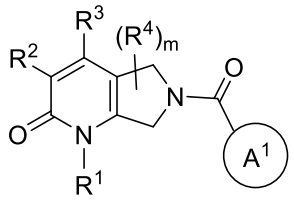
Claims:

1. A compound represented by Formula I:



(I)

or a pharmaceutically acceptable salt thereof; wherein:

R^1 is C_{1-6} alkyl, C_{1-6} haloalkyl, C_{3-6} cycloalkyl, -(C_{1-6} alkylene)-(C_{3-6} cycloalkyl), or hydrogen;

R^2 is halo, C_{1-4} alkyl, C_{1-4} haloalkyl, or hydrogen;

R^3 is C_{1-4} alkyl, C_{1-4} haloalkyl, C_{1-4} alkoxyl, -S-(C_{1-4} alkyl), or halo;

R^4 represents independently for each occurrence C_{1-4} alkyl, C_{1-4} haloalkyl, or halo;

R^5 represents independently for each occurrence C_{1-6} alkyl, halo, C_{1-6} haloalkyl, C_{3-6} cycloalkyl, hydroxyl, C_{1-6} alkoxyl, -(C_{1-6} alkylene)-(C_{1-6} alkoxyl), -(C_{1-6} alkylene)-(C_{3-6} cycloalkyl), -(C_{1-6} haloalkylene)-(C_{3-6} cycloalkyl), or -(C_{1-6} alkylene)-(C_{3-6} halocycloalkyl); or two occurrences of R^5 are taken together with their intervening atoms to form a 4-7 membered ring containing 1 or 2 heteroatoms independently selected from the group consisting of oxygen, nitrogen, and sulfur;

R^6 is (i) -(C_{0-4} alkylene)-(3-7 membered saturated or unsaturated heterocyclyl containing 1, 2, or 3 heteroatoms independently selected from the group consisting of nitrogen, oxygen, and sulfur), (ii) -(C_{0-4} alkylene)-(5-6 membered heteroaryl containing 1, 2, or 3 heteroatoms independently selected the group consisting of from nitrogen, oxygen, and sulfur), or (iii) -(C_{0-4} alkylene)-phenyl, wherein the heterocyclyl, heteroaryl, and phenyl are substituted with 0, 1, 2, or 3 occurrences of R^7;

R^7 represents independently for each occurrence C_{1-6} alkyl, halo, C_{1-6} haloalkyl, C_{3-6} cycloalkyl, hydroxyl, or C_{1-6} alkoxyl;

A^1 is a 5-6 membered monocyclic heteroaryl containing 1, 2, or 3 heteroatoms independently selected from nitrogen, oxygen, and sulfur, an 8-10 membered bicyclic heteroaryl containing 1, 2, or 3 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or phenyl, wherein the heteroaryl and phenyl are substituted with n occurrences of R^5 and t occurrences of R^6;

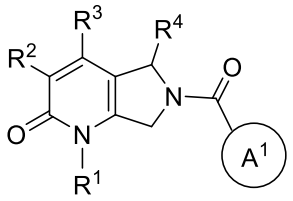
m is 0, 1, 2, or 3;

n is 0, 1, or 2; and

t is 0 or 1.

2. The compound of claim 1, wherein the compound is a compound of Formula I.

3. The compound of claim 1, wherein the compound is a compound of Formula Ia or a pharmaceutically acceptable salt thereof:



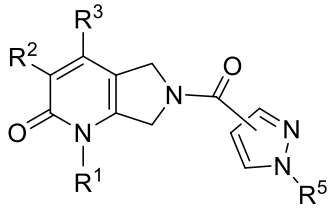
Ia.

4. The compound of any one of claims 1-3, or a pharmaceutically acceptable salt thereof, wherein A^1 is a 5 membered monocyclic heteroaryl containing 1 or 2 heteroatoms independently selected from nitrogen and oxygen, wherein the 5 membered monocyclic heteroaryl is substituted with n occurrences of R^5 and t occurrences of R^6.

