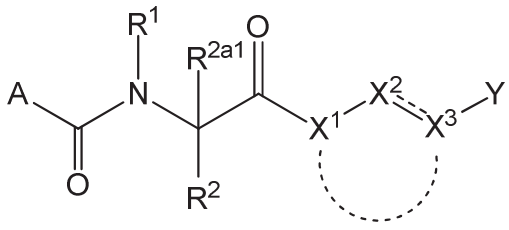
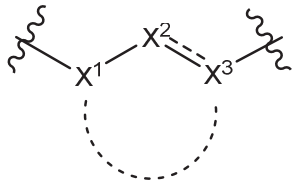
CLAIMS

1. A compound characterized by having the structure of Formula (Ic), or a pharmaceutically acceptable salt thereof, having the structure:



(Ic);

wherein X^1, X^2 and X^3 are each independently C (carbon), N (nitrogen), or O (oxygen), and the



dotted line between X^1 and X^3 of indicates an optionally substituted 6 membered mono-cyclic heteroaryl, by joining X^1 and X^3 together; with the proviso that the valencies of X^1, X^2 and X^3 are satisfied with a substituent selected from the group consisting of hydrogen and an optionally substituted C_{1-4} alkyl; and X^1, X^2 and X^3 are uncharged;

wherein:

A is selected from the group consisting of an optionally substituted cycloalkyl, an optionally substituted cycloalkenyl, an optionally substituted C_{6-10} aryl, an optionally substituted C_{6-10} aryl(C_{1-2} alkyl), an optionally substituted heteroaryl and an optionally substituted heterocyclyl;

Y is selected from the group consisting of an optionally substituted cycloalkyl, an optionally substituted cycloalkenyl, an optionally substituted C_{6-10} aryl, an optionally substituted heteroaryl and an optionally substituted heterocyclyl;

R^1 is hydrogen or an unsubstituted C_{1-4} alkyl;

R^2 and R^{2a1} are each independently selected from the group consisting of hydrogen, an optionally substituted C_{1-4} alkyl, alkoxyalkyl, aminoalkyl, hydroxyalkyl, hydroxy, an optionally substituted C_{6-10} aryl(C_{1-6} alkyl), an optionally substituted heteroaryl(C_{1-6} alkyl) and an optionally substituted heterocyclyl(C_{1-6} alkyl); or

R^1 and R^2, together with the atoms to which they are attached, are joined to form an optionally substituted 5-membered heterocyclic ring or an optionally substituted 6-membered heterocyclic ring,

wherein when a group is optionally substituted, unless otherwise specified, the group may be substituted with one or more substituents selected from the group consisting of alkyl, alkenyl, alkynyl, alkoxy, cycloalkyl, cycloalkenyl, acylalkyl, alkoxyalkyl, aminoalkyl, amino acid, C_{6-10} aryl, heteroaryl, heterocyclyl, C_{6-10} aryl(alkyl), heteroaryl(alkyl), heterocyclyl(alkyl), hydroxy, hydroxyalkyl, acyl, cyano, halogen, thiocarbonyl, O-carbamyl, N-carbamyl, O-thiocarbamyl, N-thiocarbamyl, C-amido, N-amido, S-sulfonamido, N-sulfonamido, C-carboxy, O-carboxy, isocyanato, thiocyanato, isothiocyanato, azido, nitro, silyl, sulfenyl, sulfinyl, sulfonyl, haloalkyl, haloalkoxy, trihalomethanesulfonyl, trihalomethanesulfonamido, an amino, a mono-alkyl amine and a di-alkyl amine;

wherein "heteroaryl" refers to a monocyclic or multicyclic aromatic ring system, wherein the ring system has a fully delocalized pi-electron system and contains one or more heteroatoms selected from nitrogen, oxygen and sulfur, and wherein the heteroaryl contains 4 to 14 atoms in the ring(s); and

wherein "heterocyclyl" refers to a 3 to 18-membered monocyclic, bicyclic, and tricyclic ring system wherein carbon atoms together with from 1 to 5 heteroatoms selected from nitrogen, oxygen and sulfur constitute said ring system; wherein the heterocycle may optionally contain one or more unsaturated bonds situated in such a way, however, that a fully delocalized pi-electron system does not occur throughout all the rings; wherein the heterocycle may further contain one or more carbonyl or thiocarbonyl functionalities, so as to make the definition include oxo-systems and thio-systems; wherein when composed of two or more rings, the rings may be joined together in a fused fashion; and wherein any nitrogens in the heterocyclyl may be quaternized.

2. The compound of Claim 1, wherein R^1 is hydrogen.

3. The compound of Claim 1, wherein R^1 is an unsubstituted C_{1-4} alkyl.

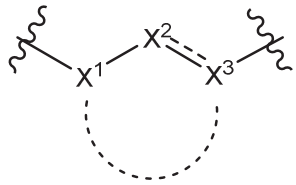
4. The compound of any one of Claims 1-3, wherein both R^2 and R^{2a1} are hydrogen.

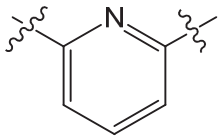
5. The compound of any one of Claims 1-3, wherein R^2 is hydrogen; and R^{2a1} is an unsubstituted C_{1-4} alkyl.

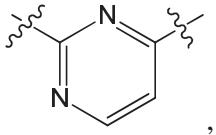
6. The compound of any one of Claims 1-3, wherein R^2 is hydrogen; and R^{2a1} is a substituted C_{1-4} alkyl.

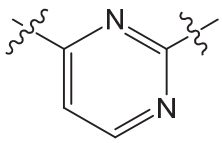
7. The compound of Claim 1, wherein R^2 is hydrogen and R^{2a1} is an optionally substituted C_{6-10} aryl(C_{1-6} alkyl), an optionally substituted heterocyclyl(C_{1-6} alkyl), an alkoxyalkyl, an aminoalkyl or a hydroxyalkyl; or R^{2a1} is hydrogen and R^1 and R^2 are joined together with the atoms to which they are attached to form an optionally substituted 5 membered heterocyclyl or an optionally substituted 6 membered heterocyclyl.

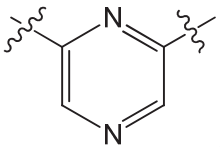
8. The compound of any one of Claims 1-3, wherein R^2 is hydrogen and R^{2a1} is hydroxy.

9. The compound of any one of Claims 1-8, wherein the 

in Formula (Ic) is selected from the group consisting of: an optionally substituted 

, an optionally substituted 

, an optionally substituted 

, and an optionally substituted 

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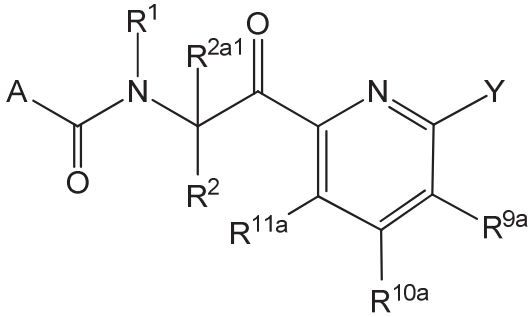
10. The compound of any one of Claims 1-9, wherein the compound of Formula (Ic) 

is a compound of Formula (Id): (Id)

wherein: R^{9a}, R^{10a} and R^{11a} are each independently selected from the group consisting of hydrogen, halogen, hydroxy, an optionally substituted C_{1-8} alkyl, an optionally substituted C_{2-8} alkenyl, an optionally substituted C_{2-8} alkynyl, an optionally substituted C_{3-6} cycloalkyl, an optionally substituted C_{6-10} aryl, an optionally substituted heteroaryl, an optionally substituted

heterocyclyl, an optionally substituted hydroxyalkyl, an optionally substituted C_{1-8} alkoxy, an optionally substituted alkoxyalkyl, amino, mono-alkyl amine, di-alkyl amine, halo(C_{1-8} alkyl) and an optionally substituted C-carboxy.

11. The compound of Claim 10, wherein R^{9a} is selected from the group consisting of hydrogen, hydroxy, an optionally substituted C_{1-8} alkyl, an optionally substituted C_{1-8} alkoxy, an optionally substituted alkoxyalkyl, mono-alkyl amine and di-alkyl amine.

12. The compound of Claim 10 or 11, wherein R^{10a} is selected from the group consisting of hydrogen, halogen, an optionally substituted C_{1-8} alkyl, an optionally substituted C_{2-8} alkenyl, an optionally substituted C_{2-8} alkynyl, an optionally substituted C_{3-6} cycloalkyl, an optionally substituted C_{6-10} aryl, an optionally substituted 6 membered heterocyclyl, an optionally substituted hydroxyalkyl, an optionally substituted C_{1-8} alkoxy, mono-alkyl amine, di-alkyl amine, halo(C_{1-8} alkyl) and an optionally substituted C-carboxy.

13. The compound of any one of Claims 10-12, wherein R^{11a} is selected from the group consisting of hydrogen, hydroxy and an optionally substituted C_{1-8} alkoxy.

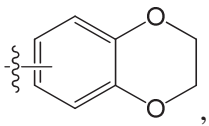
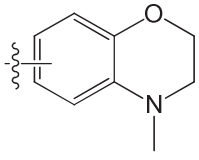
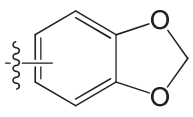
14. The compound of any one of Claims 1-13, wherein A of Formula (Ic) is selected from the group consisting of:

an optionally substituted C_{3-8} monocyclic cycloalkyl,

an optionally substituted C_{6-10} aryl,

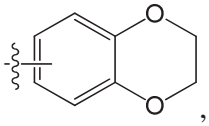
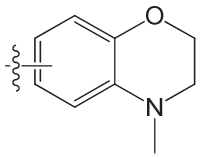
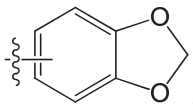
an optionally substituted C_{6-10} aryl(C_{1-2} alkyl),

an optionally substituted monocyclic heteroaryl selected from the group consisting of an optionally substituted imidazole, an optionally substituted thiazole, an optionally substituted furan, an optionally substituted thiophene, an optionally substituted pyrrole, an optionally substituted pyridine, an optionally substituted pyrimidine, an optionally substituted pyrazine, an optionally substituted oxazole and an optionally substituted isoxazole; and

an optionally substituted bicyclic heterocyclyl selected from the group consisting of an optionally substituted , an optionally substituted  and an optionally substituted .

15. The compound of any one of Claims 1-14, wherein when A of Formula (Ic) is substituted, A is substituted with one or more substituents selected from the group consisting of an unsubstituted C_{1-4} alkyl, cycloalkyl, hydroxy, an optionally substituted C_{1-4} alkoxy, halogen, haloalkyl, a haloalkoxy, nitro, amino, mono-alkyl amine, di-alkyl amine, sulfenyl, alkyoxyalkyl, phenyl, mono-cyclic heteroaryl, mono-cyclic heterocyclyl and aminoalkyl.

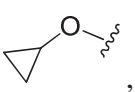
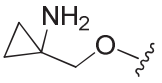
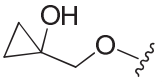
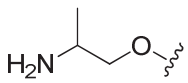
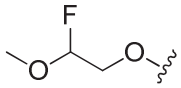
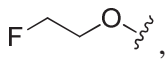
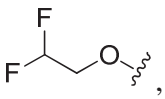
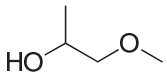
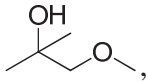
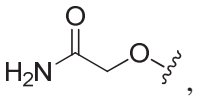
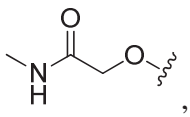
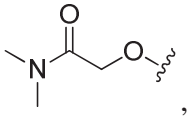
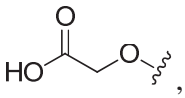
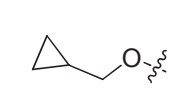
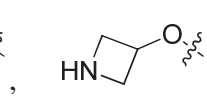
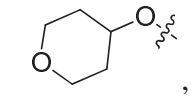
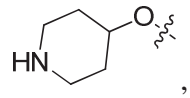
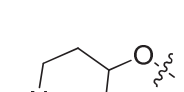
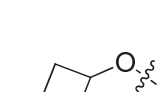
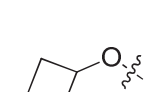
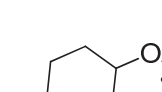
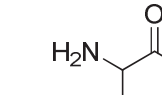
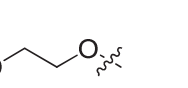
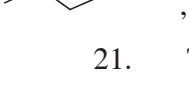
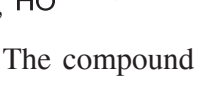
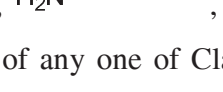
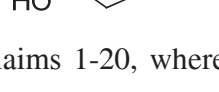
16. The compound of any one of Claims 1-15, wherein A of Formula (Ic) is selected from the group consisting of an optionally substituted C_{3-8} monocyclic cycloalkyl and an optionally substituted C_{6-10} aryl(C_{1-2} alkyl).

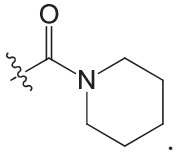
17. The compound of any one of Claims 1-15, wherein A of Formula (Ic) is an optionally substituted monocyclic heteroaryl selected from the group consisting of an optionally substituted imidazole, an optionally substituted thiazole, an optionally substituted furan, an optionally substituted thiophene, an optionally substituted pyrrole, an optionally substituted pyridine, an optionally substituted pyrimidine, an optionally substituted pyrazine, an optionally substituted oxazole and an optionally substituted isoxazole; or an optionally substituted bicyclic heterocyclyl selected from the group consisting of an optionally substituted , an optionally substituted  and an optionally substituted .

18. The compound of any one of Claims 1-15, wherein A of Formula (Ic) is an optionally substituted C_{6-10} aryl.

19. The compound of Claim 18, wherein A of Formula (Ic) is an optionally substituted phenyl.

20. The compound of Claim 19, wherein the phenyl is substituted with one or more substituents selected from the group consisting of methyl, ethyl, propyl, butyl, hydroxy, methoxy, ethoxy, propoxy, butoxy, phenoxy, bromo, chloro, fluoro, trifluoromethyl, difluoromethoxy, trifluoromethoxy, N,N-di-methyl-amino, N,N-di-ethyl-amino, N-methyl-N-ethyl-amino, N-methyl-amino, N-ethyl-amino, amino, alkylthio, phenyl, imidazole, morpholinyl, pyrazole, pyrrolidinyl, pyridinyl, piperidinyl, pyrrolidinone, pyrimidine, pyrazine, 1,2,4-oxadiazole, $-(CH_2)_{1-2}-NH(CH_3)$, $-O(CH_2)_2-NH_2$, $–O(CH_2)_2-NH(CH_3)$, $–O(CH_2)_2-N(CH_3)_2$, -O-

$(CH_2)_{2\text{-}4}OH$, $-O(CH_2)_2OCH_3$, $-O(CH_2)_{1\text{-}2}$-morpholinyl, $-O(CH_2)_{1\text{-}2}$-triazole, $-O(CH_2)_{1\text{-}2}$-imidazole, , , , , , , , , , , , , , , , , , , , , , , , , , , , , and .

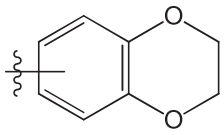
21. The compound of any one of Claims 1-20, wherein when Y of Formula (Ic) is substituted, Y is substituted with one or more R^B, wherein each R^B is independently selected from the group consisting of: cyano, halogen, an optionally substituted $C_{1\text{-}4}$ alkyl, an unsubstituted $C_{2\text{-}4}$ alkenyl, an unsubstituted $C_{2\text{-}4}$ alkynyl, an optionally substituted $C_{6\text{-}10}$ aryl, an optionally substituted 5 or 6 membered heteroaryl, an optionally substituted 5 or 6 membered heterocyclyl, hydroxy, $C_{1\text{-}4}$ alkoxy, alkoxyalkyl, $C_{1\text{-}4}$ haloalkyl, haloalkoxy, an unsubstituted acyl, an optionally substituted –C-carboxy, an optionally substituted –C-amido, sulfonyl, carbonyl, amino, mono-alkyl amine, di-alkyl amine and .

22. The compound of any one of Claims 1-21, wherein Y of Formula (Ic) is an optionally substituted phenyl.

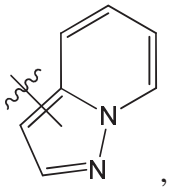
23. The compound of Claim 22, wherein Y of Formula (Ic) is a substituted phenyl.

