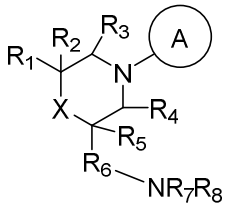
What is claimed is:

1. A compound having a structure represented by formula I:



(I), or a pharmaceutically acceptable salt or stereoisomer thereof,

wherein:

X is CH_2, S, CHF, CHCl, CHOH, or CF_2;

R_1 is hydrogen, cyano, halo, $-OR_9$, $-N(R_9)_2$, $-C(O)N(R_9)_2$, $-SO_2N(R_9)_2$, $-N(R_9)C(O)R_9$, $-N(R_9)SO_2R_9$, $-N(R_9)C(O)N(R_9)_2$, $-P(O)(R_9)_2$, $(C_1\text{-}C_6)$alkyl, $(C_1\text{-}C_6)$haloalkyl, $(C_1\text{-}C_6)$hydroxyalkyl, $(C_3\text{-}C_7)$carbocyclyl, 4- to 7-membered heterocyclyl, $(C_6\text{-}C_{10})$aryl, monocyclic or bicyclic 5- to 10-membered heteroaryl, $(C_2\text{-}C_6)$alkenyl, or $(C_2\text{-}C_6)$alkynyl; wherein said alkyl, alkynyl, carbocyclyl, heterocyclyl, aryl, or heteroaryl is further optionally substituted by one or more, identical or different R_{10} groups;

each R_9 is independently hydrogen, $(C_1\text{-}C_6)$alkyl, $(C_3\text{-}C_7)$carbocyclyl, 4- to 7-membered heterocyclyl, $(C_6\text{-}C_{10})$aryl, or monocyclic or bicyclic 5- to 10-membered heteroaryl; wherein said alkyl, carbocyclyl, heterocyclyl, aryl or heteroaryl is further optionally substituted by one or more, identical or different R_{10} groups;

each R_{10} is independently alkyl, alkenyl, alkynyl, halo, haloalkyl, carbocyclyl, heterocyclyl, hydroxy, alkoxy, cycloalkoxy, heterocycloalkoxy, haloalkoxy, aryloxy, heteroaryloxy, aralkyloxy, alkyenyloxy, alkynyloxy, amino, alkylamino, cycloalkylamino, heterocycloalkylamino, arylamino, heteroarylamino, aralkylamino, N-alkyl-N-arylamino, N-alkyl-N-heteroarylamino, N-alkyl-N-aralkylamino, hydroxyalkyl, aminoalkyl, alkylthio, haloalkylthio, alkylsulfonyl, haloalkylsulfonyl, cycloalkylsulfonyl, heterocycloalkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, aminosulfonyl, alkylaminosulfonyl, cycloalkylaminosulfonyl, heterocycloalkylaminosulfonyl, arylaminosulfonyl, heteroarylaminosulfonyl, N-alkyl-N-arylaminosulfonyl, N-alkyl-N-heteroarylaminosulfonyl, formyl, alkylcarbonyl, haloalkylcarbonyl, alkenylcarbonyl, alkynylcarbonyl, carboxy, alkoxycarbonyl, alkylcarbonyloxy, amino, alkylsulfonylamino, haloalkylsulfonylamino, cycloalkylsulfonylamino, heterocycloalkylsulfonylamino, arylsulfonylamino,

heteroarylsulfonylamino, aralkylsulfonylamino, alkylcarbonylamino, haloalkylcarbonylamino, cycloalkylcarbonylamino, heterocycloalkylcarbonylamino, arylcarbonylamino, heteroarylcarbonylamino, aralkylsulfonylamino, aminocarbonyl, alkylaminocarbonyl, cycloalkylaminocarbonyl, heterocycloalkylaminocarbonyl, arylaminocarbonyl, heteroarylaminocarbonyl, N-alkyl-N-arylaminocarbonyl, N-alkyl-N-heteroarylaminocarbonyl, cyano, nitro, azido, or phosphinyl;

R_2 is hydrogen, cyano, halo, $-OR_9$, $-N(R_9)_2$, $-C(O)N(R_9)_2$, $-SO_2N(R_9)_2$, $-N(R_9)C(O)R_9$, $-N(R_9)SO_2R_9$, $-N(R_9)C(O)N(R_9)_2$, $-P(O)(R_9)_2$, $(C_1\text{-}C_6)$alkyl, $(C_1\text{-}C_6)$haloalkyl, $(C_1\text{-}C_6)$hydroxyalkyl, $(C_3\text{-}C_7)$carbocyclyl, 4- to 7-membered heterocyclyl, $(C_6\text{-}C_{10})$aryl, monocyclic or bicyclic 5- to 10-membered heteroaryl, $(C_2\text{-}C_6)$alkenyl, or $(C_2\text{-}C_6)$alkynyl; wherein said alkyl, alkynyl, carbocyclyl, heterocyclyl, aryl, or heteroaryl is further optionally substituted by one or more, identical or different R_{10} groups, or

R_1 and R_2 together with the same carbon atom to which they are attached form a spiro $(C_3\text{-}C_7)$carbocyclyl group or a 4- to 7-membered heterocyclyl group; wherein said carbocyclyl or heterocyclyl is further optionally substituted by one or more, identical or different R_{10} groups;

R_3 is hydrogen, cyano, halo, $-OR_9$, $-N(R_9)_2$, $-C(O)N(R_9)_2$, $-SO_2N(R_9)_2$, $-N(R_9)C(O)R_9$, $-N(R_9)SO_2R_9$, $-N(R_9)C(O)N(R_9)_2$, $-P(O)(R_9)_2$, $(C_1\text{-}C_6)$alkyl, $(C_1\text{-}C_6)$haloalkyl, $(C_1\text{-}C_6)$hydroxyalkyl, $(C_3\text{-}C_7)$carbocyclyl, 4- to 7-membered heterocyclyl, $(C_6\text{-}C_{10})$aryl, monocyclic or bicyclic 5- to 10-membered heteroaryl, $(C_2\text{-}C_6)$alkenyl, or $(C_2\text{-}C_6)$alkynyl; wherein said alkyl, alkynyl, carbocyclyl, heterocyclyl, aryl, or heteroaryl is further optionally substituted by one or more, identical or different R_{10} groups;

R_4 is hydrogen, cyano, halo, $-OR_9$, $-N(R_9)_2$, $-C(O)N(R_9)_2$, $-SO_2N(R_9)_2$, $-N(R_9)C(O)R_9$, $-N(R_9)SO_2R_9$, $-N(R_9)C(O)N(R_9)_2$, $-P(O)(R_9)_2$, $(C_1\text{-}C_6)$alkyl, $(C_1\text{-}C_6)$haloalkyl, $(C_1\text{-}C_6)$hydroxyalkyl, $(C_3\text{-}C_7)$carbocyclyl, 4- to 7-membered heterocyclyl, $(C_6\text{-}C_{10})$aryl, monocyclic or bicyclic 5- to 10-membered heteroaryl, $(C_2\text{-}C_6)$alkenyl, or $(C_2\text{-}C_6)$alkynyl; wherein said alkyl, alkynyl, carbocyclyl, heterocyclyl, aryl, or heteroaryl is further optionally substituted by one or more, identical or different R_{10} groups;

R_5 is hydrogen, cyano, halo, $-OR_9$, $-N(R_9)_2$, $-C(O)N(R_9)_2$, $-SO_2N(R_9)_2$, $-N(R_9)C(O)R_9$, $-N(R_9)SO_2R_9$, $-N(R_9)C(O)N(R_9)_2$, $-P(O)(R_9)_2$, $(C_1\text{-}C_6)$alkyl, $(C_1\text{-}C_6)$haloalkyl, $(C_1\text{-}C_6)$hydroxyalkyl, $(C_3\text{-}C_7)$carbocyclyl, 4- to 7-membered heterocyclyl, $(C_6\text{-}C_{10})$aryl, monocyclic or bicyclic 5- to 10-membered heteroaryl, $(C_2\text{-}C_6)$alkenyl, or $(C_2\text{-}C_6)$alkynyl; wherein said alkyl,

alkynyl, carbocyclyl, heterocyclyl, aryl, or heteroaryl is further optionally substituted by one or more, identical or different R_{10} groups;

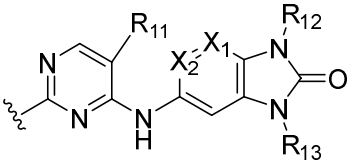
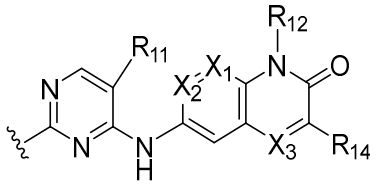
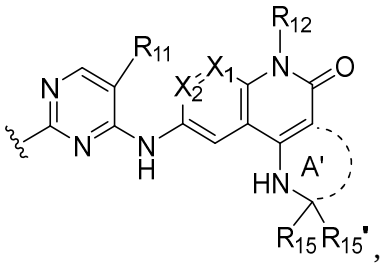
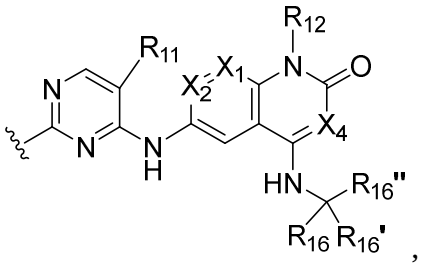
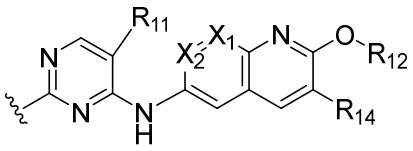
R_6 is absent, (C_1-C_6)alkylene, or (C_3-C_7)carbocyclyl; wherein said alkylene or carbocyclyl, is further optionally substituted by one or more, identical or different R_{10} groups, or

R_5 and R_6 together with the same carbon atom to which they are attached form a spiro (C_3-C_7)carbocyclyl group or a 4- to 7-membered heterocyclyl group; wherein said carbocyclyl or heterocyclyl, is further optionally substituted by one or more, identical or different R_{10} groups, or

R_6 is (C_2-C_4)alkylene which is bound to R_7 to form a 4- to 6-membered heterocyclyl group;

R_7 and R_8 are each independently hydrogen, (C_1-C_6)alkyl, (C_3-C_7)carbocyclyl, 4- to 7-membered heterocyclyl, (C_6-C_{10})aryl, or monocyclic or bicyclic 5- to 10-membered heteroaryl; wherein said alkyl, carbocyclyl, heterocyclyl, aryl or heteroaryl is further optionally substituted by one or more, identical or different R_{10} groups, or

R_7 and R_8 together with the nitrogen atom to which they are attached form a 3- to 7-membered heterocyclyl, wherein said heterocyclyl is further optionally substituted by one or more, identical or different R_{10} groups;

A is , , , , or ;

X_1 and X_2 are independently CR_{17}, or N;

R_{17} is hydrogen, (C_1-C_4)alkyl, halo, hydroxy, amino, (C_1-C_4)alkoxy, (C_1-C_4)haloalkyl, (C_1-C_4)haloalkoxy, (C_2-C_4)alkenyl, (C_2-C_4)alkynyl, nitro, cyano, NH(C_1-C_4)alkyl, or N(C_1-C_4 alkyl)$_2$;