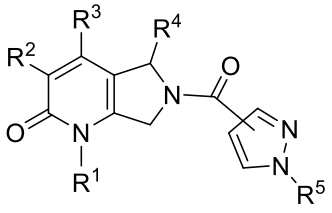
5. The compound of any one of claims 1-3, or a pharmaceutically acceptable salt thereof, wherein A^1 is pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, pyrrolyl, thiophenyl, or pyridinyl, each of which is substituted with n occurrences of R^5 and t occurrences of R^6.

6. The compound of any one of claims 1-3, wherein A^1 is pyrazolyl substituted with n occurrences of R^5 and t occurrences of R^6.

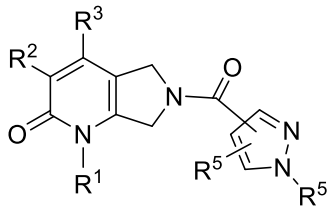
7. The compound of claim 1, wherein the compound is a compound of Formula Ib, Ic, Id, or Ie, or a pharmaceutically acceptable salt thereof:



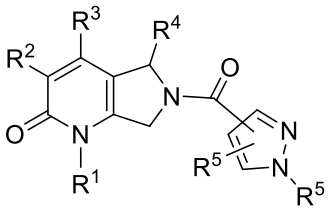
Ib



Ic

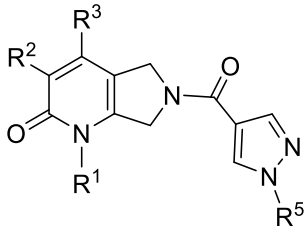


Id

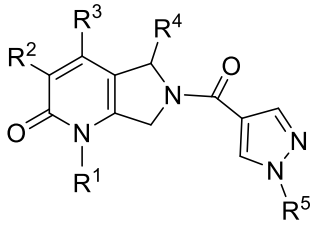


Ie.

8. The compound of claim 1, wherein the compound is a compound of Formula If or Ig, or a pharmaceutically acceptable salt thereof:



If



Ig.

9. The compound of any one of claims 1-8, or a pharmaceutically acceptable salt thereof, wherein R^1 is methyl.

10. The compound of any one of claims 1-9, or a pharmaceutically acceptable salt thereof, wherein R^2 is chloro or fluoro.

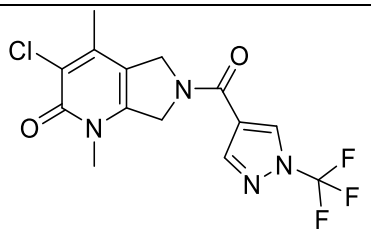
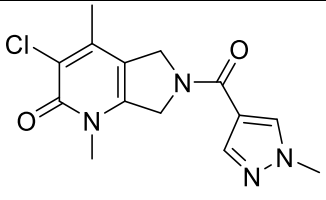
11. The compound of any one of claims 1-10, or a pharmaceutically acceptable salt thereof, wherein R^3 is methyl.

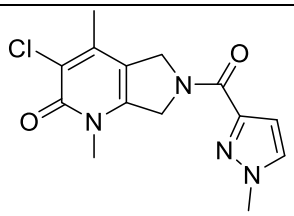
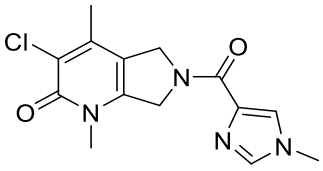
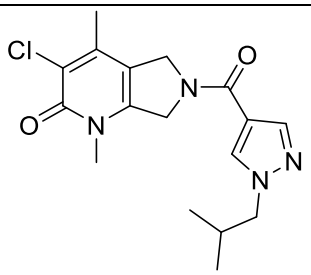
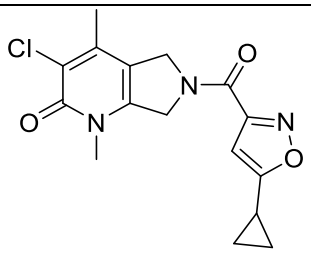
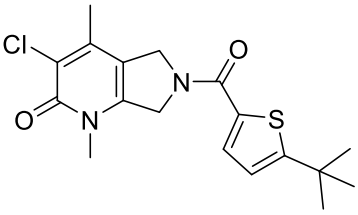
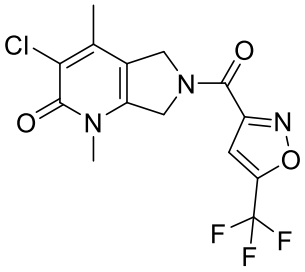
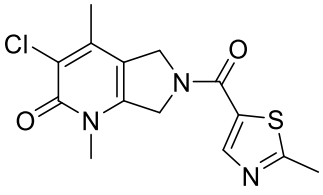
12. The compound of any one of claims 1-11, or a pharmaceutically acceptable salt thereof, wherein R^4 is methyl.

