-C₆ alkyl, -S(O)N(C₁-C₆ alkyl)₂, -S(O)NH(C₁-C₆ alkyl), -S(O)NH₂, -S(O)₂N(C₁-C₆ alkyl)₂, -S(O)₂NH(C₁-C₆ alkyl), -S(O)₂NH₂, -N(C₁-C₆ alkyl)₂, -NH(C₁-C₆ alkyl), -NH₂, -N(C₁-C₆ alkyl)C(O)C₁-C₆ alkyl, -NHC(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)OC₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)OH, -NHC(O)OC₁-C₆ alkyl, -NHC(O)OH, -N(C₁-C₆ alkyl)C(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)C(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)C(O)NH₂, -NHC(O)N(C₁-C₆ alkyl)₂, -NHC(O)NH(C₁-C₆ alkyl), -NHC(O)NH₂, -N(C₁-C₆ alkyl)S(O)C₁-C₆ alkyl, -NHS(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)₂C₁-C₆ alkyl, -NHS(O)₂C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)NH₂, -NHS(O)N(C₁-C₆ alkyl)₂, -NHS(O)NH(C₁-C₆ alkyl), -NHS(O)NH₂, -N(C₁-C₆ alkyl)S(O)₂N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)₂NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)₂NH₂, -NHS(O)₂N(C₁-C₆ alkyl)₂, -NHS(O)₂NH(C₁-C₆ alkyl), -NHS(O)₂NH₂, -C(O)C₁-C₆ alkyl,

-C(O)OC₁₋₆ alkyl, -C(O)N(C₁₋₆ alkyl)₂, -C(O)NH(C₁₋₆ alkyl), -C(O)NH₂, -P(C₁₋₆ alkyl)₂,
-P(O)(C₁₋₆ alkyl)₂, -P(O)₂(C₁₋₆ alkyl)₂, -P(O)N(C₁₋₆ alkyl)₂, -P(O)₂N(C₁₋₆ alkyl)₂,
-P(O)OC₁₋₆ alkyl, or -P(O)₂OC₁₋₆ alkyl.

26. The compound of claim 25, or a pharmaceutically acceptable salt thereof, wherein M is CR³.

27. The compound of claim 25 or 26, or a pharmaceutically acceptable salt thereof, wherein R³ is H, deuterium, C₁₋₆ alkyl or halogen.

28. The compound of any one of claims 25 to 27, or a pharmaceutically acceptable salt thereof, wherein R³ is H or F.

29. The compound of claim 25, or a pharmaceutically acceptable salt thereof, wherein M is N.

30. The compound of any one of claims 25 to 29, or a pharmaceutically acceptable salt thereof, wherein M¹ is CR⁴.

31. The compound of any one of claims 25 to 30, or a pharmaceutically acceptable salt thereof, wherein R⁴ is H, deuterium, C₁₋₆ alkyl or halogen.

32. The compound of any one of claims 25 to 31, or a pharmaceutically acceptable salt thereof, wherein R⁴ is H or Cl.

33. The compound of any one of claims 25 to 32, or a pharmaceutically acceptable salt thereof, wherein R⁵ is F.

34. The compound of any one of claims 25 to 33, or a pharmaceutically acceptable salt thereof, wherein R² is H.

35. The compound of any one of claims 25 to 34, or a pharmaceutically acceptable salt thereof, wherein R¹ is C₁₋₆ alkyl.

36. The compound of any one of claims 25 to 33, or a pharmaceutically acceptable salt thereof, wherein R² is C₁₋₆ alkyl; or C₃₋₇ cycloalkyl.

