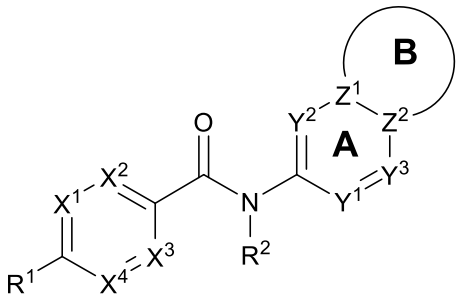
CLAIMS

What is claimed is:

1. A compound of Formula I or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof,



I

wherein:

X^1, X^2, X^3, and X^4 are CR^4 or N, wherein at least two but no more than three of X^1, X^2, X^3, and X^4 are N;

each R^4 is independently hydrogen, halo, hydroxy, $C_{1\text{-}6}$alkyl, $C_{1\text{-}6}$haloalkyl, or $C_{1\text{-}6}$alkoxy;

Y^1 is CR^5 or N;

R^5 is hydrogen, cyano, halo, hydroxy, $C_{1\text{-}6}$alkyl, $C_{1\text{-}6}$haloalkyl, $C_{1\text{-}6}$alkylthio, $C_{1\text{-}6}$alkoxy, $C_{1\text{-}6}$haloalkoxy, heterocyclyl, $-NH_2$, $-NHR^{17}$, or $-N(R^{17})_2$, and optionally substituted on an available nitrogen atom with $C_{1\text{-}6}$alkyl or $C_{1\text{-}6}$haloalkyl;

Y^2 is CR^6 or N;

R^6 is hydrogen, cyano, halo, hydroxy, $C_{1\text{-}6}$alkyl, $C_{1\text{-}6}$haloalkyl, $C_{1\text{-}6}$alkylthio, $C_{1\text{-}6}$alkoxy, $C_{1\text{-}6}$haloalkoxy, heterocyclyl, $-NH_2$, $-NHR^{17}$, or $-N(R^{17})_2$, and optionally substituted on an available nitrogen atom with $C_{1\text{-}6}$alkyl or $C_{1\text{-}6}$haloalkyl; and

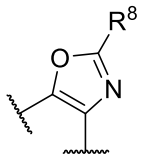
Y^3 is CR^3 or N;

R^3 is hydrogen, cyano, halo, hydroxy, $C_{1\text{-}6}$alkyl, $C_{1\text{-}6}$haloalkyl, $C_{1\text{-}6}$alkylthio, $C_{1\text{-}6}$alkoxy, $C_{1\text{-}6}$haloalkoxy, heterocyclyl, $-NH_2$, $-NHR^{17}$, or $-N(R^{17})_2$, and optionally substituted on an available nitrogen atom with $C_{1\text{-}6}$alkyl or $C_{1\text{-}6}$haloalkyl;

each R^{17} is independently $C_{1\text{-}4}$alkyl, or two R^{17} join, with any intervening atoms, to form a 3- to 6-membered heterocyclyl;

each of Z^1 and Z^2 is C;

Ring A and Ring B together form a 9-membered bicyclic heteroaryl containing 1 to 3 ring nitrogen atoms;

Ring B is 

;

R^8 is $C_{1\text{-}6}$alkyl;

R^1 is $-L^1-R^{11}$, wherein L^1 is -O-, -S-, -S(O)-, $-S(O)_2$-, $-N(R^{12})$-, $-C_{1-3}$alkylene-, $-O-C_{1-3}$alkylene-, $-N(R^{12})-C_{1-3}$alkylene-, or absent, and R^{11} is heterocyclyl optionally substituted with 1 to 4 R^{13} groups;

R^{12} is hydrogen or C_{1-6}alkyl;

each R^{13} is independently selected from halo, cyano, hydroxy, C_{1-6}alkyl optionally substituted with R^{16}, C_{1-6}haloalkyl, C_{1-6}hydroxyalkyl, C_{3-10}cycloalkyl optionally substituted with R^{16}, C_{3-10}cycloalkyl-C_{1-6}alkyl optionally substituted with R^{16}, C_{6-10}aryl optionally substituted with R^{16}, C_{6-10}aryl-C_{1-6}alkyl optionally substituted with R^{16}, heteroaryl optionally substituted with R^{16}, heteroaryl-C_{1-6}alkyl optionally substituted with R^{16}, heterocyclyl optionally substituted with R^{16}, heterocyclyl-C_{1-6}alkyl optionally substituted with R^{16}, OR^{14}, $-NH_2$, $-NHR^{14}$, $-N(R^{14})_2$, $-C_{1-6}$alkylene-NH_2, $-C_{1-6}$alkylene-NHR^{14}, $-C_{1-6}$alkylene-$N(R^{14})_2$, $-C(O)R^{15}$, $-C(O)OR^{15}$, $-C(O)NHR^{15}$, $-C(O)N(C_{1-4}alkyl)R^{15}$, $-S(O)_2R^{15}$, $-S(O)R^{15}$, $-NHC(O)R^{15}$, $-N(C_{1-4}alkyl)C(O)R^{15}$, $-NHS(O)R^{15}$, $-N(C_{1-4}alkyl)S(O)R^{15}$, $-NHS(O)_2R^{15}$, and $-N(C_{1-4}alkyl)S(O)_2R^{15}$;

each R^{14} is independently selected from C_{1-6}alkyl, C_{3-10}cycloalkyl, C_{6-10}aryl, heteroaryl, and heterocyclyl; and each R^{14} is optionally substituted with one to six halo, C_{1-3}alkyl, C_{1-3}alkoxy, C_{3-10}cycloalkyl, or $-NHSO_2$-aryl-$N(CH_3)_2$;

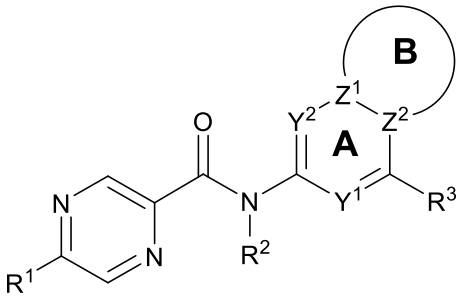
each R^{15} is independently hydrogen, -OH, C_{1-6}alkyl, C_{1-6}haloalkyl, C_{3-10}cycloalkyl, C_{6-10}aryl, heteroaryl, or heterocyclyl;

each R^{16} is independently halo, cyano, hydroxy, $-NH_2$, $-NHR^{21}$, $-N(R^{21})_2$, C_{1-6}alkyl, C_{1-6}haloalkyl, OR^{21}, or C_{3-10}cycloalkyl;

each R^{21} is independently selected from C_{1-6}alkyl, C_{3-10}cycloalkyl, C_{6-10}aryl, heteroaryl, and heterocyclyl, and each R^{21} is optionally substituted with one to six halo or C_{1-3}alkoxy; and

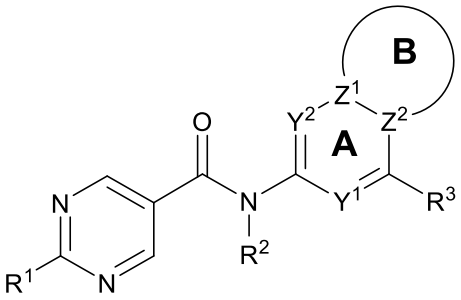
R^2 is hydrogen or C_{1-6}alkyl.

2. The compound of claim 1, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein the compound is of Formula Ia:



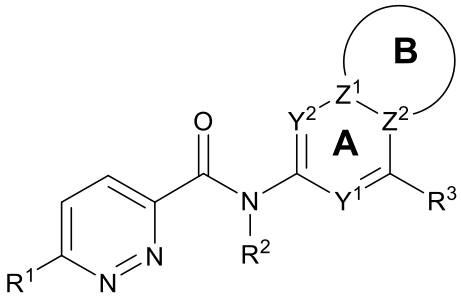
Ia; or

of Formula Ib:



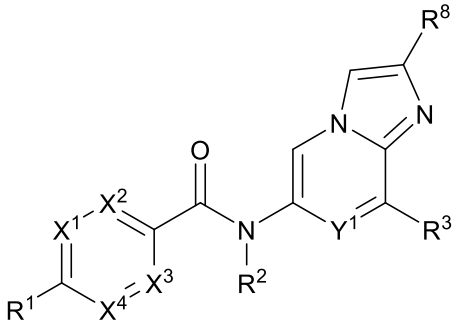
Ib; or

of Formula Ic:



Ic.

3. A compound or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein the compound is of Formula IIa:



IIa;

wherein R^8 is halo, hydroxy, C_{1-6}alkyl, C_{1-6}haloalkyl, or C_{1-6}alkoxy;

X^1, X^2, X^3, and X^4 are CR^4 or N, wherein at least two but no more than three of X^1, X^2, X^3, and X^4 are N;

each R^4 is independently hydrogen, halo, hydroxy, C_{1-6}alkyl, C_{1-6}haloalkyl, or C_{1-6}alkoxy;

Y^1 is CR^5 or N;

R^5 is hydrogen, cyano, halo, hydroxy, C_{1-6}alkyl, C_{1-6}haloalkyl, C_{1-6}alkylthio, C_{1-6}alkoxy, C_{1-6}haloalkoxy, heterocyclyl, $-NH_2$, $-NHR^{17}$, or $-N(R^{17})_2$, and optionally substituted on an available nitrogen atom with C_{1-6}alkyl or C_{1-6}haloalkyl;

R^3 is hydrogen, cyano, halo, hydroxy, C_{1-6}alkyl, C_{1-6}haloalkyl, C_{1-6}alkylthio, C_{1-6}alkoxy, C_{1-6}haloalkoxy, heterocyclyl, $-NH_2$, $-NHR^{17}$, or $-N(R^{17})_2$, and optionally substituted on an available nitrogen atom with C_{1-6}alkyl or C_{1-6}haloalkyl;

each R^{17} is independently C_{1-4}alkyl, or two R^{17} join, with any intervening atoms, to form a 3- to 6-membered heterocyclyl;

R^1 is $-L^1-R^{11}$, wherein L^1 is -O-, -S-, -S(O)-, $-S(O)_2-$, $-N(R^{12})-$, $-C_{1-3}$alkylene-, $-O-C_{1-3}$alkylene-, $-N(R^{12})-C_{1-3}$alkylene-, or absent, and R^{11} is heterocyclyl optionally substituted with 1 to 4 R^{13} groups;

R^{12} is hydrogen or C_{1-6}alkyl;

each R^{13} is independently selected from halo, cyano, hydroxy, C_{1-6}alkyl optionally substituted with R^{16}, C_{1-6}haloalkyl, C_{1-6}hydroxyalkyl, C_{3-10}cycloalkyl optionally substituted with R^{16}, C_{3-10}cycloalkyl-C_{1-6}alkyl optionally substituted with R^{16}, C_{6-10}aryl optionally substituted with R^{16}, C_{6-10}aryl-C_{1-6}alkyl optionally substituted with R^{16}, heteroaryl optionally substituted with R^{16}, heteroaryl-C_{1-6}alkyl optionally substituted with R^{16}, heterocyclyl optionally substituted with R^{16}, heterocyclyl-C_{1-6}alkyl optionally substituted with R^{16}, OR^{14}, $-NH_2$, $-NHR^{14}$, $-N(R^{14})_2$, $-C_{1-6}$alkylene-NH_2, $-C_{1-6}$alkylene-NHR^{14}, $-C_{1-6}$alkylene-$N(R^{14})_2$, $-C(O)R^{15}$, $-C(O)OR^{15}$, $-C(O)NHR^{15}$, $-C(O)N(C_{1-4}alkyl)R^{15}$, $-S(O)_2R^{15}$, $-S(O)R^{15}$, $-NHC(O)R^{15}$, $-N(C_{1-4}alkyl)C(O)R^{15}$, $-NHS(O)R^{15}$, $-N(C_{1-4}alkyl)S(O)R^{15}$, $-NHS(O)_2R^{15}$, and $-N(C_{1-4}alkyl)S(O)_2R^{15}$;

each R^{14} is independently selected from C_{1-6}alkyl, C_{3-10}cycloalkyl, C_{6-10}aryl, heteroaryl, and heterocyclyl; and each R^{14} is optionally substituted with one to six halo, C_{1-3}alkyl, C_{1-3}alkoxy, C_{3-10}cycloalkyl, or $-NHSO_2$-aryl-$N(CH_3)_2$;

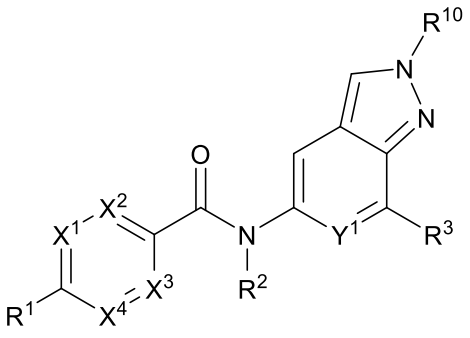
each R^{15} is independently hydrogen, -OH, C_{1-6}alkyl, C_{1-6}haloalkyl, C_{3-10}cycloalkyl, C_{6-10}aryl, heteroaryl, or heterocyclyl;

each R^{16} is independently halo, cyano, hydroxy, $-NH_2$, $-NHR^{21}$, $-N(R^{21})_2$, C_{1-6}alkyl, C_{1-6}haloalkyl, OR^{21}, or C_{3-10}cycloalkyl;

each R^{21} is independently selected from C_{1-6}alkyl, C_{3-10}cycloalkyl, C_{6-10}aryl, heteroaryl, and heterocyclyl, and each R^{21} is optionally substituted with one to six halo or C_{1-3}alkoxy; and

R^2 is hydrogen or C_{1-6}alkyl;

4. A compound or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein the compound is of Formula IIb:



IIb;

wherein:

R^{10} is hydrogen, C_{1-6}alkyl or C_{1-6}haloalkyl;

X^1 is N; X^2 is CH; X^3 is N; and X^4 is CH; or

X^1 is CH; X^2 is N; X^3 is CH; and X^4 is N;

R^3 is hydrogen, cyano, halo, hydroxy, C_{1-6}alkyl, C_{1-6}haloalkyl, C_{1-6}alkylthio, C_{1-6}alkoxy, C_{1-6}haloalkoxy, heterocyclyl, $-NH_2$, $-NHR^{17}$, or $-N(R^{17})_2$, and optionally substituted on an available nitrogen atom with C_{1-6}alkyl or C_{1-6}haloalkyl;

Y^1 is CR^5 or N;

R^5 is hydrogen, cyano, halo, hydroxy, C_{1-6}alkyl, C_{1-6}haloalkyl, C_{1-6}alkylthio, C_{1-6}alkoxy, C_{1-6}haloalkoxy, heterocyclyl, $-NH_2$, $-NHR^{17}$, or $-N(R^{17})_2$, and optionally substituted on an available nitrogen atom with C_{1-6}alkyl or C_{1-6}haloalkyl;

each R^{17} is independently C_{1-4}alkyl, or two R^{17} join, with any intervening atoms, to form a 3- to 6-membered heterocyclyl;

R^1 is $-L^1-R^{11}$, wherein L^1 is -O-, -S-, -S(O)-, $-S(O)_2-$, $-N(R^{12})-$, $-C_{1-3}$alkylene-, $-O-C_{1-3}$alkylene-, $-N(R^{12})-C_{1-3}$alkylene-, or absent, and R^{11} is heterocyclyl optionally substituted with 1 to 4 R^{13} groups;

R^{12} is hydrogen or C_{1-6}alkyl;

each R^{13} is independently selected from halo, cyano, hydroxy, C_{1-6}alkyl optionally substituted with R^{16}, C_{1-6}haloalkyl, C_{1-6}hydroxyalkyl, C_{3-10}cycloalkyl optionally substituted with R^{16}, C_{3-10}cycloalkyl-C_{1-6}alkyl optionally substituted with R^{16}, C_{6-10}aryl optionally substituted with R^{16}, C_{6-10}aryl-C_{1-6}alkyl optionally substituted with R^{16}, heteroaryl optionally substituted with R^{16}, heteroaryl-C_{1-6}alkyl optionally substituted with R^{16}, heterocyclyl optionally substituted with R^{16}, heterocyclyl-C_{1-6}alkyl optionally substituted with R^{16}, OR^{14}, $-NH_2$, $-NHR^{14}$, $-N(R^{14})_2$, $-C_{1-6}$alkylene-NH_2, $-C_{1-6}$alkylene-NHR^{14}, $-C_{1-6}$alkylene-$N(R^{14})_2$, $-C(O)R^{15}$, $-C(O)OR^{15}$, $-C(O)NHR^{15}$, $-C(O)N(C_{1-4}alkyl)R^{15}$, $-S(O)_2R^{15}$, $-S(O)R^{15}$, $-NHC(O)R^{15}$, $-N(C_{1-4}alkyl)C(O)R^{15}$, $-NHS(O)R^{15}$, $-N(C_{1-4}alkyl)S(O)R^{15}$, $-NHS(O)_2R^{15}$, and $-N(C_{1-4}alkyl)S(O)_2R^{15}$;

each R^{14} is independently selected from C_{1-6}alkyl, C_{3-10}cycloalkyl, C_{6-10}aryl, heteroaryl, and heterocyclyl; and each R^{14} is optionally substituted with one to six halo, C_{1-3}alkyl, C_{1-3}alkoxy, C_{3-10}cycloalkyl, or $-NHSO_2$-aryl-$N(CH_3)_2$;

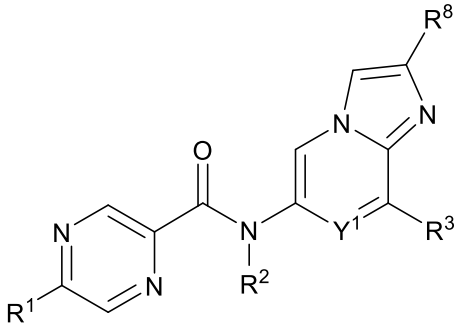
each R^{15} is independently hydrogen, -OH, C_{1-6}alkyl, C_{1-6}haloalkyl, C_{3-10}cycloalkyl, C_{6-10}aryl, heteroaryl, or heterocyclyl;

each R^{16} is independently halo, cyano, hydroxy, $-NH_2$, $-NHR^{21}$, $-N(R^{21})_2$, C_{1-6}alkyl, C_{1-6}haloalkyl, OR^{21}, or C_{3-10}cycloalkyl;

each R^{21} is independently selected from C_{1-6}alkyl, C_{3-10}cycloalkyl, C_{6-10}aryl, heteroaryl, and heterocyclyl, and each R^{21} is optionally substituted with one to six halo or C_{1-3}alkoxy; and

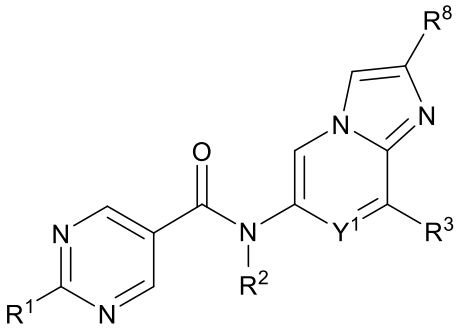
R^2 is hydrogen or C_{1-6}alkyl.

5. The compound of claim 3, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein the compound is of Formula IIIa:



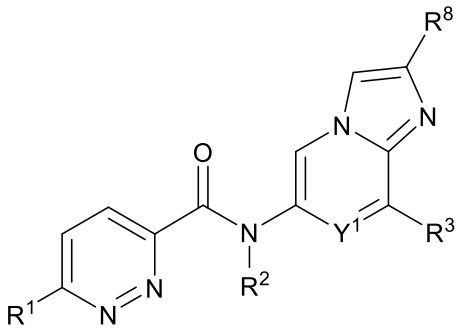
IIIa; or

of Formula IIIb:



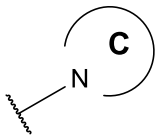
IIIb; or

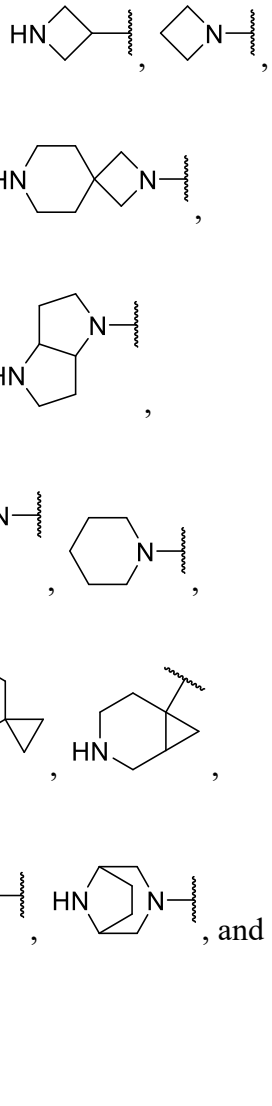
of Formula IIIc:



IIIc.