X_3 is CH or N;

X_4 is $CR_{17'}$, or N;

$R_{17'}$ is hydrogen, fluor, chloro, or methyl;

R_{11} is Cl or CN;

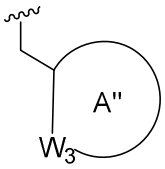
R_{12} is hydrogen, (C_1-C_6)alkyl, (C_3-C_6)carbocyclyl, 4- to 7-membered heterocyclyl, (C_3-C_7)carbocyclyl(C_1-C_6)alkyl, or 4- to 7-membered heterocyclyl(C_1-C_6)alkyl; wherein said alkyl, carbocyclyl, or heterocyclyl is further optionally substituted by one or more, identical or different groups selected from (C_1-C_6)alkyl, (C_1-C_6)alkoxy, halo, amino, hydroxyl, haloalkyl, NH(C_1-C_6)alkyl, N((C_1-C_6)alkyl)$_2$, (C_3-C_6)carbocyclyl, and 4- to 7-membered heterocyclyl, or R_{12} is –L-Y-Z or –L-Y-Z;

L is absent or (C_1-C_5)alkylene optionally substituted by one or more substituents selected from (C_1-C_2)alkyl and oxo;

Y is absent, O, S, S(O), S(O)$_2$, NR', C(O), C(O)O, OC(O), C(O)N(R'), N(R')C(O), N(R')C(O)N(R'), N(R')C(O)O, OC(O)N(R'), S(O)$_2$N(R'), or N(R')S(O)$_2$;

each R' is independently hydrogen or (C_1-C_4)alkyl;

Z is hydrogen, (C_1-C_6)alkyl, (C_2-C_6)alkenyl, (C_2-C_6)alkynyl, (C_3-C_{10})carbocyclyl, or 3- to 10-membered heterocyclyl; wherein Z is optionally substituted by one or more substituents independently selected from (C_1-C_4)alkyl, halo, (C_1-C_4)haloalkyl, (C_1-C_4)haloalkoxy, amino, (C_1-C_4)aminoalkyl, cyano, hydroxy, carboxy, carbamoyl, sulphamoyl, mercapto, ureido, NR^rR^s, OR^r, $C(O)R^r$, $C(O)OR^r$, $OC(O)R^r$, $C(O)NR^rR^s$, $N(R^r)C(O)R^r$, $S(O)_{0-2}R^r$, $S(O)_2NR^rR^s$, $N(R^r)SO_2R^r$, $Si(R^r)(R^s)R^t$ and $(CH_2)_{1-3}NR^rR^s$; wherein R^r, R^s, and R^t are each independently hydrogen, (C_1-C_6)alkyl, or (C_3-C_6)cycloalkyl; or R^r and R^s together with the nitrogen atom to which they are attached form a 4- to 9-membered heterocyclyl which is optionally substituted by one or more substituents selected from (C_1-C_4)alkyl, halo, (C_1-C_4)haloalkyl, (C_1-C_4)haloalkoxy, (C_1-C_4)alkoxy, (C_1-C_4)alkylamino, amino, cyano, and hydroxy;

R_{13} is hydrogen, methyl, $-(CH_2)_{1\text{-}3}W_1W_2$, or 

;

W_1 is $CR_{18}R_{18'}$ or C(O);

R_{18} and $R_{18'}$ are independently hydrogen, $(C_1\text{-}C_2)$alkyl, fluoro, hydroxy, cyano, nitro, $(C_1\text{-}C_2)$alkoxy, $(C_1\text{-}C_2)$haloalkyl, $(C_1\text{-}C_2)$haloalkoxy, amino, $NH(C_1\text{-}C_2)$alkyl, or $N(C_1\text{-}C_2$ alkyl$)_2$, or

R_{18} and $R_{18'}$ together with the carbon atom to which they are attached form C(O), $(C_3\text{-}C_6)$carbocyclyl or 3- to 6-membered heterocyclyl, which is optionally substituted by one or more substituents independently selected from $(C_1\text{-}C_2)$alkyl, halo, $(C_1\text{-}C_2)$haloalkyl, $(C_1\text{-}C_2)$haloalkoxy, $(C_1\text{-}C_2)$alkoxy, $(C_1\text{-}C_2)$alkylamino, amino, cyano, and hydroxy;

W_2 is cyano, hydroxy, 5- or 6-membered heteroaryl, phenyl, C(O)-$(C_1\text{-}C_2)$alkyl, $S(O)_2$-$(C_1\text{-}C_2)$alkyl, $C(O)OCH_3$, $C(O)NHCH_3$, $CR_{19}R_{20}R_{21}$, amino, $NH(C_1\text{-}C_2)$alkyl, or $N(C_1\text{-}C_2$ alkyl$)_2$:

R_{19} is hydrogen, $(C_1\text{-}C_2)$alkyl, fluoro, chloro, bromo, hydroxy, amino, cyano, nitro, $(C_1\text{-}C_2)$alkoxy, $(C_1\text{-}C_2)$haloalkyl, or $(C_1\text{-}C_2)$haloalkoxy;

R_{20} is hydrogen, $(C_1\text{-}C_2)$alkyl, fluoro, chloro, bromo, hydroxy, cyano, nitro, $(C_1\text{-}C_2)$alkoxy, $(C_1\text{-}C_2)$haloalkyl, $(C_1\text{-}C_2)$haloalkoxy, or $-Y_2\text{-}L_2\text{-}Z_2$;

Y_2 is absent, O, S, S(O), $S(O)_2$, NR', C(O), C(O)O, OC(O), C(O)N(R'), N(R')C(O), $S(O)_2N(R')$, or $N(R')SO_2$;

L_2 is absent or $(C_1\text{-}C_2)$alkylene;

Z_2 is hydrogen, $(C_1\text{-}C_6)$alkyl, $(C_2\text{-}C_4)$alkenyl, $(C_2\text{-}C_4)$alkynyl, phenyl, $(C_3\text{-}C_6)$carbocyclyl, or 4- to 6-membered heterocyclyl, wherein Z_2 is optionally substituted by one or more substituents independently selected from $(C_1\text{-}C_4)$alkyl, halo, $(C_1\text{-}C_4)$haloalkyl, $(C_1\text{-}C_4)$haloalkoxy, $(C_1\text{-}C_4)$alkoxy, $(C_1\text{-}C_4)$alkylamino, amino, cyano, hydroxy, C(O)R', C(O)OR', OC(O)R', C(O)NR'R', and N(R')C(O)R', wherein each R' is independently hydrogen or $(C_1\text{-}C_4)$alkyl;

or R_{19} and R_{20} together with the carbon atom to which they are attached form $(C_3\text{-}C_6)$carbocyclyl or 3- to 6-membered heterocyclyl, optionally substituted by one or

more substituents selected from (C_1-C_2)alkyl, halo, (C_1-C_2)haloalkyl, (C_1-C_2)haloalkoxy, (C_1-C_2)alkoxy, (C_1-C_2)alkylamino, amino, cyano, and hydroxy;

R_{21} is (C_1-C_2)alkyl, -C(O)OR'', OR'', -C(O)NR'', NR''R'', phenyl, or 5-membered heteroaryl, wherein each R'' is independently hydrogen or (C_1-C_2)alkyl;

A'' is (C_4-C_6)carbocyclyl or 4- to 6-membered heterocyclyl, optionally substituted with one or more substituents independently selected from (C_1-C_2)alkyl, halo, hydroxy, cyano, and (C_1-C_2)alkoxy;

W_3 is NR_{22} or $CR_{23}R_{23'}$;

R_{22} is hydrogen, (C_1-C_2)alkyl, (C_1-C_4)haloalkyl, (C_1-C_4)hydroxyalkyl, -C(O)CH_3, or –C(O)O-(C_1-C_4)alkyl;

R_{23} and $R_{23'}$ are independently hydrogen, (C_1-C_2)alkyl, cyclopropyl, fluoro, chloro, bromo, hydroxy, amino, cyano, nitro, (C_1-C_2)haloalkyl, (C_1-C_2)haloalkoxy, (C_1-C_2)alkoxy, -C(O)OR'', NR''R'', phenyl, or 5-membered heteroaryl;

R_{14} is $–L_3CR_{24}R_{25}R_{26}$, or –CH=CH–R_{26};

L_3 is absent, O, S, (C_1-C_4)alkylene, -O-(C_1-C_4)alkylene, or -S-(C_1-C_4)alkylene;

R_{24} is hydrogen or (C_1-C_4)alkyl;

R_{25} is hydrogen or (C_1-C_4)alkyl, or

R_{24} and R_{25} together with the carbon atom to which they are attached form a (C_3-C_5)carbocyclyl, 4- to 7-membered heterocyclyl, or C=O;

R_{26} is (C_1-C_6)alkyl, $–NR_{27}R_{28}$, $–OR_{27}$, $–C(O)R_{27}$, $–C(O)OR_{27}$, $–N(R_{28})C(O)R_{27}$, $–C(O)NR_{27}R_{28}$, $–S(O)–(C_1$-$C_6)$alkyl, $–S(O)_2–(C_1$-$C_6)$alkyl, $–P(O)–(C_1$-C_6 alkyl)$_2$, $–C(NH)NH_2$, or $–(C_1$-$C_4)$alkyl$–NR_{28}C(O)R_{27}$;

R_{27} is hydrogen, 3- to 6-membered heterocyclyl, or (C_1-C_4)alkyl optionally substituted by one or more, identical or different groups selected from OH, Cl, F, CF_3, N(C_1-C_4 alkyl)$_2$, (C_3-C_6)carbocyclyl, 3- to 6-membered heterocyclyl, (C_2-C_4)alkenyl, and (C_2-C_4)alkynyl;

R_{28} is hydrogen or (C_1-C_4)alkyl;

R_{15} is hydrogen, (C_1-C_4)alkyl, (C_3-C_6)cycloalkyl, (C_1-C_4)haloalkyl, or cyano, wherein said alkyl or cycloalkyl is optionally substituted by one or more substituents selected from (C_1-C_4)alkyl, (C_3-C_6)cycloalkyl, hydroxy, (C_1-C_2)alkoxy, amino, NH(C_1-C_2)alkyl, N((C_1-C_2)alkyl)$_2$, (C_1-C_2)aminoalkyl, and halo;

R_{15}' is hydrogen, $(C_1\text{-}C_4)$alkyl, cyano, $(C_1\text{-}C_4)$haloalkyl, or $-Y_3\text{-}L_4\text{-}Z_3$;

Y_3 is absent, C(O)O, or C(O)N(R');

L_4 is absent or $(C_1\text{-}C_2)$alkylene;

Z_3 is hydrogen, $(C_1\text{-}C_6)$alkyl, phenyl, $(C_3\text{-}C_6)$cycloalkyl, or 4- to 6-membered heterocyclyl, wherein Z_3 is optionally substituted by one or more substituents independently selected from $(C_1\text{-}C_2)$alkyl, halo, $(C_1\text{-}C_2)$haloalkyl, $(C_1\text{-}C_2)$haloalkoxy, $(C_1\text{-}C_2)$alkoxy, amino, nitro, cyano, and hydroxy, or

R_{15} and R_{15}', together with the carbon atom to which they are attached, form a $(C_4\text{-}C_6)$carbocyclyl, or 4- to 6-membered heterocyclyl;

