

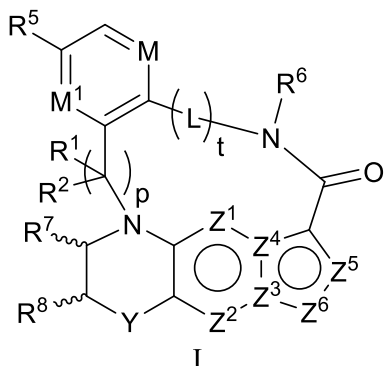
[018] each of Z^1 , Z^2 , Z^3 , Z^4 , Z^5 , and Z^6 is independently N, NH, C or CH;

[019] p is 1, 2, 3, or 4; and

[020] t is 1, 2, 3, 4, or 5;

[021] or a pharmaceutically acceptable salt thereof.

[022] In another [aspect/example](#), the disclosure relates to a compound of the formula I



[023] wherein

[024] L is independently -C(R¹)(R²)- or X;

[025] X is O, S, S(O) or S(O)₂;

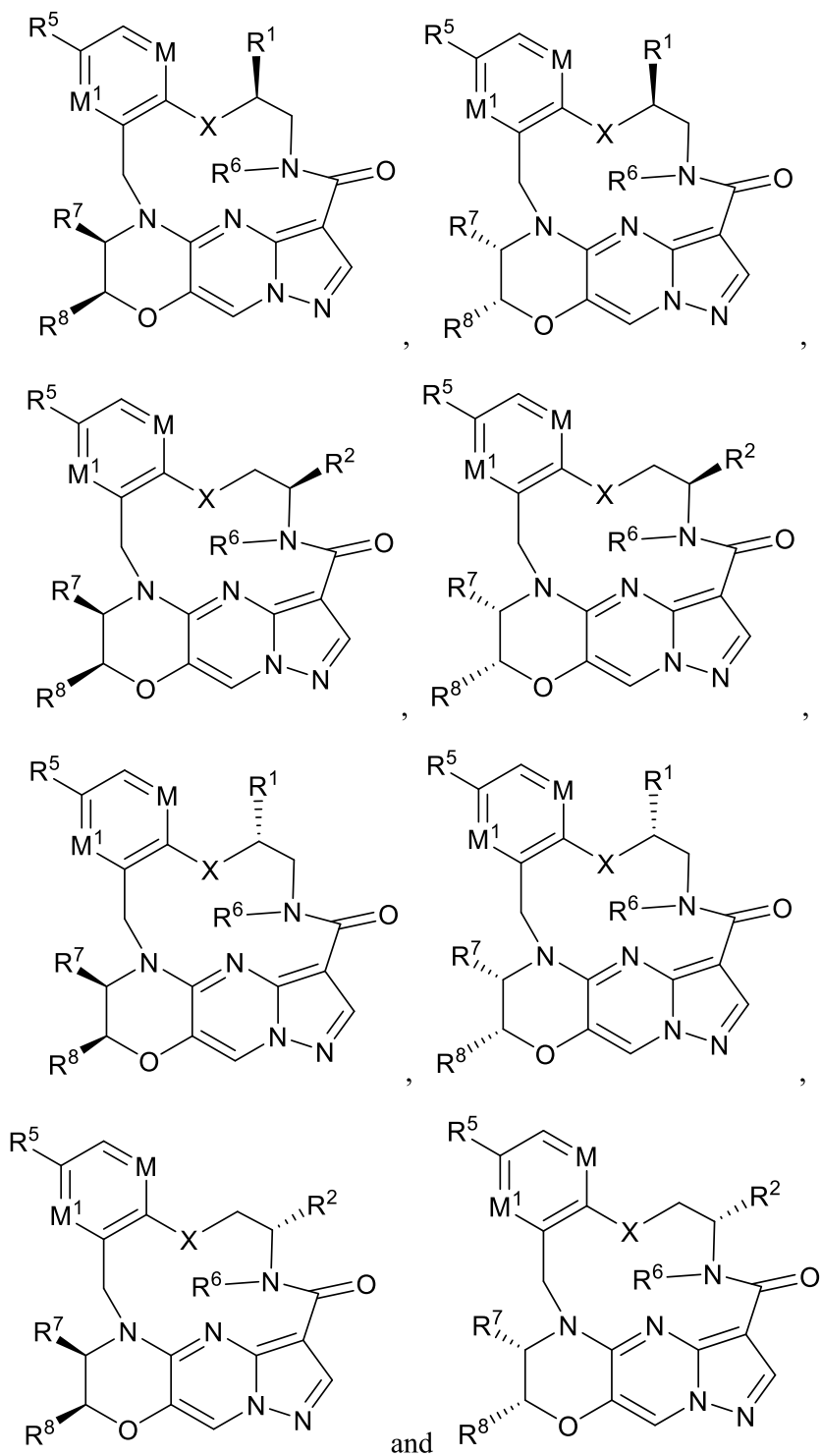
[026] each R¹ and R² is independently H, deuterium, halogen, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl, 3- to 7-membered heterocycloalkyl, C₆-C₁₀ aryl, or mono- or bicyclic heteroaryl, -OR^a, -OC(O)R^a, -OC(O)R^a, -OC(O)NR^aR^b, -OS(O)R^a, -OS(O)₂R^a, -SR^a, -S(O)R^a, -S(O)₂R^a, -S(O)NR^aR^b, -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^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 -NO₂;

[027] M is CR³ or N;

[028] M¹ is CR⁴;

[051] n is 2 or 3.