6. The compound of any one of claims 1-5, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein R^{11} is heterocyclyl optionally substituted with 1 to 4 groups independently selected from halo, C_{1-6}alkyl, C_{1-6}haloalkyl, C_{3-10}cycloalkyl, heteroaryl, heterocyclyl, heterocyclyl-C_{1-6}alkyl, -NH_2, -NHR^{14}, -$N(R^{14})_2$, -C_{1-6}alkylene-NH_2, -C_{1-6}alkylene-NHR^{14}, -C_{1-6}alkylene-$N(R^{14})_2$, and -$C(O)OR^{15}$; wherein each R^{14} is independently selected from C_{1-6}alkyl, C_{3-10}cycloalkyl, and heterocyclyl, and each R^{14} is optionally substituted with one to three halo; and wherein R^{15} is C_{1-6}alkyl.

7. The compound of any one of claims 1-5, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein R^{11} is  wherein Ring C is a 3- to 10-membered heterocyclyl containing 0, 1 or 2 additional ring nitrogen atoms optionally substituted with 1 to 4 R^{13} groups.

8. The compound of any one of claims 1-5, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein R^{11} is selected from , each of which is optionally substituted with 1 to 4 R^{13} groups.

9. The compound of any one of claims 1-5, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein R^{11} is optionally substituted with 1 to 4 groups independently selected from fluoro, methyl, ethyl, methoxyethoxy, trifluoromethyl, 2,2-difluoroethylaminomethyl, N-methyl-2,2-difluoroethylaminomethyl, (3,3,3-trifluoroprop-1-ylamino)methyl, cyclopropyl, 1-(cyclopropylamino)-1-cyclopropyl, 1-pyrrolyl, N-morpholinyl, N-pyrrolidinyl, N-pyrrolidinylmethyl, 2-pyrrolidinyl, 1-methyl-2-pyrrolidinyl, 1-methyl-2-piperdinyl, 1-cyclopropyl-2-piperdinyl, cyclopropylamino, N-cyclopropylaminomethyl, (1-methyl-1-cyclopropylamino)methyl, 1-(N-cyclopropylamino)ethyl, N,N-dicyclopropylaminomethyl, N-

methoxyethyl-N-cyclopropylaminomethyl, N-cyclopropyl-N-methylamino, N-cyclopropyl-N-methylaminomethyl, amino, aminomethyl, methylamino, ethylamino, isopropylamino, isopropylaminomethyl, N-isopropyl-N-aminomethyl, tert-butylamino, n-butylamino, N-methylaminomethyl, N,N-dimethylaminomethyl, 3,3-difluorocyclobutylamino, tetrahydropyranylamino, oxetanylamino, (3-methoxy-1-azetidinyl)methyl, (3-methoxy-1-pyrrolidinyl)methyl, (3-fluoro-1-pyrrolidinyl)methyl, (3-fluoro-3-methyl-1-pyrrolidinyl)methyl, 4-morpholinylmethyl, and tert-butoxycarbonyl.

10. The compound of any one of claims 1-9, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein R^3 is halo; or

wherein R^3 is methyl; or

wherein R^3 is methoxy.

11. The compound of any one of claims 1 or 3-10, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein each R^4 is hydrogen.

12. The compound of any one of claims 1-11, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein R^5 is hydrogen; or

wherein R^5 is $C_{1\text{-}6}$alkoxy.

13. The compound of any one of claims 1-12, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein L^1 is absent.

14. The compound of any one of claims 1-13, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein Y^1 is CR^5.

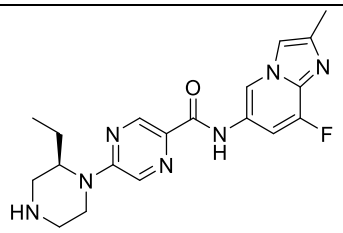
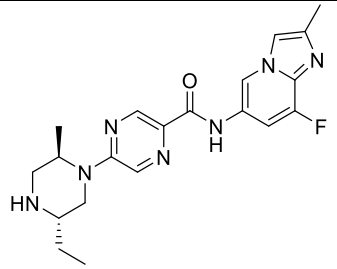
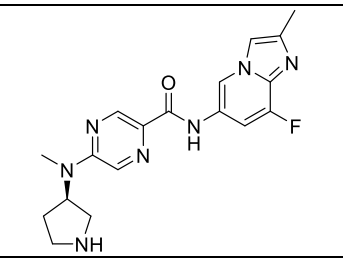
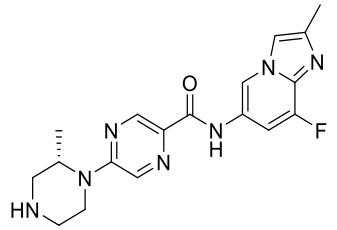
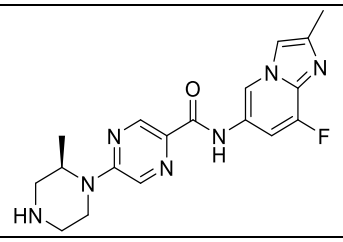
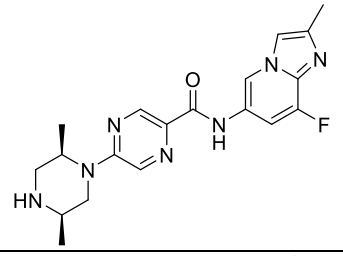
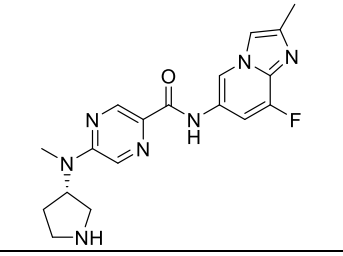
15. The compound of any one of claims 1-13, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein Y^1 is N.

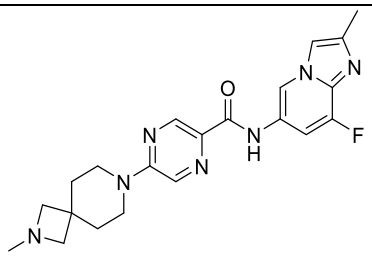
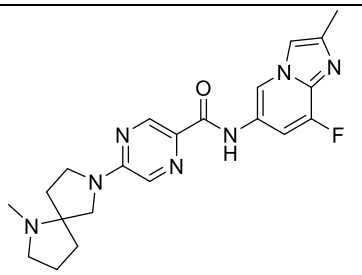
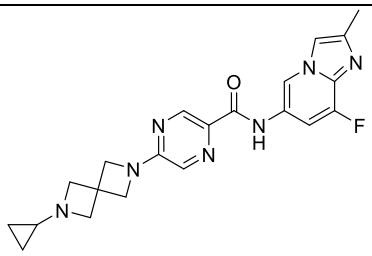
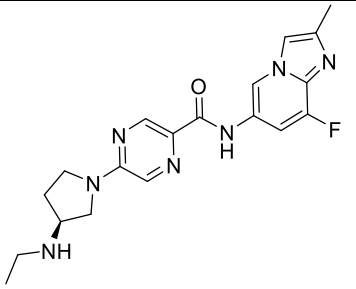
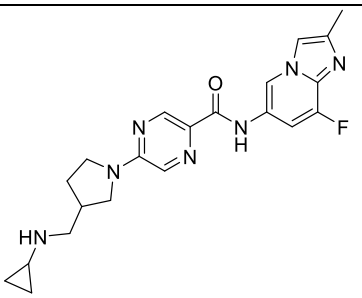
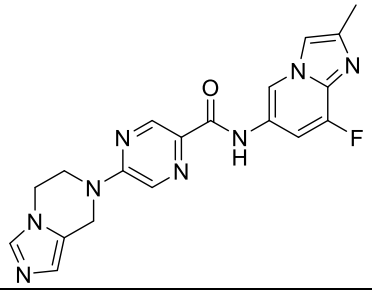
16. The compound of any one of claims 1-2, or 6-15, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein Y^2 is CR^6.

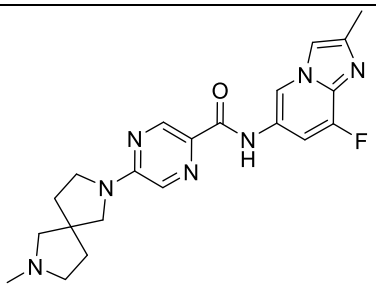
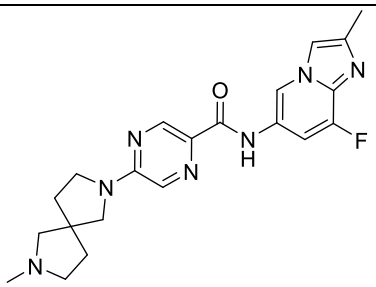
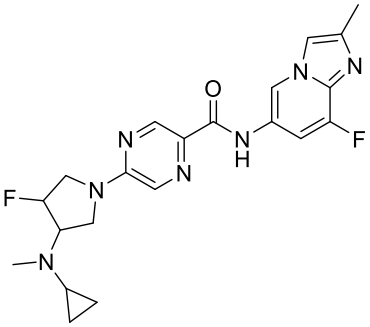
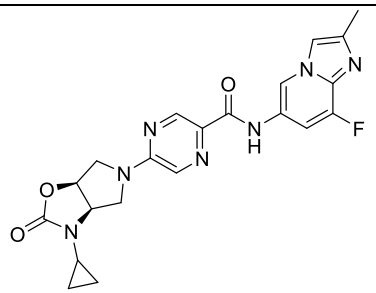
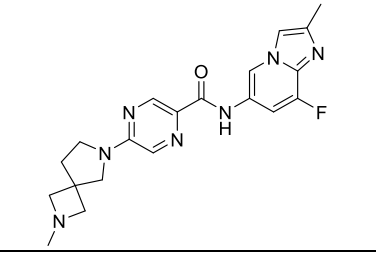
17. The compound of any one of claims 1, or 6-16, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, wherein Y^3 is CR^3.

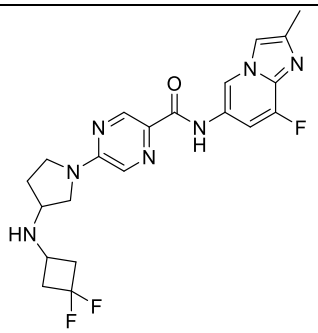
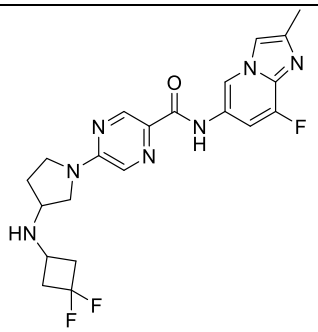
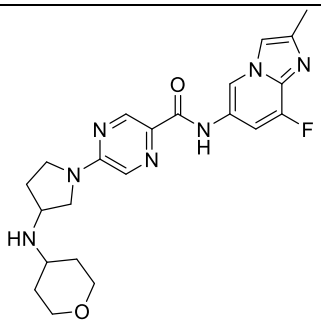
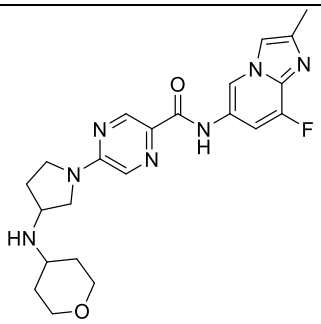
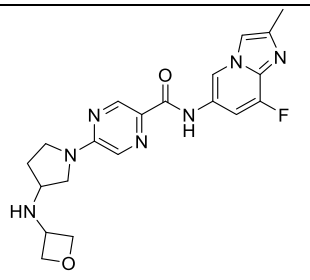
18. A compound, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, which is selected from:

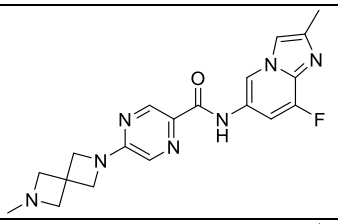
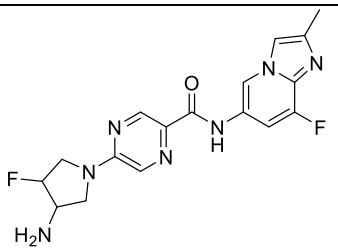
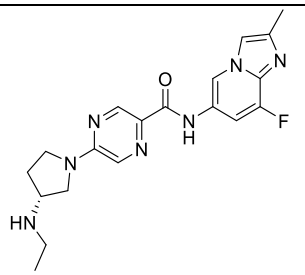
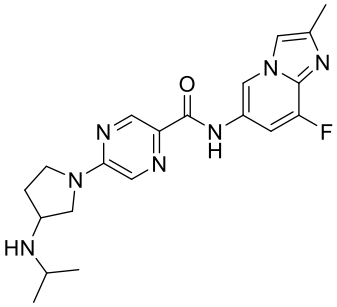
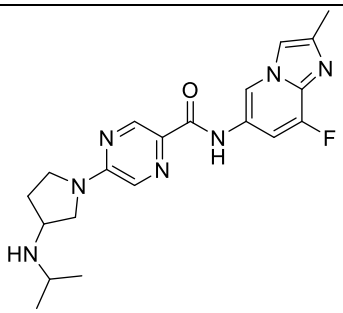
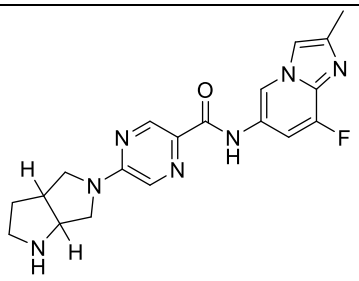
Ex.	Structure

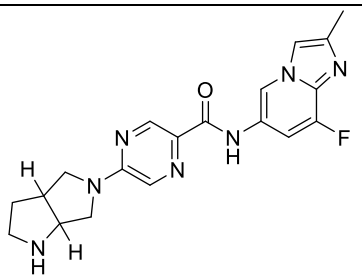
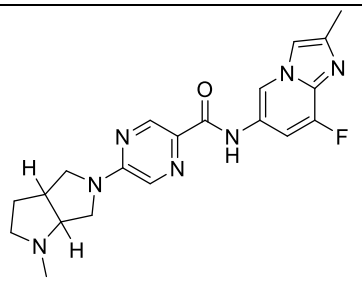
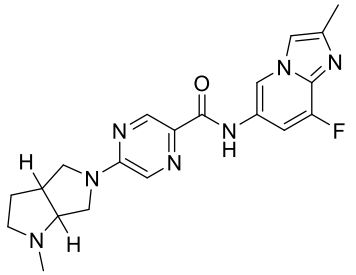
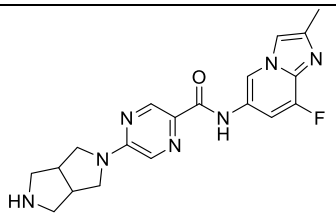
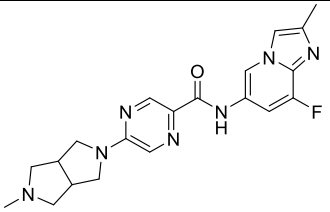
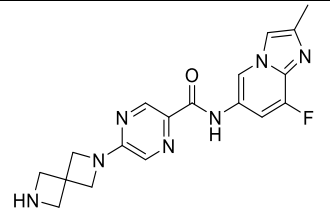
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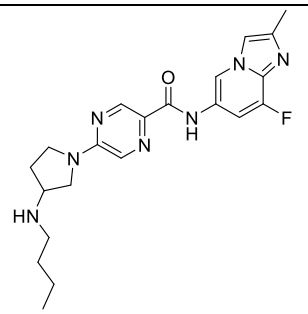
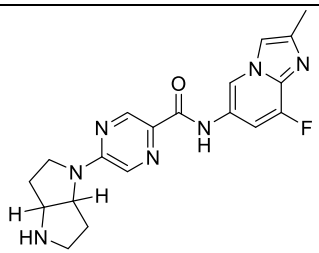
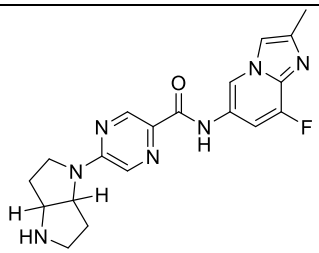
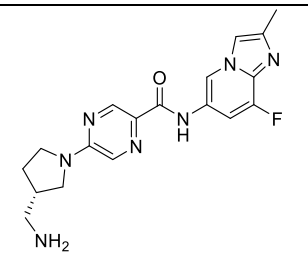
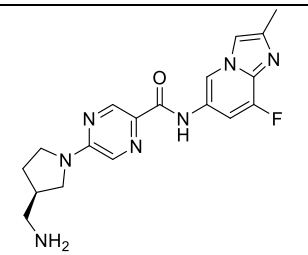
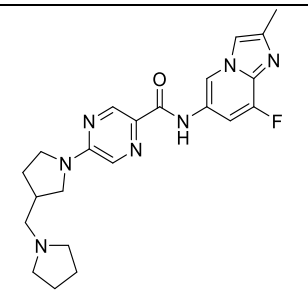
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9	 Enantiomer 1 + Enantiomer 2
10	
11	
12	 Enantiomer 1 + Enantiomer 2
13	

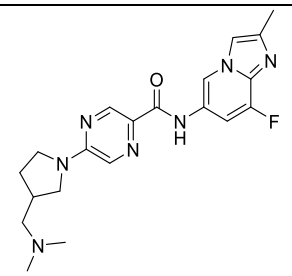
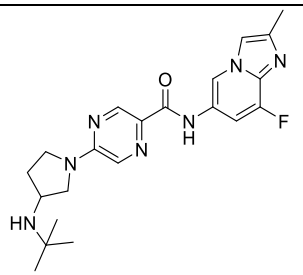
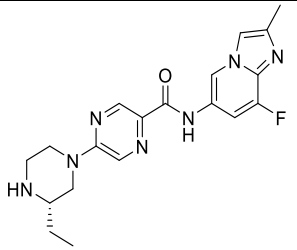
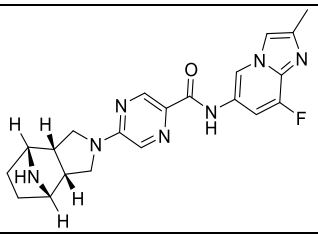
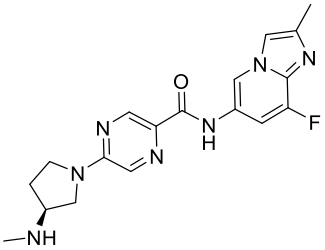
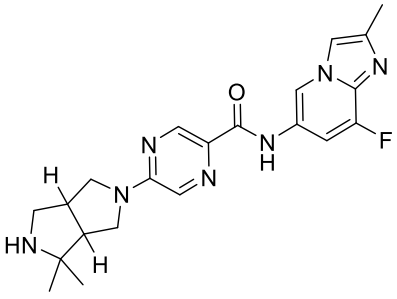
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15	 Enantiomer 1
16	 Cis Isomer, Enantiomer 1
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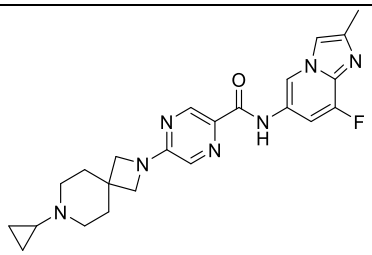
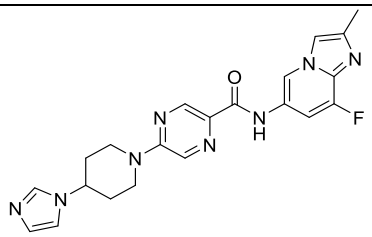
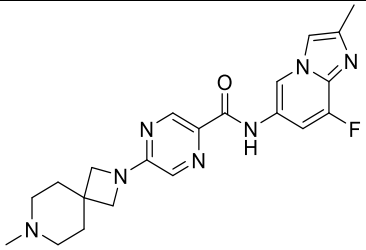
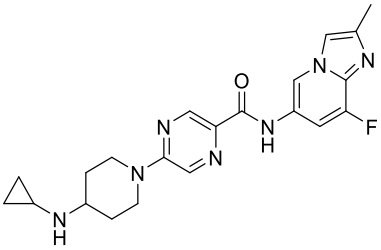
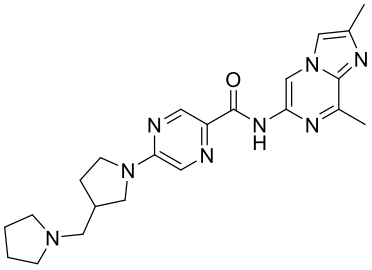
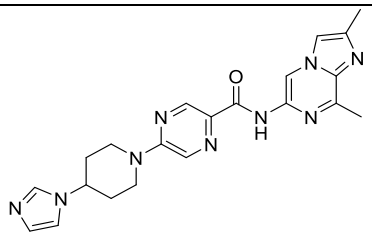
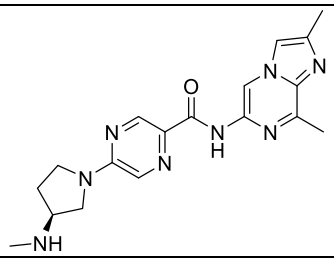
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20	 Enantiomer 2
21	 Enantiomer 2
22	 Enantiomer 1
23	 Enantiomer 1 + Enantiomer 2