A' is a 6- or 7-membered heterocyclyl, which in addition to R_{15} and R_{15}', is optionally further substituted by one more substituents independently selected from oxo, $(C_1\text{-}C_2)$alkyl, cyclopropyl, spiro-cyclopropyl, halo, $(C_1\text{-}C_2)$haloalkyl, $(C_1\text{-}C_2)$haloalkoxy, $(C_1\text{-}C_2)$alkoxy, amino, cyano, and hydroxy;

R_{16} is hydrogen, $(C_1\text{-}C_2)$alkyl, $(C_3\text{-}C_4)$cycloalkyl, $(C_1\text{-}C_2)$haloalkyl, cyano, $(C_2\text{-}C_4)$alkenyl, or $(C_2\text{-}C_4)$alkynyl;

R_{16}' is $(C_1\text{-}C_4)$alkyl, cyano, $(C_1\text{-}C_4)$haloalkyl, or $-Y_4\text{-}L_5\text{-}Z_4$;

Y_4 is absent, C(O), C(O)O, OC(O), C(O)N(R'), or $S(O)_2N(R')$;

L_5 is absent or $(C_1\text{-}C_2)$alkylene optionally substituted by one or more substituents selected from $(C_1\text{-}C_2)$alkyl and oxo;

Z_4 is hydrogen, $(C_1\text{-}C_6)$alkyl, $(C_2\text{-}C_4)$alkenyl, $(C_2\text{-}C_4)$alkynyl, phenyl, $(C_3\text{-}C_6)$carbocyclyl, $(C_3\text{-}C_6)$cycloalkenyl, or 4- to 6-membered heterocyclyl, wherein Z_4 is optionally substituted by one or more substituents independently selected from oxo, $(C_1\text{-}C_4)$alkyl, $(C_3\text{-}C_6)$cycloalkyl, halo, $(C_1\text{-}C_4)$haloalkyl, $(C_1\text{-}C_4)$haloalkoxy, $(C_1\text{-}C_4)$alkoxy, $(C_1\text{-}C_4)$alkylamino, amino, nitro, cyano, hydroxy, $C(O)R^u$, $C(O)OR^u$, $OC(O)R^u$, $C(O)NR^uR^u$, and $N(R^u)C(O)R^u$, wherein each R^u is independently hydrogen, $(C_1\text{-}C_4)$alkyl, or $(C_3\text{-}C_6)$cycloalkyl, or

Z_4 is $-Q\text{-}L_6\text{-}W$, wherein

Q is absent, O, NH, or $N(C_1\text{-}C_2)$alkyl;

L_6 is absent or $(C_1\text{-}C_2)$alkylene optionally substituted by one or more substituents selected from oxo and $(C_1\text{-}C_2)$alkyl;

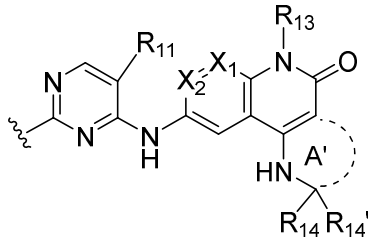
W is $(C_1\text{-}C_4)$alkyl, phenyl, $(C_3\text{-}C_6)$cycloalkyl, $(C_3\text{-}C_6)$cycloalkenyl, or 5- or 6-membered

heterocyclyl, wherein W is optionally substituted by one or more substituents independently selected from (C_1-C_4)alkyl, halo, (C_1-C_4)haloalkyl, (C_1-C_4)haloalkoxy, (C_1-C_4)alkoxy, (C_1-C_4)alkylamino, amino, nitro, cyano, or hydroxy, or

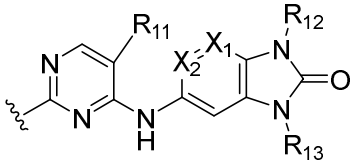
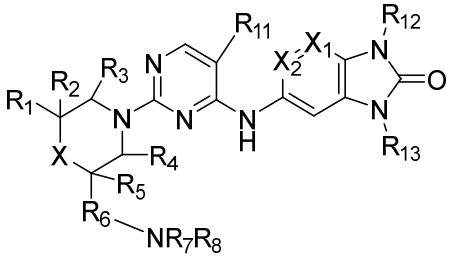
R_{16} and R_{16}', together with the carbon atom to which they are attached, for a (C_3-C_{10})carbocyclyl or a 4- to 10-membered heterocyclyl, which is optionally substituted by one or more substituents independently selected from oxo, (C_1-C_2)alkyl, halo, (C_1-C_2)haloalkyl, (C_1-C_2)haloalkoxy, (C_1-C_2)alkoxy, (C_1-C_2)alkylamino, amino, nitro, cyano, or hydroxy; or the (C_3-C_{10})carbocyclyl or 4- to 10-membered heterocyclyl is optionally fused to a 5- or 6-membered heteroaryl or phenyl ring, and the 5- or 6-membered heteroaryl or phenyl ring is optionally substituted by (C_1-C_2)alkyl, halo, (C_1-C_2)haloalkyl, (C_1-C_2)haloalkoxy, (C_1-C_2)alkoxy, (C_1-C_2)alkylamino, amino, nitro, cyano, or hydroxy; and

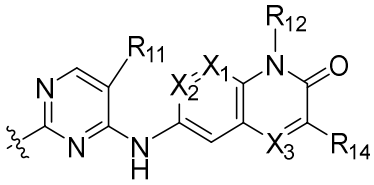
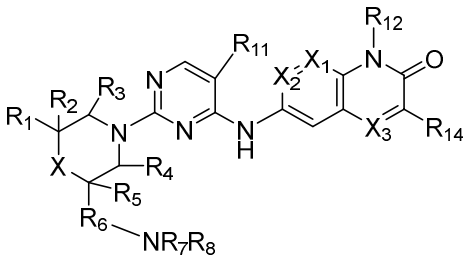
R_{16}'' is hydrogen, (C_1-C_4)alkyl, (C_1-C_2)haloalkyl, (C_1-C_2)alkoxy, (C_1-C_2)haloalkoxy, cyano, nitro, acetylenyl, phenyl, or 5- or 6-membered heteroaryl, wherein said alkyl, phenyl, or heteroaryl is optionally substituted by one or more substituents independently selected from halo, hydroxy, and amino;

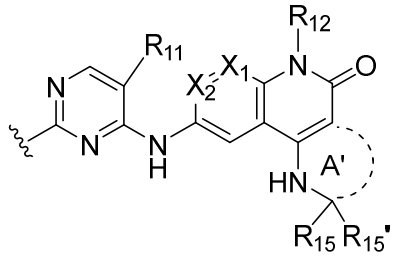
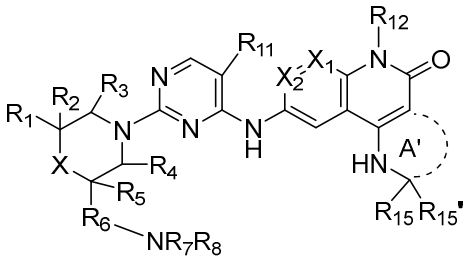
provided that when R_7 is (C_1-C_3)alkyl and R_8 is (C_1-C_3)alkyl, R_6 is not (C_1-C_6)alkylene, and

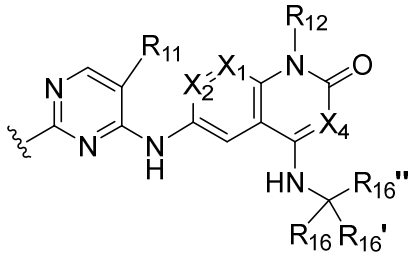
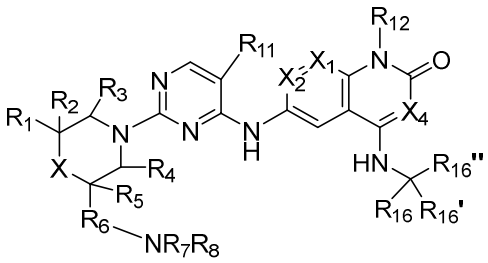
provided that when A is 

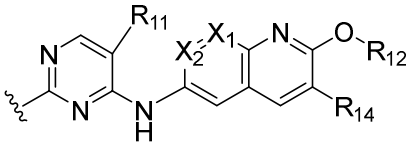
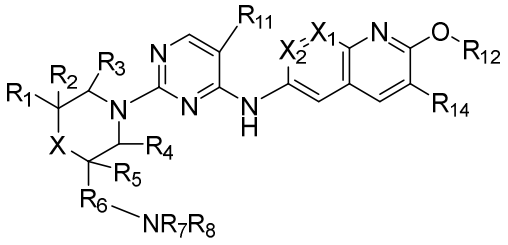
, R_{11} is Cl, X is CH_2 or CF_2, and R_6 is absent or optionally substituted (C_1-C_2)alkylene, R_7 and R_8 cannot be a) independently hydrogen or (C_1-C_2)alkyl optionally substituted with an oxo group, or b) R_7 and R_8 together with the nitrogen atom to which they are attached form a 4-membered heterocyclyl optionally substituted with a gem-difluoro group.

2. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein  is  and the compound has the structure of formula I-1,  (I-1).

3. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein  is  and the compound has the structure of formula I-2,  (I-2).

4. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein  is  and the compound has the structure of formula I-3,  (I-3).

5. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein  is  and the compound has the structure of formula I-4,  (I-4).

6. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein A is  and the compound has the structure of formula I-5,  (I-5).

7. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_{11} is Cl.

8. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_{11} is CN.

9. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_1 is hydrogen, $-OR_9$, or $(C_1\text{-}C_6)$alkyl.

10. The compound of claim 9 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_1 is hydrogen, methyl, or –OH.

11. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_2 is hydrogen, $-OR_9$, or $(C_1\text{-}C_6)$alkyl.

12. The compound of claim 11 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_2 is hydrogen, methyl, or –OH.

13. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_1 and R_2 together with the same carbon atom to which they are attached form a spiro $(C_3\text{-}C_7)$carbocyclyl group.

14. The compound of claim 13 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_1 and R_2 together with the same carbon atom to which they are attached form a spiro (C_3)carbocyclyl.

15. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_3 is hydrogen.

16. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_4 is hydrogen.

17. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_5 is hydrogen, -OR_9, or (C_1-C_6)alkyl.

18. The compound of claim 17 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_5 is hydrogen, methyl, or –OH.

19. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_6 is optionally substituted (C_1-C_6)alkylene or optionally substituted (C_3-C_7)carbocyclyl.

20. The compound of claim 19 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_6 is optionally substituted (C_1-C_2)alkylene or optionally substituted (C_3-C_4)carbocyclyl.

21. The compound of claim 20 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_6 is C_1-alkylene.

22. The compound of claim 20 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_6 is C_2-alkylene.

23. The compound of claim 20 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_6 is C_1-alkylene substituted by one or more, identical or different R_{10} groups.

24. The compound of claim 20 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_6 is C_2-alkylene substituted by one or more, identical or different R_{10} groups.

25. The compound of claim 23 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein each R_{10} is methyl, fluoro, or cyclopropyl.

26. The compound of claim 20 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_6 is C_3-carbocyclyl.

27. The compound of claim 20 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_6 is C_4-carbocyclyl.

28. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_5 and R_6 together with the same carbon atom to which they are attached form a spiro (C_3-C_7)carbocyclyl group.

