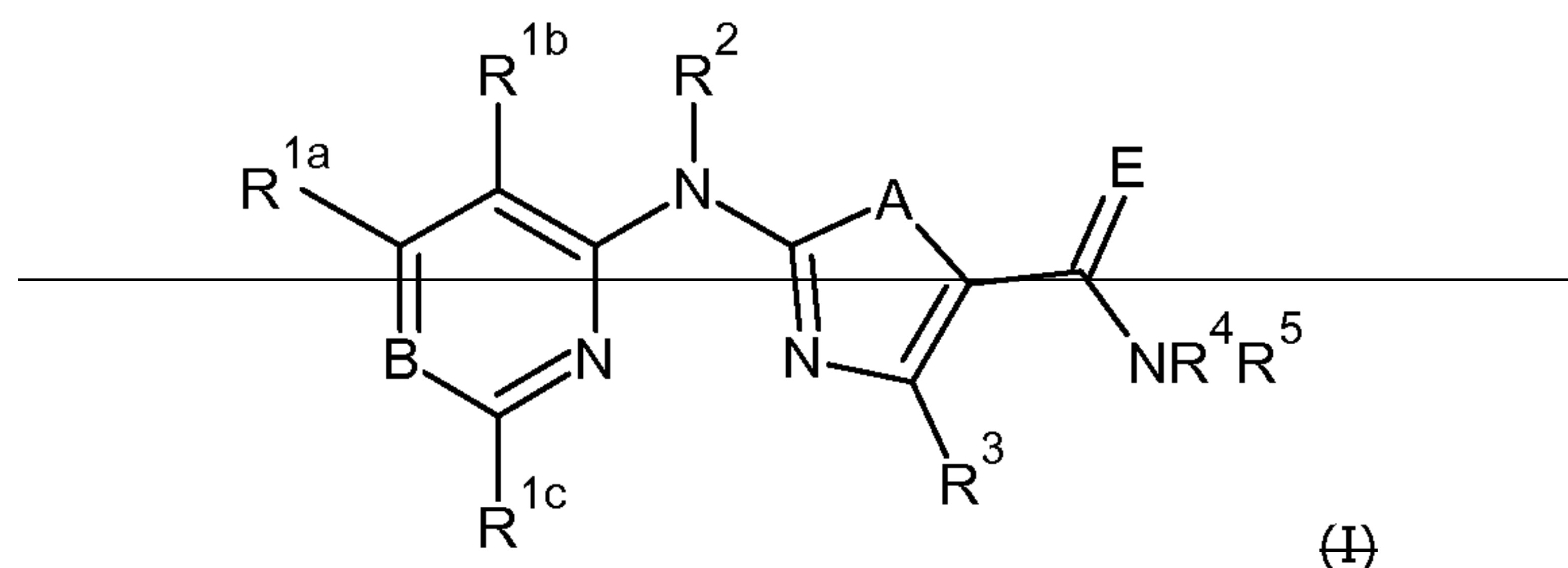


CLAIMS

1. A compound selected from the group consisting of a kinase inhibitor of the formula:



- 5 and solvates, salts, N-oxides, complexes, polymorphs, crystalline forms, racemic mixtures, diastereomers, enantiomers, tautomers, conformers, isotopically labeled forms, prodrugs, and combinations thereof;

wherein:

R^{1a} is selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl, heteroaryl, halogen, -CN, azido, -NO₂, -OR¹¹, -N(R¹²)(R¹³), -N(R¹¹)(OR¹¹), -S(O)₀₋₂R¹¹, -S(O)₁₋₂OR¹¹, -OS(O)₁₋₂R¹¹, -OS(O)₁₋₂OR¹¹,
 10 -S(O)₁₋₂N(R¹²)(R¹³), -OS(O)₁₋₂N(R¹²)(R¹³), -N(R¹¹)S(O)₁₋₂R¹¹, -NR¹¹S(O)₁₋₂OR¹¹, -NR¹¹S(O)₁₋₂N(R¹²)(R¹³), -P(O)(OR¹¹)₂,
 -OP(O)(OR¹¹)₂, -C(=X)R¹¹, -C(=X)XR¹¹, -XC(=X)R¹¹, and -XC(=X)XR¹¹, wherein each of the alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl, and heteroaryl groups is optionally substituted with one or more independently selected R³⁰;

each of R^{1b} and R^{1c} is independently selected from the group consisting of H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₇ cycloalkyl, C₆₋₁₀ aryl, 3- to 7-membered heteroaryl, 3- to 7-membered heterocyclyl, -O(CH₂)₀₋₂(C₃₋₇ cycloalkyl),
 15 -O(CH₂)₀₋₂(C₆₋₁₀ aryl), -O(CH₂)₀₋₂(3- to 7-membered heteroaryl), -O(CH₂)₀₋₂(3- to 7-membered heterocyclyl),
 -NH(CH₂)₀₋₂(C₃₋₇ cycloalkyl), -NH(CH₂)₀₋₂(C₆₋₁₀ aryl), -NH(CH₂)₀₋₂(3- to 7-membered heteroaryl), -NH(CH₂)₀₋₂(3- to 7-membered heterocyclyl), halogen, -CF₃, -CN, azido, -NO₂, -OH, -O(C₁₋₆ alkyl), -OCF₃, -S(C₁₋₆ alkyl), -NH₂, -NH(C₁₋₆ alkyl), -N(C₁₋₆ alkyl)₂, -NHS(O)₂(C₁₋₆ alkyl), -S(O)₂NH_{2-z}(C₁₋₆ alkyl)_z, -C(=O)(C₁₋₆ alkyl), -C(=O)OH, -C(=O)O(C₁₋₆ alkyl),
 20 -C(=O)NH_{2-z}(C₁₋₆ alkyl)_z, -NHC(=O)(C₁₋₆ alkyl), -NHC(=NH)NH_{2-z}(C₁₋₆ alkyl)_z, and -N(C₁₋₆ alkyl)C(=NH)NH_{2-z}(C₁₋₆ alkyl)_z,
 wherein z is 0, 1, or 2 and each of the C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₇ cycloalkyl, C₆₋₁₀ aryl, 3- to 7-membered heteroaryl, and 3- to 7-membered heterocyclyl groups is optionally substituted with one, two, or three moieties independently selected from the group consisting of -OH, methyl, ethyl, -OCH₃, -SCH₃, and -NH_{2-z}(CH₃)_z;

R² is H;

25 R³ is selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl, heteroaryl, halogen, -CN, azido, -NO₂, -OR¹¹, -N(R¹²)(R¹³), -N(R¹¹)(OR¹¹), -S(O)₀₋₂R¹¹, -S(O)₁₋₂OR¹¹, -OS(O)₁₋₂R¹¹, -OS(O)₁₋₂OR¹¹,
 -S(O)₁₋₂N(R¹²)(R¹³), -OS(O)₁₋₂N(R¹²)(R¹³), -N(R¹¹)S(O)₁₋₂R¹¹, -NR¹¹S(O)₁₋₂OR¹¹, -NR¹¹S(O)₁₋₂N(R¹²)(R¹³), -P(O)(OR¹¹)₂,
 -OP(O)(OR¹¹)₂, -C(=X)R¹¹, -C(=X)XR¹¹, -XC(=X)R¹¹, and -XC(=X)XR¹¹, wherein each of the alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl, and heteroaryl groups is optionally substituted with one or more independently selected R³⁰;

R⁴ is H;

R⁵ is -L-R⁶;

L is selected from the group consisting of a bond, C₁₋₆ alkylene, C₂₋₆ alkenylene, C₂₋₆ alkynylene, and -(CH₂)_m-[Y-(CH₂)_n]_o-, wherein m is an integer between 1 and 6, n is an integer between 0 and 3, o is an integer
 35 between 1 and 3, wherein if n is 0 then o is 1; Y is independently selected from O, S, and -N(R¹³)-; and each of the C₁₋₆ alkylene, C₂₋₆ alkenylene, C₂₋₆ alkynylene, -(CH₂)_m-, and -(CH₂)_n- groups is optionally substituted with one or two independently selected R³⁰;

R⁶ is heteroaryl or heterocyclyl each of which is optionally substituted with one or more independently selected R⁷;

R^7 is independently selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl, heteroaryl, halogen, $-\text{CN}$, azido, $-\text{NO}_2$, $-\text{OR}^{11}$, $-\text{N}(\text{R}^{12})(\text{R}^{13})$, $-\text{N}(\text{R}^{11})(\text{OR}^{11})$, $-\text{S}(\text{O})_{0-2}\text{R}^{11}$, $-\text{S}(\text{O})_{1-2}\text{OR}^{11}$, $-\text{OS}(\text{O})_{1-2}\text{R}^{11}$, $-\text{OS}(\text{O})_{1-2}\text{OR}^{11}$, $-\text{S}(\text{O})_{1-2}\text{N}(\text{R}^{12})(\text{R}^{13})$, $-\text{OS}(\text{O})_{1-2}\text{N}(\text{R}^{12})(\text{R}^{13})$, $-\text{N}(\text{R}^{11})\text{S}(\text{O})_{1-2}\text{R}^{11}$, $-\text{NR}^{11}\text{S}(\text{O})_{1-2}\text{OR}^{11}$, $-\text{NR}^{11}\text{S}(\text{O})_{1-2}\text{N}(\text{R}^{12})(\text{R}^{13})$, $-\text{P}(\text{O})(\text{OR}^{11})_2$, $-\text{OP}(\text{O})(\text{OR}^{11})_2$, $-\text{C}(=\text{X})\text{R}^{11}$, $-\text{C}(=\text{X})\text{XR}^{11}$, $-\text{XC}(=\text{X})\text{R}^{11}$, and $-\text{XC}(=\text{X})\text{XR}^{11}$, and/or

5 any two R^7 which are bound to the same atom of R^6 being a heterocyclyl group may join together to form $=\text{O}$, wherein each of the alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl, and heteroaryl groups is optionally substituted with one or more independently selected R^{30} ;

A is selected from the group consisting of S, O, NR^8 , and $\text{C}(\text{R}^9)_2$;

