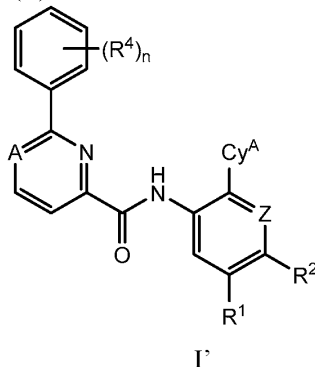


What is claimed is:

1. A compound of Formula (I¹):



or a pharmaceutically acceptable salt thereof, wherein:

Cy^A is C₃₋₁₂ cycloalkyl or 4-12 membered heterocycloalkyl; wherein the 4-12 membered heterocycloalkyl has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein the N and S are optionally oxidized; wherein a ring-forming carbon atom of the 4-12 membered heterocycloalkyl is optionally substituted by oxo to form a carbonyl group; and wherein the C₃₋₁₂ cycloalkyl and 4-12 membered heterocycloalkyl are each optionally substituted with 1, 2, 3 or 4 substituents independently selected from R^A;

A is N or CR¹⁶;

R¹⁶ is selected from H, D, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, halo, CN, NO₂, OR^{a16}, SR^{a16}, C(O)R^{b16}, C(O)NR^{c16}R^{d16}, C(O)OR^{a16}, OC(O)R^{b16}, OC(O)NR^{c16}R^{d16}, NR^{c16}R^{d16}, NR^{c16}C(O)R^{b16}, NR^{c16}C(O)OR^{a16}, NR^{c16}C(O)NR^{c16}R^{d16}, NR^{c16}S(O)R^{b16}, NR^{c16}S(O)₂R^{b16}, NR^{c16}S(O)₂NR^{c16}R^{d16}, S(O)R^{b16}, S(O)NR^{c16}R^{d16}, S(O)₂R^{b16}, S(O)₂NR^{c16}R^{d16} and BR^{h16}Rⁱ¹⁶; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^g;

R¹ is selected from H, D, halo, CN, C₁₋₆ alkyl, OR^{a15} and NR^{c15}R^{d15}; wherein the C₁₋₆ alkyl is optionally substituted with 1, 2, or 3 substituents independently selected from R^g;

R² is selected from H, D, Cy², C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, halo, CN, NO₂, OR^a, SR^a, C(O)R^b, C(O)NR^cR^d, C(O)OR^a, OC(O)R^b, OC(O)NR^cR^d, NR^cR^d, NR^cC(O)R^b, NR^cC(O)OR^a, NR^cC(O)NR^cR^d, C(=NR^e)R^b, C(=NOR^a)R^b, C(=NR^e)NR^cR^d, NR^cC(=NR^e)NR^cR^d, NR^cS(O)R^b, NR^cS(O)₂R^b, NR^cS(O)₂NR^cR^d, S(O)R^b, S(O)NR^cR^d,

$S(O)_2R^b$, $S(O)_2NR^cR^d$ and BR^hR^i ; wherein said C_{1-6} alkyl, C_{2-6} alkenyl and C_{2-6} alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{10} ;

Cy^2 is selected from C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl and 5-10 membered heteroaryl; wherein the 4-10 membered heterocycloalkyl and 5-10 membered heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein the N and S are optionally oxidized; wherein a ring-forming carbon atom of 5-10 membered heteroaryl and 4-10 membered heterocycloalkyl is optionally substituted by oxo to form a carbonyl group; and wherein the C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3 or 4 substituents independently selected from R^{10} ;

Z is N or CR^3 ;

R^3 is selected from H, D, Cy^3 , C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, halo, CN, NO_2 , OR^{a4} , SR^{a4} , $C(O)R^{b4}$, $C(O)NR^{c4}R^{d4}$, $C(O)OR^{a4}$, $OC(O)R^{b4}$, $OC(O)NR^{c4}R^{d4}$, $NR^{c4}R^{d4}$, $NR^{c4}C(O)R^{b4}$, $NR^{c4}C(O)OR^{a4}$, $NR^{c4}C(O)NR^{c4}R^{d4}$, $C(=NR^{e4})R^{b4}$, $C(=NOR^{a4})R^{b4}$, $C(=NR^{e4})NR^{c4}R^{d4}$, $NR^{c4}C(=NR^{e4})NR^{c4}R^{d4}$, $NR^{c4}S(O)R^{b4}$, $NR^{c4}S(O)_2R^{b4}$, $NR^{c4}S(O)_2NR^{c4}R^{d4}$, $S(O)R^{b4}$, $S(O)NR^{c4}R^{d4}$, $S(O)_2R^{b4}$, $S(O)_2NR^{c4}R^{d4}$ and $BR^{h4}R^{i4}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl and C_{2-6} alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{13} ;

Cy^3 is selected from C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl and 5-10 membered heteroaryl; wherein the 4-10 membered heterocycloalkyl and 5-10 membered heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein the N and S are optionally oxidized; wherein a ring-forming carbon atom of 5-10 membered heteroaryl and 4-10 membered heterocycloalkyl is optionally substituted by oxo to form a carbonyl group; and wherein the C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3 or 4 substituents independently selected from R^{13} ;

each R^4 is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene, 5-10 membered heteroaryl- C_{1-3} alkylene, halo, D, CN, NO_2 , OR^{a8} , SR^{a8} , $C(O)R^{b8}$, $C(O)NR^{c8}R^{d8}$, $C(O)OR^{a8}$, $OC(O)R^{b8}$, $OC(O)NR^{c8}R^{d8}$, $NR^{c8}R^{d8}$, $NR^{c8}C(O)R^{b8}$, $NR^{c8}C(O)OR^{a8}$, $NR^{c8}C(O)NR^{c8}R^{d8}$, $C(=NR^{e8})R^{b8}$, $C(=NOR^{a8})R^{b8}$, $C(=NR^{e8})NR^{c8}R^{d8}$,

$\text{NR}^{\text{c}8}\text{C}(=\text{NR}^{\text{c}8})\text{NR}^{\text{c}8}\text{R}^{\text{d}8}$, $\text{NR}^{\text{c}8}\text{S}(\text{O})\text{R}^{\text{b}8}$, $\text{NR}^{\text{c}8}\text{S}(\text{O})_2\text{R}^{\text{b}8}$, $\text{NR}^{\text{c}8}\text{S}(\text{O})_2\text{NR}^{\text{c}8}\text{R}^{\text{d}8}$, $\text{S}(\text{O})\text{R}^{\text{b}8}$, $\text{S}(\text{O})\text{NR}^{\text{c}8}\text{R}^{\text{d}8}$, $\text{S}(\text{O})_2\text{R}^{\text{b}8}$, $\text{S}(\text{O})_2\text{NR}^{\text{c}8}\text{R}^{\text{d}8}$ and $\text{BR}^{\text{h}8}\text{R}^{\text{i}8}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene and 5-10 membered heteroaryl- C_{1-3} alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^5 ;

each R^5 is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene, 5-10 membered heteroaryl- C_{1-3} alkylene, halo, D, CN, $\text{OR}^{\text{a}9}$, $\text{SR}^{\text{a}9}$, $\text{C}(\text{O})\text{R}^{\text{b}9}$, $\text{C}(\text{O})\text{NR}^{\text{c}9}\text{R}^{\text{d}9}$, $\text{C}(\text{O})\text{OR}^{\text{a}9}$, $\text{NR}^{\text{c}9}\text{R}^{\text{d}9}$, $\text{NR}^{\text{c}9}\text{C}(\text{O})\text{R}^{\text{b}9}$, $\text{NR}^{\text{c}9}\text{C}(\text{O})\text{OR}^{\text{a}9}$, $\text{NR}^{\text{c}9}\text{S}(\text{O})\text{R}^{\text{b}9}$, $\text{NR}^{\text{c}9}\text{S}(\text{O})_2\text{R}^{\text{b}9}$, $\text{NR}^{\text{c}9}\text{S}(\text{O})_2\text{NR}^{\text{c}9}\text{R}^{\text{d}9}$, $\text{S}(\text{O})\text{R}^{\text{b}9}$, $\text{S}(\text{O})\text{NR}^{\text{c}9}\text{R}^{\text{d}9}$, $\text{S}(\text{O})_2\text{R}^{\text{b}9}$, $\text{S}(\text{O})_2\text{NR}^{\text{c}9}\text{R}^{\text{d}9}$ and $\text{BR}^{\text{h}9}\text{R}^{\text{i}9}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene and 5-10 membered heteroaryl- C_{1-3} alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^6 ;

each R^6 is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-6} cycloalkyl, phenyl, 5-6 membered heteroaryl, 4-7 membered heterocycloalkyl, halo, D, CN, $\text{OR}^{\text{a}10}$, $\text{SR}^{\text{a}10}$, $\text{C}(\text{O})\text{R}^{\text{b}10}$, $\text{C}(\text{O})\text{NR}^{\text{c}10}\text{R}^{\text{d}10}$, $\text{C}(\text{O})\text{OR}^{\text{a}10}$, $\text{NR}^{\text{c}10}\text{R}^{\text{d}10}$, $\text{NR}^{\text{c}10}\text{C}(\text{O})\text{R}^{\text{b}10}$, $\text{NR}^{\text{c}10}\text{C}(\text{O})\text{OR}^{\text{a}10}$, $\text{NR}^{\text{c}10}\text{S}(\text{O})\text{R}^{\text{b}10}$, $\text{NR}^{\text{c}10}\text{S}(\text{O})_2\text{R}^{\text{b}10}$, $\text{NR}^{\text{c}10}\text{S}(\text{O})_2\text{NR}^{\text{c}10}\text{R}^{\text{d}10}$, $\text{S}(\text{O})\text{R}^{\text{b}10}$, $\text{S}(\text{O})\text{NR}^{\text{c}10}\text{R}^{\text{d}10}$, $\text{S}(\text{O})_2\text{R}^{\text{b}10}$, and $\text{S}(\text{O})_2\text{NR}^{\text{c}10}\text{R}^{\text{d}10}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, phenyl, 5-6 membered heteroaryl and 4-7 membered heterocycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^g ;

each R^A is selected from H, D, Cy^1 , C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, halo, CN, NO_2 , $\text{OR}^{\text{a}11}$, $\text{SR}^{\text{a}11}$, $\text{C}(\text{O})\text{R}^{\text{b}11}$, $\text{C}(\text{O})\text{NR}^{\text{c}11}\text{R}^{\text{d}11}$, $\text{C}(\text{O})\text{OR}^{\text{a}11}$, $\text{OC}(\text{O})\text{R}^{\text{b}11}$, $\text{OC}(\text{O})\text{NR}^{\text{c}11}\text{R}^{\text{d}11}$, $\text{NR}^{\text{c}11}\text{R}^{\text{d}11}$, $\text{NR}^{\text{c}11}\text{C}(\text{O})\text{R}^{\text{b}11}$, $\text{NR}^{\text{c}11}\text{C}(\text{O})\text{OR}^{\text{a}11}$, $\text{NR}^{\text{c}11}\text{C}(\text{O})\text{NR}^{\text{c}11}\text{R}^{\text{d}11}$, $\text{C}(=\text{NR}^{\text{e}11})\text{R}^{\text{b}11}$, $\text{C}(=\text{NOR}^{\text{a}11})\text{R}^{\text{b}11}$, $\text{C}(=\text{NR}^{\text{e}11})\text{NR}^{\text{c}11}\text{R}^{\text{d}11}$, $\text{NR}^{\text{c}11}\text{C}(=\text{NR}^{\text{e}11})\text{NR}^{\text{c}11}\text{R}^{\text{d}11}$, $\text{NR}^{\text{c}11}\text{S}(\text{O})\text{R}^{\text{b}11}$, $\text{NR}^{\text{c}11}\text{S}(\text{O})_2\text{R}^{\text{b}11}$, $\text{NR}^{\text{c}11}\text{S}(\text{O})_2\text{NR}^{\text{c}11}\text{R}^{\text{d}11}$, $\text{S}(\text{O})\text{R}^{\text{b}11}$, $\text{S}(\text{O})\text{NR}^{\text{c}11}\text{R}^{\text{d}11}$, $\text{S}(\text{O})_2\text{R}^{\text{b}11}$, $\text{S}(\text{O})_2\text{NR}^{\text{c}11}\text{R}^{\text{d}11}$ and $\text{BR}^{\text{h}11}\text{R}^{\text{i}11}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl and C_{2-6} alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^7 ;