29. The compound of claim 28 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_5 and R_6 together with the same carbon atom to which they are attached form a spiro (C_3)carbocyclyl.

30. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_6 is (C_2-C_4)alkylene which is bound to R_7 to form a 4- to 6-membered heterocyclyl group.

31. The compound of claim 30 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_6 is (C_2-C_3)alkylene which is bound to R_7 to form a 4-membered heterocyclyl group.

32. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_7 is hydrogen or (C_1-C_6)alkyl.

33. The compound of claim 32 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_7 is hydrogen or methyl.

34. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_8 is hydrogen or $(C_1\text{-}C_6)$alkyl.

35. The compound of claim 34 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_8 is hydrogen or methyl.

36. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_7 and R_8 together with the nitrogen atom to which they are attached form a 3- to 7-membered heterocyclyl.

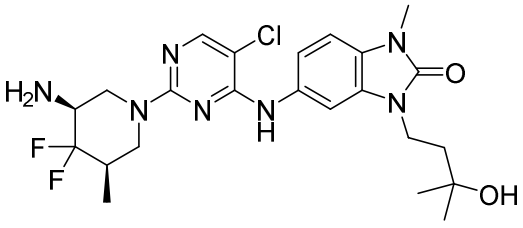
37. The compound of claim 36 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R_7 and R_8 together with the nitrogen atom to which they are attached form a 3-membered heterocyclyl.

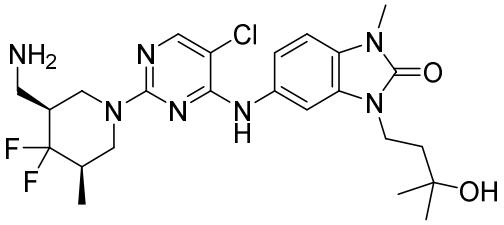
38. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein X is CH_2.

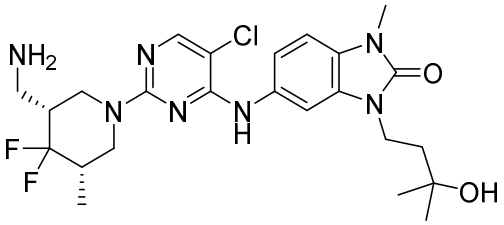
39. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein X is CHF.

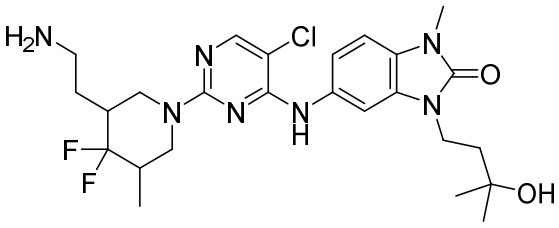
40. The compound of claim 1 or a pharmaceutically acceptable salt or stereoisomer thereof, wherein X is CF_2.

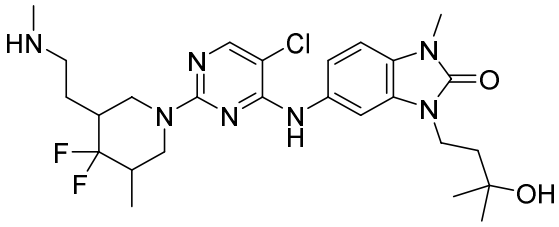
47. A compound which is selected from the group consisting of:

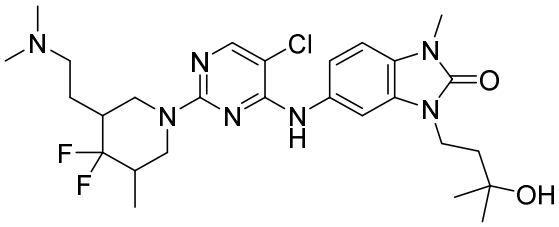

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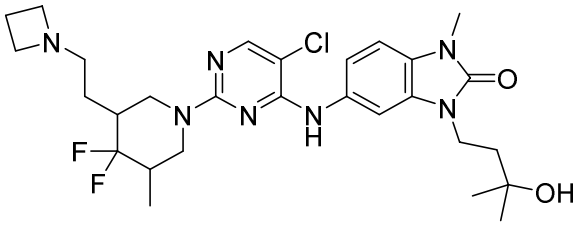

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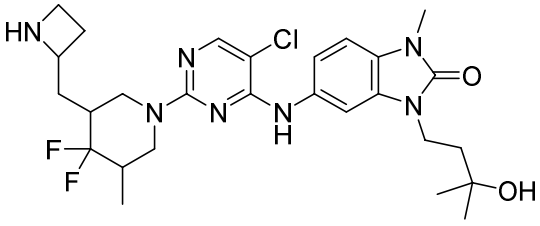

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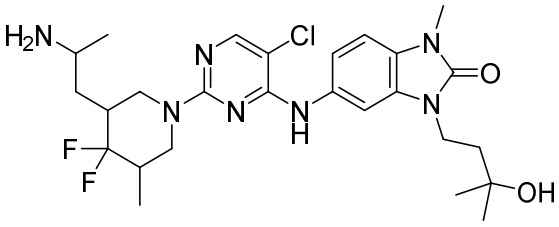

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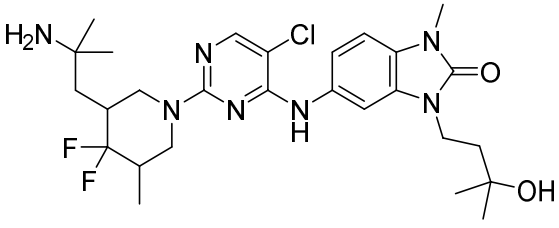

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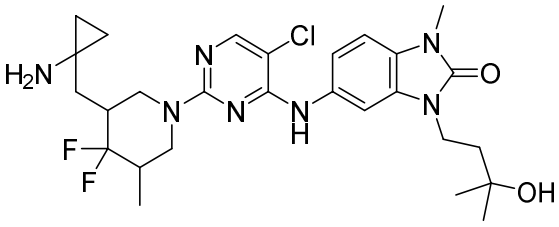

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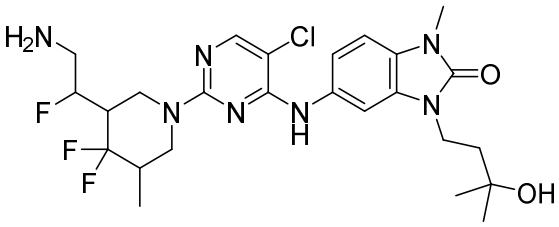

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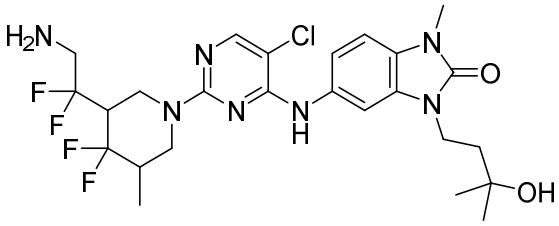

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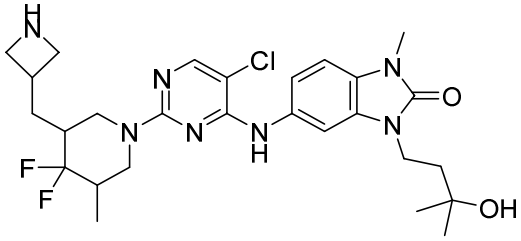

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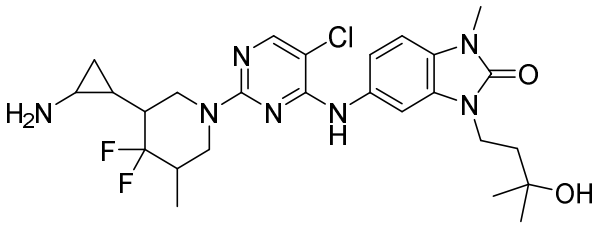

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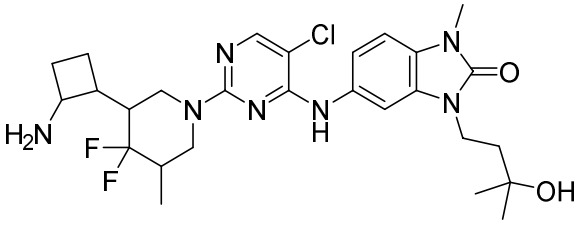

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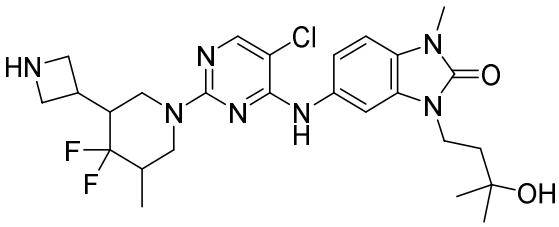

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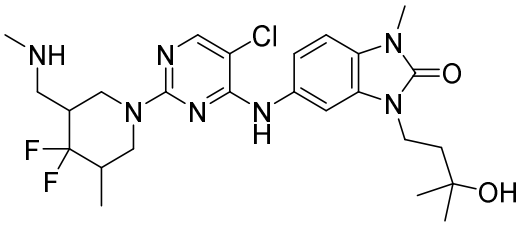

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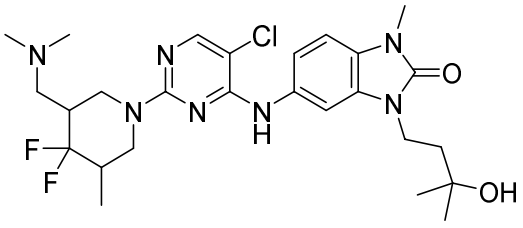

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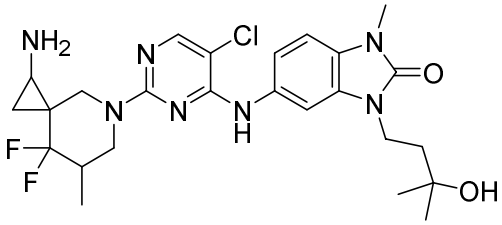

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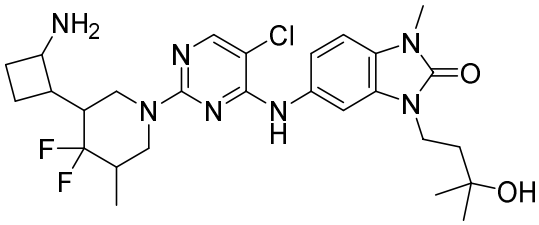

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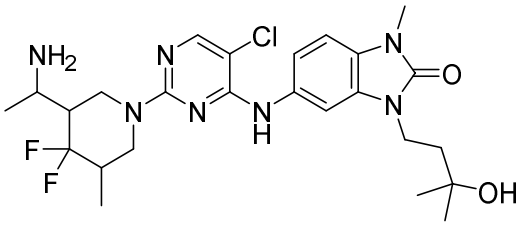

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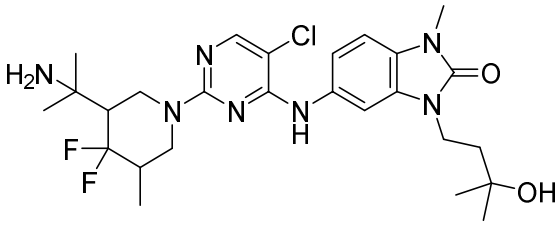