10 R^8 is selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl, and heteroaryl, wherein each of the alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl, and heteroaryl groups is optionally substituted with one or more independently selected R^{30} ;

R^9 is independently selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl, heteroaryl, halogen, $-\text{CN}$, azido, $-\text{NO}_2$, $-\text{OR}^{11}$, $-\text{N}(\text{R}^{12})(\text{R}^{13})$, $-\text{S}(\text{O})_{0-2}\text{R}^{11}$, $-\text{S}(\text{O})_{1-2}\text{OR}^{11}$, $-\text{OS}(\text{O})_{1-2}\text{R}^{11}$, $-\text{OS}(\text{O})_{1-2}\text{OR}^{11}$, $-\text{S}(\text{O})_{1-2}\text{N}(\text{R}^{12})(\text{R}^{13})$, $-\text{OS}(\text{O})_{1-2}\text{N}(\text{R}^{12})(\text{R}^{13})$, $-\text{N}(\text{R}^{11})\text{S}(\text{O})_{1-2}\text{R}^{11}$, $-\text{NR}^{11}\text{S}(\text{O})_{1-2}\text{OR}^{11}$, $-\text{NR}^{11}\text{S}(\text{O})_{1-2}\text{N}(\text{R}^{12})(\text{R}^{13})$, $-\text{C}(=\text{X})\text{R}^{11}$, $-\text{C}(=\text{X})\text{XR}^{11}$, $-\text{XC}(=\text{X})\text{R}^{11}$, and $-\text{XC}(=\text{X})\text{XR}^{11}$, wherein each of the alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl, and heteroaryl groups is optionally substituted with one or more independently selected R^{30} ;

X is independently selected from the group consisting of O, S, and $\text{N}(\text{R}^{14})$;

E is O or S;

B is N or CR^{1d} ;

20 R^{1d} is selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl, heteroaryl, halogen, $-\text{CN}$, azido, $-\text{NO}_2$, $-\text{OR}^{11}$, $-\text{N}(\text{R}^{12})(\text{R}^{13})$, $-\text{N}(\text{R}^{11})(\text{OR}^{11})$, $-\text{S}(\text{O})_{0-2}\text{R}^{11}$, $-\text{S}(\text{O})_{1-2}\text{OR}^{11}$, $-\text{OS}(\text{O})_{1-2}\text{R}^{11}$, $-\text{OS}(\text{O})_{1-2}\text{OR}^{11}$, $-\text{S}(\text{O})_{1-2}\text{N}(\text{R}^{12})(\text{R}^{13})$, $-\text{OS}(\text{O})_{1-2}\text{N}(\text{R}^{12})(\text{R}^{13})$, $-\text{N}(\text{R}^{11})\text{S}(\text{O})_{1-2}\text{R}^{11}$, $-\text{NR}^{11}\text{S}(\text{O})_{1-2}\text{OR}^{11}$, $-\text{NR}^{11}\text{S}(\text{O})_{1-2}\text{N}(\text{R}^{12})(\text{R}^{13})$, $-\text{P}(\text{O})(\text{OR}^{11})_2$, $-\text{OP}(\text{O})(\text{OR}^{11})_2$, $-\text{C}(=\text{X})\text{R}^{11}$, $-\text{C}(=\text{X})\text{XR}^{11}$, $-\text{XC}(=\text{X})\text{R}^{11}$, and $-\text{XC}(=\text{X})\text{XR}^{11}$, wherein each of the alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl, and heteroaryl groups is optionally substituted with one or more independently selected R^{30} ;

R^{11} is independently selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, and heterocyclyl, wherein each of the alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, and heterocyclyl groups is optionally substituted with one or more independently selected R^{30} ;

30 each of R^{12} and R^{13} is independently selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, and heterocyclyl, or R^{12} and R^{13} may join together with the nitrogen atom to which they are attached to form the group $-\text{N}=\text{CR}^{15}\text{R}^{16}$, wherein each of the alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, and heterocyclyl groups is optionally substituted with one or more independently selected R^{30} ;

R^{14} is independently selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, heterocyclyl, and $-\text{OR}^{11}$, wherein each of the alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, and heterocyclyl groups is optionally substituted with one or more independently selected R^{30} ;

35 each of R^{15} and R^{16} is independently selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, heterocyclyl, and $-\text{NH}_2$, R^{20}_{2-y} , or R^{15} and R^{16} may join together with the atom to which they are attached to form a ring which is optionally substituted with one or more independently selected R^{30} , wherein each of the alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, and heterocyclyl groups is optionally substituted with one or more independently selected R^{30} ;

40 y is an integer from 0 to 2;

R^{20} is independently selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, and heterocyclyl, wherein each of the alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, and heterocyclyl groups is optionally substituted with one or more independently selected R^{30} ; and

R^{30} is a 1st level substituent and is, in each case, independently selected from the group consisting of alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl, halogen, $-CN$, azido, $-NO_2$, $-OR^{71}$, $-N(R^{72})(R^{73})$, $-S(O)_{0-2}R^{71}$, $-S(O)_{1-2}OR^{71}$, $-OS(O)_{1-2}R^{71}$, $-OS(O)_{1-2}OR^{71}$, $-S(O)_{1-2}N(R^{72})(R^{73})$, $-OS(O)_{1-2}N(R^{72})(R^{73})$, $-N(R^{71})S(O)_{1-2}R^{71}$, $-NR^{71}S(O)_{1-2}OR^{71}$, $-NR^{71}S(O)_{1-2}N(R^{72})(R^{73})$, $-OP(O)(OR^{71})_2$, $-C(=X^1)R^{71}$, $-C(=X^1)X^1R^{71}$, $-X^1C(=X^1)R^{71}$, and $-X^1C(=X^1)X^1R^{71}$, and/or any two R^{30} which are bound to the same carbon atom of a cycloalkyl or heterocyclyl group may join together to form $=X^1$, wherein each of the alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, and heterocyclyl groups being a 1st level substituent is optionally substituted by one or more 2nd level substituents, wherein said 2nd level substituent is, in each case, independently selected from the group consisting of C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, 3- to 14-membered aryl, 3- to 14-membered heteroaryl, 3- to 14-membered cycloalkyl, 3- to 14-membered heterocyclyl, halogen, $-CF_3$, $-CN$, azido, $-NO_2$, $-OR^{81}$, $-N(R^{82})(R^{83})$, $-S(O)_{0-2}R^{81}$, $-S(O)_{1-2}OR^{81}$, $-OS(O)_{1-2}R^{81}$, $-OS(O)_{1-2}OR^{81}$, $-S(O)_{1-2}N(R^{82})(R^{83})$, $-OS(O)_{1-2}N(R^{82})(R^{83})$, $-N(R^{81})S(O)_{1-2}R^{81}$, $-NR^{81}S(O)_{1-2}OR^{81}$, $-NR^{81}S(O)_{1-2}N(R^{82})(R^{83})$, $-OP(O)(OR^{81})_2$, $-C(=X^2)R^{81}$, $-C(=X^2)X^2R^{81}$, $-X^2C(=X^2)R^{81}$, and $-X^2C(=X^2)X^2R^{81}$, and/or any two 2nd level substituents which are bound to the same carbon atom of a cycloalkyl or heterocyclyl group being a 1st level substituent may join together to form $=X^2$, wherein each of the C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, 3- to 14-membered aryl, 3- to 14-membered heteroaryl, 3- to 14-membered cycloalkyl, 3- to 14-membered heterocyclyl groups being a 2nd level substituent is optionally substituted with one or more 3rd level substituents, wherein said 3rd level substituent is, in each case, independently selected from the group consisting of C_{1-3} alkyl, halogen, $-CF_3$, $-CN$, azido, $-NO_2$, $-OH$, $-O(C_{1-3} \text{ alkyl})$, $-OCF_3$, $-S(C_{1-3} \text{ alkyl})$, $-NH_2$, $-NH(C_{1-3} \text{ alkyl})$, $-N(C_{1-3} \text{ alkyl})_2$, $-NHS(O)_2(C_{1-3} \text{ alkyl})$, $-S(O)_2NH_2-z(C_{1-3} \text{ alkyl})_z$, $-C(=O)OH$, $-C(=O)O(C_{1-3} \text{ alkyl})$, $-C(=O)NH_2-z(C_{1-3} \text{ alkyl})_z$, $-NHC(=O)(C_{1-3} \text{ alkyl})$, $-NHC(=NH)NH_2-z(C_{1-3} \text{ alkyl})_z$, and $-N(C_{1-3} \text{ alkyl})C(=NH)NH_2-z(C_{1-3} \text{ alkyl})_z$, wherein each z is independently 0, 1, or 2 and each C_{1-3} alkyl is independently methyl, ethyl, propyl or isopropyl, and/or any two 3rd level substituents which are bound to the same carbon atom of a 3- to 14-membered cycloalkyl or heterocyclyl group being a 2nd level substituent may join together to form $=O$, $=S$, $=NH$, or $=N(C_{1-3} \text{ alkyl})$;