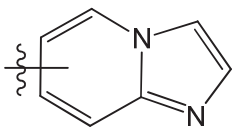
24. The compound of Claim 23, wherein Y of Formula (Ic) is a di-substituted phenyl.

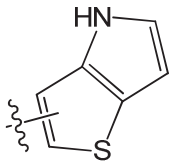
25. The compound of Claim 24, wherein Y of Formula (Ic) is a di-halo substituted phenyl.

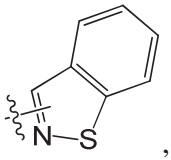
26. The compound of any one of Claims 1-21, wherein Y of Formula (Ic) is an optionally substituted ; or an optionally substituted mono-cyclic heteroaryl

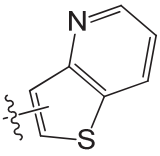
selected from the group consisting of an optionally substituted imidazole, an optionally substituted furan, an optionally substituted thiophene, an optionally substituted pyrrole, an optionally substituted pyrimidine, an optionally substituted pyrazine, an optionally substituted pyridine, an optionally substituted pyrazole, an optionally substituted oxazole and an optionally substituted isoxazole.

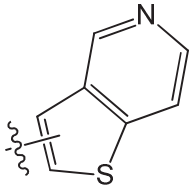
27. The compound of any one of Claims 1-21, wherein Y of Formula (Ic) is an optionally substituted bicyclic heteroaryl selected from the group consisting of an optionally substituted benzothiophene, an optionally substituted benzofuran, an optionally substituted indole, an optionally substituted quinoline, an optionally substituted isoquinoline, an optionally substituted benzooxazole, an optionally substituted benzoisoxazole, an optionally substituted benzoisothiazole, an optionally substituted benzothiazole, an optionally substituted benzoimidazole, an optionally substituted benzotriazole, an optionally substituted 1H-indazole, an optionally substituted 2H-indazole, an optionally substituted 

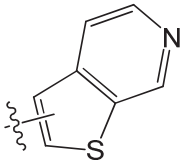
, an optionally substituted 

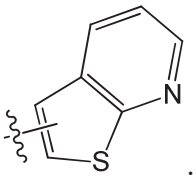
, an optionally substituted 

, an optionally substituted 

, an optionally substituted 

, an optionally substituted 

, an optionally substituted 

and an optionally substituted 

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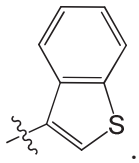
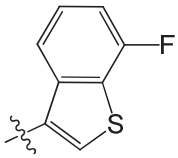
28. The compound of Claim 27, wherein Y of Formula (Ic) is an optionally substituted benzothiophene.

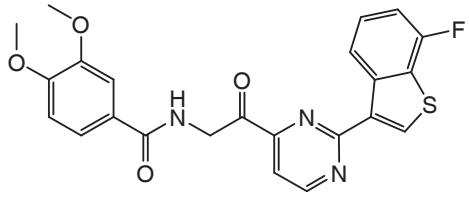
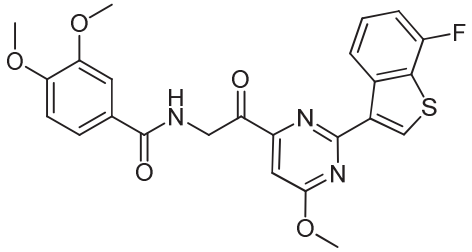
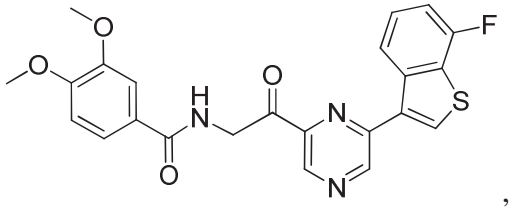
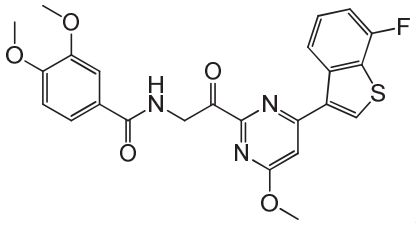
29. The compound of Claim 28, wherein Y of Formula (Ic) is an optionally substituted .

30. The compound of Claim 28 or 29, wherein Y of Formula (Ic) is an unsubstituted benzothiophene.

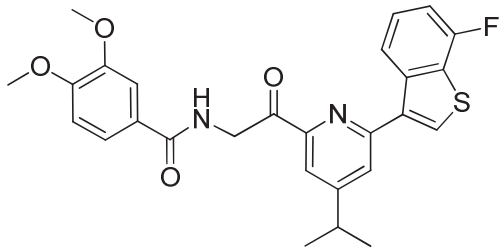
31. The compound of Claim 28 or 29, wherein Y of Formula (Ic) is a substituted benzothiophene.

32. The compound of Claim 31, wherein the benzothiophene is substituted with one or more substituents selected from the group consisting of halogen, carbonyl, C_{1-4} alkyl, hydroxy, C_{1-4} alkoxy, cyano, amino and mono-alkyl amine.

33. The compound of Claim 32, wherein the substituted benzothiophene is .

34. The compound of Claim 1, wherein the compound is selected from the group consisting of: , , , and , or a pharmaceutically acceptable salt of the foregoing.