[052] In another [aspectexample](#), the disclosure relates to a compound selected from the group consisting of



[053] wherein

[054] M is CR³ or N;

[055] M¹ is CR⁴;

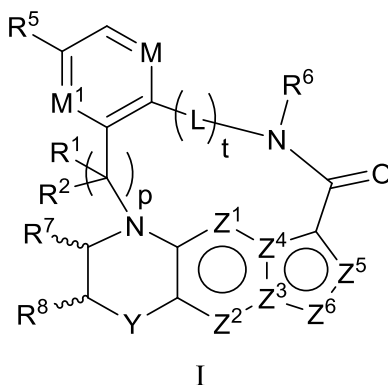
alkyl)S(O)₂N(C₁-C₆ alkyl)₂, -N(C₁-C₆ alkyl)S(O)₂NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)S(O)₂NH₂, -NHS(O)₂N(C₁-C₆ alkyl)₂, -NHS(O)₂NH(C₁-C₆ alkyl), -NHS(O)₂NH₂, -C(O)C₁-C₆ alkyl, -C(O)OC₁-C₆ alkyl, -C(O)N(C₁-C₆ alkyl)₂, -C(O)NH(C₁-C₆ alkyl), -C(O)NH₂, -P(C₁-C₆ alkyl)₂, -P(O)(C₁-C₆ alkyl)₂, -P(O)₂(C₁-C₆ alkyl)₂,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

[0062a] In another aspect, there is provided a pharmaceutical composition comprising a compound as defined above, or a pharmaceutically acceptable salt thereof, and optionally at least one diluent, carrier or excipient.

[0062b] In another aspect, there is provided the use of a compound as defined above or a pharmaceutical composition as defined above, in the manufacture of a medicament for the treatment of cancer.

[063] Additional embodiments, features, and advantages of the disclosure will be apparent from the following detailed description and through practice of the disclosure. The compounds of the present disclosure can be described as embodiments in any of the following enumerated clauses. It will be understood that any of the embodiments described herein can be used in connection with any other embodiments described herein to the extent that the embodiments do not contradict one another.

[064] 1. A compound of the formula I



[065] wherein

[066] L is independently -C(R¹)(R²)- or X;

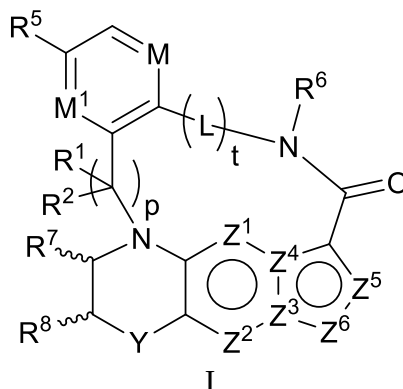
[067] X is -O-, -S-, -S(O)- or -S(O)₂-;

[068] 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, -OR^e, -OC(O)R^e, -OC(O)NR^eR^f,

WHAT IS CLAIMED IS:

1. A compound of the formula I



wherein

each L is independently -C(R¹)(R²)- or X; with the proviso that, when t is 1, then L is -C(R¹)(R²)-;

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^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 -NO₂;

M is CR³ or N;

M¹ is CR⁴;

each R³, R⁴, and R⁵ 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, -NO₂, 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 R⁴ and R⁵ taken together with the ring to which they are attached form a C₅-C₈ cycloalkyl, or a 5- to 8-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, C₅-C₈ cycloalkyl, or 5- to 8-membered heterocycloalkyl is independently optionally substituted by deuterium, halogen, C₁-C₆ alkyl, C₁-C₆ 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 -NO₂;

R⁶ is H, deuterium, 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 independently optionally substituted by deuterium, halogen, C₃-C₆ 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 -NO₂;

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, -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 -NO₂;

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^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, or -P(O)₂OR^e;

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

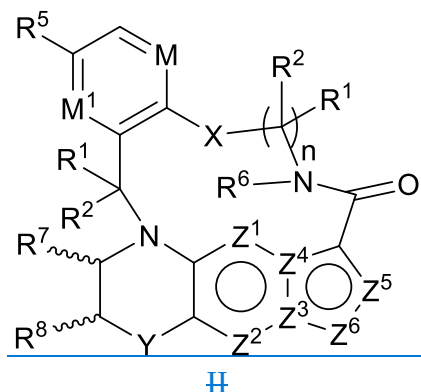
t is 1, 2, 3, 4, or 5;

