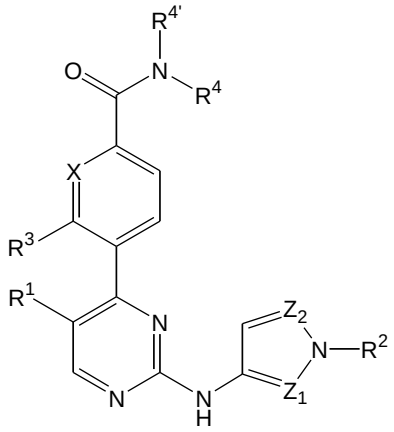
Amended CLAIMS

(Marked)

1. A compound having the structural formula (I):



(I)

wherein

X is N or CR^x, wherein R^x is R', halogen, CN or OR';

each of Z_1 and Z_2 is independently selected from N and CR', *provided* that one of Z_1 and Z_2 is N and the other is CR';

R^1 is Cl;

R^2 is a ~~C_1~~C_3~~-C_{16}~~-C_6 ~~aliphatic group optionally comprising one or more heteroatoms selected from N, O, and S, wherein the aliphatic group is optionally substituted with one or more of halogen, OR', NRR', CN, CONRR', NRCOR' and C_1-C_6 alkyl, which is in turn optionally substituted with F, OR' or NRR'~~cyclic alkyl;

R^3 is R', halogen or CN;

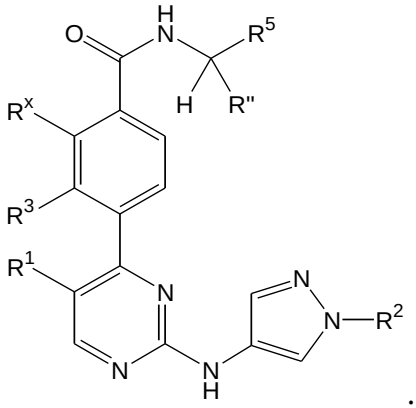
$R^{4'}$ is H ~~or a C_1-C_6 alkyl~~;

R^4 is -CHR"-R^5, wherein R" is H or a C_1-C_6 alkyl and R^5 is a CN~~,~~ or CF_3~~, OR' or a C_1-C_{11} aliphatic group with 0 to 4 carbon atoms replaced by one or more heteroatoms selected from N, O, and S, wherein the aliphatic group is optionally substituted with one or more of halogen, OR', NRR', CN, CONRR', NRCOR' and C_1-C_6 alkyl, which is in turn optionally substituted with F, OR' or NRR'~~; and

each ~~R and~~ R' is independently hydrogen or a C_1-C_{12} unsubstituted or substituted alkyl group,

or a pharmaceutically acceptable salt thereof.

2. The compound of claim 1, wherein ~~$R^{4'}$ is H,~~ X is CR^x, Z_1 is CH and Z_2 is N, having the structural formula (II):



(II)

3. The compound of claim 1 or 2, wherein R^x is hydrogen, halogen, C_1-C_6 unsubstituted or substituted alkyl or alkoxy.

4. The compound of claim 3, wherein R^x is H.

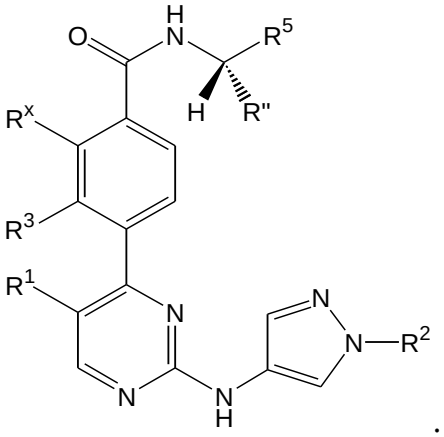
5. The compound of claim 1, wherein X is N.

6. The compound of any one of claims 1-5, wherein R^3 is H.

7. The compound of any one of claims 1-5, wherein R^3 is F, CH_3 or Cl.

8. The compound of any one of claims 1-5, wherein R^3 is F.

9. The compound of claim 1, wherein X is CR^x, ~~$R^{4'}$ is H,~~ Z_1 is CH and Z_2 is N, having the structural formula (III):

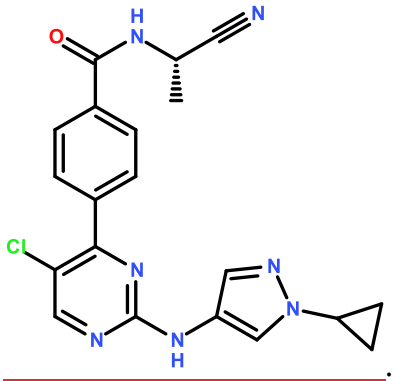


(III)

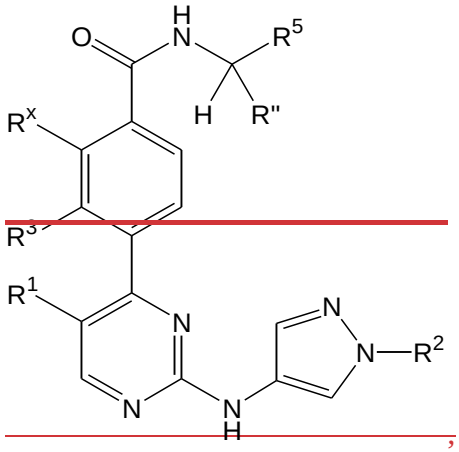
10. The compound of claim 9, wherein R^x is H, $R^{''}$ is CH_3, R^3 is H and R^5 is CN.

11. The compound of any one of claims 1-10, wherein R^2 is ~~a C_1-C_6 aliphatic group with 0 to 2 carbon atoms replaced by one or more heteroatoms selected from N, O, and S, optionally substituted with a CN or CF_3 group~~cyclopropyl.

12. The compound of ~~any one of claims 1-10, wherein R^2 is a C_7-C_{16} aliphatic group with 0 to 3 carbon atoms replaced by one or more heteroatoms selected from N, O, and S, optionally substituted with a CN or CF_3 group~~claim 1, having the structural formula:



~~13. The compound of claim 1, having the structural formula of (II):~~



(II)

wherein

R^2 is a C_3-C_6 cyclic alkyl;

R^3 is R';

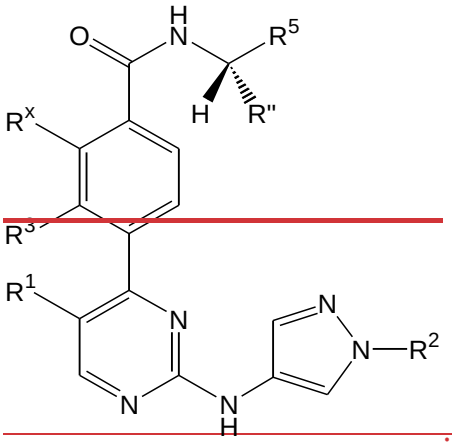
R^5 is a CN;

R^x is R', halogen, CN or OR';

R' is H or a C_1-C_{12} unsubstituted or substituted alkyl group; and

R" is a C_1-C_6 alkyl.

14. The compound of claim 13, wherein R" is in the *S* configuration, having the structural formula (III):



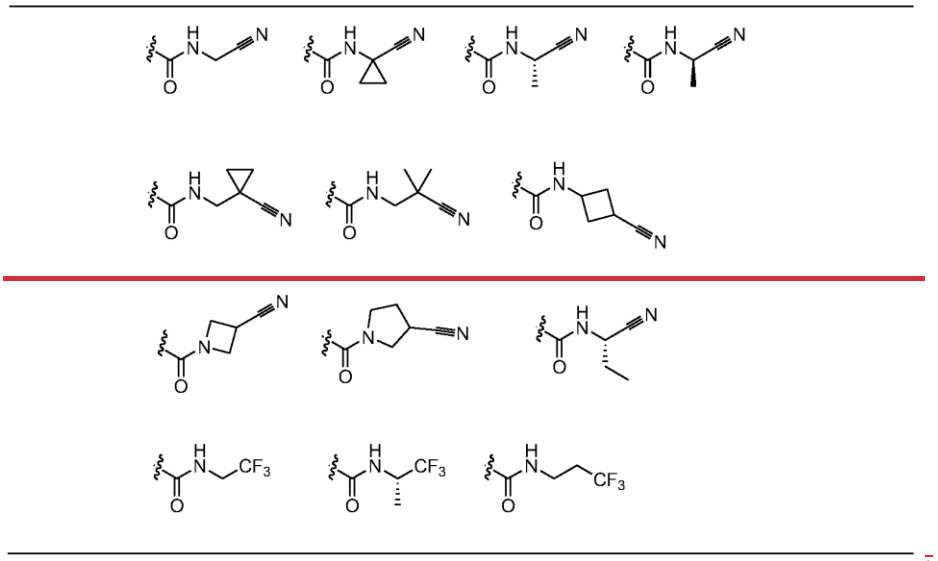
(III)

15. The compound of claim 13 or 14, wherein R" is methyl.

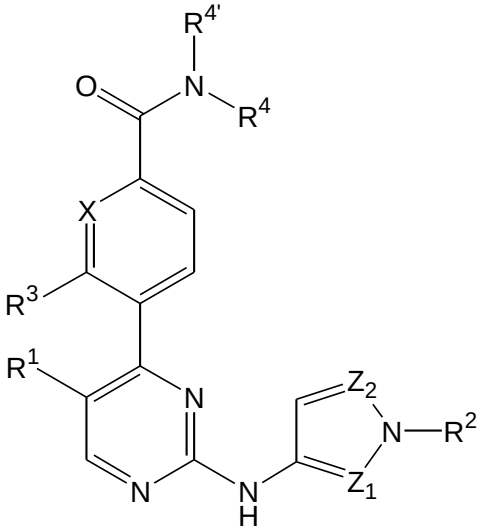
16. The compound of any one of claims 13-15, wherein R^x is H and R^3 is H.