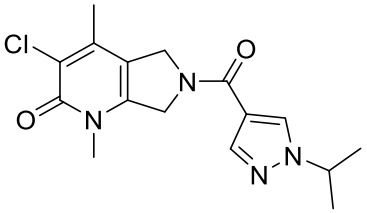
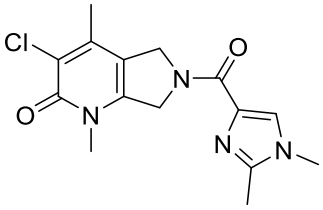
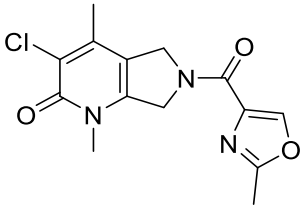
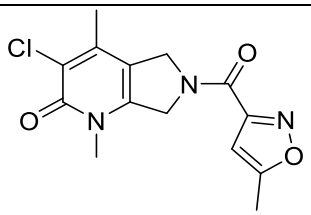
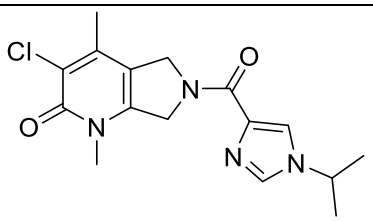
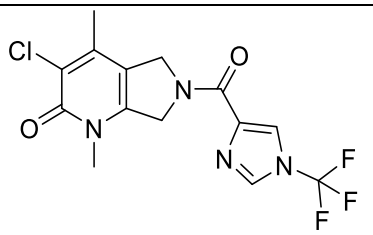
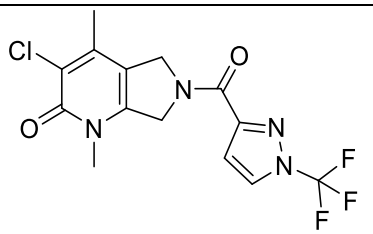
13. The compound of any one of claims 1-12, or a pharmaceutically acceptable salt thereof, wherein R^5 is $C_{1\text{-}6}$ haloalkyl.

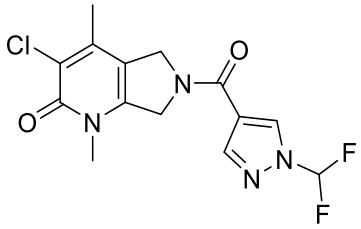
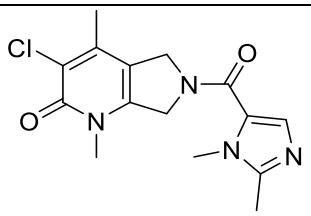
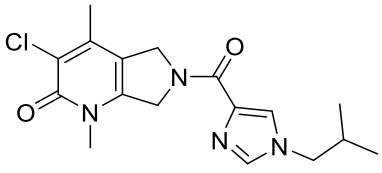
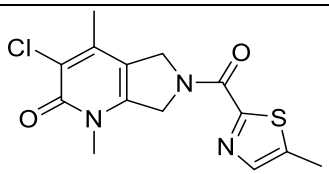
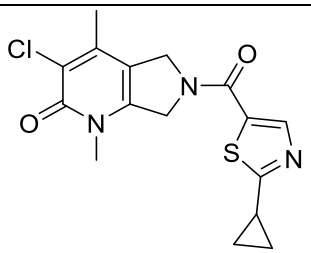
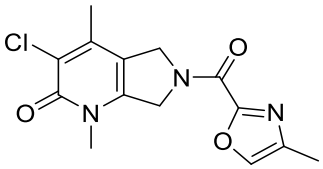
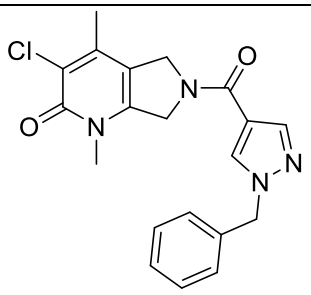
14. The compound of any one of claims 1-12, or a pharmaceutically acceptable salt thereof, wherein R^5 is $-CF_3$.