wherein

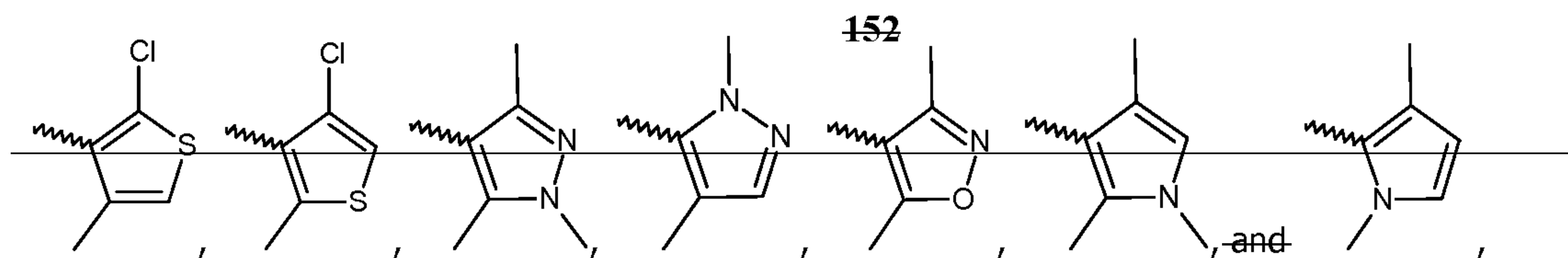
each of R^{71} , R^{72} , and R^{73} is independently selected from the group consisting of H, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, 3- to 7-membered cycloalkyl, 5- or 6-membered aryl, 5- or 6-membered heteroaryl, and 3- to 7-membered heterocyclyl, wherein each of the C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, 3- to 7-membered cycloalkyl, 5- or 6-membered aryl, 5- or 6-membered heteroaryl, and 3- to 7-membered heterocyclyl groups is optionally substituted with one, two or three substituents independently selected from the group consisting of C_{1-3} alkyl, halogen, $-CF_3$, $-CN$, azido, $-NO_2$, $-OH$, $-O(C_{1-3} \text{ alkyl})$, $-OCF_3$, $=O$, $-S(C_{1-3} \text{ alkyl})$, $-NH_2$, $-NH(C_{1-3} \text{ alkyl})$, $-N(C_{1-3} \text{ alkyl})_2$, $-NHS(O)_2(C_{1-3} \text{ alkyl})$, $-S(O)_2NH_2-z(C_{1-3} \text{ alkyl})_z$, $-C(=O)(C_{1-3} \text{ alkyl})$, $-C(=O)OH$, $-C(=O)O(C_{1-3} \text{ alkyl})$, $-C(=O)NH_2-z(C_{1-3} \text{ alkyl})_z$, $-NHC(=O)(C_{1-3} \text{ alkyl})$, $-NHC(=NH)NH_2-z(C_{1-3} \text{ alkyl})_z$, and $-N(C_{1-3} \text{ alkyl})C(=NH)NH_2-z(C_{1-3} \text{ alkyl})_z$, wherein each z is independently 0, 1, or 2 and each C_{1-3} alkyl is independently methyl, ethyl, propyl or isopropyl;

each of R^{81} , R^{82} , and R^{83} is independently selected from the group consisting of H, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, 3- to 6-membered cycloalkyl, 5- or 6-membered aryl, 5- or 6-membered heteroaryl, and 3- to 6-membered heterocyclyl, wherein each of the C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, 3- to 6-membered cycloalkyl, 5- or 6-membered aryl, 5- or 6-membered heteroaryl, and 3- to 6-membered heterocyclyl groups is optionally substituted with one, two or three substituents independently selected from the group consisting of C_{1-3} alkyl, halogen, $-CF_3$, $-CN$, azido, $-NO_2$, $-OH$, $-O(C_{1-3} \text{ alkyl})$, $-OCF_3$, $=O$, $-S(C_{1-3} \text{ alkyl})$, $-NH_2$, $-NH(C_{1-3} \text{ alkyl})$, $-N(C_{1-3} \text{ alkyl})_2$, $-NHS(O)_2(C_{1-3} \text{ alkyl})$, $-S(O)_2NH_2-z(C_{1-3} \text{ alkyl})_z$, $-C(=O)(C_{1-3} \text{ alkyl})$, $-C(=O)OH$, $-C(=O)O(C_{1-3} \text{ alkyl})$, $-C(=O)NH_2-z(C_{1-3} \text{ alkyl})_z$, $-NHC(=O)(C_{1-3} \text{ alkyl})$, $-NHC(=NH)NH_2-z(C_{1-3} \text{ alkyl})_z$, and $-N(C_{1-3} \text{ alkyl})C(=NH)NH_2-z(C_{1-3} \text{ alkyl})_z$, wherein each z is independently 0, 1, or 2 and each C_{1-3} alkyl is independently methyl, ethyl, propyl or isopropyl; and

each of X^1 and X^2 is independently selected from O, S, and $N(R^{84})$, wherein R^{84} is H or C_{1-3} alkyl;

with the proviso that

- (1) when R^{1a} is 4-(2-hydroxyethyl)piperazin-1-yl or Cl; R^{1b} is H; R^{1c} is methyl; B is N; E is O; R^3 is H; A is S; and L is a bond; then R^6 is not 4-chloro-2-methylpyridin-3-yl;
- (2) when R^{1a} is methoxy; R^{1b} is H; R^{1c} is methoxy; B is N; E is O; R^3 is H; A is S; and L is a bond; then R^6 is not 2,2-difluoro-5H-1,3-dioxolo[4,5-f]benzimidazol-6-yl;
- 5 (3) when R^3 is H; A is S; L is a bond; R^6 is 1-methyl-4-piperidinyl; R^{1b} is H; B is N; E is O; and
- (i) R^{1a} is methyl; then R^{1c} is not N-tert-butoxycarbonylpiperidin-4-yl; or
- (ii) R^{1c} is methyl; then R^{1a} is not N-tert-butoxycarbonylpiperidin-4-yl or N-tert-butoxycarbonylpiperidin-3-yl;
- (4) when E is O; B is CR^{1d} and R^{1d} is either H, F, Cl or Br, then R^{1a} is not H; and
- 10 (5) when R^{1a} is methyl; each of R^{1b} and R^{1c} is H; B is CH; E is O; A is S; and R^3 is methyl; then R^5 is not 1,3-benzodioxol-5-ylmethyl, 2-furanylmethyl, 1,3-benzodioxol-5-yl, 2-(2-thienyl)ethyl, 2-(4-morpholinyl)ethyl, 2-(2-pyridinyl)ethyl, 2-pyridinylmethyl, or tetrahydro-2-furanylmethyl.
2. The compound of claim 1, wherein R^6 is a mono- or bicyclic heteroaryl or a mono- or bicyclic heterocyclyl, each of which is optionally substituted with one, two, or three independently selected R^7 .
- 15 3. The compound of claim 1 or 2, wherein R^6 is a 5- to 6-membered monocyclic heteroaryl optionally substituted with one, two, or three independently selected R^7 .
4. The compound of any one of claims 1 to 3, wherein R^6 is a 5-membered monocyclic heteroaryl which contains at least one ring heteroatom selected from the group consisting of N, O, and S and which is optionally substituted with one, two, or three independently selected R^7 .
- 20 5. The compound of any one of claims 1 to 3, wherein R^6 is a 5- or 6-membered monocyclic heteroaryl which contains at least one S ring atom and which is optionally substituted with one, two, or three independently selected R^7 .
6. The compound of any one of claims 1 to 5, wherein R^6 is thienyl optionally substituted with one, two, or three independently selected R^7 .
- 25 7. The compound of any one of claims 1 to 6, wherein R^6 is substituted with one, two, or three independently selected R^7 .
8. The compound of any one of claims 1 to 7, wherein R^7 is independently selected from the group consisting of C_{1-3} alkyl, halogen, CN, $O(C_{1-3}$ alkyl), $NH(C_{1-3}$ alkyl), and $N(C_{1-3}$ alkyl)₂, and/or any two R^7 which are bound to the same atom of R^6 being a heterocyclyl group may join together to form =O, wherein each of the C_{1-3} alkyl groups is
- 30 optionally substituted with one or more independently selected R^{30} .
9. The compound of any one of claims 1 to 8, wherein R^7 is independently selected from the group consisting of halogen and C_{1-2} alkyl, wherein the C_{1-2} alkyl groups is optionally substituted with one, two, or three independently selected R^{30} .
10. The compound of any one of claims 1 to 9, wherein R^7 is independently selected from the group consisting of
- 35 Cl, Br, and methyl.
11. The compound of any one of claims 1 to 10, wherein one R^7 group is bound to a ring atom of R^6 at position 2 relative to the ring atom by which R^6 is bound to the remainder of the compound.
12. The compound of any one of claims 1 to 4, wherein R^6 is selected from the group consisting of



wherein represents the bond by which R⁶ is bound to the remainder of the compound.

13. The compound of any one of claims 1 to 12, wherein L is selected from the group consisting of a bond; C₁ alkylene, optionally substituted with one R³⁰; C₂ alkylene (in particular 1,2-ethylene or 1,1-ethylene), optionally substituted with one R³⁰; C₃ alkylene (in particular trimethylene), optionally substituted with one R³⁰; C₄ alkylene (in particular tetramethylene or 2,4-butandiyl), optionally substituted with one R³⁰; $-(CH_2)_mO-$; and $-(CH_2)_mNH-$, wherein m is 1, 2, or 3.
14. The compound of any one of claims 1 to 13, wherein L is a bond.
15. The compound of any one of claims 1 to 14, wherein R^{1a} is selected from the group consisting of alkyl, -O(alkyl), -S(alkyl), -NH(alkyl), -N(alkyl)₂, and heterocyclyl, wherein each of the alkyl and heterocyclyl groups is optionally substituted with one or more independently selected R³⁰.
16. The compound of claim 15, wherein the one or more independently selected R³⁰ optionally substituting R^{1a} are selected from (i) C₁₋₃ alkyl, phenyl, thiazolidinyl, halogen, -NH₂, -NHS(O)₂(C₁₋₃ alkyl), -NHC(=O)(C₁₋₃ alkyl), and -NHC(=NH)NH₂₋₂(C₁₋₃ alkyl)_z, wherein z is 0, 1, or 2 and each C₁₋₃ alkyl is independently methyl, ethyl, propyl or isopropyl; (ii) methyl, ethyl, propyl, isopropyl, phenyl, =O, and =S; or (iii) methyl, ethyl, propyl, isopropyl, halogen, and -CF₃.
17. The compound of any one of claims 1 to 15, wherein R^{1a} is selected from the group consisting of -O(alkyl), -S(alkyl), -NH(alkyl), -N(alkyl)₂, and heterocyclyl, wherein each of the alkyl and heterocyclyl groups is optionally substituted with one or more independently selected R³⁰.
18. The compound of any one of claims 1 to 15, wherein R^{1a} is selected from the group consisting of C₁₋₃ alkyl, -O(C₁₋₃ alkyl), -S(C₁₋₃ alkyl), -NH(C₁₋₃ alkyl), piperazinyl, morpholinyl, piperidinyl, and pyrrolidinyl, wherein each of the piperazinyl, morpholinyl, piperidinyl, and pyrrolidinyl groups is optionally substituted with one or two moieties independently selected from the group consisting of methyl, ethyl, -OH, -OCH₃, -SCH₃, cyclopropyl, 2-hydroxyethyl, 2-(N,N-dimethylamino)ethyl, 2-(N,N-dimethylamino)ethoxy, 2-aminoethyl, 2-(N-methylamino)ethyl, 2-(methoxy)ethyl, 4-methylpiperazinyl, -C(=O)(C₁₋₃ alkyl), $-(CH_2)_{1-3}COOH$, and $-NH_{2-z}(CH_3)_z$, wherein z is 0, 1, or 2; and each of the C₁₋₃ alkyl groups is optionally substituted with one or two moieties independently selected from the group consisting of -OH, -OCH₃, -SCH₃, cyclopropyl, piperazinyl, 4-methylpiperazinyl, 4-(2-hydroxyethyl)piperazinyl, 2-(N,N-dimethylamino)ethoxy, and $-NH_{2-z}(CH_3)_z$, wherein z is 0, 1, or 2.
19. The compound of any one of claims 1 to 15, wherein R^{1a} is selected from the group consisting of -NH(C₁₋₃ alkyl), piperazinyl, piperidinyl, and pyrrolidinyl, wherein the piperazinyl group is optionally substituted with one or two moieties independently selected from the group consisting of 2-hydroxyethyl, methyl, -CH₂COOH, and -C(=O)CH₃; the piperidinyl group is optionally substituted with one or two moieties independently selected from the group consisting of -NH₂ and 4-methylpiperazinyl; the pyrrolidinyl is optionally substituted with one or two -OH; and each of the C₁₋₃ alkyl groups is optionally substituted with one or two moieties independently selected from the group consisting of -OH, -OCH₃, and $-NH_{2-z}(CH_3)_z$, wherein z is 0, 1, or 2.
20. The compound of any one of claims 1 to 15 and 17 to 19, wherein R^{1a} is selected from the group consisting of 4-(2-hydroxyethyl)piperazinyl, 4-methylpiperazinyl, 4-acetylpiperazinyl, and (2-hydroxyethyl)amino.
21. The compound of any one of claims 1 to 20, wherein at least one of R^{1b} and R^{1c} is selected from the group