Cy^1 is selected from C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl and 5-10 membered heteroaryl; wherein the 4-10 membered heterocycloalkyl and 5-10 membered

heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein the N and S are optionally oxidized; wherein a ring-forming carbon atom of 5-10 membered heteroaryl and 4-10 membered heterocycloalkyl is optionally substituted by oxo to form a carbonyl group; and wherein the C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3 or 4 substituents independently selected from R⁷;

each R⁷ is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl, C₃₋₁₀ cycloalkyl-C₁₋₃ alkylene, 4-10 membered heterocycloalkyl-C₁₋₃ alkylene, C₆₋₁₀ aryl-C₁₋₃ alkylene, 5-10 membered heteroaryl-C₁₋₃ alkylene, halo, D, CN, NO₂, OR^{a12}, SR^{a12}, C(O)R^{b12}, C(O)NR^{c12}R^{d12}, C(O)OR^{a12}, OC(O)R^{b12}, OC(O)NR^{c12}R^{d12}, NR^{c12}R^{d12}, NR^{c12}C(O)R^{b12}, NR^{c12}C(O)OR^{a12}, NR^{c12}C(O)NR^{c12}R^{d12}, C(=NR^{e12})R^{b12}, C(=NOR^{a12})R^{b12}, C(=NR^{e12})NR^{c12}R^{d12}, NR^{c12}C(=NR^{e12})NR^{c12}R^{d12}, NR^{c12}S(O)R^{b12}, NR^{c12}S(O)₂R^{b12}, NR^{c12}S(O)₂NR^{c12}R^{d12}, S(O)R^{b12}, S(O)NR^{c12}R^{d12}, S(O)₂R^{b12}, S(O)₂NR^{c12}R^{d12} and BR^{h12}Rⁱ¹²; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl, C₃₋₁₀ cycloalkyl-C₁₋₃ alkylene, 4-10 membered heterocycloalkyl-C₁₋₃ alkylene, C₆₋₁₀ aryl-C₁₋₃ alkylene and 5-10 membered heteroaryl-C₁₋₃ alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R⁸ is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl, C₃₋₁₀ cycloalkyl-C₁₋₃ alkylene, 4-10 membered heterocycloalkyl-C₁₋₃ alkylene, C₆₋₁₀ aryl-C₁₋₃ alkylene, 5-10 membered heteroaryl-C₁₋₃ alkylene, halo, D, CN, OR^{a13}, SR^{a13}, C(O)R^{b13}, C(O)NR^{c13}R^{d13}, C(O)OR^{a13}, NR^{c13}R^{d13}, NR^{c13}C(O)R^{b13}, NR^{c13}C(O)OR^{a13}, NR^{c13}S(O)R^{b13}, NR^{c13}S(O)₂R^{b13}, NR^{c13}S(O)₂NR^{c13}R^{d13}, S(O)R^{b13}, S(O)NR^{c13}R^{d13}, S(O)₂R^{b13}, S(O)₂NR^{c13}R^{d13} and BR^{h13}Rⁱ¹³; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl, C₃₋₁₀ cycloalkyl-C₁₋₃ alkylene, 4-10 membered heterocycloalkyl-C₁₋₃ alkylene, C₆₋₁₀ aryl-C₁₋₃ alkylene and 5-10 membered heteroaryl-C₁₋₃ alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁹;

each R⁹ is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₆ cycloalkyl, phenyl, 5-6 membered heteroaryl, 4-7 membered heterocycloalkyl, halo, D, CN, OR^{a14}, SR^{a14}, C(O)R^{b14}, C(O)NR^{c14}R^{d14}, C(O)OR^{a14}, NR^{c14}R^{d14}, NR^{c14}C(O)R^{b14},

$\text{NR}^{\text{c}14}\text{C}(\text{O})\text{OR}^{\text{a}14}$, $\text{NR}^{\text{c}14}\text{S}(\text{O})\text{R}^{\text{b}14}$, $\text{NR}^{\text{c}14}\text{S}(\text{O})_2\text{R}^{\text{b}14}$, $\text{NR}^{\text{c}14}\text{S}(\text{O})_2\text{NR}^{\text{c}14}\text{R}^{\text{d}14}$, $\text{S}(\text{O})\text{R}^{\text{b}14}$, $\text{S}(\text{O})\text{NR}^{\text{c}14}\text{R}^{\text{d}14}$, $\text{S}(\text{O})_2\text{R}^{\text{b}14}$ and $\text{S}(\text{O})_2\text{NR}^{\text{c}14}\text{R}^{\text{d}14}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl and 4-7 membered heterocycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{g} ;

each R^{10} is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene, 5-10 membered heteroaryl- C_{1-3} alkylene, halo, D, CN, NO_2 , $\text{OR}^{\text{a}1}$, $\text{SR}^{\text{a}1}$, $\text{C}(\text{O})\text{R}^{\text{b}1}$, $\text{C}(\text{O})\text{NR}^{\text{c}1}\text{R}^{\text{d}1}$, $\text{C}(\text{O})\text{OR}^{\text{a}1}$, $\text{OC}(\text{O})\text{R}^{\text{b}1}$, $\text{OC}(\text{O})\text{NR}^{\text{c}1}\text{R}^{\text{d}1}$, $\text{NR}^{\text{c}1}\text{R}^{\text{d}1}$, $\text{NR}^{\text{c}1}\text{C}(\text{O})\text{R}^{\text{b}1}$, $\text{NR}^{\text{c}1}\text{C}(\text{O})\text{OR}^{\text{a}1}$, $\text{NR}^{\text{c}1}\text{C}(\text{O})\text{NR}^{\text{c}1}\text{R}^{\text{d}1}$, $\text{C}(=\text{NR}^{\text{e}1})\text{R}^{\text{b}1}$, $\text{C}(=\text{NOR}^{\text{a}1})\text{R}^{\text{b}1}$, $\text{C}(=\text{NR}^{\text{e}1})\text{NR}^{\text{c}1}\text{R}^{\text{d}1}$, $\text{NR}^{\text{c}1}\text{C}(=\text{NR}^{\text{e}1})\text{NR}^{\text{c}1}\text{R}^{\text{d}1}$, $\text{NR}^{\text{c}1}\text{S}(\text{O})\text{R}^{\text{b}1}$, $\text{NR}^{\text{c}1}\text{S}(\text{O})_2\text{R}^{\text{b}1}$, $\text{NR}^{\text{c}1}\text{S}(\text{O})_2\text{NR}^{\text{c}1}\text{R}^{\text{d}1}$, $\text{S}(\text{O})\text{R}^{\text{b}1}$, $\text{S}(\text{O})\text{NR}^{\text{c}1}\text{R}^{\text{d}1}$, $\text{S}(\text{O})_2\text{R}^{\text{b}1}$, $\text{S}(\text{O})_2\text{NR}^{\text{c}1}\text{R}^{\text{d}1}$ and $\text{BR}^{\text{h}1}\text{R}^{\text{i}1}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene and 5-10 membered heteroaryl- C_{1-3} alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{11} ;

each R^{11} is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene, 5-10 membered heteroaryl- C_{1-3} alkylene, halo, D, CN, $\text{OR}^{\text{a}2}$, $\text{SR}^{\text{a}2}$, $\text{C}(\text{O})\text{R}^{\text{b}2}$, $\text{C}(\text{O})\text{NR}^{\text{c}2}\text{R}^{\text{d}2}$, $\text{C}(\text{O})\text{OR}^{\text{a}2}$, $\text{NR}^{\text{c}2}\text{R}^{\text{d}2}$, $\text{NR}^{\text{c}2}\text{C}(\text{O})\text{R}^{\text{b}2}$, $\text{NR}^{\text{c}2}\text{C}(\text{O})\text{OR}^{\text{a}2}$, $\text{NR}^{\text{c}2}\text{S}(\text{O})\text{R}^{\text{b}2}$, $\text{NR}^{\text{c}2}\text{S}(\text{O})_2\text{R}^{\text{b}2}$, $\text{NR}^{\text{c}2}\text{S}(\text{O})_2\text{NR}^{\text{c}2}\text{R}^{\text{d}2}$, $\text{S}(\text{O})\text{R}^{\text{b}2}$, $\text{S}(\text{O})\text{NR}^{\text{c}2}\text{R}^{\text{d}2}$, $\text{S}(\text{O})_2\text{R}^{\text{b}2}$, $\text{S}(\text{O})_2\text{NR}^{\text{c}2}\text{R}^{\text{d}2}$ and $\text{BR}^{\text{h}2}\text{R}^{\text{i}2}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene and 5-10 membered heteroaryl- C_{1-3} alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{12} ;

each R^{12} is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-6} cycloalkyl, phenyl, 5-6 membered heteroaryl, 4-7 membered heterocycloalkyl, halo, D, CN, $\text{OR}^{\text{a}3}$, $\text{SR}^{\text{a}3}$, $\text{C}(\text{O})\text{R}^{\text{b}3}$, $\text{C}(\text{O})\text{NR}^{\text{c}3}\text{R}^{\text{d}3}$, $\text{C}(\text{O})\text{OR}^{\text{a}3}$, $\text{NR}^{\text{c}3}\text{R}^{\text{d}3}$, $\text{NR}^{\text{c}3}\text{C}(\text{O})\text{R}^{\text{b}3}$, $\text{NR}^{\text{c}3}\text{C}(\text{O})\text{OR}^{\text{a}3}$, $\text{NR}^{\text{c}3}\text{S}(\text{O})\text{R}^{\text{b}3}$, $\text{NR}^{\text{c}3}\text{S}(\text{O})_2\text{R}^{\text{b}3}$, $\text{NR}^{\text{c}3}\text{S}(\text{O})_2\text{NR}^{\text{c}3}\text{R}^{\text{d}3}$, $\text{S}(\text{O})\text{R}^{\text{b}3}$, $\text{S}(\text{O})\text{NR}^{\text{c}3}\text{R}^{\text{d}3}$, $\text{S}(\text{O})_2\text{R}^{\text{b}3}$ and $\text{S}(\text{O})_2\text{NR}^{\text{c}3}\text{R}^{\text{d}3}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6}

cycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl and 4-7 membered heterocycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^g;

each R¹³ is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl, C₃₋₁₀ cycloalkyl-C₁₋₃ alkylene, 4-10 membered heterocycloalkyl-C₁₋₃ alkylene, C₆₋₁₀ aryl-C₁₋₃ alkylene, 5-10 membered heteroaryl-C₁₋₃ alkylene, halo, D, CN, NO₂, OR^{a5}, SR^{a5}, C(O)R^{b5}, C(O)NR^{c5}R^{d5}, C(O)OR^{a5}, OC(O)R^{b5}, OC(O)NR^{c5}R^{d5}, NR^{c5}R^{d5}, NR^{c5}C(O)R^{b5}, NR^{c5}C(O)OR^{a5}, NR^{c5}C(O)NR^{c5}R^{d5}, C(=NR^{c5})R^{b5}, C(=NOR^{a5})R^{b5}, C(=NR^{c5})NR^{c5}R^{d5}, NR^{c5}C(=NR^{c5})NR^{c5}R^{d5}, NR^{c5}S(O)R^{b5}, NR^{c5}S(O)₂R^{b5}, NR^{c5}S(O)₂NR^{c5}R^{d5}, S(O)R^{b5}, S(O)NR^{c5}R^{d5}, S(O)₂R^{b5}, S(O)₂NR^{c5}R^{d5} and BR^{h5}Rⁱ⁵; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl, C₃₋₁₀ cycloalkyl-C₁₋₃ alkylene, 4-10 membered heterocycloalkyl-C₁₋₃ alkylene, C₆₋₁₀ aryl-C₁₋₃ alkylene and 5-10 membered heteroaryl-C₁₋₃ alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁴;

each R¹⁴ is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl, C₃₋₁₀ cycloalkyl-C₁₋₃ alkylene, 4-10 membered heterocycloalkyl-C₁₋₃ alkylene, C₆₋₁₀ aryl-C₁₋₃ alkylene, 5-10 membered heteroaryl-C₁₋₃ alkylene, halo, D, CN, OR^{a6}, SR^{a6}, C(O)R^{b6}, C(O)NR^{c6}R^{d6}, C(O)OR^{a6}, NR^{c6}R^{d6}, NR^{c6}C(O)R^{b6}, NR^{c6}C(O)OR^{a6}, NR^{c6}S(O)R^{b6}, NR^{c6}S(O)₂R^{b6}, NR^{c6}S(O)₂NR^{c6}R^{d6}, S(O)R^{b6}, S(O)NR^{c6}R^{d6}, S(O)₂R^{b6}, S(O)₂NR^{c6}R^{d6} and BR^{h6}Rⁱ⁶; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl, C₃₋₁₀ cycloalkyl-C₁₋₃ alkylene, 4-10 membered heterocycloalkyl-C₁₋₃ alkylene, C₆₋₁₀ aryl-C₁₋₃ alkylene and 5-10 membered heteroaryl-C₁₋₃ alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁵;

each R¹⁵ is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₆ cycloalkyl, phenyl, 5-6 membered heteroaryl, 4-7 membered heterocycloalkyl, halo, D, CN, OR^{a7}, SR^{a7}, C(O)R^{b7}, C(O)NR^{c7}R^{d7}, C(O)OR^{a7}, NR^{c7}R^{d7}, NR^{c7}C(O)R^{b7}, NR^{c7}C(O)OR^{a7}, NR^{c7}S(O)R^{b7}, NR^{c7}S(O)₂R^{b7}, NR^{c7}S(O)₂NR^{c7}R^{d7}, S(O)R^{b7}, S(O)NR^{c7}R^{d7}, S(O)₂R^{b7} and S(O)₂NR^{c7}R^{d7}; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₆ cycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl and 4-7 membered heterocycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^g;