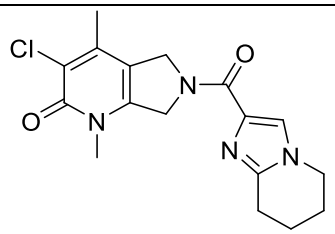
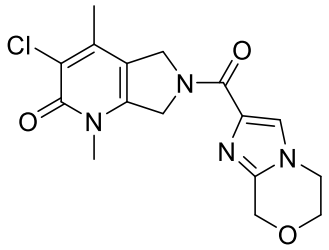
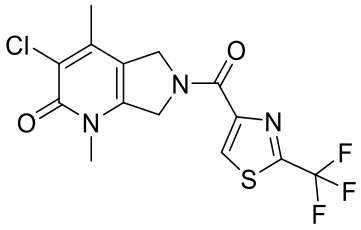
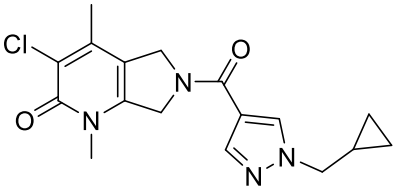
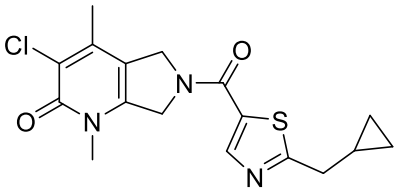
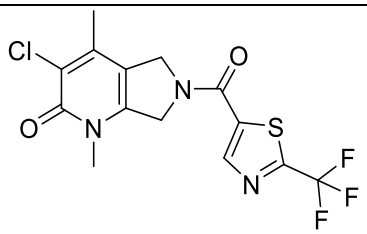
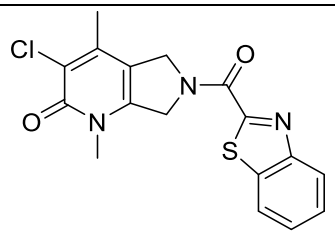
15. A compound selected from the group consisting of:

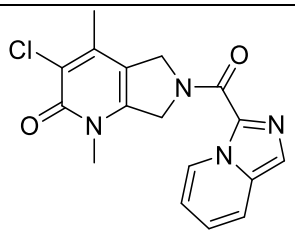
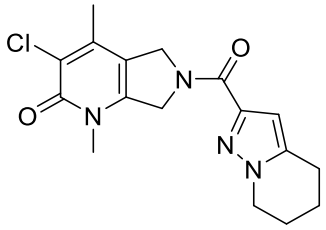
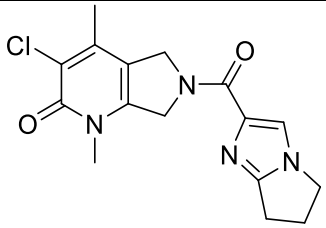
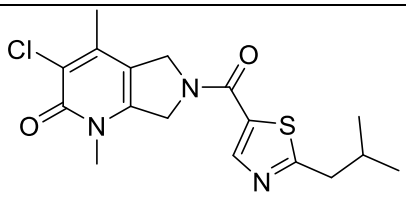
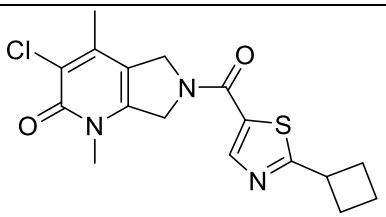
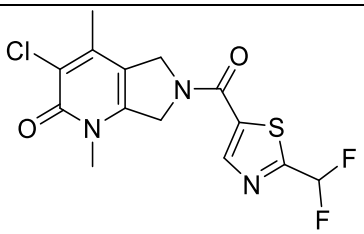
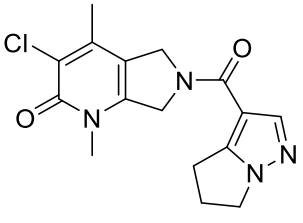
Compound No.	Structure
I-1	
I-2	