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,

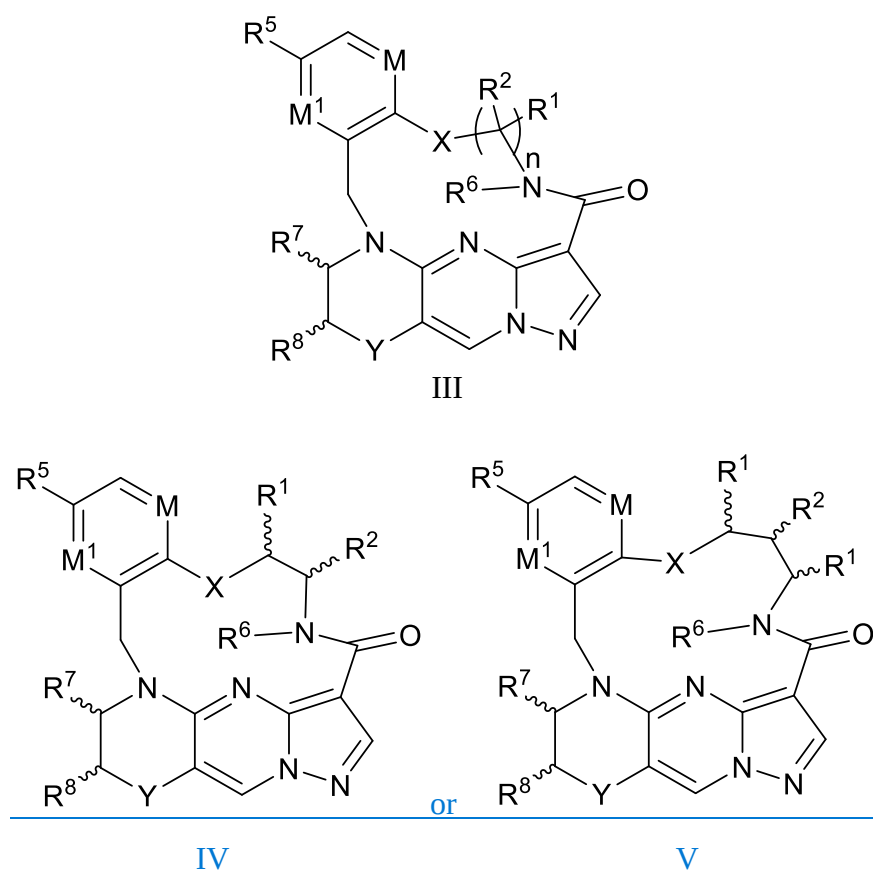
a 5- to 8-membered heterocycloalkyl, C₆-C₁₀ aryl, or 5- to 7-membered heteroaryl is independently optionally substituted by deuterium, halogen, OH, OC₁-C₆ alkyl, OC(O)C₁-C₆ alkyl, OC(O)NH₂, OC(O)NH(C₁-C₆ alkyl), OC(O)N(C₁-C₆ alkyl)₂, OC(=N)NH₂, OC(=N)NH(C₁-C₆ alkyl), OC(=N)N(C₁-C₆ alkyl)₂, OS(O)C₁-C₆ 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.~~~~~~~~~~~~~~

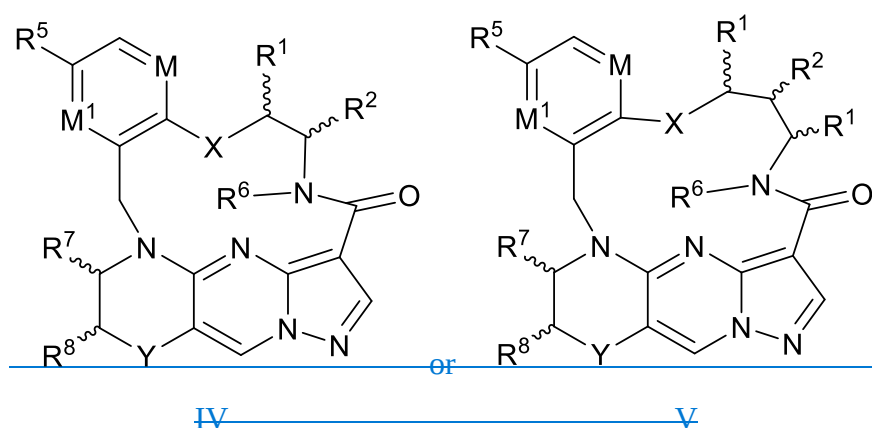
52. The compound of claim 1, having ~~the~~ formula III, IV, or V



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~~



~~or a pharmaceutically acceptable salt thereof.~~

~~83. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein Y is O.~~

~~94. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein M is CR³.~~

~~105. 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; or-~~

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

~~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.~~

~~146. 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; or~~

~~15. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof,~~

wherein R⁴ is H or Cl; or

~~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; or

~~18. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof,~~

wherein R¹ is H; or

~~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.