each R^a, R^c and R^d is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10

membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁰;

or any R^c and R^d attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹⁰;

each R^b is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁰;

each R^e is independently selected from H, CN, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylaminosulfonyl, carbamyl, C₁₋₆ alkylcarbamyl, di(C₁₋₆ alkyl)carbamyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl and di(C₁₋₆ alkyl)aminosulfonyl;

each R^h and Rⁱ is independently selected from OH and C₁₋₆ alkoxy;

or any R^h and Rⁱ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a1}, R^{c1} and R^{d1} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹¹;

or any R^{c1} and R^{d1} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹¹;

each R^{b1} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹¹;

each R^{e1} is independently selected from H, CN, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylaminosulfonyl, carbamyl, C₁₋₆

alkylcarbamyl, di(C₁₋₆ alkyl)carbamyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl and di(C₁₋₆ alkyl)aminosulfonyl;

each R^{h1} and Rⁱ¹ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h1} and Rⁱ¹ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a2}, R^{c2} and R^{d2} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹²;

or any R^{c2} and R^{d2} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹²;

each R^{b2} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹²;

each R^{h2} and Rⁱ² is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h2} and Rⁱ² attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a3}, R^{c3} and R^{d3} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{b3} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{a4}, R^{c4} and R^{d4} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹³;

or any R^{c4} and R^{d4} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹³;

each R^{b4} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹³;

each R^{e4} is independently selected from H, CN, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylaminosulfonyl, carbamyl, C₁₋₆ alkylcarbamyl, di(C₁₋₆ alkyl)carbamyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl and di(C₁₋₆ alkyl)aminosulfonyl;

each R^{h4} and Rⁱ⁴ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h4} and Rⁱ⁴ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a5}, R^{c5} and R^{d5} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁴;

or any R^{c5} and R^{d5} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹⁴;

each R^{b5} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁴;

each R^{e5} is independently selected from H, CN, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylaminosulfonyl, carbamyl, C₁₋₆ alkylcarbamyl, di(C₁₋₆ alkyl)carbamyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl and di(C₁₋₆ alkyl)aminosulfonyl;

each R^{h5} and Rⁱ⁵ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h5} and Rⁱ⁵ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a6}, R^{c6} and R^{d6} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁵;

or any R^{c6} and R^{d6} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹⁵;

each R^{b6} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁵;

each R^{h6} and Rⁱ⁶ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h6} and Rⁱ⁶ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a7}, R^{c7} and R^{d7} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{b7} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{a8}, R^{c8} and R^{d8} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁵;

or any R^{c8} and R^{d8} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R⁵;

each R^{b8} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁵;

each R^{e8} is independently selected from H, CN, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylaminosulfonyl, carbamyl, C₁₋₆ alkylcarbamyl, di(C₁₋₆ alkyl)carbamyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl and di(C₁₋₆ alkyl)aminosulfonyl;

each R^{h8} and Rⁱ⁸ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h8} and Rⁱ⁸ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a9}, R^{c9} and R^{d9} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁶;

or any R^{c9} and R^{d9} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R⁶;

each R^{b9} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁶;

each R^{h9} and Rⁱ⁹ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h9} and Rⁱ⁹ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a10}, R^{c10} and R^{d10} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{b10} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^g;

each R^{a11}, R^{c11} and R^{d11} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁷;

or any R^{c11} and R^{d11} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R⁷;

each R^{b11} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁷;

each R^{e11} is independently selected from H, CN, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylaminosulfonyl, carbamyl, C₁₋₆ alkylcarbamyl, di(C₁₋₆ alkyl)carbamyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl and di(C₁₋₆ alkyl)aminosulfonyl;

each R^{h11} and Rⁱ¹¹ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h11} and Rⁱ¹¹ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a12}, R^{c12} and R^{d12} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

or any R^{c12} and R^{d12} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R⁸;

each R^{b12} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered

heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{e12} is independently selected from H, CN, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylaminosulfonyl, carbamyl, C₁₋₆ alkylcarbamyl, di(C₁₋₆ alkyl)carbamyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl and di(C₁₋₆ alkyl)aminosulfonyl;

each R^{h12} and Rⁱ¹² is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h12} and Rⁱ¹² attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a13}, R^{c13} and R^{d13} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁹;

or any R^{c13} and R^{d13} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R⁹;

each R^{b13} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁹;

each R^{h13} and Rⁱ¹³ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h13} and Rⁱ¹³ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a14}, R^{c14} and R^{d14} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{b14} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{a15} , R^{c15} and R^{d15} is independently selected from H, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl and C_{1-6} haloalkyl; wherein said C_{1-6} alkyl, C_{2-6} alkenyl and C_{2-6} alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^g ;

each R^{a16} , R^{c16} and R^{d16} is independently selected from H, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl and C_{1-6} haloalkyl; wherein said C_{1-6} alkyl, C_{2-6} alkenyl and C_{2-6} alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^g ;

each R^{b16} is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl and C_{1-6} haloalkyl; wherein said C_{1-6} alkyl, C_{2-6} alkenyl and C_{2-6} alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^g ;

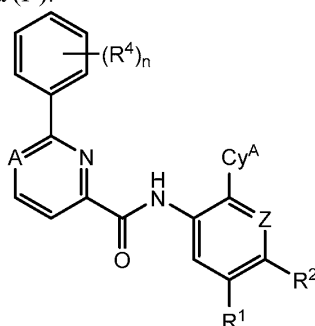
each R^{h16} and R^{i16} is independently selected from OH and C_{1-6} alkoxy;

or any R^{h16} and R^{i16} attached to the same B atom are C_{2-3} dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C_{1-6} alkyl; and

each R^g is independently selected from OH, NO_2 , CN, halo, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-6} cycloalkyl, C_{3-6} cycloalkyl- C_{1-2} alkylene, C_{1-6} alkoxy, C_{1-6} haloalkoxy, C_{1-3} alkoxy- C_{1-3} alkyl, C_{1-3} alkoxy- C_{1-3} alkoxy, HO- C_{1-3} alkoxy, HO- C_{1-3} alkyl, cyano- C_{1-3} alkyl, H_2N - C_{1-3} alkyl, amino, C_{1-6} alkylamino, di(C_{1-6} alkyl)amino, thio, C_{1-6} alkylthio, C_{1-6} alkylsulfinyl, C_{1-6} alkylsulfonyl, carbamyl, C_{1-6} alkylcarbamyl, di(C_{1-6} alkyl)carbamyl, carboxy, C_{1-6} alkylcarbonyl, C_{1-6} alkoxy carbonyl, C_{1-6} alkylcarbonylamino, C_{1-6} alkylsulfonylamino, aminosulfonyl, C_{1-6} alkylaminosulfonyl, di(C_{1-6} alkyl)aminosulfonyl, aminosulfonylamino, C_{1-6} alkylaminosulfonylamino, di(C_{1-6} alkyl)aminosulfonylamino, aminocarbonylamino, C_{1-6} alkylaminocarbonylamino, and di(C_{1-6} alkyl)aminocarbonylamino; and

n is 0, 1, 2, 3 or 4.

2. A compound of Formula (I⁺):



I'

or a pharmaceutically acceptable salt thereof, wherein:

Cy^A is 4-12 membered heterocycloalkyl; wherein the 4-12 membered heterocycloalkyl has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein a ring-forming carbon atom of the 4-12 membered heterocycloalkyl is optionally substituted by oxo to form a carbonyl group; and wherein the 4-12 membered heterocycloalkyl is optionally substituted with 1, 2, 3 or 4 substituents independently selected from R^A;

A is N or CR¹⁶;

R¹⁶ is selected from H, D, C₁₋₆ alkyl, halo, CN and OR^{a16};

R¹ is selected from H, D, halo, CN, C₁₋₆ alkyl and OR^{a15}; wherein the C₁₋₆ alkyl is optionally substituted with 1, 2, or 3 substituents independently selected from R^g;

R² is selected from H, D, Cy², C₁₋₆ alkyl, C₁₋₆ haloalkyl, halo, CN; wherein said C₁₋₆ alkyl, is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁰;

Cy² is selected from 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein the 4-10 membered heterocycloalkyl and 5-10 membered heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein a ring-forming carbon atom of 5-10 membered heteroaryl and 4-10 membered heterocycloalkyl is optionally substituted by oxo to form a carbonyl group; and wherein the 4-10 membered heterocycloalkyl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹⁰;

Z is N or CR³;

R³ is selected from H, D, Cy³, halo and CN;

Cy³ is 6-10 membered heteroaryl; wherein the 6-10 membered heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S;

each R⁴ is independently selected from C₁₋₆ alkyl, C₁₋₆ haloalkyl, halo, D, CN and OR^{a8};

R^A is selected from H, D, Cy¹, C₁₋₆ alkyl, C₁₋₆ haloalkyl, halo, CN, OR^{a11}, C(O)NR^{c11}R^{d11}, and NR^{c11}R^{d11}; wherein said C₁₋₆ alkyl, is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁷;

Cy¹ is selected from C₃₋₁₀ cycloalkyl and 5-10 membered heteroaryl; wherein the 5-10 membered heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-

forming heteroatoms independently selected from N, O, and S; wherein a ring-forming carbon atom of 5-10 membered heteroaryl is optionally substituted by oxo to form a carbonyl group; and wherein the C₃₋₁₀ cycloalkyl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3 or 4 substituents independently selected from R⁷;

each R⁷ is independently selected from C₁₋₆ alkyl, halo, D, CN, OR^{a12} and NR^{c12}R^{d12};

each R¹⁰ is independently selected from C₁₋₆ alkyl, C₁₋₆ haloalkyl, 4-10 membered heterocycloalkyl, halo, D, CN, OR^{a1}, C(O)NR^{c1}R^{d1} and NR^{c1}R^{d1}; wherein said C₁₋₆ alkyl, and 4-10 membered heterocycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹¹;

each R¹¹ is independently selected from C₁₋₆ alkyl, C₁₋₆ haloalkyl, halo, D, CN and OR^{a2};

each R^{a1}, R^{c1} and R^{d1} is independently selected from H, C₁₋₆ alkyl, C₁₋₆ haloalkyl and C₃₋₁₀ cycloalkyl; wherein said C₁₋₆ alkyl and C₃₋₁₀ cycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹¹;

each R^{a2}, R^{c2} and R^{d2} is independently selected from H, C₁₋₆ alkyl and C₁₋₆ haloalkyl;

each R^{a8}, R^{c8} and R^{d8} is independently selected from H, C₁₋₆ alkyl and C₁₋₆ haloalkyl;

each R^{a11}, R^{c11} and R^{d11} is independently selected from H, C₁₋₆ alkyl and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁷;

each R^{a12}, R^{c12} and R^{d12} is independently selected from H, C₁₋₆ alkyl and C₁₋₆ haloalkyl;

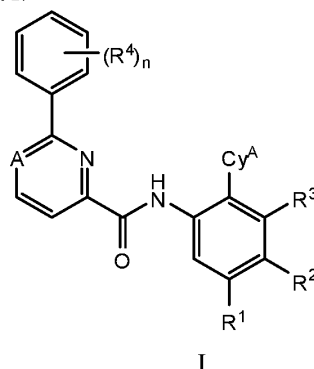
each R^{a15}, R^{c15} and R^{d15} is independently selected from H, C₁₋₆ alkyl and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^g;

R^{a16} is independently selected from H and C₁₋₆ alkyl;

each R^g is independently selected from OH, CN, halo, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkoxy, C₁₋₆ haloalkoxy, amino, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl; and

n is 0, 1, 2 or 3.

