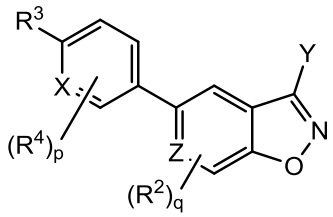
What is claimed is:

1. A compound of formula I:



I

wherein

Y is -L-R^1 or a heterocyclyl or heteroaryl ring bonded through a ring nitrogen atom, wherein each heterocyclyl or heteroaryl is optionally substituted with 1 to 3 groups independently selected from the group consisting of C_1-C_6 alkyl, C_3-C_6 cycloalkyl, halo, aryl, heterocyclyl, heteroaryl, oxo, C_1-C_6 alkoxy, -OH, -NH_2, -COR^7, -CO_2R^7, -$NHSO_2R^7$, -$NHCO_2R^7$, and -CN; and wherein each C_1-C_6 alkyl, C_3-C_6 cycloalkyl, aryl, heterocyclyl, heteroaryl, and C_1-C_6 alkoxy is optionally substituted with 1 to 3 C_1-C_6 alkoxy, halo, -CF_3, -CN, -OH, -NH_2 or -OCF_3;

X is CR^8 or N;

Z is CR^9 or N;

L is -O-, -NR^5-, -$NR^5(CHR^6)_n$-, -$O(CHR^6)_n$, -$O(CHR^6)_nC(O)$-, -$O(CHR^6)_nC(O)O$-, -$O(CHR^6)_nNH$-, -$O(CHR^6)_nC(O)NH$-, -$O(CHR^6)_nNHC(O)O$- or -$O(CHR^6)_mNHS(O)_2$-;

R^1 is hydrogen, C_1-C_6 alkyl, C_3-C_8 cycloalkyl, aryl, heterocyclyl or heteroaryl; wherein each cycloalkyl, aryl, heterocyclyl or heteroaryl is optionally substituted with 1 to 3 groups independently selected from the group consisting of C_1-C_6 alkyl, C_3-C_6 cycloalkyl, halo, aryl, heterocyclyl, heteroaryl, oxo, -OH, -NH_2, -COR^7, -CO_2R^7, -$NHSO_2R^7$, -$NHCO_2R^7$, and -CN; and wherein each C_1-C_6 alkyl, C_3-C_6 cycloalkyl, aryl, heterocyclyl, heteroaryl, and C_1-C_6 alkoxy is optionally substituted with 1 to 3 C_1-C_6 alkoxy, halo, -CF_3, -CN, -OH, -NH_2 or -OCF_3;

each R^2 is independently halo, C_1-C_6 alkyl, C_1-C_6 alkoxy or -OCF_3;

R^3 is hydrogen, halo, C_1-C_3 haloalkyl, C_1-C_3 haloalkoxy, C_3-C_6 cycloalkyl or phenyl, wherein the cycloalkyl or phenyl is optionally substituted with one or two halo atoms, provided that when R^3 is hydrogen, then p is 1 or 2;

each R^4 is independently C_1-C_6 alkyl, halo, C_1-C_6 alkoxy or -OCF_3; or R^3 and R^4 taken together with the carbon atoms to which they are attached form a C_4-C_8 ring optionally containing from one to three double bonds and optionally containing from one to three heteroatoms independently selected from the group consisting of O, N, and S, which ring can can be optionally substituted with one to three halo, C_1-C_6 alkyl, C_1-C_3 haloalkyl or C_1-C_3 haloalkoxy;

R^5 is hydrogen, C_1-C_6 alkyl, C_1-C_3 haloalkyl or -$COCH_3$;

each R^6 is independently hydrogen, C_1-C_6 alkyl, C_1-C_3 haloalkyl, -CN, -OH or -NH_2;

R^7 is hydrogen, C_1-C_6 alkyl, aryl or aralkyl;

R^8 is independently hydrogen, C_1-C_6 alkyl, halo, C_1-C_6 alkoxy or -OCF_3; or R^3 and R^8 taken together with the carbon atoms to which they are attached form a C_4-C_8 ring optionally containing from one to three double bonds and optionally containing from one to three heteroatoms independently selected from the group consisting of O, N, and S, which ring can can be optionally substituted with one to three halo, C_1-C_6 alkyl, C_1-C_3 haloalkyl or C_1-C_3 haloalkoxy;

R^9 is hydrogen, halo, C_1-C_6 alkyl, C_1-C_6 alkoxy or -OCF_3;

each m is independently 2, 3, 4 or 5;

each n is independently 1, 2, 3, 4 or 5; and

p and q are each independently 0, 1 or 2;

or a pharmaceutically acceptable salt, stereoisomer or mixture of stereoisomer thereof.

2. The compound of claim 1, Y is a heterocyclyl or heteroaryl ring bonded through a ring nitrogen atom, wherein each heterocyclyl or heteroaryl is optionally substituted with 1 to 3 groups independently selected from the group consisting of C_1-C_6 alkyl, C_3-C_6 cycloalkyl, halo, aryl, heterocyclyl, heteroaryl, oxo, C_1-C_6 alkoxy, -OH, -NH_2, -COR^7, -CO_2R^7, -$NHSO_2R^7$, -$NHCO_2R^7$, and -CN; and wherein each C_1-C_6 alkyl, C_3-C_6 cycloalkyl, aryl, heterocyclyl, heteroaryl, and C_1-C_6 alkoxy is

optionally substituted with 1 to 3 C_1-C_6 alkoxy, halo, -CF_3, -CN, -OH, -NH_2 or -OCF_3.

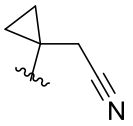
3. The compound of claim 1, wherein Y is a heterocyclyl or heteroaryl ring bonded through a ring nitrogen atom, wherein each heterocyclyl or heteroaryl is optionally substituted with 1 to 3 groups independently selected from the group consisting of C_1-C_6 alkyl, aryl, and oxo, wherein the C_1-C_6 alkyl is optionally substituted with 1 to 3 halo or -OH.

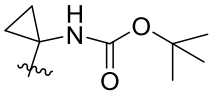
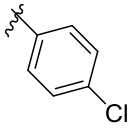
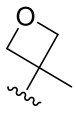
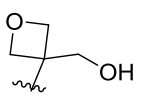
4. The compound of claim 1, wherein Y is -L-R^1.

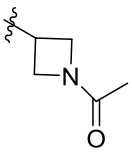
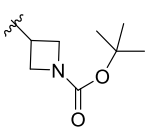
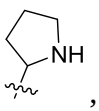
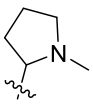
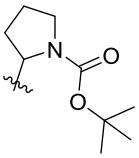
5. The compound of claim 4, wherein L is -$O(CHR^6)_n$-.

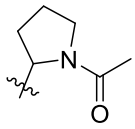
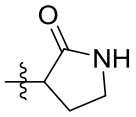
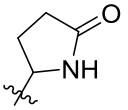
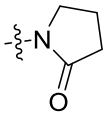
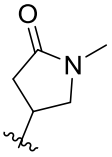
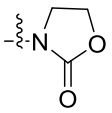
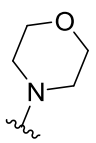
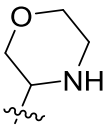
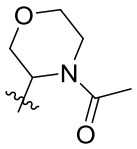
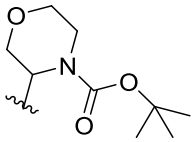
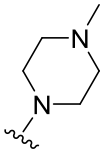
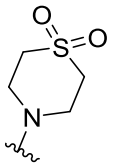
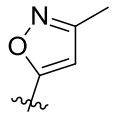
6. The compound of claim 4, wherein each R^6 is independently hydrogen or C_1-C_6 alkyl.

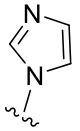
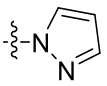
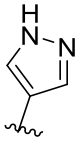
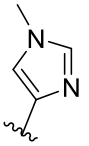
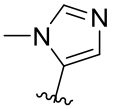
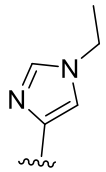
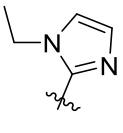
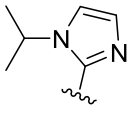
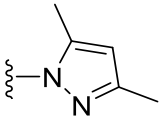
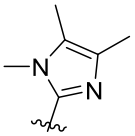
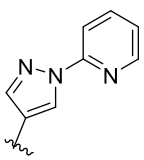
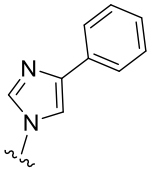
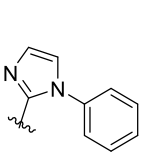
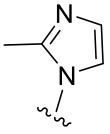
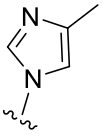
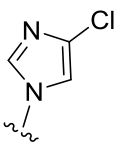
7. The compound of claim 1, wherein R^1 is C_1-C_6 alkyl, C_3-C_8 cycloalkyl, aryl, heterocyclyl or heteroaryl; wherein each cycloalkyl, aryl, heterocyclyl or heteroaryl is optionally substituted with 1 to 3 groups independently selected from the group consisting of C_1-C_6 alkyl, C_3-C_6 cycloalkyl, halo, aryl, heterocyclyl, heteroaryl, oxo, -OH, -NH_2, -COR^7, -CO_2R^7, -$NHSO_2R^7$, -$NHCO_2R^7$, and -CN; and wherein each C_1-C_6 alkyl, C_3-C_6 cycloalkyl, aryl, heterocyclyl, heteroaryl, and C_1-C_6 alkoxy is optionally substituted with 1 to 3 C_1-C_6 alkoxy, halo, -CF_3, -CN, -OH, -NH_2 or -OCF_3.