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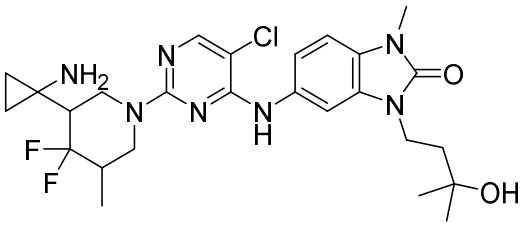

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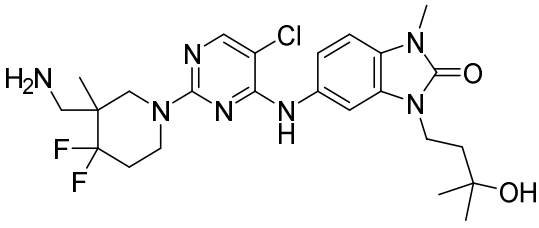

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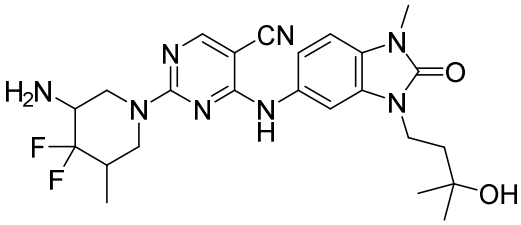

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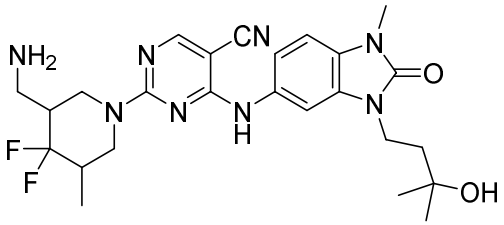

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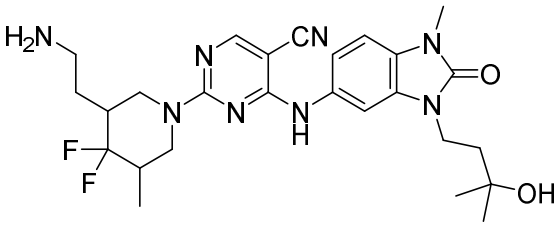

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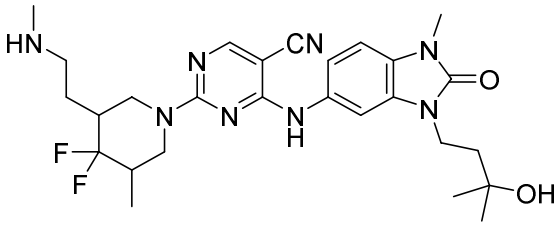

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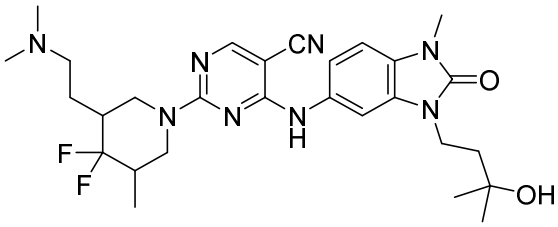

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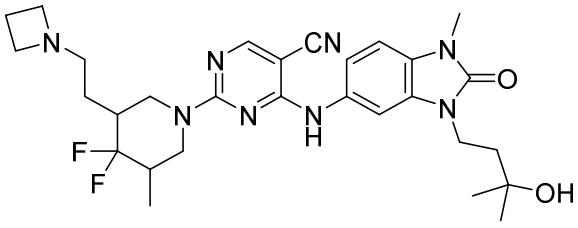

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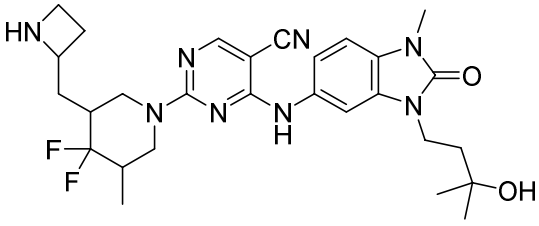

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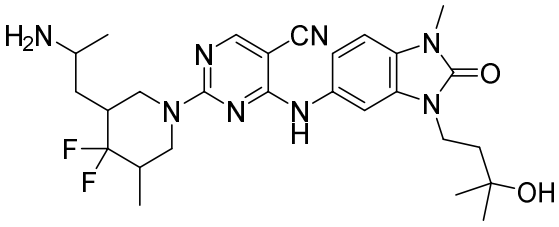

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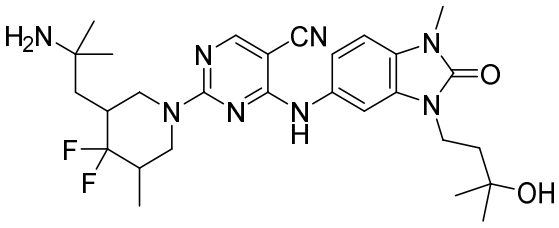

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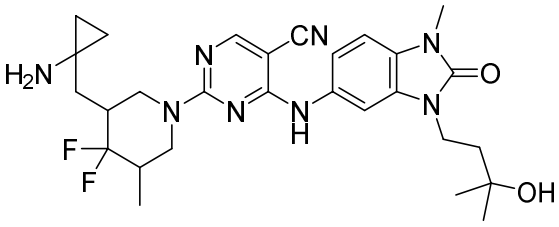

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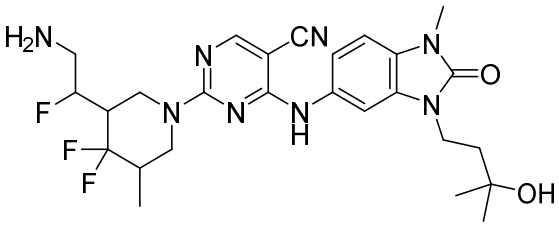

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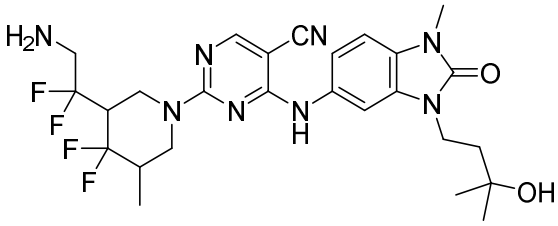

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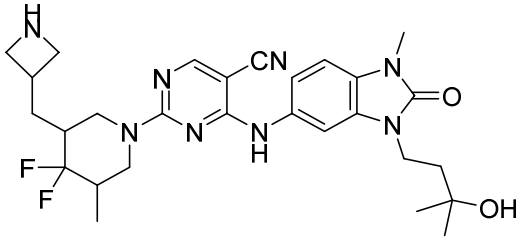

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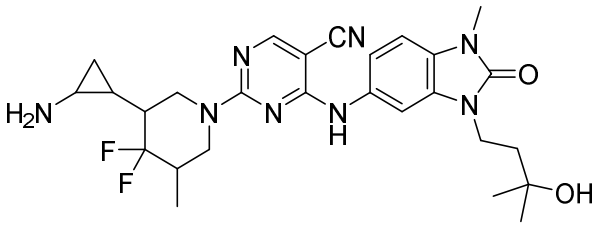

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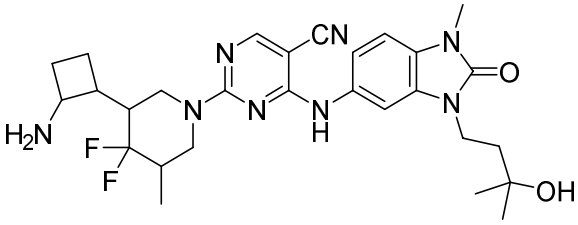

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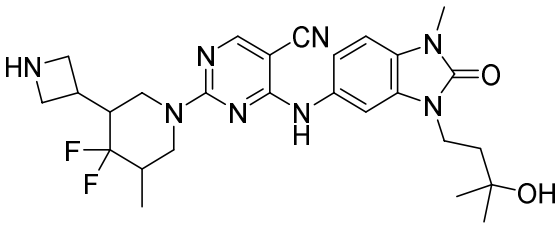

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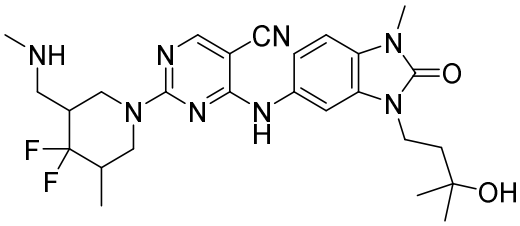

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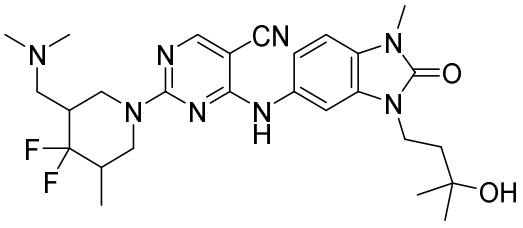

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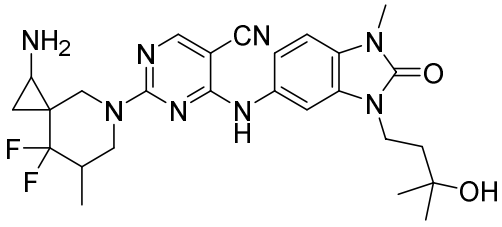

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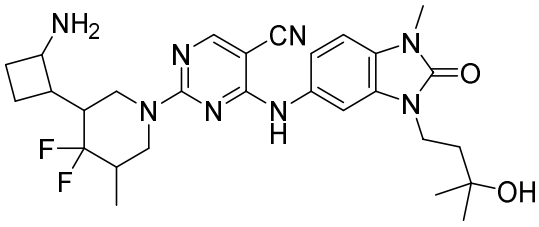

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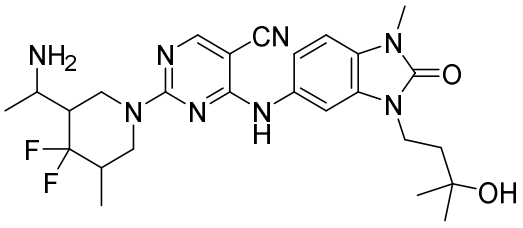

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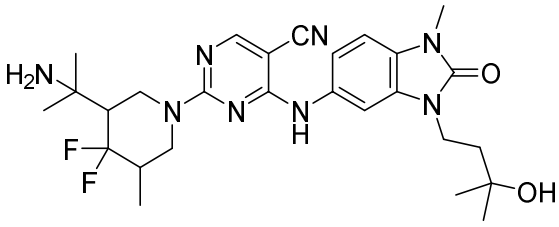

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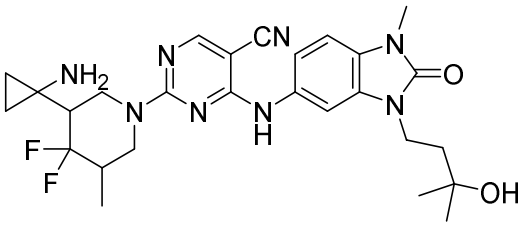