3. A compound of Formula I:



or a pharmaceutically acceptable salt thereof, wherein:

Cy^A is C₃₋₁₂ cycloalkyl or 4-12 membered heterocycloalkyl; wherein the 4-12 membered heterocycloalkyl has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein the N and S are optionally oxidized; wherein a ring-forming carbon atom of the 4-12 membered heterocycloalkyl is optionally substituted by oxo to form a carbonyl group; and wherein the C₃₋₁₂ cycloalkyl and 4-12 membered heterocycloalkyl are each optionally substituted with 1, 2, 3 or 4 substituents independently selected from R^A;

A is N or CF;

R¹ is selected from H, D, halo, CN, C₁₋₆ alkyl, OR^{a15} and NR^{c15}R^{d15}; wherein the C₁₋₆ alkyl is optionally substituted with 1, 2, or 3 substituents independently selected from R^g;

R² is selected from H, D, Cy², C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, halo, CN, NO₂, OR^a, SR^a, C(O)R^b, C(O)NR^cR^d, C(O)OR^a, OC(O)R^b, OC(O)NR^cR^d, NR^cR^d, NR^cC(O)R^b, NR^cC(O)OR^a, NR^cC(O)NR^cR^d, C(=NR^e)R^b, C(=NOR^a)R^b, C(=NR^e)NR^cR^d, NR^cC(=NR^e)NR^cR^d, NR^cS(O)R^b, NR^cS(O)₂R^b, NR^cS(O)₂NR^cR^d, S(O)R^b, S(O)NR^cR^d, S(O)₂R^b, S(O)₂NR^cR^d and BR^bRⁱ; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁰;

Cy² is selected from C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein the 4-10 membered heterocycloalkyl and 5-10 membered heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein the N and S are optionally oxidized; wherein a ring-forming carbon atom of 5-10 membered heteroaryl and 4-10 membered heterocycloalkyl is optionally substituted by oxo to form a carbonyl group; and wherein the C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered

heteroaryl are each optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹⁰;

R³ is selected from H, D, Cy³, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, halo, CN, NO₂, OR^{a4}, SR^{a4}, C(O)R^{b4}, C(O)NR^{c4}R^{d4}, C(O)OR^{a4}, OC(O)R^{b4}, OC(O)NR^{c4}R^{d4}, NR^{c4}R^{d4}, NR^{c4}C(O)R^{b4}, NR^{c4}C(O)OR^{a4}, NR^{c4}C(O)NR^{c4}R^{d4}, C(=NR^{c4})R^{b4}, C(=NOR^{a4})R^{b4}, C(=NR^{c4})NR^{c4}R^{d4}, NR^{c4}C(=NR^{c4})NR^{c4}R^{d4}, NR^{c4}S(O)R^{b4}, NR^{c4}S(O)₂R^{b4}, NR^{c4}S(O)₂NR^{c4}R^{d4}, S(O)R^{b4}, S(O)NR^{c4}R^{d4}, S(O)₂R^{b4}, S(O)₂NR^{c4}R^{d4} and BR^{h4}Rⁱ⁴; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹³;

Cy³ is selected from C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein the 4-10 membered heterocycloalkyl and 5-10 membered heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein the N and S are optionally oxidized; wherein a ring-forming carbon atom of 5-10 membered heteroaryl and 4-10 membered heterocycloalkyl is optionally substituted by oxo to form a carbonyl group; and wherein the C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹³;

each R⁴ is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl, C₃₋₁₀ cycloalkyl-C₁₋₃ alkylene, 4-10 membered heterocycloalkyl-C₁₋₃ alkylene, C₆₋₁₀ aryl-C₁₋₃ alkylene, 5-10 membered heteroaryl-C₁₋₃ alkylene, halo, D, CN, NO₂, OR^{a8}, SR^{a8}, C(O)R^{b8}, C(O)NR^{c8}R^{d8}, C(O)OR^{a8}, OC(O)R^{b8}, OC(O)NR^{c8}R^{d8}, NR^{c8}R^{d8}, NR^{c8}C(O)R^{b8}, NR^{c8}C(O)OR^{a8}, NR^{c8}C(O)NR^{c8}R^{d8}, C(=NR^{c8})R^{b8}, C(=NOR^{a8})R^{b8}, C(=NR^{c8})NR^{c8}R^{d8}, NR^{c8}C(=NR^{c8})NR^{c8}R^{d8}, NR^{c8}S(O)R^{b8}, NR^{c8}S(O)₂R^{b8}, NR^{c8}S(O)₂NR^{c8}R^{d8}, S(O)R^{b8}, S(O)NR^{c8}R^{d8}, S(O)₂R^{b8}, S(O)₂NR^{c8}R^{d8} and BR^{h8}Rⁱ⁸; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl, C₃₋₁₀ cycloalkyl-C₁₋₃ alkylene, 4-10 membered heterocycloalkyl-C₁₋₃ alkylene, C₆₋₁₀ aryl-C₁₋₃ alkylene and 5-10 membered heteroaryl-C₁₋₃ alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁵;

each R⁵ is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl, C₃₋₁₀ cycloalkyl-C₁₋₃ alkylene, 4-10 membered heterocycloalkyl-C₁₋₃ alkylene, C₆₋₁₀ aryl-C₁₋₃ alkylene, 5-10 membered heteroaryl-C₁₋₃ alkylene, halo, D, CN, OR^{a9}, SR^{a9},

$C(O)R^{b9}$, $C(O)NR^{c9}R^{d9}$, $C(O)OR^{a9}$, $NR^{c9}R^{d9}$, $NR^{c9}C(O)R^{b9}$, $NR^{c9}C(O)OR^{a9}$, $NR^{c9}S(O)R^{b9}$, $NR^{c9}S(O)_2R^{b9}$, $NR^{c9}S(O)_2NR^{c9}R^{d9}$, $S(O)R^{b9}$, $S(O)NR^{c9}R^{d9}$, $S(O)_2R^{b9}$, $S(O)_2NR^{c9}R^{d9}$ and $BR^{h9}R^{i9}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene and 5-10 membered heteroaryl- C_{1-3} alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^6 ;

each R^6 is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-6} cycloalkyl, phenyl, 5-6 membered heteroaryl, 4-7 membered heterocycloalkyl, halo, D, CN, OR^{a10} , SR^{a10} , $C(O)R^{b10}$, $C(O)NR^{c10}R^{d10}$, $C(O)OR^{a10}$, $NR^{c10}R^{d10}$, $NR^{c10}C(O)R^{b10}$, $NR^{c10}C(O)OR^{a10}$, $NR^{c10}S(O)R^{b10}$, $NR^{c10}S(O)_2R^{b10}$, $NR^{c10}S(O)_2NR^{c10}R^{d10}$, $S(O)R^{b10}$, $S(O)NR^{c10}R^{d10}$, $S(O)_2R^{b10}$, and $S(O)_2NR^{c10}R^{d10}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, phenyl, 5-6 membered heteroaryl and 4-7 membered heterocycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^8 ;

R^A is selected from H, D, Cy^1 , C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, halo, CN, NO_2 , OR^{a11} , SR^{a11} , $C(O)R^{b11}$, $C(O)NR^{c11}R^{d11}$, $C(O)OR^{a11}$, $OC(O)R^{b11}$, $OC(O)NR^{c11}R^{d11}$, $NR^{c11}R^{d11}$, $NR^{c11}C(O)R^{b11}$, $NR^{c11}C(O)OR^{a11}$, $NR^{c11}C(O)NR^{c11}R^{d11}$, $C(=NR^{e11})R^{b11}$, $C(=NOR^{a11})R^{b11}$, $C(=NR^{e11})NR^{c11}R^{d11}$, $NR^{c11}C(=NR^{e11})NR^{c11}R^{d11}$, $NR^{c11}S(O)R^{b11}$, $NR^{c11}S(O)_2R^{b11}$, $NR^{c11}S(O)_2NR^{c11}R^{d11}$, $S(O)R^{b11}$, $S(O)NR^{c11}R^{d11}$, $S(O)_2R^{b11}$, $S(O)_2NR^{c11}R^{d11}$ and $BR^{h11}R^{i11}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl and C_{2-6} alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^7 ;

Cy^1 is selected from C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl and 5-10 membered heteroaryl; wherein the 4-10 membered heterocycloalkyl and 5-10 membered heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein the N and S are optionally oxidized; wherein a ring-forming carbon atom of 5-10 membered heteroaryl and 4-10 membered heterocycloalkyl is optionally substituted by oxo to form a carbonyl group; and wherein the C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3 or 4 substituents independently selected from R^7 ;

each R^7 is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_6 -

$_{10}$ aryl- C_{1-3} alkylene, 5-10 membered heteroaryl- C_{1-3} alkylene, halo, D, CN, NO_2 , OR^{a12} , SR^{a12} , $C(O)R^{b12}$, $C(O)NR^{c12}R^{d12}$, $C(O)OR^{a12}$, $OC(O)R^{b12}$, $OC(O)NR^{c12}R^{d12}$, $NR^{c12}R^{d12}$, $NR^{c12}C(O)R^{b12}$, $NR^{c12}C(O)OR^{a12}$, $NR^{c12}C(O)NR^{c12}R^{d12}$, $C(=NR^{e12})R^{b12}$, $C(=NOR^{a12})R^{b12}$, $C(=NR^{e12})NR^{c12}R^{d12}$, $NR^{c12}C(=NR^{e12})NR^{c12}R^{d12}$, $NR^{c12}S(O)R^{b12}$, $NR^{c12}S(O)_2R^{b12}$, $NR^{c12}S(O)_2NR^{c12}R^{d12}$, $S(O)R^{b12}$, $S(O)NR^{c12}R^{d12}$, $S(O)_2R^{b12}$, $S(O)_2NR^{c12}R^{d12}$ and $BR^{h12}R^{i12}$, wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene and 5-10 membered heteroaryl- C_{1-3} alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^8 ;

each R^8 is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene, 5-10 membered heteroaryl- C_{1-3} alkylene, halo, D, CN, OR^{a13} , SR^{a13} , $C(O)R^{b13}$, $C(O)NR^{c13}R^{d13}$, $C(O)OR^{a13}$, $NR^{c13}R^{d13}$, $NR^{c13}C(O)R^{b13}$, $NR^{c13}C(O)OR^{a13}$, $NR^{c13}S(O)R^{b13}$, $NR^{c13}S(O)_2R^{b13}$, $NR^{c13}S(O)_2NR^{c13}R^{d13}$, $S(O)R^{b13}$, $S(O)NR^{c13}R^{d13}$, $S(O)_2R^{b13}$, $S(O)_2NR^{c13}R^{d13}$ and $BR^{h13}R^{i13}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene and 5-10 membered heteroaryl- C_{1-3} alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^9 ;

each R^9 is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-6} cycloalkyl, phenyl, 5-6 membered heteroaryl, 4-7 membered heterocycloalkyl, halo, D, CN, OR^{a14} , SR^{a14} , $C(O)R^{b14}$, $C(O)NR^{c14}R^{d14}$, $C(O)OR^{a14}$, $NR^{c14}R^{d14}$, $NR^{c14}C(O)R^{b14}$, $NR^{c14}C(O)OR^{a14}$, $NR^{c14}S(O)R^{b14}$, $NR^{c14}S(O)_2R^{b14}$, $NR^{c14}S(O)_2NR^{c14}R^{d14}$, $S(O)R^{b14}$, $S(O)NR^{c14}R^{d14}$, $S(O)_2R^{b14}$ and $S(O)_2NR^{c14}R^{d14}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl and 4-7 membered heterocycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^8 ;

each R^{10} is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene, 5-10 membered heteroaryl- C_{1-3} alkylene, halo, D, CN, NO_2 , OR^{a1} , SR^{a1} , $C(O)R^{b1}$, $C(O)NR^{c1}R^{d1}$, $C(O)OR^{a1}$, $OC(O)R^{b1}$, $OC(O)NR^{c1}R^{d1}$, $NR^{c1}R^{d1}$, $NR^{c1}C(O)R^{b1}$,

$\text{NR}^{\text{c1}}\text{C}(\text{O})\text{OR}^{\text{a1}}$, $\text{NR}^{\text{c1}}\text{C}(\text{O})\text{NR}^{\text{c1}}\text{R}^{\text{d1}}$, $\text{C}(=\text{NR}^{\text{c1}})\text{R}^{\text{b1}}$, $\text{C}(=\text{NOR}^{\text{a1}})\text{R}^{\text{b1}}$, $\text{C}(=\text{NR}^{\text{c1}})\text{NR}^{\text{c1}}\text{R}^{\text{d1}}$, $\text{NR}^{\text{c1}}\text{C}(=\text{NR}^{\text{c1}})\text{NR}^{\text{c1}}\text{R}^{\text{d1}}$, $\text{NR}^{\text{c1}}\text{S}(\text{O})\text{R}^{\text{b1}}$, $\text{NR}^{\text{c1}}\text{S}(\text{O})_2\text{R}^{\text{b1}}$, $\text{NR}^{\text{c1}}\text{S}(\text{O})_2\text{NR}^{\text{c1}}\text{R}^{\text{d1}}$, $\text{S}(\text{O})\text{R}^{\text{b1}}$, $\text{S}(\text{O})\text{NR}^{\text{c1}}\text{R}^{\text{d1}}$, $\text{S}(\text{O})_2\text{R}^{\text{b1}}$, $\text{S}(\text{O})_2\text{NR}^{\text{c1}}\text{R}^{\text{d1}}$ and $\text{BR}^{\text{h1}}\text{R}^{\text{i1}}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene and 5-10 membered heteroaryl- C_{1-3} alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{11} ;

each R^{11} is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene, 5-10 membered heteroaryl- C_{1-3} alkylene, halo, D, CN, OR^{a2} , SR^{a2} , $\text{C}(\text{O})\text{R}^{\text{b2}}$, $\text{C}(\text{O})\text{NR}^{\text{c2}}\text{R}^{\text{d2}}$, $\text{C}(\text{O})\text{OR}^{\text{a2}}$, $\text{NR}^{\text{c2}}\text{R}^{\text{d2}}$, $\text{NR}^{\text{c2}}\text{C}(\text{O})\text{R}^{\text{b2}}$, $\text{NR}^{\text{c2}}\text{C}(\text{O})\text{OR}^{\text{a2}}$, $\text{NR}^{\text{c2}}\text{S}(\text{O})\text{R}^{\text{b2}}$, $\text{NR}^{\text{c2}}\text{S}(\text{O})_2\text{R}^{\text{b2}}$, $\text{NR}^{\text{c2}}\text{S}(\text{O})_2\text{NR}^{\text{c2}}\text{R}^{\text{d2}}$, $\text{S}(\text{O})\text{R}^{\text{b2}}$, $\text{S}(\text{O})\text{NR}^{\text{c2}}\text{R}^{\text{d2}}$, $\text{S}(\text{O})_2\text{R}^{\text{b2}}$, $\text{S}(\text{O})_2\text{NR}^{\text{c2}}\text{R}^{\text{d2}}$ and $\text{BR}^{\text{h2}}\text{R}^{\text{i2}}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene and 5-10 membered heteroaryl- C_{1-3} alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{12} ;