35. The compound of Claim 1, wherein the compound is selected from the group consisting of: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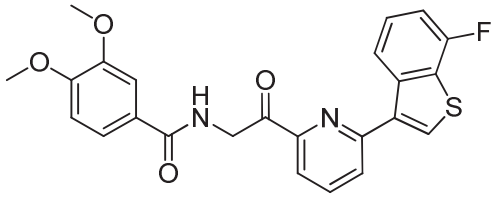
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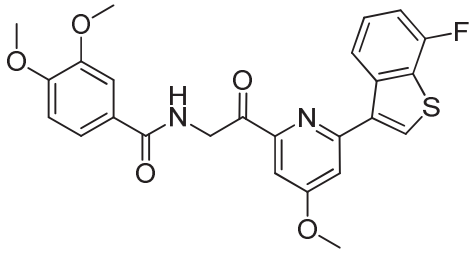
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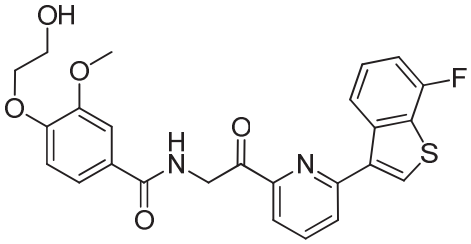
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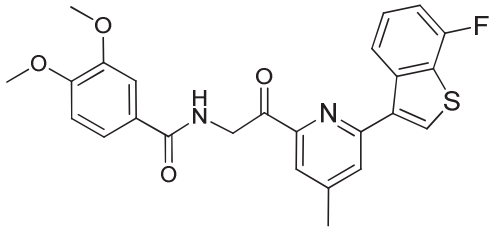
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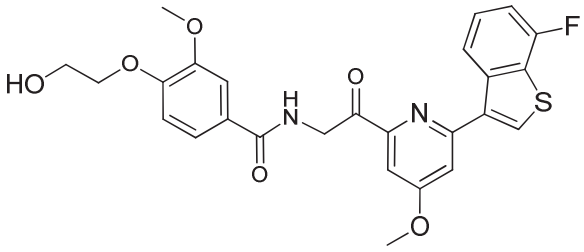
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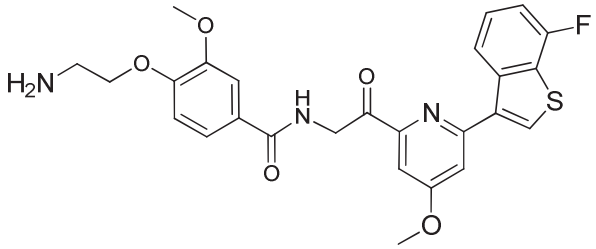
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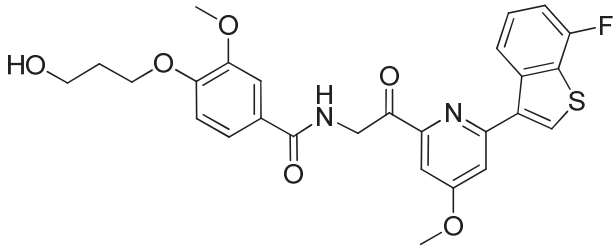
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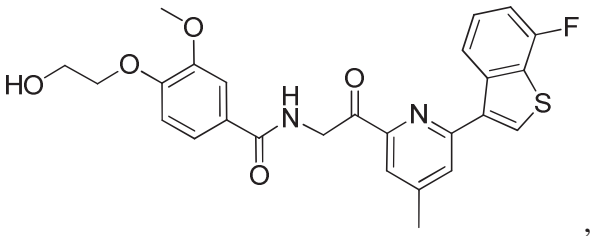
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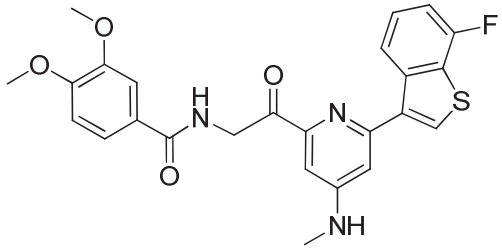
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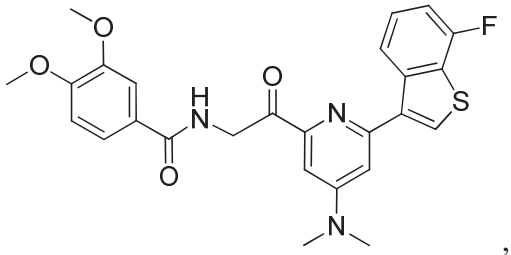
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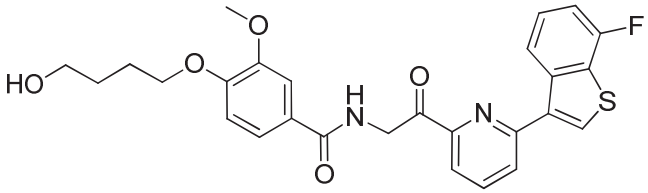
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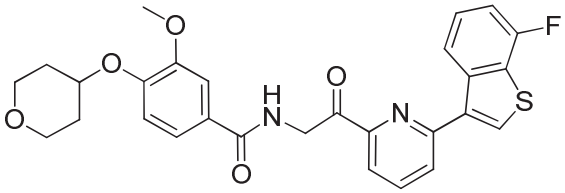
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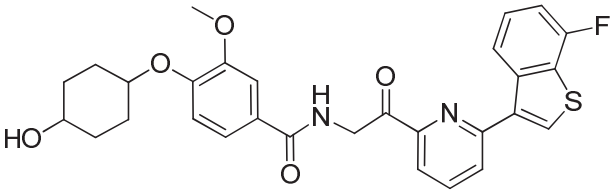
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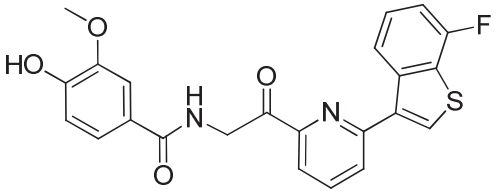
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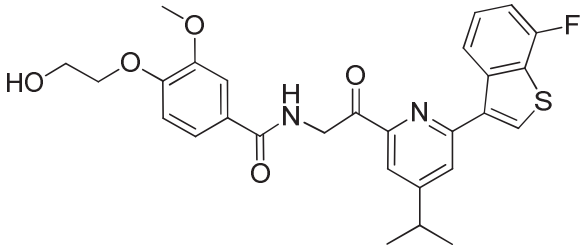
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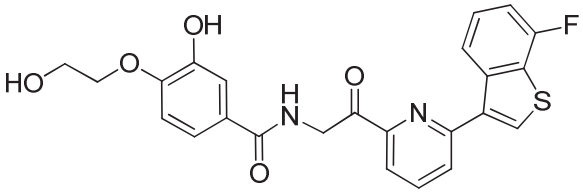
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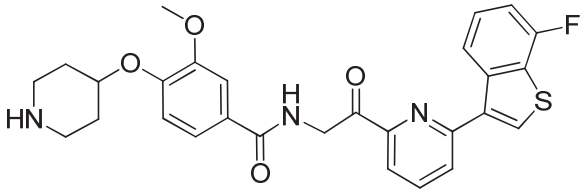
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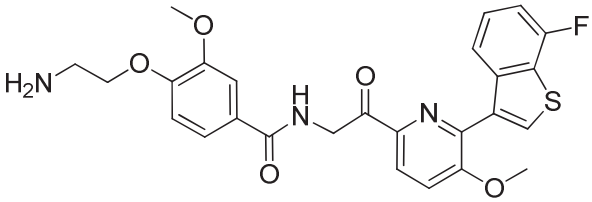
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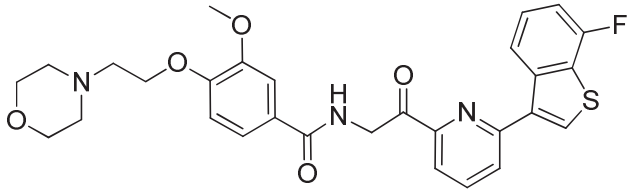
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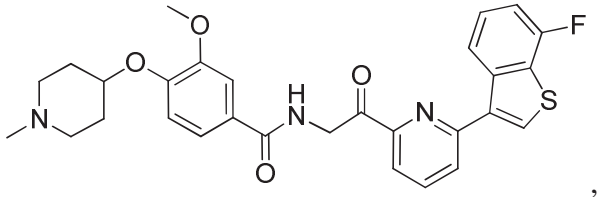
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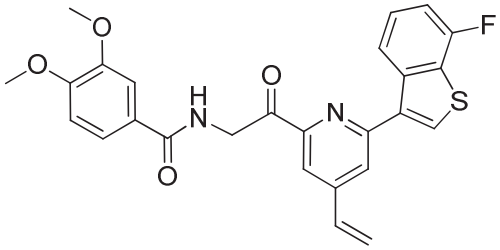
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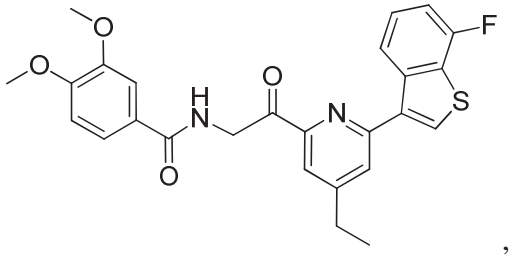
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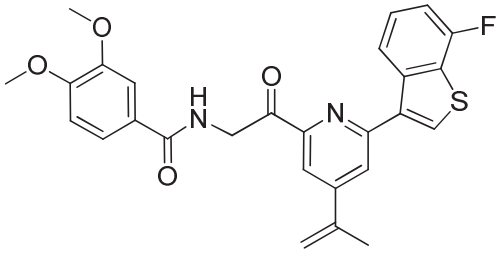
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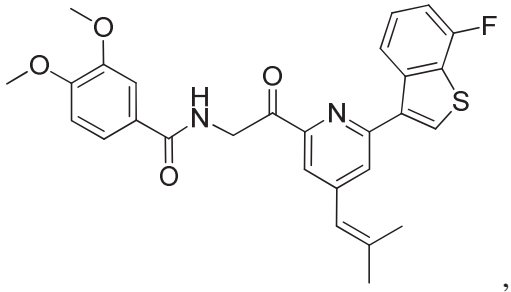
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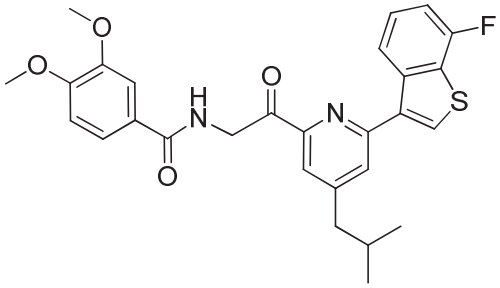
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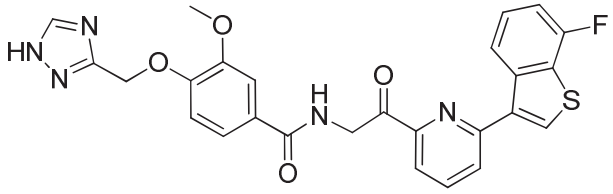
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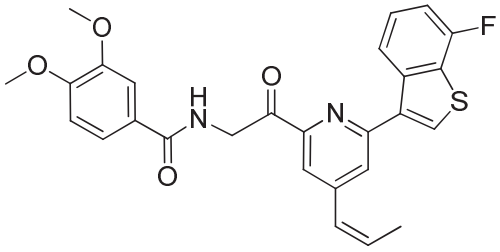
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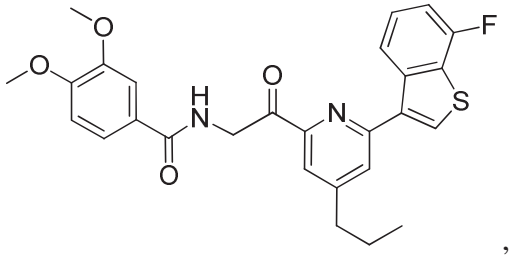
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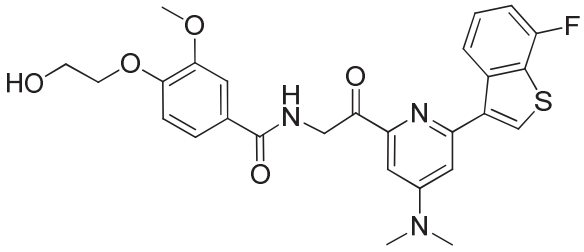
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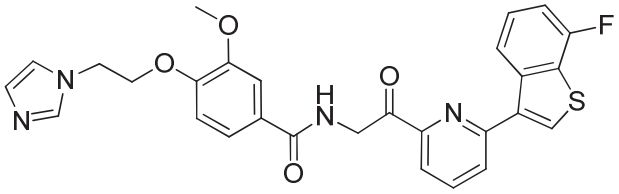
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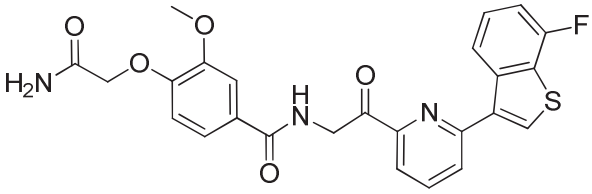
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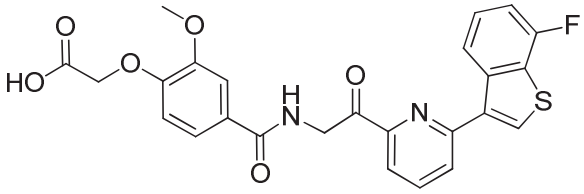
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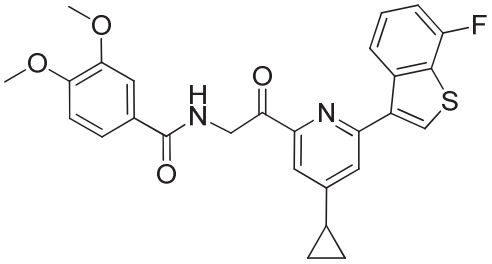
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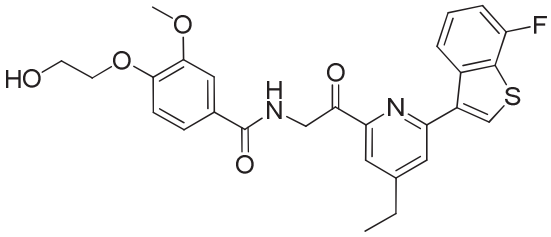
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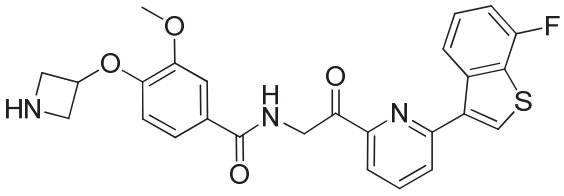
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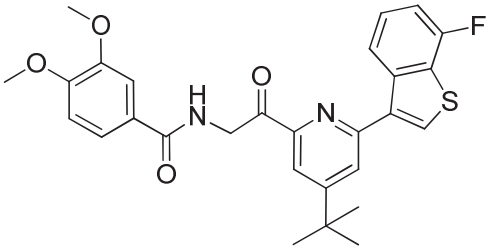
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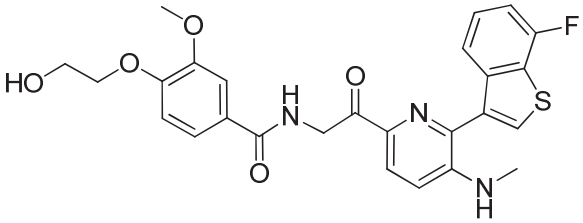
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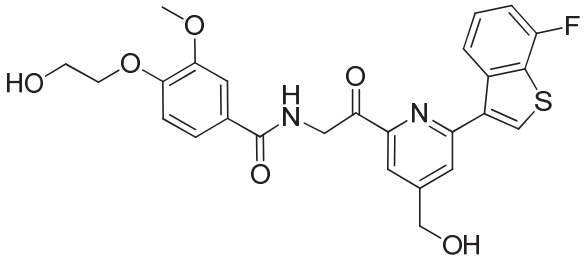
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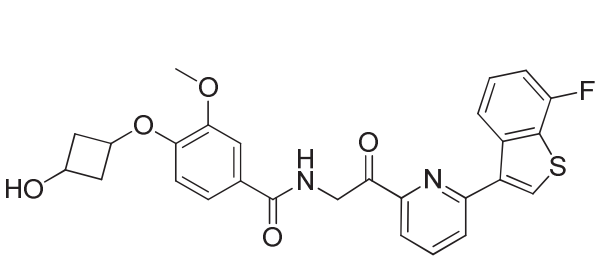
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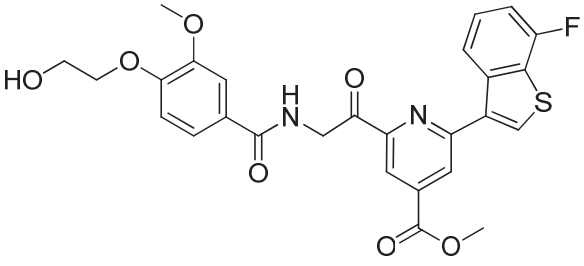
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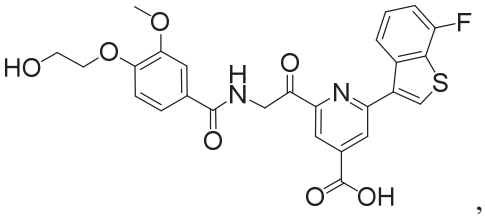
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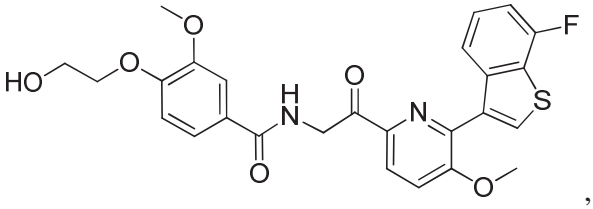
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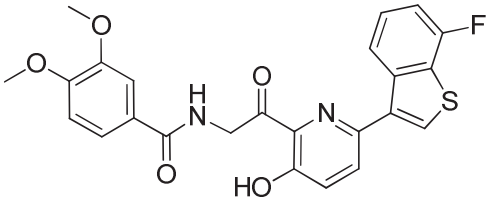
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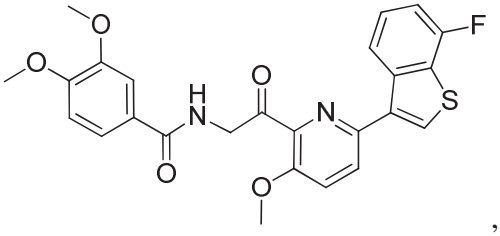
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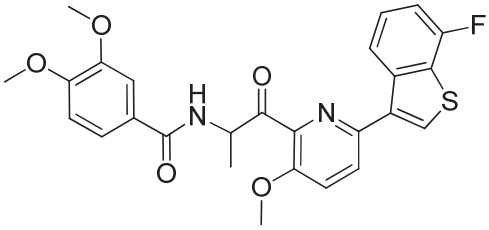
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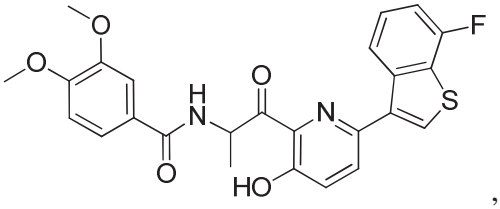
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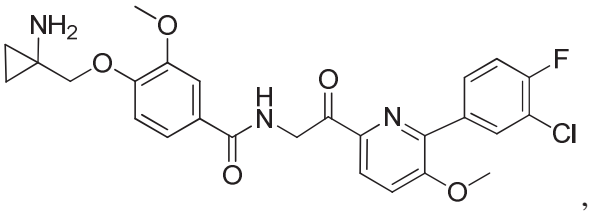
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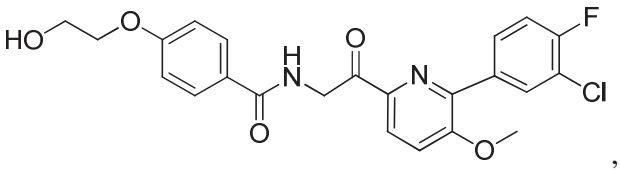
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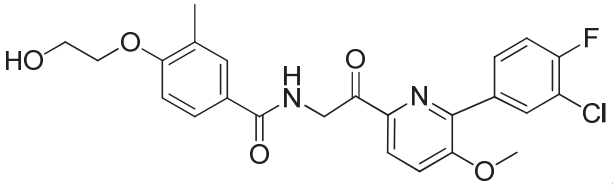
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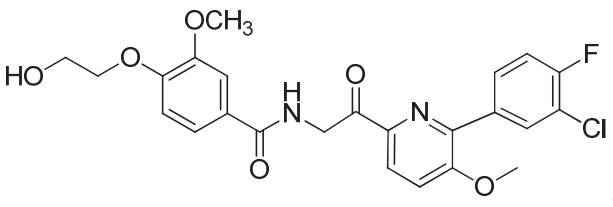
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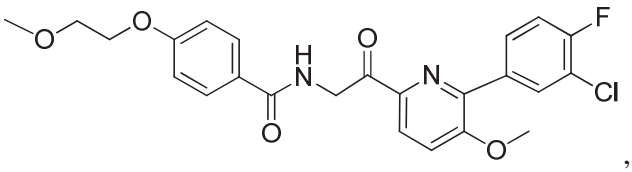
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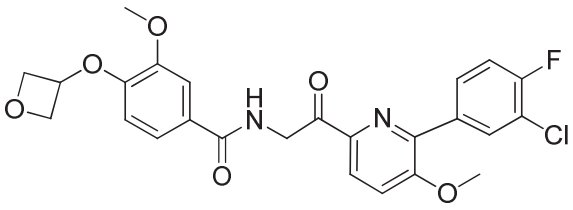
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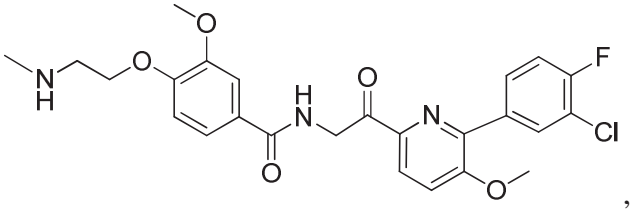
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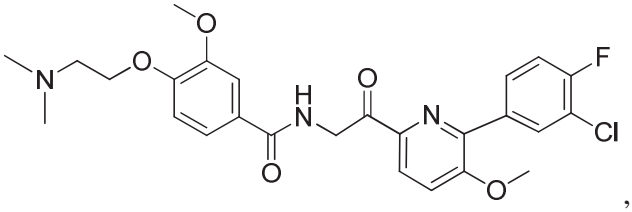
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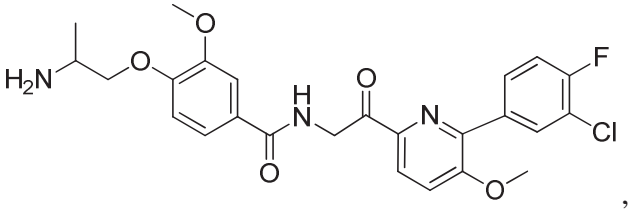
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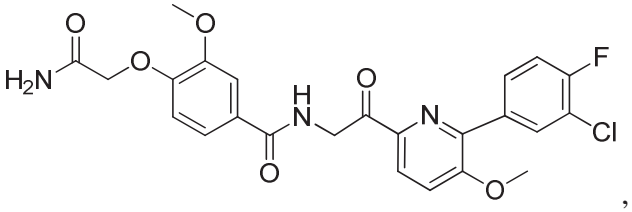
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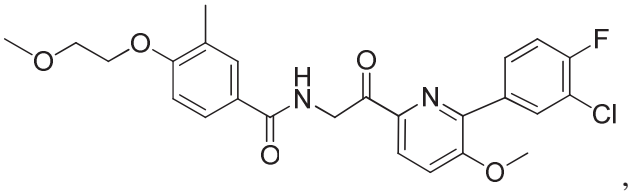
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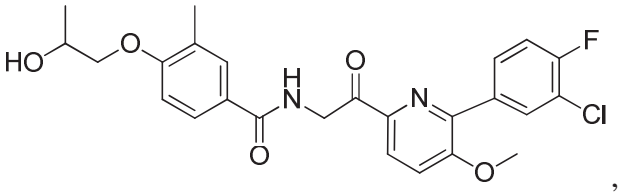
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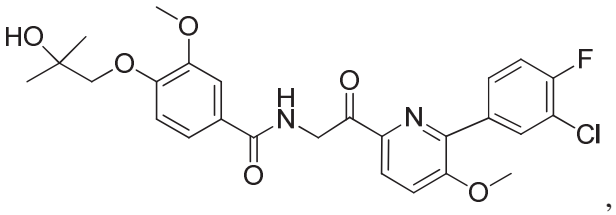
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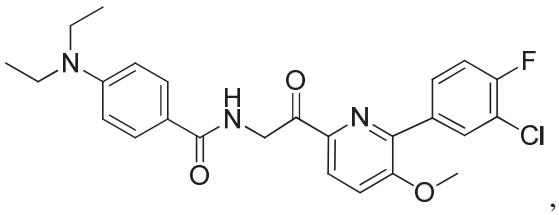