consisting of H, methyl, ethyl, ~~OH, OCH₃, SCH₃, cyclopropyl, 2-hydroxyethyl, 2-(N,N-dimethylamino)ethyl, 2-(N,N-dimethylamino)ethoxy, 2-aminoethyl, 2-(N-methylamino)ethyl, 2-(methoxy)ethyl, NH_{2-z}(CH₃)_z, and phenyl~~, wherein z is 0, 1, or 2.

22. The compound of any one of claims 1 to 21, wherein R^{1b} is H; and R^{1c} is methyl, ethyl, propyl, isopropyl, or phenyl, preferably methyl.

23. The compound of any one of claims 1 to 22, wherein A is S, O, or N(CH₃)₂.

24. The compound of any one of claims 1 to 23, wherein A is S.

25. The compound of any one of claims 1 to 24, wherein B is N or CR^{1d}, wherein R^{1d} is selected from the group consisting of C₁₋₃ alkyl, halogen, ~~O(C₁₋₃ alkyl), S(C₁₋₃ alkyl), NH(C₁₋₃ alkyl), and N(C₁₋₃ alkyl)₂~~, wherein each of the C₁₋₃ alkyl groups is optionally substituted with one or two moieties independently selected from the group consisting of halogen, ~~OH, OCH₃, SCH₃, and NH_{2-z}(CH₃)_z~~, wherein z is 0, 1, or 2.

26. The compound of any one of claims 1 to 24, wherein B is N.

27. The compound of any one of claims 1 to 26, wherein E is O.

28. The compound of any one of claims 1 to 27, wherein R³ is selected from the group consisting of H, methyl, ethyl, propyl, isopropyl, phenyl, and halogen.

29. The compound of any one of claims 1 to 28, wherein R³ is H.

30. The compound of claim 1, wherein:

L is a bond; and

(A) R^{1a} is selected from the group consisting of alkyl, ~~O(alkyl), S(alkyl), NH(alkyl), N(alkyl)₂, and heterocyclyl~~, wherein each of the alkyl and heterocyclyl groups is optionally substituted with one or more independently selected R³⁰, wherein, preferably, each R³⁰ is independently (i) C₁₋₃ alkyl, phenyl, thiazolidinyl, halogen, ~~NH₂, NHS(O)₂(C₁₋₃ alkyl), NHC(=O)(C₁₋₃ alkyl), and NHC(=NH)NH_{2-z}(C₁₋₃ alkyl)_z~~, wherein z is 0, 1, or 2 and each C₁₋₃ alkyl is independently methyl, ethyl, propyl or isopropyl; (ii) methyl, ethyl, propyl, isopropyl, phenyl, =O, and =S; or (iii) methyl, ethyl, propyl, isopropyl, halogen, and ~~CF₃~~;

(B) each of R^{1b} and R^{1c} is independently selected from the group consisting of H, methyl, ethyl, ~~OH, OCH₃, SCH₃, cyclopropyl, 2-hydroxyethyl, 2-(N,N-dimethylamino)ethyl, 2-(N,N-dimethylamino)ethoxy, 2-aminoethyl, 2-(N-methylamino)ethyl, 2-(methoxy)ethyl, NH_{2-z}(CH₃)_z, phenyl, pyridinyl, pyrazolyl, phenoxy, pyridinyloxy, imidazolylamino, and tetrahydrofuranylmethoxy~~, wherein z is 0, 1, or 2; and each of the phenyl, pyridinyl, pyrazolyl, phenoxy, pyridinyloxy, imidazolylamino, and tetrahydrofuranylmethoxy groups is optionally substituted with one, two or three moieties independently selected from methyl, ethyl, ~~OH, OCH₃, SCH₃, cyclopropyl, 2-hydroxyethyl, 2-(N,N-dimethylamino)ethyl, 2-(N,N-dimethylamino)ethoxy, 2-aminoethyl, 2-(N-methylamino)ethyl, 2-(methoxy)ethyl, and NH_{2-z}(CH₃)_z~~, wherein z is 0, 1, or 2;

(C) R³ is selected from the group consisting of H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₆ cycloalkyl, phenyl, halogen, ~~CN, azido, NO₂, O(C₁₋₆ alkyl), OCF₃, S(C₁₋₆ alkyl), NH₂, NH(C₁₋₆ alkyl), N(C₁₋₆ alkyl)₂, NHS(O)₂(C₁₋₆ alkyl), S(O)₂NH_{2-z}(C₁₋₆ alkyl)_z, C(=O)(C₁₋₆ alkyl), C(=O)OH, C(=O)O(C₁₋₆ alkyl), C(=O)NH_{2-z}(C₁₋₆ alkyl)_z, NHC(=O)(C₁₋₆ alkyl), NHC(=NH)NH_{2-z}(C₁₋₆ alkyl)_z, and N(C₁₋₆ alkyl)C(=NH)NH_{2-z}(C₁₋₆ alkyl)_z~~, wherein z is 0, 1, or 2 and wherein each of the C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₆ cycloalkyl, and phenyl groups is optionally substituted with one or more independently selected R³⁰;

- (D) ~~R⁶ is a 3- to 10-membered heteroaryl or a 3- to 10-membered heterocyclyl, each of which is optionally substituted with one, two, or three independently selected R⁷;~~
- (E) ~~A is selected from the group consisting of S, O, NH, N(C₁₋₆ alkyl), and C(C₁₋₆ alkyl)₂;~~
- (F) ~~B is N or CR^{1d}, wherein R^{1d} is selected from the group consisting of C₁₋₃ alkyl, halogen, -O(C₁₋₃ alkyl), -S(C₁₋₃ alkyl), -NH(C₁₋₃ alkyl), and -N(C₁₋₃ alkyl)₂, wherein each of the C₁₋₃ alkyl groups is optionally substituted with one or two moieties independently selected from the group consisting of halogen, -OH, -OCH₃, -SCH₃, and -NH_{2-z}(CH₃)_z, wherein z is 0, 1, or 2; and/or~~
- (G) ~~E is O or S, preferably O.~~