each R^{12} is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-6} cycloalkyl, phenyl, 5-6 membered heteroaryl, 4-7 membered heterocycloalkyl, halo, D, CN, OR^{a3} , SR^{a3} , $\text{C}(\text{O})\text{R}^{\text{b3}}$, $\text{C}(\text{O})\text{NR}^{\text{c3}}\text{R}^{\text{d3}}$, $\text{C}(\text{O})\text{OR}^{\text{a3}}$, $\text{NR}^{\text{c3}}\text{R}^{\text{d3}}$, $\text{NR}^{\text{c3}}\text{C}(\text{O})\text{R}^{\text{b3}}$, $\text{NR}^{\text{c3}}\text{C}(\text{O})\text{OR}^{\text{a3}}$, $\text{NR}^{\text{c3}}\text{S}(\text{O})\text{R}^{\text{b3}}$, $\text{NR}^{\text{c3}}\text{S}(\text{O})_2\text{R}^{\text{b3}}$, $\text{NR}^{\text{c3}}\text{S}(\text{O})_2\text{NR}^{\text{c3}}\text{R}^{\text{d3}}$, $\text{S}(\text{O})\text{R}^{\text{b3}}$, $\text{S}(\text{O})\text{NR}^{\text{c3}}\text{R}^{\text{d3}}$, $\text{S}(\text{O})_2\text{R}^{\text{b3}}$ and $\text{S}(\text{O})_2\text{NR}^{\text{c3}}\text{R}^{\text{d3}}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl and 4-7 membered heterocycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{8} ;

each R^{13} is independently selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered heteroaryl, C_{3-10} cycloalkyl- C_{1-3} alkylene, 4-10 membered heterocycloalkyl- C_{1-3} alkylene, C_{6-10} aryl- C_{1-3} alkylene, 5-10 membered heteroaryl- C_{1-3} alkylene, halo, D, CN, NO_2 , OR^{a5} , SR^{a5} , $\text{C}(\text{O})\text{R}^{\text{b5}}$, $\text{C}(\text{O})\text{NR}^{\text{c5}}\text{R}^{\text{d5}}$, $\text{C}(\text{O})\text{OR}^{\text{a5}}$, $\text{OC}(\text{O})\text{R}^{\text{b5}}$, $\text{OC}(\text{O})\text{NR}^{\text{c5}}\text{R}^{\text{d5}}$, $\text{NR}^{\text{c5}}\text{R}^{\text{d5}}$, $\text{NR}^{\text{c5}}\text{C}(\text{O})\text{R}^{\text{b5}}$, $\text{NR}^{\text{c5}}\text{C}(\text{O})\text{OR}^{\text{a5}}$, $\text{NR}^{\text{c5}}\text{C}(\text{O})\text{NR}^{\text{c5}}\text{R}^{\text{d5}}$, $\text{C}(=\text{NR}^{\text{c5}})\text{R}^{\text{b5}}$, $\text{C}(=\text{NOR}^{\text{a5}})\text{R}^{\text{b5}}$, $\text{C}(=\text{NR}^{\text{c5}})\text{NR}^{\text{c5}}\text{R}^{\text{d5}}$, $\text{NR}^{\text{c5}}\text{C}(=\text{NR}^{\text{c5}})\text{NR}^{\text{c5}}\text{R}^{\text{d5}}$, $\text{NR}^{\text{c5}}\text{S}(\text{O})\text{R}^{\text{b5}}$, $\text{NR}^{\text{c5}}\text{S}(\text{O})_2\text{R}^{\text{b5}}$, $\text{NR}^{\text{c5}}\text{S}(\text{O})_2\text{NR}^{\text{c5}}\text{R}^{\text{d5}}$, $\text{S}(\text{O})\text{R}^{\text{b5}}$, $\text{S}(\text{O})\text{NR}^{\text{c5}}\text{R}^{\text{d5}}$, $\text{S}(\text{O})_2\text{R}^{\text{b5}}$, $\text{S}(\text{O})_2\text{NR}^{\text{c5}}\text{R}^{\text{d5}}$ and $\text{BR}^{\text{h5}}\text{R}^{\text{i5}}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-10} cycloalkyl, 4-10 membered heterocycloalkyl, C_{6-10} aryl, 5-10 membered

heteroaryl, C₃₋₁₀ cycloalkyl-C₁₋₃ alkylene, 4-10 membered heterocycloalkyl-C₁₋₃ alkylene, C₆₋₁₀ aryl-C₁₋₃ alkylene and 5-10 membered heteroaryl-C₁₋₃ alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁴;

each R¹⁴ is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl, C₃₋₁₀ cycloalkyl-C₁₋₃ alkylene, 4-10 membered heterocycloalkyl-C₁₋₃ alkylene, C₆₋₁₀ aryl-C₁₋₃ alkylene, 5-10 membered heteroaryl-C₁₋₃ alkylene, halo, D, CN, OR^{a6}, SR^{a6}, C(O)R^{b6}, C(O)NR^{c6}R^{d6}, C(O)OR^{a6}, NR^{c6}R^{d6}, NR^{c6}C(O)R^{b6}, NR^{c6}C(O)OR^{a6}, NR^{c6}S(O)R^{b6}, NR^{c6}S(O)₂R^{b6}, NR^{c6}S(O)₂NR^{c6}R^{d6}, S(O)R^{b6}, S(O)NR^{c6}R^{d6}, S(O)₂R^{b6}, S(O)₂NR^{c6}R^{d6} and BR^{h6}Rⁱ⁶; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl, C₃₋₁₀ cycloalkyl-C₁₋₃ alkylene, 4-10 membered heterocycloalkyl-C₁₋₃ alkylene, C₆₋₁₀ aryl-C₁₋₃ alkylene and 5-10 membered heteroaryl-C₁₋₃ alkylene are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁵;

each R¹⁵ is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₆ cycloalkyl, phenyl, 5-6 membered heteroaryl, 4-7 membered heterocycloalkyl, halo, D, CN, OR^{a7}, SR^{a7}, C(O)R^{b7}, C(O)NR^{c7}R^{d7}, C(O)OR^{a7}, NR^{c7}R^{d7}, NR^{c7}C(O)R^{b7}, NR^{c7}C(O)OR^{a7}, NR^{c7}S(O)R^{b7}, NR^{c7}S(O)₂R^{b7}, NR^{c7}S(O)₂NR^{c7}R^{d7}, S(O)R^{b7}, S(O)NR^{c7}R^{d7}, S(O)₂R^{b7} and S(O)₂NR^{c7}R^{d7}; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₆ cycloalkyl, C₆₋₁₀ aryl, 5-10 membered heteroaryl and 4-7 membered heterocycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^a, R^c and R^d is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁰;

or any R^c and R^d attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹⁰;

each R^b is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁰;

each R^c is independently selected from H, CN, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylaminosulfonyl, carbamyl, C₁₋₆ alkylcarbamyl, di(C₁₋₆ alkyl)carbamyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl and di(C₁₋₆ alkyl)aminosulfonyl;

each R^h and Rⁱ is independently selected from OH and C₁₋₆ alkoxy;

or any R^h and Rⁱ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a1}, R^{c1} and R^{d1} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹¹;

or any R^{c1} and R^{d1} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹¹;

each R^{b1} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹¹;

each R^{e1} is independently selected from H, CN, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylaminosulfonyl, carbamyl, C₁₋₆ alkylcarbamyl, di(C₁₋₆ alkyl)carbamyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl and di(C₁₋₆ alkyl)aminosulfonyl;

each R^{h1} and Rⁱ¹ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h1} and Rⁱ¹ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a2}, R^{c2} and R^{d2} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹²;

or any R^{c2} and R^{d2} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹²;

each R^{b2} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹²;

each R^{h2} and Rⁱ² is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h2} and Rⁱ² attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a3}, R^{c3} and R^{d3} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{b3} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{a4}, R^{c4} and R^{d4} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹³;

or any R^{c4} and R^{d4} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹³;

each R^{b4} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹³;

each R^{e4} is independently selected from H, CN, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylaminosulfonyl, carbamyl, C₁₋₆

alkylcarbamyl, di(C₁₋₆ alkyl)carbamyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl and di(C₁₋₆ alkyl)aminosulfonyl;

each R^{h4} and Rⁱ⁴ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h4} and Rⁱ⁴ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a5}, R^{c5} and R^{d5} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁴;

or any R^{c5} and R^{d5} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹⁴;

each R^{b5} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁴;

each R^{e5} is independently selected from H, CN, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylaminosulfonyl, carbamyl, C₁₋₆ alkylcarbamyl, di(C₁₋₆ alkyl)carbamyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl and di(C₁₋₆ alkyl)aminosulfonyl;

each R^{h5} and Rⁱ⁵ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h5} and Rⁱ⁵ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a6}, R^{c6} and R^{d6} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁵;

or any R^{c6} and R^{d6} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹⁵;

each R^{b6} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁵;

each R^{h6} and Rⁱ⁶ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h6} and Rⁱ⁶ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a7}, R^{c7} and R^{d7} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{b7} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{a8}, R^{c8} and R^{d8} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁵;

or any R^{c8} and R^{d8} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R⁵;

each R^{b8} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁵;

each R^{e8} is independently selected from H, CN, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylaminosulfonyl, carbamyl, C₁₋₆

alkylcarbamyl, di(C₁₋₆ alkyl)carbamyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl and di(C₁₋₆ alkyl)aminosulfonyl;

each R^{h8} and Rⁱ⁸ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h8} and Rⁱ⁸ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a9}, R^{c9} and R^{d9} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁶;

or any R^{c9} and R^{d9} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R⁶;

each R^{b9} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁶;

each R^{h9} and Rⁱ⁹ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h9} and Rⁱ⁹ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a10}, R^{c10} and R^{d10} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{b10} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{a11}, R^{c11} and R^{d11} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁷;

or any R^{c11} and R^{d11} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R⁷;

each R^{b11} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁷;

each R^{e11} is independently selected from H, CN, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylaminosulfonyl, carbamyl, C₁₋₆ alkylcarbamyl, di(C₁₋₆ alkyl)carbamyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl and di(C₁₋₆ alkyl)aminosulfonyl;

each R^{h11} and Rⁱ¹¹ is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h11} and Rⁱ¹¹ attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a12}, R^{c12} and R^{d12} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

or any R^{c12} and R^{d12} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R⁸;

each R^{b12} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁸;

each R^{e12} is independently selected from H, CN, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylaminosulfonyl, carbamyl, C₁₋₆ alkylcarbamyl, di(C₁₋₆ alkyl)carbamyl, aminosulfonyl, C₁₋₆ alkylaminosulfonyl and di(C₁₋₆ alkyl)aminosulfonyl;

each R^{h12} and Rⁱ¹² is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h12} and R^{i12} attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a13} , R^{c13} and R^{d13} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^9 ;

or any R^{c13} and R^{d13} attached to the same N atom, together with the N atom to which they are attached, form a 4-, 5-, 6- or 7-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from R^9 ;

each R^{b13} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₁₀ cycloalkyl, 4-10 membered heterocycloalkyl, C₆₋₁₀ aryl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^9 ;

each R^{h13} and R^{i13} is independently selected from OH and C₁₋₆ alkoxy;

or any R^{h13} and R^{i13} attached to the same B atom are C₂₋₃ dialkoxy and together with the B atom to which they are attached, form a 5- or 6-membered heterocycloalkyl group optionally substituted with 1, 2, 3 or 4 substituents independently selected from C₁₋₆ alkyl;

each R^{a14} , R^{c14} and R^{d14} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^8 ;

each R^{b14} is independently selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^8 ;

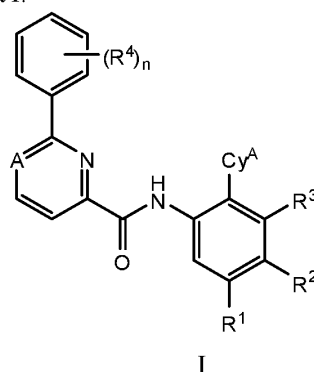
each R^{a15} , R^{c15} and R^{d15} is independently selected from H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl and C₁₋₆ haloalkyl; wherein said C₁₋₆ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^8 ;

each R^8 is independently selected from OH, NO₂, CN, halo, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₃₋₆ cycloalkyl, C₃₋₆ cycloalkyl-C₁₋₂ alkylene, C₁₋₆ alkoxy, C₁₋₆ haloalkoxy, C₁₋₃ alkoxy-C₁₋₃ alkyl, C₁₋₃ alkoxy-C₁₋₃ alkoxy, HO-C₁₋₃ alkoxy, HO-C₁₋₃ alkyl, cyano-C₁₋₃ alkyl, H₂N-C₁₋₃ alkyl, amino, C₁₋₆ alkylamino, di(C₁₋₆ alkyl)amino, thio, C₁₋₆ alkylthio, C₁₋₆ alkylsulfinyl, C₁₋₆ alkylsulfonyl, carbamyl, C₁₋₆ alkylcarbamyl, di(C₁₋₆

alkyl)carbamyl, carboxy, C₁₋₆ alkylcarbonyl, C₁₋₆ alkoxy carbonyl, C₁₋₆ alkylcarbonylamino, C₁₋₆ alkylsulfonylamino, aminosulfonyl, C₁₋₆ alkylaminosulfonyl, di(C₁₋₆ alkyl)aminosulfonyl, aminosulfonylamino, C₁₋₆ alkylaminosulfonylamino, di(C₁₋₆ alkyl)aminosulfonylamino, aminocarbonylamino, C₁₋₆ alkylaminocarbonylamino, and di(C₁₋₆ alkyl)aminocarbonylamino; and

n is 0, 1, 2, 3 or 4.