17. The compound of claim 16, wherein R^2 is cyclopropyl.

~~18. The compound of claim 1, wherein C(O)NR^{4}R$^{4'}$ is selected from the below table:~~



~~19~~13. A compound having the structural formula (I):



(I)

wherein

X is N or CR^x, wherein R^x is R', halogen, CN or OR';

each of Z_1 and Z_2 is independently selected from N and CR', *provided* that one of Z_1 and Z_2 is N and the other is CR';

R^1 is CH_3;

R^2 is a C_1-C_3 alkyl group substituted with CN;

R^3 is R', halogen or CN;

$R^{4'}$ is H ~~or a C_1-C_6 alkyl~~;

R^4 is -CHR"-R^5, wherein R" is H or a C_1-C_6 alkyl and R^5 is a CN~~,~~ or CF_3 ~~or OR'~~; and

each ~~R and~~ R' is independently hydrogen or a C_1-C_{12} unsubstituted or substituted alkyl group,

or a pharmaceutically acceptable salt thereof.

~~20~~14. The compound of claim ~~19~~13, wherein R^2 is CH_2CN.

~~21~~15. The compound of claim ~~19~~ 13 or ~~20~~14, wherein ~~$R^{4'}$~~ R" is H.

~~22. The compound of any one of claims 19-21, wherein R^4 is -CH_2R^5, wherein R^5 is CN or CF_3.~~

~~23~~16. The compound of claim ~~22~~13, wherein R^5 is CN.

~~24~~17. The compound of any one of claims ~~19-23~~13-16, wherein X is CR^x.

~~25~~18. The compound of claim ~~24~~17, wherein R^x is H.

~~26~~19. The compound of any one of claims ~~19-25~~13-16, wherein X is N.

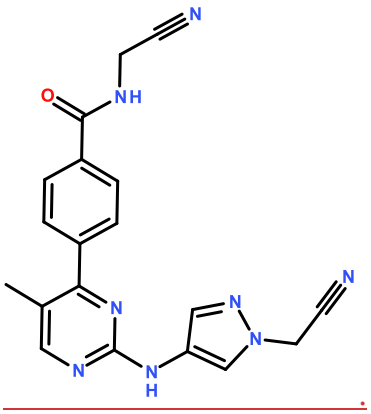
~~27~~20. The compound of any one of claims ~~19-26~~13-19, wherein R^3 is H.

~~28~~21. The compound of ~~any one of claims 19-27~~claim 20, wherein Z_1 is CH and Z_2 is N.

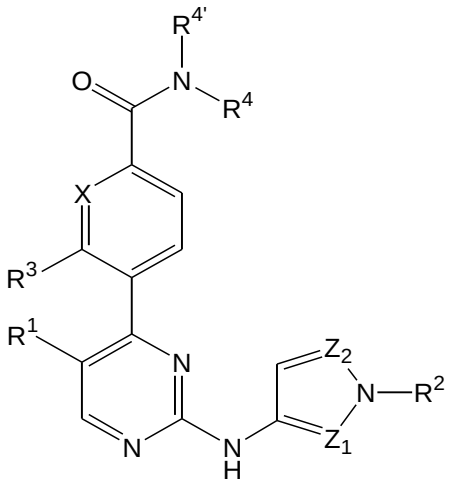
~~29~~22. The compound of claim ~~19~~13, wherein R^2 is CH_2CN, R^3 is H, ~~$R^{4'}$ is H,~~ X is ~~CR*~~CH, ~~wherein R^* is H,~~ Z_1 is CH and Z_2 is N.

~~30~~23. The compound of claim ~~29~~22, wherein R^4 is -CH_2CN.

24. The compound of claim 13, having the structural formula:



~~31~~25. A compound having the structural formula (I):



(I)

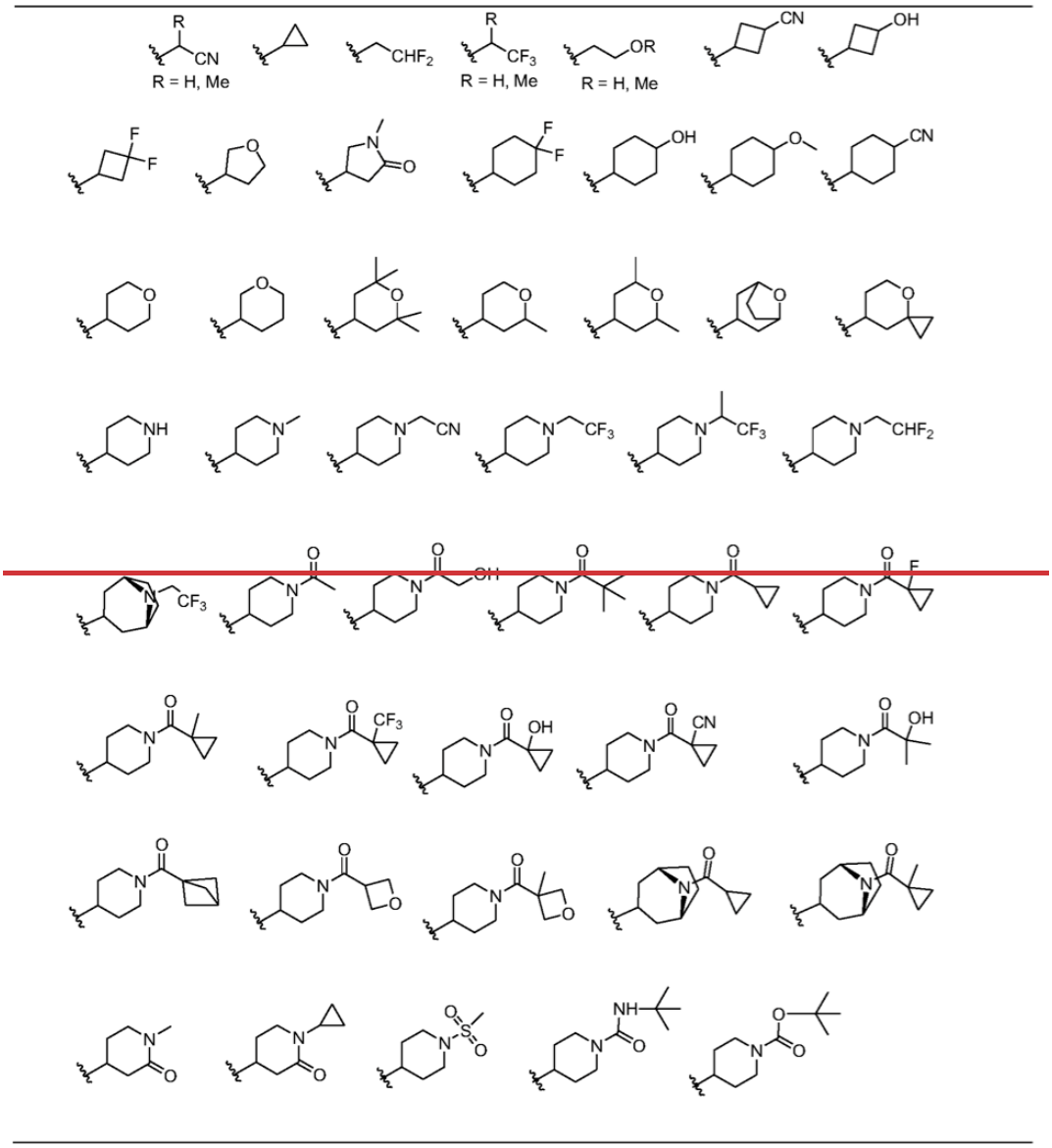
wherein

X is N or CR^x, wherein R^x is R', halogen, CN or OR';

each of Z_1 and Z_2 is independently selected from N and CR', *provided* that one of Z_1 and Z_2 is N and the other is CR';

R^1 is CH_3;

R^2 is- a six-membered cyclic aliphatic group comprising an N or O, wherein the cyclic aliphatic group is substituted with one or more C_1-C_3 alkyl groups~~selected from the below table:~~



;

R^3 is R', halogen or CN;

$R^{4'}$ is H ~~or a C_1-C_6 alkyl~~;

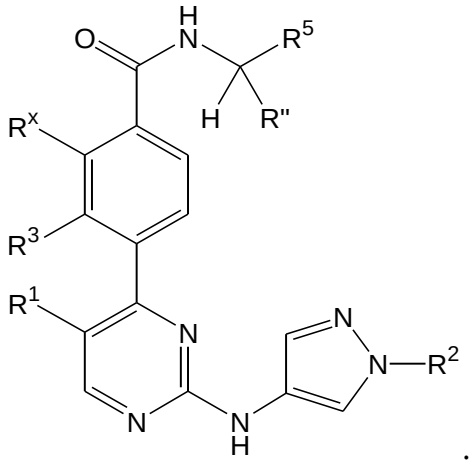
R^4 is -CHR"-R^5, wherein R" is H or a C_1-C_6 alkyl and R^5 is a CN~~,~~ or CF_3 ~~or OR'~~;

and

each ~~R and~~ R' is independently hydrogen or a C_1-~~C_{12}~~-C_3 unsubstituted or substituted alkyl group,

or a pharmaceutically acceptable salt thereof.