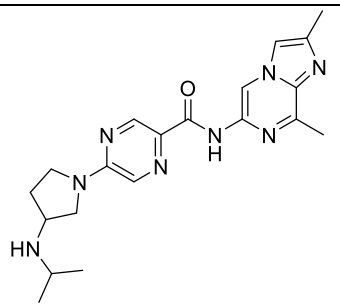
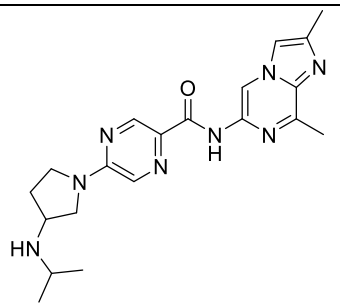
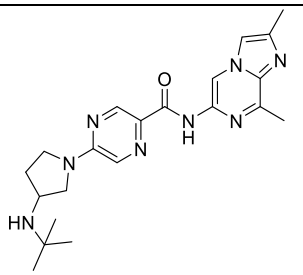
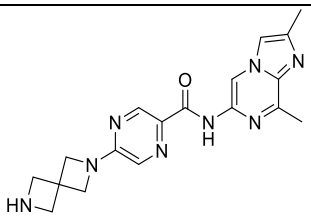
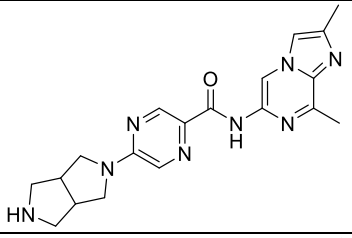
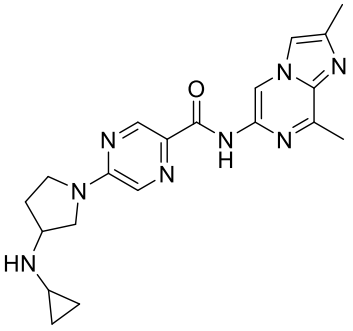
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25	 Cis Isomers, Enantiomer 1 + Enantiomer 2
26	
27	 Enantiomer 1
28	 Enantiomer 2
29	 Cis Isomer, Enantiomer 1

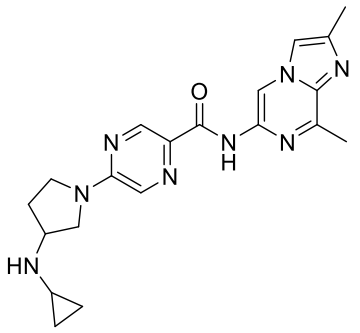
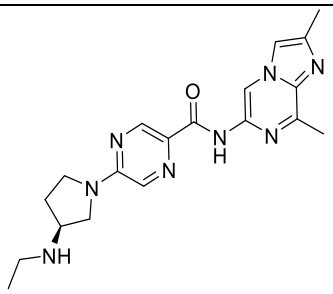
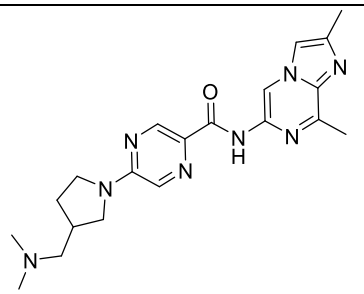
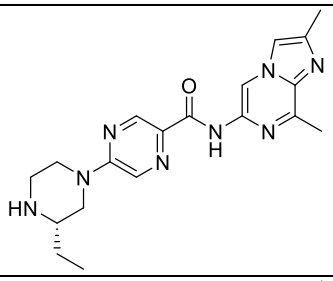
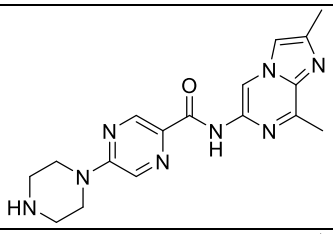
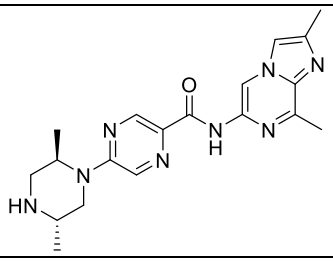
30	 Cis Isomer, Enantiomer 2
31	 Cis Isomer, Enantiomer 1
32	 Cis Isomer, Enantiomer 2
33	
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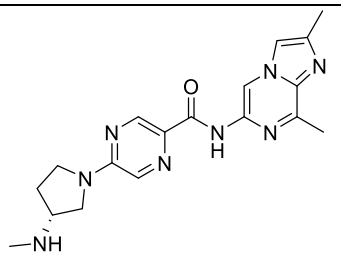
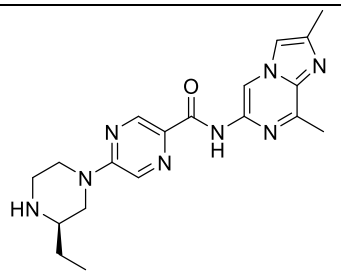
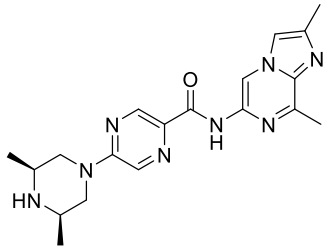
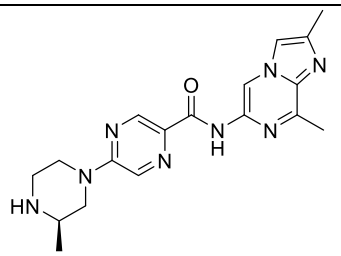
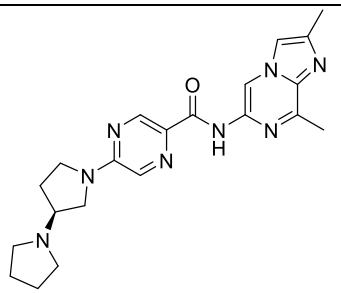
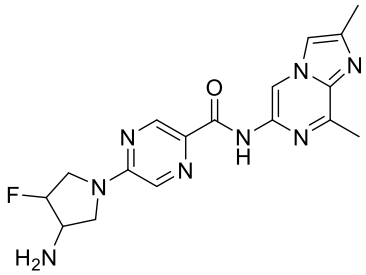
36	 Enantiomer 1 + Enantiomer 2
37	 Cis Isomer, Enantiomer 2
38	 Cis Isomer, Enantiomer 1
39	
40	
41	 Enantiomer 1 + Enantiomer 2

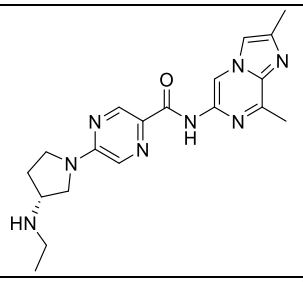
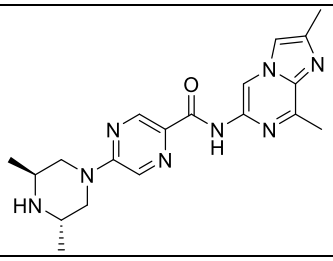
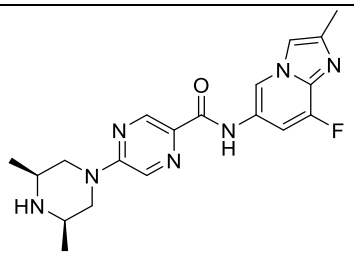
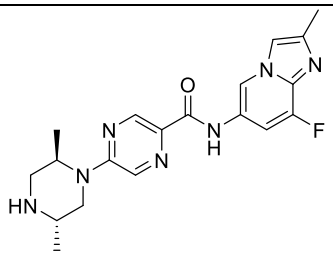
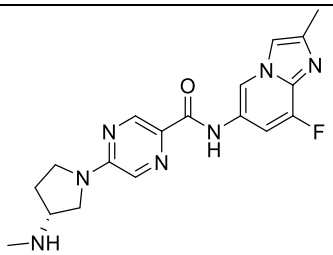
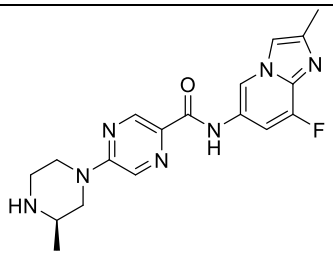
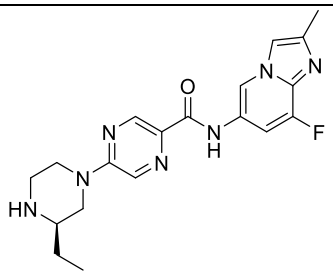
42	 Enantiomer 1 + Enantiomer 2
43	 Enantiomer 1 + Enantiomer 2
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47	 Cis Isomers, Enantiomer 1 + Enantiomer 2

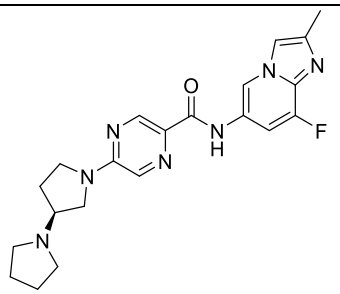
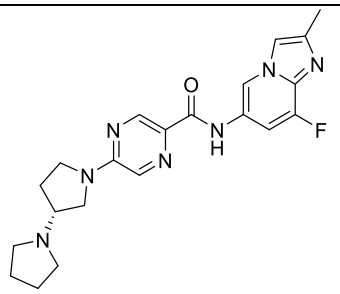
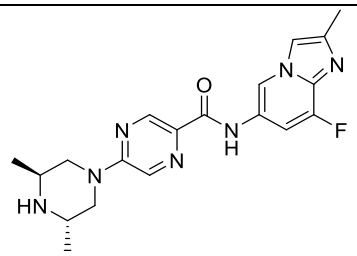
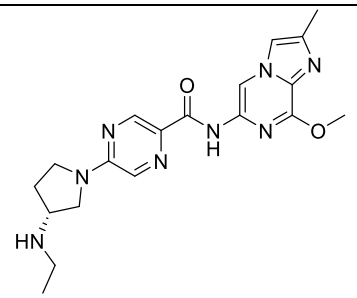
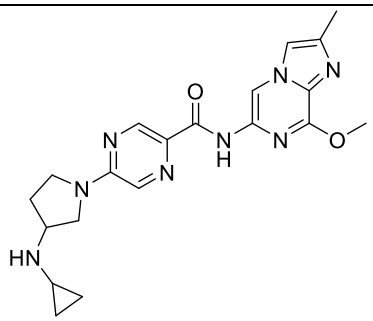
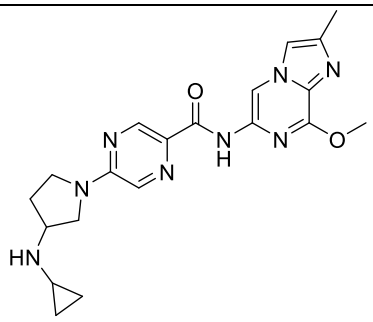
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52	 Enantiomer 1 + Enantiomer 2
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54	

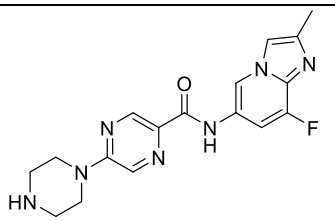
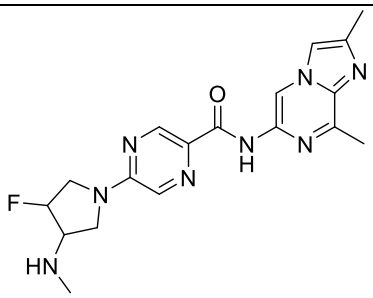
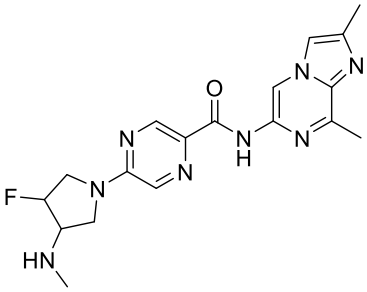
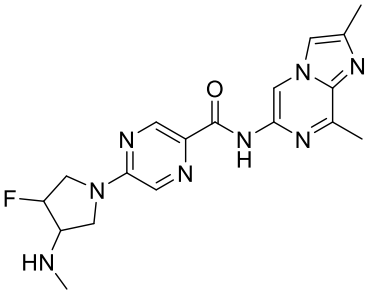
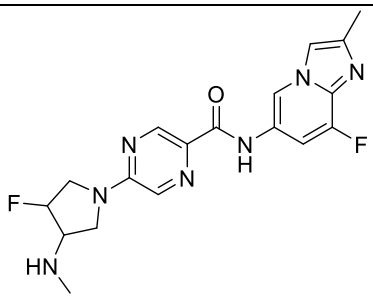
55	 Enantiomer 1
56	 Enantiomer 2
57	 Enantiomer 1 + Enantiomer 2
58	
59	
60	 Enantiomer 2

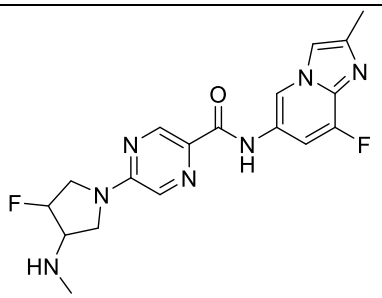
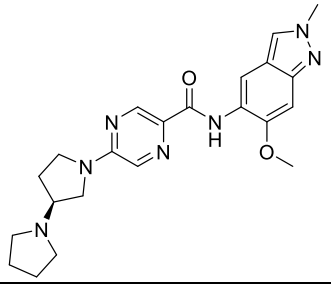
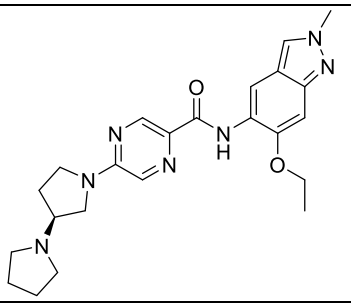
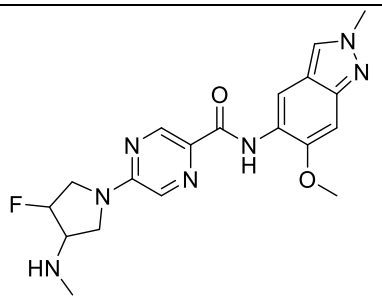
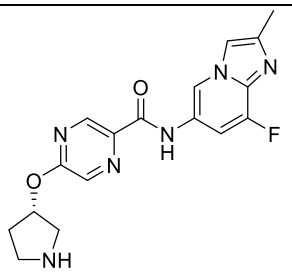
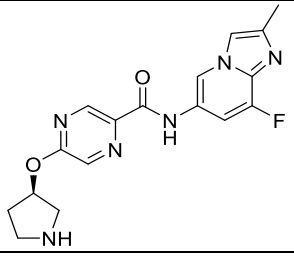
61	 Enantiomer 1
62	
63	 Enantiomer 1 + Enantiomer 2
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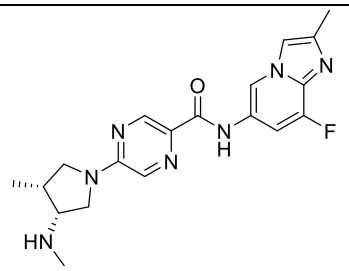
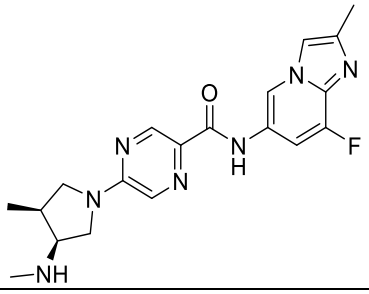
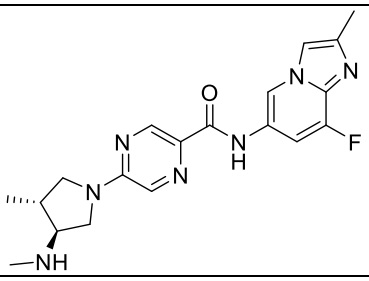
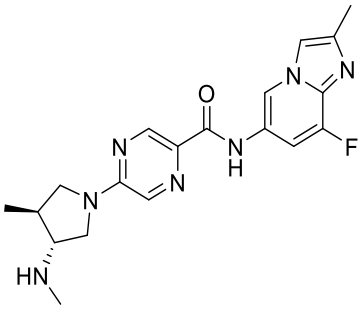
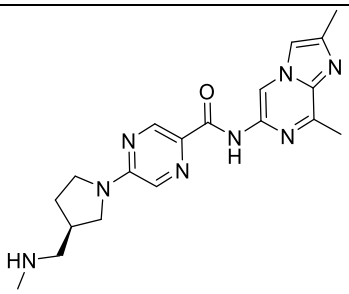
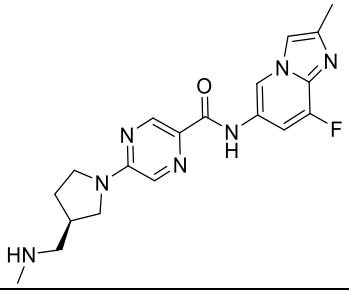
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72	 Trans Isomers, Enantiomer 1 + Enantiomer 2