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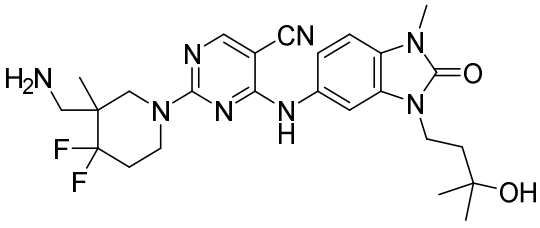

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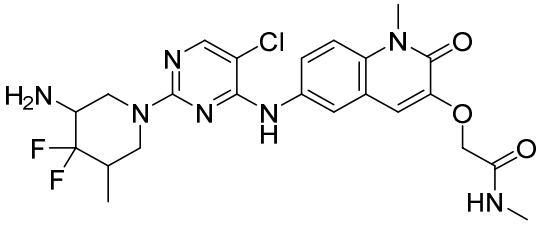

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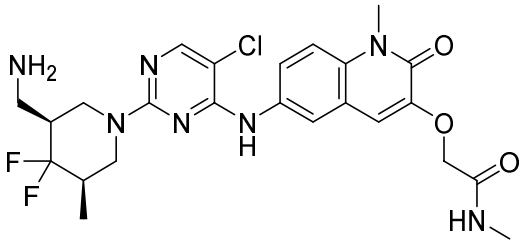

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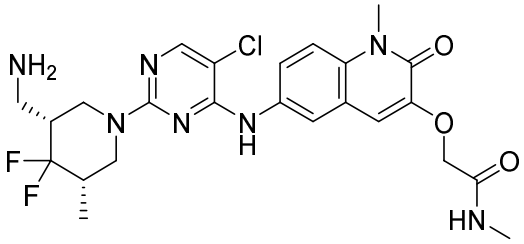

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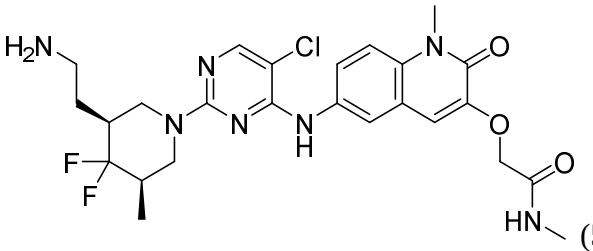

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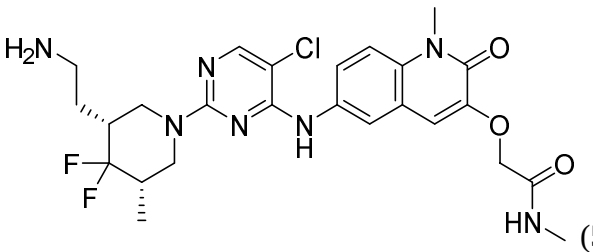

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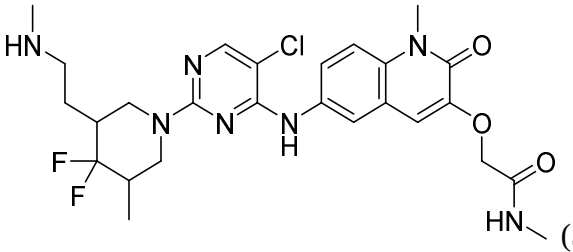

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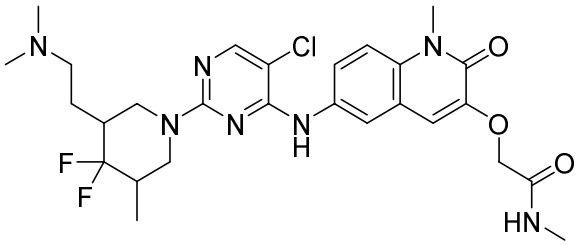

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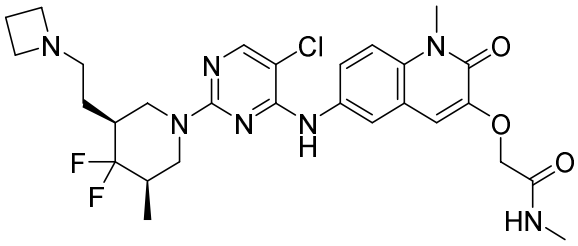

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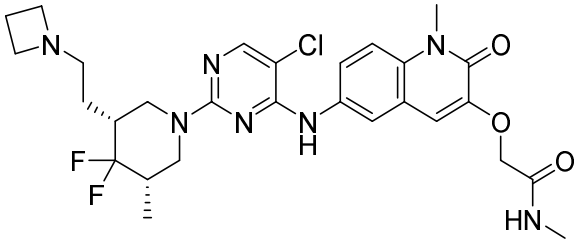

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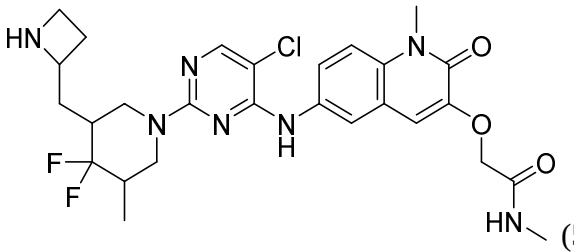

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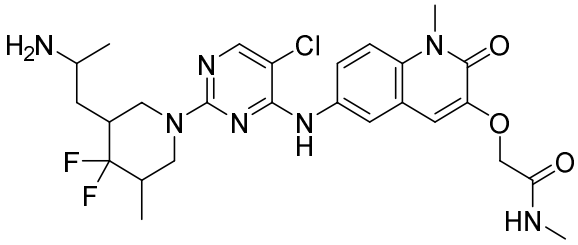

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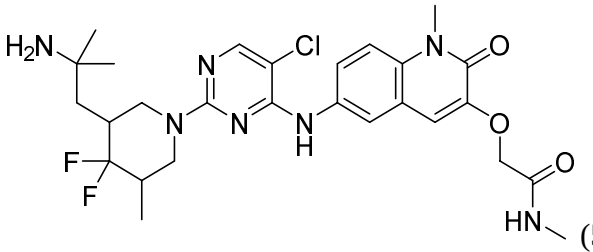

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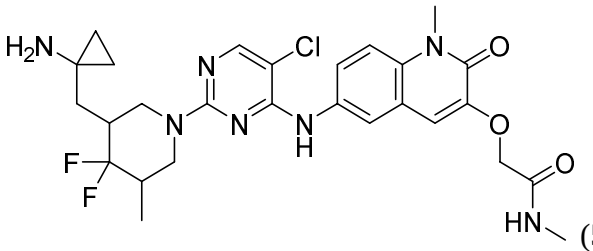

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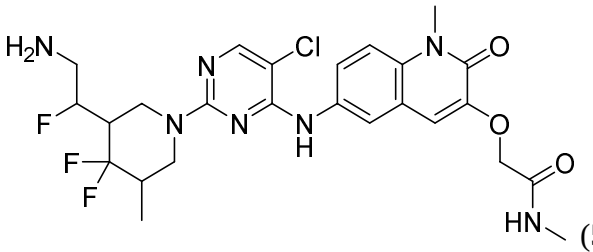

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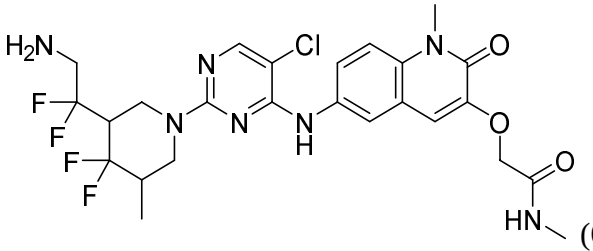

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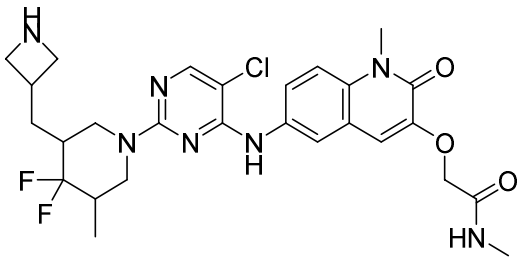

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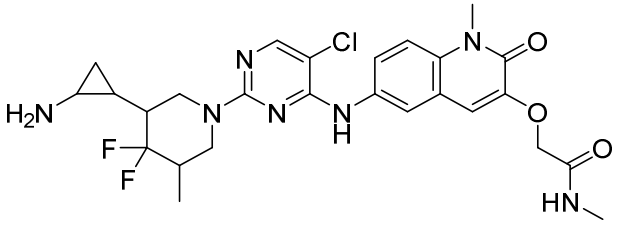

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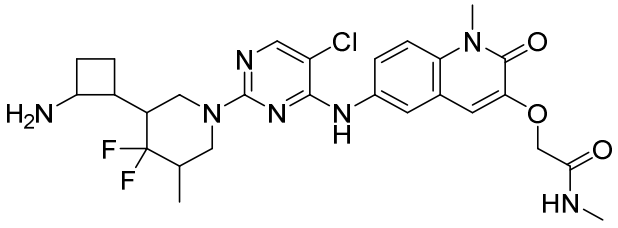

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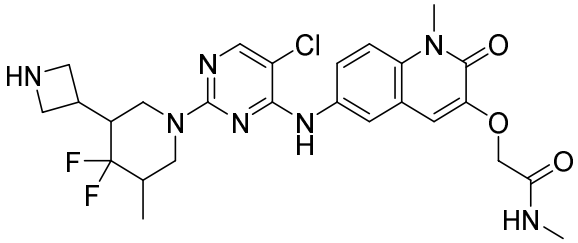

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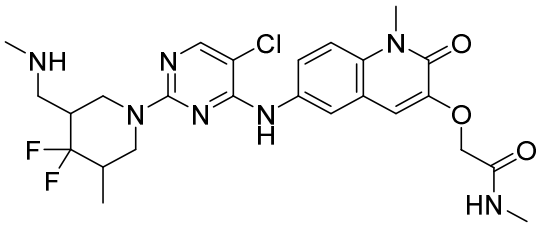

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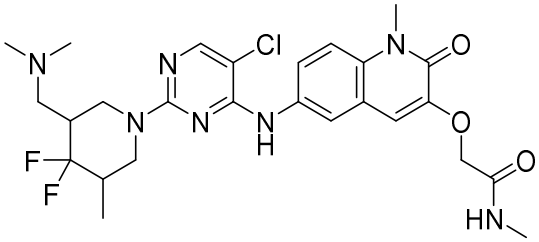

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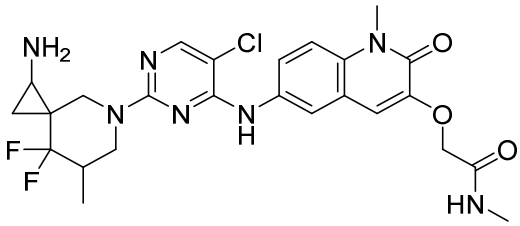

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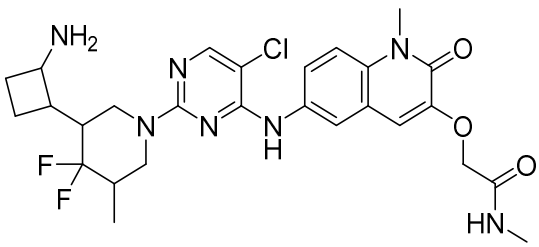