~~32~~26. The compound of claim ~~31~~25, wherein ~~$R^{4'}$ is H,~~ X is CR^x, Z_1 is CH, and Z_2 is N, having the structural formula (II):



(II)

~~33~~27. The compound of claim ~~31~~25, wherein X is ~~CR^x~~CH~~, wherein R^x is hydrogen, halogen, C_1-C_6 unsubstituted or substituted alkyl or alkoxy~~.

~~34~~28. The compound of claim ~~31~~25, wherein X is N.

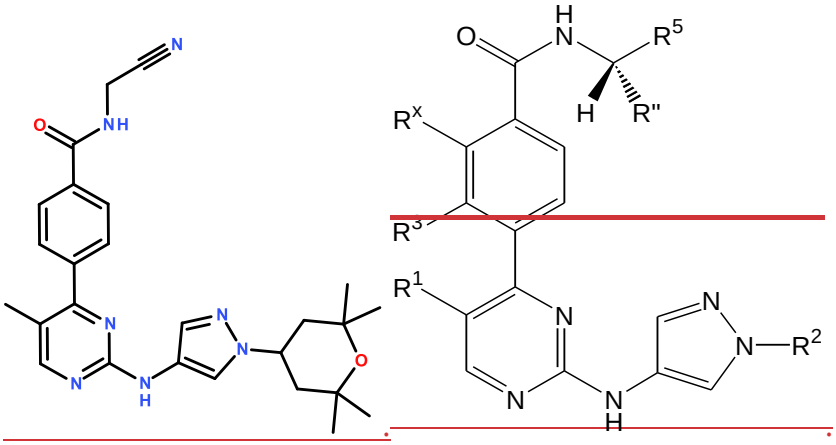
29. The compound of claim 25, wherein R^2 is a six-membered cyclic aliphatic group comprising an O substituted with two or more C_1-C_3 alkyl groups.

~~35~~30. The compound of any one of claims ~~31-34~~25-29, wherein R^3 is H, F, CH_3 or Cl.

~~36~~31. The compound of ~~any one of claims 31-35~~claim 30, wherein ~~Z_1 is CH and Z_2 is N~~R^3 is H.

~~37~~32. The compound of ~~any one of claims 31-36~~claim 31, wherein $R^{"}$ is H and R^5 is CN.

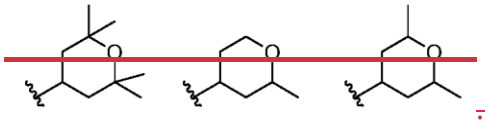
33. The compound of claim 25, having the structural formula:~~38. The compound of claim 31, wherein X is CR^x, R^3 is H, $R^{4'}$ is H, Z_1 is CH and Z_2 is N, having the structural formula (III):~~



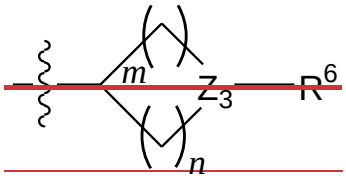
(III)

39. The compound of claim 38, wherein $R^{"}$ is CH_3 and R^5 is CN.

40. The compound of any one of claims 31-39, wherein R^2 is selected from:



41. The compound of claim 31, wherein R^2 is:



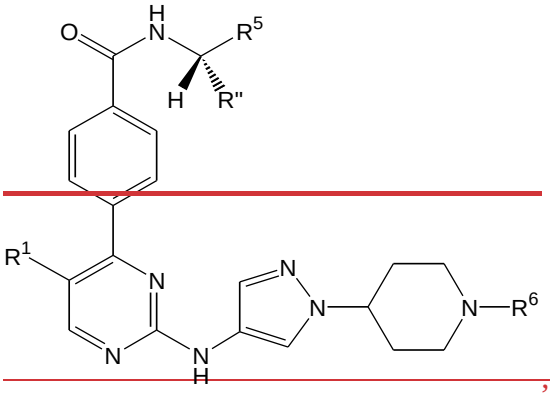
wherein

Z_3 is N, CH or O, wherein when Z_3 is O, R^6 is absent;

each of *m* and *n* is independently 0, 1, 2, 3 or 4; provided that *m* and *n* are not both 0 at the same time, and

R^6 is a C_1-C_6 alkyl, CN, halogen or $C(O)R^7$, wherein R^7 is a C_1-C_6 alkyl; *provided that* when Z_3 is N, R_6 is not CN or halo.

42. The compound of claim 31, having the structural formula (IV):

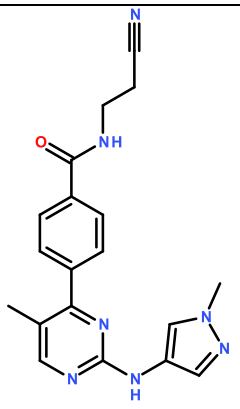
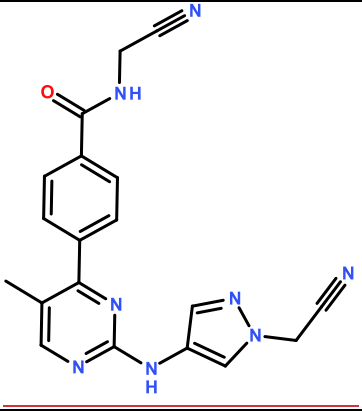


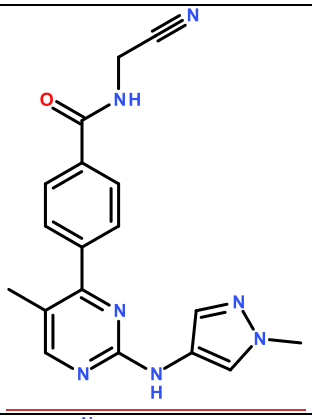
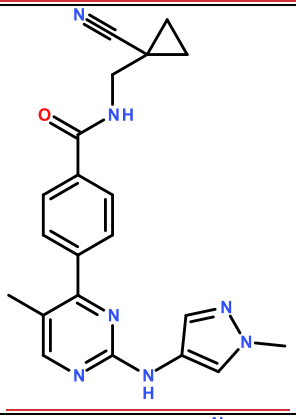
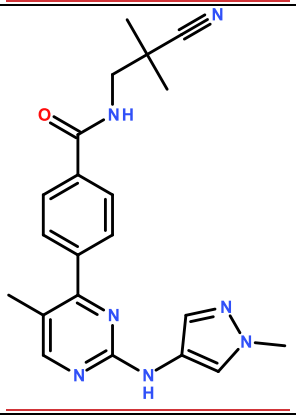
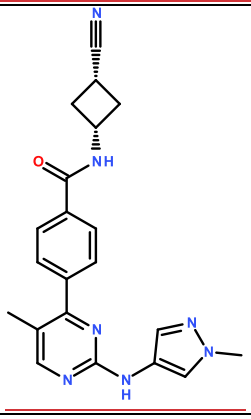
~~(IV)~~

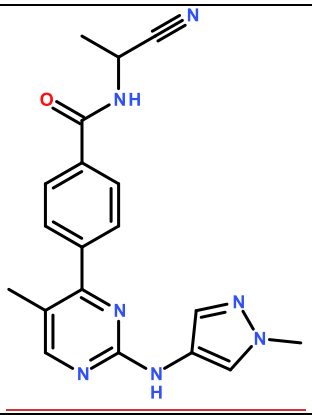
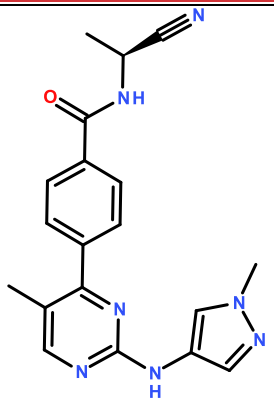
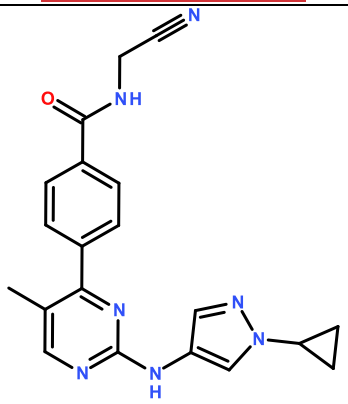
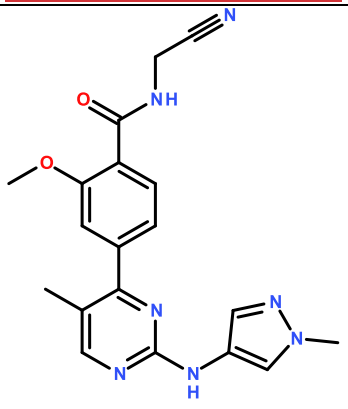
~~wherein R" is H or C_1-C_6 alkyl, R^6 is a C_1-C_6 alkyl or C(O)R^7, wherein R^7 is a C_1-C_6 alkyl, and R^5 is a CN, CF_3 or OR'.~~

