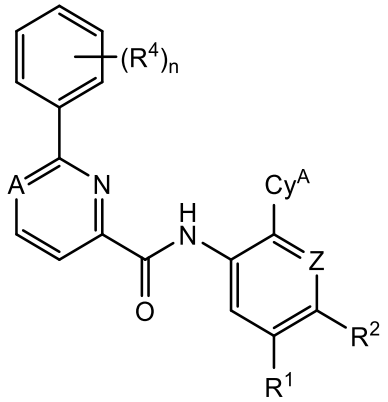
CLAIMS:

1. A compound of Formula (I'):



I'

or a pharmaceutically acceptable salt thereof, wherein:

Cy^A is C_{3-12} 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 C_{3-12} 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 CR^{16};

R^{16} is selected from H, D, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, halo, CN, NO_2, 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 $BR^{h16}R^{i16}$; 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;

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

R^2 is selected from H, D, Cy^2, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, halo, CN, NO_2, 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}, $C(O)R^{b8}$, $C(O)NR^{c8}R^{d8}$, $C(O)OR^{a8}$, $OC(O)R^{b8}$, $OC(O)NR^{c8}R^{d8}$, $NR^{c8}R^{d8}$, $NR^{c8}C(O)R^{b8}$, $NR^{c8}C(O)OR^{a8}$, $NR^{c8}C(O)NR^{c8}R^{d8}$, $C(=NR^{e8})R^{b8}$, $C(=NOR^{a8})R^{b8}$, $C(=NR^{e8})NR^{c8}R^{d8}$,

$NR^{c8}C(=NR^{e8})NR^{c8}R^{d8}$, $NR^{c8}S(O)R^{b8}$, $NR^{c8}S(O)_2R^{b8}$, $NR^{c8}S(O)_2NR^{c8}R^{d8}$, $S(O)R^{b8}$, $S(O)NR^{c8}R^{d8}$, $S(O)_2R^{b8}$, $S(O)_2NR^{c8}R^{d8}$ and $BR^{h8}R^{i8}$; 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, 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^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, 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^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, OR^{a1}, SR^{a1}, $C(O)R^{b1}$, $C(O)NR^{c1}R^{d1}$, $C(O)OR^{a1}$, $OC(O)R^{b1}$, $OC(O)NR^{c1}R^{d1}$, $NR^{c1}R^{d1}$, $NR^{c1}C(O)R^{b1}$, $NR^{c1}C(O)OR^{a1}$, $NR^{c1}C(O)NR^{c1}R^{d1}$, $C(=NR^{e1})R^{b1}$, $C(=NOR^{a1})R^{b1}$, $C(=NR^{e1})NR^{c1}R^{d1}$, $NR^{c1}C(=NR^{e1})NR^{c1}R^{d1}$, $NR^{c1}S(O)R^{b1}$, $NR^{c1}S(O)_2R^{b1}$, $NR^{c1}S(O)_2NR^{c1}R^{d1}$, $S(O)R^{b1}$, $S(O)NR^{c1}R^{d1}$, $S(O)_2R^{b1}$, $S(O)_2NR^{c1}R^{d1}$ and $BR^{h1}R^{i1}$; 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}, $C(O)R^{b2}$, $C(O)NR^{c2}R^{d2}$, $C(O)OR^{a2}$, $NR^{c2}R^{d2}$, $NR^{c2}C(O)R^{b2}$, $NR^{c2}C(O)OR^{a2}$, $NR^{c2}S(O)R^{b2}$, $NR^{c2}S(O)_2R^{b2}$, $NR^{c2}S(O)_2NR^{c2}R^{d2}$, $S(O)R^{b2}$, $S(O)NR^{c2}R^{d2}$, $S(O)_2R^{b2}$ $S(O)_2NR^{c2}R^{d2}$ and $BR^{h2}R^{i2}$; 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}, $C(O)R^{b3}$, $C(O)NR^{c3}R^{d3}$, $C(O)OR^{a3}$, $NR^{c3}R^{d3}$, $NR^{c3}C(O)R^{b3}$, $NR^{c3}C(O)OR^{a3}$, $NR^{c3}S(O)R^{b3}$, $NR^{c3}S(O)_2R^{b3}$, $NR^{c3}S(O)_2NR^{c3}R^{d3}$, $S(O)R^{b3}$, $S(O)NR^{c3}R^{d3}$, $S(O)_2R^{b3}$ and $S(O)_2NR^{c3}R^{d3}$; 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^g;