31. The compound of claim 1, wherein:

~~L is a bond; and~~

- (A) ~~R^{1a} is selected from the group consisting of alkyl, -O(alkyl), -S(alkyl), -NH(alkyl), -N(alkyl)₂, and heterocyclyl, wherein each of the alkyl and heterocyclyl groups is optionally substituted with one or more independently selected R³⁰, wherein, preferably, each R³⁰ is independently (i) C₁₋₃ alkyl, phenyl, thiazolidinyl, halogen, -NH₂, -NHS(O)₂(C₁₋₃ alkyl), -NHC(=O)(C₁₋₃ alkyl), and -NHC(=NH)NH_{2-z}(C₁₋₃ alkyl)_z, wherein z is 0, 1, or 2 and each C₁₋₃ alkyl is independently methyl, ethyl, propyl or isopropyl; (ii) methyl, ethyl, propyl, isopropyl, phenyl, =O, and =S; or (iii) methyl, ethyl, propyl, isopropyl, halogen, and -CF₃;~~
- (B) ~~each of R^{1b} and R^{1c} is independently selected from the group consisting of H, methyl, ethyl, -OH, -OCH₃, -SCH₃, cyclopropyl, 2-hydroxyethyl, 2-(N,N-dimethylamino)ethyl, 2-(N,N-dimethylamino)ethoxy, 2-aminoethyl, 2-(N-methylamino)ethyl, 2-(methoxy)ethyl, -NH_{2-z}(CH₃)_z, phenyl, pyridinyl, pyrazolyl, phenoxy, pyridinyloxy, imidazolylamino, and tetrahydrofuranylmethoxy, wherein z is 0, 1, or 2; and each of the phenyl, pyridinyl, pyrazolyl, phenoxy, pyridinyloxy, imidazolylamino, and tetrahydrofuranylmethoxy groups is optionally substituted with one, two or three moieties independently selected from methyl, ethyl, -OH, -OCH₃, -SCH₃, cyclopropyl, 2-hydroxyethyl, 2-(N,N-dimethylamino)ethyl, 2-(N,N-dimethylamino)ethoxy, 2-aminoethyl, 2-(N-methylamino)ethyl, 2-(methoxy)ethyl, and -NH_{2-z}(CH₃)_z, wherein z is 0, 1, or 2;~~
- (C) ~~R³ is selected from the group consisting of H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₆ cycloalkyl, phenyl, halogen, -CN, azido, -NO₂, -O(C₁₋₆ alkyl), -OCF₃, -S(C₁₋₆ alkyl), -NH₂, -NH(C₁₋₆ alkyl), -N(C₁₋₆ alkyl)₂, -NHS(O)₂(C₁₋₆ alkyl), -S(O)₂NH_{2-z}(C₁₋₆ alkyl)_z, -C(=O)(C₁₋₆ alkyl), -C(=O)OH, -C(=O)O(C₁₋₆ alkyl), -C(=O)NH_{2-z}(C₁₋₆ alkyl)_z, -NHC(=O)(C₁₋₆ alkyl), -NHC(=NH)NH_{2-z}(C₁₋₆ alkyl)_z, and -N(C₁₋₆ alkyl)C(=NH)NH_{2-z}(C₁₋₆ alkyl)_z, wherein z is 0, 1, or 2 and wherein each of the C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₆ cycloalkyl, and phenyl groups is optionally substituted with one or more independently selected R³⁰;~~
- (D) ~~R⁶ is a 3- to 10-membered heteroaryl or a 3- to 10-membered heterocyclyl, each of which is optionally substituted with one, two, or three independently selected R⁷;~~
- (E) ~~A is selected from the group consisting of S, O, NH, N(C₁₋₆ alkyl), and C(C₁₋₆ alkyl)₂;~~
- (F) ~~B is N or CR^{1d}, wherein R^{1d} is selected from the group consisting of C₁₋₃ alkyl, halogen, -O(C₁₋₃ alkyl), -S(C₁₋₃ alkyl), -NH(C₁₋₃ alkyl), and -N(C₁₋₃ alkyl)₂, wherein each of the C₁₋₃ alkyl groups is optionally substituted with one or two moieties independently selected from the group consisting of halogen, -OH, -OCH₃, -SCH₃, and -NH_{2-z}(CH₃)_z, wherein z is 0, 1, or 2; and~~
- (G) ~~E is O or S, preferably O.~~

32. The compound of claim 1, wherein:

~~L is a bond; and~~

- (A') ~~R^{1a} is selected from the group consisting of C₁₋₃ alkyl, -O(C₁₋₃ alkyl), -S(C₁₋₃ alkyl), -NH(C₁₋₃ alkyl),~~

- ~~-N(C₁₋₃ alkyl)₂, and 3- to 7-membered heterocyclyl, wherein the 3- to 7-membered heterocyclyl group is optionally substituted with one or two moieties independently selected from the group consisting of methyl, ethyl, -OH, -OCH₃, -SCH₃, cyclopropyl, 2-hydroxyethyl, 2-(N,N-dimethylamino)ethyl, 2-(N,N-dimethylamino)ethoxy, 2-aminoethyl, 2-(N-methylamino)ethyl, 2-(methoxy)ethyl, 4-methylpiperazinyl, -C(=O)(C₁₋₃ alkyl), -(CH₂)₁₋₃COOH, and -NH_{2-z}(CH₃)_z, wherein z is 0, 1, or 2; and each of the C₁₋₃ alkyl groups is optionally substituted with one or two moieties independently selected from the group consisting of -OH, -OCH₃, -SCH₃, cyclopropyl, piperazinyl, 4-methyl-piperazinyl, 4-(2-hydroxyethyl)piperazinyl, 2-(N,N-dimethylamino)ethoxy, and -NH_{2-z}(CH₃)_z, wherein z is 0, 1, or 2;~~
- (B') ~~at least one of R^{1b} and R^{1c} is selected from the group consisting of H, methyl, ethyl, -OH, -OCH₃, -SCH₃, cyclopropyl, 2-hydroxyethyl, 2-(N,N-dimethylamino)ethyl, 2-(N,N-dimethylamino)ethoxy, 2-aminoethyl, 2-(N-methylamino)ethyl, 2-(methoxy)ethyl, -NH_{2-z}(CH₃)_z, and phenyl, wherein z is 0, 1, or 2, and the other of R^{1b} and R^{1c} is as defined above under (B) in claim 30;~~
- (C') ~~R³ is selected from the group consisting of H, C₁₋₄ alkyl, C₃₋₆ cycloalkyl, phenyl, halogen, -CN, -O(C₁₋₄ alkyl), -OCF₃, -S(C₁₋₄ alkyl), -NH₂, -NH(C₁₋₄ alkyl), -N(C₁₋₄ alkyl)₂, -C(=O)(C₁₋₄ alkyl), -C(=O)OH, -C(=O)O(C₁₋₄ alkyl), -C(=O)NH_{2-z}(C₁₋₄ alkyl)_z, -NHC(=O)(C₁₋₄ alkyl), -NHC(=NH)NH_{2-z}(C₁₋₄ alkyl)_z, and -N(C₁₋₄ alkyl)C(=NH)NH_{2-z}(C₁₋₄ alkyl)_z, wherein the phenyl group is optionally substituted with one, two or groups independently selected from the group consisting of halogen, methyl, isopropyl, -CN, -CF₃, -OCF₃, -OH, -NH₂, -NH(C₁₋₃ alkyl), -N(C₁₋₃ alkyl)₂, -NHC(=O)(C₁₋₃ alkyl), -C(=O)NH_{2-z}(C₁₋₃ alkyl)_z, -(CH₂)₁₋₃NH₂, -(CH₂)₁₋₃NH(C₁₋₃ alkyl), -(CH₂)₁₋₃N(C₁₋₃ alkyl)₂, -(CH₂)₁₋₃OH, and -(CH₂)₁₋₃O(C₁₋₃ alkyl); and wherein z is 0, 1, or 2;~~
- (D') ~~R⁶ is a 3- to 10-membered heteroaryl containing at least one ring heteroatom selected from the group consisting of N, O, and S or a 3- to 10-membered heterocyclyl containing at least one ring heteroatom selected from the group consisting of N, O, and S, each of which is optionally substituted with one, two, or three independently selected R⁷, preferably R⁶ is a mono- or bicyclic heteroaryl or a mono- or bicyclic heterocyclyl, each of which is optionally substituted with one, two, or three independently selected R⁷;~~
- (E') ~~A is S, O, or N(CH₃)₂;~~
- (F') ~~B is N or CR^{1d}, wherein R^{1d} is selected from the group consisting of C₁₋₃ alkyl, halogen, -O(C₁₋₃ alkyl), -S(C₁₋₃ alkyl), -NH(C₁₋₃ alkyl), and -N(C₁₋₃ alkyl)₂; and/or~~
- (G') ~~E is O or S, preferably O.~~
33. The compound of claim 1, wherein:
L is a bond; and
- (A') ~~R^{1a} is selected from the group consisting of C₁₋₃ alkyl, -O(C₁₋₃ alkyl), -S(C₁₋₃ alkyl), -NH(C₁₋₃ alkyl), -N(C₁₋₃ alkyl)₂, and 3- to 7-membered heterocyclyl, wherein the 3- to 7-membered heterocyclyl group is optionally substituted with one or two moieties independently selected from the group consisting of methyl, ethyl, -OH, -OCH₃, -SCH₃, cyclopropyl, 2-hydroxyethyl, 2-(N,N-dimethylamino)ethyl, 2-(N,N-dimethylamino)ethoxy, 2-aminoethyl, 2-(N-methylamino)ethyl, 2-(methoxy)ethyl, 4-methylpiperazinyl, -C(=O)(C₁₋₃ alkyl), -(CH₂)₁₋₃COOH, and -NH_{2-z}(CH₃)_z, wherein z is 0, 1, or 2; and each of the C₁₋₃ alkyl groups is optionally substituted with one or two moieties independently selected from the group consisting of -OH, -OCH₃, -SCH₃, cyclopropyl, piperazinyl, 4-methyl-piperazinyl, 4-(2-hydroxyethyl)piperazinyl, 2-(N,N-dimethylamino)ethoxy, and -NH_{2-z}(CH₃)_z, wherein z is 0, 1, or 2;~~
- (B') ~~at least one of R^{1b} and R^{1c} is selected from the group consisting of H, methyl, ethyl, -OH, -OCH₃, -SCH₃, cyclopropyl, 2-hydroxyethyl, 2-(N,N-dimethylamino)ethyl, 2-(N,N-dimethylamino)ethoxy, 2-aminoethyl, 2-(N-methylamino)ethyl, 2-(methoxy)ethyl, -NH_{2-z}(CH₃)_z, and phenyl, wherein z is 0, 1, or~~

2, and the other of R^{1b} and R^{1c} is as defined above under (B) in claim 30;

(C') R^3 is selected from the group consisting of H, C_{1-4} alkyl, C_{3-6} cycloalkyl, phenyl, halogen, $-CN$, $-O(C_{1-4}$ alkyl), $-OCF_3$, $-S(C_{1-4}$ alkyl), $-NH_2$, $-NH(C_{1-4}$ alkyl), $-N(C_{1-4}$ alkyl) $_2$, $-C(=O)(C_{1-4}$ alkyl), $-C(=O)OH$, $-C(=O)O(C_{1-4}$ alkyl), $-C(=O)NH_{2-z}(C_{1-4}$ alkyl) $_z$, $-NHC(=O)(C_{1-4}$ alkyl), $-NHC(=NH)NH_{2-z}(C_{1-4}$ alkyl) $_z$, and $-N(C_{1-4}$ alkyl) $C(=NH)NH_{2-z}(C_{1-4}$ alkyl) $_z$, wherein the phenyl group is optionally substituted with one, two or groups independently selected from the group consisting of halogen, methyl, isopropyl, $-CN$, $-CF_3$, $-OCF_3$, $-OH$, $-NH_2$, $-NH(C_{1-3}$ alkyl), $-N(C_{1-3}$ alkyl) $_2$, $-NHC(=O)(C_{1-3}$ alkyl), $-C(=O)NH_{2-z}(C_{1-3}$ alkyl) $_z$, $-(CH_2)_{1-3}NH_2$, $-(CH_2)_{1-3}NH(C_{1-3}$ alkyl), $-(CH_2)_{1-3}N(C_{1-3}$ alkyl) $_2$, $-(CH_2)_{1-3}OH$, and $-(CH_2)_{1-3}O(C_{1-3}$ alkyl); and wherein z is 0, 1, or 2;

(D') R^6 is a 3- to 10-membered heteroaryl containing at least one ring heteroatom selected from the group consisting of N, O, and S or a 3- to 10-membered heterocyclyl containing at least one ring heteroatom selected from the group consisting of N, O, and S, each of which is optionally substituted with one, two, or three independently selected R^7 , preferably R^6 is a mono- or bicyclic heteroaryl or a mono- or bicyclic heterocyclyl, each of which is optionally substituted with one, two, or three independently selected R^7 ;

(E') A is S, O, or $N(CH_3)_2$;

(F') B is N or CR^{1d} , wherein R^{1d} is selected from the group consisting of C_{1-3} alkyl, halogen, $-O(C_{1-3}$ alkyl), $-S(C_{1-3}$ alkyl), $-NH(C_{1-3}$ alkyl), and $-N(C_{1-3}$ alkyl) $_2$; and

(G') E is O or S, preferably O.