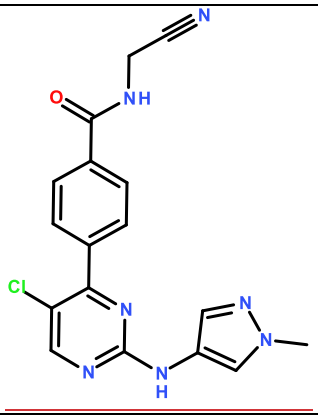
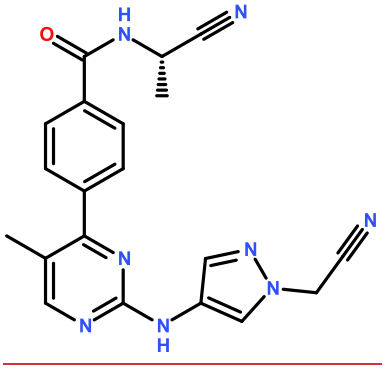
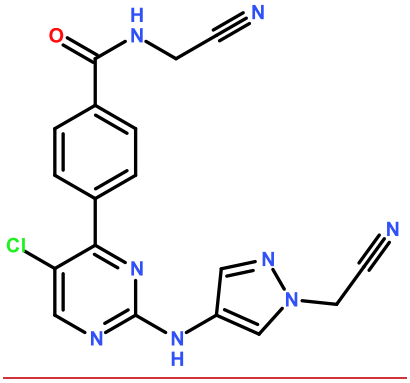
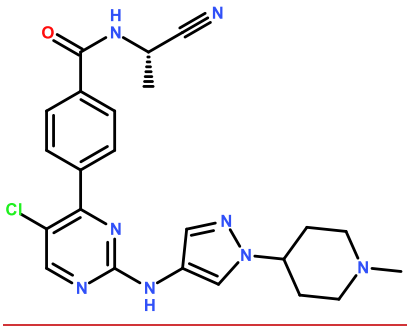
~~43. The compound of claim 32, wherein R^2 is R^8-CN, wherein R^8 is a $(CH_2)_m$, wherein *m* is 1, 2, 3, 4, 5 or 6.~~

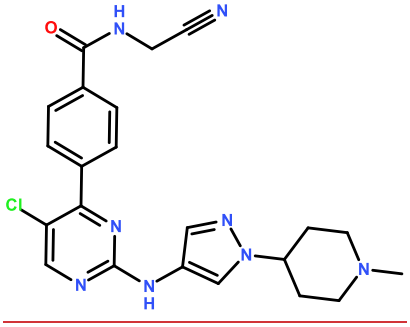
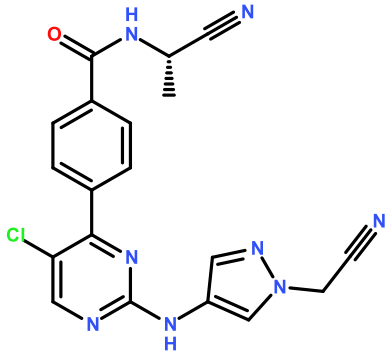
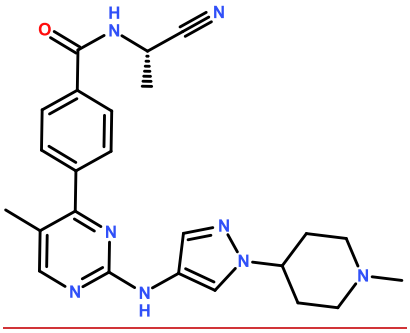
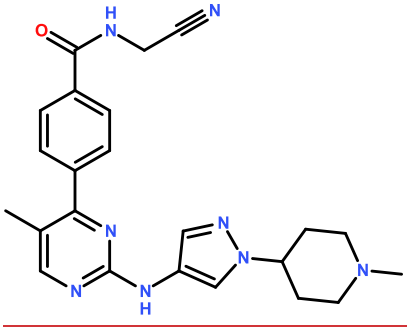
~~44~~34. The compound of any of claims 1~~-43~~, 13 and 25, selected from the group consisting of:

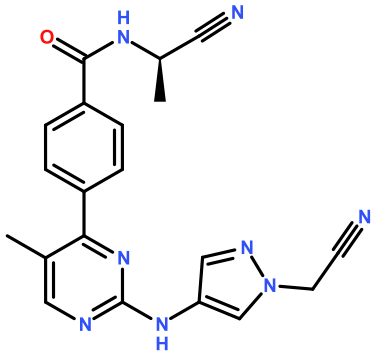
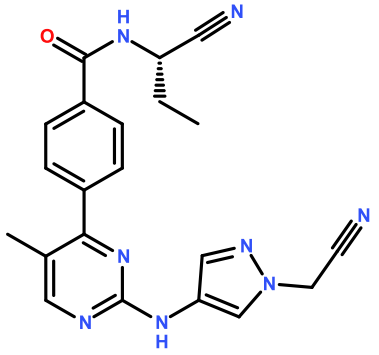
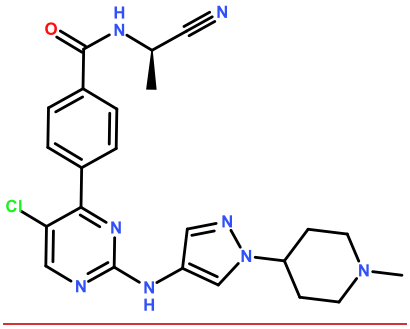
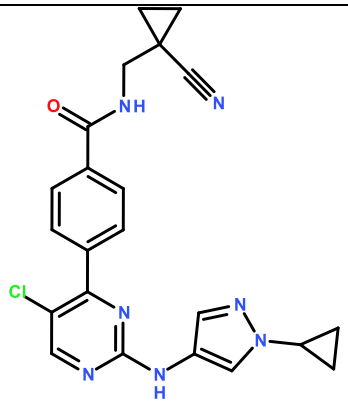
Example	Structure	IUPAC Name
2		N-(2-cyanoethyl)-4-(5-methyl-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
4		N-(cyanomethyl)-4-(2-((1-(cyanomethyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide

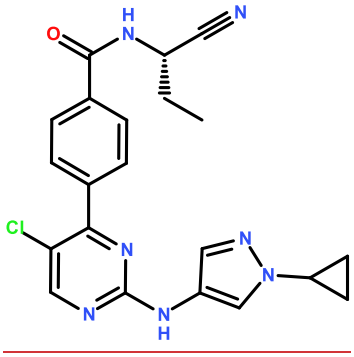
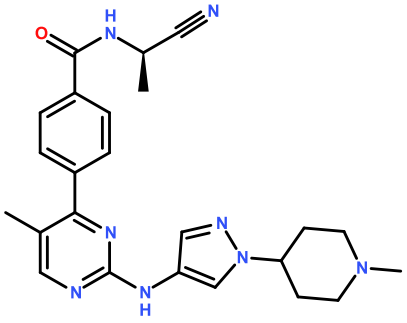
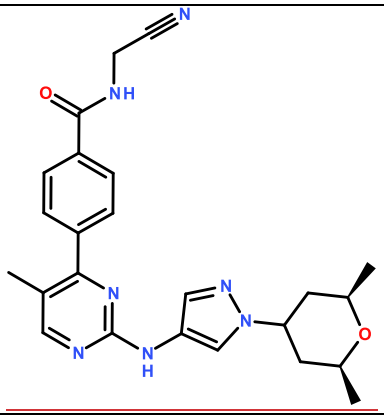
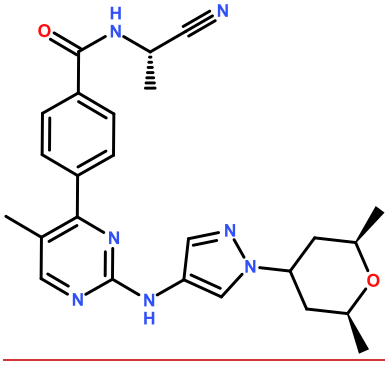
11		N-(cyanomethyl)-4-(5-methyl-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
12		N-((1-cyanocyclopropyl)methyl)-4-(5-methyl-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
13		N-(2-cyano-2-methylpropyl)-4-(5-methyl-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
16		N-((1s,3s)-3-cyanocyclobutyl)-4-(5-methyl-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide

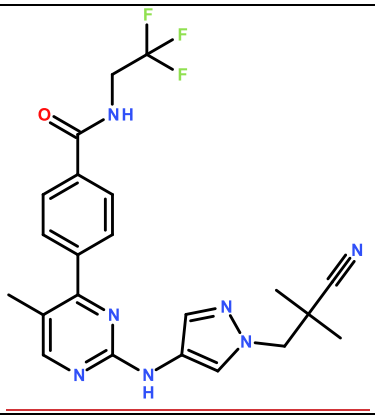
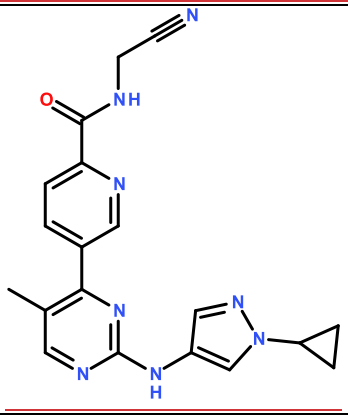
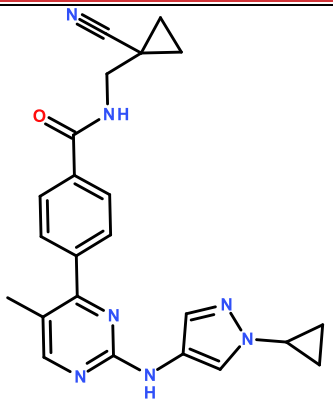
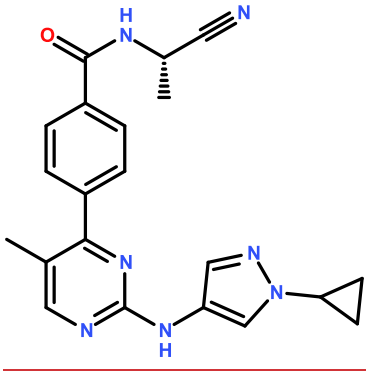
17		N-(1-cyanoethyl)-4-(5-methyl-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
18		(S)-N-(1-cyanoethyl)-4-(5-methyl-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
25		N-(cyanomethyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide
33		N-(cyanomethyl)-2-methoxy-4-(5-methyl-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide