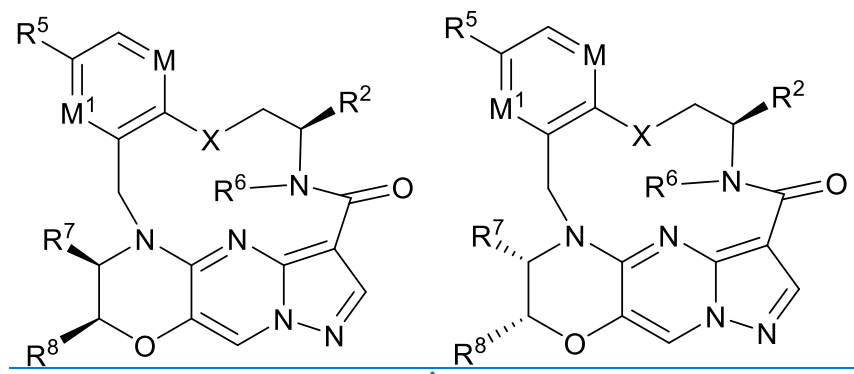
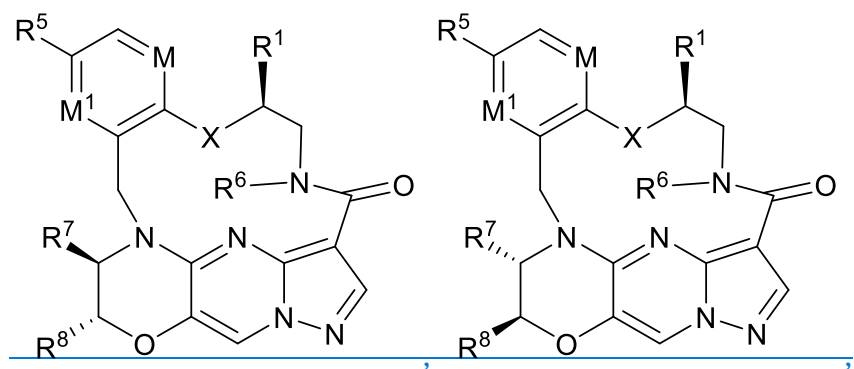
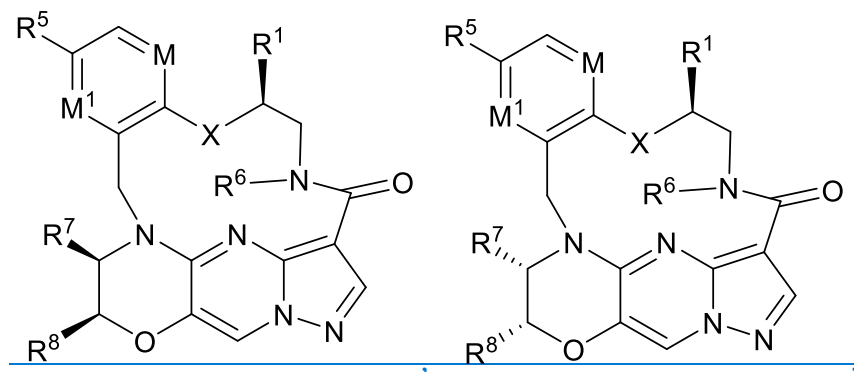
239. The compound of ~~claim 22~~any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein R⁷ and R⁸ combine to form a tetrahydrofuran ring; or