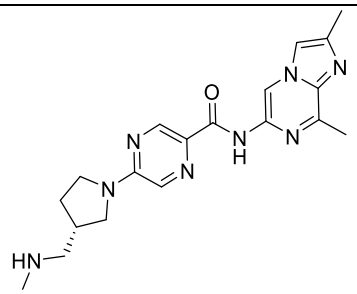
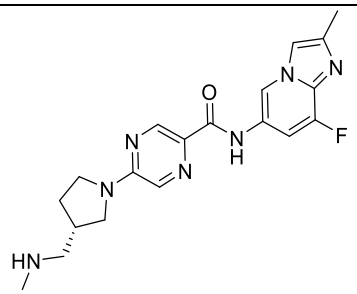
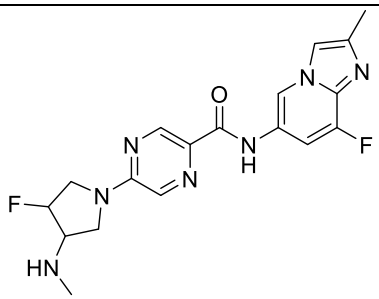
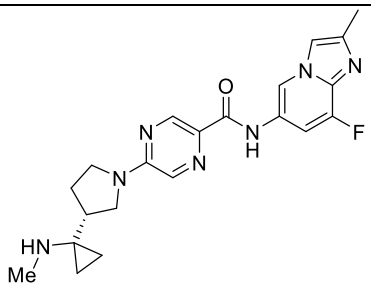
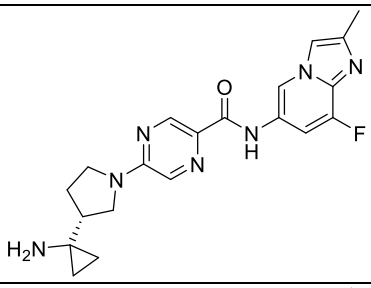
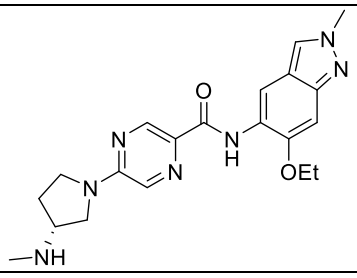
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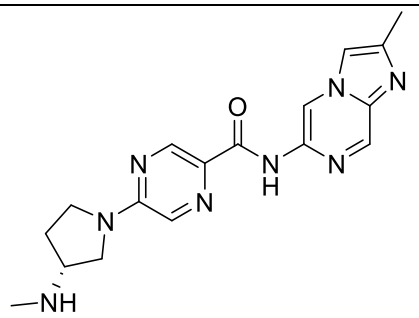
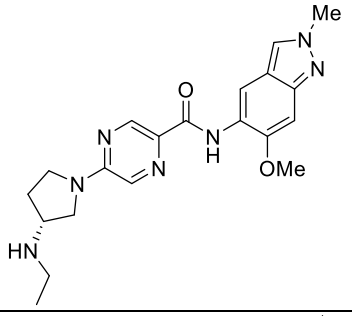
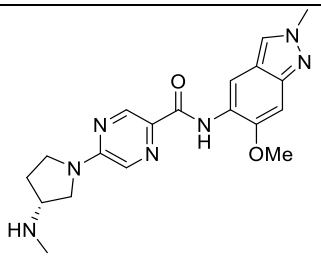
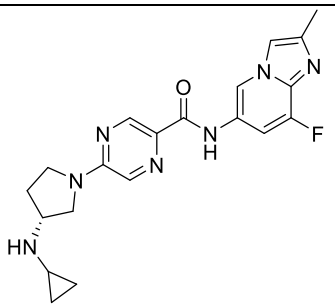
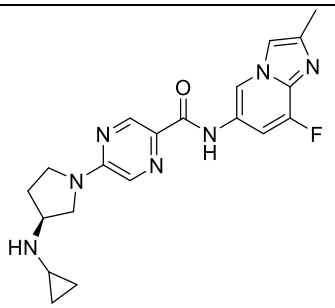
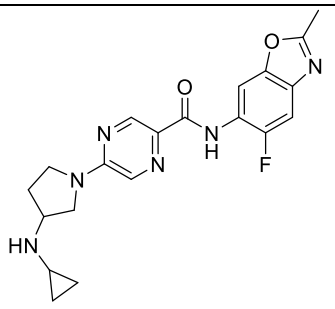
80	
81	
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84	 Enantiomer 1
85	 Enantiomer 2

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87	 Cis Isomer, Enantiomer 1
88	 Cis Isomer, Enantiomer 2
89	 Trans Isomers, Enantiomer 1 and Enantiomer 2
90	 Trans Isomers, Enantiomer 1 and Enantiomer 2

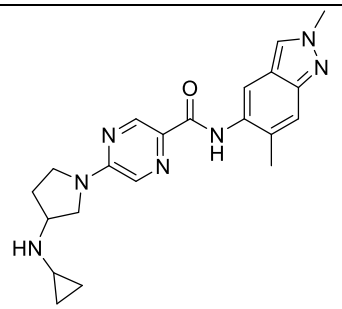
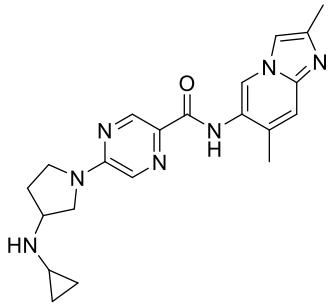
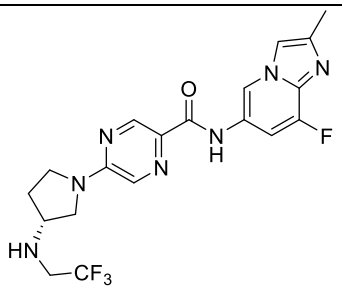
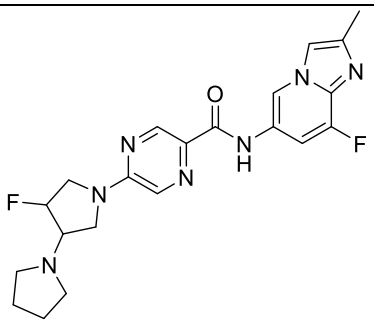
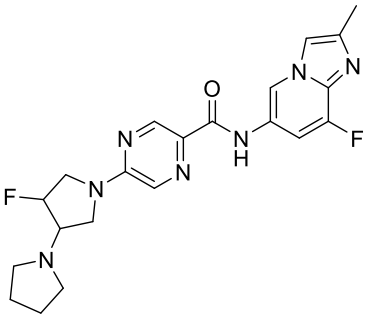
91	 Cis Isomer, Enantiomer 1
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94	 Cis Isomers, Enantiomer 1 + Enantiomer 2
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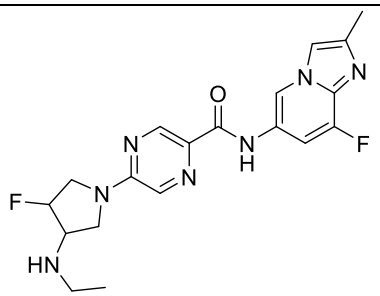
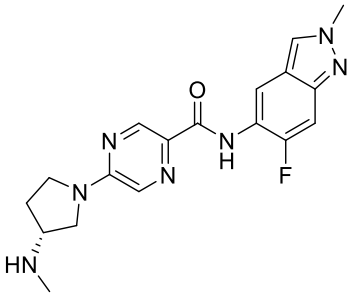
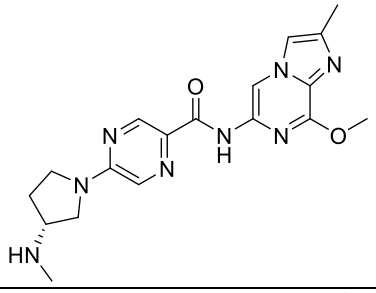
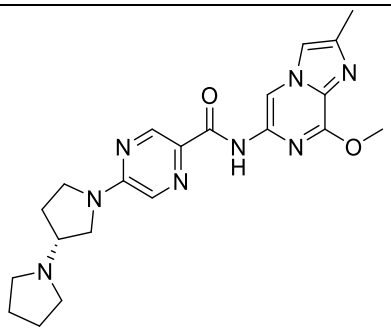
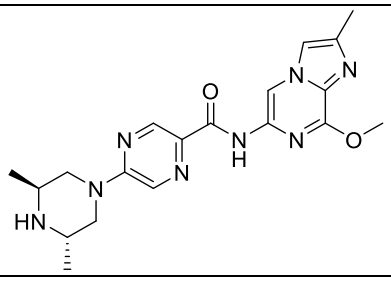
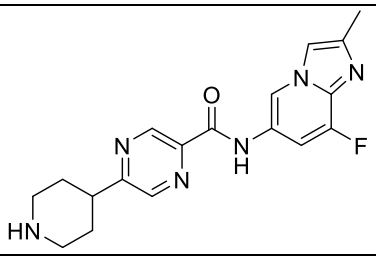
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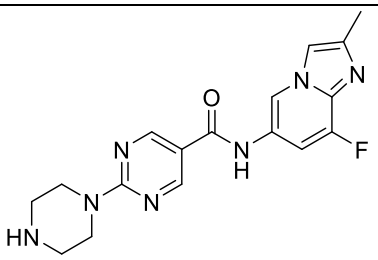
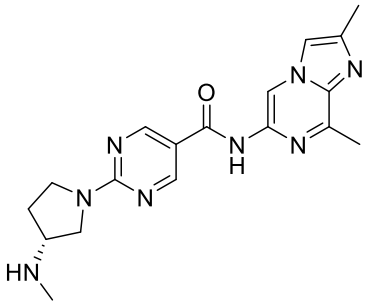
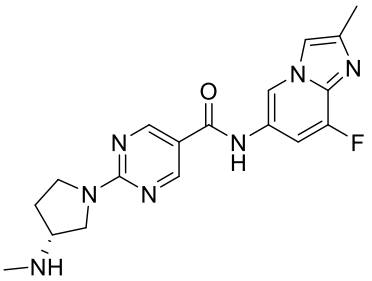
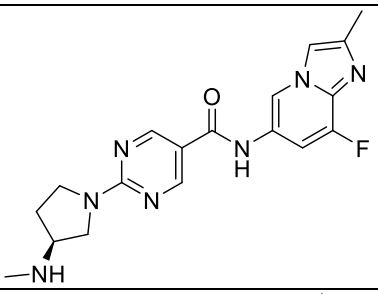
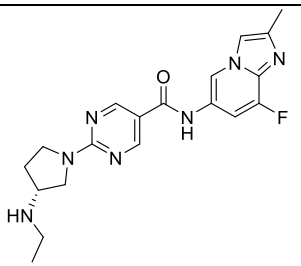
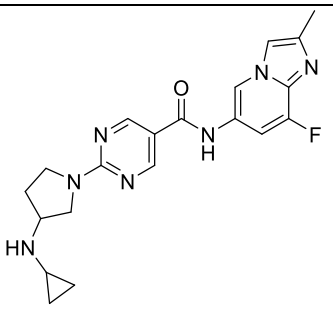
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105	 Cis Isomer, Enantiomer 1 + Enantiomer 2
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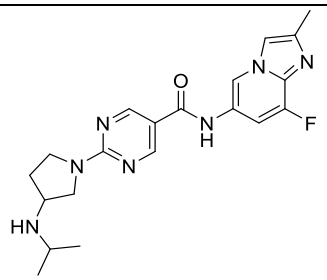
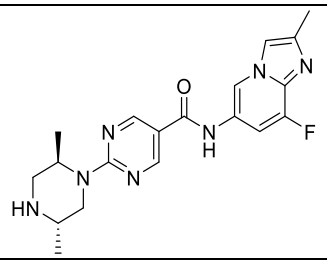
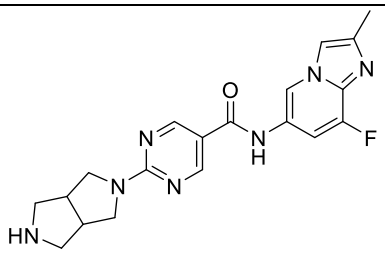
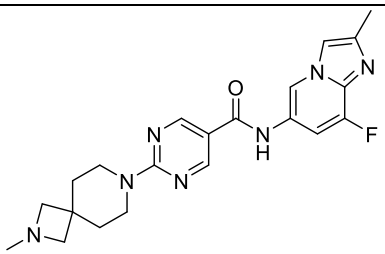
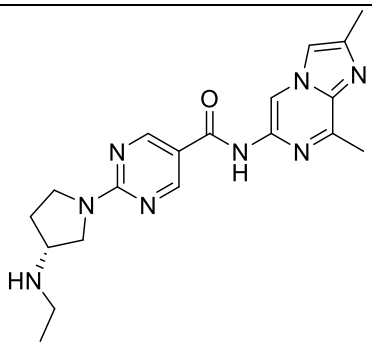
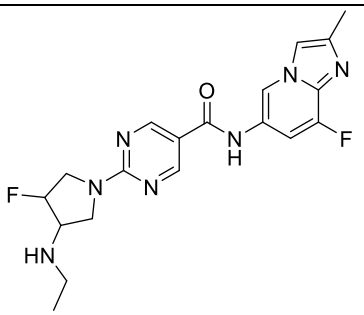
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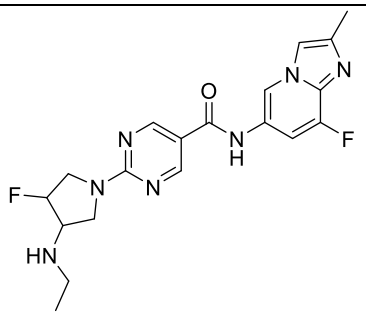
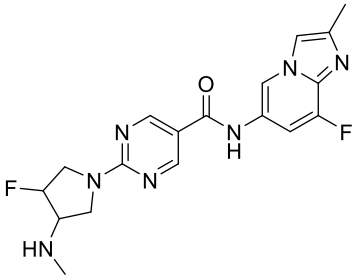
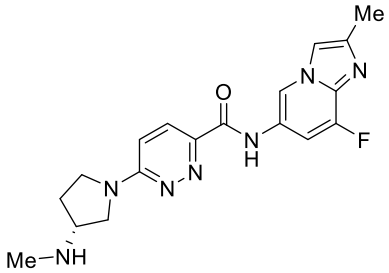
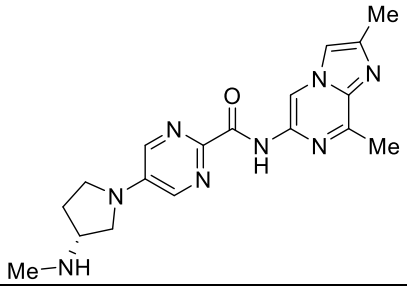
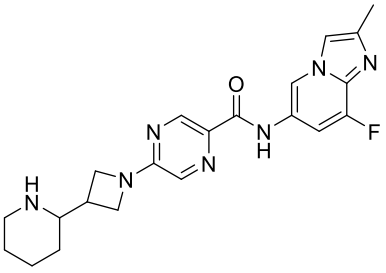
Enantiomer 1 + Enantiomer 2

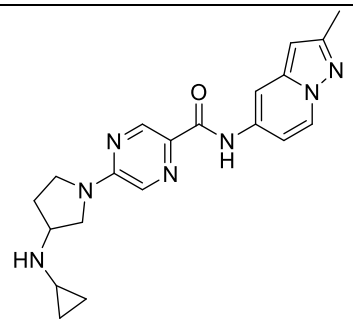
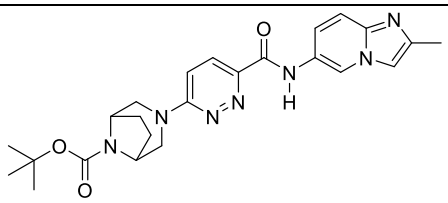
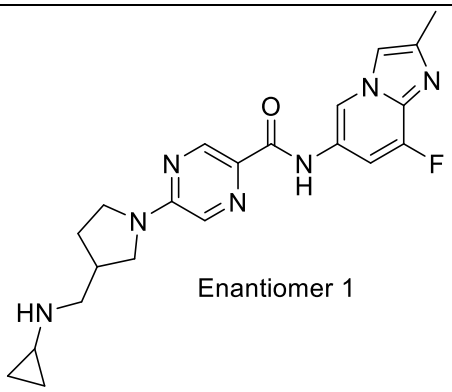
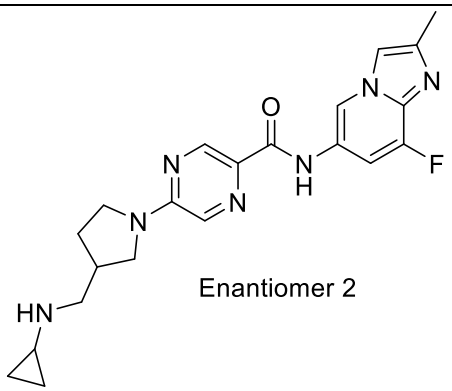
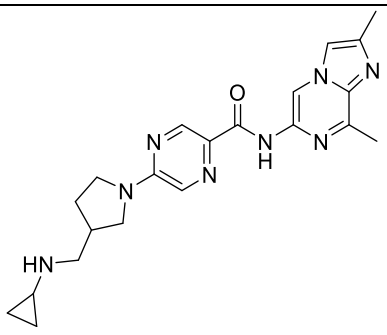
115	 Enantiomer 1 + Enantiomer 2
116	 Enantiomer 1 + Enantiomer 2
117	
118	 Cis Isomer, Enantiomer 1
119	 Cis Isomer, Enantiomer 2

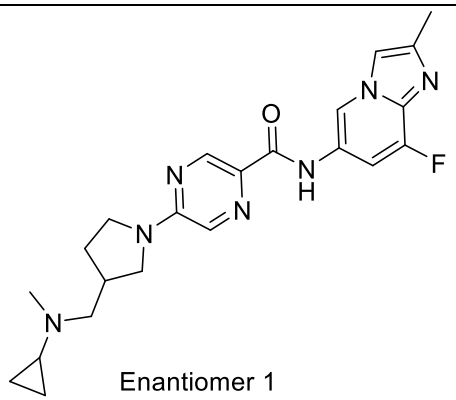
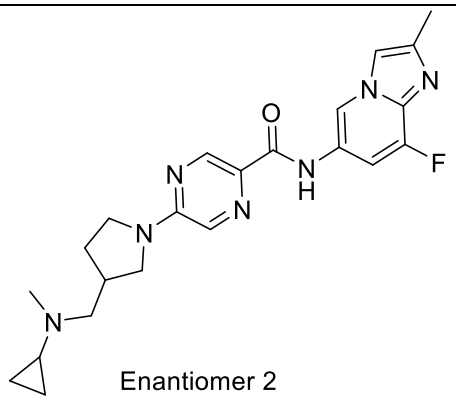
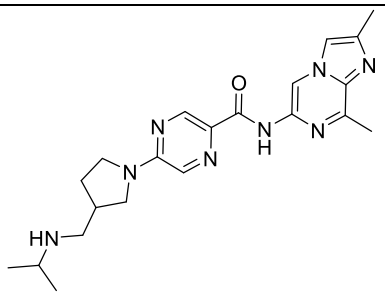
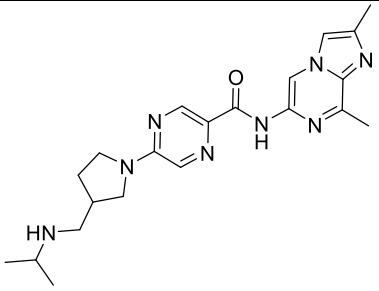
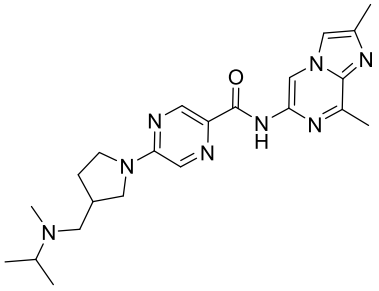
120	 Cis Isomer, Enantiomer 1
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122	
123	
124	
125	

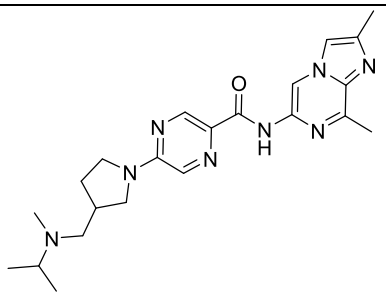
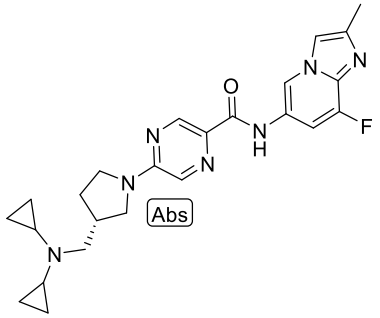
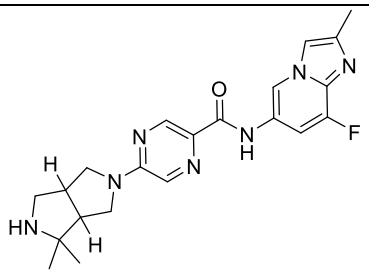
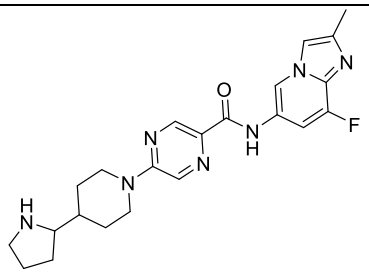
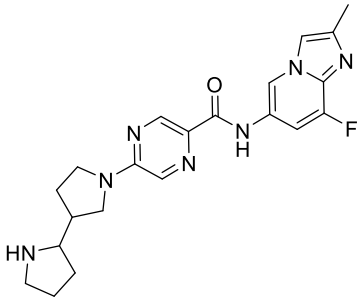
126	
127	
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130	
131	 Enantiomer 1 + Enantiomer 2