4. A compound of Formula I:



or a pharmaceutically acceptable salt thereof, wherein:

Cy^A is 4-12 membered heterocycloalkyl; wherein the 4-12 membered heterocycloalkyl has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein a ring-forming carbon atom of the 4-12 membered heterocycloalkyl is optionally substituted by oxo to form a carbonyl group; and wherein the 4-12 membered heterocycloalkyl is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^A;

A is N;

R¹ is selected from H, D, halo, CN, C₁₋₆ alkyl and OR^{a15}; wherein the C₁₋₆ alkyl is optionally substituted with 1, 2, or 3 substituents independently selected from R^B;

R² is selected from H, D, Cy², C₁₋₆ alkyl, C₁₋₆ haloalkyl, halo, CN; wherein said C₁₋₆ alkyl, is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹⁰;

Cy² is selected from 4-10 membered heterocycloalkyl, and 5-10 membered heteroaryl; wherein the 4-10 membered heterocycloalkyl and 5-10 membered heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein a ring-forming carbon atom of 5-10 membered heteroaryl and 4-10 membered heterocycloalkyl is optionally substituted by oxo to form a carbonyl

group; and wherein the 4-10 membered heterocycloalkyl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹⁰;

R³ is selected from H, D, Cy³, halo and CN;

Cy³ is 5-10 membered heteroaryl; wherein the 5-10 membered heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein a ring-forming carbon atom of 5-10 membered heteroaryl is optionally substituted by oxo to form a carbonyl group; and wherein the 5-10 membered heteroaryl is optionally substituted with 1, 2, 3 or 4 substituents independently selected from R¹³;

each R⁴ is independently selected from C₁₋₆ alkyl, C₁₋₆ haloalkyl, halo, D, CN and OR^{a8}; wherein said C₁₋₆ alkyl, is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁵;

each R⁵ is independently selected from C₁₋₆ alkyl, C₁₋₆ haloalkyl, halo, D, CN, OR^{a9} and NR^{c9}R^{d9};

R^A is selected from H, D, Cy¹, C₁₋₆ alkyl, C₁₋₆ haloalkyl, halo, CN, OR^{a11}, C(O)NR^{c11}R^{d11}, and NR^{c11}R^{d11}; wherein said C₁₋₆ alkyl, is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁷;

Cy¹ is 5-10 membered heteroaryl; wherein the 5-10 membered heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein a ring-forming carbon atom of 5-10 membered heteroaryl is optionally substituted by oxo to form a carbonyl group; and wherein the 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3 or 4 substituents independently selected from R⁷;

each R⁷ is independently selected from C₁₋₆ alkyl, halo, D, CN, OR^{a12} and NR^{c12}R^{d12};

each R¹⁰ is independently selected from C₁₋₆ alkyl, C₁₋₆ haloalkyl, 4-10 membered heterocycloalkyl, halo, D, CN, OR^{a1}, C(O)NR^{c1}R^{d1} and NR^{c1}R^{d1}; wherein said C₁₋₆ alkyl, and 4-10 membered heterocycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹¹;

each R¹¹ is independently selected from C₁₋₆ alkyl, C₁₋₆ haloalkyl, halo, D, CN and OR^{a2};

each R¹³ is independently selected from C₁₋₆ alkyl and C₁₋₆ haloalkyl;

each R^{a1}, R^{c1} and R^{d1} is independently selected from H, C₁₋₆ alkyl, C₁₋₆ haloalkyl and C₃₋₁₀ cycloalkyl; wherein said C₁₋₆ alkyl and C₃₋₁₀ cycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹¹;

each R^{a2} , R^{c2} and R^{d2} is independently selected from H, C_{1-6} alkyl and C_{1-6} haloalkyl;
each R^{a8} , R^{c8} and R^{d8} is independently selected from H, C_{1-6} alkyl and C_{1-6} haloalkyl;
each R^{a9} , R^{c9} and R^{d9} is independently selected from H, C_{1-6} alkyl and C_{1-6} haloalkyl;
each R^{a11} , R^{c11} and R^{d11} is independently selected from H, C_{1-6} alkyl and C_{1-6} haloalkyl; wherein said C_{1-6} alkyl is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^7 ;

each R^{a12} , R^{c12} and R^{d12} is independently selected from H, C_{1-6} alkyl and C_{1-6} haloalkyl;

each R^{a15} , R^{c15} and R^{d15} is independently selected from H, C_{1-6} alkyl and C_{1-6} haloalkyl; wherein said C_{1-6} alkyl is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^g ;

each R^g is independently selected from OH, CN, halo, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-6} alkoxy, C_{1-6} haloalkoxy, amino, C_{1-6} alkylthio, C_{1-6} alkylsulfonyl; and

n is 0, 1, 2 or 3.

5. The compound of any one of claims 1 and 3, or a pharmaceutically acceptable salt thereof, wherein Cy^A is 4-12 membered heterocycloalkyl; wherein the 4-12 membered heterocycloalkyl has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein a ring-forming carbon atom of the 4-12 membered heterocycloalkyl is optionally substituted by oxo to form a carbonyl group; and wherein the 4-12 membered heterocycloalkyl is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^A .

6. The compound of any one of claims 1 and 3, or a pharmaceutically acceptable salt thereof, wherein Cy^A is C_{3-10} cycloalkyl, wherein the C_{3-10} cycloalkyl is optionally substituted with 1, 2, or 3 substituents independently selected from R^A .

7. The compound of any one of claims 1-6, or a pharmaceutically acceptable salt thereof, wherein each R^A is independently selected from Cy^1 , C_{1-6} alkyl, OR^{a11} , $C(O)NR^{c11}R^{d11}$, and $NR^{c11}R^{d11}$; wherein said C_{1-6} alkyl is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^7 .

8. The compound of any one of claims 1-6, or a pharmaceutically acceptable salt thereof, wherein each R^A is independently C_{1-6} alkyl; wherein said C_{1-6} alkyl is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^7 .
9. The compound of any one of claims 1-6, or a pharmaceutically acceptable salt thereof, wherein each R^A is independently selected from methyl and ethyl; wherein said methyl and ethyl are each optionally substituted with 1, 2, or 3 substituents independently selected from R^7 .
10. The compound of any one of claims 1-6, or a pharmaceutically acceptable salt thereof, wherein each R^A is independently selected from OH, NH_2 , aminomethyl, hydroxymethyl, methoxymethyl, pyridinyl, ethyl, hydroxyethyl, and propylcarbamoyl.
11. The compound of any one of claims 1-6, or a pharmaceutically acceptable salt thereof, wherein each R^A is independently Cy^1 .
12. The compound of any one of claims 1-7 and 11, or a pharmaceutically acceptable salt thereof, wherein Cy^1 is selected from C_{3-10} cycloalkyl and 5-10 membered heteroaryl; wherein the 5-10 membered heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein the N and S are optionally oxidized; wherein a ring-forming carbon atom of 5-10 membered heteroaryl is optionally substituted by oxo to form a carbonyl group; and wherein the C_{3-10} cycloalkyl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3 or 4 substituents independently selected from R^7 .
13. The compound of any one of claims 1-7 and 11, or a pharmaceutically acceptable salt thereof, wherein Cy^1 is selected from C_{3-10} cycloalkyl optionally substituted with 1, 2, 3 or 4 substituents independently selected from R^7 .
14. The compound of any one of claims 1-7 and 11, or a pharmaceutically acceptable salt thereof, wherein Cy^1 is 5-10 membered heteroaryl; wherein the 5-10 membered heteroaryl has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; and wherein the 5-10 membered heteroaryl is optionally substituted with 1, 2, 3 or 4 substituents independently selected from R^7 .

15. The compound of any one of claims 1-7 and 11 or a pharmaceutically acceptable salt thereof, wherein Cy¹ is pyridinyl.
16. The compound of any one of claims 1-7 and 11 or a pharmaceutically acceptable salt thereof, wherein Cy¹ is cyclopropyl.
17. The compound of any one of claims 1-9 and 11-14, or a pharmaceutically acceptable salt thereof, wherein each R⁷ is independently selected from C₁₋₆ alkyl, halo, D, CN, OR^{a12} and NR^{c12}R^{d12}.
18. The compound of any one of claims 1-9 and 11-14, or a pharmaceutically acceptable salt thereof, wherein each R⁷ is independently selected from CN, OR^{a12}, NR^{c12}R^{d12} and D.
19. The compound of any one of claims 1-9 and 11-14, or a pharmaceutically acceptable salt thereof, wherein each R⁷ is independently selected from D, CN, OH, NH₂, and methoxy.
20. The compound of any one of claims 1-9, 11-14, 17, and 18, or a pharmaceutically acceptable salt thereof, wherein R^{a12} is H.
21. The compound of any one of claims 1-9, 11-14, 17, and 18, or a pharmaceutically acceptable salt thereof, wherein R^{c12} and R^{d12} are each H.
22. The compound of any one of claims 1-4, or a pharmaceutically acceptable salt thereof, wherein Cy^A is selected from 2,5-diazabicyclo[2.2.1]heptan-2-yl; 3-aminopyrrolidin-1-yl; 2-(aminomethyl)pyrrolidin-1-yl; 2-(hydroxymethyl)pyrrolidin-1-yl; 2-(methoxymethyl)pyrrolidin-1-yl; 4-amino-2-(hydroxymethyl)pyrrolidin-1-yl; 4-hydroxy-2-methylpyrrolidin-1-yl; 2-(pyridin-2-yl)pyrrolidin-1-yl; hexahydropyrrolo[3,4-b]pyrrol-1(2H)-yl; 2-methylpiperazin-1-yl; 2-(hydroxymethyl)piperazin-1-yl; 3-(hydroxymethyl)morpholino; 5-ethyl-2,5-diazabicyclo[2.2.1]heptan-2-yl; (2-hydroxyethyl)-2,5-diazabicyclo[2.2.1]heptan-2-yl; 5-(propylcarbamoyl)-2,5-diazabicyclo[2.2.1]heptan-2-yl; 4-hydroxy-2-(hydroxymethyl)pyrrolidin-1-yl; 2-(hydroxymethyl)-5-methylpiperazin-1-yl; 6-(hydroxymethyl)-4,7-diazaspiro[2.5]octan-7-yl; 4-amino-2-(1-hydroxycyclopropyl)pyrrolidin-1-yl; 4-amino-2-(2-hydroxypropan-2-yl)pyrrolidin-1-yl; 4-

amino-2-(hydroxymethyl-d2)pyrrolidin-1-yl; 3-(hydroxymethyl)-2,5-diazabicyclo[2.2.1]heptan-2-yl; 4-amino-2-methylpiperidin-1-yl; piperidin-4-yl; 4-(dimethylamino)-2-(hydroxymethyl)pyrrolidin-1-yl; 2-(hydroxymethyl)-4-(isopropylamino)pyrrolidin-1-yl; 4-(hydroxymethyl)-5-methyl-2,5-diazabicyclo[2.2.1]heptan-2-yl; 2-(hydroxymethyl)morpholino; 2-(2-((dimethylamino)methyl)morpholino; 2-(cyanomethyl)morpholino; 3-oxotetrahydro-3H-oxazolo[3,4-a]pyrazin-7(1H)-yl; 3-(hydroxymethyl)piperazin-1-yl; 3-(methoxymethyl)azetidin-1-yl; 2-(hydroxymethyl)azetidin-1-yl; 2-((dimethylamino)methyl)azetidin-1-yl; 4-methylpiperazin-1-yl; and 4-(2-hydroxyethyl)piperazin-1-yl.