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}, $C(O)R^{b5}$, $C(O)NR^{c5}R^{d5}$, $C(O)OR^{a5}$, $OC(O)R^{b5}$, $OC(O)NR^{c5}R^{d5}$, $NR^{c5}R^{d5}$, $NR^{c5}C(O)R^{b5}$, $NR^{c5}C(O)OR^{a5}$, $NR^{c5}C(O)NR^{c5}R^{d5}$, $C(=NR^{e5})R^{b5}$, $C(=NOR^{a5})R^{b5}$, $C(=NR^{e5})NR^{c5}R^{d5}$, $NR^{c5}C(=NR^{e5})NR^{c5}R^{d5}$, $NR^{c5}S(O)R^{b5}$, $NR^{c5}S(O)_2R^{b5}$, $NR^{c5}S(O)_2NR^{c5}R^{d5}$, $S(O)R^{b5}$, $S(O)NR^{c5}R^{d5}$, $S(O)_2R^{b5}$, $S(O)_2NR^{c5}R^{d5}$ and $BR^{h5}R^{i5}$; 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, 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^{14};

each R^{14} 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^{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 $BR^{h6}R^{i6}$; 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^{15};

each R^{15} 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^{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 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^a, R^c and R^d is independently selected from H, 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 and 5-10

membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{10};

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 R^{10};

each R^b 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{10};

each R^e is independently selected from H, CN, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-6} alkylthio, C_{1-6} alkylsulfonyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylaminosulfonyl, carbamyl, C_{1-6} alkylcarbamyl, di(C_{1-6} alkyl)carbamyl, aminosulfonyl, C_{1-6} alkylaminosulfonyl and di(C_{1-6} alkyl)aminosulfonyl;

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

or any R^h and R^i 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;

each R^{a1}, R^{c1} and R^{d1} is independently selected from H, 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{11};

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 R^{11};

each R^{b1} 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{11};

each R^{e1} is independently selected from H, CN, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-6} alkylthio, C_{1-6} alkylsulfonyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylaminosulfonyl, carbamyl, C_{1-6}

alkylcarbamyl, di(C_{1-6} alkyl)carbamyl, aminosulfonyl, C_{1-6} alkylaminosulfonyl and di(C_{1-6} alkyl)aminosulfonyl;

each R^{h1} and R^{i1} is independently selected from OH and C_{1-6} alkoxy;

or any R^{h1} and R^{i1} 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;

each R^{a2}, R^{c2} and R^{d2} is independently selected from H, 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{12};

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 R^{12};

each R^{b2} 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{12};

each R^{h2} and R^{i2} is independently selected from OH and C_{1-6} alkoxy;

or any R^{h2} and R^{i2} 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;

each R^{a3}, R^{c3} and R^{d3} 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^{b3} 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^{a4}, R^{c4} and R^{d4} is independently selected from H, 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{13};

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 R^{13};

each R^{b4} 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{13};

each R^{e4} is independently selected from H, CN, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-6} alkylthio, C_{1-6} alkylsulfonyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylaminosulfonyl, carbamyl, C_{1-6} alkylcarbamyl, di(C_{1-6} alkyl)carbamyl, aminosulfonyl, C_{1-6} alkylaminosulfonyl and di(C_{1-6} alkyl)aminosulfonyl;

each R^{h4} and R^{i4} is independently selected from OH and C_{1-6} alkoxy;

or any R^{h4} and R^{i4} 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;

each R^{a5}, R^{c5} and R^{d5} is independently selected from H, 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{14};