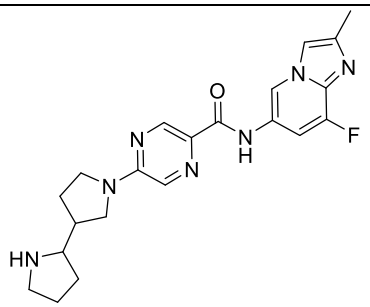
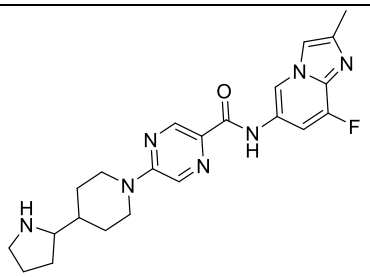
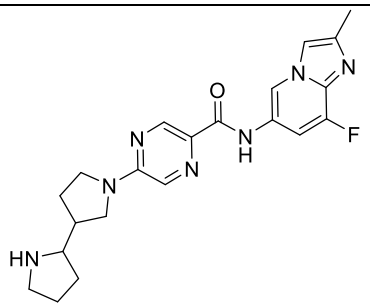
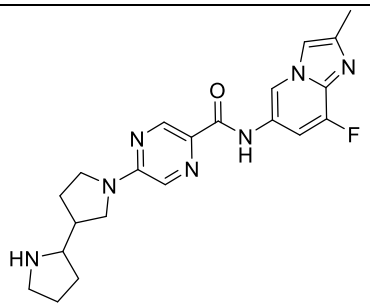
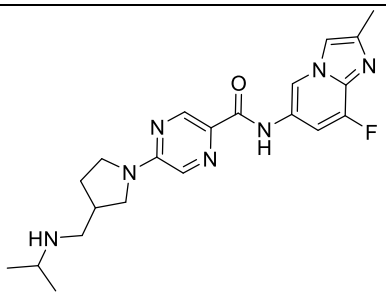
132	 Enantiomer 1 + Enantiomer 2
133	
134	 Cis Isomer
135	
136	
137	 Cis Isomer, Enantiomer 1

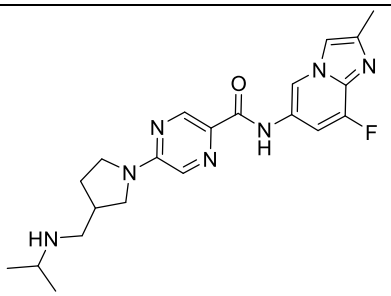
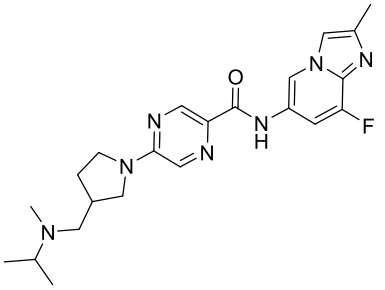
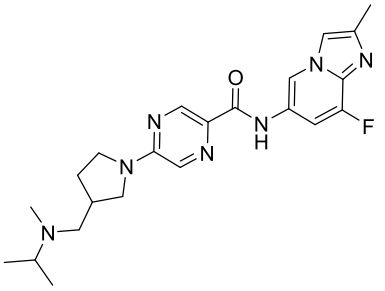
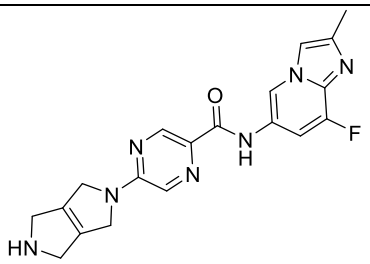
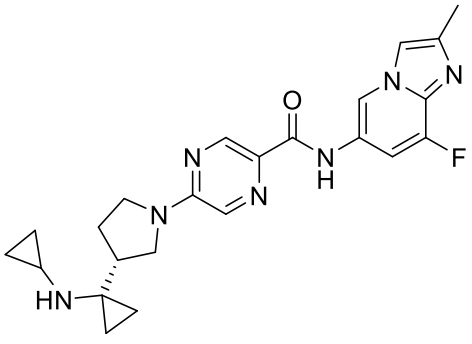
138	 Cis Isomer, Enantiomer 2
139	 Cis Isomer, Enantiomer 1
140	
141	
142	 Enantiomer 1

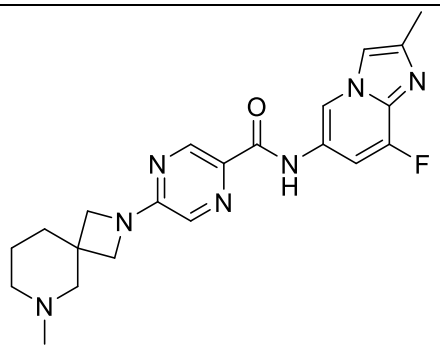
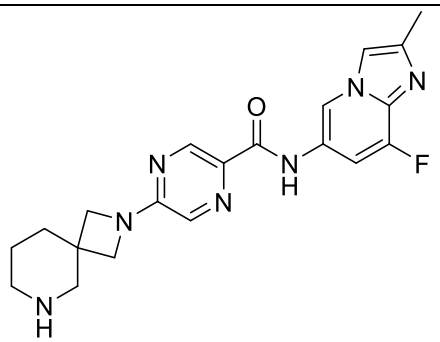
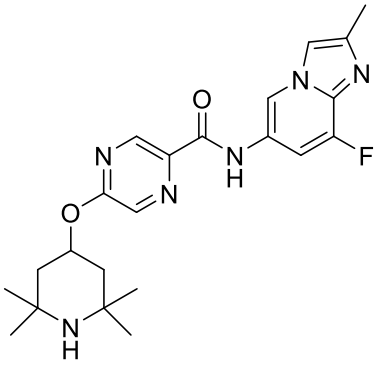
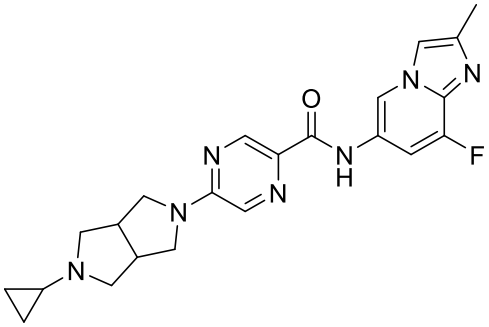
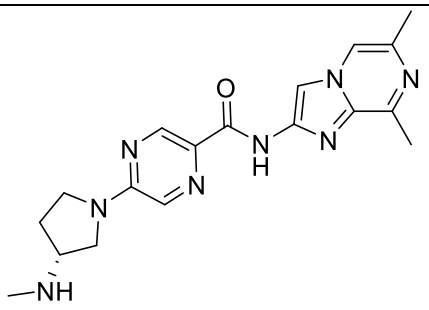
143	 Enantiomer 1 + Enantiomer 2
144	
148	 Enantiomer 1
149	 Enantiomer 2
150	

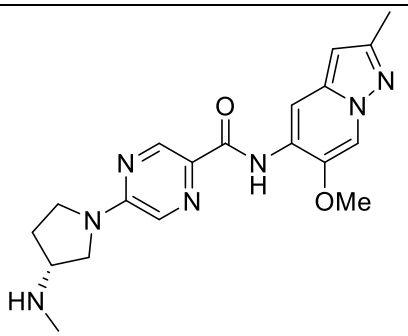
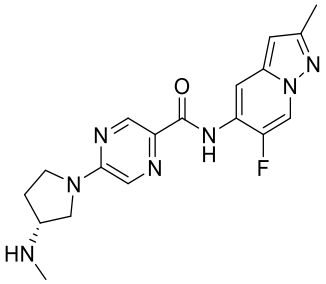
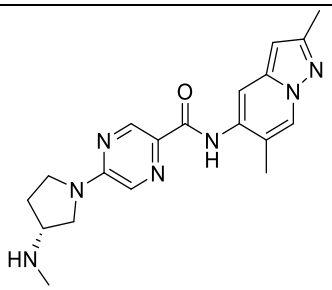
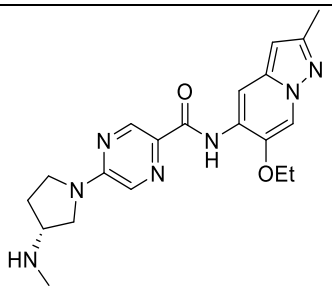
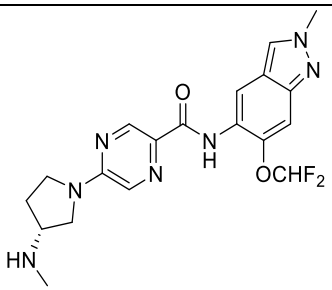
151	 Enantiomer 1
152	 Enantiomer 2
153	 Enantiomer 1
154	 Enantiomer 2
155	 Enantiomer 1

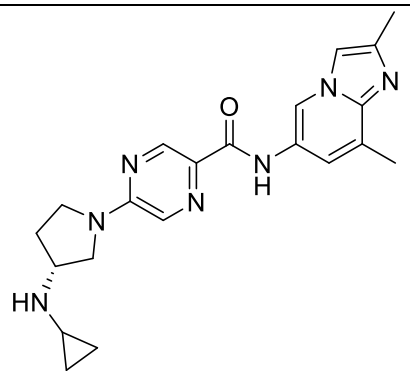
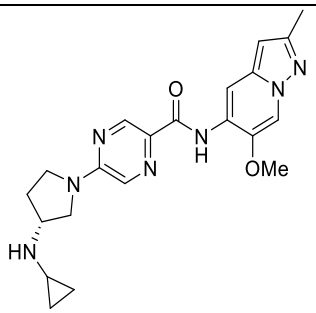
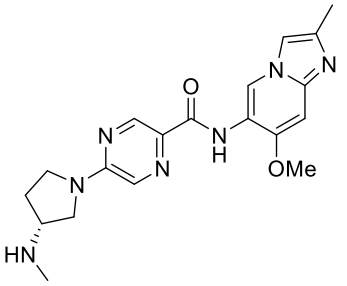
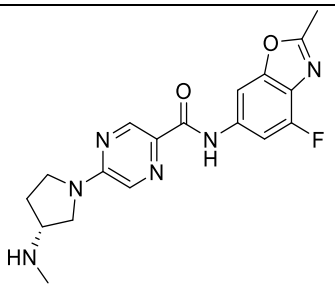
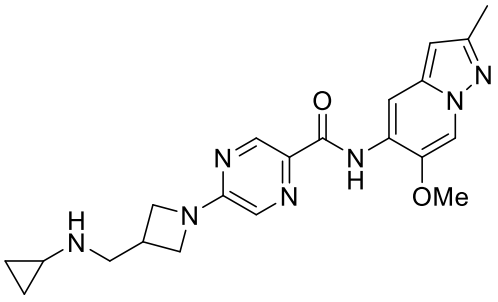
156	 Enantiomer 2
157	
158	
159	 Enantiomer 1
160	 Stereoisomer 1

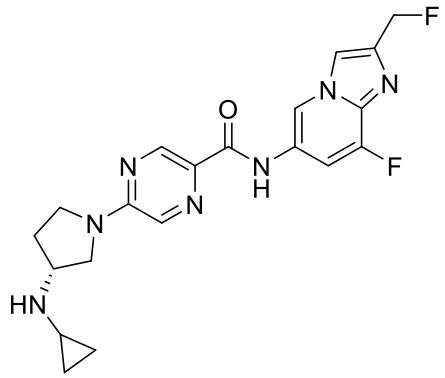
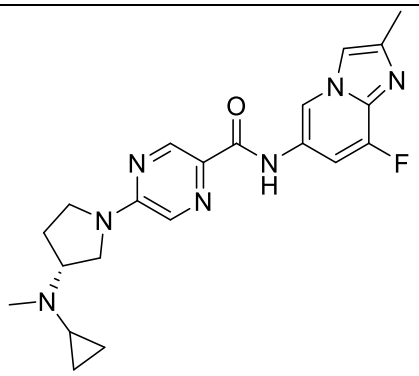
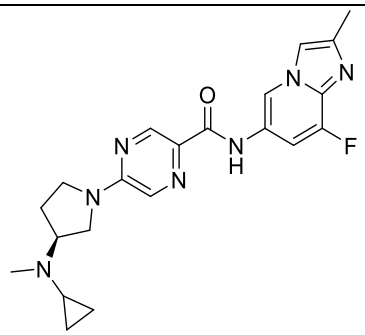
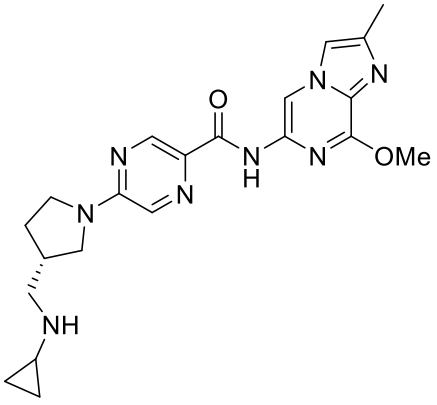
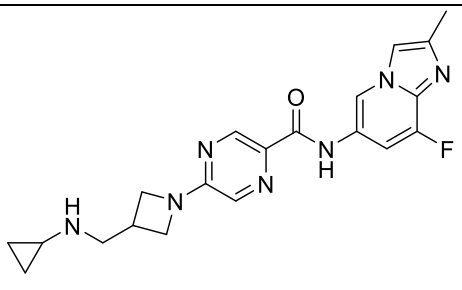
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165	 Enantiomer 1