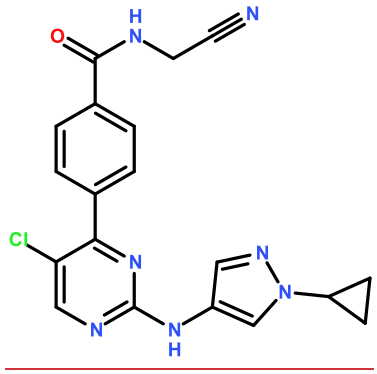
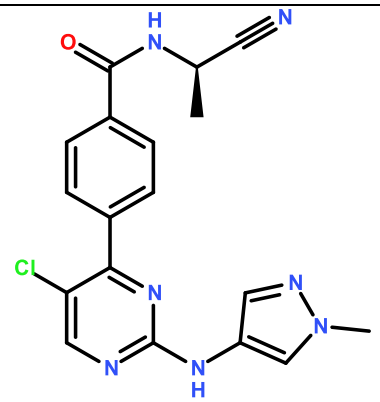
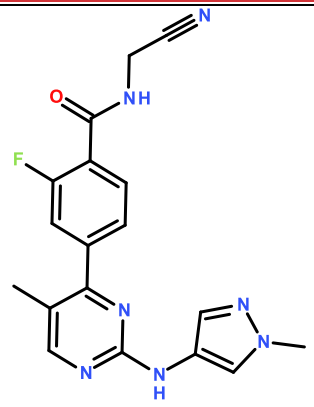
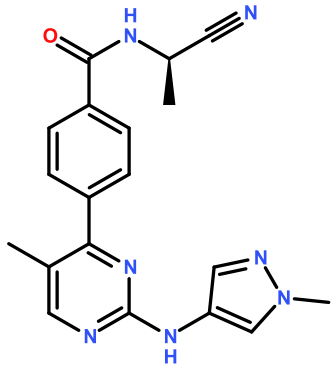
34		4-(5-chloro-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(cyanomethyl)benzamide
40		(S)-N-(1-cyanoethyl)-4-(2-((1-(cyanomethyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide
41		4-(5-chloro-2-((1-(cyanomethyl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(cyanomethyl)benzamide
43		(S)-4-(5-chloro-2-((1-(1-methylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide

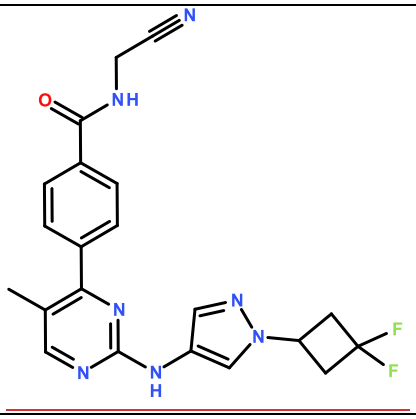
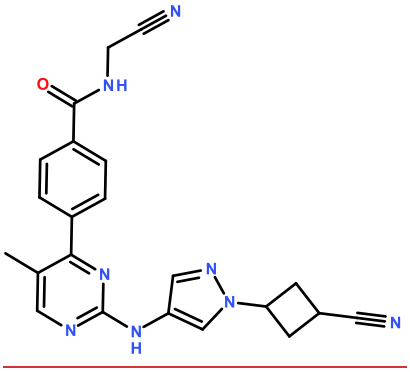
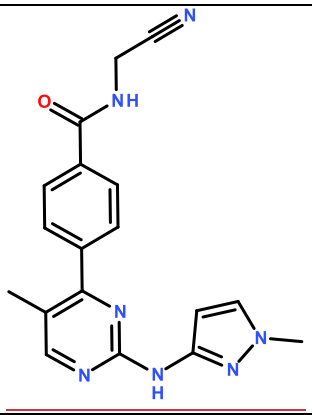
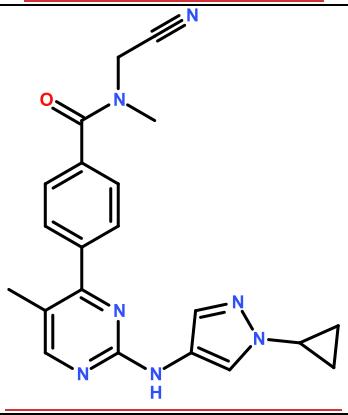
44		4-(5-chloro-2-((1-(1-methylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(cyanomethyl)benzamide
46		(S)-4-(5-chloro-2-((1-(cyanomethyl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide
48		(S)-N-(1-cyanoethyl)-4-(5-methyl-2-((1-(1-methylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
49		N-(cyanomethyl)-4-(5-methyl-2-((1-(1-methylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide

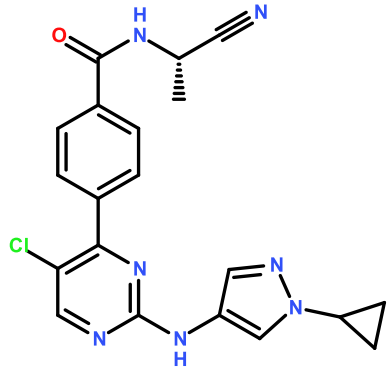
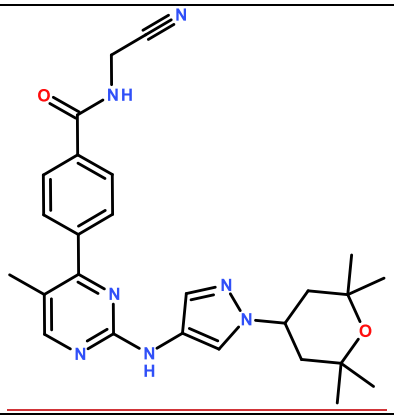
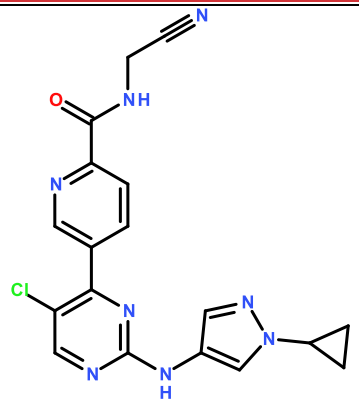
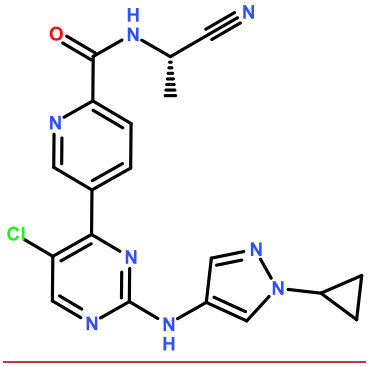
54		(R)-N-(1-cyanoethyl)-4-(2-((1-(cyanomethyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide
55		(S)-4-(2-((1-(cyanomethyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)-N-(1-cyanopropyl)benzamide
58		(R)-4-(5-chloro-2-((1-(1-methylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide
60		4-(5-chloro-2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-((1-cyanocyclopropyl)methyl)benzamide

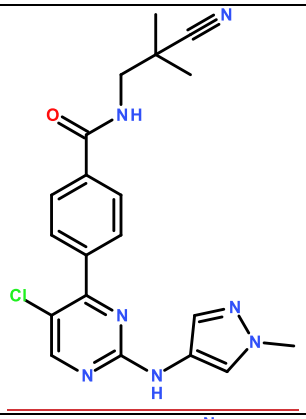
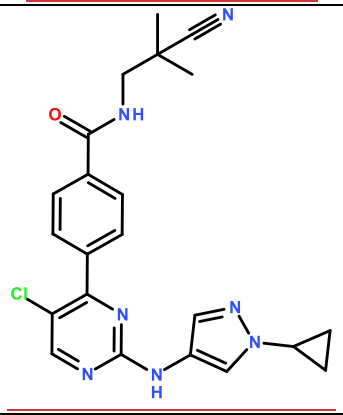
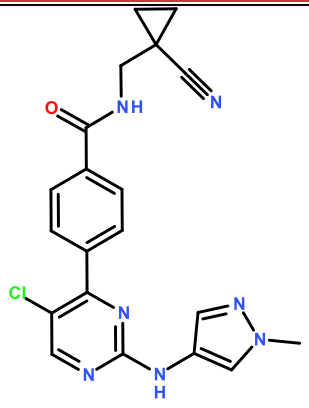
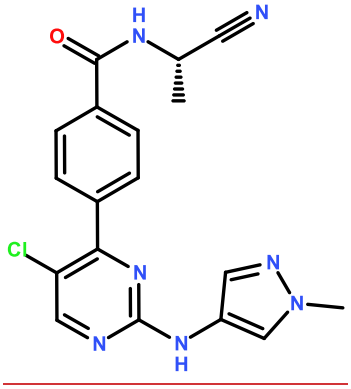
61		(S)-4-(5-chloro-2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanopropyl)benzamide
62		(R)N-(1-cyanoethyl)-4-(5-methyl-2-((1-(1-methylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
68		N-(cyanomethyl)-4-(2-(1-cis-2,6-dimethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide
73		N-((S)-1-cyanoethyl)-4-(2-((1-(cis-2,6-dimethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide