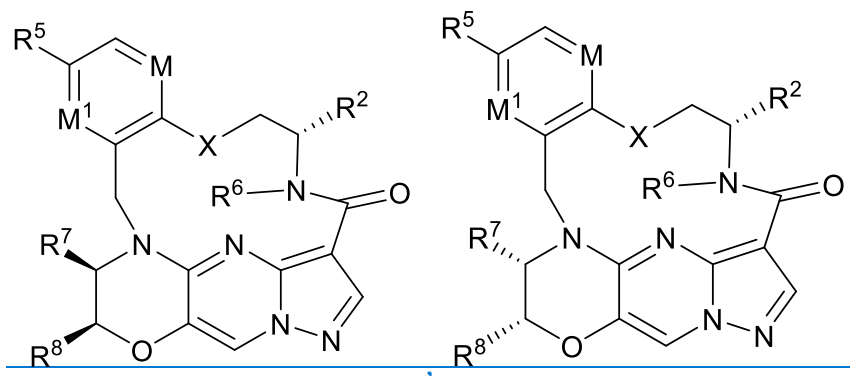
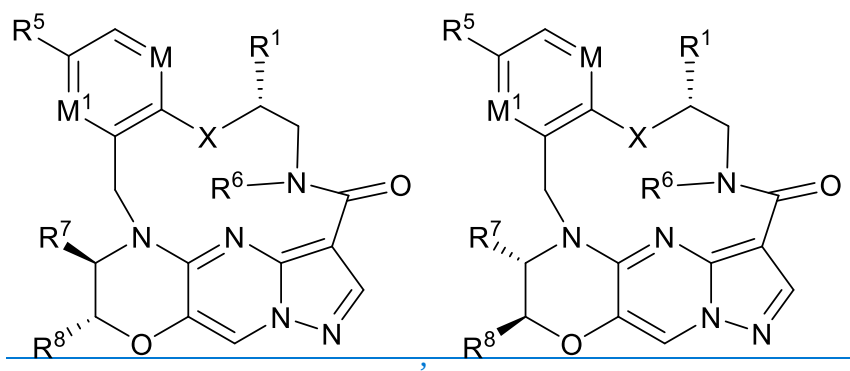
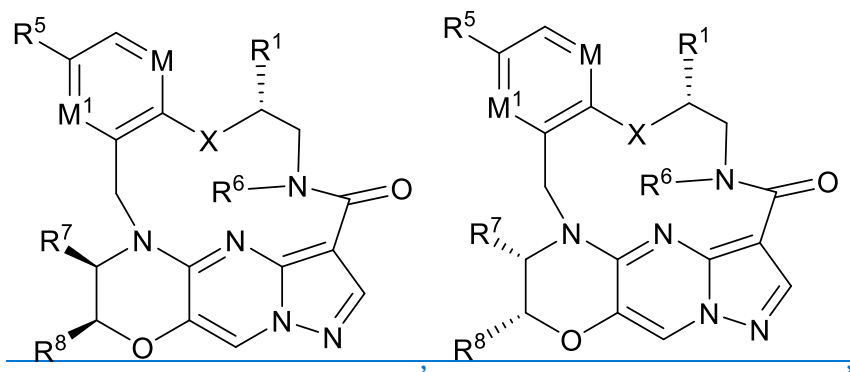
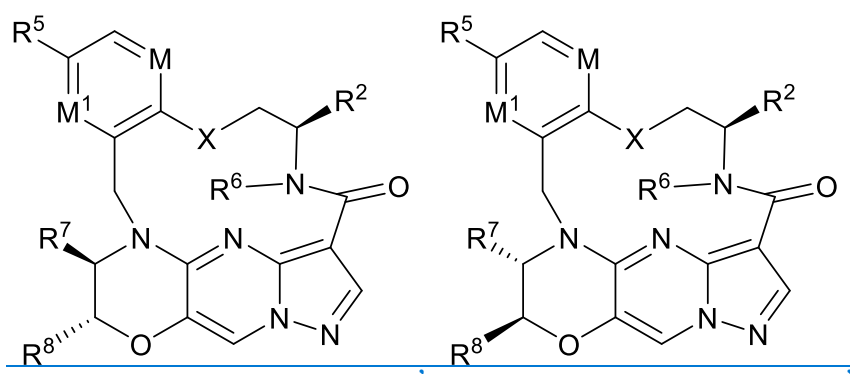
~~24. The compound of claim 21, or a pharmaceutically acceptable salt thereof,~~

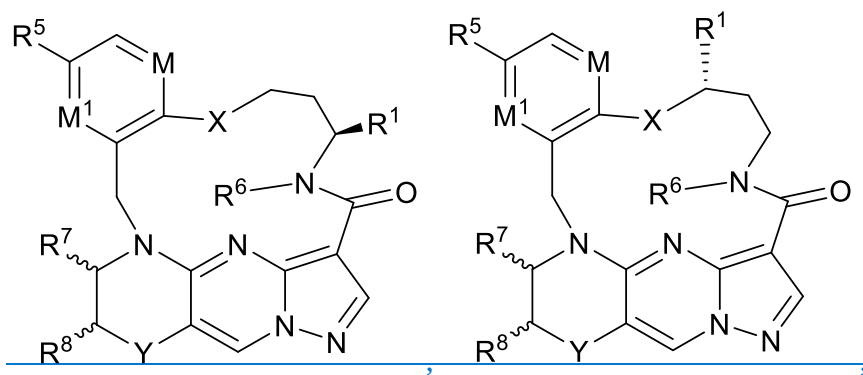
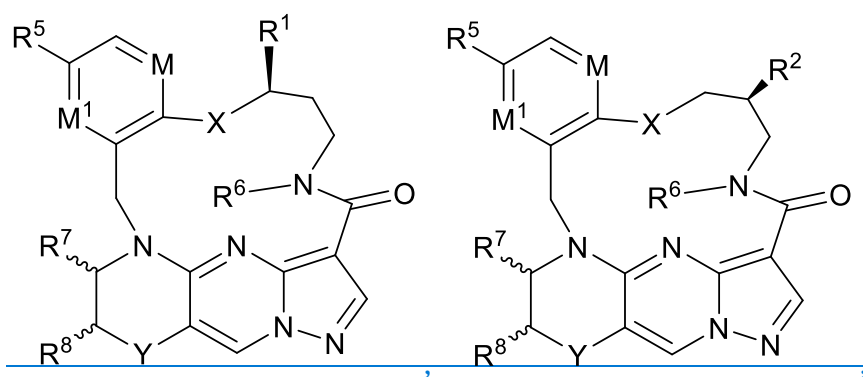
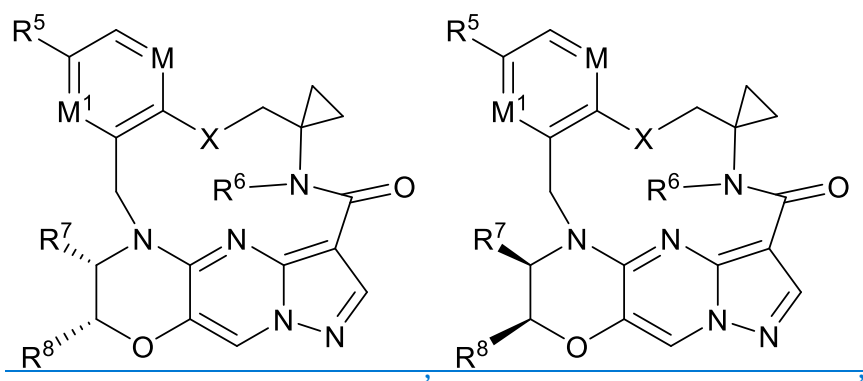
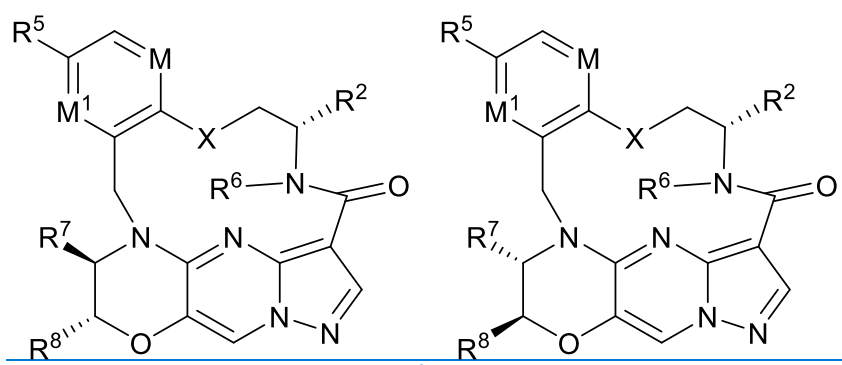
wherein R⁷ and R⁸ combine to form a cyclobutane ring, cyclopentane ring, or cyclohexane ring.