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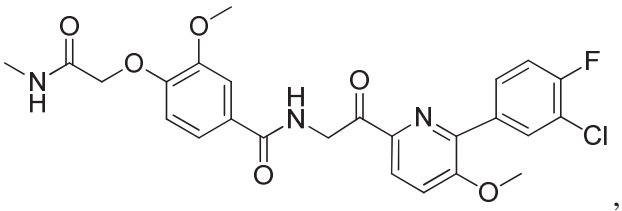
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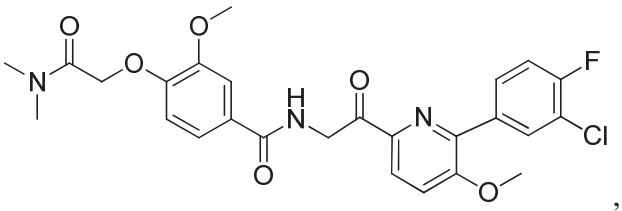
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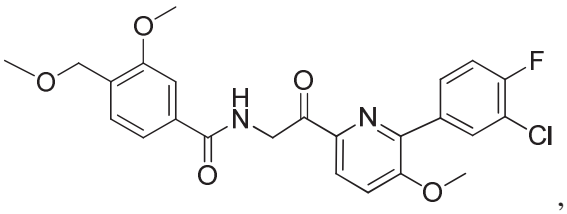
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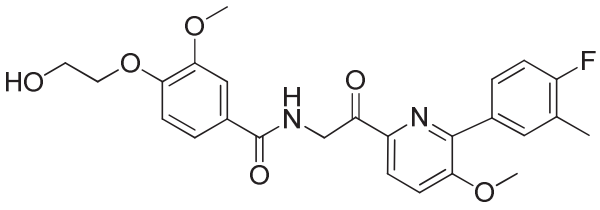
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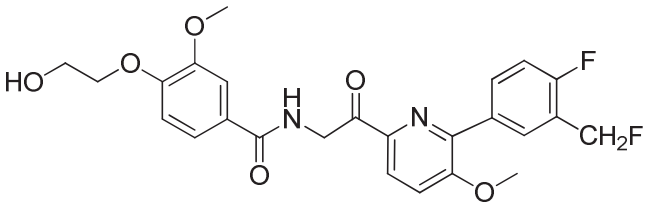
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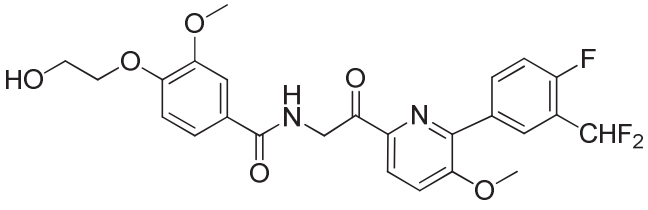
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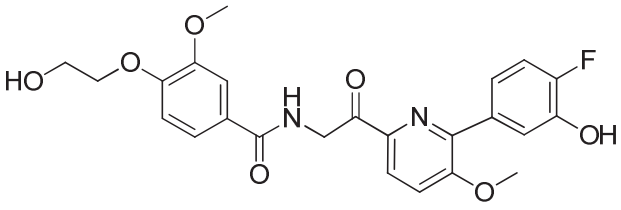
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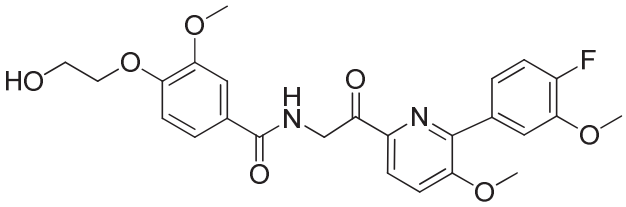
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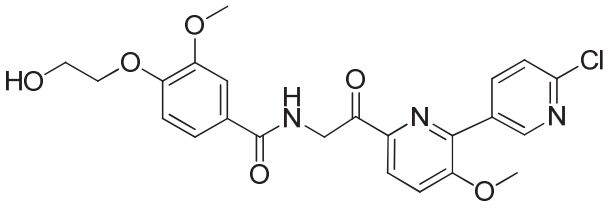
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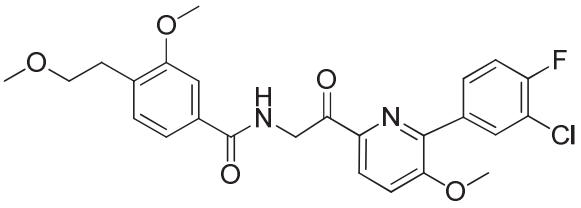
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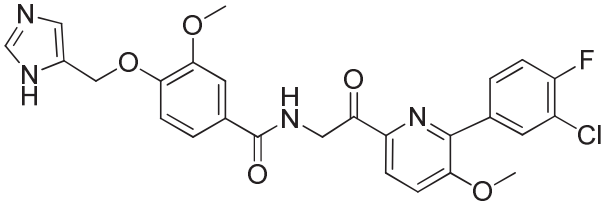
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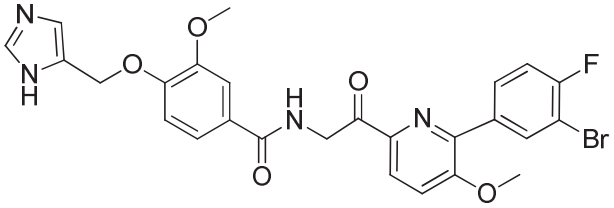
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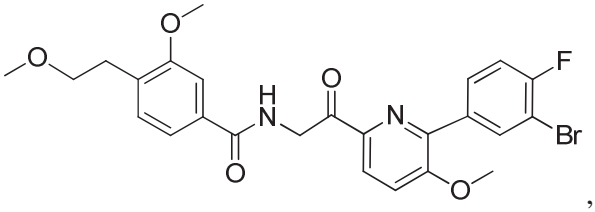
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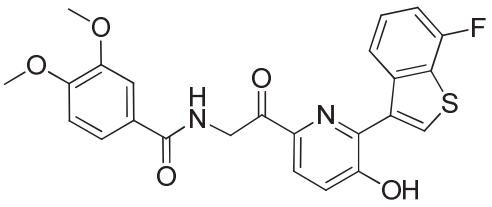
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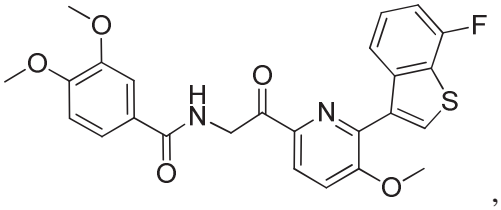
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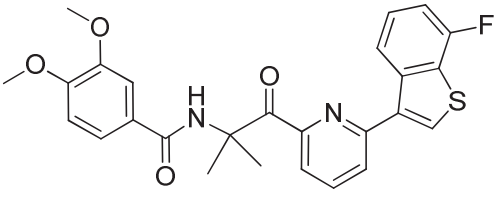
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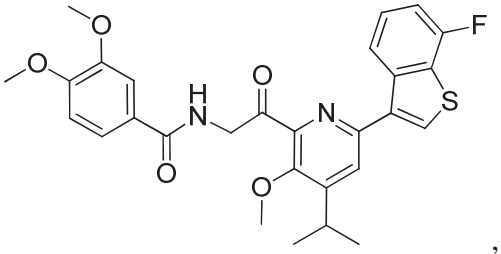
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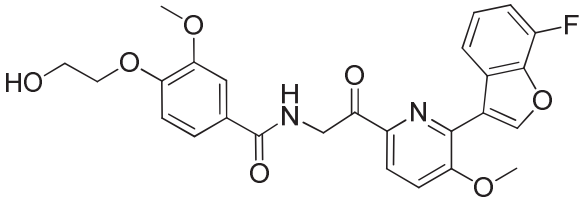
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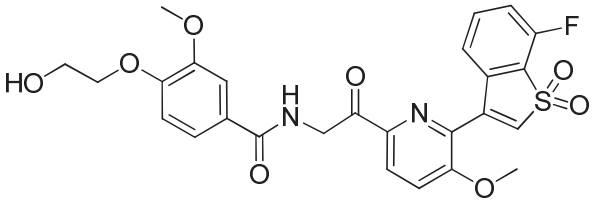
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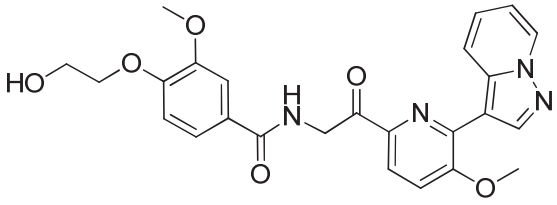
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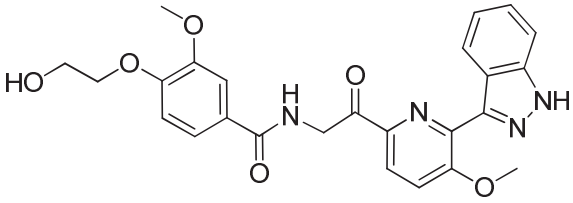
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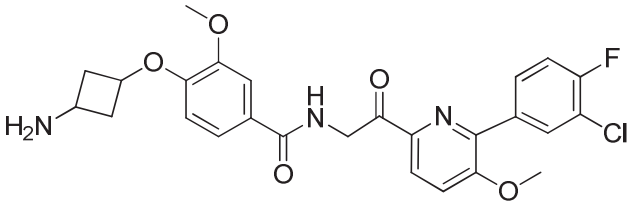
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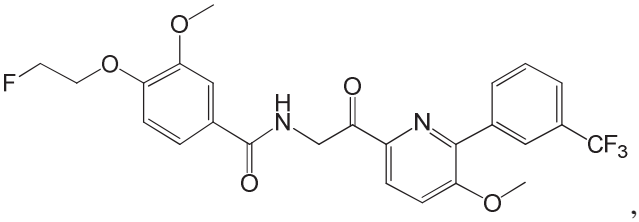
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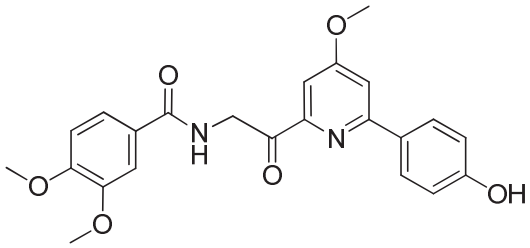
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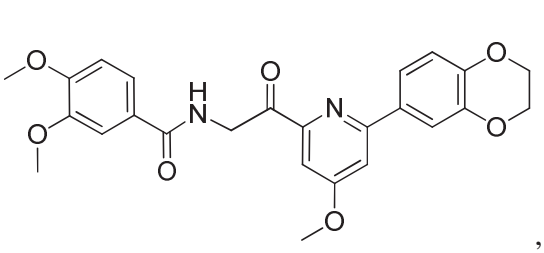
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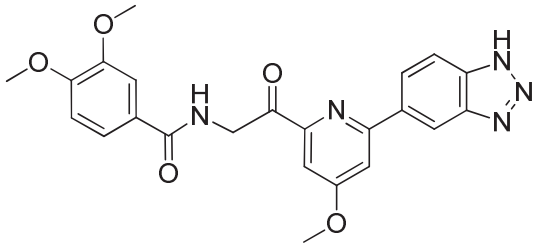
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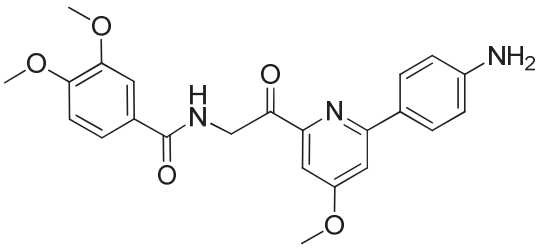
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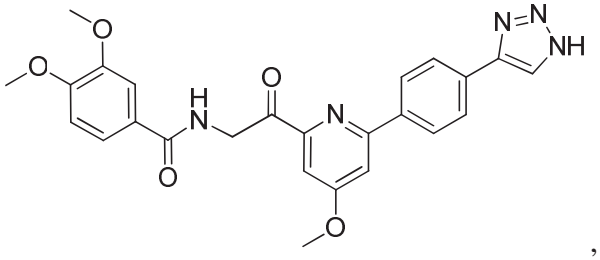
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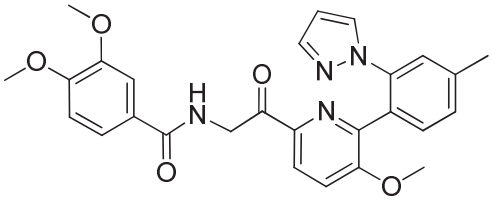
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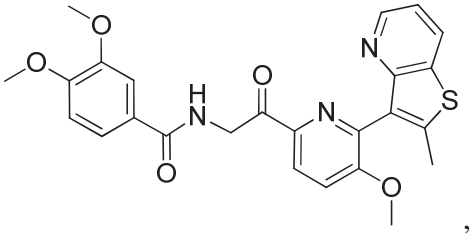
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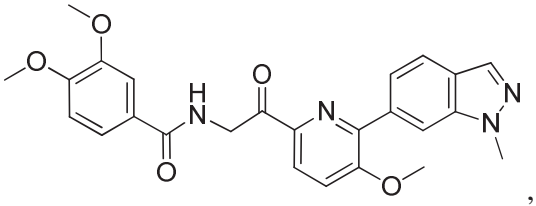
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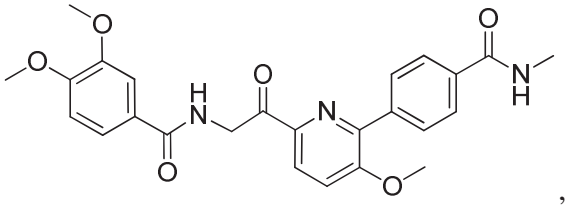
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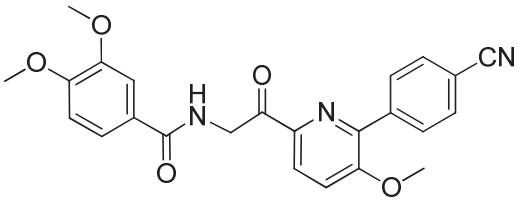
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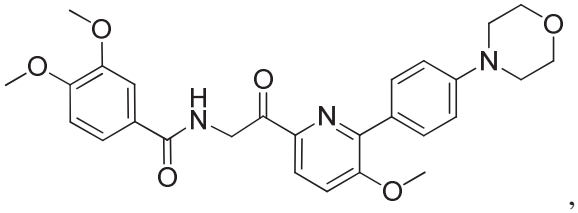
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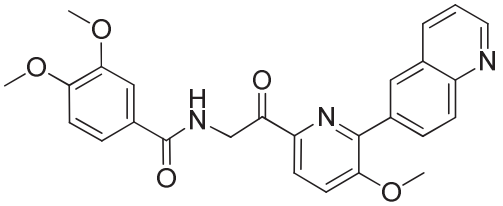
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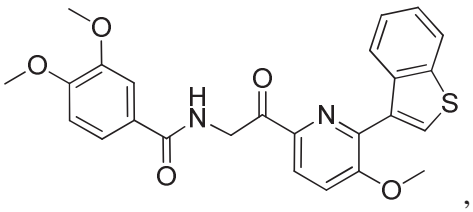
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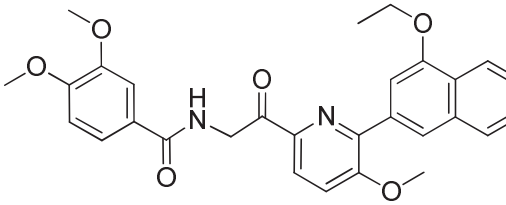
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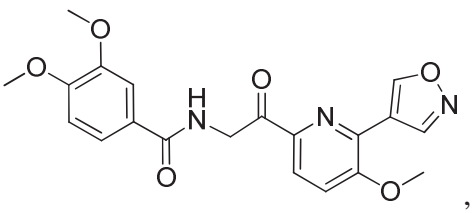
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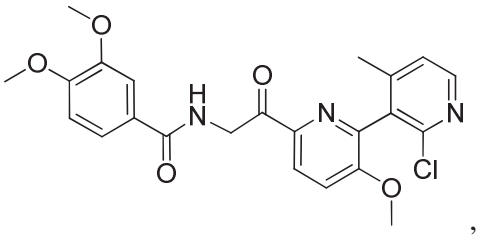
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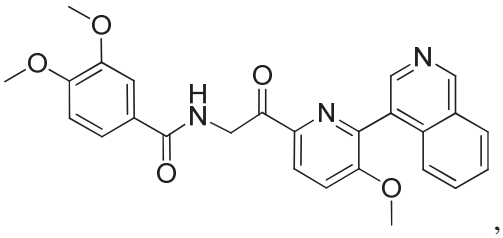
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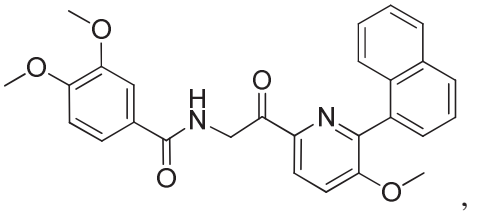
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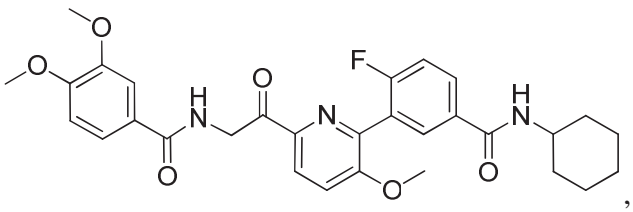
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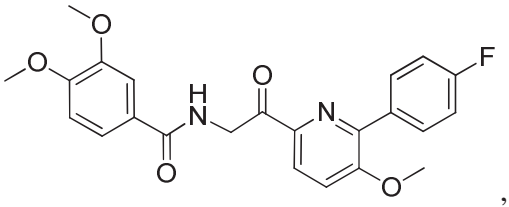
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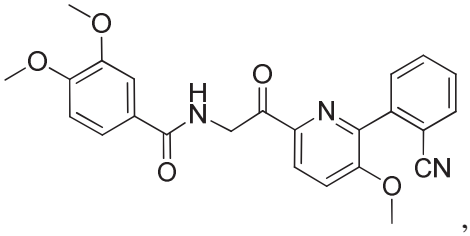
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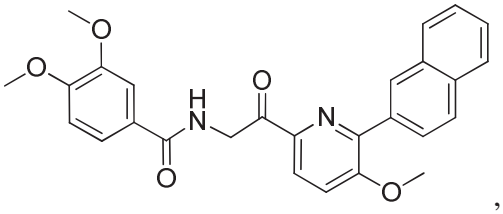
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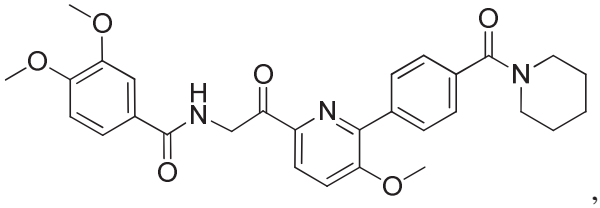
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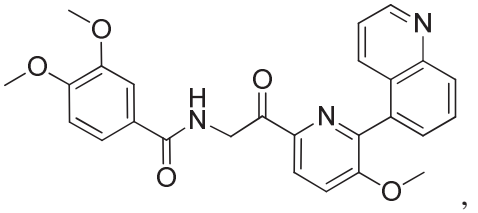
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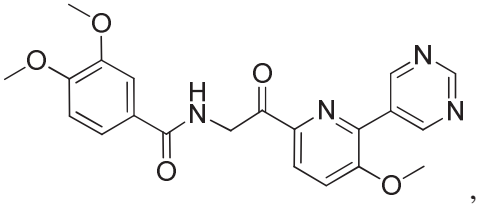
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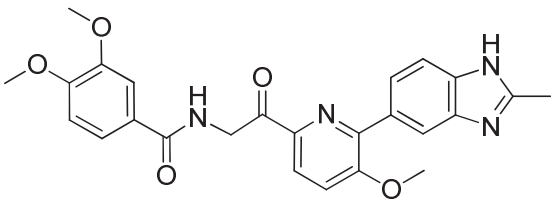
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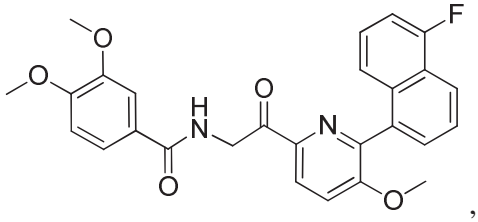
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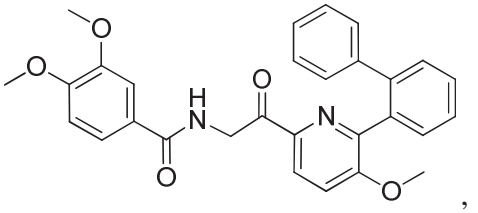
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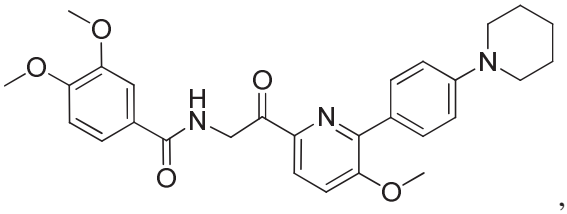
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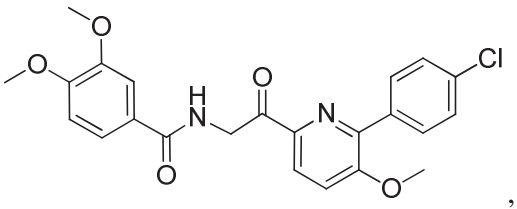
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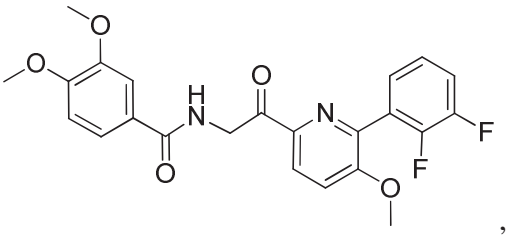
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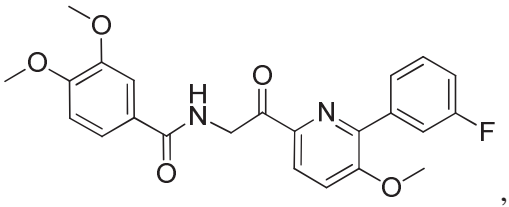
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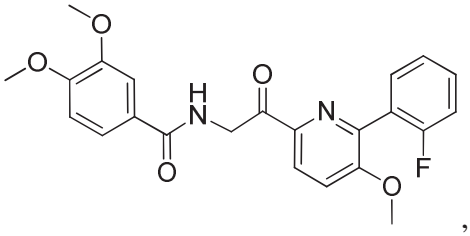
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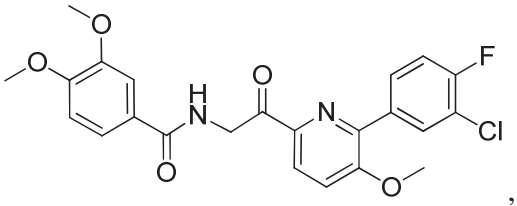
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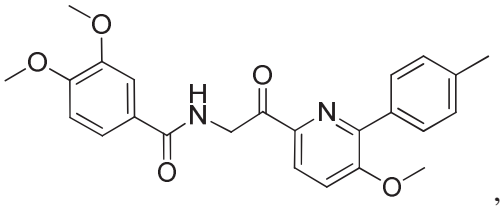
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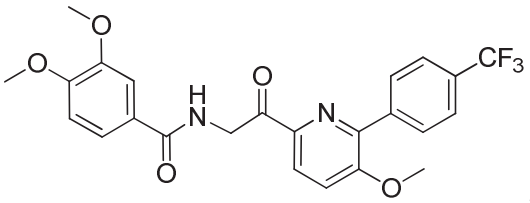
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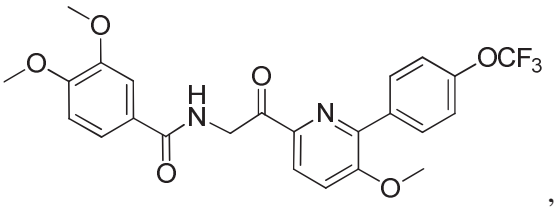
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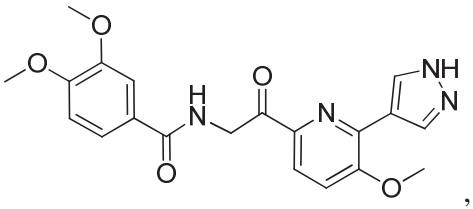
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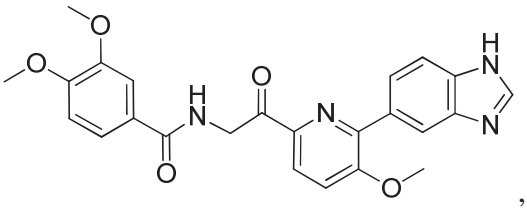