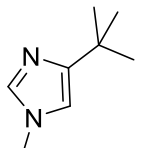
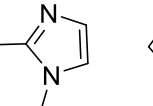
8. The compound of claim 1, wherein R^1 is  ,  ,

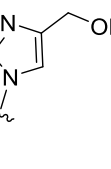
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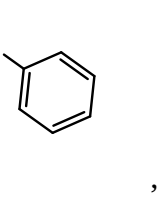
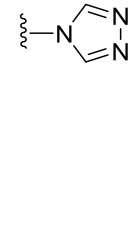
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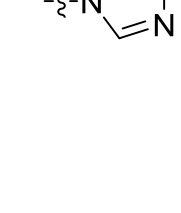

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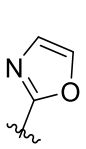
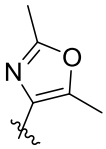
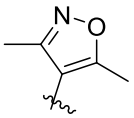
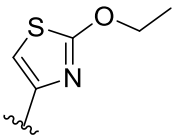
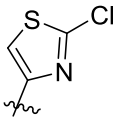
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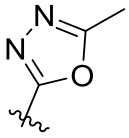
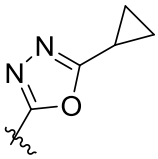
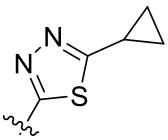
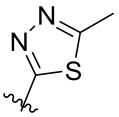
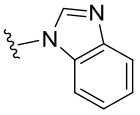
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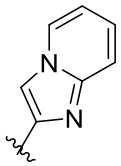
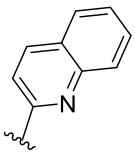
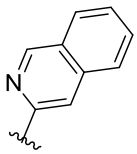
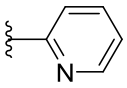
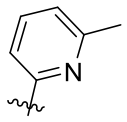
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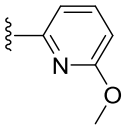
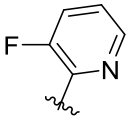
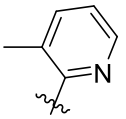
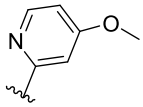
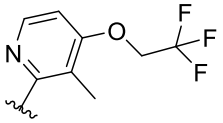
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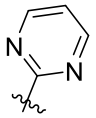
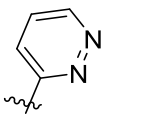
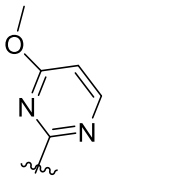
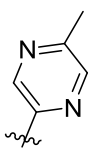
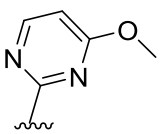
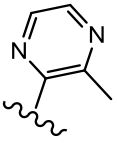
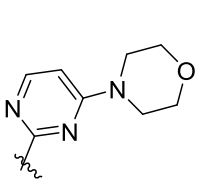
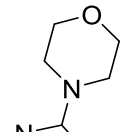
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9. The compound of claim 1, wherein R^1 is C_1-C_6 alkyl.

10. The compound of claim 1, wherein R^2 is fluoro, methyl or methoxy.

11. The compound of claim 1, wherein R^3 is hydrogen, fluoro, -CF_3, -OCF_3, -O-CH_2-CF_3 or cyclopropyl.

12. The compound of claim 9, wherein R^4 is fluoro, chloro, methyl, methoxy or -OCF_3.

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

14. The compound of claim 1, wherein X is CR^8.

15. The compound of claim 1, wherein R^8 is hydrogen.

16. The compound of claim 1, wherein Z is N.

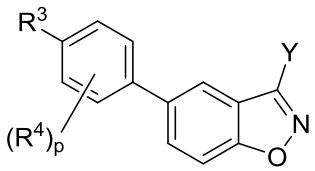
17. The compound of claim 1, wherein Z is CR^9.

18. The compound of claim 1, wherein R^9 is hydrogen.

19. The compound of claim 1, wherein q is 0 or 1.

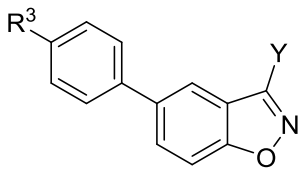
20. The compound of claim 1, wherein p is 0 or 1.

21. The compound of claim 1, wherein the compound of formula I is a compound of formula IA:



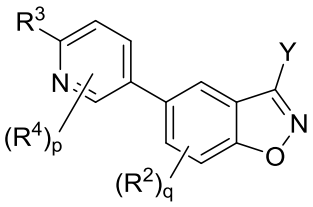
IA.

22. The compound of claim 1, wherein the compound of formula I is a compound of formula IB:



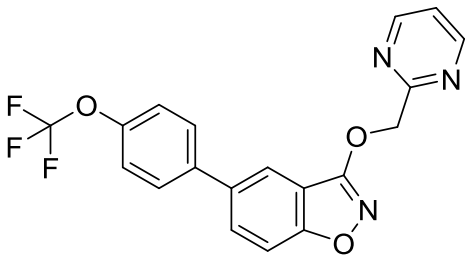
IB.

23. The compound of claim 1, wherein the compound of formula I is a compound of formula IC:

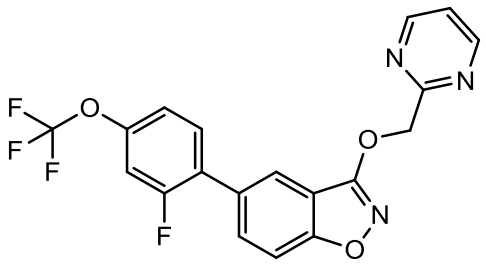


IC.

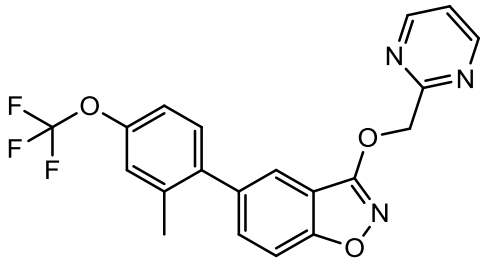
24. A compound selected from the group consisting of:



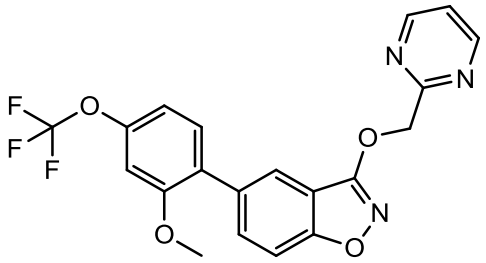
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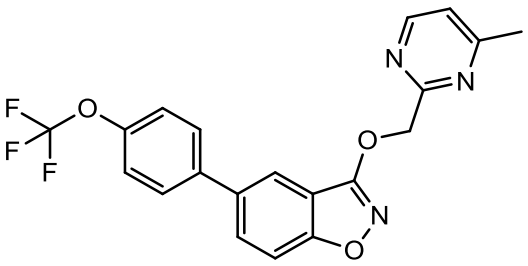
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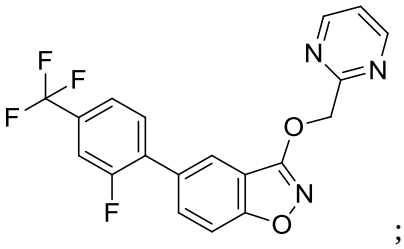


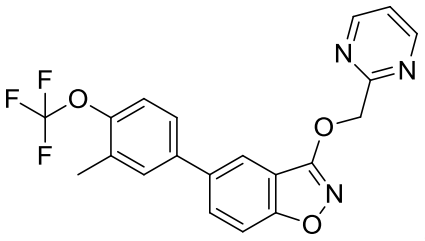
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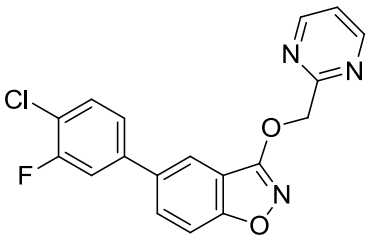


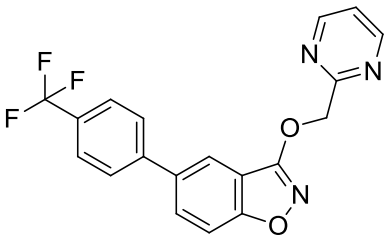
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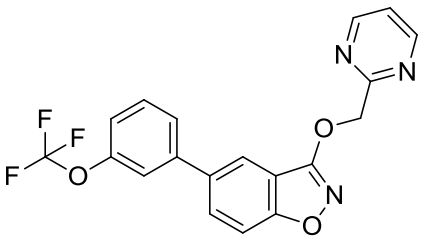

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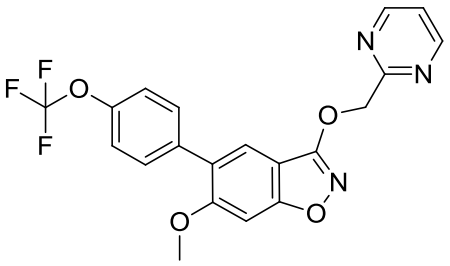

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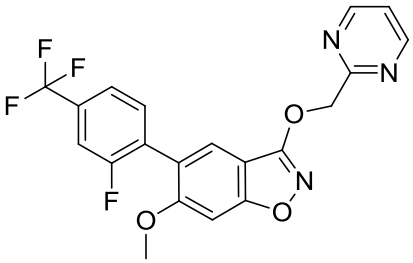

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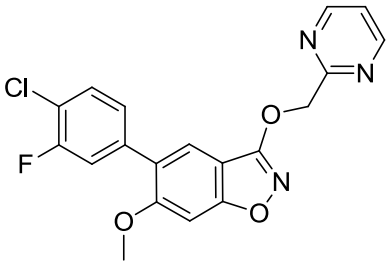

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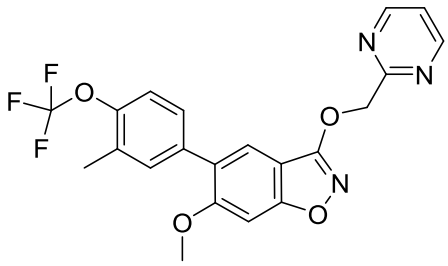
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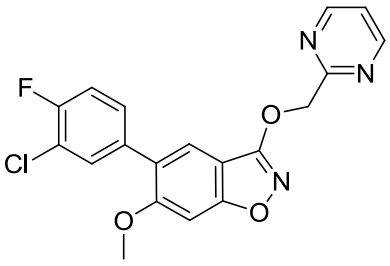
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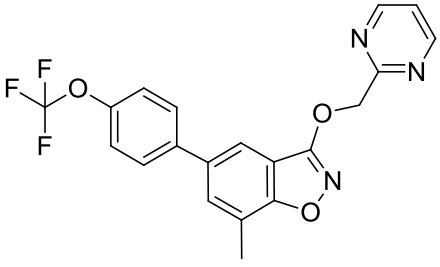
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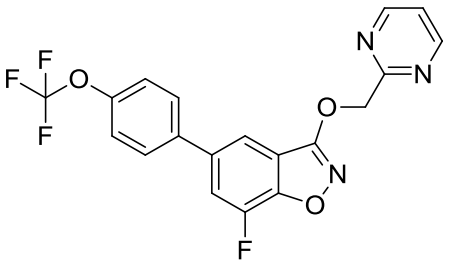
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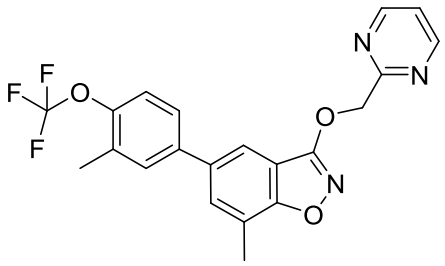