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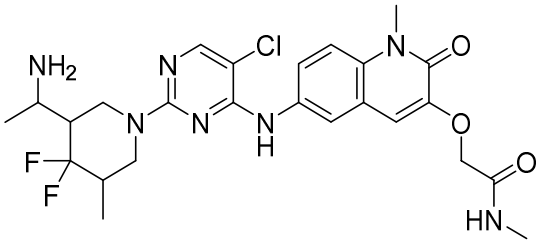

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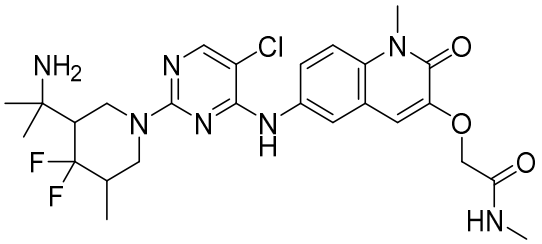

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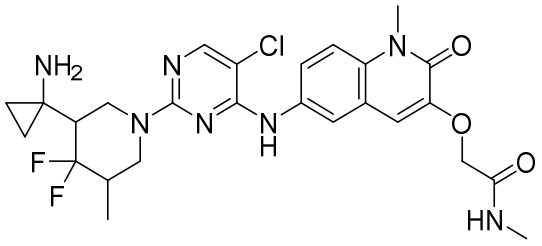

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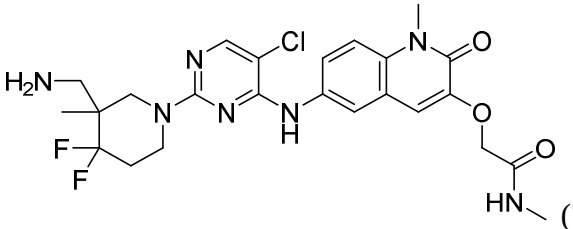

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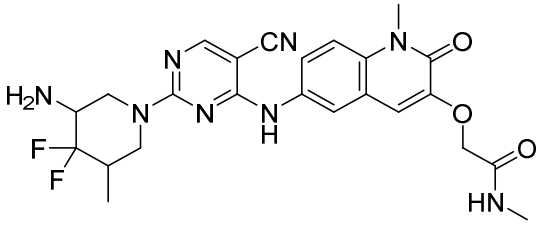

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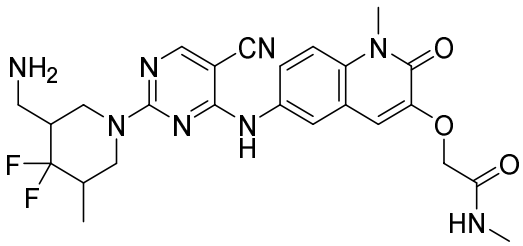

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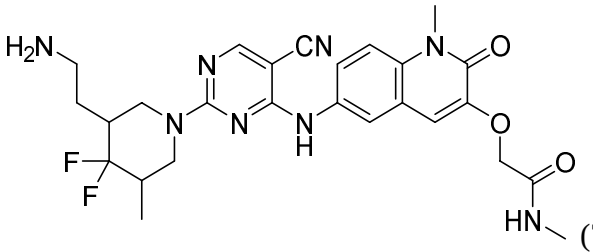

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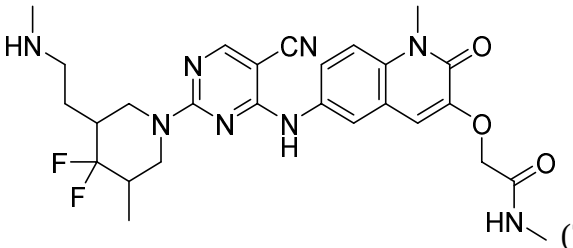

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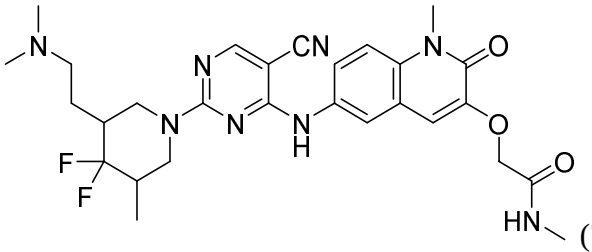

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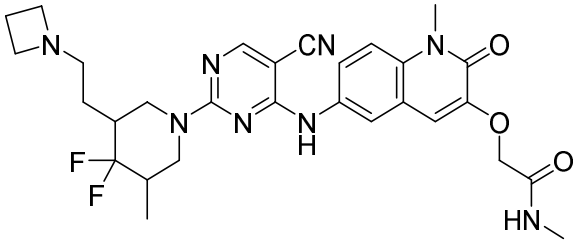

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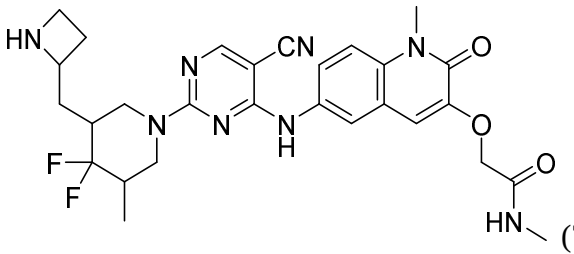

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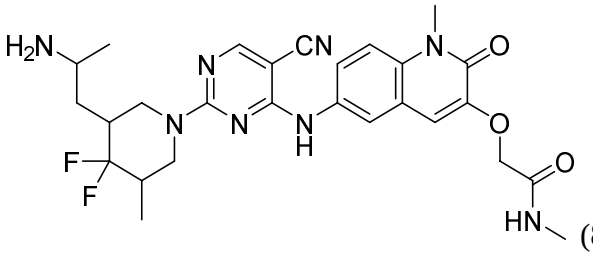

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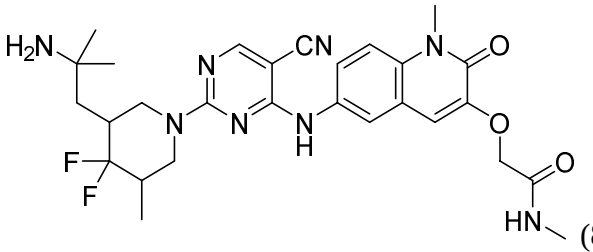

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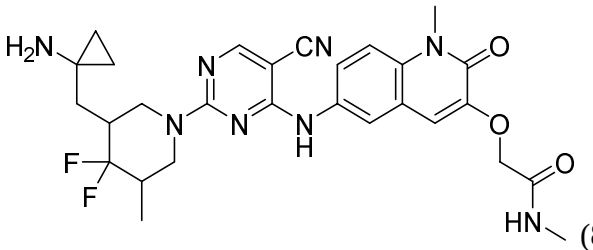

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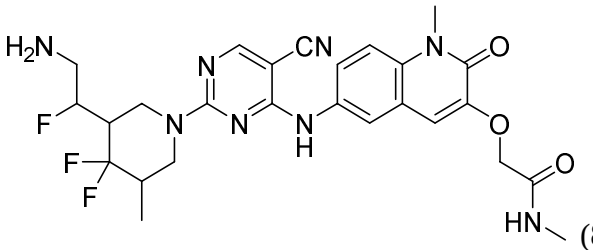

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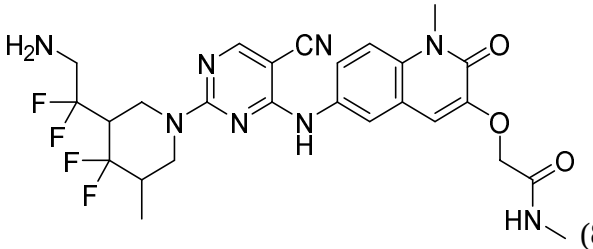

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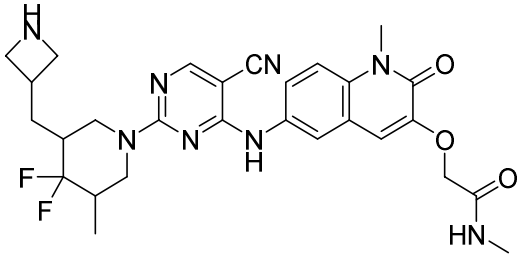

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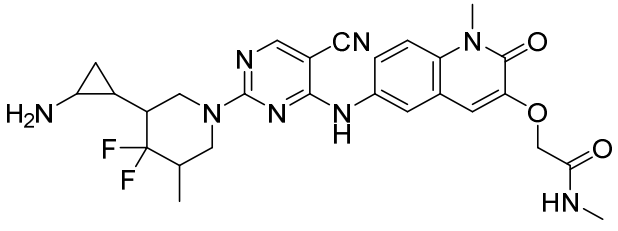

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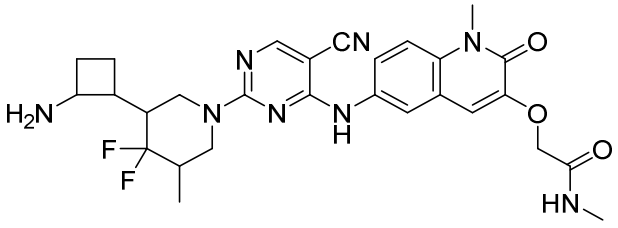

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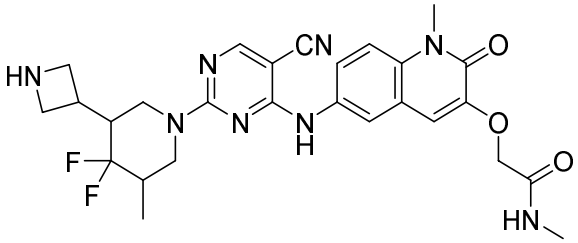

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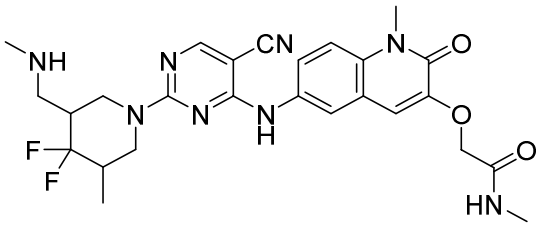

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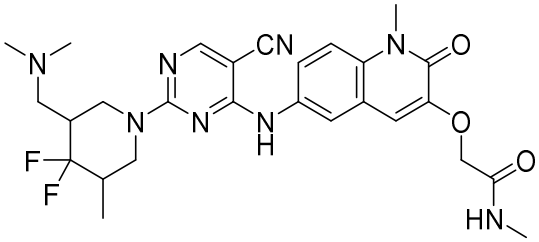

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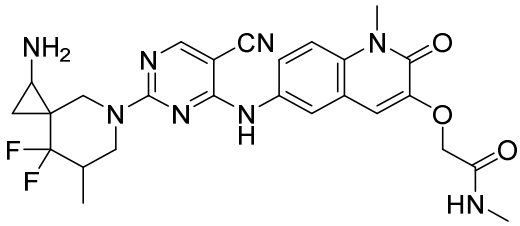

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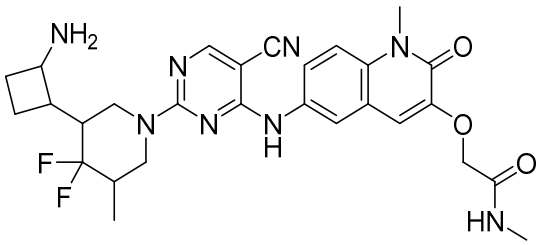