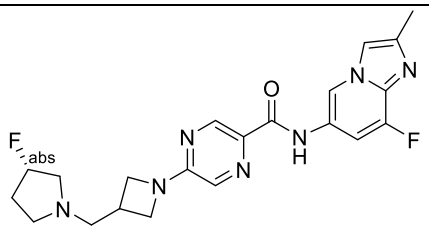
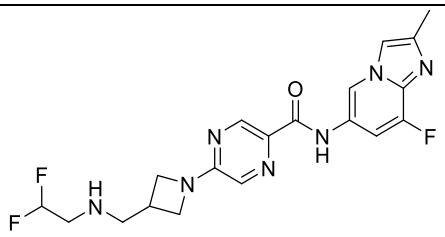
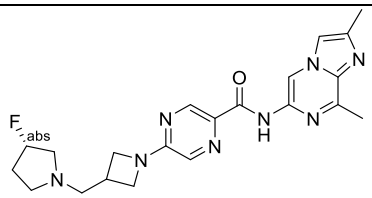
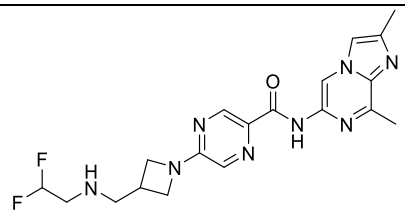
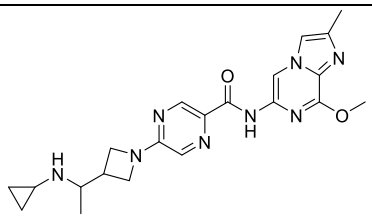
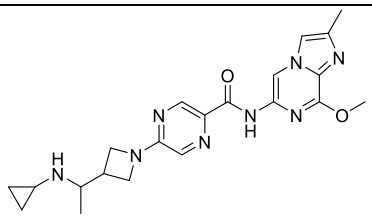
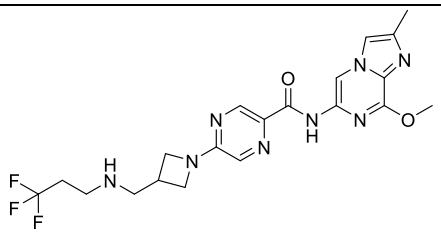
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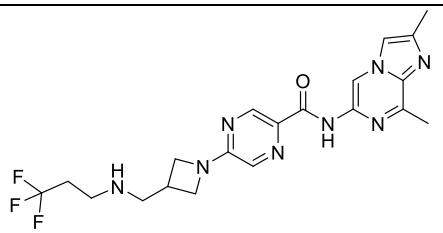
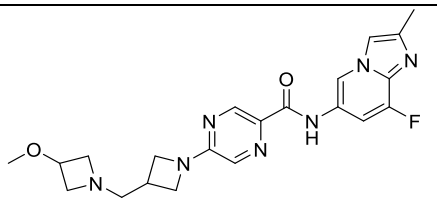
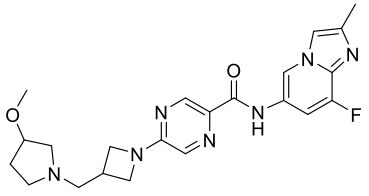
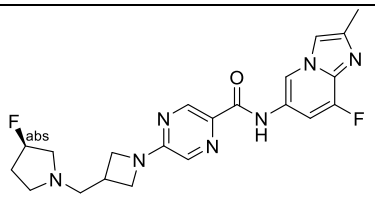
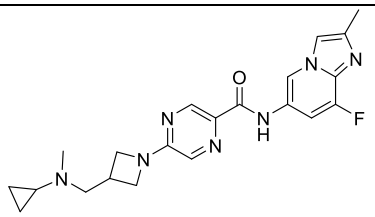
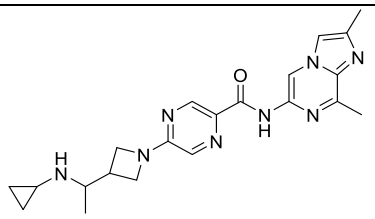
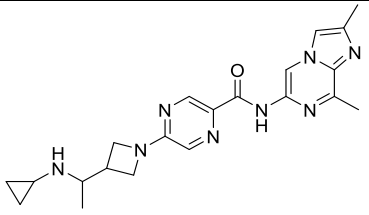
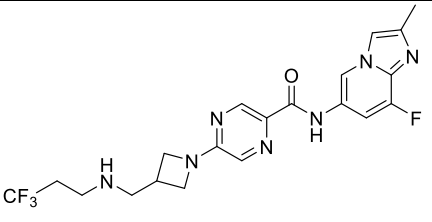
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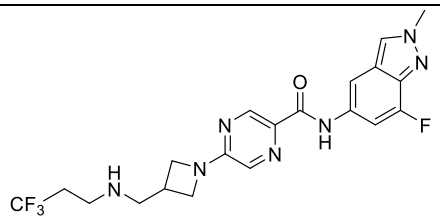
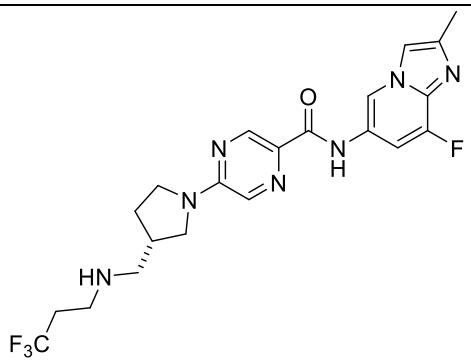
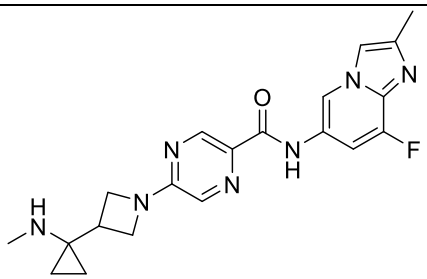
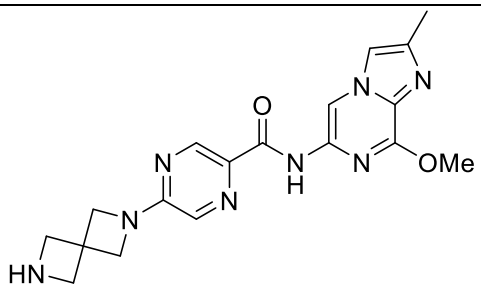
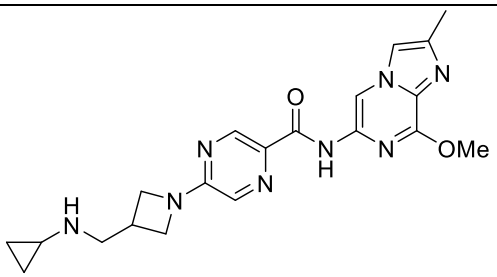
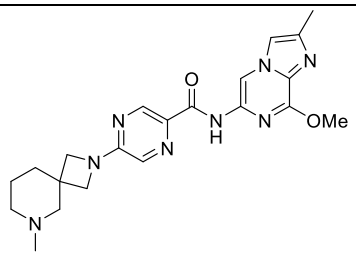
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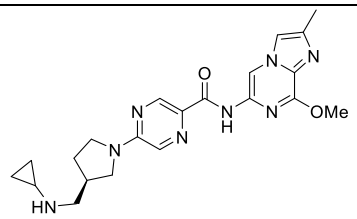
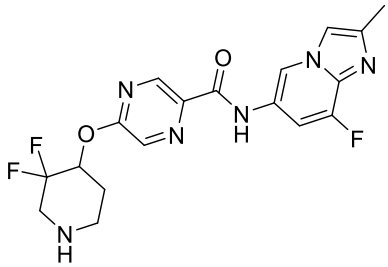
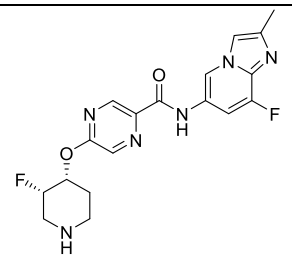
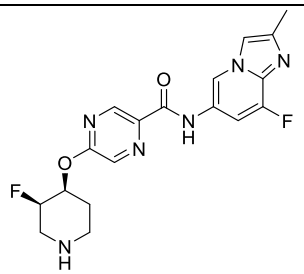
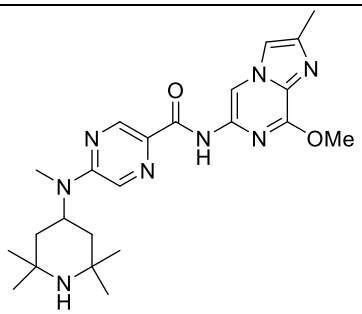
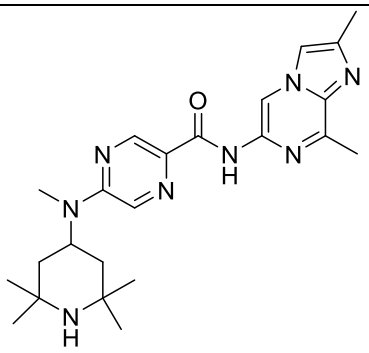
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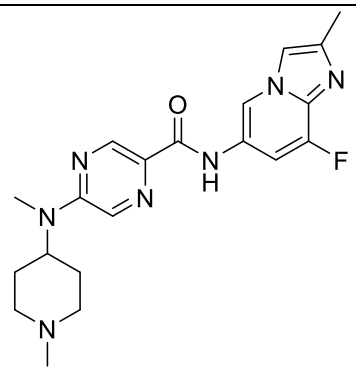
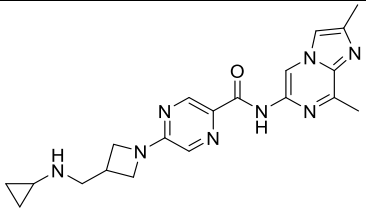
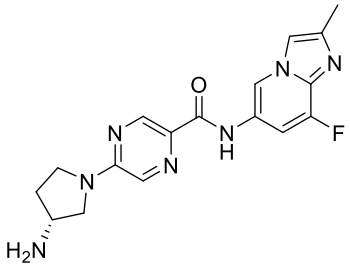
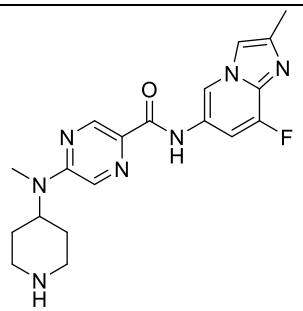
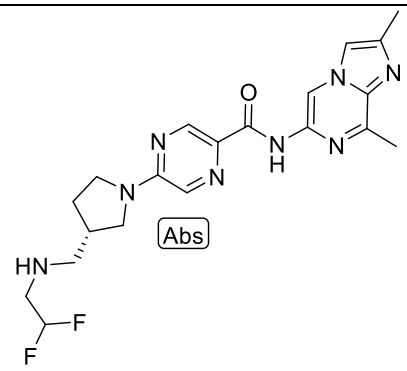
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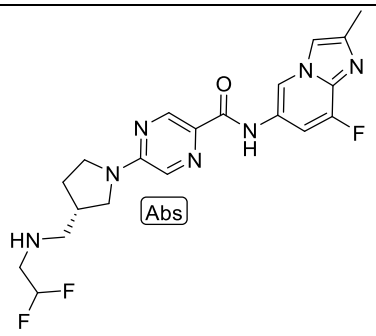
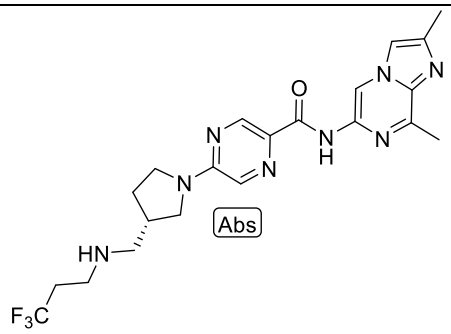
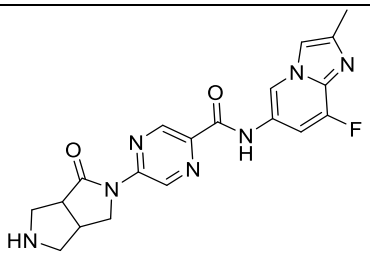
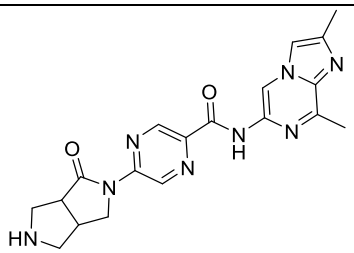
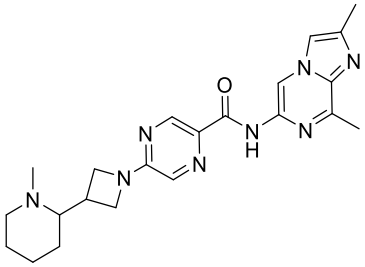
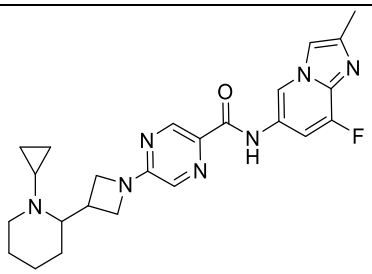
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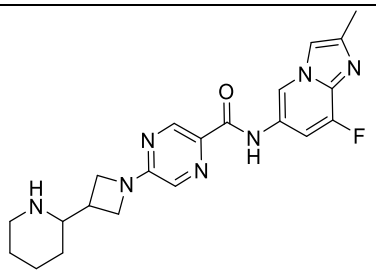
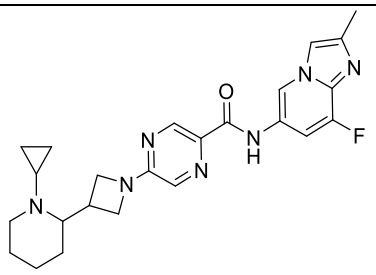
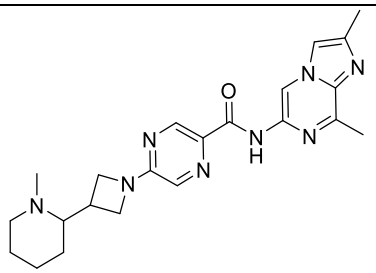
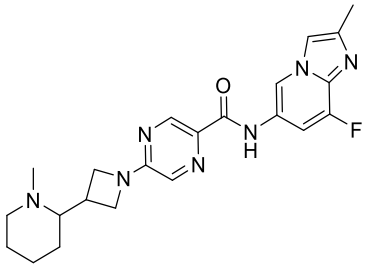
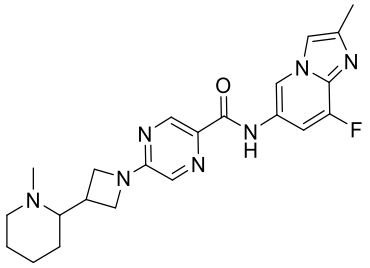
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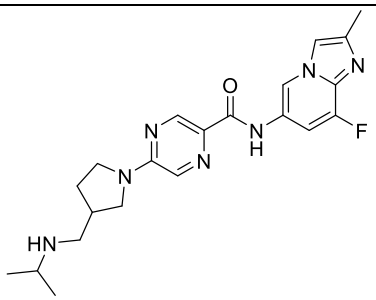
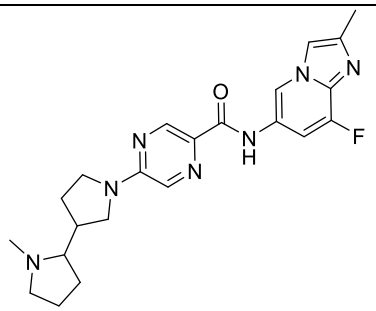
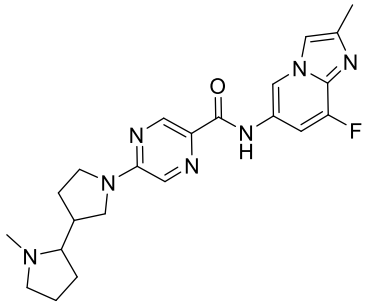
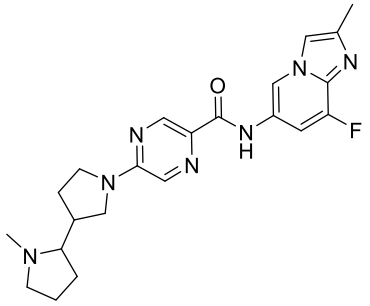
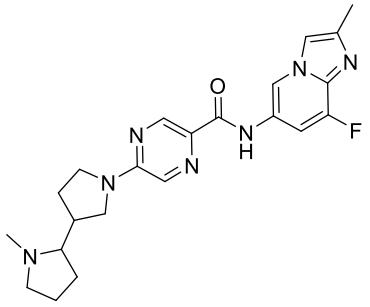
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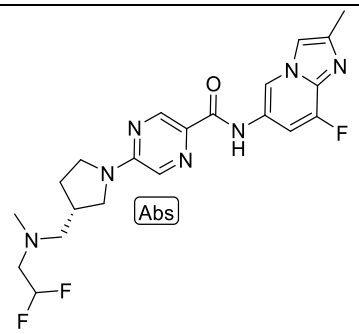
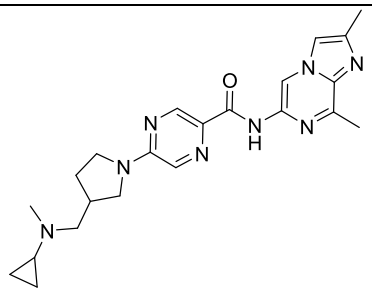
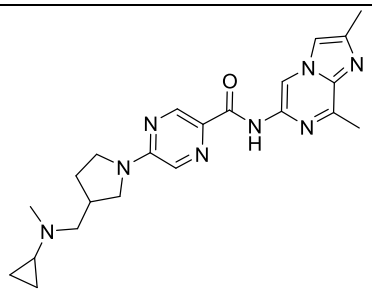
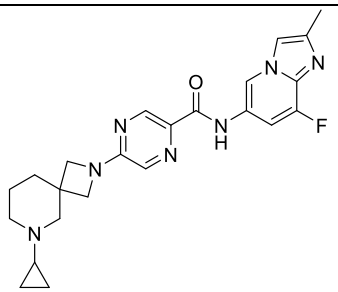
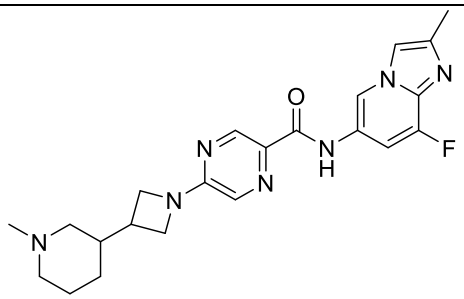
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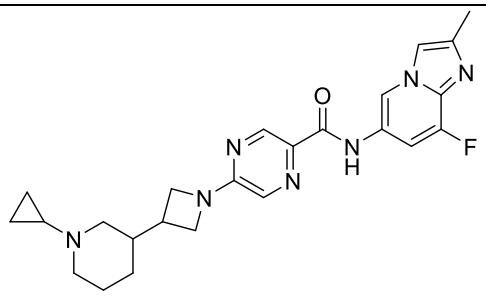
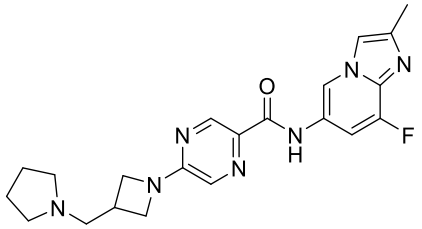
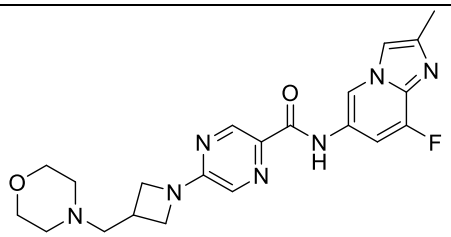
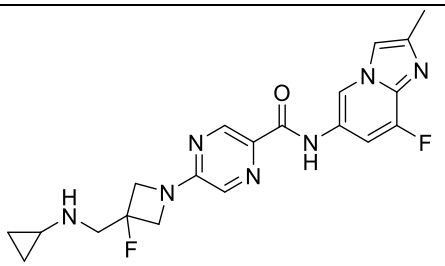
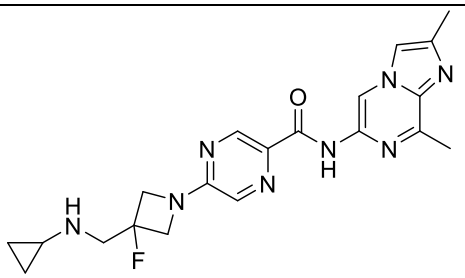
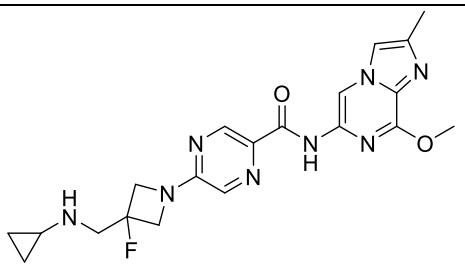
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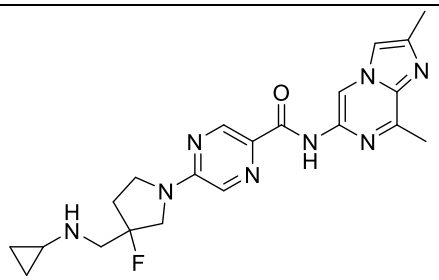
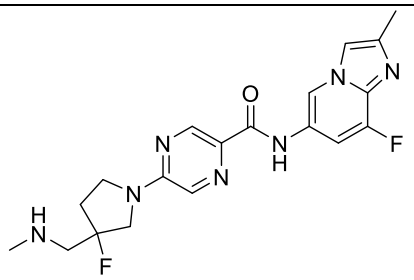
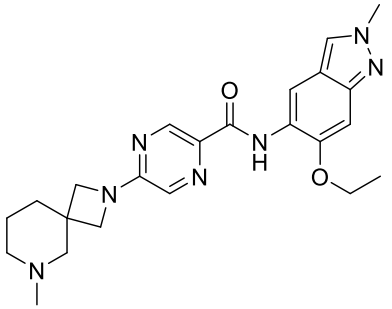
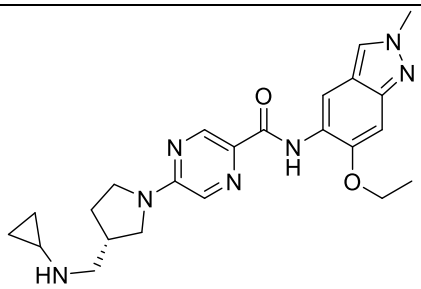
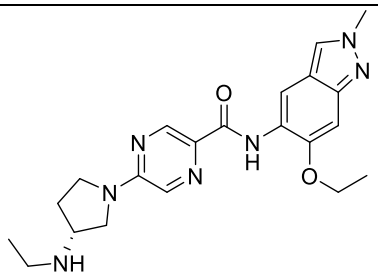
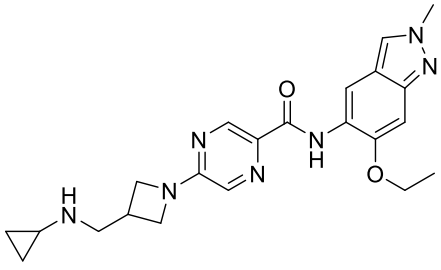
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227	 Enantiomer 1
228	 Enantiomer 1

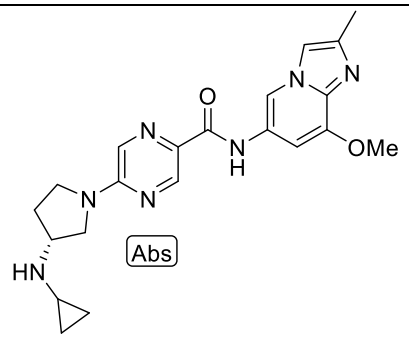
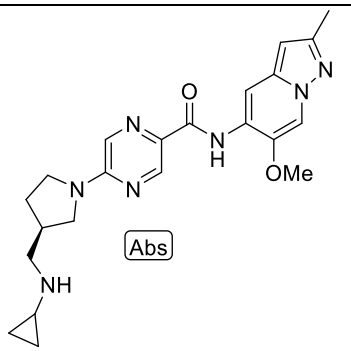
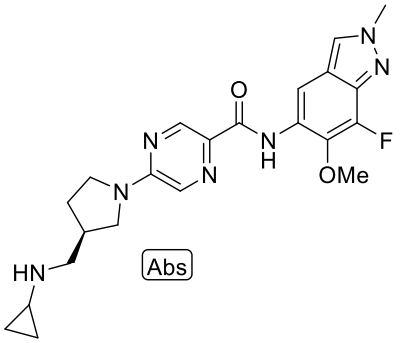
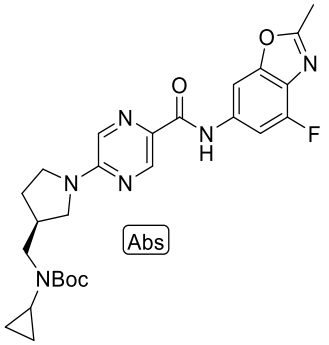
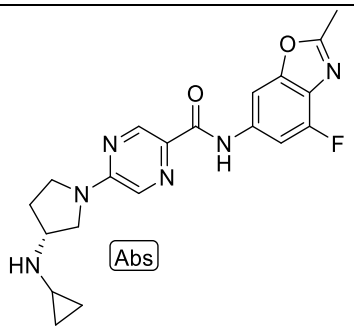
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230	 Enantiomer 2
231	 Enantiomer 2
232	 Enantiomer 1
233	 Enantiomer 2