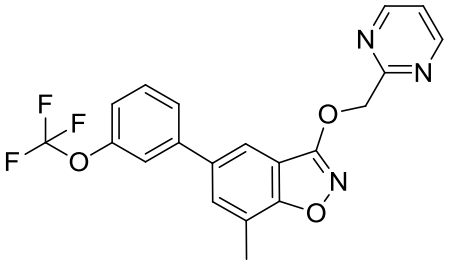
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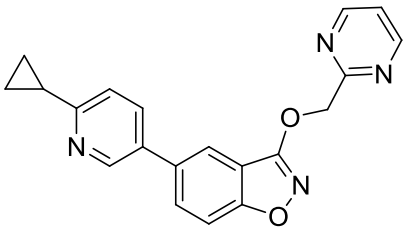


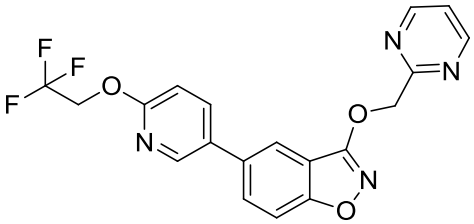
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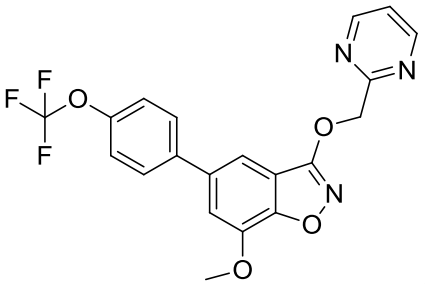

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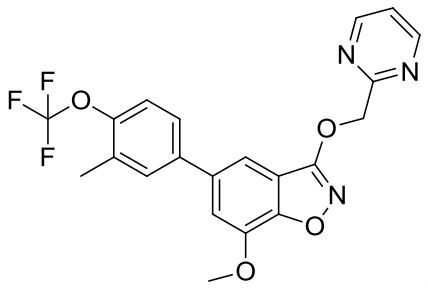

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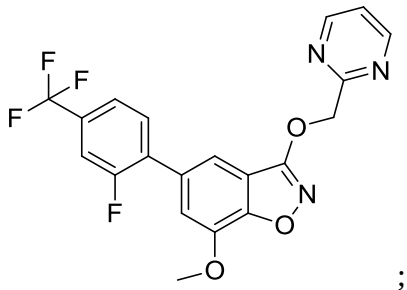

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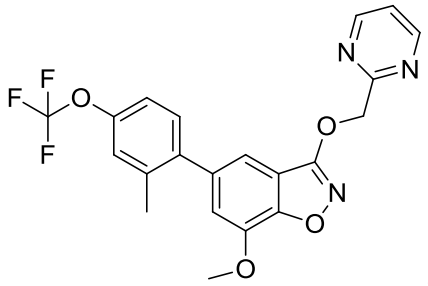

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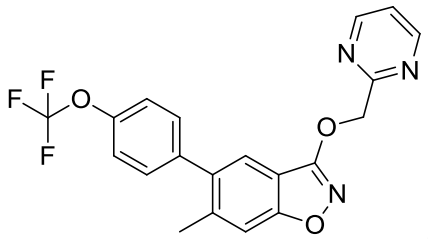

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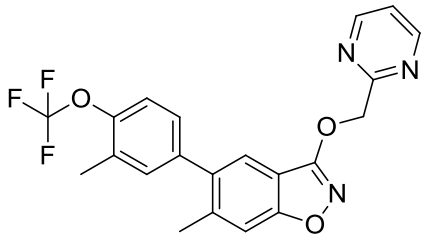

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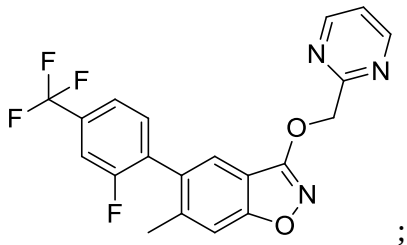

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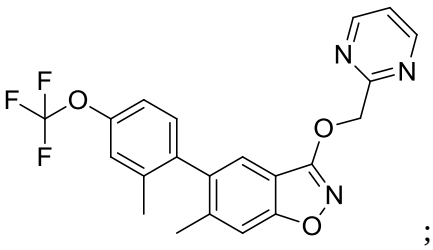

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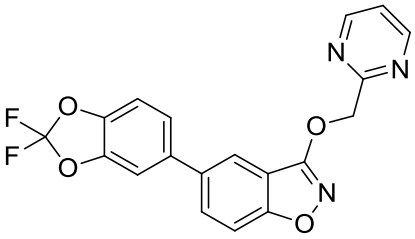

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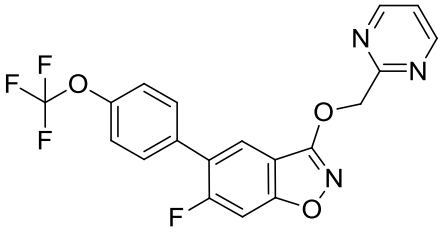

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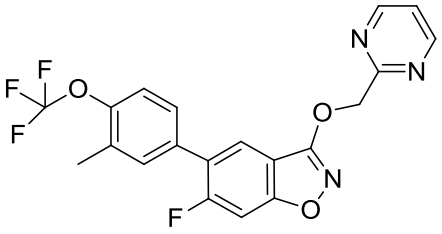

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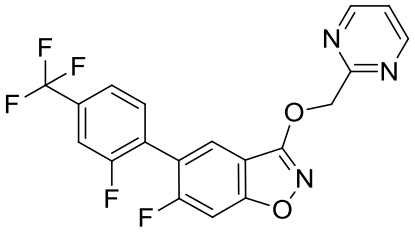

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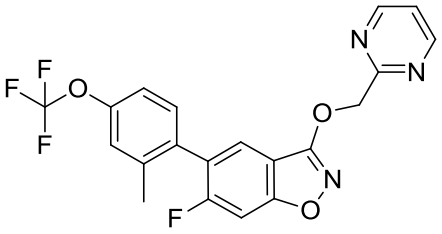

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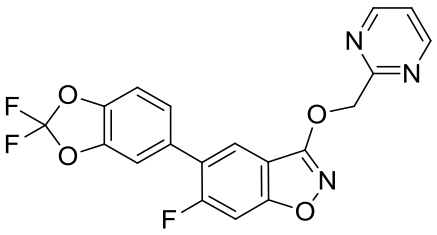

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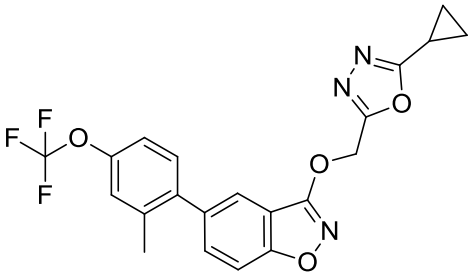

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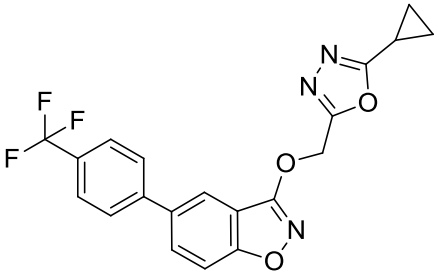

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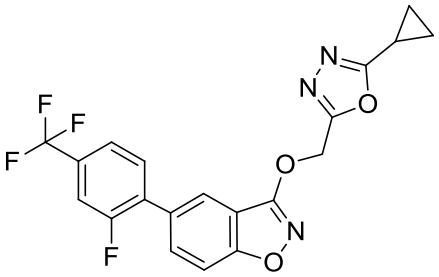

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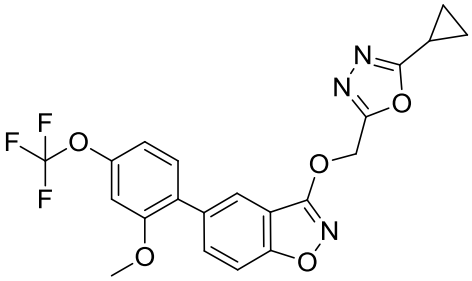

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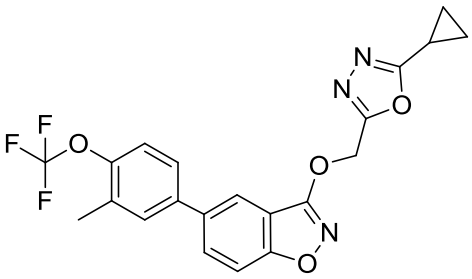

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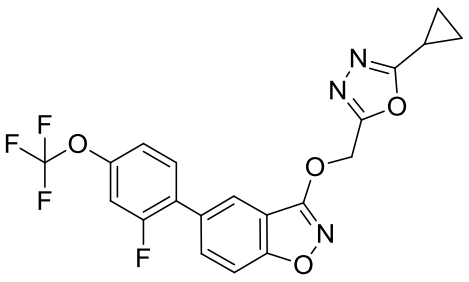

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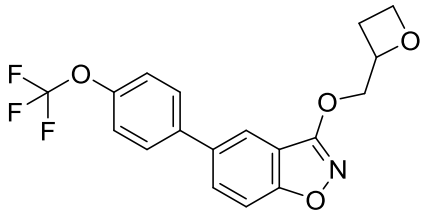

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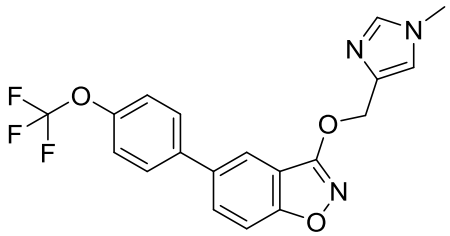