23. The compound of any one of claims 1-4, or a pharmaceutically acceptable salt thereof, wherein Cy^A is selected from 2,5-diazabicyclo[2.2.1]heptan-2-yl; 3-aminopyrrolidin-1-yl; 2-(aminomethyl)pyrrolidin-1-yl; 2-(hydroxymethyl)pyrrolidin-1-yl; 2-(methoxymethyl)pyrrolidin-1-yl; 4-amino-2-(hydroxymethyl)pyrrolidin-1-yl; 4-hydroxy-2-methylpyrrolidin-1-yl; 2-(pyridin-2-yl)pyrrolidin-1-yl; hexahydropyrrolo[3,4-b]pyrrol-1(2H)-yl; 2-methylpiperazin-1-yl; 2-(hydroxymethyl)piperazin-1-yl; 3-(hydroxymethyl)morpholino; 5-ethyl-2,5-diazabicyclo[2.2.1]heptan-2-yl; (2-hydroxyethyl)-2,5-diazabicyclo[2.2.1]heptan-2-yl; and 5-(propylcarbamoyl)-2,5-diazabicyclo[2.2.1]heptan-2-yl.

24. The compound of any one of claims 1-4, or a pharmaceutically acceptable salt thereof, wherein Cy^A is 4-amino-2-(hydroxymethyl)pyrrolidin-1-yl.

25. The compound of any one of claims 1 and 3, wherein Cy^A is selected from cyclopentyl and cyclohexyl, wherein the cyclopentyl and cyclohexyl are optionally substituted with NH₂.

26. The compound of any one of claims 1-25, or a pharmaceutically acceptable salt thereof, wherein R¹ is selected from H, D, halo, CN, C₁₋₆ alkyl and OR^{a15}; wherein the C₁₋₆ alkyl is optionally substituted with 1, 2, or 3 substituents independently selected from R^g.

27. The compound of any one of claims 1-25, or a pharmaceutically acceptable salt thereof, wherein R¹ is selected from H, D, F, CN, methyl, hydroxymethyl and methoxy.

28. The compound of any one of claims 1-25, or a pharmaceutically acceptable salt thereof, wherein R^1 is H.
29. The compound of any one of claims 1-26, or a pharmaceutically acceptable salt thereof, wherein R^1 is F.
30. The compound of any one of claims 1-29, or a pharmaceutically acceptable salt thereof, wherein R^2 is selected from H, D, Cy^2 , C_{1-6} alkyl, halo, and $S(O)_2R^b$; wherein said C_{1-6} alkyl is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{10} .
31. The compound of any one of claims 1-30, or a pharmaceutically acceptable salt thereof, wherein R^2 is selected from isopropyl, F, Cl, Br, and $S(O)_2CH_3$.
32. The compound of any one of claims 1-30, or a pharmaceutically acceptable salt thereof, wherein R^2 is Cy^2 .
33. The compound of any one of claims 1-30 and 32, or a pharmaceutically acceptable salt thereof, wherein Cy^2 is selected from 4-10 membered heterocycloalkyl and 5-10 membered heteroaryl; wherein the 4-10 membered heterocycloalkyl and 5-10 membered heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein a ring-forming carbon atom of 5-10 membered heteroaryl and 4-10 membered heterocycloalkyl is optionally substituted by oxo to form a carbonyl group; and wherein the 4-10 membered heterocycloalkyl and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3 or 4 substituents independently selected from R^{10} .
34. The compound of any one of claims 1-30 and 32, or a pharmaceutically acceptable salt thereof, wherein Cy^2 is C_{6-10} aryl optionally substituted with 1, 2, 3 or 4 substituents independently selected from R^{10} .
35. The compound of any one of claims 1-30 and 32-34, or a pharmaceutically acceptable salt thereof, wherein each R^{10} is independently selected from C_{1-6} alkyl, 4-10 membered heterocycloalkyl, halo, CN, OH, OR^{a1} , $C(O)NR^{c1}R^{d1}$ and $NR^{c1}R^{d1}$; wherein said C_{1-6} alkyl,

and 4-10 membered heterocycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹¹.

36. The compound of any one of claims 1-30 and 32-34, or a pharmaceutically acceptable salt thereof, wherein each R¹⁰ is independently selected from OH, F, CN, methyl, hydroxymethyl, methylcarbamoyl, methoxy, morpholino, and cyclobutylamino.

37. The compound of any one of claims 1-30 and 32-35, or a pharmaceutically acceptable salt thereof, wherein each R^{a1}, R^{c1} and R^{d1} is independently selected from H, C₁₋₆ alkyl, and C₃₋₁₀ cycloalkyl; wherein said C₁₋₆ alkyl and C₃₋₁₀ cycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R¹¹.

38. The compound of any one of claims 1-30, 32-35, and 37, or a pharmaceutically acceptable salt thereof, wherein each R¹¹ is OR^{a2}.

39. The compound of any one of claims 1-30, 32-35, 37, and 38, or a pharmaceutically acceptable salt thereof, wherein each R¹¹ is OH.

40. The compound of any one of claims 1-29, or a pharmaceutically acceptable salt thereof, wherein Cy² is selected from 1-methyl-1*H*-pyrazol-4-yl; 6-(hydroxymethyl)pyridin-3-yl; 6-(methylcarbamoyl)pyridin-3-yl; 1-methyl-6-oxo-1,6-dihydropyridin-3-yl; 2-methylpyridin-3-yl; 4-methoxypyridin-3-yl; 4-cyanopyridin-3-yl; 1,3,5-trimethyl-1*H*-pyrazol-4-yl; morpholino; azetidin-1-yl; 2-(methoxymethyl)azetidin-1-yl; 3-cyanopyridin-4-yl; 3-methoxypyridin-4-yl; 2-cyano-6-fluorophenyl; 3-cyanopyridin-2-yl; 4-cyano-1-methyl-1*H*-pyrazol-5-yl; tetrahydro-2*H*-pyran-4-yl; 5-cyano-2-(pyrrolidin-1-yl)pyridin-4-yl; and 1-cyanocyclopropyl.

41. The compound of any one of claims 1-29, or a pharmaceutically acceptable salt thereof, wherein Cy² is selected from 1-methyl-1*H*-pyrazol-4-yl; 6-(hydroxymethyl)pyridin-3-yl; 6-(methylcarbamoyl)pyridin-3-yl; 1-methyl-6-oxo-1,6-dihydropyridin-3-yl; 2-methylpyridin-3-yl; 4-methoxypyridin-3-yl; 4-cyanopyridin-3-yl; 1,3,5-trimethyl-1*H*-pyrazol-4-yl; morpholino; and azetidin-1-yl.

42. The compound of any one of claims 1-29, or a pharmaceutically acceptable salt thereof, wherein Cy^2 is selected from 3-cyanopyridin-4-yl; 4-cyanopyridin-3-yl; and 3-cyanopyridin-2-yl.
43. The compound of any one of claims 1 and 2, or a pharmaceutically acceptable salt thereof, wherein Z is CR^3 .
44. The compound of any one of claims 1 and 2, or a pharmaceutically acceptable salt thereof, wherein Z is N.
45. The compound of any one of claims 1-43, or a pharmaceutically acceptable salt thereof, wherein R^3 is selected from H, D, Cy^3 , halo and CN.
46. The compound of any one of claims 1-43, or a pharmaceutically acceptable salt thereof, wherein R^3 is selected from H, D, F, Br, and CN.
47. The compound of any one of claims 1-43, or a pharmaceutically acceptable salt thereof, wherein R^3 is H.
48. The compound of any one of claims 1-43, or a pharmaceutically acceptable salt thereof, wherein R^3 is Cy^3 .
49. The compound of any one of claims 1-43, 45, and 48, or a pharmaceutically acceptable salt thereof, wherein Cy^3 is 5-10 membered heteroaryl; wherein the 5-10 membered heteroaryl each has at least one ring-forming carbon atom and 1, 2, 3, or 4 ring-forming heteroatoms independently selected from N, O, and S; wherein a ring-forming carbon atom of 5-10 membered heteroaryl is optionally substituted by oxo to form a carbonyl group; and wherein the 5-10 membered heteroaryl is optionally substituted with 1, 2, 3 or 4 substituents independently selected from R^{13} .
50. The compound of any one of claims 1-43, 45, 48, and 49, or a pharmaceutically acceptable salt thereof, wherein each R^{13} is independently C_{1-6} alkyl.

51. The compound of any one of claims 1-43, 45, and 49, or a pharmaceutically acceptable salt thereof, wherein R¹³ is methyl.
52. The compound of any one of claims 1-43 and 45, or a pharmaceutically acceptable salt thereof, wherein Cy³ is selected from pyridin-3-yl and 1-methyl-1*H*-pyrazol-4-yl.
53. The compound of any one of claims 1-52, or a pharmaceutically acceptable salt thereof, wherein each R⁴ is independently selected from C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₃₋₁₀ cycloalkyl, halo, D, CN, and OR^{a8}; wherein said C₁₋₆ alkyl, is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R⁵.
54. The compound of any one of claims 1-52, or a pharmaceutically acceptable salt thereof, wherein each R⁴ is independently selected from C₁₋₆ alkyl, C₁₋₆ haloalkyl, halo, D, CN, and OR^{a8}.
55. The compound of any one of claims 1-52, or a pharmaceutically acceptable salt thereof, wherein each R⁴ is independently selected from halo and OR^{a8}.
56. The compound of any one of claims 1-52, or a pharmaceutically acceptable salt thereof, wherein each R⁴ is independently selected from halo.
57. The compound of any one of claims 1-52, or a pharmaceutically acceptable salt thereof, wherein each R⁴ is independently selected from F and Cl.
58. The compound of any one of claims 1-52, or a pharmaceutically acceptable salt thereof, wherein each R⁴ is independently selected from F and methoxy.
59. The compound of any one of claims 1-52, or a pharmaceutically acceptable salt thereof, wherein each R⁴ is independently selected from F and methyl.
60. The compound of any one of claims 1-52, or a pharmaceutically acceptable salt thereof, wherein each R⁴ is F.

61. The compound of any one of claims 1-55, or a pharmaceutically acceptable salt thereof, wherein each R^5 is independently selected from C_{1-6} alkyl, C_{1-6} haloalkyl, halo, D, CN, OR^{a9} , and $NR^{c9}R^{d9}$.
62. The compound of any one of claims 1-55, or a pharmaceutically acceptable salt thereof, wherein each R^5 is independently selected from D and F.
63. The compound of any one of claims 1-30 and 32-38, or a pharmaceutically acceptable salt thereof, wherein each R^{a2} , R^{c2} , and R^{d2} is independently H.
64. The compound of any one of claims 1-53, or a pharmaceutically acceptable salt thereof, wherein each R^{a8} , R^{c8} , and R^{d8} is independently selected from H, C_{1-6} alkyl, and C_{1-6} haloalkyl.
65. The compound of any one of claims 1-7, or a pharmaceutically acceptable salt thereof, wherein each R^{a11} , R^{c11} , and R^{d11} is independently selected from H and C_{1-6} alkyl; wherein said C_{1-6} alkyl is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^7 .
66. The compound of any one of claims 1-26, or a pharmaceutically acceptable salt thereof, wherein each R^{a15} , R^{c15} and R^{d15} is independently selected from H and C_{1-6} alkyl; wherein said C_{1-6} alkyl is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^8 .
67. The compound of any one of claims 1-66, or a pharmaceutically acceptable salt thereof, wherein each R^8 is OH.
68. The compound of any one of claims 1-67, or a pharmaceutically acceptable salt thereof, wherein n is 2.
69. The compound of any one of claims 1-3 and 5-68, or a pharmaceutically acceptable salt thereof, wherein A is N.

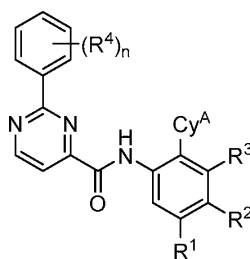
70. The compound of any one of claims 1, 2, and 5-68, or a pharmaceutically acceptable salt thereof, wherein A is CR¹⁶.

71. The compound of any one of claims 1, 2, 5-68, and 70, or a pharmaceutically acceptable salt thereof, wherein R¹⁶ is H, CN, or OR^{a16}.

72. The compound of any one of claims 1, 2, 5-68, 70, and 71, or a pharmaceutically acceptable salt thereof, wherein R^{a16} is selected from H and C₁₋₆ alkyl.

73. The compound of any one of claims 1, 2, 5-68, and 70-72, or a pharmaceutically acceptable salt thereof, wherein R^{a16} is methyl.

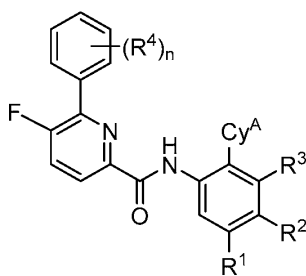
74. The compound of any one of claims 1-4, having Formula IA:



IA,

or a pharmaceutically acceptable salt thereof.

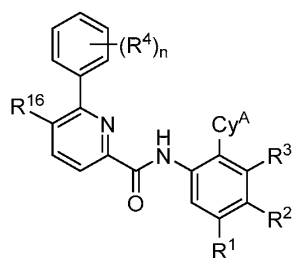
75. The compound of any one of claims 1, 2, and 3, having Formula IB:



IB,

or a pharmaceutically acceptable salt thereof.