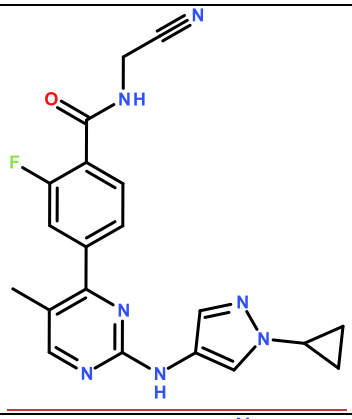
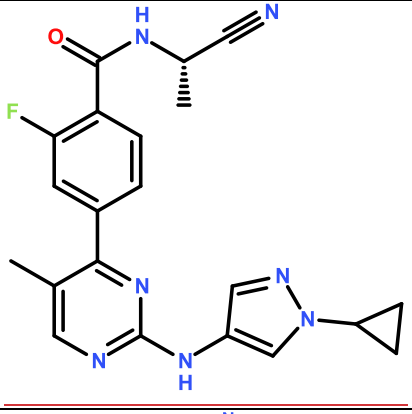
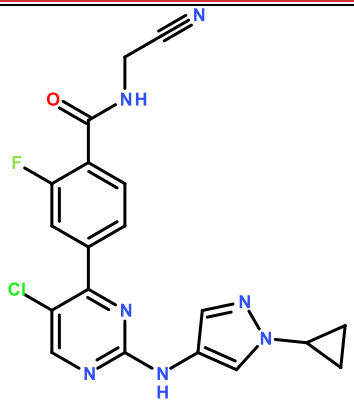
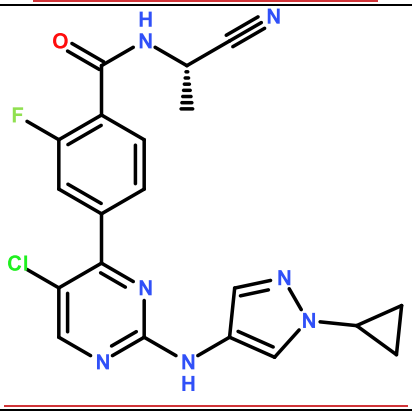
81		4-(2-((1-(2-cyano-2-methylpropyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)-N-(2,2,2-trifluoroethyl)benzamide
83		N-(cyanomethyl)-5-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)picolinamide
93		N-((1-cyanocyclopropyl)methyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide
94		(S)-N-(1-cyanoethyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide

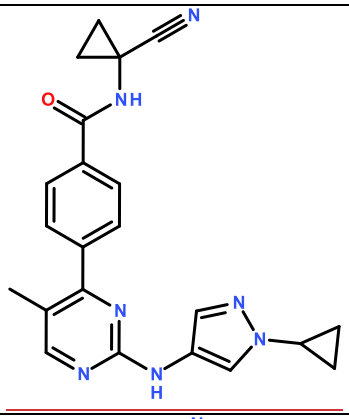
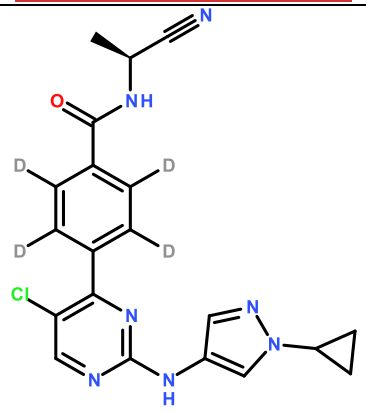
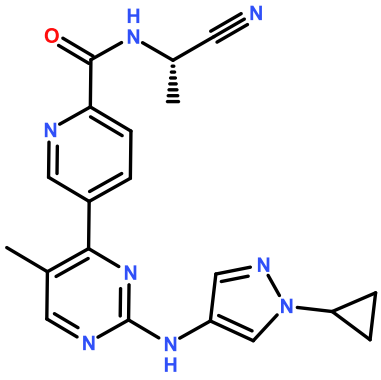
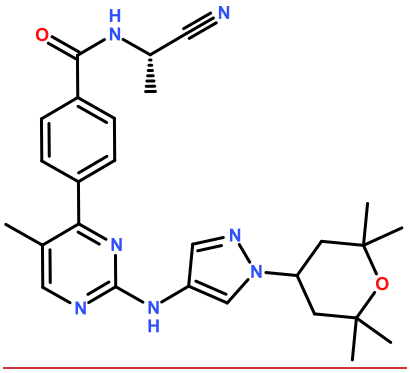
95		4-(5-chloro-2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(cyanomethyl)benzamide
97		(R)-4-(5-chloro-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide
100		N-(cyanomethyl)-2-fluoro-4-(5-methyl-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
101		(R)-N-(1-cyanoethyl)-4-(5-methyl-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide

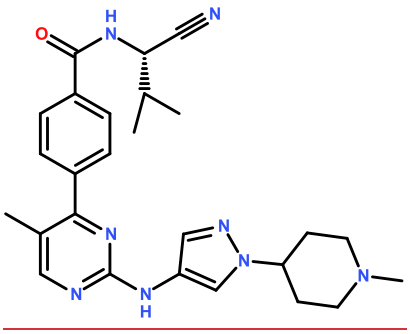
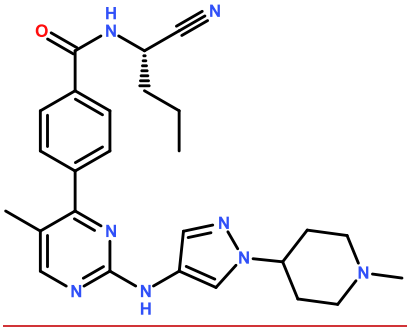
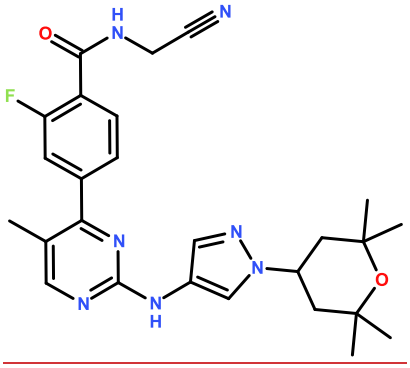
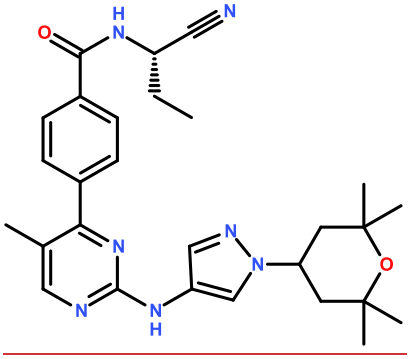
104		N-(cyanomethyl)-4-(2-((1-(3,3-difluorocyclobutyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide
106		4-(2-((1-(3-cyanocyclobutyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)-N-(cyanomethyl)benzamide
107		N-(cyanomethyl)-4-(5-methyl-2-((1-methyl-1H-pyrazol-3-yl)amino)pyrimidin-4-yl)benzamide
108		N-(cyanomethyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)-N-methylbenzamide

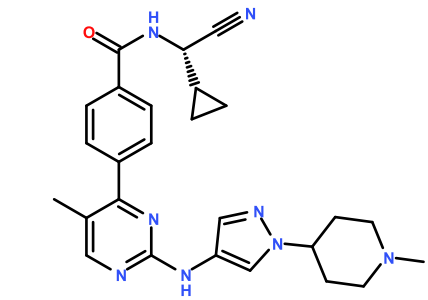
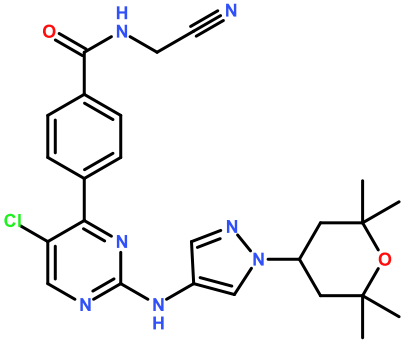
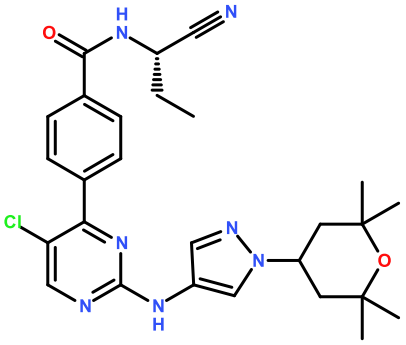
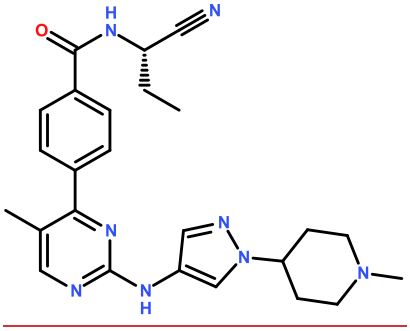
111		(S)-4-(5-chloro-2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide
113		N-(cyanomethyl)-4-(5-methyl-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
120		5-(5-chloro-2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(cyanomethyl)picolinamide
121		(S)-5-(5-chloro-2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)picolinamide