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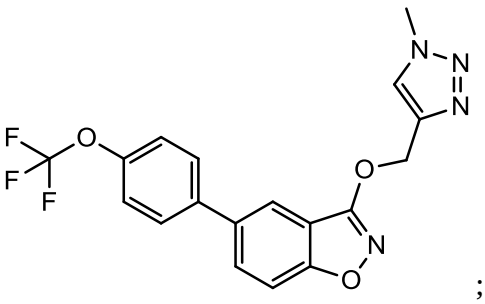

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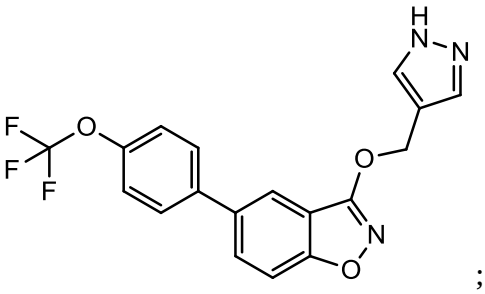

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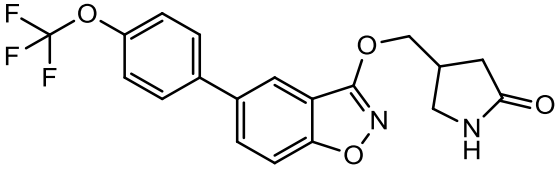

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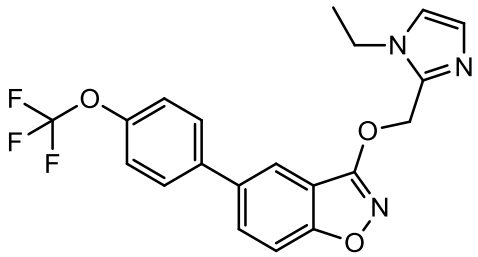

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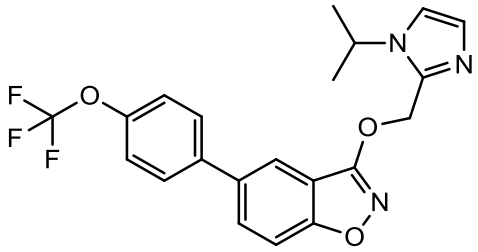

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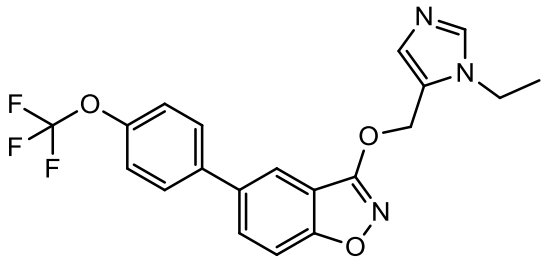

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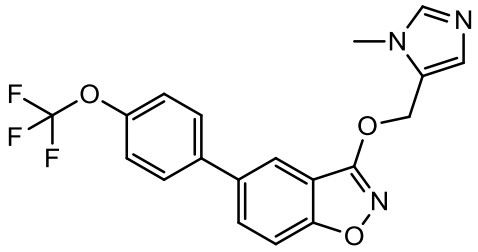

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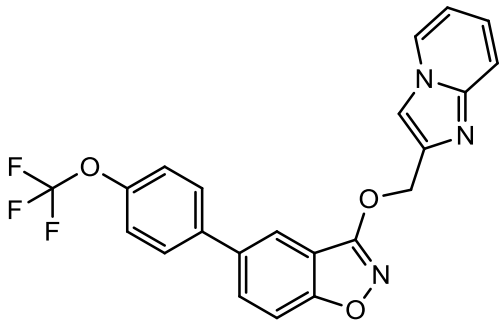

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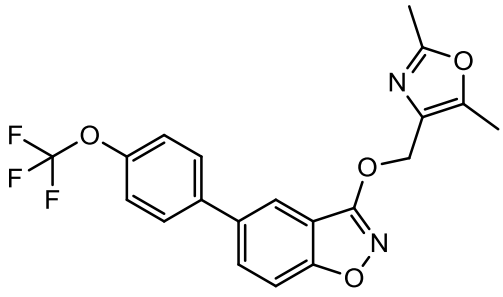

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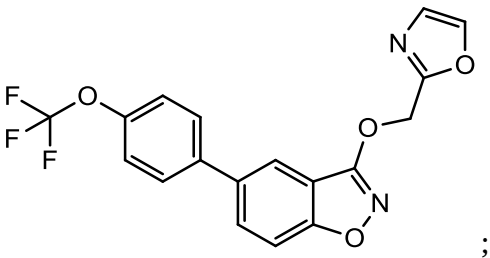

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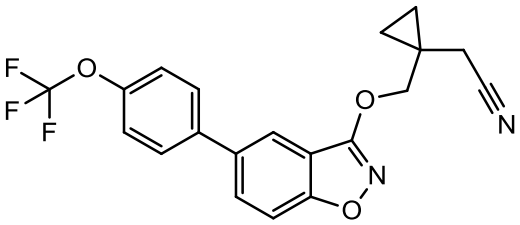

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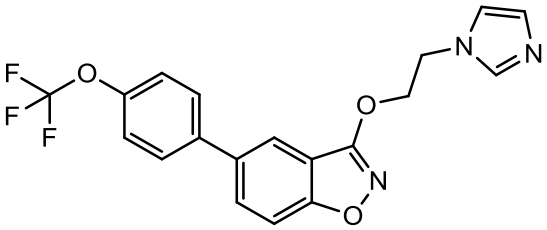

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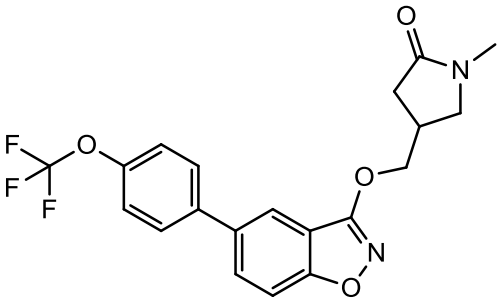

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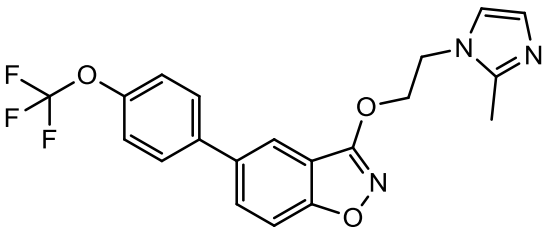

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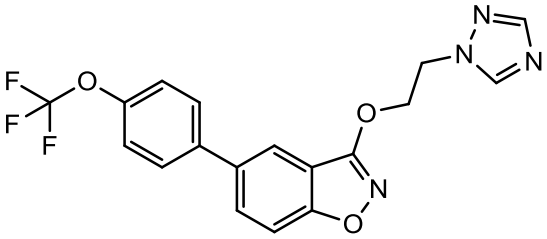

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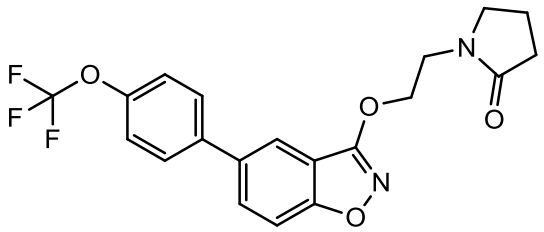

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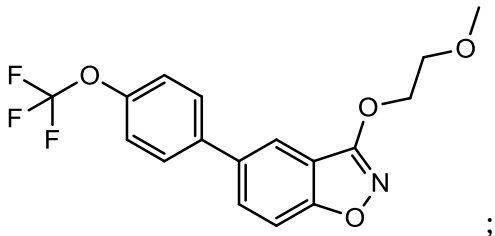

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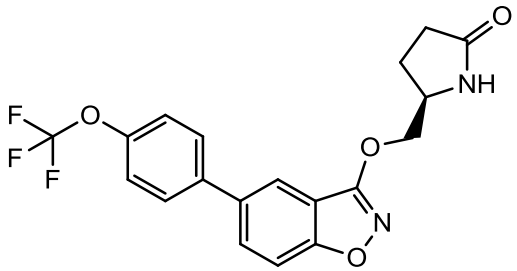