34. The compound of any one of claims 30 to 33, wherein R^6 is a 5-membered monocyclic heteroaryl which contains at least one ring heteroatom selected from the group consisting of N, O, and S and which is optionally substituted with one, two, or three independently selected R^7 .

35. The compound of any one of claims 30 to 33, wherein R^6 is a 5- or 6-membered monocyclic heteroaryl which contains at least one S ring atom and which is optionally substituted with one, two, or three independently selected R^7 .

36. The compound of any one of claims 30 to 35, wherein R^6 is thienyl optionally substituted with one, two, or three independently selected R^7 .

37. The compound of any one of claims 30 to 36, wherein R^6 is substituted with one, two, or three independently selected R^7 .

38. The compound of any one of claims 30 to 37, wherein R^7 is independently selected from the group consisting of C_{1-3} alkyl, halogen, $-CN$, $-O(C_{1-3}$ alkyl), $-NH(C_{1-3}$ alkyl), and $-N(C_{1-3}$ alkyl) $_2$, and/or any two R^7 which are bound to the same atom of R^6 being a heterocyclyl group may join together to form $=O$, wherein each of the C_{1-3} alkyl groups is optionally substituted with one or more independently selected R^{30} .

39. The compound of any one of claims 30 to 38, wherein R^7 is independently selected from the group consisting of halogen and C_{1-2} alkyl, wherein the C_{1-2} alkyl groups is optionally substituted with one, two, or three independently selected R^{30} .

40. The compound of any one of claims 30 to 39, wherein R^7 is independently selected from the group consisting of Cl, Br, and methyl.

41. The compound of any one of claims 30 to 40, wherein R^{1a} is selected from the group consisting of $-NH(C_{1-3}$ alkyl), piperazinyl, piperidinyl, and pyrrolidinyl, wherein the piperazinyl group is optionally substituted with one or two moieties independently selected from the group consisting of 2-hydroxyethyl, methyl, $-CH_2COOH$, and

~~-C(=O)CH₃; the piperidiny group is optionally substituted with one or two moieties independently selected from the group consisting of -NH₂ and 4-methylpiperazinyl; the pyrrolidiny is optionally substituted with one or two -OH; and each of the C₁₋₃ alkyl groups is optionally substituted with one or two moieties independently selected from the group consisting of -OH, -OCH₃, and -NH_{2-z}(CH₃)_z, wherein z is 0, 1, or 2.~~

5 42. The compound of any one of claims 30 to 41, wherein R^{1a} is selected from the group consisting of 4-(2-hydroxyethyl)piperazinyl, 4-methylpiperazinyl, 4-acetylpiperazinyl, and (2-hydroxyethyl)amino.

43. The compound of any one of claims 30 to 42, wherein R^{1b} is H; and R^{1c} is methyl, ethyl, propyl, isopropyl, or phenyl, preferably methyl.

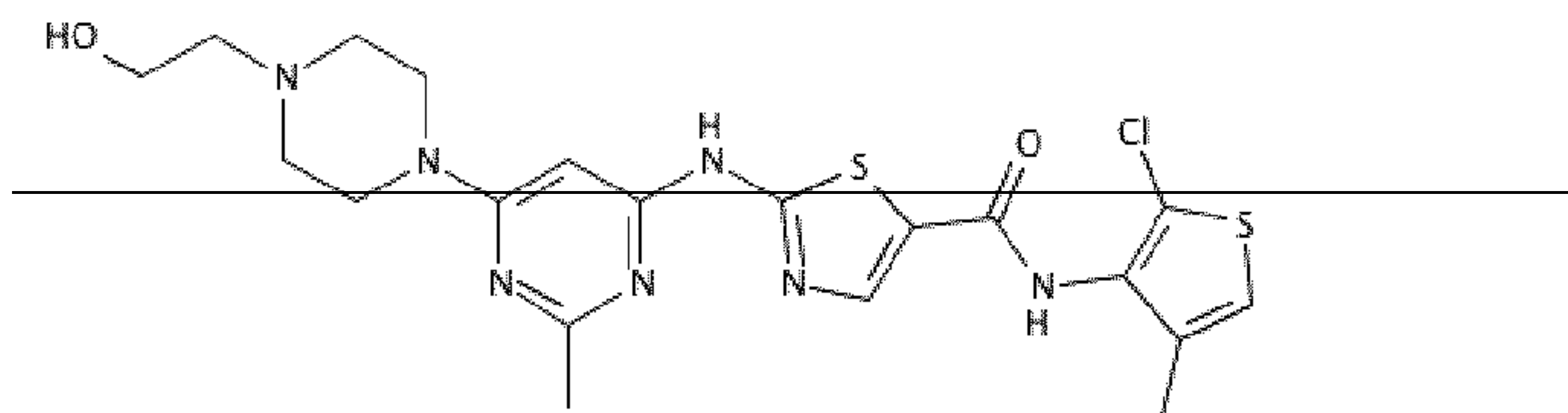
44. The compound of any one of claims 30 to 43, wherein A is S, B is N and/or E is O.

10 45. The compound of any one of claims 30 to 44, wherein A is S, B is N and E is O.

46. The compound of any one of claims 30 to 45, wherein R³ is selected from the group consisting of H, methyl, ethyl, propyl, isopropyl, phenyl, and halogen.

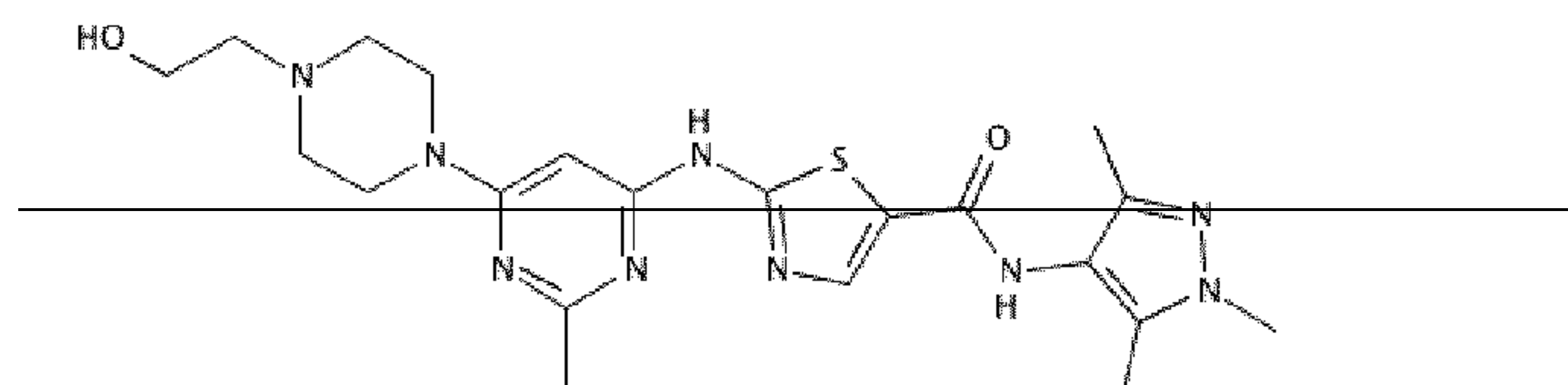
47. The compound of any one of claims 30 to 46, wherein and R³ is H.

48. The compound of any one of claims 1 to 47, selected from the group consisting of:



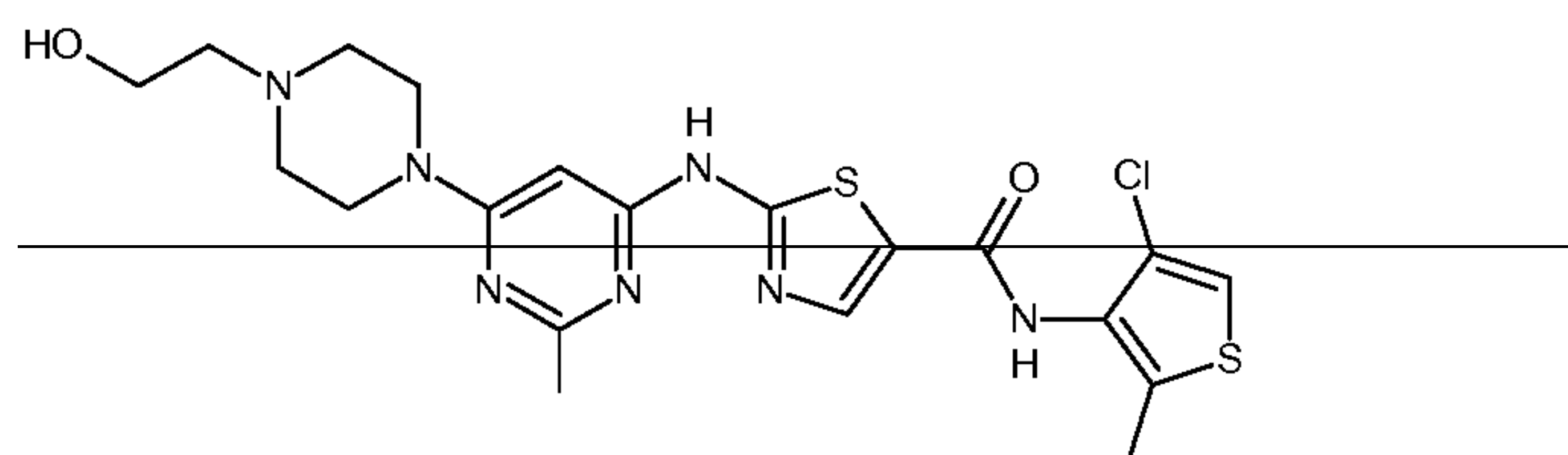
15 and solvates, salts, N-oxides, complexes, polymorphs, crystalline forms, tautomers, conformers, isotopically labeled forms, prodrugs, and combinations thereof.