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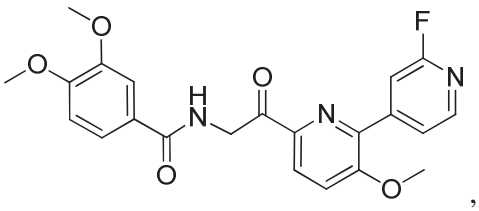
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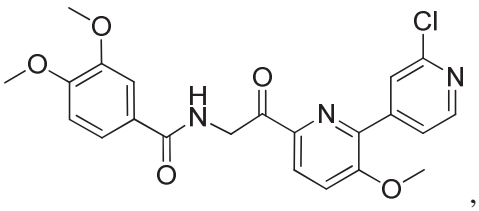
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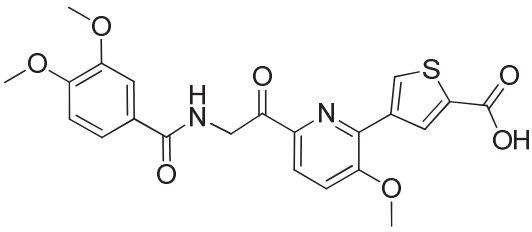
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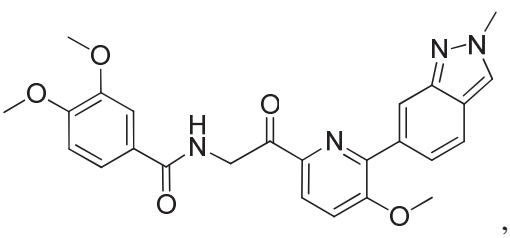
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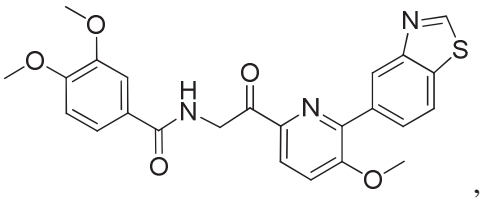
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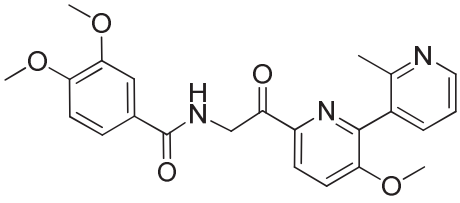
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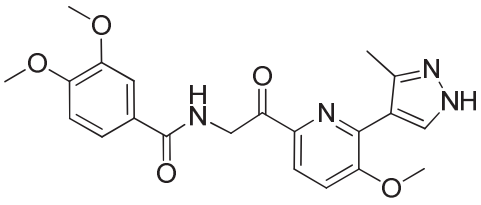
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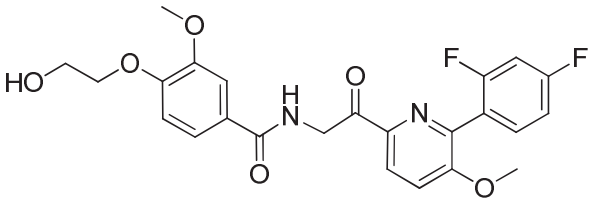
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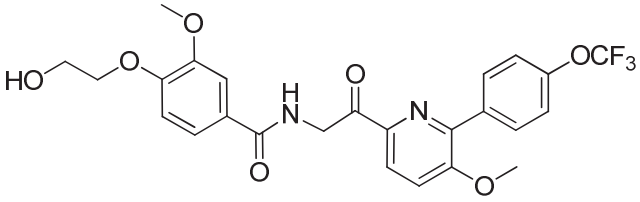
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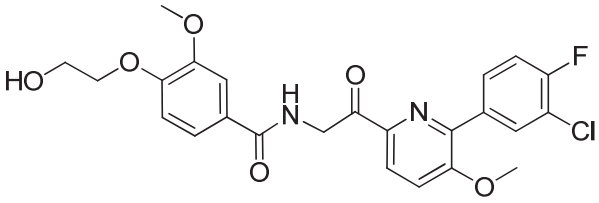
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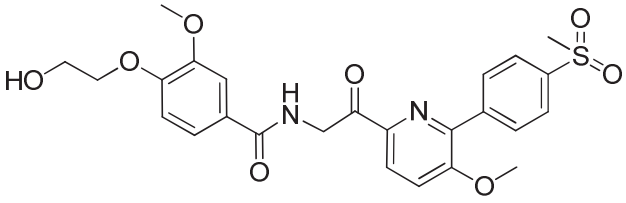
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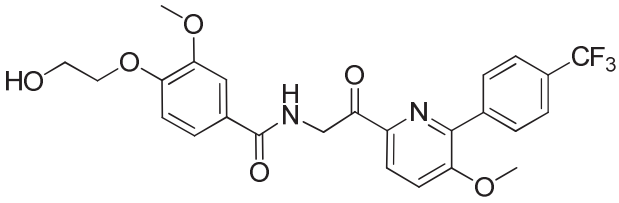
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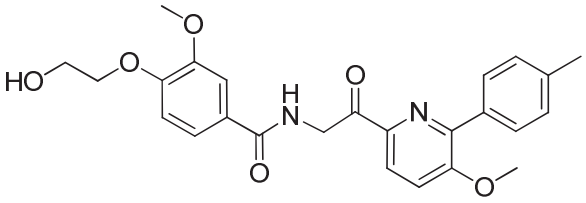
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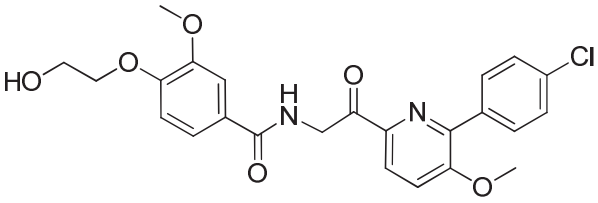
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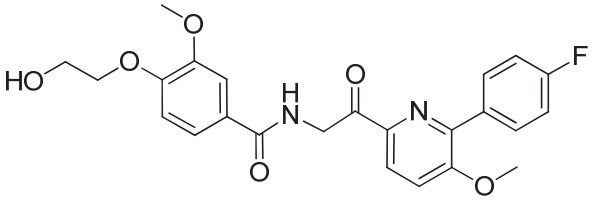
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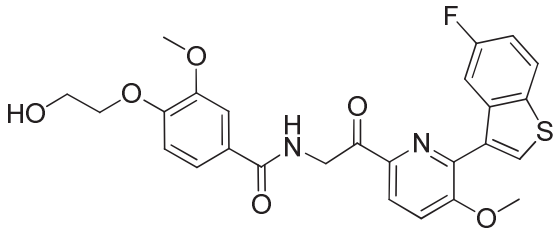
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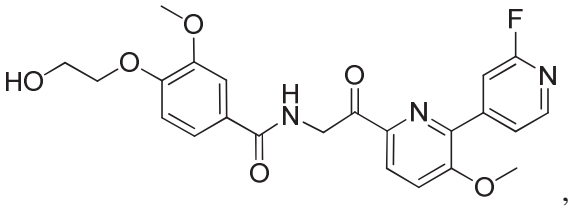
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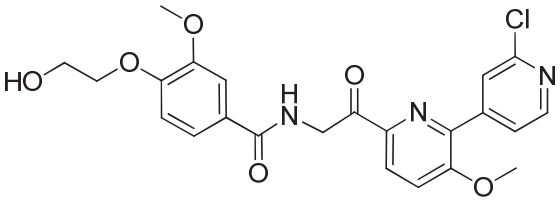
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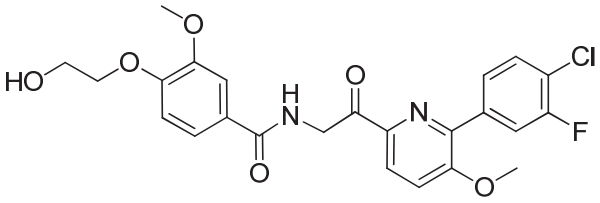
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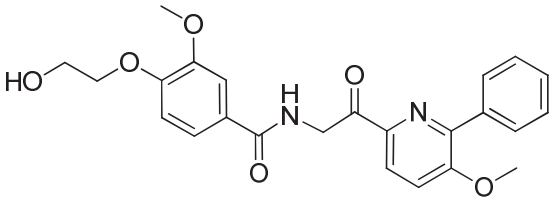
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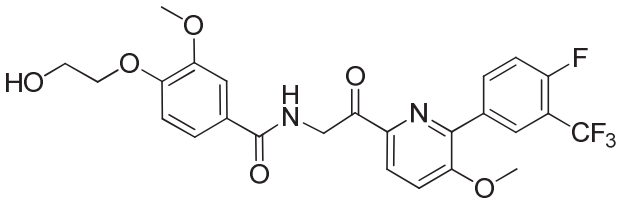
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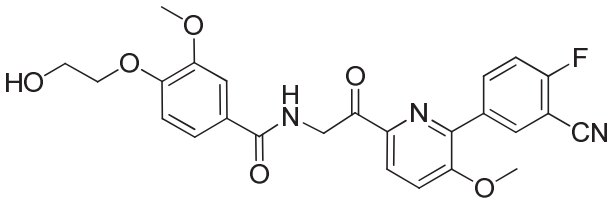
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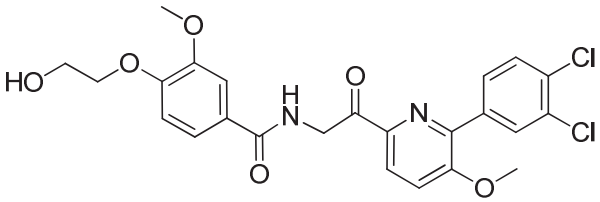
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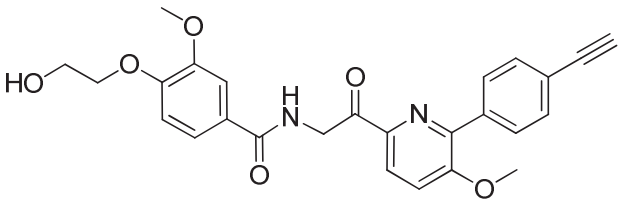
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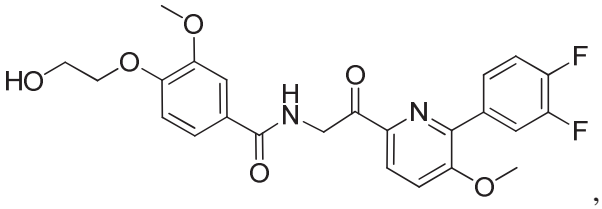
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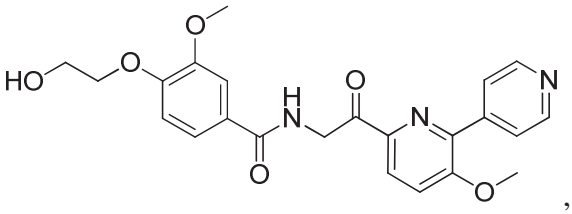
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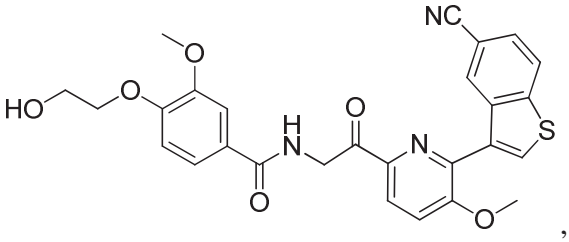
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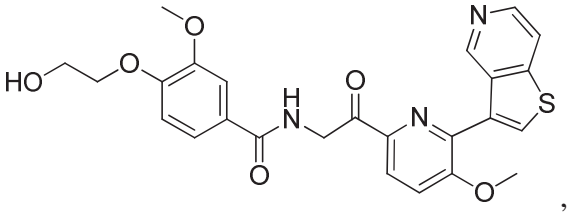
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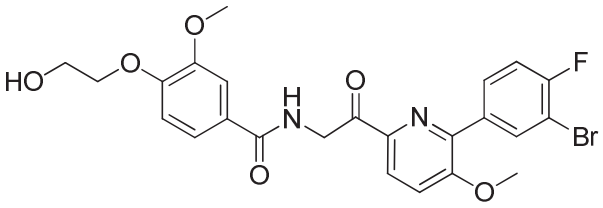
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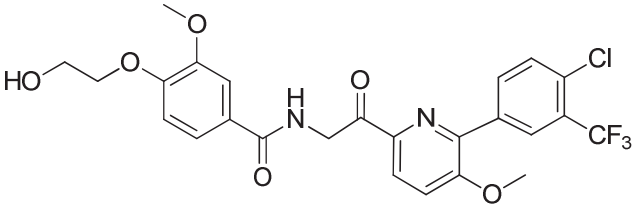
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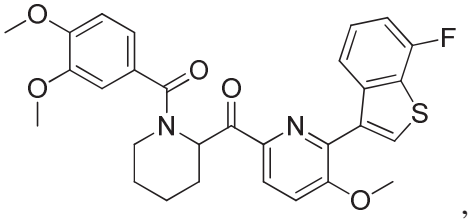
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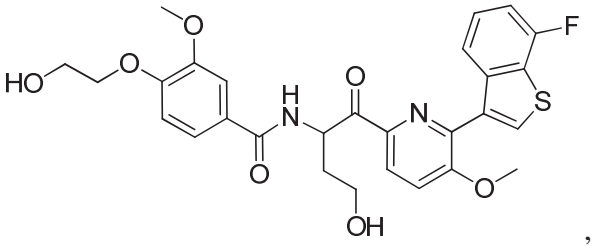
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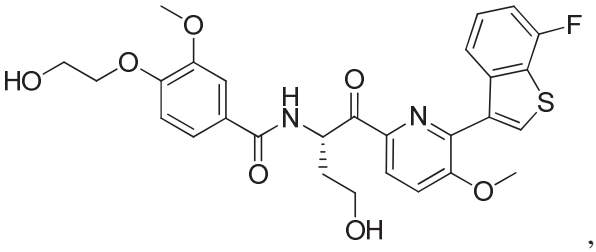
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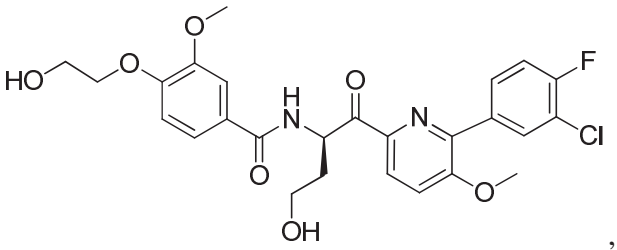
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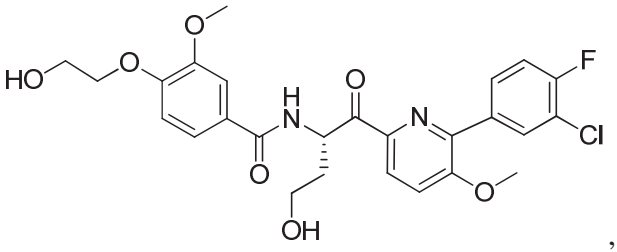
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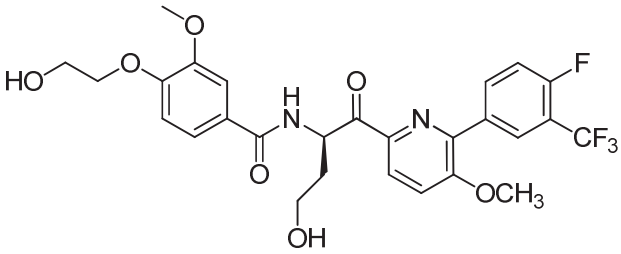
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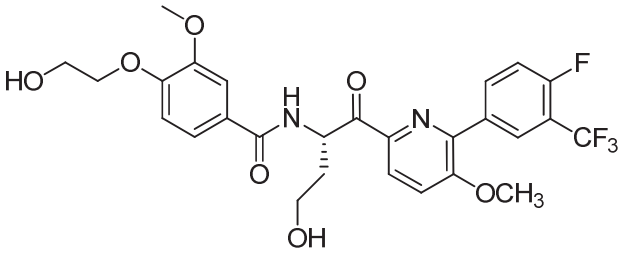
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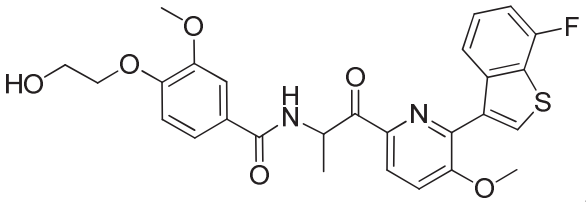
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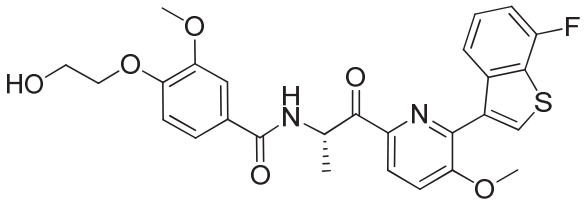
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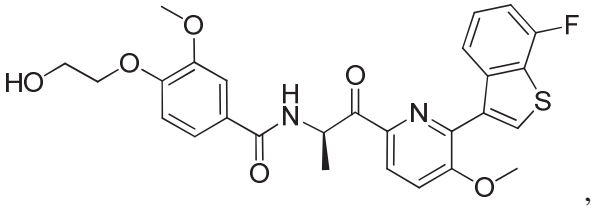
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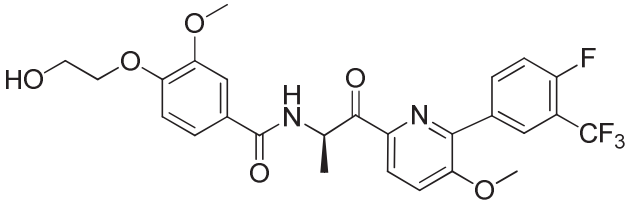
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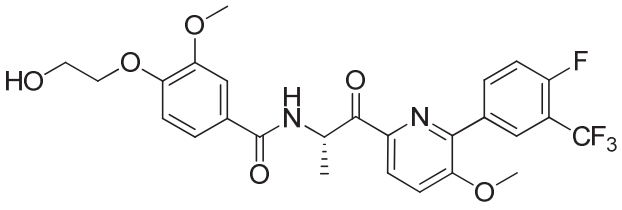
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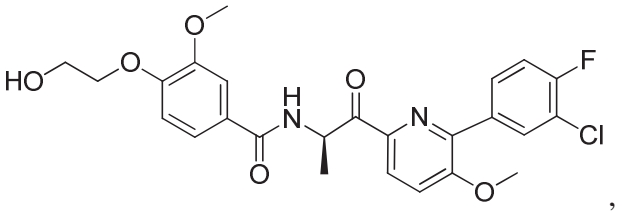
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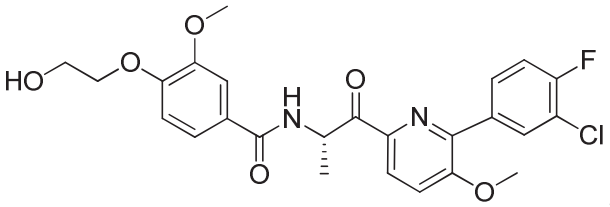
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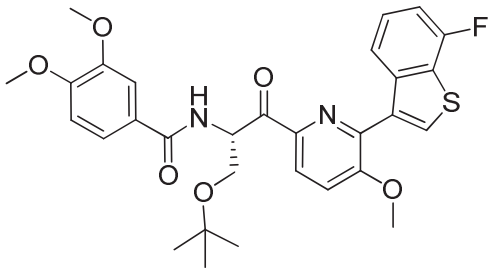
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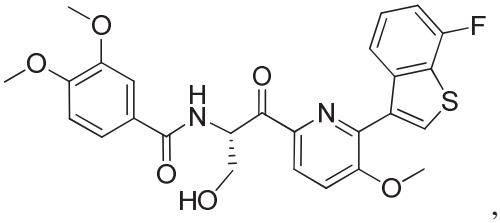
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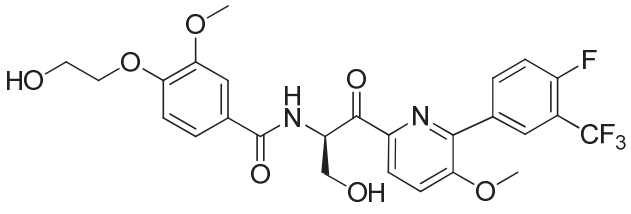
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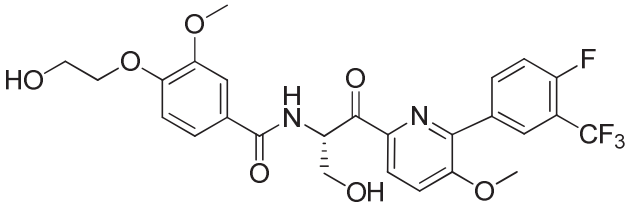
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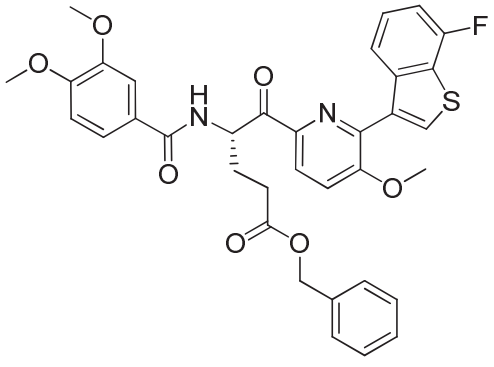
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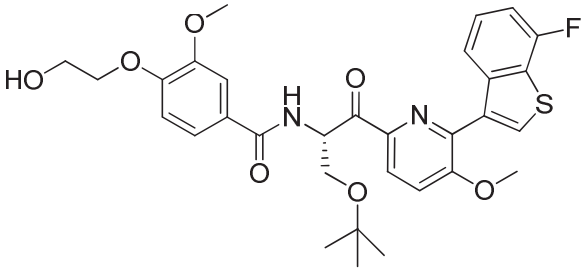
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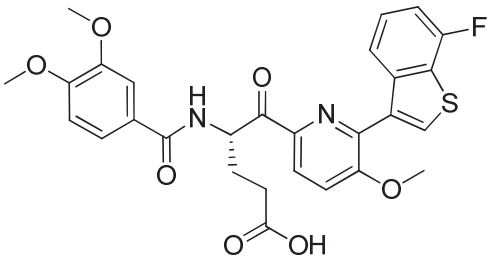
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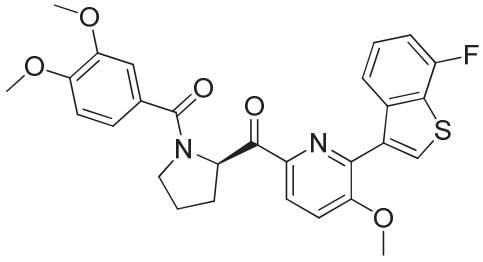
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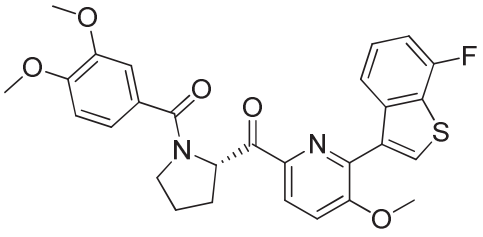
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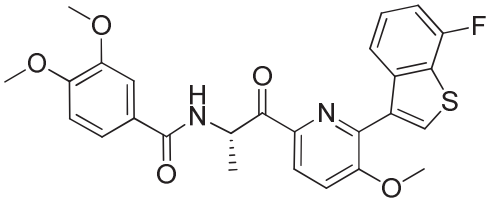
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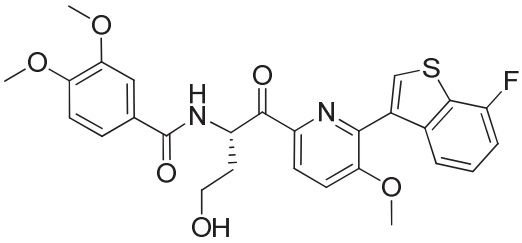
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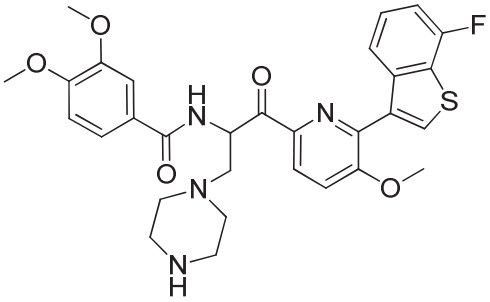
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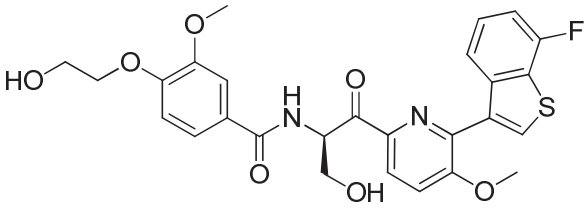
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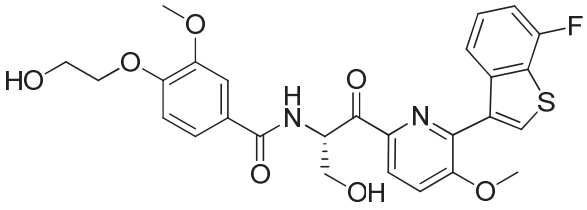
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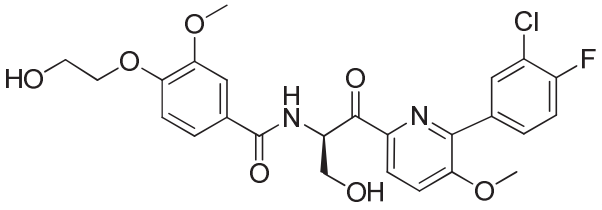
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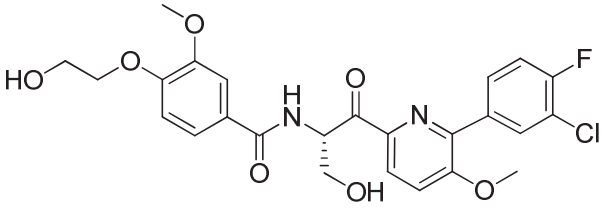
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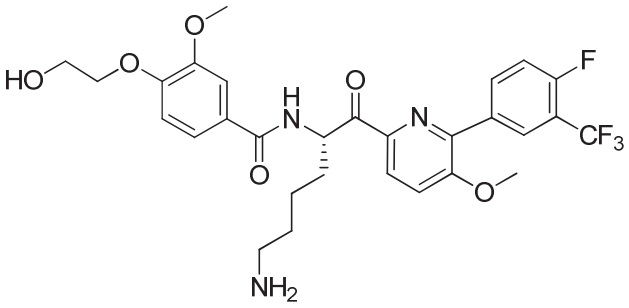