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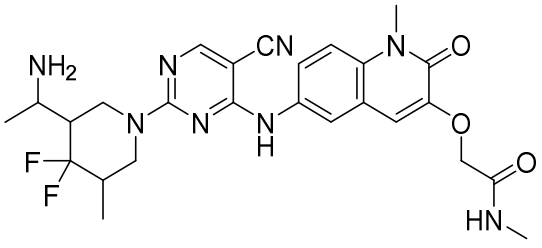

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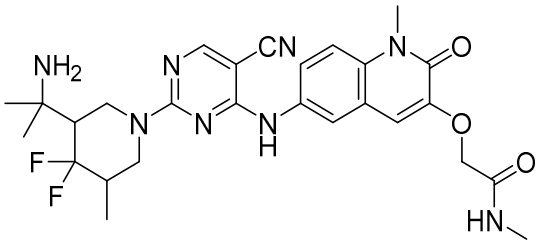

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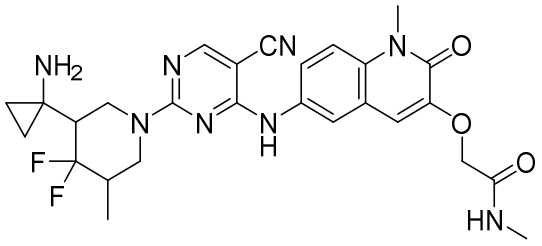

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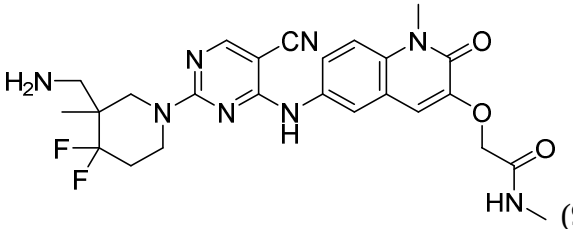

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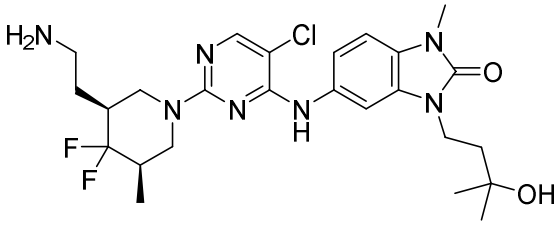

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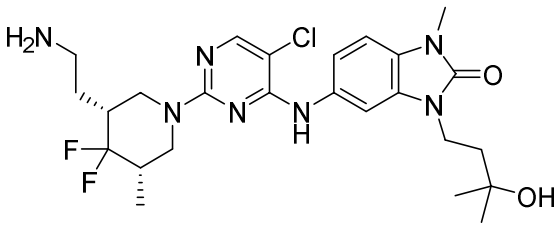

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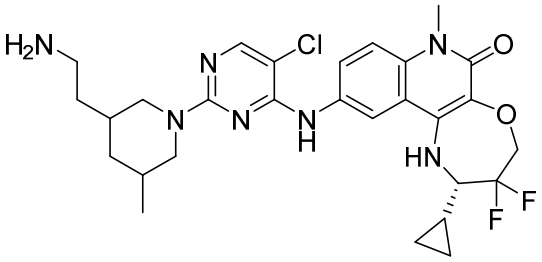

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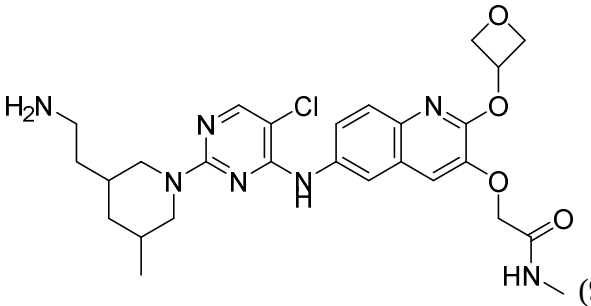

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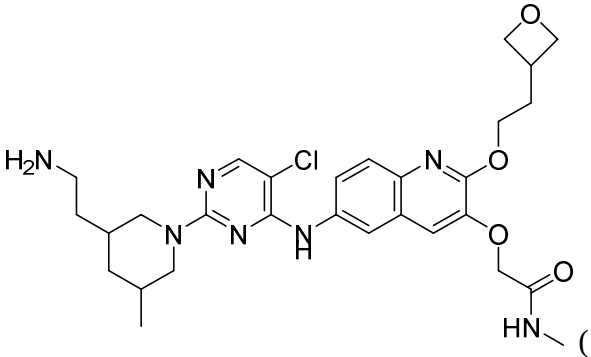

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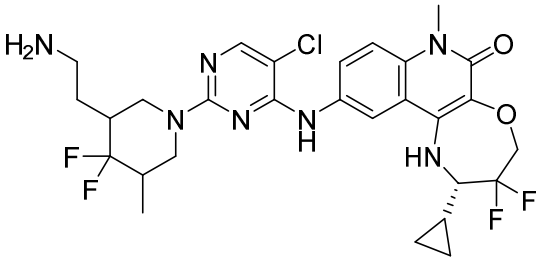

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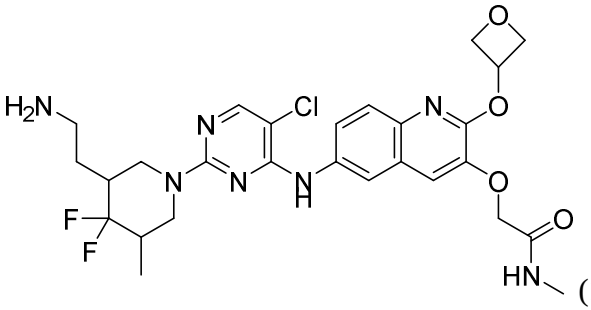

(97b),

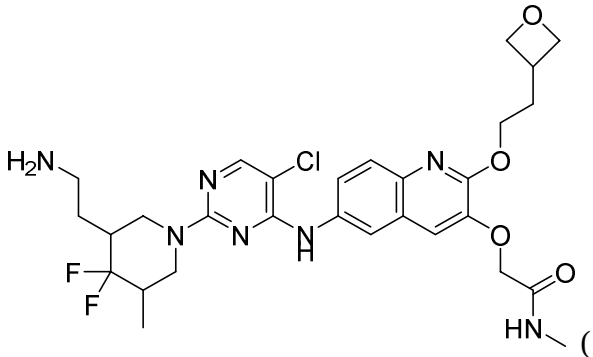

(98),


(99),

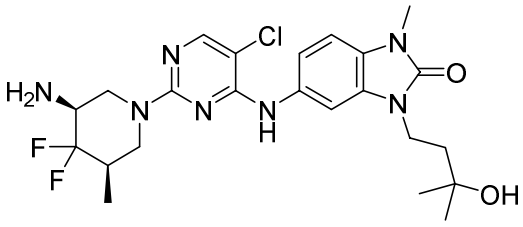

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(101),

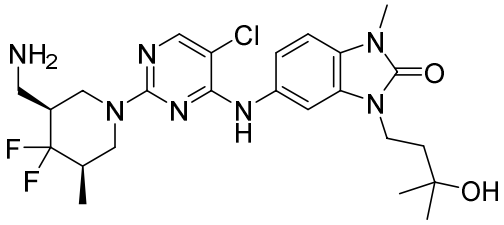

(102),


(103), or a pharmaceutically acceptable salt or stereoisomer thereof.

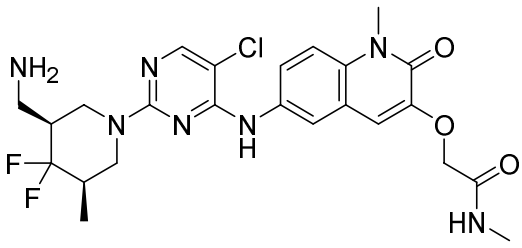
42. A compound which is:


(1), or a pharmaceutically acceptable salt or stereoisomer thereof.

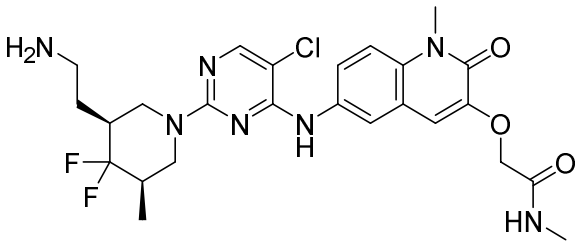
43. A compound which is:


(2a), or a pharmaceutically acceptable salt or stereoisomer thereof.

44. A compound which is:

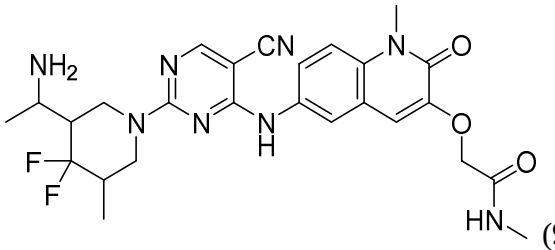

(50a), or a pharmaceutically acceptable salt or stereoisomer thereof.

45. A compound which is:



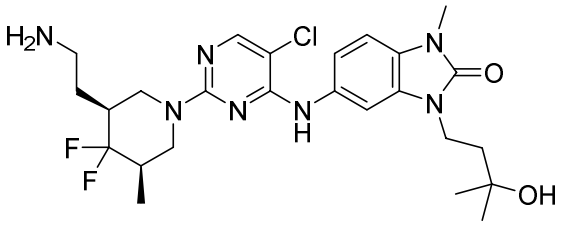
(51a), or a pharmaceutically acceptable salt or stereoisomer thereof.

46. A compound which is:



(93), or a pharmaceutically acceptable salt or stereoisomer thereof.

47. A compound which is:



(97a), or a pharmaceutically acceptable salt or stereoisomer thereof.

48. A pharmaceutical composition, comprising a therapeutically effective amount of the compound or pharmaceutically acceptable salt or stereoisomer of any one of claims 1-47, and a pharmaceutically acceptable carrier,
optionally wherein the pharmaceutical composition is in the form of a liquid or a solid.

49. Use of the compound or a pharmaceutically acceptable salt or stereoisomer thereof of any one of claims 1-47 or the pharmaceutical composition of claim 48 in the manufacture of a medicament for treating a disease or disorder characterized by aberrant B-cell lymphoma 6 (BCL6) activity, optionally wherein the medicament is to be used in combination with at least one other active agent, further optionally wherein the at least one other active agent comprises rituximab.

50. The use of claim 49, wherein

a) the disease or disorder is a lymphoid malignancy,

optionally wherein the lymphoid malignancy is peripheral T-cell lymphoma (PTCL), diffuse large B-cell lymphoma (DLBCL), mantle cell lymphoma (MCL), follicular lymphoma (FL), chronic lymphocytic leukemia (CLL), acute lymphoblastic leukemia/lymphoma (ALL), or cutaneous T-cell lymphoma, or

b) wherein an additional anti-cancer agent is to be administered with the medicament,

optionally wherein the additional anti-cancer agent is rituximab or an enhancer of zeste homolog 2 (EZH2) inhibitor.