49. The compound of any one of claims 1 to 34 and 37 to 47, selected from the group consisting of:



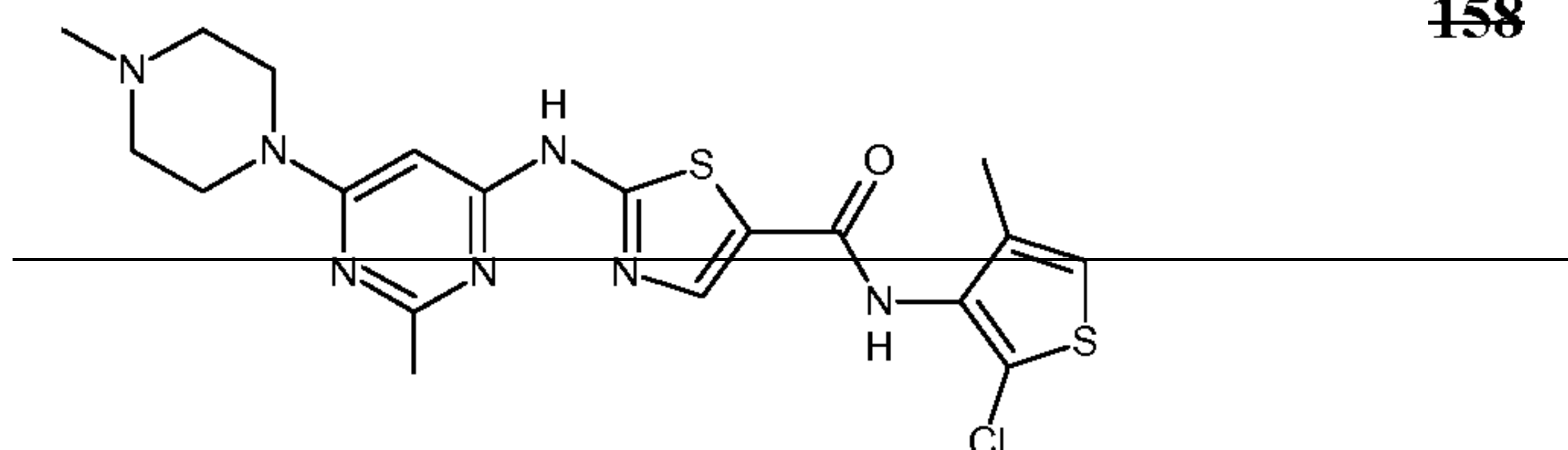
20 and solvates, salts, N-oxides, complexes, polymorphs, crystalline forms, tautomers, conformers, isotopically labeled forms, prodrugs, and combinations thereof.

50. The compound of any one of claims 1 to 47, selected from the group consisting of:



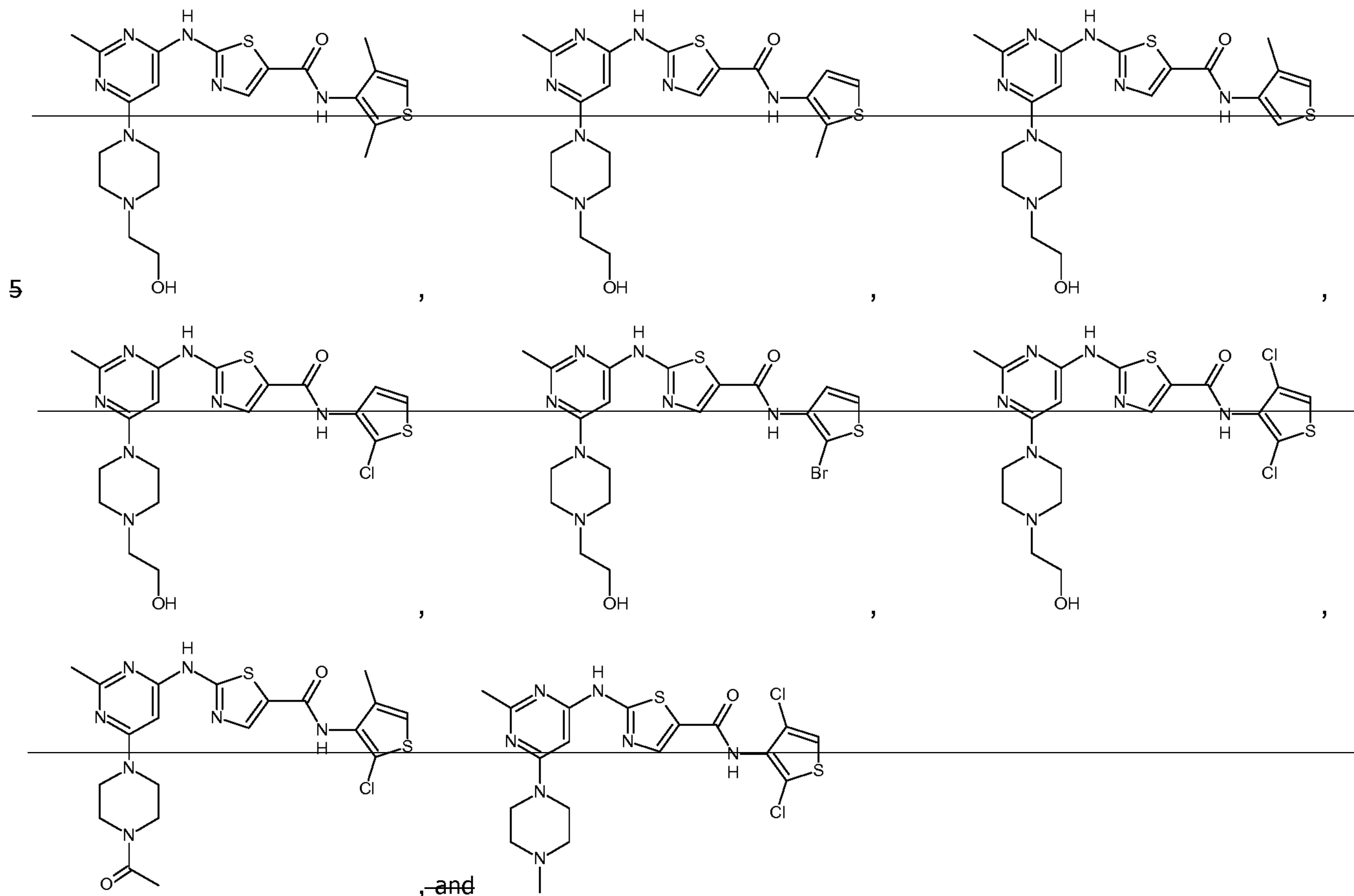
25 and solvates, salts, N-oxides, complexes, polymorphs, crystalline forms, tautomers, conformers, isotopically labeled forms, prodrugs, and combinations thereof.

51. The compound of any one of claims 1 to 47, selected from the group consisting of:



and solvates, salts, N-oxides, complexes, polymorphs, crystalline forms, tautomers, conformers, isotopically labeled forms, prodrugs, and combinations thereof.

52. The compound of any one of claims 1 to 47, selected from the group consisting of:



and solvates, salts, N-oxides, complexes, polymorphs, crystalline forms, tautomers, conformers, isotopically labeled forms, prodrugs, and combinations thereof.

10 53. The compound of any one of claims 1 to 49 in substantially pure form, in particular in greater than about 90%, 95%, 98% or 99% pure form.

54. A pharmaceutical composition comprising the compound of any one of claims 1 to 49 or 53, and optionally further comprising a pharmaceutically acceptable excipient.

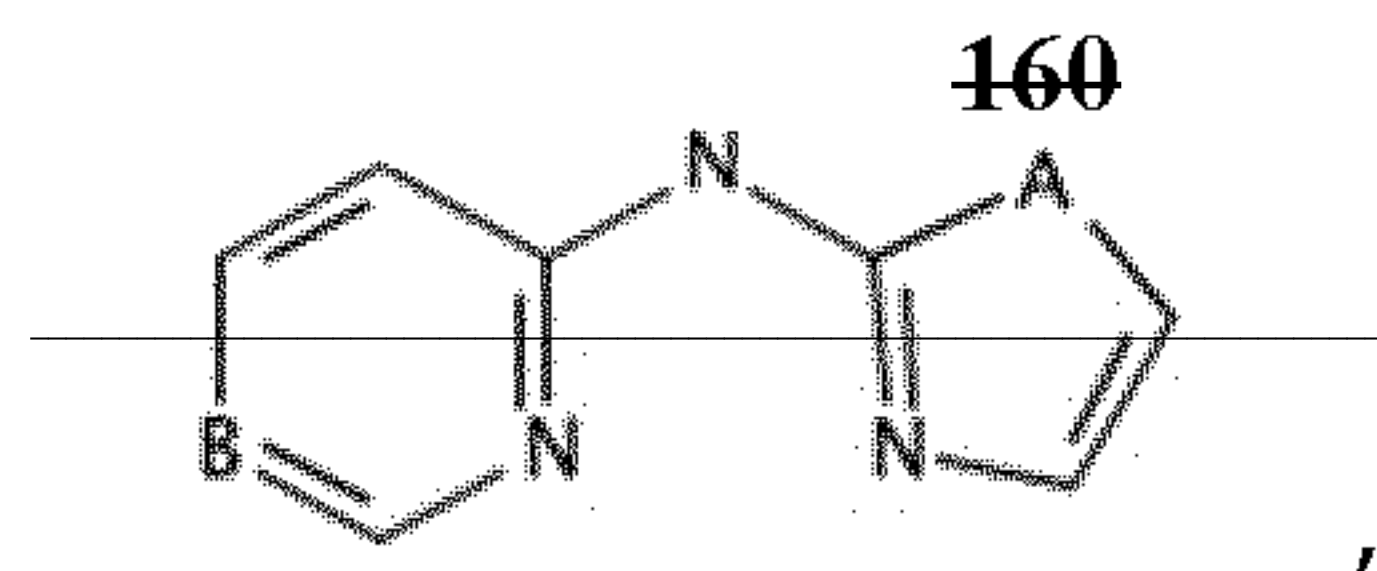
55. The pharmaceutical composition of claim 54 formulated for oral administration.