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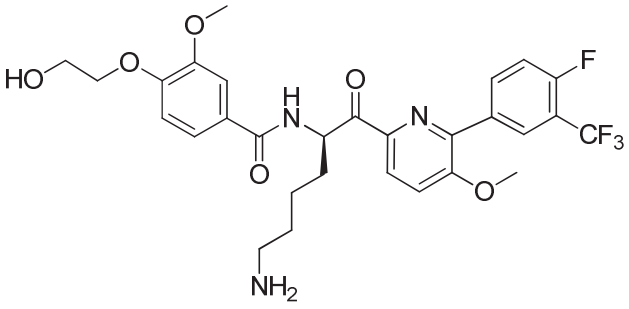

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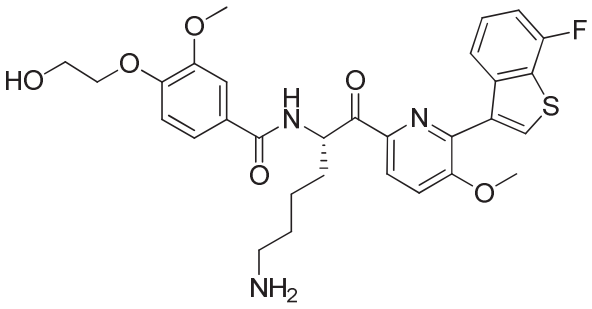