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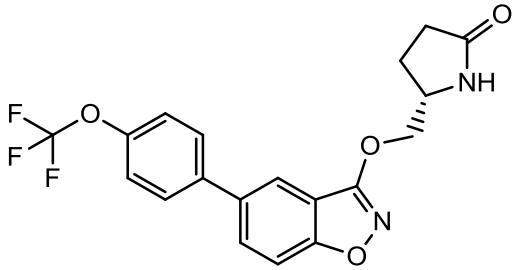
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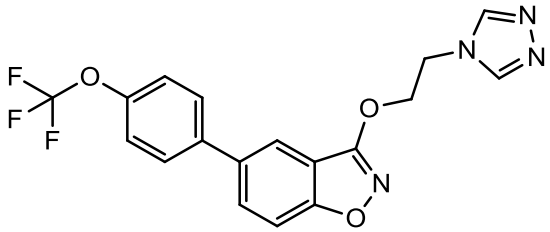
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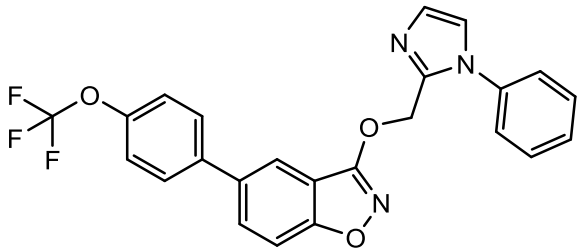
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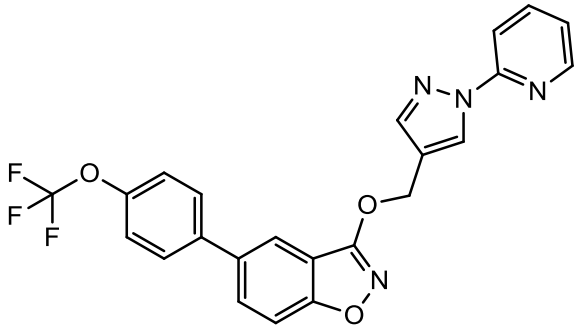
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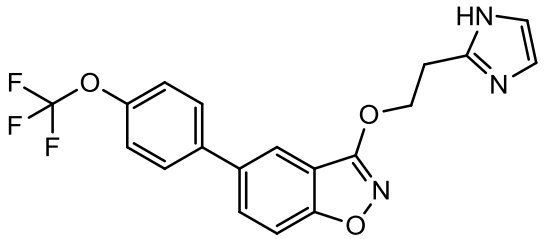
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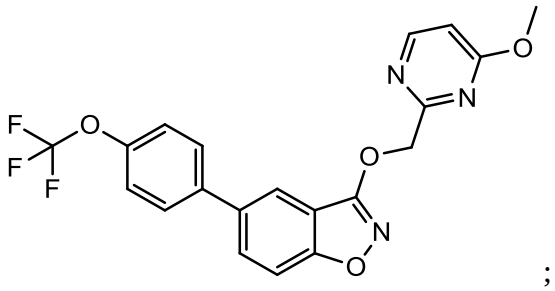
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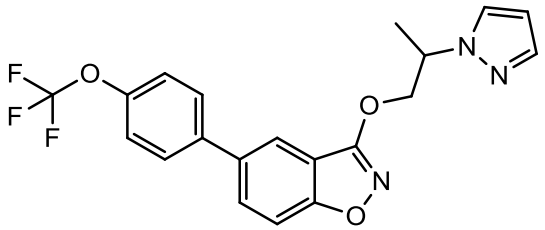
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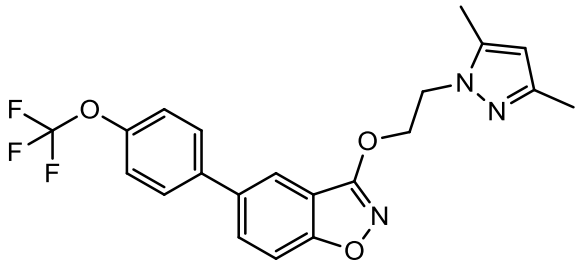
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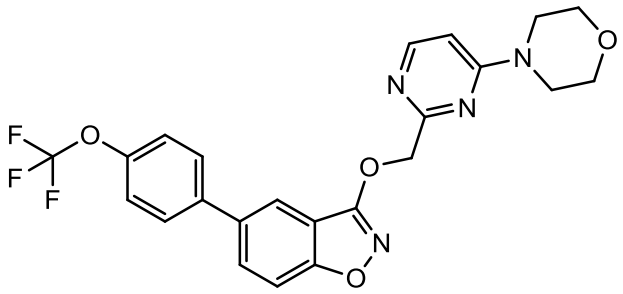
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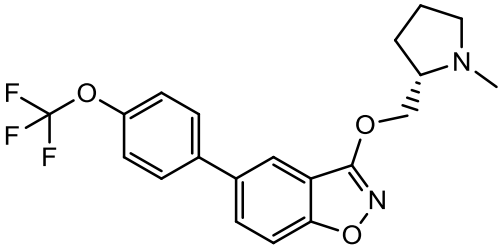
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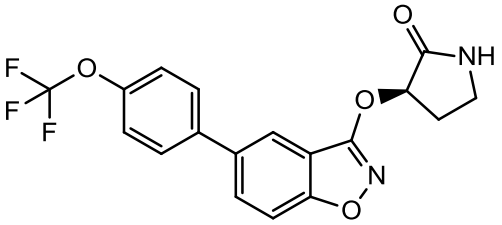


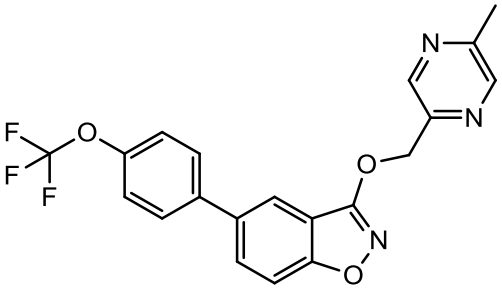
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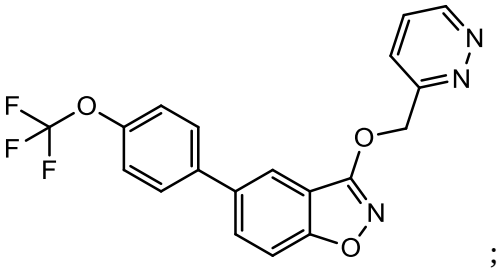


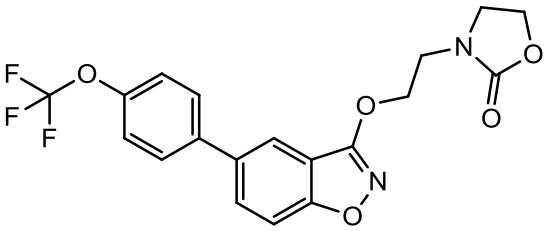
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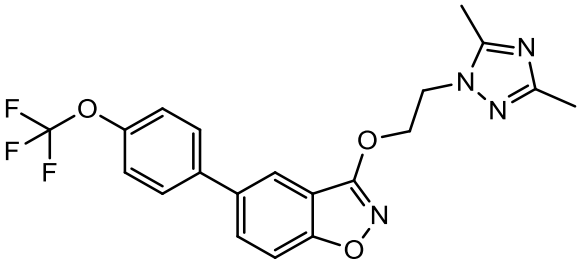

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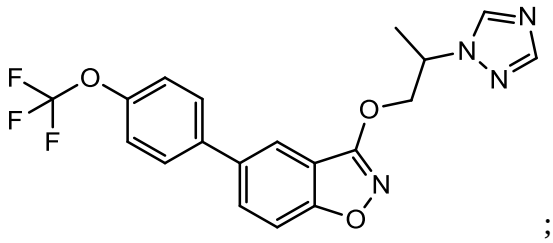

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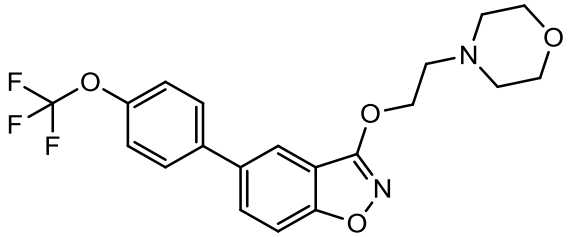

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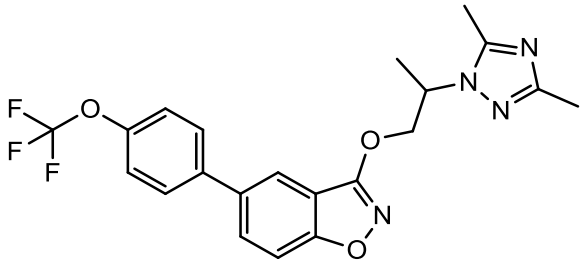

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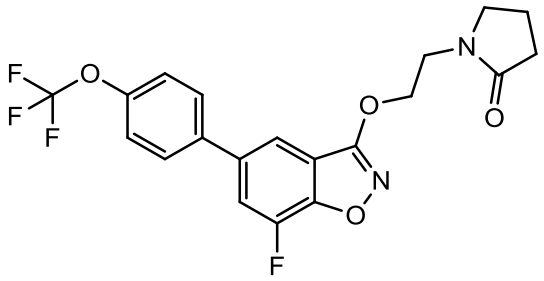

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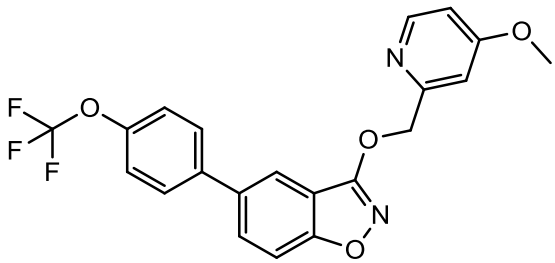

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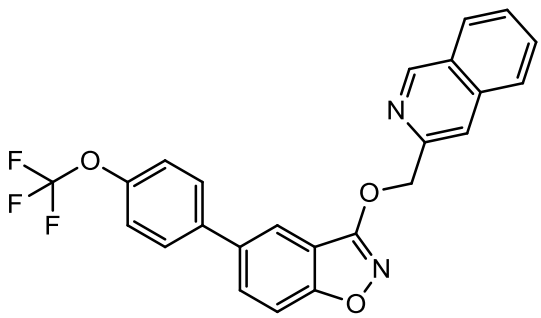

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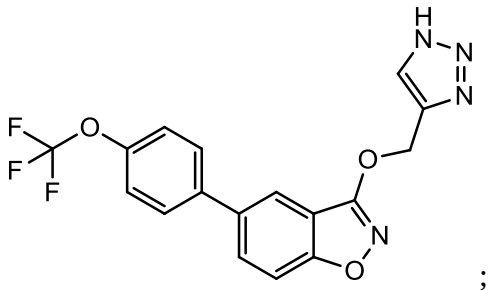

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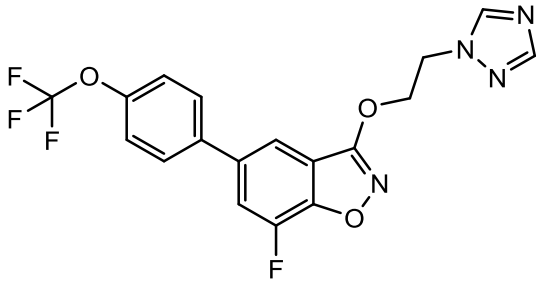

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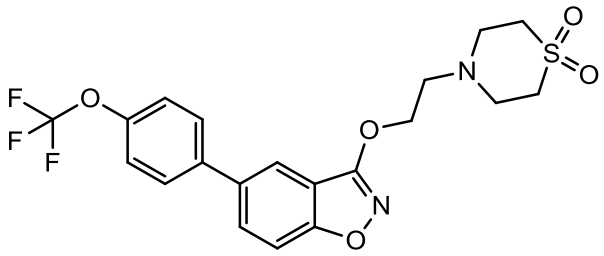