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 R^{14};

each R^{b5} 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{14};

each R^{e5} is independently selected from H, CN, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-6} alkylthio, C_{1-6} alkylsulfonyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylaminosulfonyl, carbamyl, C_{1-6} alkylcarbamyl, di(C_{1-6} alkyl)carbamyl, aminosulfonyl, C_{1-6} alkylaminosulfonyl and di(C_{1-6} alkyl)aminosulfonyl;

each R^{h5} and R^{i5} is independently selected from OH and C_{1-6} alkoxy;

or any R^{h5} and R^{i5} 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;

each R^{a6}, R^{c6} and R^{d6} is independently selected from H, 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{15};

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 R^{15};

each R^{b6} 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{15};

each R^{h6} and R^{i6} is independently selected from OH and C_{1-6} alkoxy;

or any R^{h6} and R^{i6} 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;

each R^{a7}, R^{c7} and R^{d7} 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^{b7} 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^{a8}, R^{c8} and R^{d8} is independently selected from H, 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{5};

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 R^{5};

each R^{b8} 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^5;

each R^{e8} is independently selected from H, CN, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-6} alkylthio, C_{1-6} alkylsulfonyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylaminosulfonyl, carbamyl, C_{1-6} alkylcarbamyl, di(C_{1-6} alkyl)carbamyl, aminosulfonyl, C_{1-6} alkylaminosulfonyl and di(C_{1-6} alkyl)aminosulfonyl;

each R^{h8} and R^{i8} is independently selected from OH and C_{1-6} alkoxy;

or any R^{h8} and R^{i8} 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;

each R^{a9}, R^{c9} and R^{d9} is independently selected from H, 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^6;

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 R^6;

each R^{b9} 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^6;

each R^{h9} and R^{i9} is independently selected from OH and C_{1-6} alkoxy;

or any R^{h9} and R^{i9} 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;

each R^{a10}, R^{c10} and R^{d10} 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^{b10} 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^{a11}, R^{c11} and R^{d11} is independently selected from H, 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^7;

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 R^7;

each R^{b11} 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^7;

each R^{e11} is independently selected from H, CN, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-6} alkylthio, C_{1-6} alkylsulfonyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylaminosulfonyl, carbamyl, C_{1-6} alkylcarbamyl, di(C_{1-6} alkyl)carbamyl, aminosulfonyl, C_{1-6} alkylaminosulfonyl and di(C_{1-6} alkyl)aminosulfonyl;

each R^{h11} and R^{i11} is independently selected from OH and C_{1-6} alkoxy;

or any R^{h11} and R^{i11} 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;

each R^{a12}, R^{c12} and R^{d12} is independently selected from H, 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 and 5-10 membered heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^8;

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 R^8;

each R^{b12} 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 and 5-10 membered

heteroaryl; 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 and 5-10 membered heteroaryl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^8;

each R^{e12} is independently selected from H, CN, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-6} alkylthio, C_{1-6} alkylsulfonyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylaminosulfonyl, carbamyl, C_{1-6} alkylcarbamyl, di(C_{1-6} alkyl)carbamyl, aminosulfonyl, C_{1-6} alkylaminosulfonyl and di(C_{1-6} alkyl)aminosulfonyl;

each R^{h12} and R^{i12} is independently selected from OH and C_{1-6} alkoxy;

or any R^{h12} and R^{i12} 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;

each R^{a13}, R^{c13} and R^{d13} is independently selected from H, 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 and 5-10 membered heteroaryl; 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 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 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 and 5-10 membered heteroaryl; 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 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 C_{1-6} alkoxy;

or any R^{h13} and R^{i13} 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;

each R^{a14}, R^{c14} and R^{d14} 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^{b14} 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^{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} alkoxycarbonyl, 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 claim 1, 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;

R^{16} is selected from H, D, C_{1-6} alkyl, halo, CN and OR^{a16};

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

R^2 is selected from H, D, Cy^2, C_{1-6} alkyl, C_{1-6} haloalkyl, halo, CN; wherein said C_{1-6} alkyl, is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{10};

Cy^2 is selected from 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 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};

R^3 is selected from H, D, Cy^3, halo and CN;

Cy^3 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 R^4 is independently selected from C_{1-6} alkyl, C_{1-6} haloalkyl, halo, D, CN and OR^{a8};

R^A is selected from H, D, Cy^1, C_{1-6} alkyl, C_{1-6} haloalkyl, halo, CN, 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;