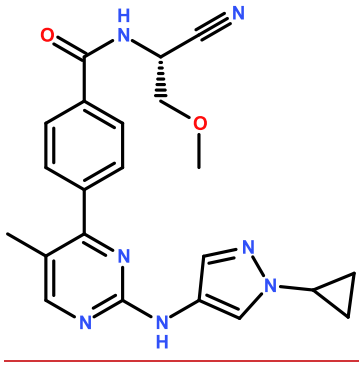
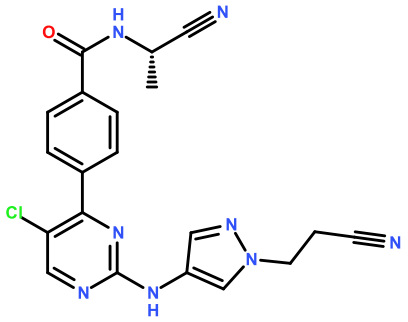
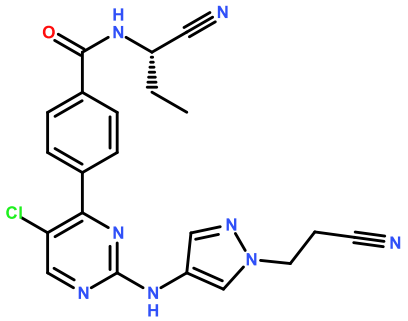
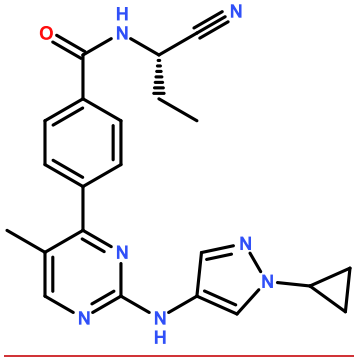
122		4-(5-chloro-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(2-cyano-2-methylpropyl)benzamide
123		4-(5-chloro-2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(2-cyano-2-methylpropyl)benzamide
124		4-(5-chloro-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-((1-cyanocyclopropyl)methyl)benzamide
125		(S)-4-(5-chloro-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide

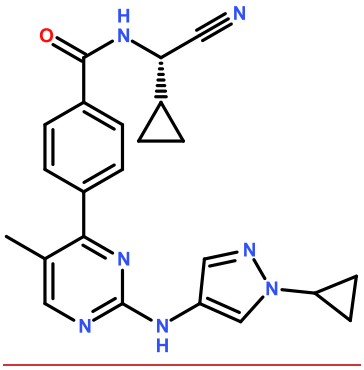
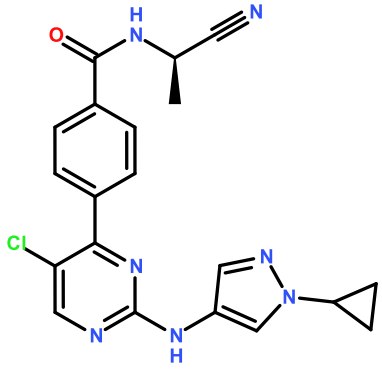
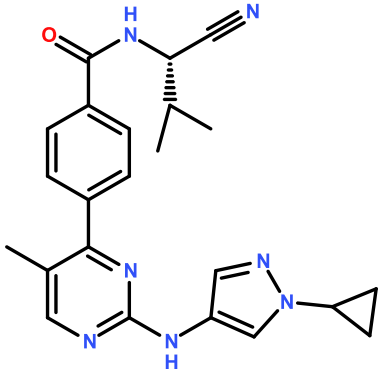
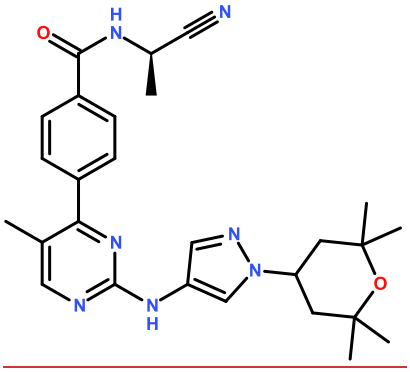
128		N-(cyanomethyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)-2-fluorobenzamide
129		(S)-N-(1-cyanoethyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)-2-fluorobenzamide
135		4-(5-chloro-2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(cyanomethyl)-2-fluorobenzamide
137		(S)-4-(5-chloro-2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)-2-fluorobenzamide

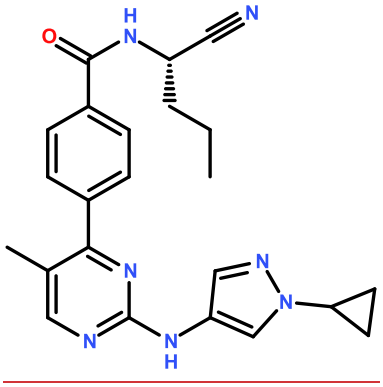
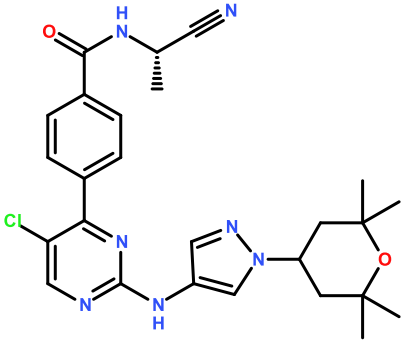
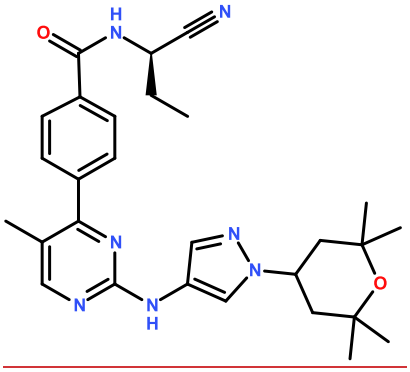
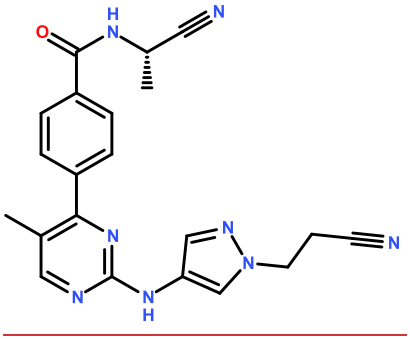
160		N-(1-cyanocyclopropyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide
162		(S)-4-(5-chloro-2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide-2,3,5,6-d_4
164		(S)-N-(1-cyanoethyl)-5-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)picolinamide
173		(S)-N-(1-cyanoethyl)-4-(5-methyl-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide

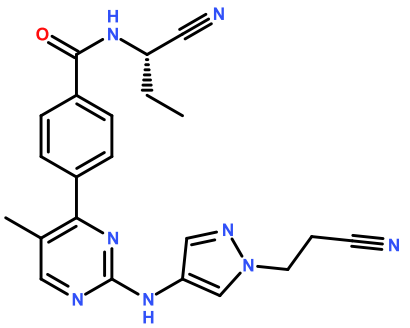
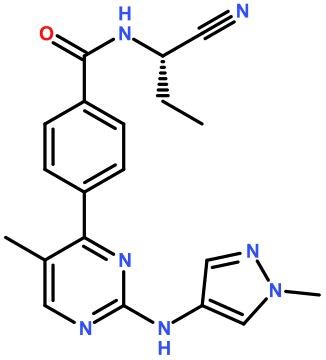
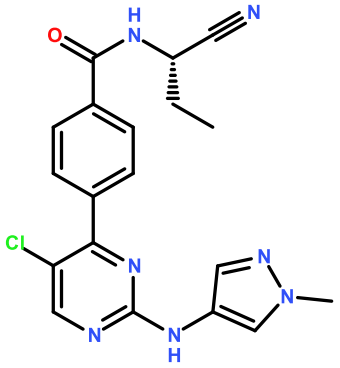
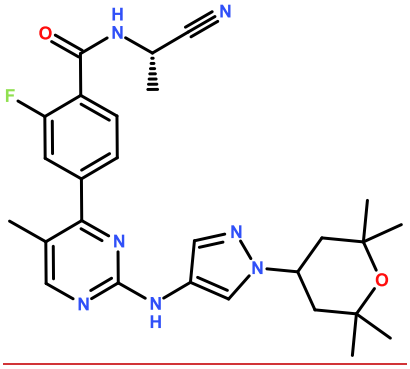
174		(S)-N-(1-cyano-2-methylpropyl)-4-(5-methyl-2-((1-(1-methylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
176		(S)-N-(1-cyanobutyl)-4-(5-methyl-2-((1-(1-methylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
178		N-(cyanomethyl)-2-fluoro-4-(5-methyl-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
179		(S)-N-(1-cyanopropyl)-4-(5-methyl-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide

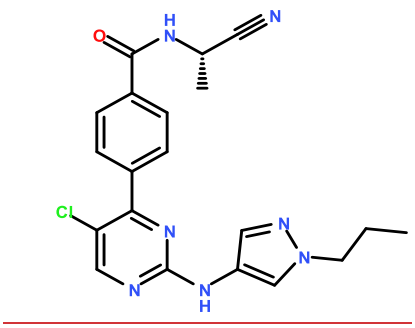
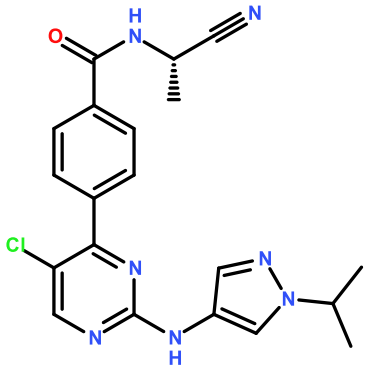
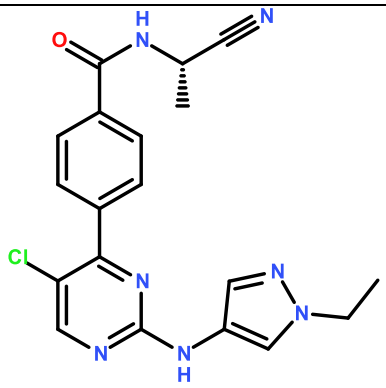
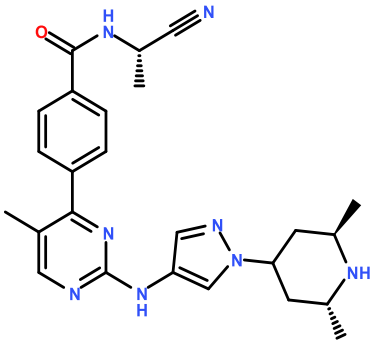
180		(S)-N-(cyano(cyclopropyl)methyl)-4-(5-methyl-2-((1-(1-methylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
181		4-(5-chloro-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(cyanomethyl)benzamide
182		(S)-4-(5-chloro-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanopropyl)benzamide
184		(S)-N-(1-cyanopropyl)-4-(5-methyl-2-((1-(1-methylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide