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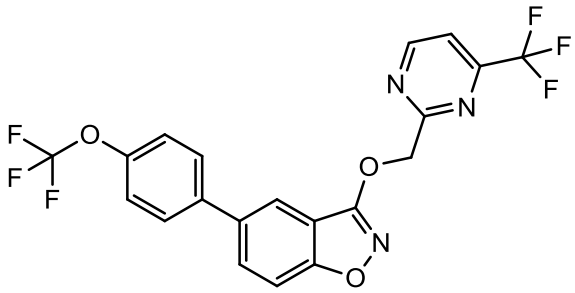
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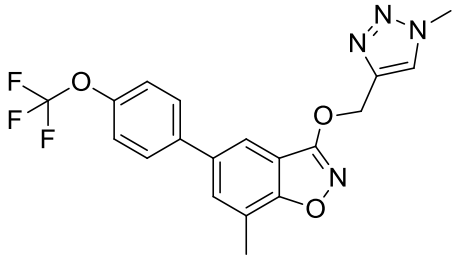
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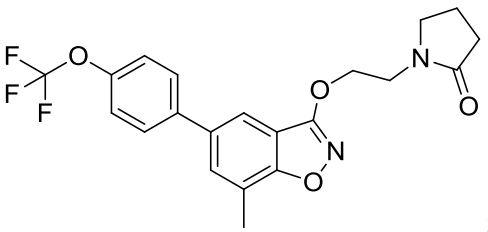
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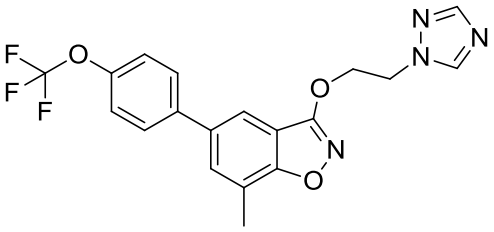
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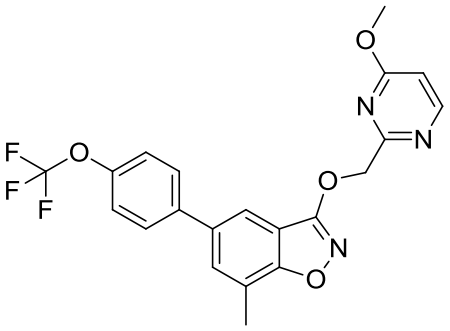
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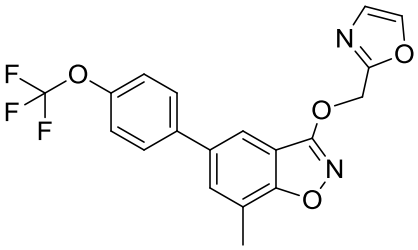
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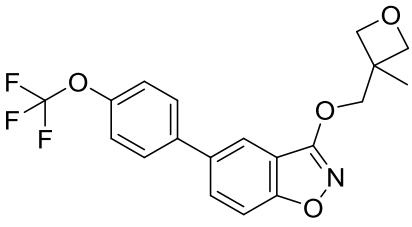
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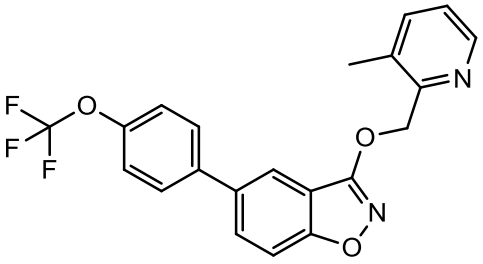
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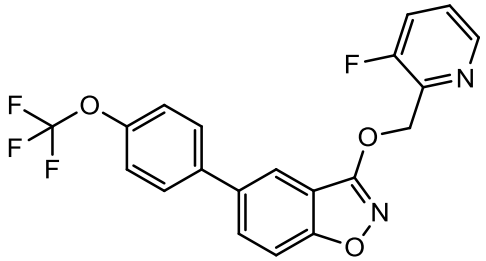
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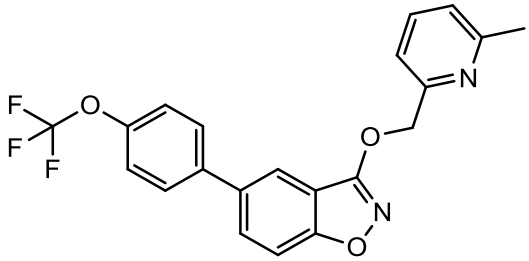


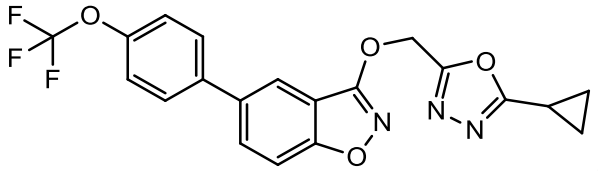
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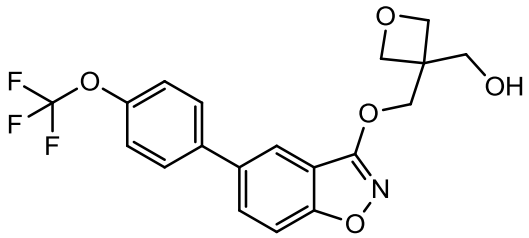


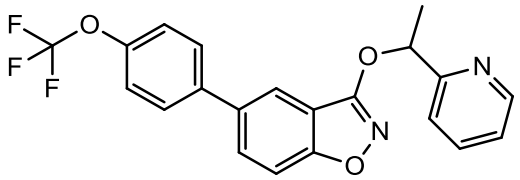
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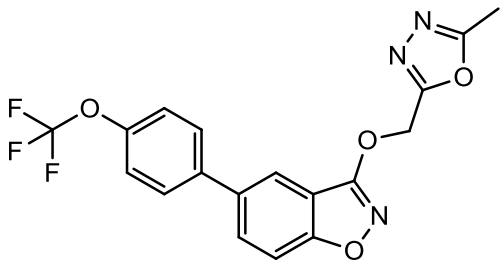

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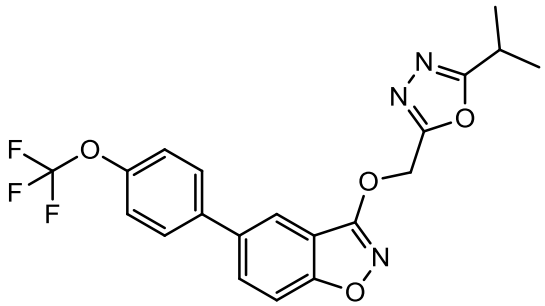

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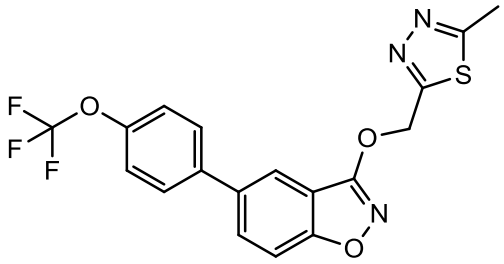

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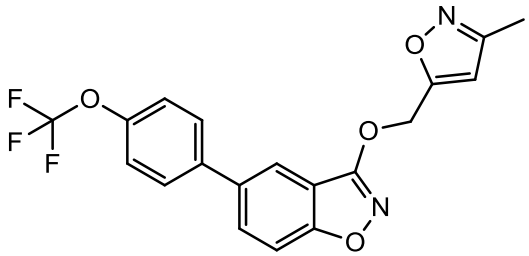

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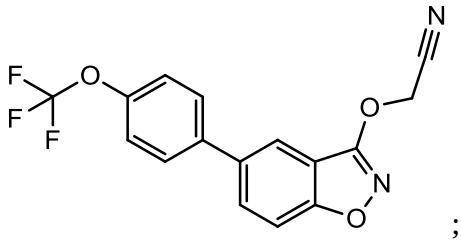

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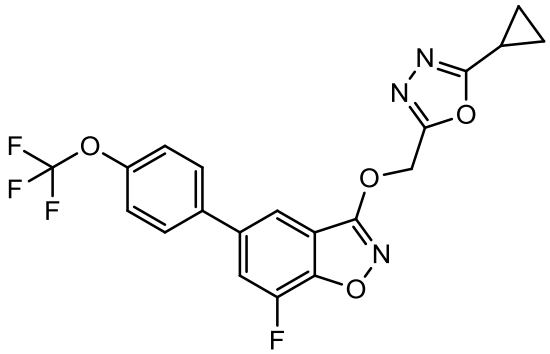

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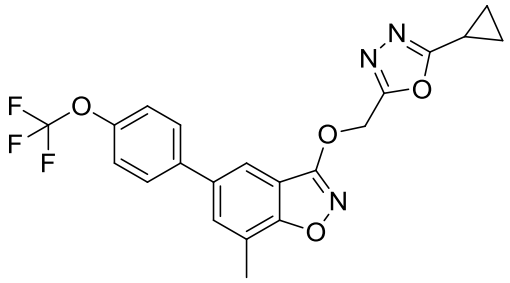

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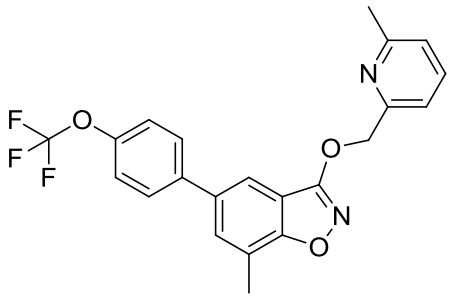

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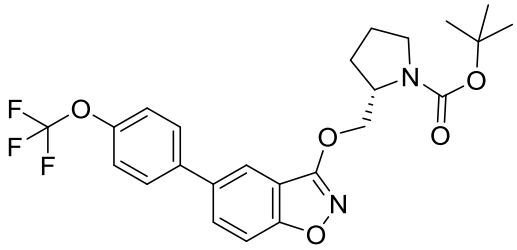