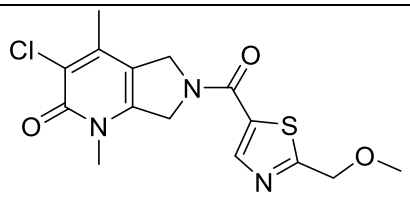
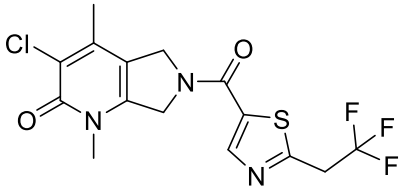
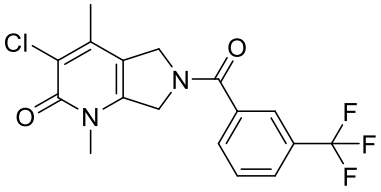
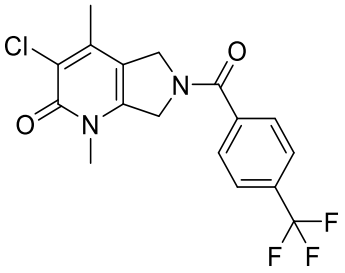
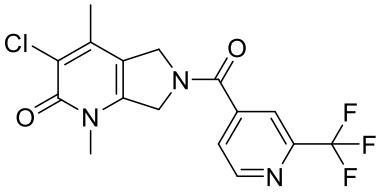
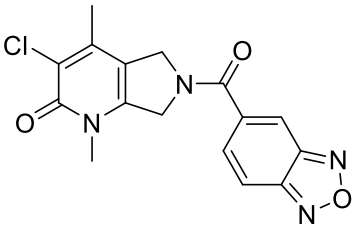
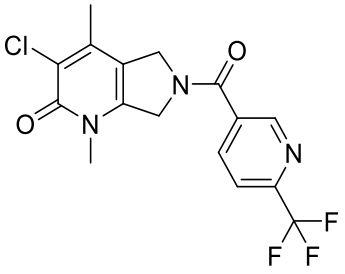
Compound No.	Structure
I-3	
I-4	
I-5	
I-6	
I-7	
I-8	
I-9	

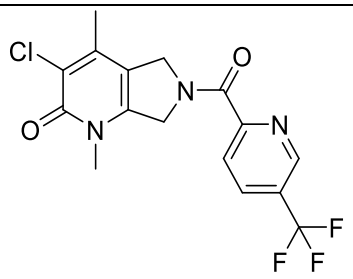
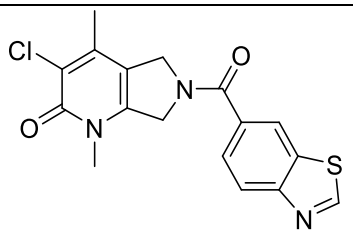
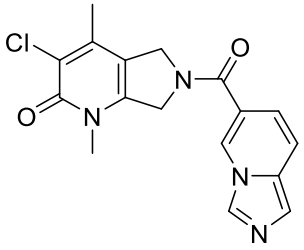
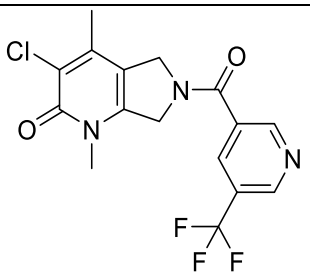
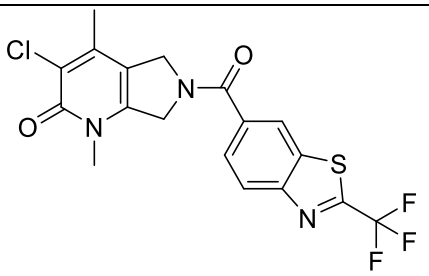
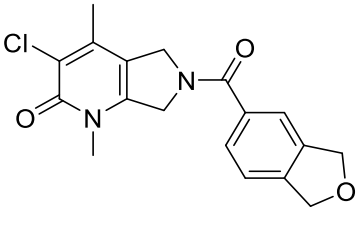
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I-16	