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 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;

each R^7 is independently selected from C_{1-6} alkyl, halo, D, CN, OR^{a12} and $NR^{c12}R^{d12}$;

each R^{10} is independently selected from C_{1-6} alkyl, C_{1-6} haloalkyl, 4-10 membered heterocycloalkyl, halo, D, CN, 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 R^{11};

each R^{11} is independently selected from C_{1-6} alkyl, C_{1-6} haloalkyl, halo, D, CN and OR^{a2};

each R^{a1}, R^{c1} and R^{d1} is independently selected from H, C_{1-6} alkyl, C_{1-6} haloalkyl and C_{3-10} cycloalkyl; wherein said C_{1-6} alkyl and C_{3-10} cycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{11};

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^{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;

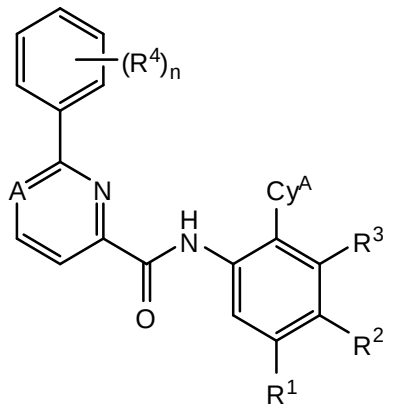
each R^{a15}, R^{c15} and R^{d15} is independently selected from H, C_{1-6} alkyl and C_{1-6} haloalkyl; wherein said C_{1-6} alkyl is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{g};

R^{a16} is independently selected from H and C_{1-6} alkyl;

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.

3. The compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein the compound of Formula I' is a compound of Formula I:



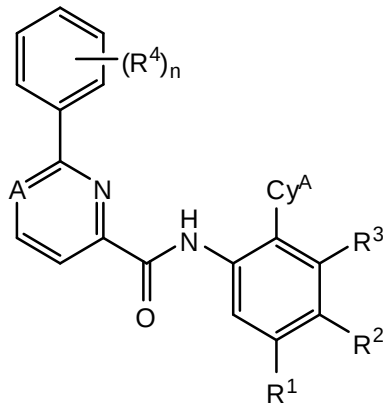
I

or a pharmaceutically acceptable salt thereof, wherein:

A is N or CF; and

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}.

4. The compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein the compound of Formula I' is 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;

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

R^2 is selected from H, D, Cy^2, C_{1-6} alkyl, C_{1-6} haloalkyl, halo, CN; wherein said C_{1-6} alkyl, is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{10};

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};

R^3 is selected from H, D, Cy^3, halo and CN;

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};

each R^4 is independently selected from C_{1-6} alkyl, C_{1-6} haloalkyl, halo, D, CN and OR^{a8}; wherein said C_{1-6} alkyl, is 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_{1-6} haloalkyl, halo, D, CN, OR^{a9} and $NR^{c9}R^{d9}$;

R^A is selected from H, D, Cy^1, C_{1-6} alkyl, C_{1-6} haloalkyl, halo, CN, 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;

Cy^1 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 R^7;

each R^7 is independently selected from C_{1-6} alkyl, halo, D, CN, OR^{a12} and $NR^{c12}R^{d12}$;

each R^{10} is independently selected from C_{1-6} alkyl, C_{1-6} haloalkyl, 4-10 membered heterocycloalkyl, halo, D, CN, 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 R^{11};

each R^{11} is independently selected from C_{1-6} alkyl, C_{1-6} haloalkyl, halo, D, CN and OR^{a2};

each R^{13} is independently selected from C_{1-6} alkyl and C_{1-6} haloalkyl;

each R^{a1}, R^{c1} and R^{d1} is independently selected from H, C_{1-6} alkyl, C_{1-6} haloalkyl and C_{3-10} cycloalkyl; wherein said C_{1-6} alkyl and C_{3-10} cycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{11};

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:

(i) 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}; or

(ii) 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}.

6. The compound of any one of claims 1-5, 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}.

7. The compound of any one of claims 1-5, or a pharmaceutically acceptable salt thereof, wherein:

(i) 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; or

(ii) 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.