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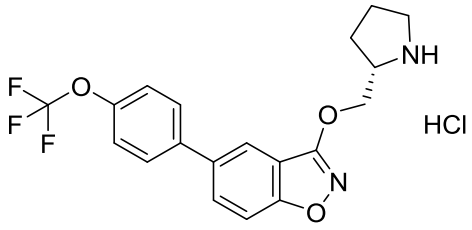
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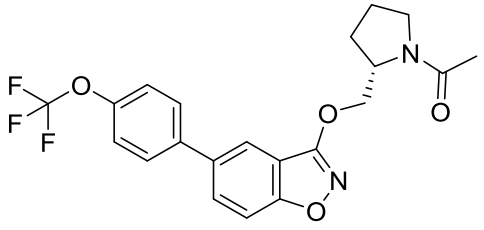
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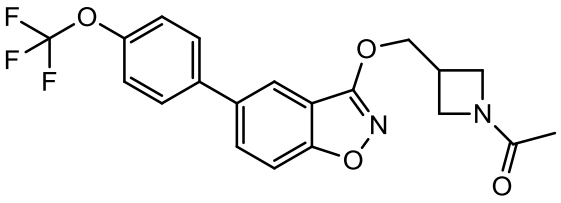
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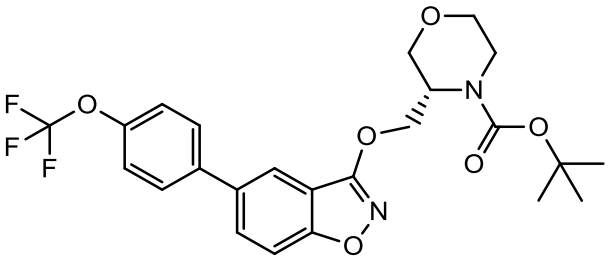

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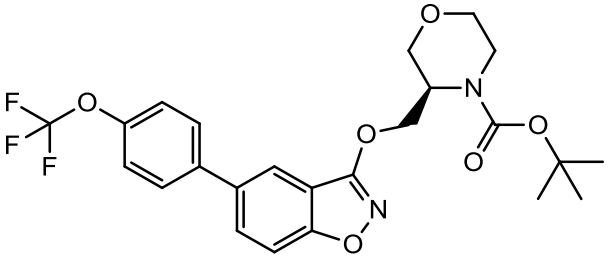
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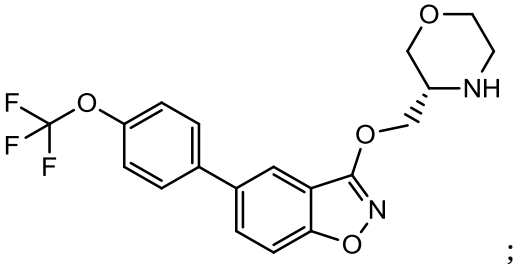


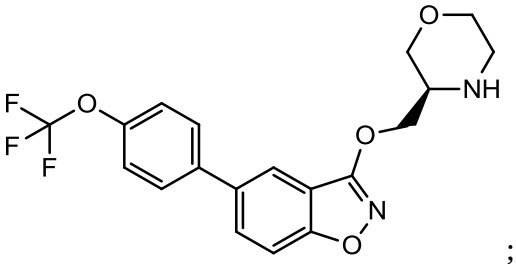
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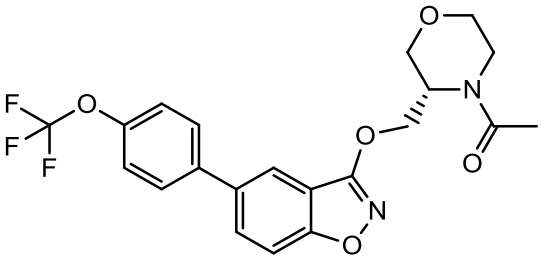

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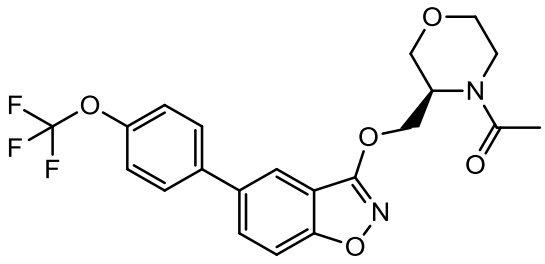

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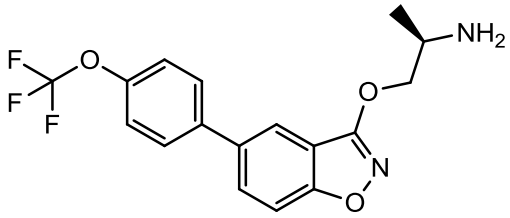

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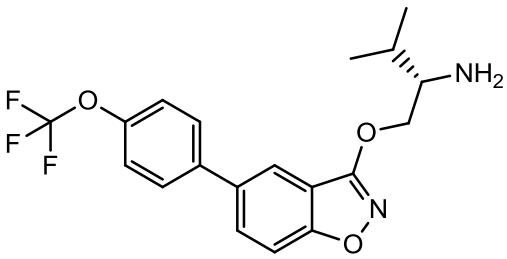

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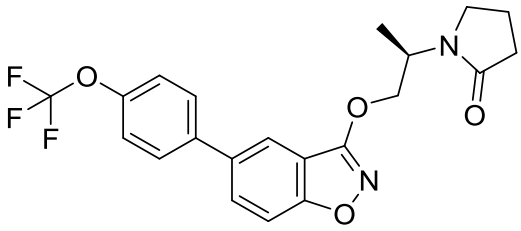

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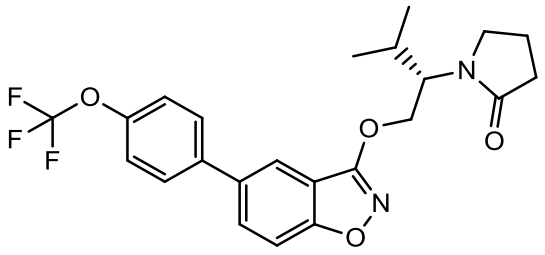

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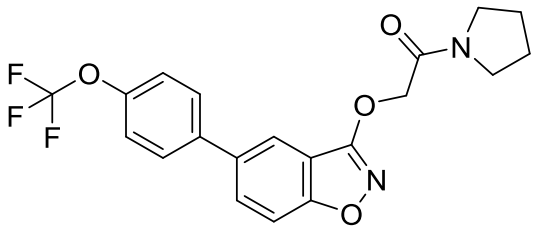

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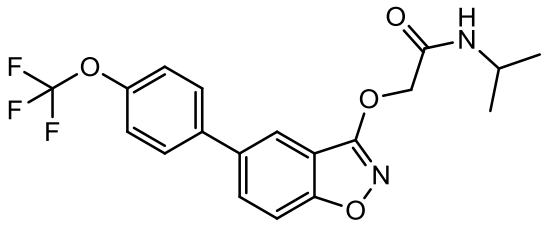

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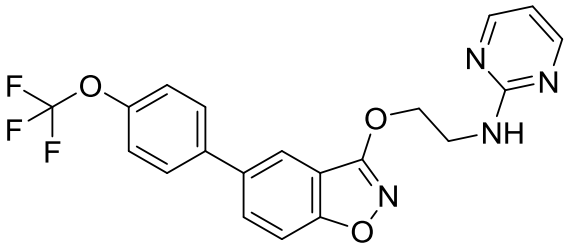

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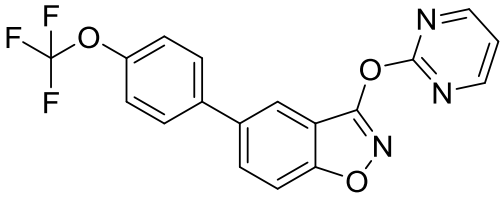

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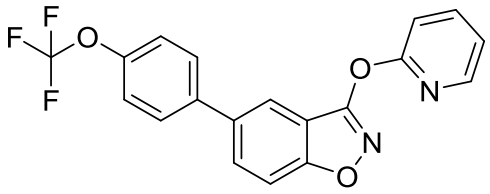
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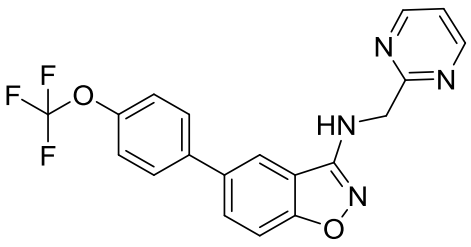
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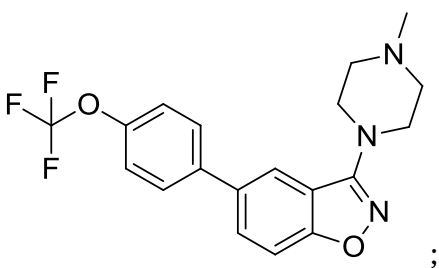
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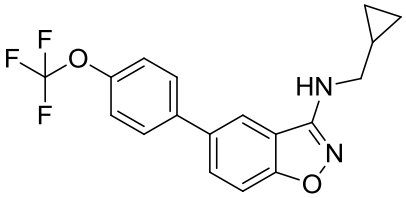
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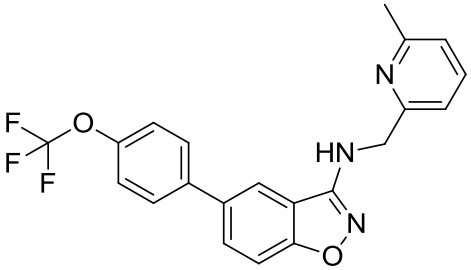


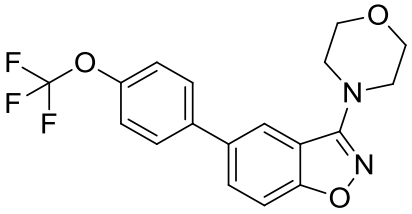
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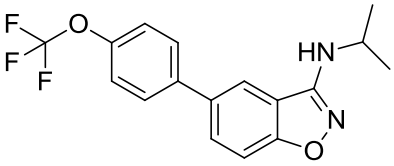


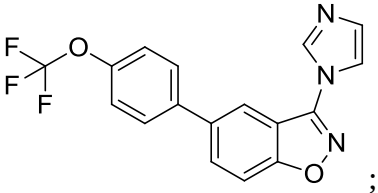
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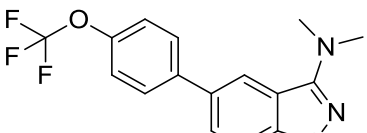

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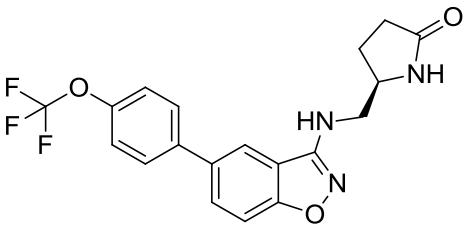