37. The compound of any one of claims 25 to 36, or a pharmaceutically acceptable salt thereof, wherein R⁷ and R⁸ combine to form a 4-, 5- or 6-membered cycloalkyl, wherein each hydrogen atom in the 5- or 6-membered cycloalkyl is independently optionally substituted by deuterium, halogen, -OH, -CN, -OC₁-C₆ alkyl, -OC₁-C₆ alkyl(C₆-C₁₀ aryl), -NH₂, -OC(O)C₁-C₆ alkyl, -OC(O)N(C₁-C₆ alkyl)₂, -OC(O)NH(C₁-C₆ alkyl), -OC(O)NH₂, -OC(=N)N(C₁-C₆ alkyl)₂, -OC(=N)NH(C₁-C₆ alkyl), -OC(=N)NH₂, -OS(O)C₁-C₆ alkyl, -OS(O)₂C₁-C₆ alkyl, -NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)₂, -NHC(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)C₁-C₆ alkyl, -NHC(O)NH₂, -NHC(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)C(O)NH₂, -N(C₁-C₆ alkyl)C(O)NH(C₁-C₆ alkyl), -NHC(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)C(O)N(C₁-C₆ alkyl)₂, -NHC(O)OC₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)OC₁-C₆ alkyl, -NHC(O)OH, -N(C₁-C₆ alkyl)C(O)OH, -NHS(O)C₁-C₆ alkyl, -NHS(O)₂C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)₂C₁-C₆ alkyl, -NHS(O)NH₂, -NHS(O)₂NH₂, -N(C₁-C₆ alkyl)S(O)NH₂, -N(C₁-C₆ alkyl)S(O)₂NH₂, -NHS(O)NH(C₁-C₆ alkyl), -NHS(O)₂NH(C₁-C₆ alkyl), -NHS(O)N(C₁-C₆ alkyl)₂, -NHS(O)₂N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)₂NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)₂N(C₁-C₆ alkyl)₂, -C(O)C₁-C₆ alkyl, -CO₂H, -C(O)OC₁-C₆ alkyl, -C(O)NH₂, -C(O)NH(C₁-C₆ alkyl), -C(O)N(C₁-C₆ alkyl)₂, -SC₁-C₆ alkyl, -S(O)C₁-C₆ alkyl, -S(O)₂C₁-C₆ alkyl, -S(O)NH(C₁-C₆ alkyl), -S(O)₂NH(C₁-C₆ alkyl), -S(O)N(C₁-C₆ alkyl)₂, -S(O)₂N(C₁-C₆ alkyl)₂, -S(O)NH₂, -S(O)₂NH₂, -OS(O)N(C₁-C₆ alkyl)₂, -OS(O)₂N(C₁-C₆ alkyl)₂, -OS(O)NH(C₁-C₆ alkyl), -OS(O)₂NH(C₁-C₆ alkyl), -OS(O)NH₂, -OS(O)₂NH₂, -P(C₁-C₆ alkyl)₂, -P(O)(C₁-C₆ alkyl)₂, C₃-C₆ cycloalkyl, or 3- to 7-membered heterocycloalkyl.

38. The compound of any one of claims 25 to 36, or a pharmaceutically acceptable salt thereof, wherein R⁷ and R⁸ combine to form a 3-, 4-, 5- or 6-membered heterocycloalkyl, wherein each hydrogen atom in the 3-, 4-, 5- or 6-membered heterocycloalkyl is independently optionally substituted by deuterium, halogen, -OH, -CN, -OC₁-C₆ alkyl, -OC₁-C₆ alkyl(C₆-C₁₀ aryl), -NH₂, -OC(O)C₁-C₆ alkyl, -OC(O)N(C₁-C₆ alkyl)₂, -OC(O)NH(C₁-C₆ alkyl), -OC(O)NH₂, -OC(=N)N(C₁-C₆ alkyl)₂, -OC(=N)NH(C₁-C₆ alkyl), -OC(=N)NH₂, -OS(O)C₁-C₆ alkyl, -OS(O)₂C₁-C₆ alkyl, -NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)₂, -NHC(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)C₁-C₆ alkyl, -NHC(O)NH₂, -NHC(O)NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)C(O)NH₂, -N(C₁-C₆ alkyl)C(O)NH(C₁-C₆ alkyl), -NHC(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)C(O)N(C₁-C₆ alkyl)₂, -NHC(O)OC₁-C₆ alkyl, -N(C₁-C₆ alkyl)C(O)OC₁-C₆ alkyl, -NHC(O)OH, -N(C₁-C₆ alkyl)C(O)OH, -NHS(O)C₁-C₆ alkyl, -NHS(O)₂C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)C₁-C₆ alkyl, -N(C₁-C₆ alkyl)S(O)₂C₁-C₆ alkyl, -NHS(O)NH₂, -NHS(O)₂NH₂, -N(C₁-C₆ alkyl)S(O)NH₂,