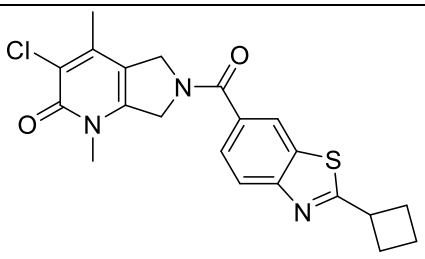
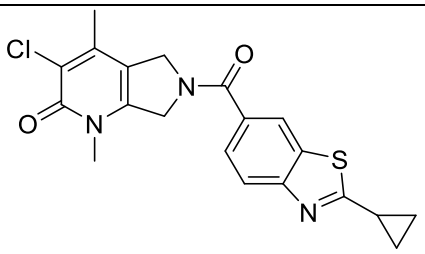
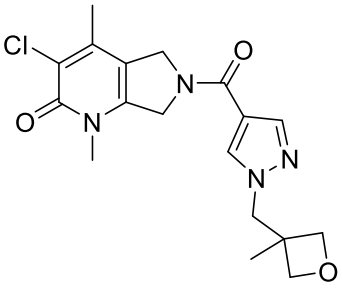
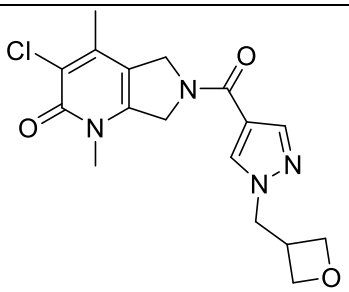
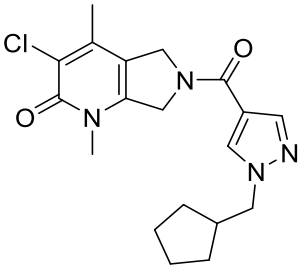
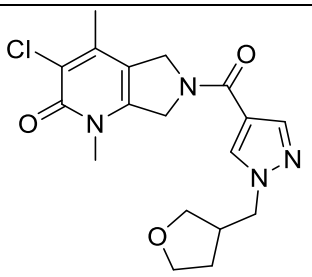
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I-23	

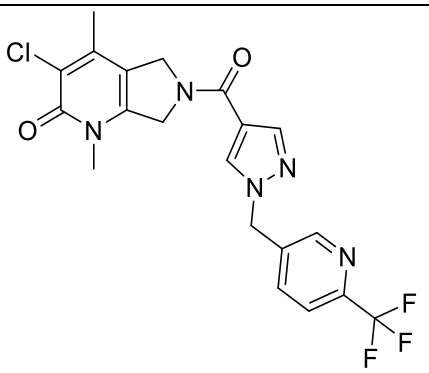
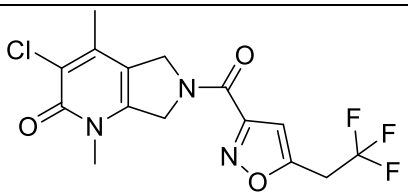
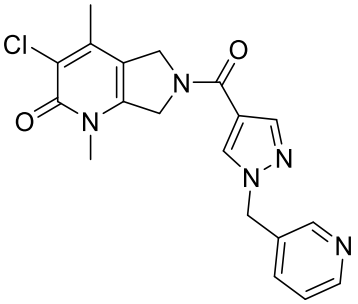
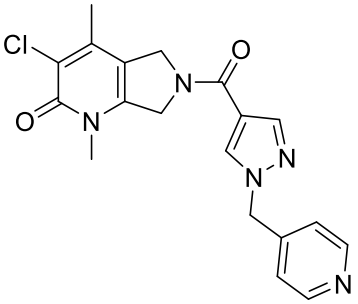
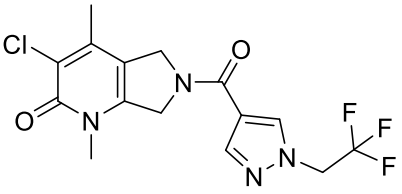
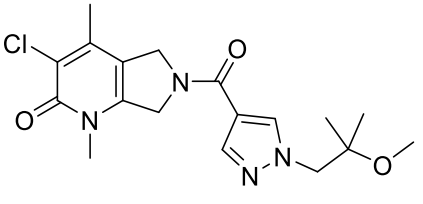
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I-29	
I-30	