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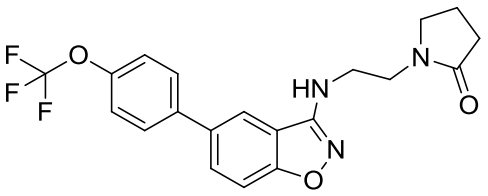

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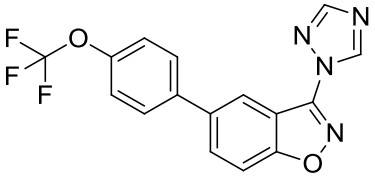

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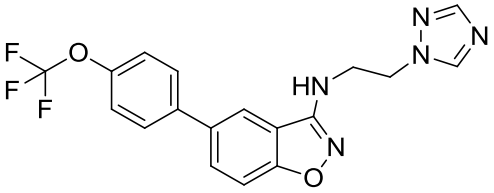

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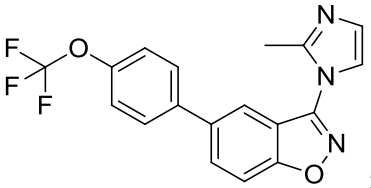

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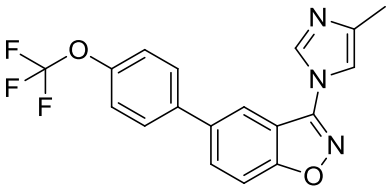

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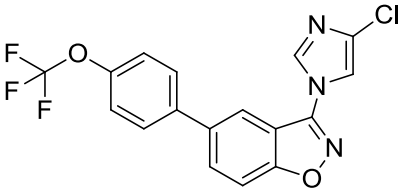

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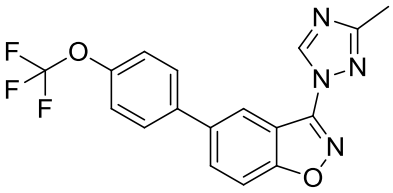

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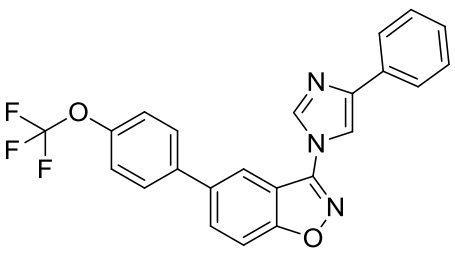

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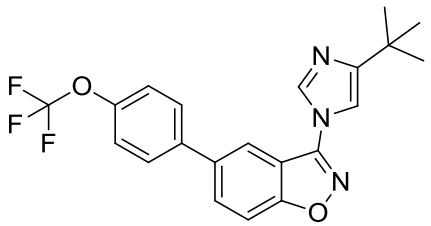

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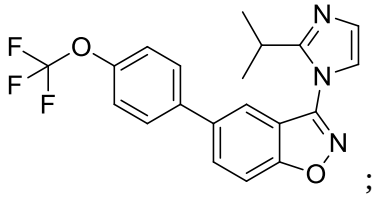

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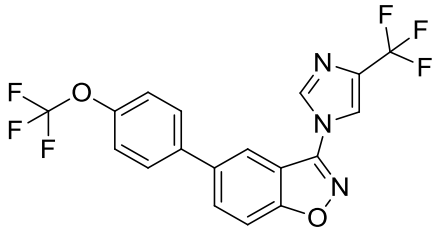

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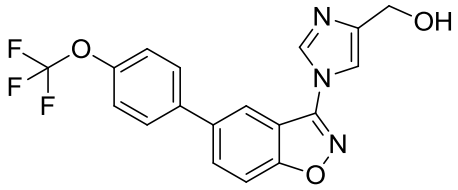

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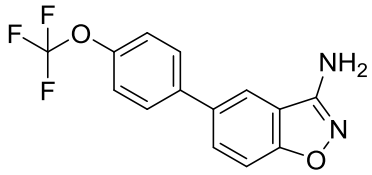

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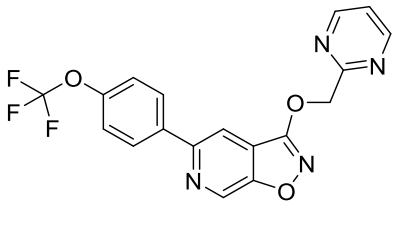

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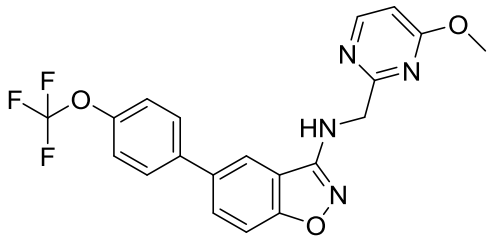

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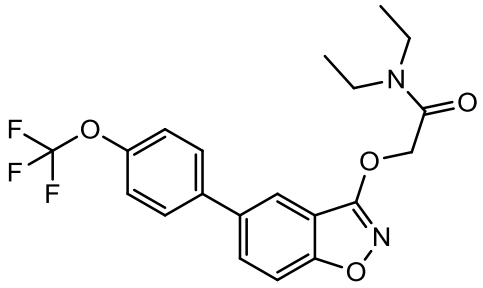

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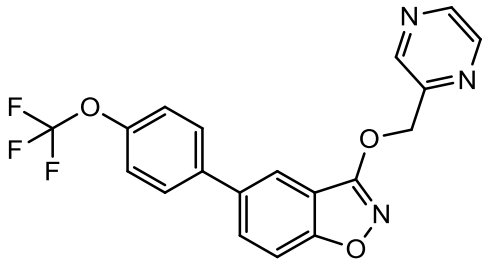

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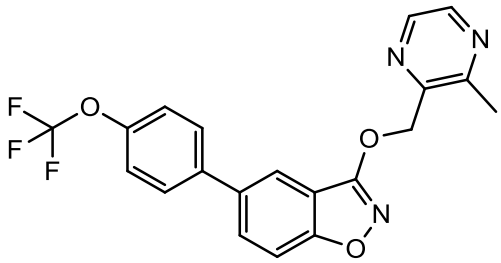
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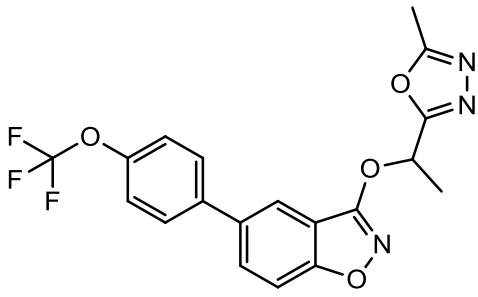
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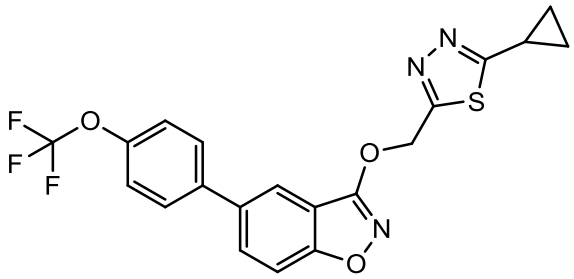
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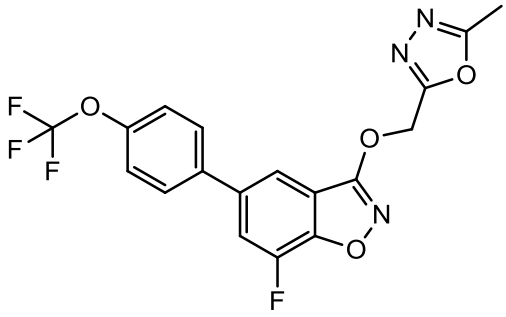


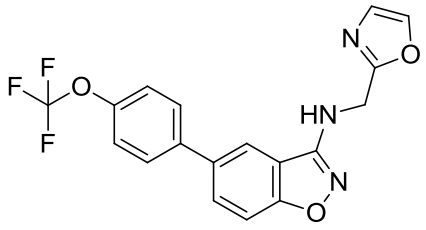
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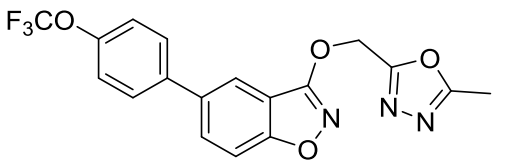

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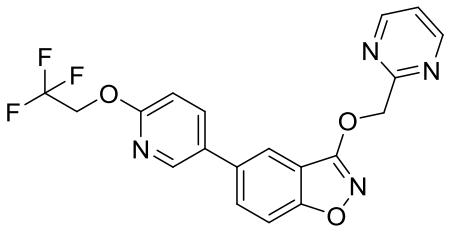

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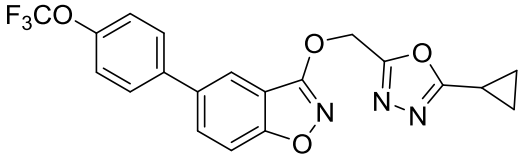

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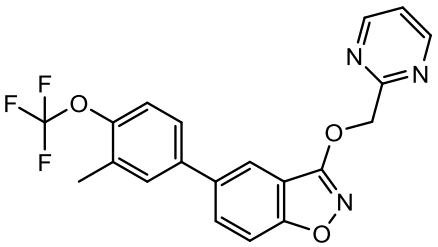
or a pharmaceutically acceptable salt, stereoisomer or mixture of stereoisomer thereof.

25. A compound selected from the group consisting of:


,


,


and


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26. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a therapeutically effective amount of the compound of any one of claims 1 to 25 or a pharmaceutically acceptable salt, thereof.

27. Use of a compound according to any one of claims 1 to 25 in the manufacture of a medicament for treating one or more diseases in a human that is alleviable by treatment with an agent capable of reducing late sodium current wherein the disease state is selected from atrial arrhythmias, ventricular arrhythmias, heart failure (including congestive heart failure, diastolic heart failure, systolic heart failure, acute heart failure), Prinzmetal's (variant) angina, stable angina, unstable angina, exercise induced angina, congestive heart disease, ischemia, recurrent ischemia, reperfusion injury, myocardial infarction, acute coronary syndrome, peripheral arterial disease, pulmonary hypertension, long QT syndrome, hypertrophic cardiomyopathy and intermittent claudication.