8. The compound of any one of claims 1-5, 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.

9. The compound of any one of claims 1-4, or a pharmaceutically acceptable salt thereof, wherein:

(i) 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(2*H*)-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;

(ii) 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(2*H*)-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; or
(iii) Cy^A is 4-amino-2-(hydroxymethyl)pyrrolidin-1-yl.

10. The compound of any one of claims 1-9, or a pharmaceutically acceptable salt thereof, wherein R^1 is selected from H, D, halo, CN, C_{1-6} alkyl and OR^{a15}; wherein the C_{1-6} alkyl is optionally substituted with 1, 2, or 3 substituents independently selected from R^g.

11. The compound of any one of claims 1-19, or a pharmaceutically acceptable salt thereof, wherein:
(i) R^1 is selected from H, D, F, CN, methyl, hydroxymethyl and methoxy;
(ii) R^1 is H; or
(iii) R^1 is F.

12. The compound of any one of claims 1-11, 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}.

13. The compound of any one of claims 1-12, or a pharmaceutically acceptable salt thereof, wherein R^2 is selected from isopropyl, F, Cl, Br, and $S(O)_2CH_3$.

14. The compound of any one of claims 1-12, or a pharmaceutically acceptable salt thereof, wherein R^2 is Cy^2.

15. The compound of any one of claims 1-12 and 14, or a pharmaceutically acceptable salt thereof, wherein
(i) 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}; or

(ii) Cy^2 is C_{6-10} aryl optionally substituted with 1, 2, 3 or 4 substituents independently selected from R^{10}.

16. The compound of any one of claims 1-12, 14 and 15, 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 R^{11}.

17. The compound of any one of claims 1-12, 14 and 15, or a pharmaceutically acceptable salt thereof, wherein each R^{10} is independently selected from OH, F, CN, methyl, hydroxymethyl, methylcarbamoyl, methoxy, morpholino, and cyclobutylamino.

18. The compound of any one of claims 1-12 and 14-16, or a pharmaceutically acceptable salt thereof, wherein:

(i) each R^{a1}, R^{c1} and R^{d1} is independently selected from H, C_{1-6} alkyl, and C_{3-10} cycloalkyl; wherein said C_{1-6} alkyl and C_{3-10} cycloalkyl are each optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^{11}; and/or

(ii) each R^{11} is OR^{a2}; or each R^{11} is OH.

19. The compound of any one of claims 1-11, or a pharmaceutically acceptable salt thereof, wherein:

(i) Cy^2 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-1H-pyrazol-5-yl; tetrahydro-2H-pyran-4-yl; 5-cyano-2-(pyrrolidin-1-yl)pyridin-4-yl; and 1-cyanocyclopropyl;

(ii) Cy^2 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; or
(iii) Cy^2 is selected from 3-cyanopyridin-4-yl; 4-cyanopyridin-3-yl; and 3-cyanopyridin-2-yl.

20. The compound of any one of claims 1 and 2, or a pharmaceutically acceptable salt thereof, wherein Z is CR^3.

21. The compound of any one of claims 1 and 2, or a pharmaceutically acceptable salt thereof, wherein Z is N.

22. The compound of any one of claims 1-20, or a pharmaceutically acceptable salt thereof, wherein R^3 is selected from H, D, Cy^3, halo and CN.

23. The compound of any one of claims 1-20, or a pharmaceutically acceptable salt thereof, wherein:
(i) R^3 is selected from H, D, F, Br, and CN; or
(ii) R^3 is H.

24. The compound of any one of claims 1-20, or a pharmaceutically acceptable salt thereof, wherein R^3 is Cy^3.

25. The compound of any one of claims 1-20, 22 and 24, 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}.

26. The compound of any one of claims 1-20, 22, 24, and 25, or a pharmaceutically acceptable salt thereof, wherein each R^{13} is independently C_{1-6} alkyl.

27. The compound of any one of claims 1-20, 22, and 25, or a pharmaceutically acceptable salt thereof, wherein R^{13} is methyl.