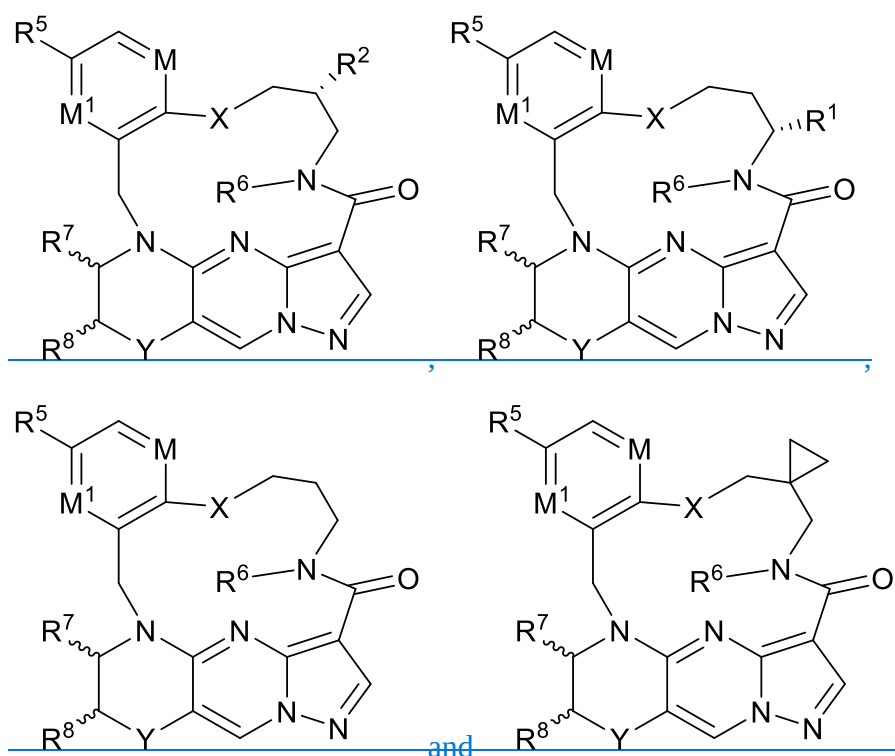
10. The compound of any one of the preceding claims, or a pharmaceutically acceptable salt thereof, wherein X is O.

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









wherein

~~— M is CR³ or N;~~

~~— M¹ is CR⁴;~~

~~— 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-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.~~

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-C₆-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 M^1 is CR^4 .

31. The compound of any one of claims 25 to 30, or a pharmaceutically acceptable salt thereof, wherein R^4 is H, deuterium, C_1 - C_6 alkyl or halogen.

32. The compound of any one of claims 25 to 31, or a pharmaceutically acceptable salt thereof, wherein R^4 is H or Cl.

33. The compound of any one of claims 25 to 32, or a pharmaceutically acceptable salt thereof, wherein R^5 is F.

34. The compound of any one of claims 25 to 33, or a pharmaceutically acceptable salt thereof, wherein R^2 is H.

35. The compound of any one of claims 25 to 34, or a pharmaceutically acceptable salt thereof, wherein R^1 is C_1 - C_6 alkyl.

36. The compound of any one of claims 25 to 33, or a pharmaceutically acceptable salt thereof, wherein R^2 is C_1 - C_6 alkyl; or C_3 - C_7 cycloalkyl.