15 56. The pharmaceutical composition of claim 54 or 55 in unit dose form.

57. The compound of any one of claims 1 to 49 and 53, or the pharmaceutical composition of any one of claims 54 to 56, for use in therapy.

20 58. A method for the treatment of a disease, disorder or condition in an individual, comprising administering to the individual a compound of any one of claims 1 to 49 and 53, or a pharmaceutical composition of any one of claims 54 to 56, optionally wherein the disease, (disorder) or condition is associated with a kinase.

59. A method for the treatment of a proliferative disorder or condition in a subject, comprising administering to the subject a compound of any one of claims 1 to 49 and 53, or a pharmaceutical composition of any one of claims 54 to 56.
60. A compound or a pharmaceutical composition for use in a treatment of a proliferative disorder in a subject, the treatment comprising administering the compound or the pharmaceutical composition to the subject, wherein, the compound is a compound of any one of claims 1 to 49 and 53, or the pharmaceutical composition is a pharmaceutical composition of claim 54.
61. The compound or pharmaceutical composition for use of claim 57 or 60, wherein the proliferative disorder is a cancer or tumour.
62. The compound or pharmaceutical composition for use of claim 61, wherein the cancer is a solid tumour.
63. The compound or pharmaceutical composition for use of any one of claims 57 and 60 to 62, wherein treatment further comprises administration of an immune checkpoint inhibitor.
64. The compound or pharmaceutical composition for use of any one of claims 57 and 60 to 63, wherein: (i) the proliferative disorder has progressed on standard therapy in the subject; or (ii) the subject is unable to receive standard therapy.
65. The compound or pharmaceutical composition for use of any one of claims 57 and 60 to 64, wherein the treatment involves inhibiting SIK3.
66. The compound or pharmaceutical composition for use of any one of claims 57 and 60 to 65, wherein the treatment involves sensitising cells involved with the proliferative disorder to a cell-mediated immune response.
67. The compound or pharmaceutical composition for use of any one of claims 57 and 60 to 66, wherein the compound or pharmaceutical composition is administered to the subject to sensitise cells involved with the proliferative disorder to killing induced by TNF.
68. The compound or pharmaceutical composition for use of any one of claims 57 and 60 to 67, the treatment comprising exposing cells involved with the proliferative disorder in the subject to: (i) TNF, a TNF variant, and/or an agonist of TNFR12 or TNFR1 signalling; and (ii) the compound or pharmaceutical composition.
69. The compound or pharmaceutical composition for use of claim 68, wherein the amount of TNF exposed to cells involved with the proliferative disorder in the subject is increased.
70. The compound or pharmaceutical composition for use of claim 68 or 69, wherein: (i) TNF, a TNF variant or an agonist of TNFR1 or TNFR2 signalling is administered to the subject; (ii) an agent that is capable of inducing or induces the exposure of the cells involved with the proliferative disorder to TNF, a TNF variant or an agonist of TNFR1 or TNFR2 signalling, is administered to the subject; or (iii) the exposure of the cells involved with the proliferative disorder to TNF is induced by a pharmaceutical, therapeutic or other procedure that increases the amount of TNF in the plasma of the subject and/or in the environment of such cells.
71. The compound or pharmaceutical composition for use of any one of claims 68 to 70, wherein the exposure of the cells involved with the proliferative disorder to TNF is induced by a pharmaceutical, therapeutic or other procedure that increases the amount of TNF in the plasma of the subject and/or in the environment of such cells.
72. A use of an intermediate to prepare a compound of any one of claims 1 to 49, wherein the intermediate comprises a substructure of R⁶ or R^{1a}, or comprises the following substructure:



wherein, R^6 , R^{1a} , A and B are as defined in any one of claims 1 to 49.

73. The use of an intermediate of claim 72, wherein the intermediate is selected from the list consisting of:

- 4-chloro-2-methylpyridin-3-amine;
- 2,4-dimethylpyridin-3-amine;
- 5 — • 3-methylpyridin-2-amine;
- 4-bromo-2-methylpyridin-3-amine;
- 3-chloro-5-methylpyridin-4-amine;
- 3,5-dimethylpyridin-4-amine;
- 2-methylpyridin-3-amine;
- 10 — • 2-chloro-4-methylthiophen-3-amine;
- 1,3,5-trimethyl-1H-pyrazol-4-amine;
- 3,5-dimethylisoxazol-4-amine;
- quinuclidine-3-amine; and
- 2-ethyl-4-methylpyridin-3-amine.

15 74. An intermediate selected from the group consisting of a compound having a structure of formula (I) as defined in any one of claims 1 to 49, wherein R^{1a} is a leaving group, such as a halogen, preferably Cl.

75. A method of preparing a compound of claim 53, comprising the steps:

- providing a compound of any one of claims 1 to 49 in admixture with one or more impurities; and
- removing at least a fraction of the impurities from the admixture.

20 76. A method of manufacturing a pharmaceutical composition comprising the step of formulating a compound of any one of claims 1 to 49 and 53 together with a pharmaceutically acceptable excipient.

77. A method of preparing a pharmaceutical package, comprising the steps:

- inserting into packaging a pharmaceutical composition of any one of claims 54 to 56 (preferably in finished pharmaceutical form), thereby forming a package containing the pharmaceutical composition; and optionally,
- 25 — • inserting into the package a leaflet describing prescribing information for the pharmaceutical composition.

78. A pharmaceutical package containing a pharmaceutical composition of any one of claims 54 to 56; preferably, wherein the pharmaceutical composition is in finished pharmaceutical form.

79. A method of delivering a pharmaceutical composition of any one of claims 54 to 56, or a pharmaceutical package of claim 78, from a first location to a second location, comprising the steps:

- 30 — • receiving at a first location a request from a second location for the delivery of an amount of the pharmaceutical composition or the pharmaceutical package; and
- delivering at least a portion of (preferably, all of) the requested amount of the pharmaceutical composition or the pharmaceutical package from the first location to the second location in one or more deliveries,

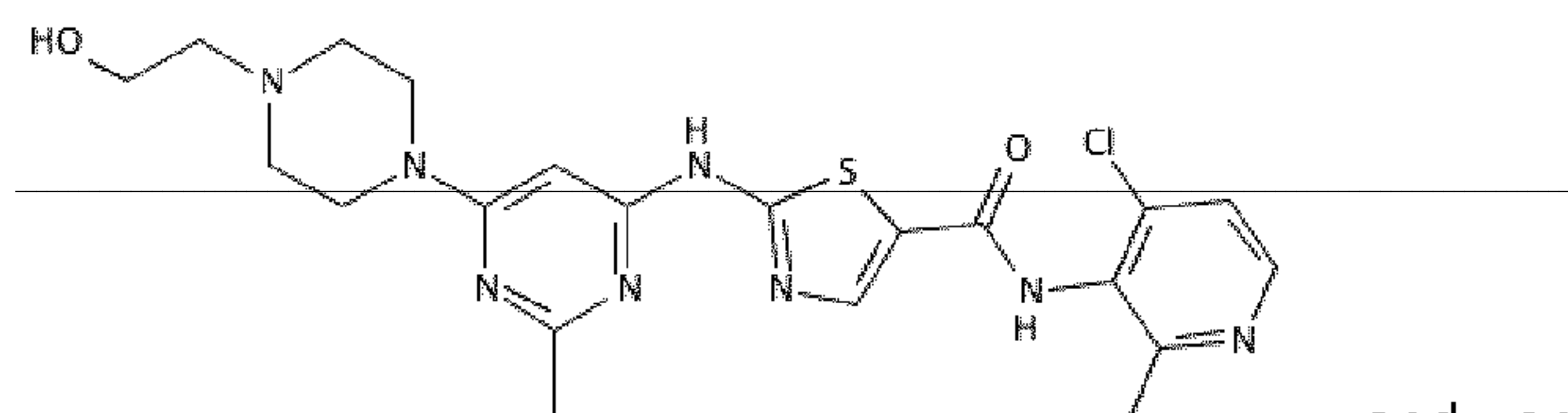
wherein first location and the second location are separated by a distance of greater than about 10m, and one or more
35 of the deliveries is/are transported for at least part of the distance between the first location to the second location by wheeled transporters.

80. A method of delivering a pharmaceutical composition or a pharmaceutical package, from a first location to a second location, comprising the steps:

- receiving at a first location a request from a second location for the delivery of an amount of the pharmaceutical composition or the pharmaceutical package; and
- delivering at least a portion of (preferably, all of) the requested amount of the pharmaceutical composition or the pharmaceutical package from the first location to the second location in one or more deliveries,

5 wherein first location and the second location are separated by a distance of greater than about 10m, and one or more of the deliveries is/are transported for at least part of the distance between the first location to the second location by wheeled transporters; and

(A) said pharmaceutical composition comprises the compound,



10 , and optionally further comprising a pharmaceutically acceptable excipient; and/or

(B) said pharmaceutical package contains said pharmaceutical composition of (B); preferably wherein the pharmaceutical composition is in finished pharmaceutical form. An invention not claimed in any divisional application.