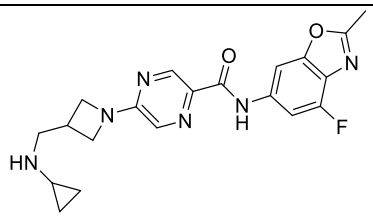
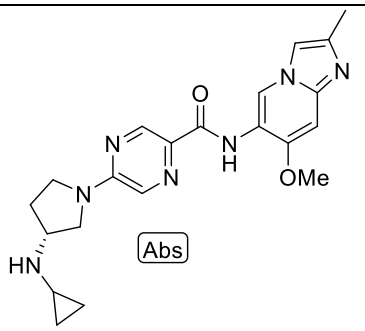
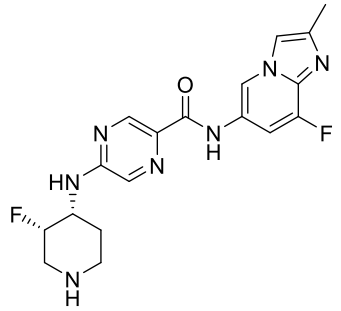
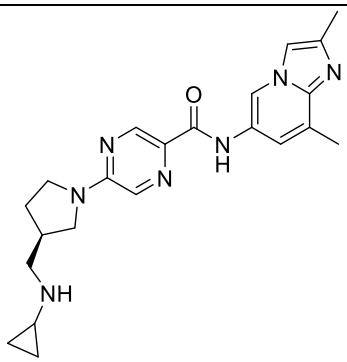
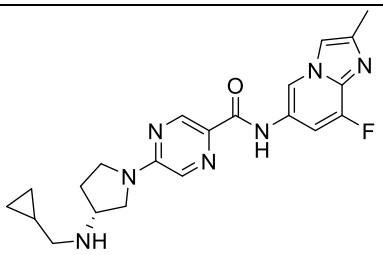
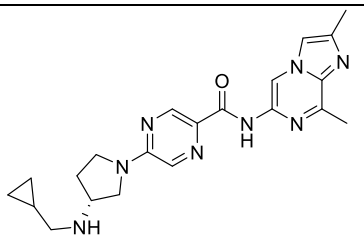
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235	 Stereoisomer 1
236	 Stereoisomer 2
237	 Stereoisomer 3
238	 Stereoisomer 4

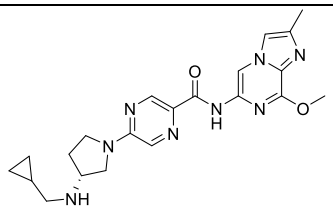
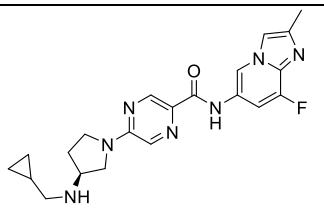
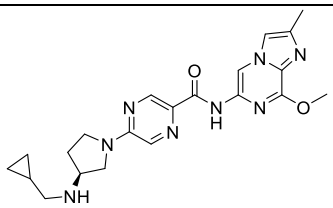
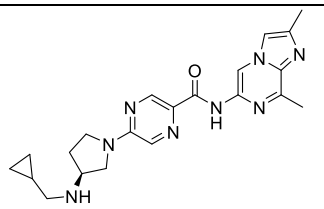
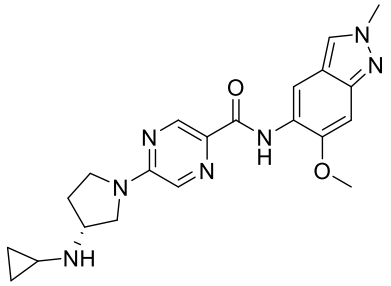
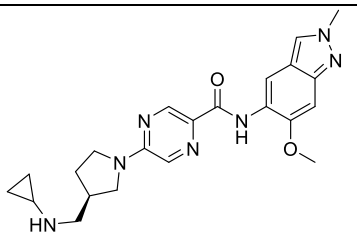
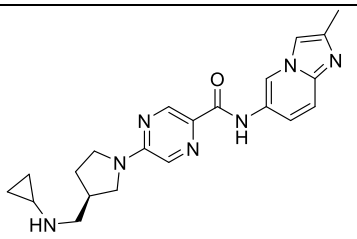
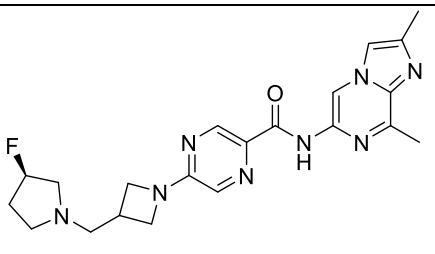
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240	 Enantiomer 1
241	 Enantiomer 2
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243	 Enantiomer 1 + Enantiomer 2

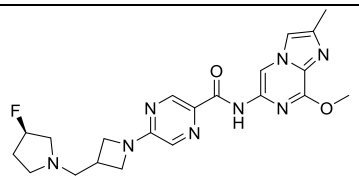
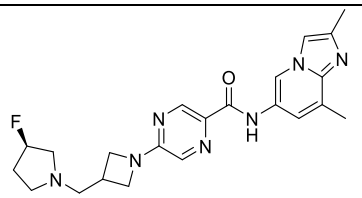
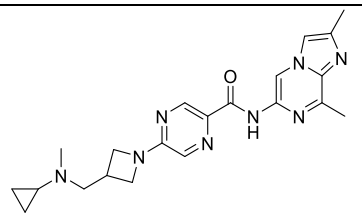
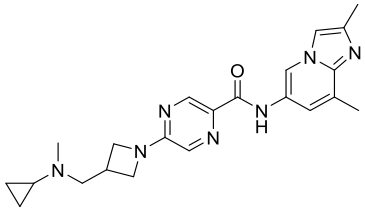
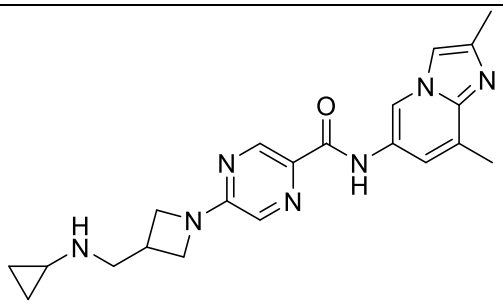
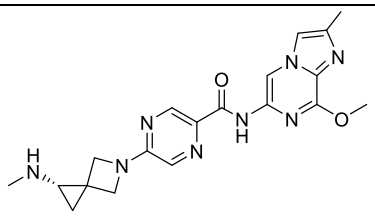
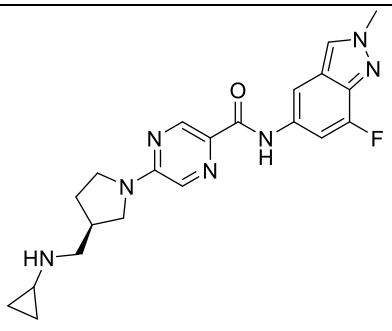
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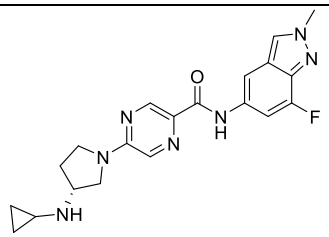
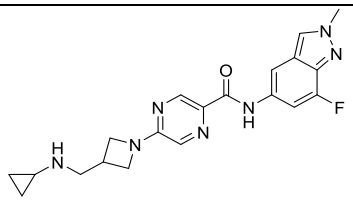
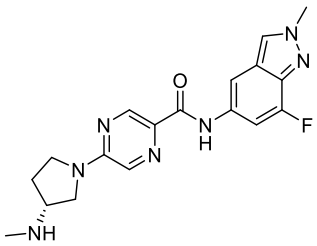
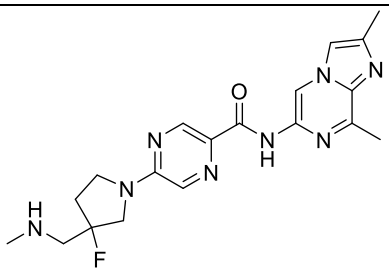
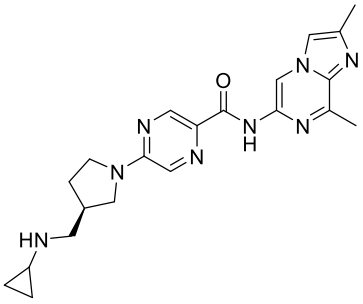
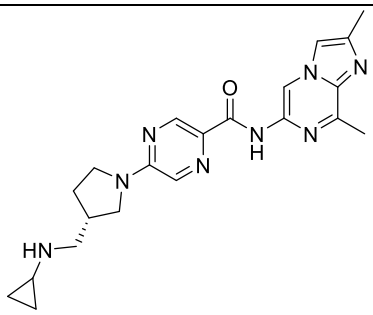
250	 Enantiomer 1 + Enantiomer 2
251	 Enantiomer 1 + Enantiomer 2
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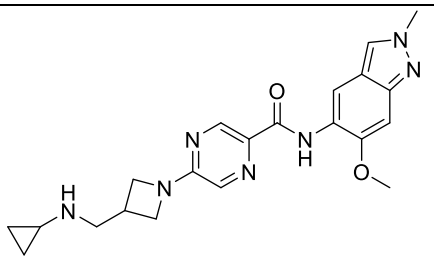
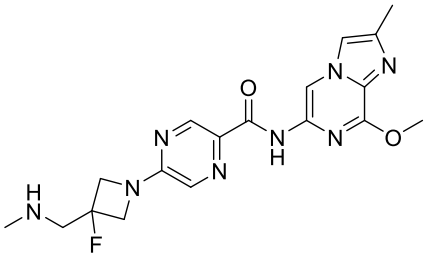
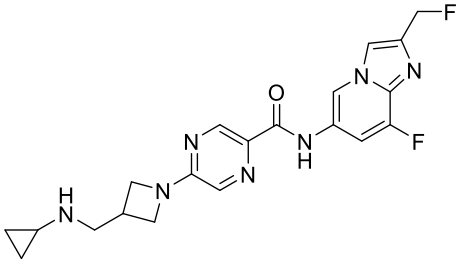
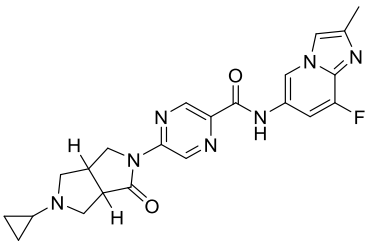
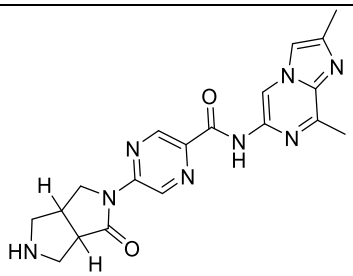
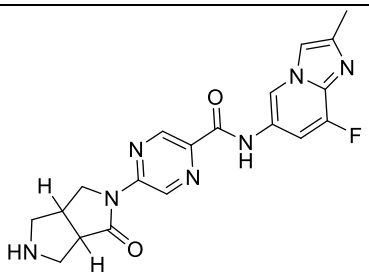
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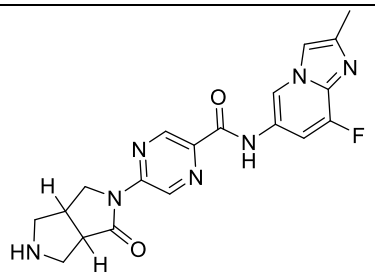
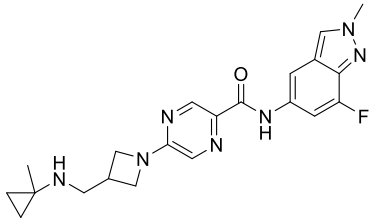
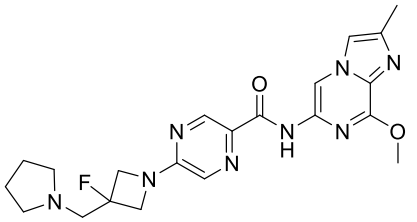
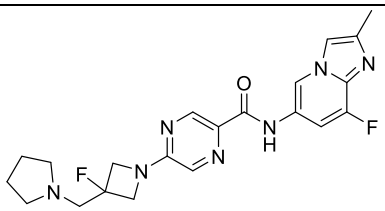
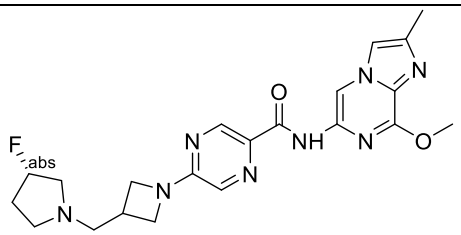
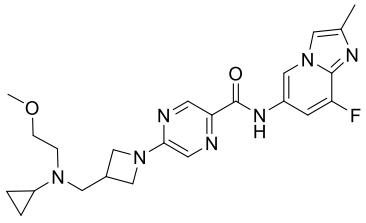
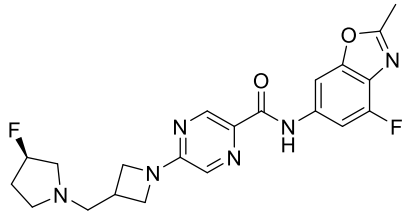
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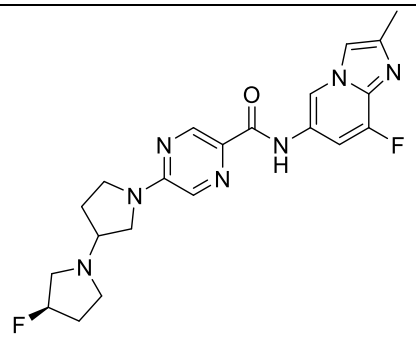
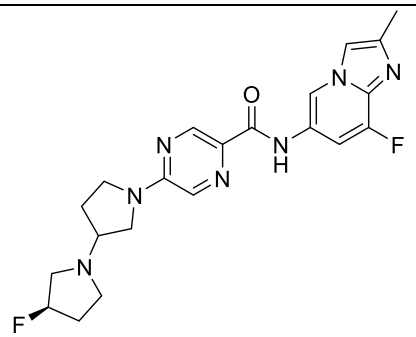
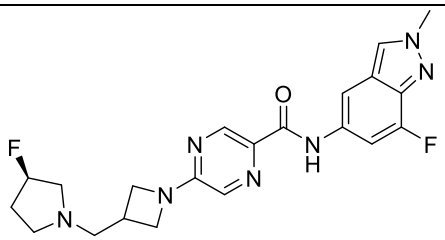
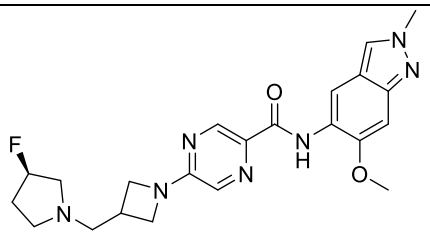
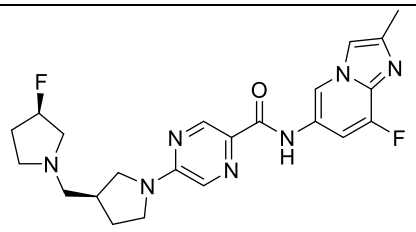
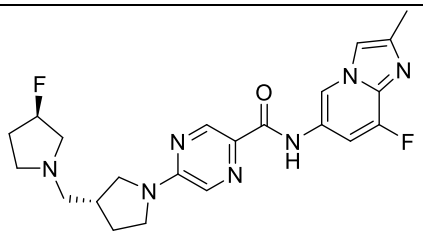
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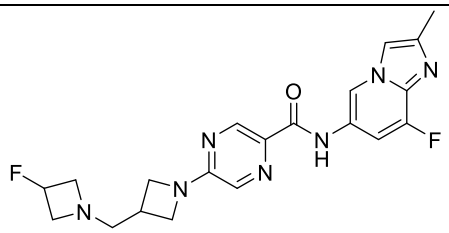
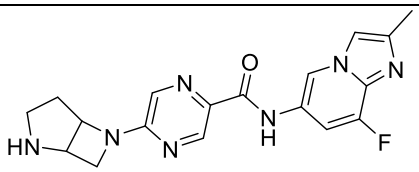
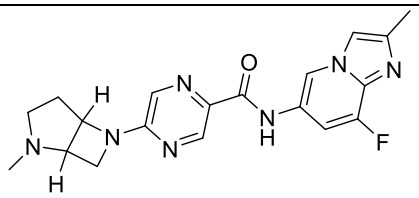
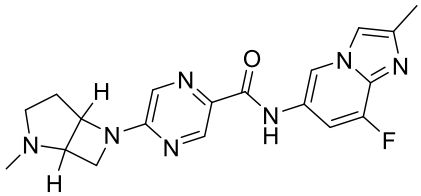
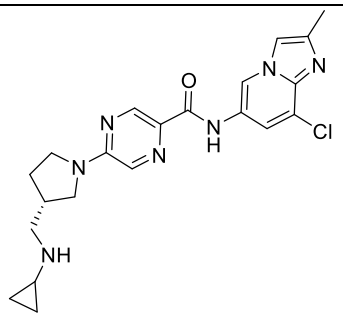
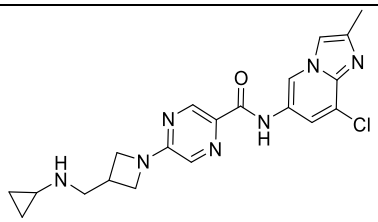
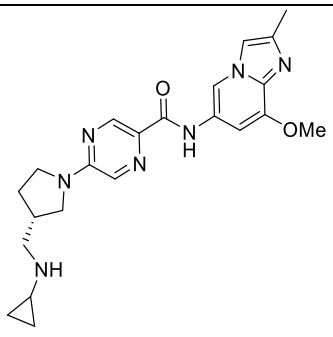
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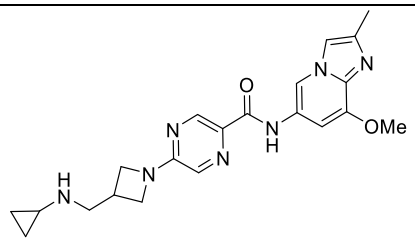
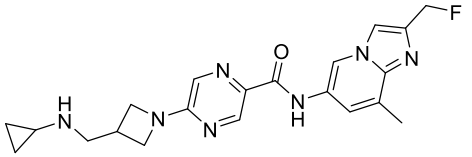
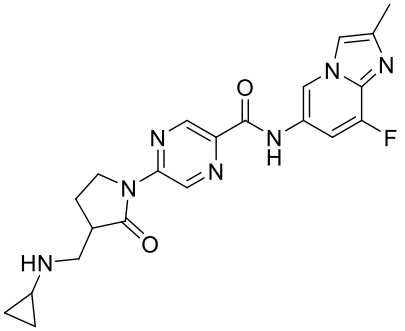
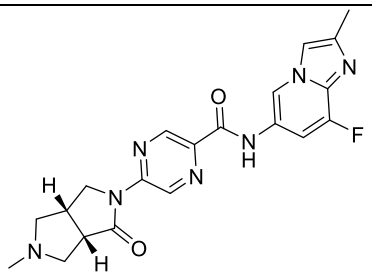
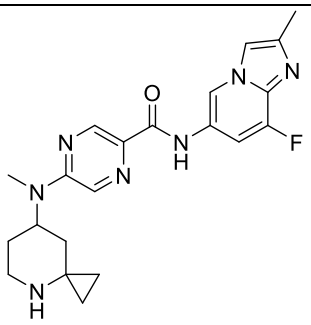
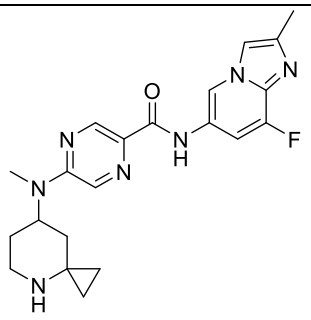
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285	 Enantiomer 1 + Enantiomer 2
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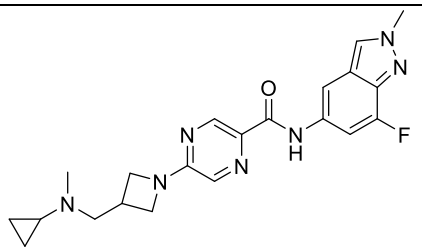
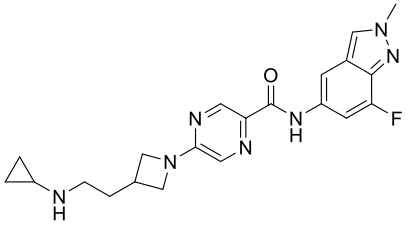
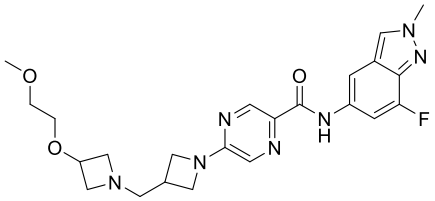
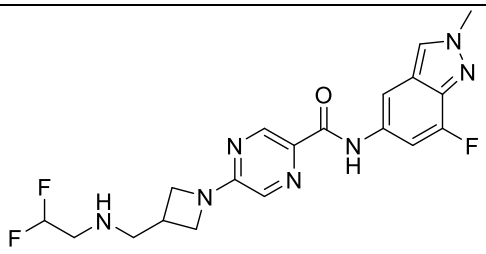
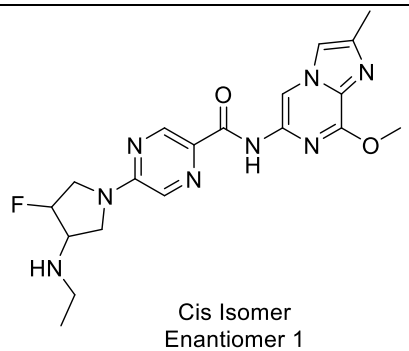
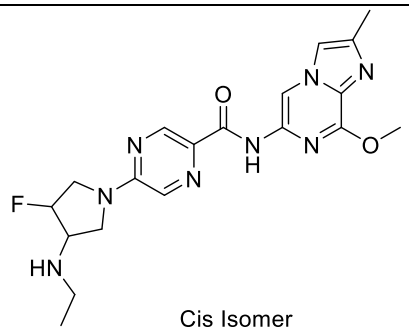
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291	 Cis Isomer, Enantiomer 1
292	 Cis Isomer, Enantiomer 1
293	 Cis Isomer, Enantiomer 1