37. The compound of any one of claims 25 to 36, or a pharmaceutically acceptable salt thereof, wherein R^7 and R^8 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, OC_1 - C_6 alkyl, OC_1 - C_6 alkyl(C_6 - C_{10} aryl), NH_2 , $OC(O)C_1$ - C_6 alkyl, $OC(O)N(C_1$ - C_6 alkyl) $_2$, $OC(O)NH(C_1$ - C_6 alkyl), $OC(O)NH_2$, $OC(=N)N(C_1$ - C_6 alkyl) $_2$, $OC(=N)NH(C_1$ - C_6 alkyl), $OC(=N)NH_2$, $OS(O)C_1$ - C_6 alkyl, $OS(O)_2C_1$ - C_6 alkyl, $NH(C_1$ - C_6 alkyl), $N(C_1$ - C_6 alkyl) $_2$, $NHC(O)C_1$ - C_6 alkyl, $N(C_1$ - C_6 alkyl) $C(O)C_1$ - C_6 alkyl, $NHC(O)NH_2$, $NHC(O)NH(C_1$ - C_6 alkyl), $N(C_1$ - C_6 alkyl) $C(O)NH_2$, $N(C_1$ - C_6 alkyl) $C(O)NH(C_1$ - C_6 alkyl), $NHC(O)N(C_1$ - C_6 alkyl) $_2$, $N(C_1$ - C_6 alkyl) $C(O)N(C_1$ - C_6 alkyl) $_2$, $NHC(O)OC_1$ - C_6 alkyl, $N(C_1$ - C_6 alkyl) $C(O)OC_1$ - C_6 alkyl, $NHC(O)OH$, $N(C_1$ - C_6 alkyl) $C(O)OH$, $NHS(O)C_1$ - C_6 alkyl, $NHS(O)_2C_1$ - C_6 alkyl, $N(C_1$ - C_6 alkyl) $S(O)C_1$ - C_6 alkyl, $N(C_1$ - C_6 alkyl) $S(O)_2C_1$ - C_6 alkyl, $NHS(O)NH_2$, $NHS(O)_2NH_2$, $N(C_1$ - C_6 alkyl) $S(O)NH_2$, $N(C_1$ - C_6 alkyl) $S(O)_2NH_2$, $NHS(O)NH(C_1$ - C_6 alkyl), $NHS(O)_2NH(C_1$ - C_6 alkyl), $NHS(O)N(C_1$ - C_6 alkyl) $_2$, $NHS(O)_2N(C_1$ - C_6 alkyl) $_2$, $N(C_1$ - C_6 alkyl) $S(O)NH(C_1$ - C_6 alkyl), $N(C_1$ - C_6 alkyl) $S(O)_2NH(C_1$ -

~~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.~~

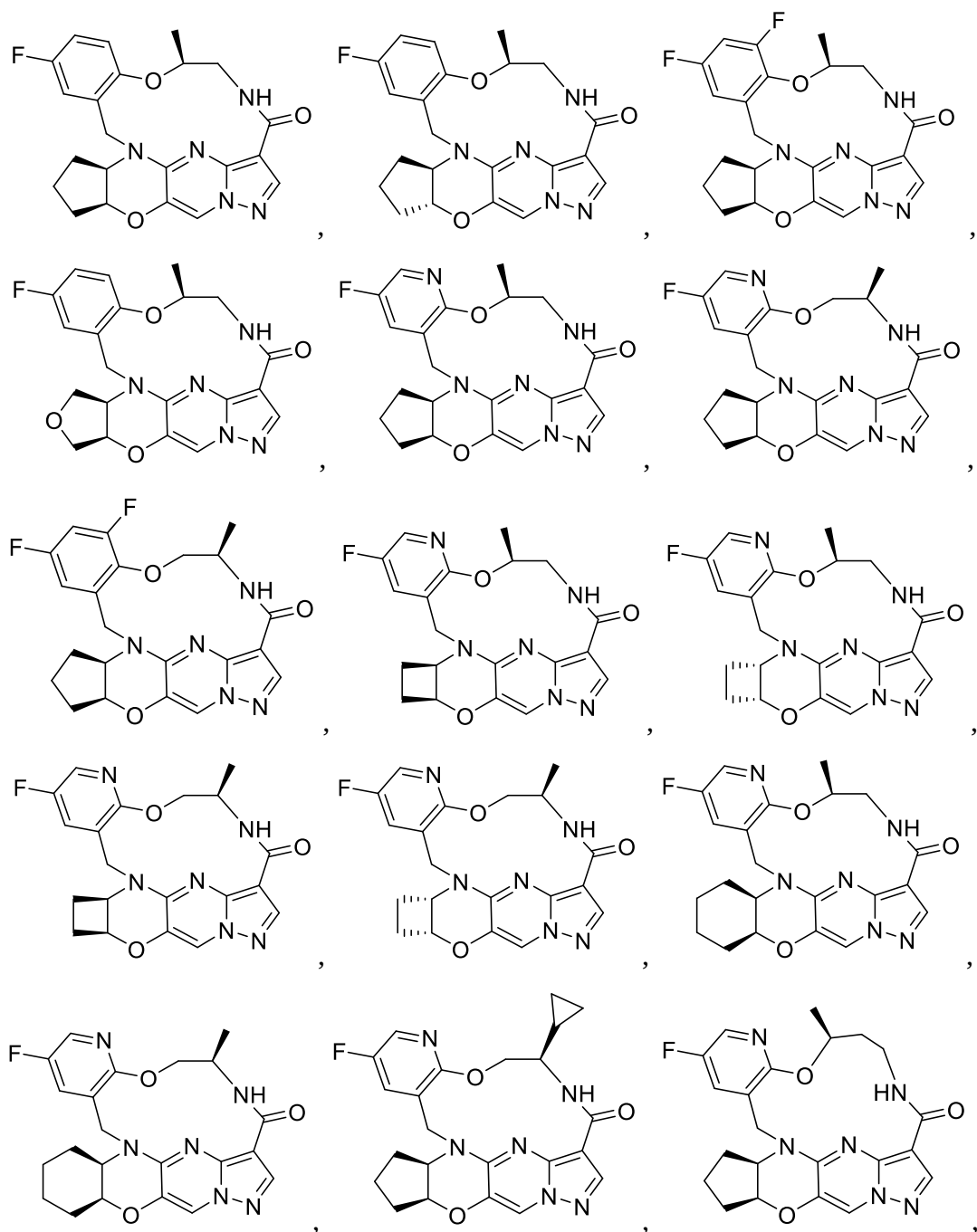
38. The compound of any one of claims 25 to 36, or a pharmaceutically acceptable salt thereof, wherein R⁷ and R⁸ combine to form a 3-, 4-, 5- or 6-membered heterocycloalkyl, wherein each hydrogen atom in the 3-, 4-, 5- or 6-membered heterocycloalkyl is independently optionally substituted by deuterium, 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.