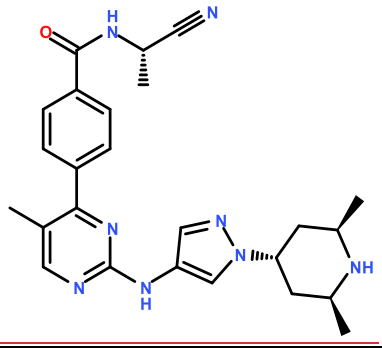
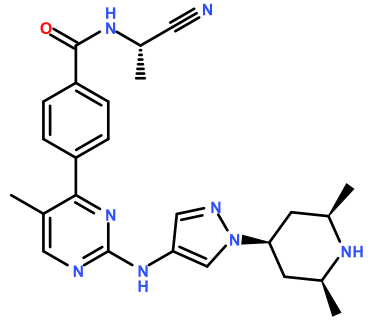
187		(R)-N-(1-cyano-2-methoxyethyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide
189		(S)-4-(5-chloro-2-((1-(2-cyanoethyl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide
190		(S)-4-(5-chloro-2-((1-(2-cyanoethyl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanopropyl)benzamide
193		(S)-N-(1-cyanopropyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide

194		(S)-N-(cyano(cyclopropyl)methyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide
196		(R)-4-(5-chloro-2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide
197		(S)-N-(1-cyano-2-methylpropyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide
198		(R)-N-(1-cyanoethyl)-4-(5-methyl-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide

202		(S)-N-(1-cyanobutyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide
206		(S)-4-(5-chloro-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide
208		(R)-N-(1-cyanopropyl)-4-(5-methyl-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
216		(S)-N-(1-cyanoethyl)-4-(2-((1-(2-cyanoethyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide

217		(S)-4-(2-((1-(2-cyanoethyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)-N-(1-cyanopropyl)benzamide
219		(S)-N-(1-cyanopropyl)-4-(5-methyl-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide
220		(S)-4-(5-chloro-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanopropyl)benzamide
224		(S)-N-(1-cyanoethyl)-2-fluoro-4-(5-methyl-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide

227		(S)-4-(5-chloro-2-((1-propyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide
228		(S)-4-(5-chloro-2-((1-isopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide
229		(S)-4-(5-chloro-2-((1-ethyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide
230		N-((S)-1-cyanoethyl)-4-(2-((1-(trans-2,6-dimethylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide

231		N-((S)-1-cyanoethyl)-4-(2-((1-((2S,4s,6R)-2,6-dimethylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide
232		N-((S)-1-cyanoethyl)-4-(2-((1-((2S,4r,6R)-2,6-dimethylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide.

~~(S)-4-(5-chloro-2-((1-(tetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide~~

~~4-(5-chloro-2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(cyanomethyl)benzamide~~

~~(S)-4-(5-chloro-2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide~~

~~(S)-4-(5-chloro-2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide-2,3,5,6-d_4~~

~~(S)-4-(5-chloro-2-((1-isopropyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide~~

~~(S)-4-(5-chloro-2-((1-ethyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide 4-methylbenzenesulfonate~~

~~(S)-4-(5-chloro-2-((1-(2-hydroxyethyl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide~~

~~(S)-4-(5-chloro-2-((1-(2-hydroxyethyl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanopropyl)benzamide~~

~~(S)-4-(5-chloro-2-((1-(piperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide~~

~~4-(5-chloro-2-((1-(1-methylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(cyanomethyl)benzamide~~

~~(S)-4-(5-chloro-2-((1-(1-methylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide~~

~~4-(5-chloro-2-((1-(cyanomethyl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(cyanomethyl)benzamide~~

~~(S)-4-(5-chloro-2-((1-(tetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanopropyl)benzamide~~

~~(S)-4-(5-chloro-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide~~

~~(S)-4-(5-chloro-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanopropyl)benzamide~~

~~4-(5-chloro-2-((1-(tetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(cyanomethyl)benzamide~~

~~(S)-4-(5-chloro-2-((1-(cyanomethyl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanoethyl)benzamide~~

~~(S)-4-(5-chloro-2-((1-(piperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)-N-(1-cyanopropyl)benzamide~~

~~(S)-4-(2-((1H-pyrazol-4-yl)amino)-5-chloropyrimidin-4-yl)-N-(1-cyanoethyl)benzamide~~

~~(S)-N-(1-cyanobutyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide~~

~~(S)-N-(1-cyanoethyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide~~

~~N-(cyanomethyl)-4-(2-((1-cyclopropyl-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide~~

~~N-(cyanomethyl)-4-(2-((1-(cyanomethyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide~~

~~(S)-N-(1-cyanoethyl)-4-(2-((1-(cyanomethyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide~~

~~(S)-4-(2-((1-(cyanomethyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)-N-(1-cyanopropyl)benzamide~~

~~(S)-N-(1-cyanoethyl)-4-(5-methyl-2-((1-(1-methylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~(S)-N-(cyano(cyclopropyl)methyl)-4-(5-methyl-2-((1-(piperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~(S)-N-(1-cyanopropyl)-4-(5-methyl-2-((1-(piperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~(S)-N-(1-cyanopropyl)-4-(5-methyl-2-((1-(1-methylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~N-(cyanomethyl)-4-(5-methyl-2-((1-(piperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~N-((S)-1-cyanoethyl)-4-(2-((1-(trans-2,6-dimethylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide~~

~~N-((S)-1-cyanoethyl)-4-(2-((1-((2S,4s,6R)-2,6-dimethylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide~~

~~N-((S)-1-cyanoethyl)-4-(2-((1-((2S,4r,6R)-2,6-dimethylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide~~

~~(S)-N-(cyano(cyclopropyl)methyl)-4-(2-((1-(2-hydroxyethyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide~~

~~(S)-N-(1-cyanoethyl)-4-(2-((1-(2-hydroxyethyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide~~

~~(S)-N-(1-cyanobutyl)-4-(2-((1-(2-hydroxyethyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide~~

~~(S)-N-(1-cyanopropyl)-4-(2-((1-(2-hydroxyethyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide~~

~~N-(cyanomethyl)-4-(5-methyl-2-((1-(tetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~N-(cyanomethyl)-4-(5-methyl-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~(S)-N-(1-cyanoethyl)-4-(5-methyl-2-((1-(tetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~(S)-N-(1-cyanoethyl)-4-(5-methyl-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~N-(cyanomethyl)-2-fluoro-4-(5-methyl-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~(S)-N-(1-cyanopropyl)-4-(5-methyl-2-((1-(2,2,6,6-tetramethyltetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~(S)-N-(1-cyanopropyl)-4-(5-methyl-2-((1-(tetrahydro-2H-pyran-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~N-((1-cyanocyclopropyl)methyl)-4-(5-methyl-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~N-(2-cyano-2-methylpropyl)-4-(5-methyl-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~(S)-N-(1-cyanoethyl)-4-(5-methyl-2-((1-methyl-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~N-(cyanomethyl)-4-(5-methyl-2-((1-(1-pivaloylpiperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~N-(cyanomethyl)-4-(5-methyl-2-((1-(2,2,2-trifluoroethyl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~N-(cyanomethyl)-4-(5-methyl-2-((1-(1-(1-methylcyclopropanecarbonyl)piperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~(S)-N-(1-cyanoethyl)-4-(2-((1-(1-(2-hydroxyacetyl)piperidin-4-yl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)benzamide~~

~~4-(2-((1-(trans-4-cyanocyclohexyl)-1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)-N-((S)-1-cyanoethyl)benzamide~~

~~N-((S)-1-cyanoethyl)-4-(5-methyl-2-((1-((S*)-1,1,1-trifluoropropan-2-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~N-((S)-1-cyanoethyl)-4-(5-methyl-2-((1-((R*)-1,1,1-trifluoropropan-2-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~(S)-N-(1-cyanoethyl)-4-(5-methyl-2-((1-(piperidin-4-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~(S)-4-(2-((1H-pyrazol-4-yl)amino)-5-methylpyrimidin-4-yl)-N-(1-cyanoethyl)benzamide~~

~~N-((S)-1-cyanopropyl)-4-(5-methyl-2-((1-((R*)-1,1,1-trifluoropropan-2-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~N-((S)-1-cyanopropyl)-4-(5-methyl-2-((1-((S*)-1,1,1-trifluoropropan-2-yl)-1H-pyrazol-4-yl)amino)pyrimidin-4-yl)benzamide~~

~~45~~35. A pharmaceutical composition comprising a compound according to any of claims 1-~~44~~34, effective to treat or reduce one or more diseases or disorders, in a mammal, including a human, and a pharmaceutically acceptable excipient, carrier, or diluent.

~~46~~36. The pharmaceutical composition of claim ~~45~~35, being suitable for oral administration, topical administration or GI-restricted administration.

~~47~~37. The pharmaceutical composition of claim ~~45~~ 35 or ~~46~~36, being useful to treat or reduce one or more of inflammatory diseases, immune-mediated diseases and cancers, or a related disease or disorder.

~~48~~38. A unit dosage form comprising a pharmaceutical composition according to any of claims ~~45~~35-~~47~~37.