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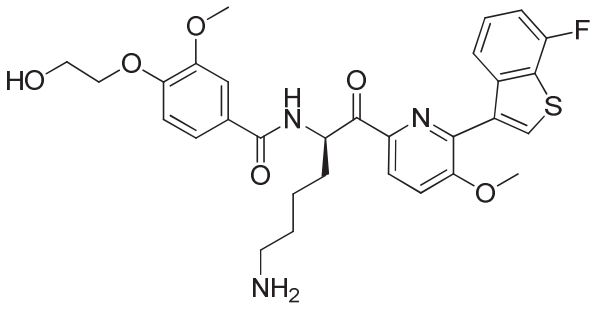

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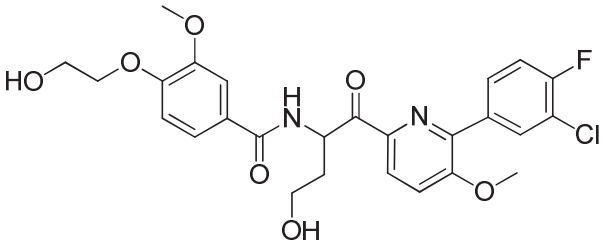

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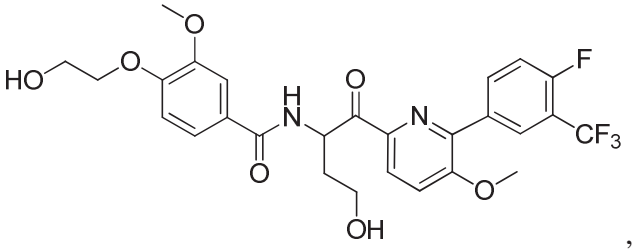