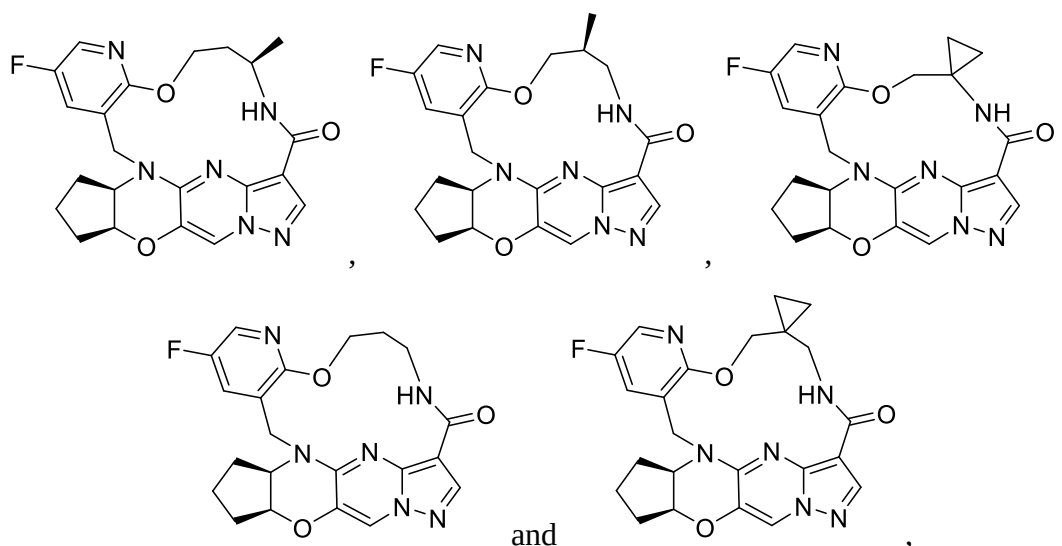
39. The compound of claim 38, or a pharmaceutically acceptable salt thereof, wherein R⁷ and R⁸ combine to form a tetrahydrofuran ring.

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.

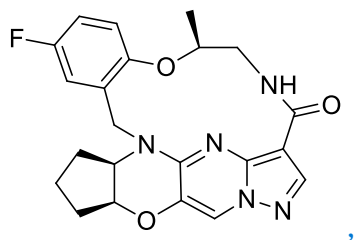
4211. The compound of claim 1, selected from the group consisting of





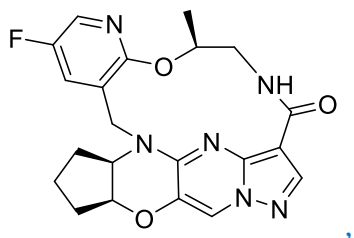
or a pharmaceutically acceptable salt thereof.

12. The compound of claim 1 having formula



or a pharmaceutically acceptable salt thereof.

13. The compound of claim 1 having formula



or a pharmaceutically acceptable salt thereof.

4314. 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~~15. Use of a compound of any one of claims 1 to ~~42~~13, or a pharmaceutically acceptable salt thereof ~~composition of claim 14~~, in the ~~preparation~~manufacture 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.~~