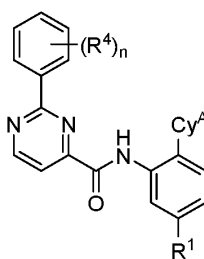
76. The compound of any one of claims 1 and 2, having Formula IC:



IC,

or a pharmaceutically acceptable salt thereof.

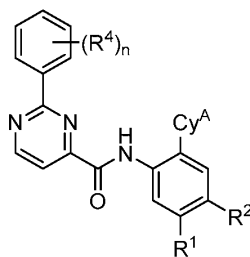
77. The compound of any one of claims 1-4, having Formula IIA:



IIA,

or a pharmaceutically acceptable salt thereof.

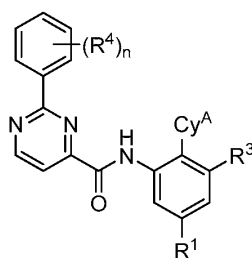
78. The compound of any one of claims 1-4, having Formula IIB:



IIB,

or a pharmaceutically acceptable salt thereof.

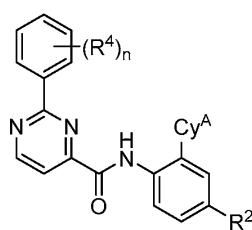
79. The compound of any one of claims 1-4, having Formula IIC:



IIC,

or a pharmaceutically acceptable salt thereof.

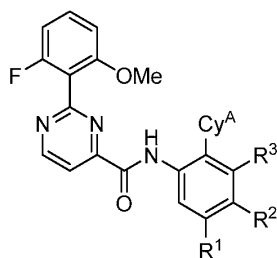
80. The compound of any one of claims 1-4, having Formula IID:



IID,

or a pharmaceutically acceptable salt thereof.

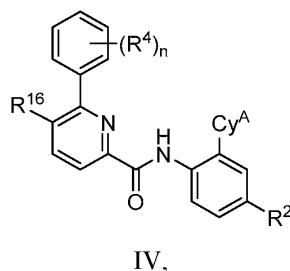
81. The compound of any one of claims 1-4, having Formula III:



III,

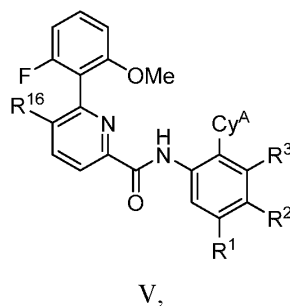
or a pharmaceutically acceptable salt thereof.

82. The compound of any one of claims 1 and 2, having Formula IV:



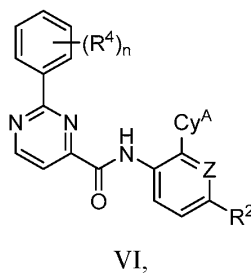
or a pharmaceutically acceptable salt thereof.

83. The compound of any one of claims 1 and 2, having Formula V:



or a pharmaceutically acceptable salt thereof.

84. The compound of any one of claims 1 and 2, having Formula VI:



or a pharmaceutically acceptable salt thereof.

85. The compound of claim 1 selected from:

N-(2-((1*R*,4*R*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-fluorophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(*S*)-*N*-(2-(3-aminopyrrolidin-1-yl)-5-fluorophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(*R*)-*N*-(2-(2-(aminomethyl)pyrrolidin-1-yl)-5-fluorophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(*R*)-*N*-(5-fluoro-2-(2-(hydroxymethyl)pyrrolidin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(*R*)-*N*-(5-fluoro-2-(2-(methoxymethyl)pyrrolidin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-amino-2-(hydroxymethyl)pyrrolidin-1-yl)-5-fluorophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(5-fluoro-2-((2*S*,4*S*)-4-hydroxy-2-methylpyrrolidin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(5-fluoro-2-(2-(pyridin-2-yl)pyrrolidin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(5-fluoro-2-(hexahydropyrrolo[3,4-*b*]pyrrol-1(2*H*)-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(*R*)-*N*-(5-fluoro-2-(2-methylpiperazin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(*R*)-*N*-(5-fluoro-2-(2-(hydroxymethyl)piperazin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(5-fluoro-2-(3-(hydroxymethyl)morpholino)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*R*,4*R*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-3-bromo-5-fluorophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*R*,4*R*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-3-cyanophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*R*,4*R*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-fluoro-3-(pyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*R*,4*R*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-fluoro-3-(1-methyl-1*H*-pyrazol-4-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-fluoro-4-(hydroxymethyl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-4-bromo-5-fluorophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-fluoro-4-(1-methyl-1*H*-pyrazol-4-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-fluoro-4-(6-(hydroxymethyl)pyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-fluoro-4-(6-(methylcarbamoyl)pyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-fluoro-4-(1-methyl-6-oxo-1,6-dihydropyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-fluoro-4-(2-methylpyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-4-(2-methylpyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-4-(4-methoxypyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-4-(1,3,5-trimethyl-1*H*-pyrazol-4-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-fluoro-4-morpholinophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(4-(azetidin-1-yl)-2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-fluorophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-fluoro-4-(morpholinomethyl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-4-((cyclobutylamino)methyl)-5-fluorophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*R*,4*R*)-5-ethyl-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-fluorophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(5-fluoro-2-((1*R*,4*R*)-5-(2-hydroxyethyl)-2,5-diazabicyclo[2.2.1]heptan-2-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(1*R*,4*R*)-5-(4-fluoro-2-(2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamido)phenyl)-*N*-propyl-2,5-diazabicyclo[2.2.1]heptane-2-carboxamide;

N-(2-((1*R*,4*R*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-methoxyphenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*R*,4*R*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-(hydroxymethyl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide; and

N-(2-((1*R*,4*R*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)-5-cyanophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

or a pharmaceutically acceptable salt thereof.

86. The compound of claim 1 selected from:

N-(4-(Azetidin-1-yl)-2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-Diazabicyclo[2.2.1]heptan-2-yl)-4-((*S*)-2-(methoxymethyl)azetidin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((1*S*,4*S*)-2,5-Diazabicyclo[2.2.1]heptan-2-yl)-4-(3-cyanopyridin-4-yl)-3-fluorophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(3-cyanopyridin-4-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(2-methylpyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(3-methoxypyridin-4-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(3-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-2'-cyano-6'-fluorobiphenyl-4-yl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(3-cyanopyridin-2-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyano-1-methyl-1*H*-pyrazol-5-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-isopropylphenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(4-(3-Cyanopyridin-4-yl)-2-((2*S*,4*S*)-4-hydroxy-2-(hydroxymethyl)pyrrolidin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(4-(4-Cyanopyridin-3-yl)-2-((2*S*,5*R*)-2-(hydroxymethyl)-5-methylpiperazin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(4-(4-Cyanopyridin-3-yl)-2-((2*S*,5*S*)-2-(hydroxymethyl)-5-methylpiperazin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(*S*)-*N*-(4-(4-Cyanopyridin-3-yl)-2-(6-(hydroxymethyl)-4,7-diazaspiro[2.5]octan-7-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(1-hydroxycyclopropyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(2-hydroxypropan-2-yl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl-*d*2)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(4-(4-Cyanopyridin-3-yl)-2-((1*S*,3*R*,4*S*)-3-(hydroxymethyl)-2,5-diazabicyclo[2.2.1]heptan-2-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(4-(4-Cyanopyridin-3-yl)-2-((1*S*,4*S*)-1-(hydroxymethyl)-2,5-diazabicyclo[2.2.1]heptan-2-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-methylpiperidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-6-(2-fluoro-6-methoxyphenyl)picolinamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-5-cyano-6-(2-fluoro-6-methoxyphenyl)picolinamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-6-(2-fluoro-6-methoxyphenyl)-5-methoxypicolinamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2,6-difluorophenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-fluoro-6-methylphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-chloro-6-fluorophenyl)pyrimidine-4-carboxamide; and

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-6-(1,3,5-trimethyl-1*H*-pyrazol-4-yl)pyridin-3-yl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

or a pharmaceutically acceptable salt thereof.

87. The compound of claim 1 selected from:

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-5-fluorophenyl)-2-(2,6-difluorophenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-5-fluorophenyl)-2-(3-cyano-2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-5-fluorophenyl)-2-(2,3-difluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-5-fluorophenyl)-2-(2-fluoro-6-(methoxy-*d*₃)-3-methylphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxy-4-methylphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(3,6-difluoro-2-methylphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2,3-difluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(3,6-difluoro-2-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(3-cyano-2-fluoro-6-(methoxy-*d*₃)phenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(3,6-difluoro-2-(methoxy-*d*₃)phenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2,3-difluoro-6-(methoxy-*d*₃)phenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-fluoro-6-(methoxy-*d*₃)phenyl-5-*d*)pyrimidine-4-carboxamide;

2-(2-Fluoro-6-methoxyphenyl)-*N*-(2-(piperidin-4-yl)phenyl)pyrimidine-4-carboxamide;

N-(2-(*cis*)4-Aminocyclohexyl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-(*trans*)4-Aminocyclohexyl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-(3-Aminocyclohexyl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-(3-aminocyclopentyl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((*cis*)-4-Aminocyclohexyl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((*trans*)-4-Aminocyclohexyl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((*cis*)-4-Aminocyclohexyl)-4-(4-cyano-1-methyl-1*H*-pyrazol-5-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((*trans*)-4-aminocyclohexyl)-4-(4-cyano-1-methyl-1*H*-pyrazol-5-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((*cis*)-4-Aminocyclohexyl)-4-(1,3,5-trimethyl-1*H*-pyrazol-4-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(methylsulfonyl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-5-methylphenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-(Dimethylamino)-2-(hydroxymethyl)pyrrolidin-1-yl)-5-fluorophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(5-Fluoro-2-((2*S*,4*S*)-2-(hydroxymethyl)-4-(isopropylamino)pyrrolidin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(tetrahydro-2*H*-pyran-4-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-chlorophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-fluorophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(5-cyano-2-(pyrrolidin-1-yl)pyridin-4-yl)phenyl)-2-(2,6-difluorophenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(1-cyanocyclopropyl)phenyl)-2-(2,6-difluorophenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-(difluoromethoxy)-6-fluorophenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-fluoro-6-(methoxy-*d*₃)phenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-cyclopropyl-6-fluorophenyl)pyrimidine-4-carboxamide;

N-(2-((2*S*,4*S*)-4-Amino-2-(hydroxymethyl)pyrrolidin-1-yl)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-ethoxy-6-fluorophenyl)pyrimidine-4-carboxamide;

N-(4-(4-Cyanopyridin-3-yl)-2-((1*S*,4*S*)-4-(hydroxymethyl)-5-methyl-2,5-diazabicyclo[2.2.1]heptan-2-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(*S*)-*N*-(4-(4-Cyanopyridin-3-yl)-2-(2-(hydroxymethyl)morpholino)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(*S*)-*N*-(4-(4-Cyanopyridin-3-yl)-2-(2-((dimethylamino)methyl)morpholino)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(*R*)-*N*-(2-(2-(Cyanomethyl)morpholino)-4-(4-cyanopyridin-3-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(*R*)-*N*-(4-(4-Cyanopyridin-3-yl)-2-(3-oxotetrahydro-3H-oxazolo[3,4-*a*]pyrazin-7(1*H*)-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(*S*)-*N*-(5-Fluoro-2-(3-(hydroxymethyl)piperazin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(4-(4-Cyanopyridin-3-yl)-2-(3-(methoxymethyl)azetidin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(*S*)-*N*-(4-(4-Cyanopyridin-3-yl)-2-(2-(hydroxymethyl)azetidin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

(*R*)-*N*-(4-(4-Cyanopyridin-3-yl)-2-(2-((dimethylamino)methyl)azetidin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(4-(4-Cyanopyridin-3-yl)-2-(4-methylpiperazin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

N-(4-(4-Cyanopyridin-3-yl)-2-(4-(2-hydroxyethyl)piperazin-1-yl)phenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide; and

(*S*)-*N*-(5-Fluoro-2-(3-(hydroxymethyl)piperazin-1-yl)-4-isopropylphenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide;

or a pharmaceutically acceptable salt thereof.

88. A pharmaceutical composition comprising a compound of any one of claims 1-87, or a pharmaceutically acceptable salt thereof, and at least one pharmaceutically acceptable carrier or excipient.

89. A method of inhibiting HPK1 activity, said method comprising contacting a compound of any one of claims 1-87, or a pharmaceutically acceptable salt thereof with HPK1.

90. The method of claim 89, wherein the contacting comprises administering the compound to a patient.

91. A method of treating a disease or disorder associated with inhibition of HPK1 interaction, said method comprising administering to a patient in need thereof a therapeutically effective amount of a compound of any one of claims 1-87, or a pharmaceutically acceptable salt thereof.

92. A method for treating a cancer in a patient, said method comprising: administering to the patient a therapeutically effective amount of the compound of any one of claims 1-87, or a pharmaceutically acceptable salt thereof.

93. The method of claim 92, wherein the cancer is selected from breast cancer, colorectal cancer, lung cancer, ovarian cancer, and pancreatic cancer.