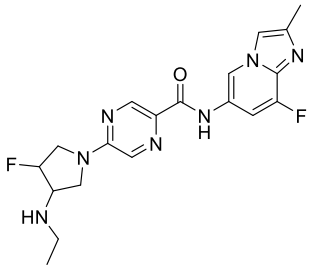
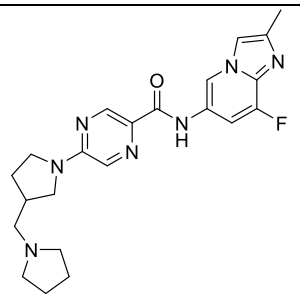
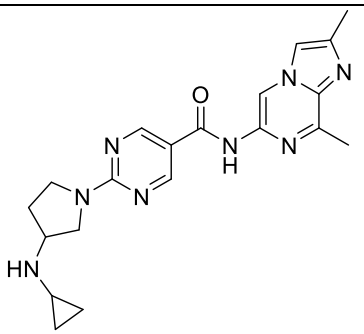
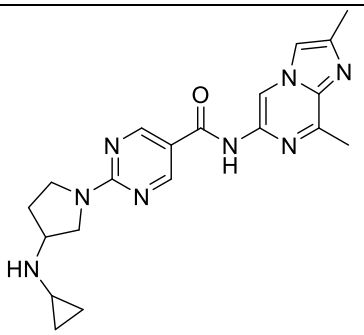
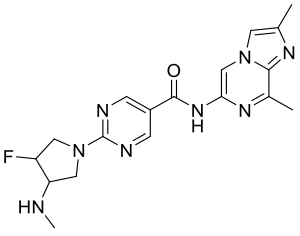
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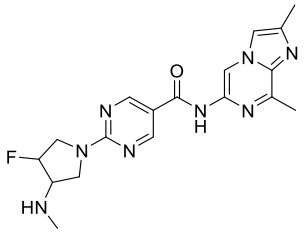
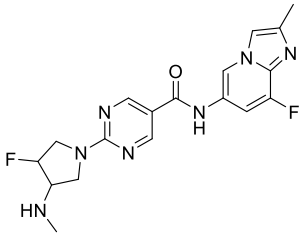
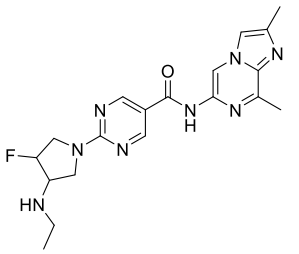
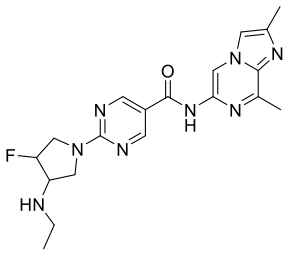
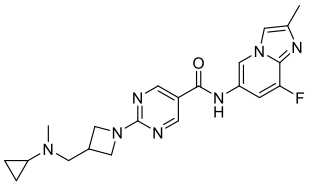
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302	 Diastereoisomer 2
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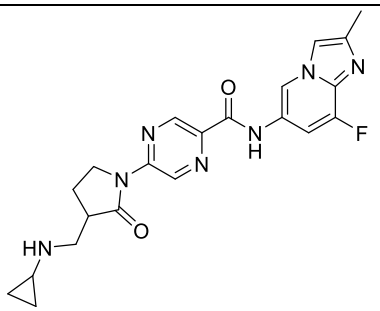
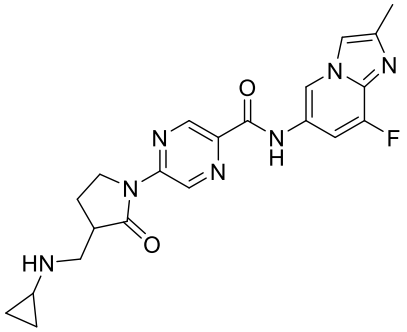
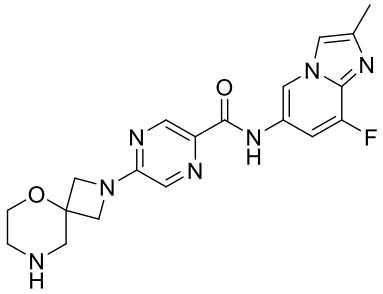
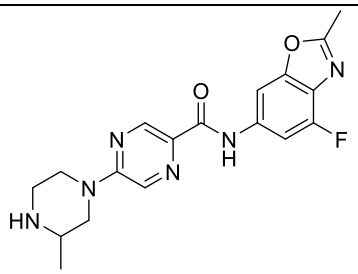
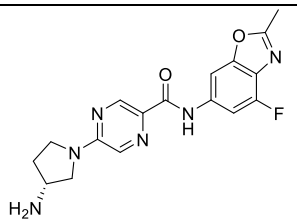
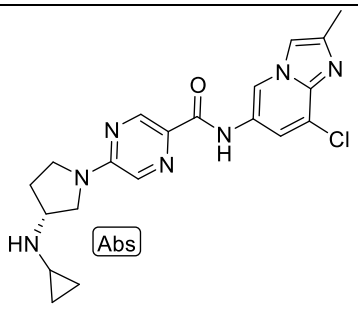
307	
308	 Enantiomer 1 + Enantiomer 2
309	 **Enantiomer 1**
310	 **Enantiomer 2**
311	
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313	

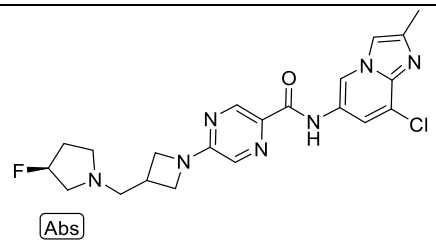
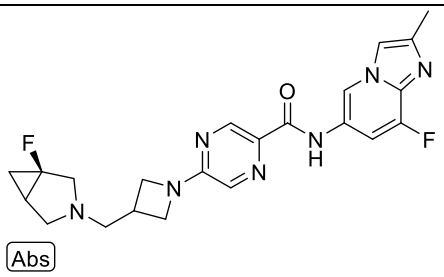
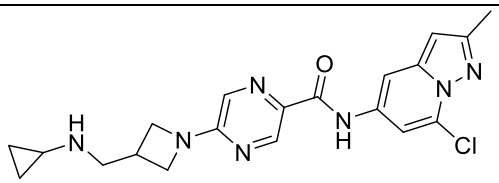
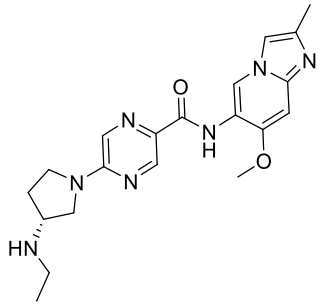
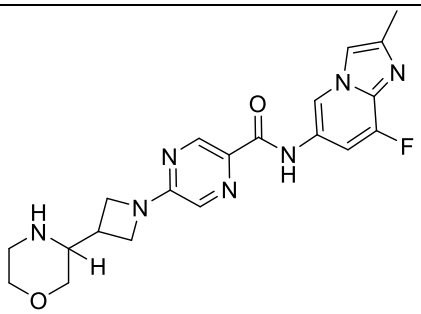
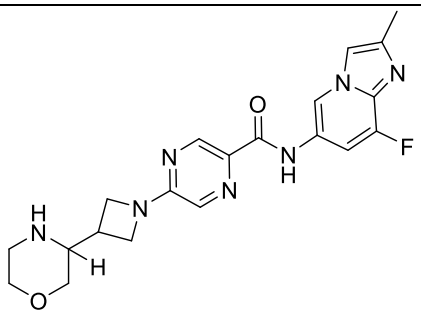
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316	 Enantiomer 1 + Enantiomer 2
317	
318	 Enantiomer 1
319	 Enantiomer 2

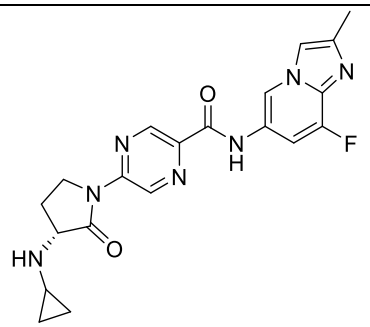
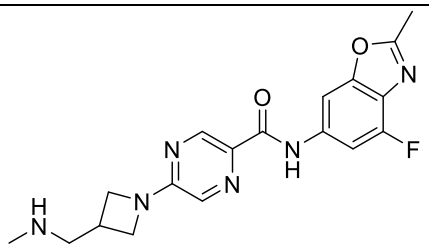
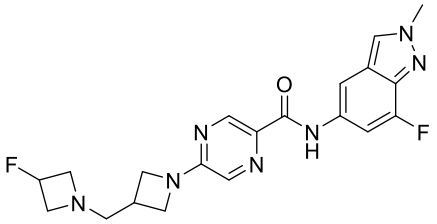
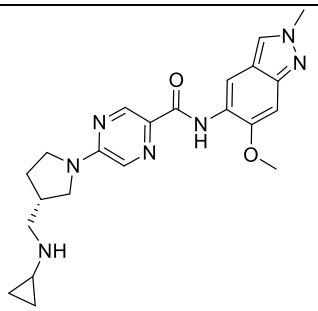
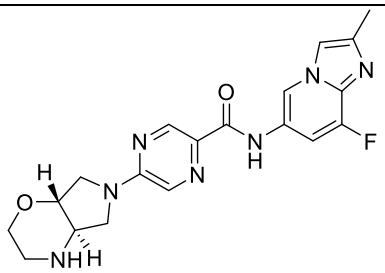
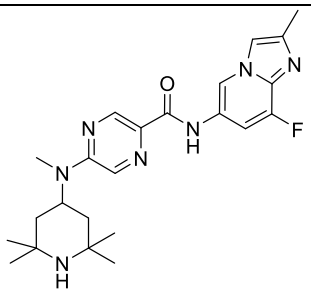
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324	 Cis Isomer Enantiomer 1
325	 Cis Isomer Enantiomer 2

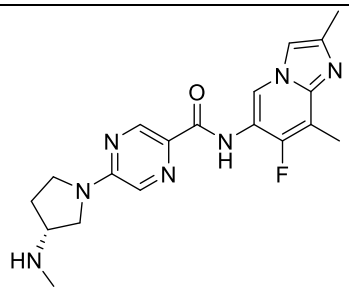
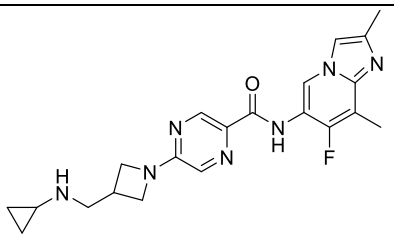
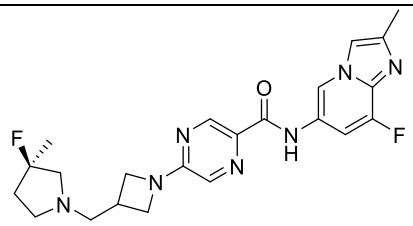
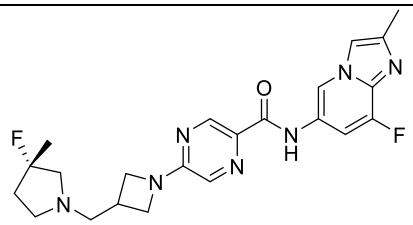
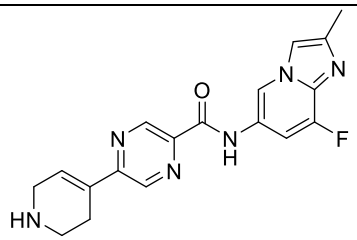
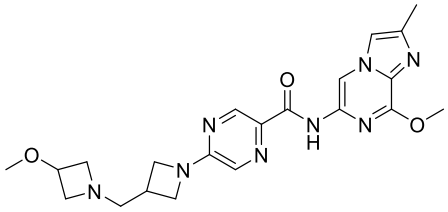
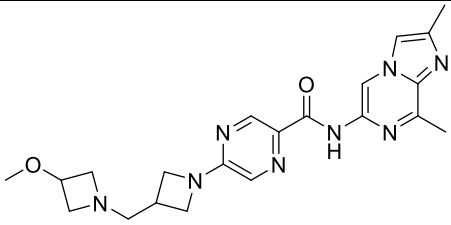
326	 Cis Isomer, Enantiomer 1
327	
328	 Enantiomer 1
329	 Enantiomer 2
330	 Cis Isomer, Enantiomer 1

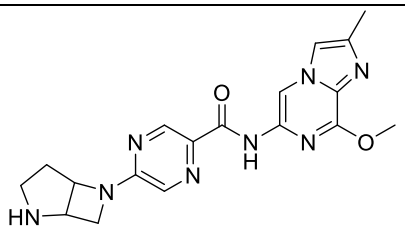
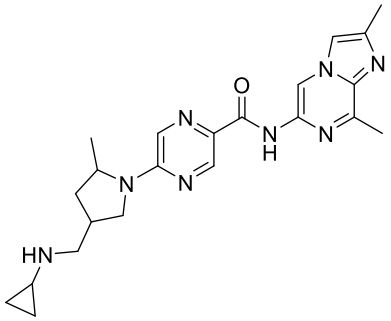
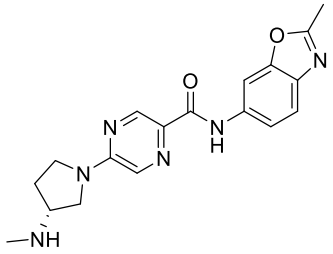
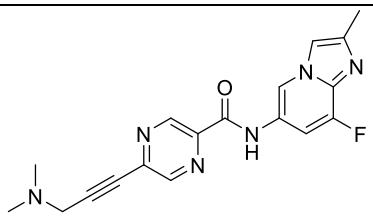
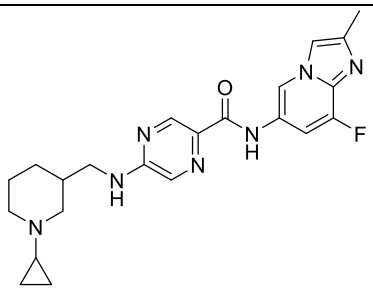
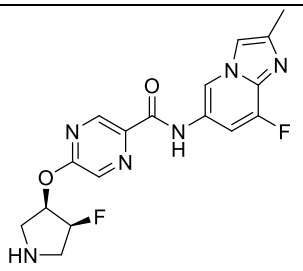
331	 Cis Isomer, Enantiomer 2
332	 Cis Isomer, Enantiomer 1
333	 Cis Isomer, Enantiomer 1
334	 Cis Isomer, Enantiomer 2
335	

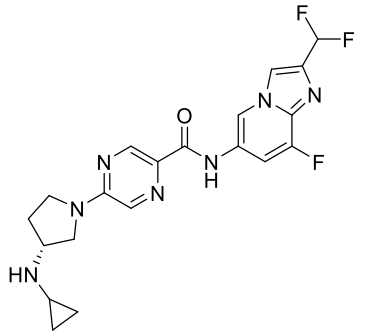
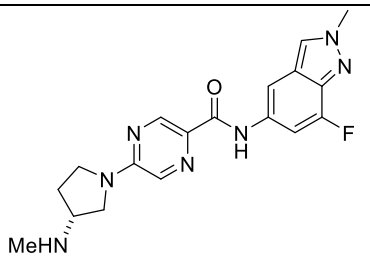
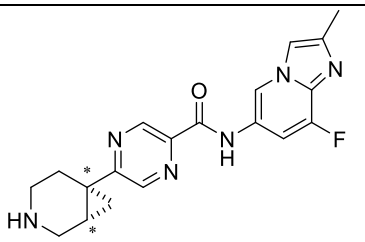
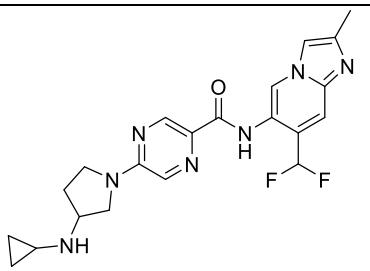
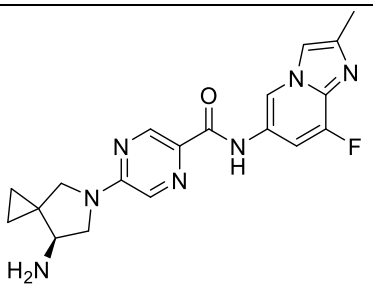
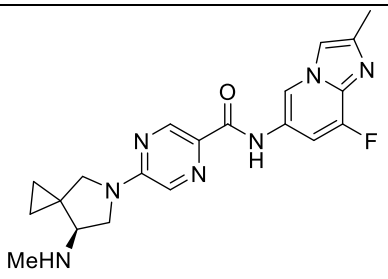
336	 Enantiomer 1
337	 Enantiomer 2
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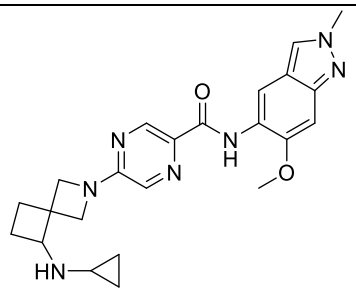
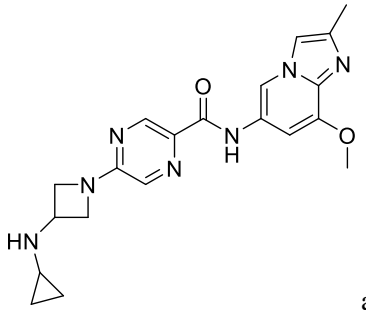
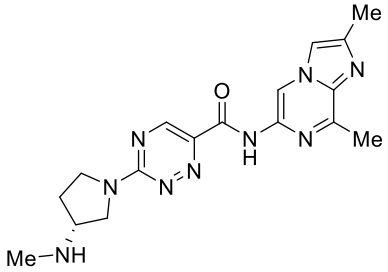
342	
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346	 Enantiomer 1
347	 Enantiomer 2

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361	 Enantiomer 1 + Enantiomer 2
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365	 Enantiomer 1 + Enantiomer 2
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374	 and
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or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof.

19. A pharmaceutical composition comprising the compound of any one of claims 1-18, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof, and a pharmaceutically acceptable excipient.

20. Use of the compound of any one of claims 1-18, or a pharmaceutically acceptable salt, tautomer, stereoisomer, or a mixture of stereoisomers thereof or the pharmaceutical composition of claim 19 in the manufacture of a medicament for treating Huntington's disease.

21. The use of claim 20, wherein the medicament further comprises or is for use in combination with a second active agent.