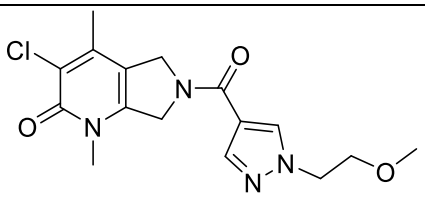
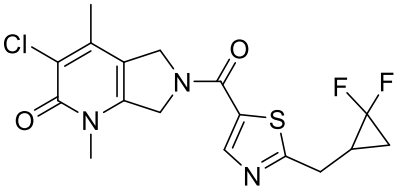
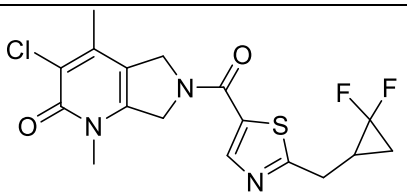
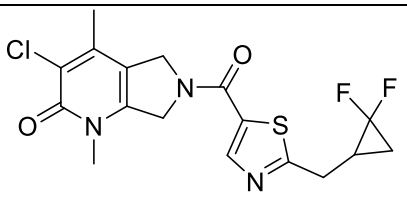
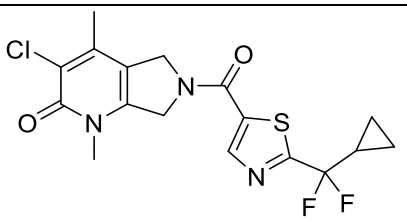
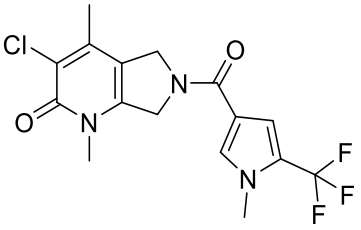
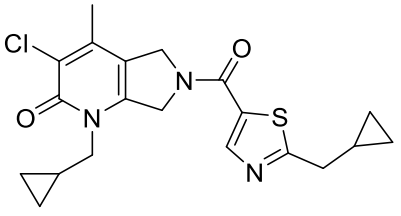
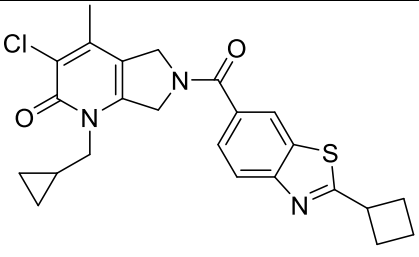
Compound No.	Structure
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I-36	
I-37	