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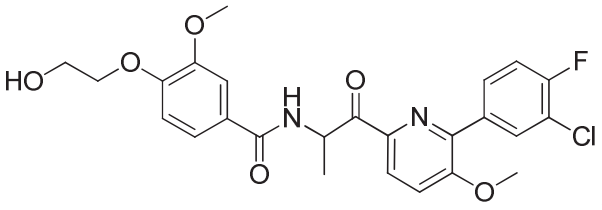
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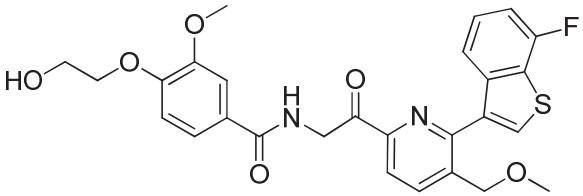
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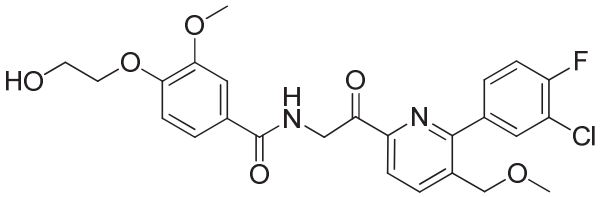
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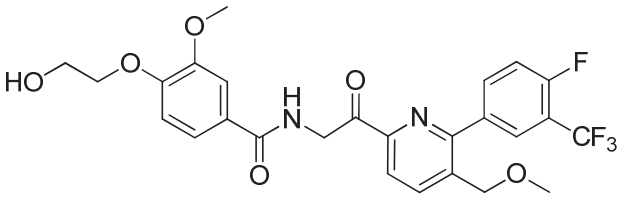
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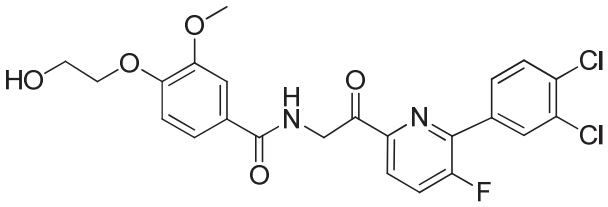
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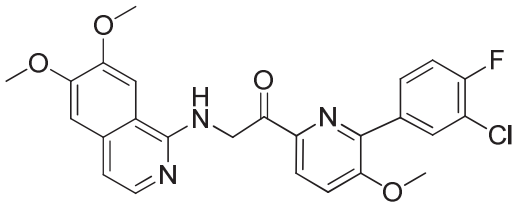
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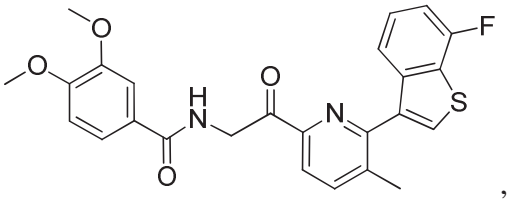
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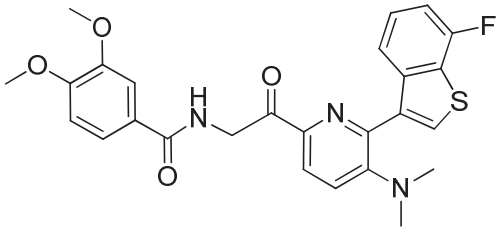
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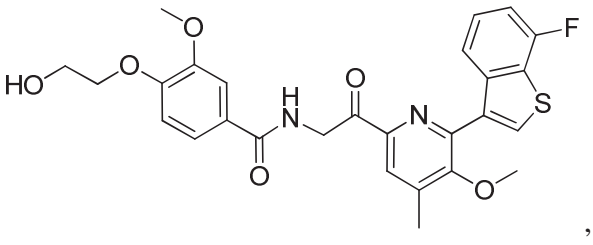
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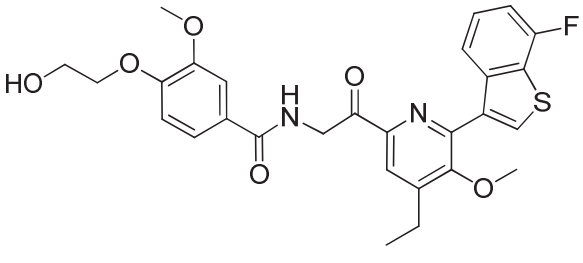
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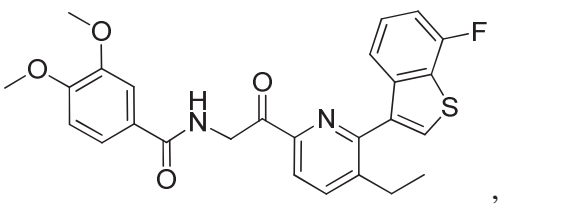
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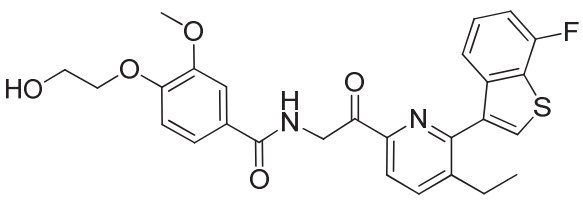
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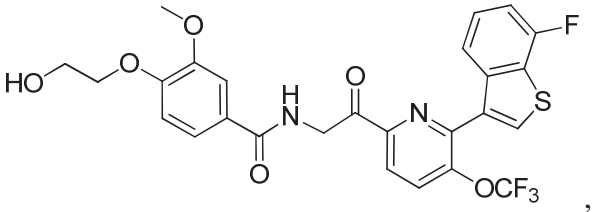
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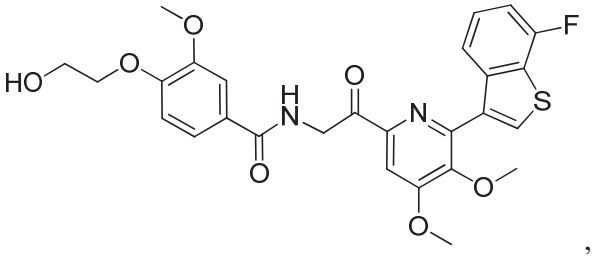
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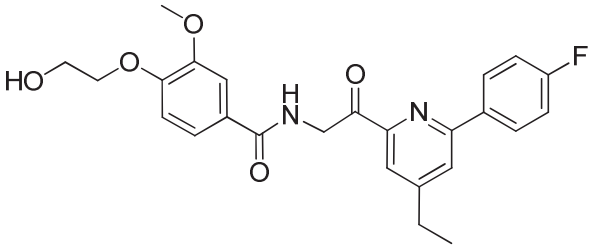
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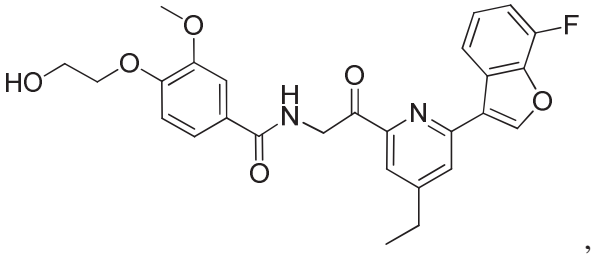
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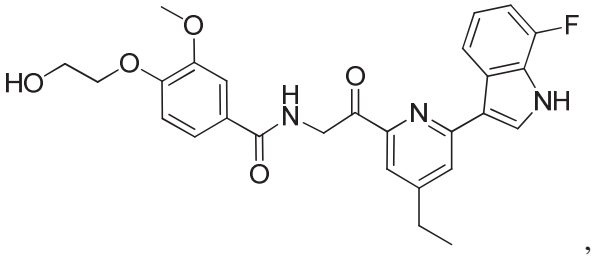
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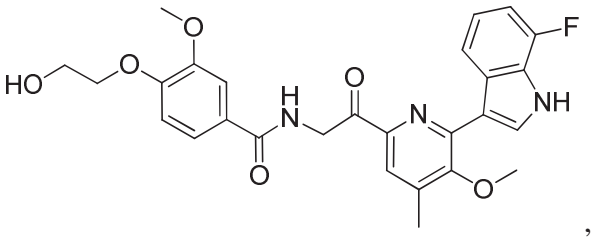
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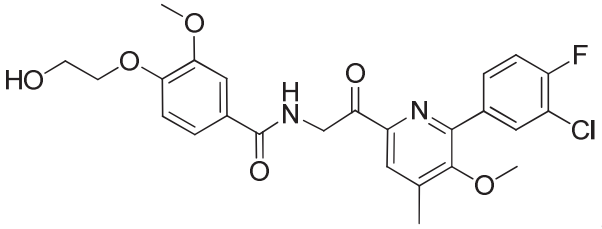
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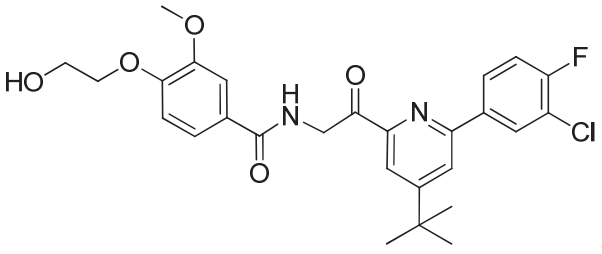
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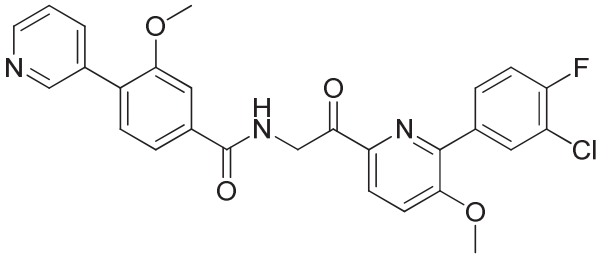
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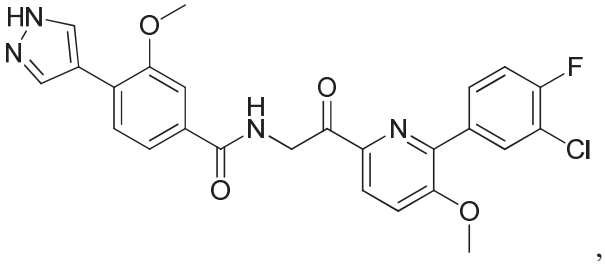
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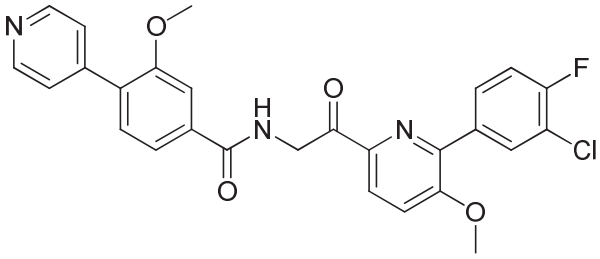
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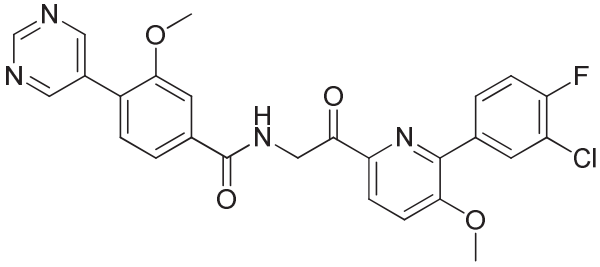
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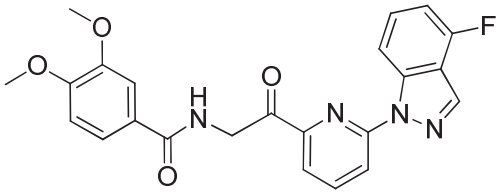
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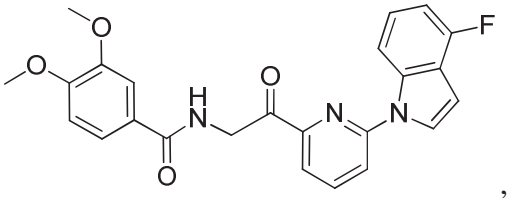
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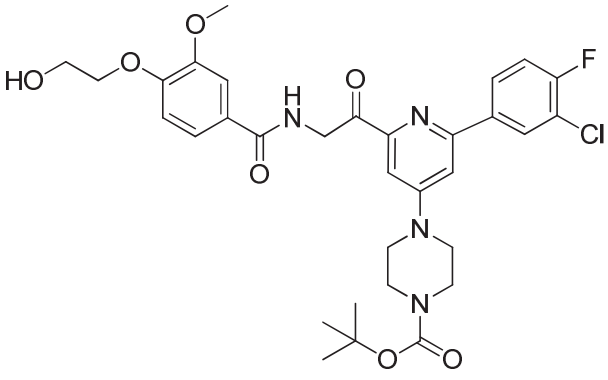
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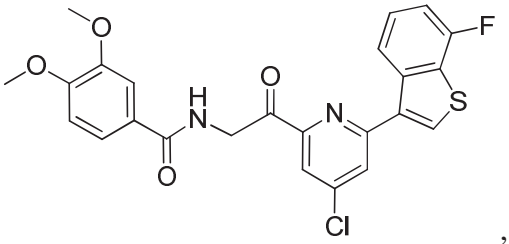
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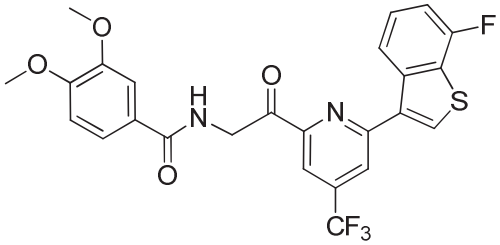
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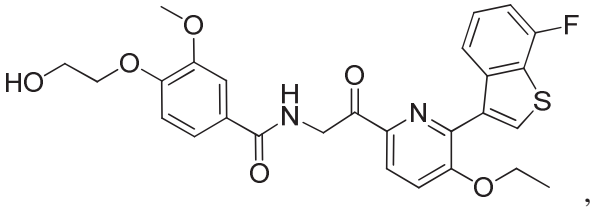
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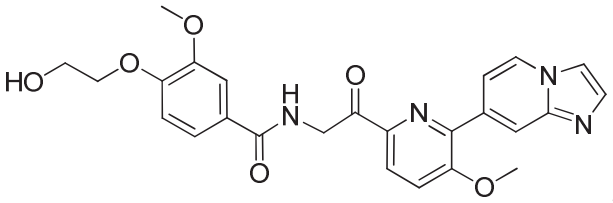
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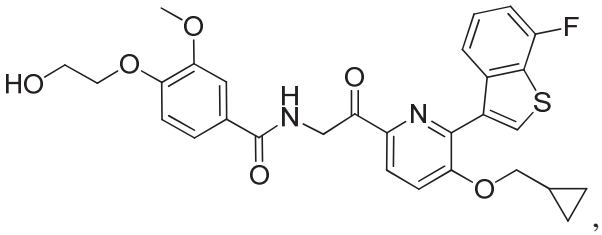
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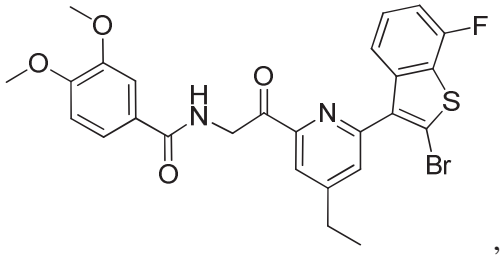
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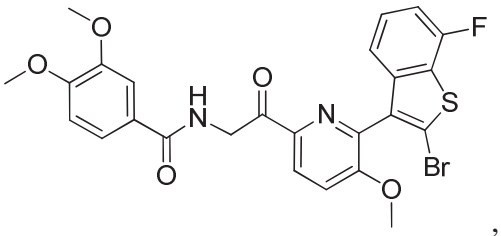
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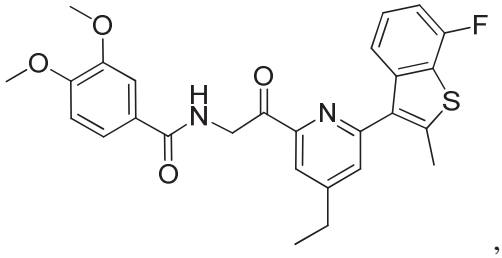
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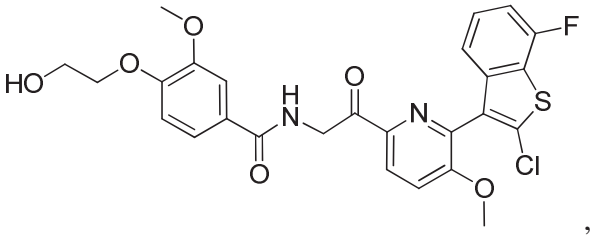
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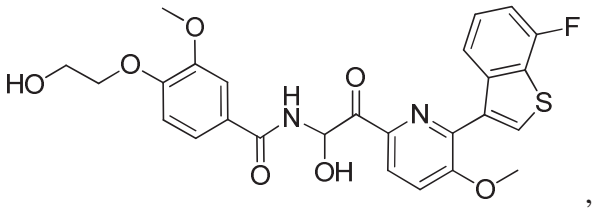
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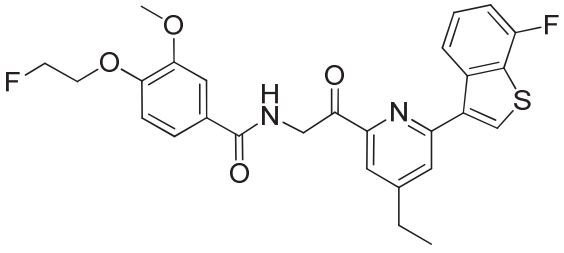
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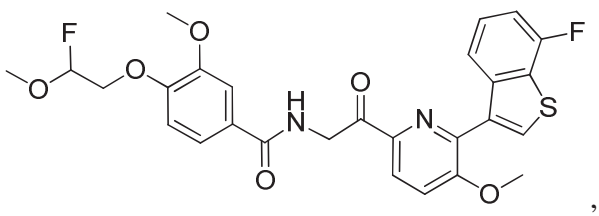
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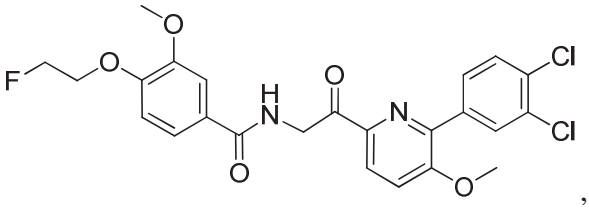
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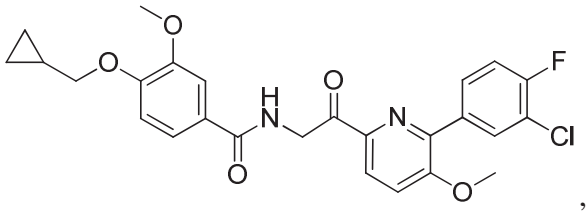
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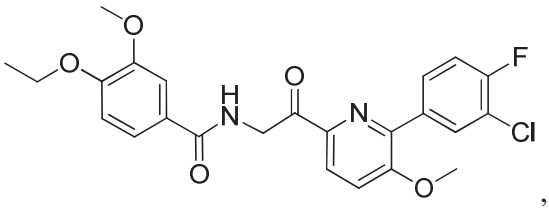
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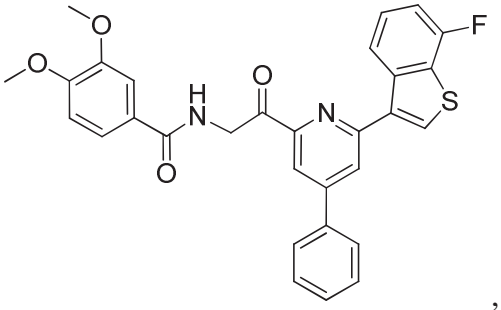
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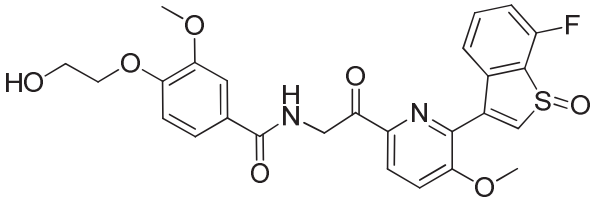
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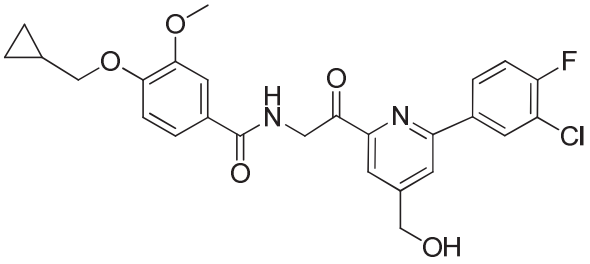
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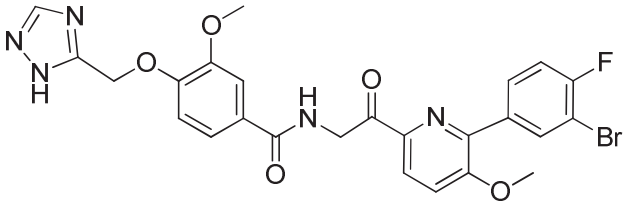
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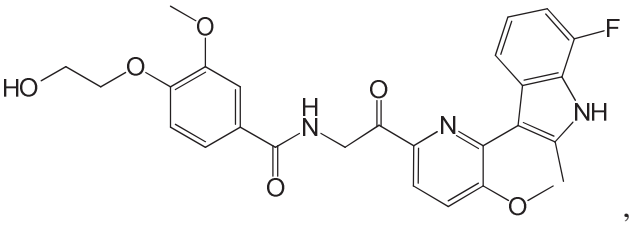
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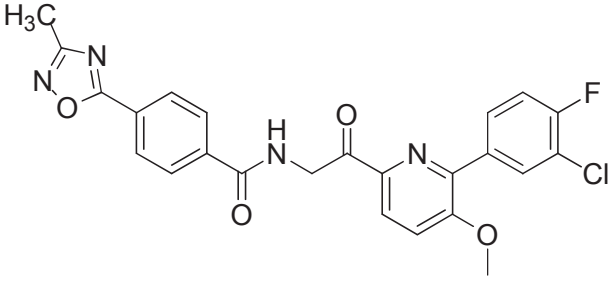
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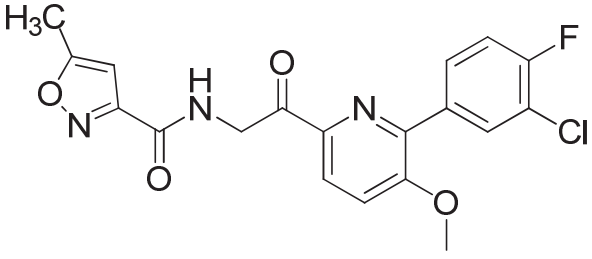
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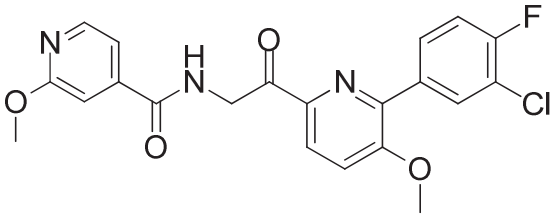
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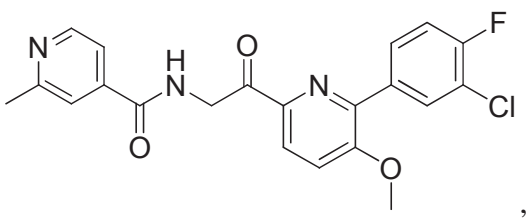
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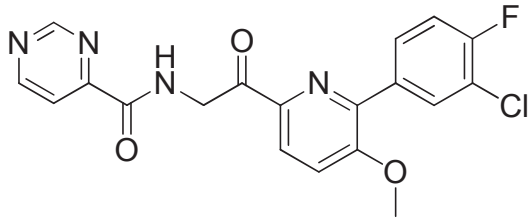
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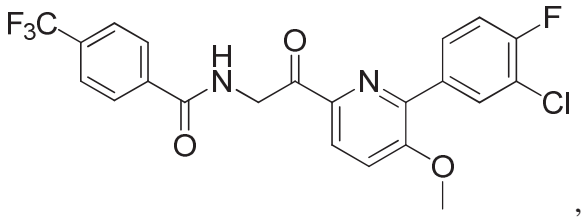
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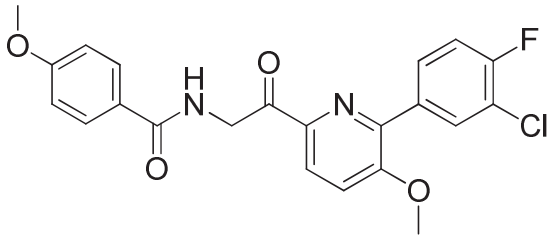
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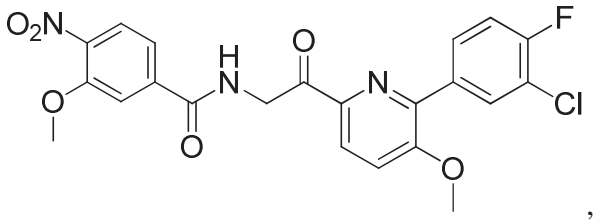
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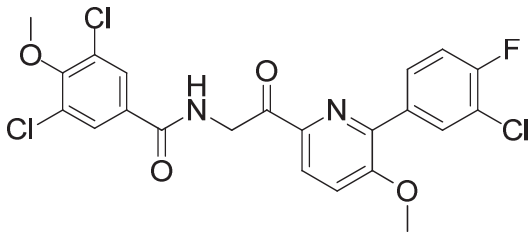
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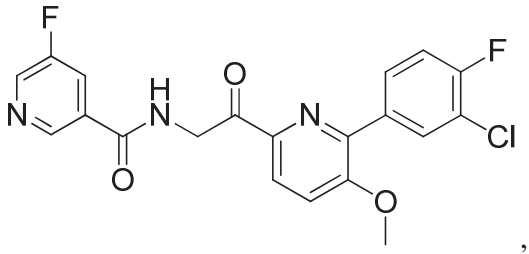
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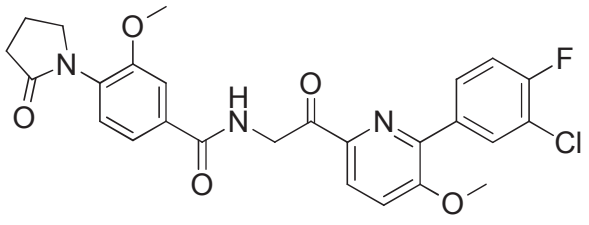
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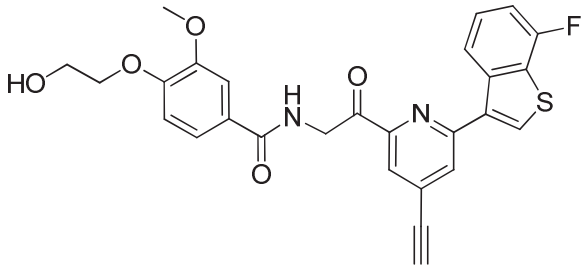
or a pharmaceutically acceptable salt of the foregoing.

36. A pharmaceutical composition comprising an effective amount of a compound of any one of Claims 1-35, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier, diluent, excipient, or combination thereof.

37. Use of an effective amount of a compound of any one of Claims 1-35, or a pharmaceutically acceptable salt thereof, in the preparation of a medicament for ameliorating or treating a paramyxovirus infection.

38. Use of an effective amount of a compound of any one of Claims 1-35, or a pharmaceutically acceptable salt thereof, in the preparation of a medicament for inhibiting replication of a paramyxovirus.

39. The use of Claim 37 or 38, wherein the paramyxovirus is a human respiratory syncytial virus.

40. The use of Claim 37 or 38, wherein the paramyxovirus is a human respiratory syncytial virus, and further comprising the use of an effective amount of one or more anti RSV-agents.

41. The use of Claim 40, wherein the one or more anti-RSV agents is selected from the group consisting of ribavirin, palivizumab, RSV-IGIV, ALN-RSV01, BMS-433771, RFI-641, RSV604, MDT-637, BTA9881, TMC-353121, MBX-300 and YM-53403.