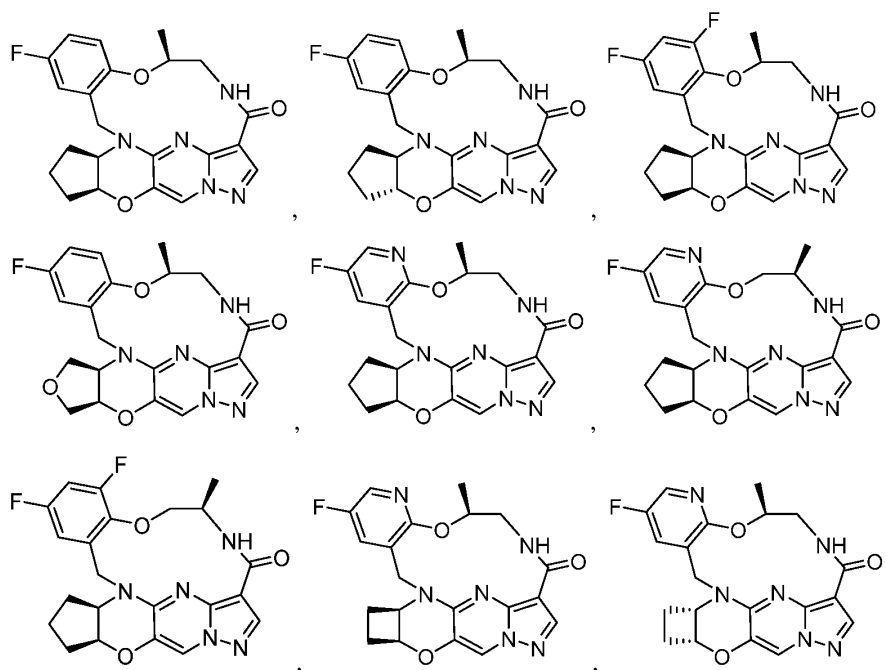
-N(C₁-C₆ alkyl)S(O)₂NH₂, -NHS(O)NH(C₁-C₆ alkyl), -NHS(O)₂NH(C₁-C₆ alkyl),
 -NHS(O)N(C₁-C₆ alkyl)₂, -NHS(O)₂N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)NH(C₁-C₆ alkyl),
 -N(C₁-C₆ alkyl)S(O)₂NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)N(C₁-C₆ alkyl)₂, -N(C₁-C₆
 alkyl)S(O)₂N(C₁-C₆ alkyl)₂, -C(O)C₁-C₆ alkyl, -CO₂H, -C(O)OC₁-C₆ alkyl, -C(O)NH₂,
 -C(O)NH(C₁-C₆ alkyl), -C(O)N(C₁-C₆ alkyl)₂, -SC₁-C₆ alkyl, -S(O)C₁-C₆ alkyl, -S(O)₂C₁-C₆
 alkyl, -S(O)NH(C₁-C₆ alkyl), -S(O)₂NH(C₁-C₆ alkyl), -S(O)N(C₁-C₆ alkyl)₂, -S(O)₂N(C₁-C₆
 alkyl)₂, -S(O)NH₂, -S(O)₂NH₂, -OS(O)N(C₁-C₆ alkyl)₂, -OS(O)₂N(C₁-C₆ alkyl)₂,
 -OS(O)NH(C₁-C₆ alkyl), -OS(O)₂NH(C₁-C₆ alkyl), -OS(O)NH₂, -OS(O)₂NH₂, -P(C₁-C₆ alkyl)₂,
 -P(O)(C₁-C₆ alkyl)₂, C₃-C₆ cycloalkyl, or 3- to 7-membered heterocycloalkyl.