28. The compound of any one of claims 1-20 and 22, or a pharmaceutically acceptable salt thereof, wherein Cy^3 is selected from pyridin-3-yl and 1-methyl-1*H*-pyrazol-4-yl.

29. The compound of any one of claims 1-28, or a pharmaceutically acceptable salt thereof, wherein each R^4 is independently selected from C_{1-6} alkyl, C_{1-6} haloalkyl, C_{3-10} cycloalkyl, halo, D, CN, and OR^{a8}; wherein said C_{1-6} alkyl, is optionally substituted with 1, 2, 3, or 4 substituents independently selected from R^5.

30. The compound of any one of claims 1-28, or a pharmaceutically acceptable salt thereof, wherein:
(i) each R^4 is independently selected from C_{1-6} alkyl, C_{1-6} haloalkyl, halo, D, CN, and OR^{a8}; or
(ii) each R^4 is independently selected from halo and OR^{a8}.

31. The compound of any one of claims 1-28, or a pharmaceutically acceptable salt thereof, wherein:
(i) each R^4 is independently selected from halo;
(ii) each R^4 is independently selected from F and Cl;
(iii) each R^4 is independently selected from F and methoxy;
(iv) each R^4 is independently selected from F and methyl; or
(v) each R^4 is F.

32. The compound of any one of claims 1-30, or a pharmaceutically acceptable salt thereof, wherein:
(i) each R^5 is independently selected from C_{1-6} alkyl, C_{1-6} haloalkyl, halo, D, CN, OR^{a9}, and $NR^{c9}R^{d9}$; or
(ii) each R^5 is independently selected from D and F.

33. The compound of any one of claims 1-32, or a pharmaceutically acceptable salt thereof, wherein:

(i) each R^g is OH; and/or

(ii) n is 2.

34. The compound of any one of claims 1-3 and 5-33, or a pharmaceutically acceptable salt thereof, wherein A is N.

35. The compound of any one of claims 1, 2, and 5-33, or a pharmaceutically acceptable salt thereof, wherein:

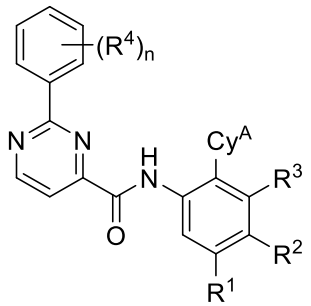
(i) A is CR^{16}; and/or

(ii) R^{16} is H, CN, or OR^{a16}; and/or

(iii) R^{a16} is selected from H and C_{1-6} alkyl; or R^{a16} is methyl.

36. The compound of any one of claims 1-4, having:

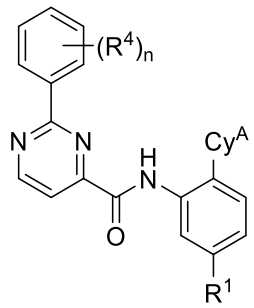
(i) Formula IA:



IA,

or a pharmaceutically acceptable salt thereof;

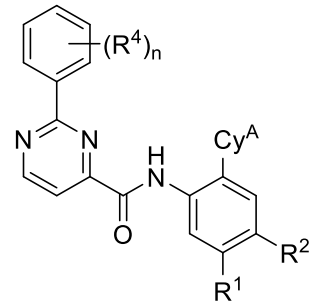
(ii) Formula IIA:



IIA,

or a pharmaceutically acceptable salt thereof;

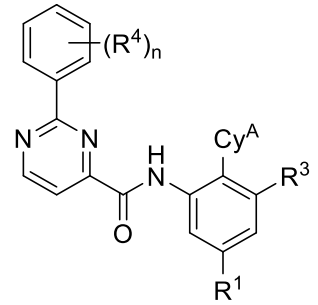
(iii) Formula IIB:



IIB,

or a pharmaceutically acceptable salt thereof;

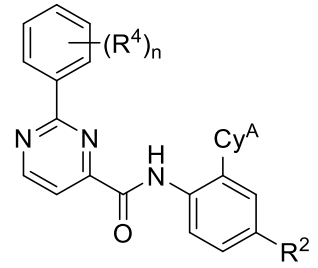
(iv) Formula IIC:



IIC,

or a pharmaceutically acceptable salt thereof;

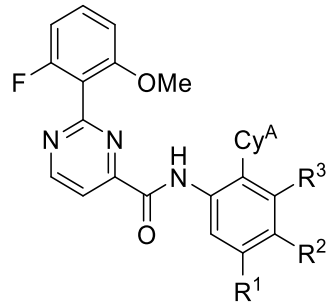
(v) Formula IID:



IID,

or a pharmaceutically acceptable salt thereof; or

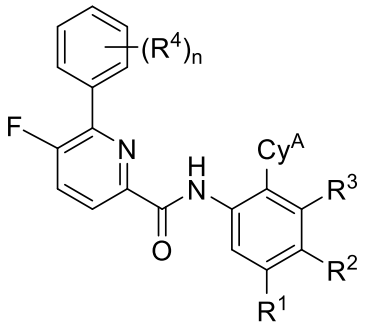
(vi) Formula III:



III,

or a pharmaceutically acceptable salt thereof.

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

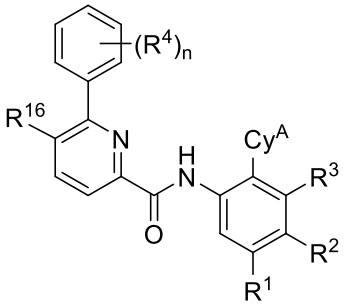


IB,

or a pharmaceutically acceptable salt thereof.

38. The compound of any one of claims 1 and 2, having:

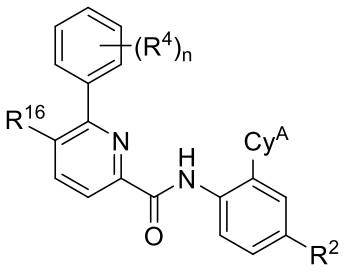
(i) Formula IC:



IC,

or a pharmaceutically acceptable salt thereof;

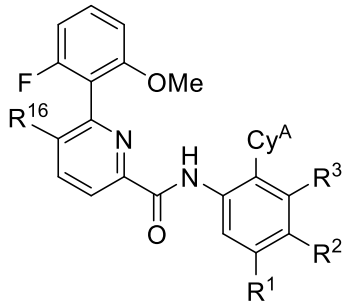
(ii) Formula IV:



IV,

or a pharmaceutically acceptable salt thereof;

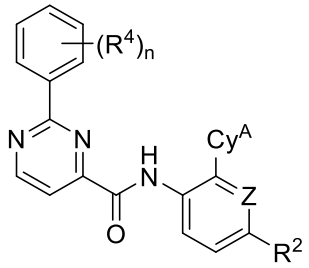
(iii) Formula V:



V,

or a pharmaceutically acceptable salt thereof; or

(iv) Formula VI:



VI,

or a pharmaceutically acceptable salt thereof.

39. The compound of claim 1 selected from:

(i)

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;

(ii)

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-1H-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-d2)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; or

(iii)

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-d3)-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.

40. The compound of claim 1, which is *N*-(2-((2*S*,4*S*)-4-amino-2-(hydroxymethyl)pyrrolidin-1-yl)-5-fluorophenyl)-2-(2-fluoro-6-methoxyphenyl)pyrimidine-4-carboxamide, or a pharmaceutically acceptable salt thereof.

41. The compound of claim 1, which is *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, or a pharmaceutically acceptable salt thereof.

42. The compound of claim 1, which is *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, or a pharmaceutically acceptable salt thereof.

43. A pharmaceutical composition comprising a compound of any one of claims 1-42, or a pharmaceutically acceptable salt thereof, and at least one pharmaceutically acceptable carrier or excipient.

44. A compound according to any one of claims 1 to 42, or a pharmaceutically acceptable salt thereof, for use in the treatment of cancer, optionally wherein the cancer is selected from breast cancer, colorectal cancer, lung cancer, ovarian cancer, and pancreatic cancer.

45. Use of a compound according to any one of claims 1 to 42, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for the treatment of cancer, optionally wherein the cancer is selected from breast cancer, colorectal cancer, lung cancer, ovarian cancer, and pancreatic cancer.