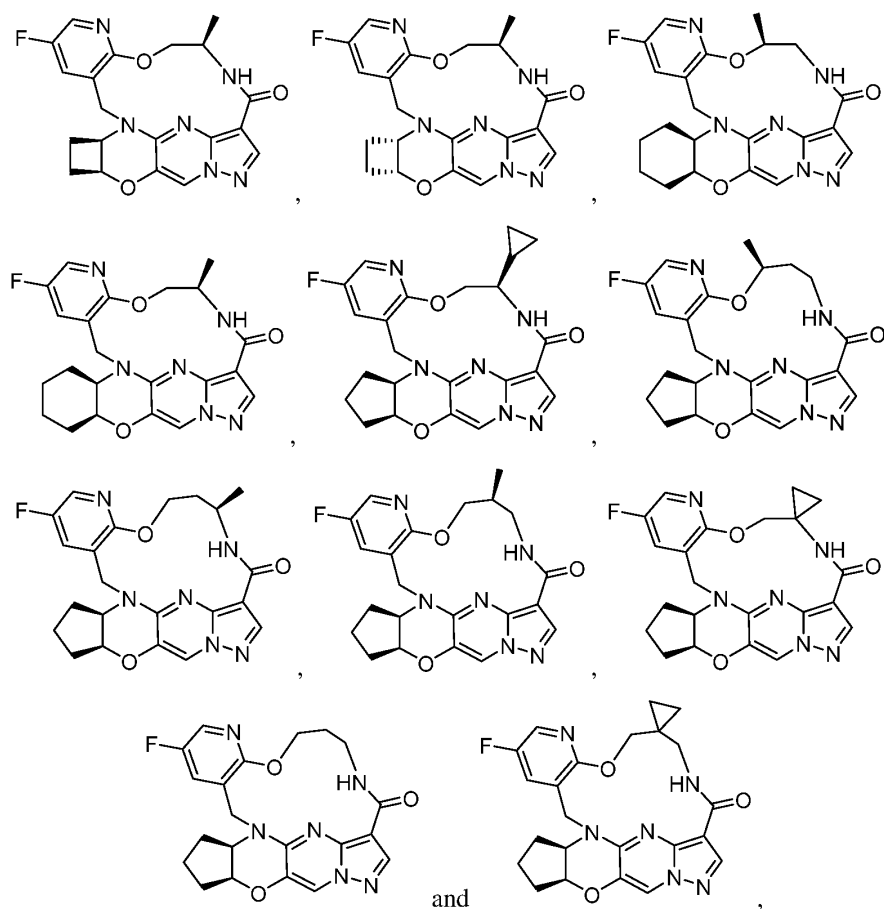
39. The compound of claim 38, or a pharmaceutically acceptable salt thereof, wherein R⁷ and R⁸ combine to form a tetrahydrofuran ring.

40. The compound of claim 37, or a pharmaceutically acceptable salt thereof, wherein R⁷ and R⁸ combine to form a cyclobutane ring, cyclopentane ring, or cyclohexane ring.

41. The compound of any of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein X is O.

42. The compound of claim 1, selected from the group consisting of





or a pharmaceutically acceptable salt thereof.

43. A pharmaceutical composition comprising a compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, and optionally at least one diluent, carrier or excipient.

44. A method of treating cancer comprising administering to a subject in need of such treatment an effective amount of at least one compound of any one of claims 1 to 42, or a pharmaceutically acceptable salt thereof.

45. Use of a compound of any one of claims 1 to 42, or a pharmaceutically acceptable salt thereof, in the preparation of a medicament for the treatment of cancer.

46. Use of a compound of any one of claims 1 to 42, or a pharmaceutically acceptable salt thereof, for treating cancer.
47. A method of inhibiting RET or SRC, comprising contacting a cell comprising one or more of such kinases with an effective amount of at least one compound of any one of claims 1 to 42, or a pharmaceutically acceptable salt thereof, and/or with at least one pharmaceutical composition of the disclosure, wherein the contacting is *in vitro*, *ex vivo*, or *in vivo*.
48. A compound of any one of claims 1 to 42, for use in treating cancer in a patient.