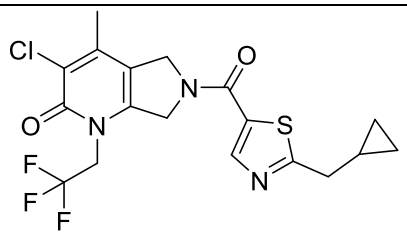
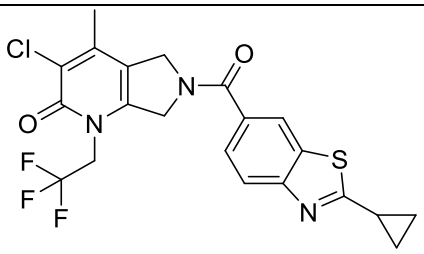
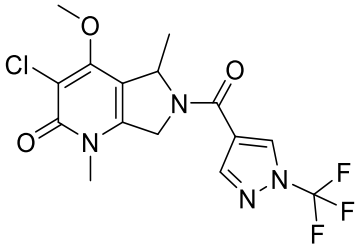
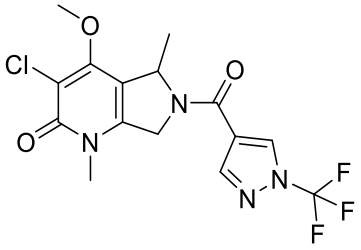
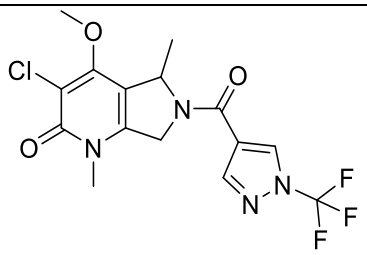
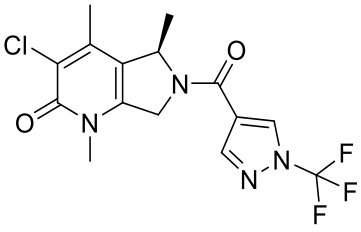
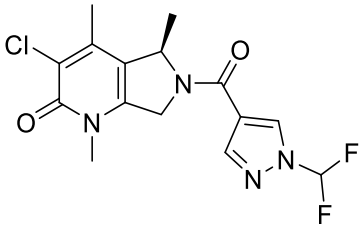
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I-44	

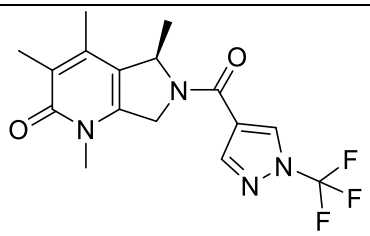
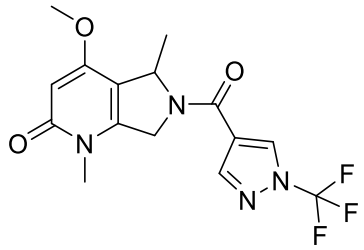
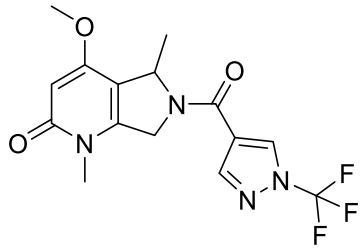
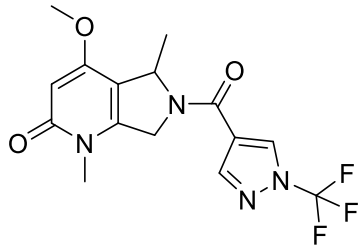
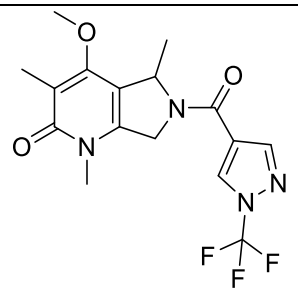
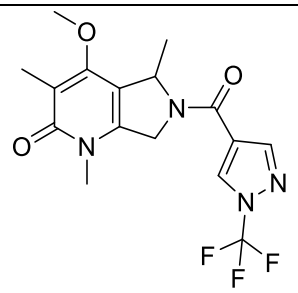
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I-50	

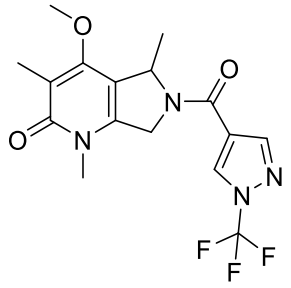
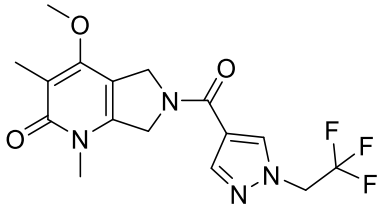
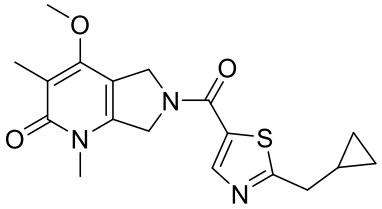
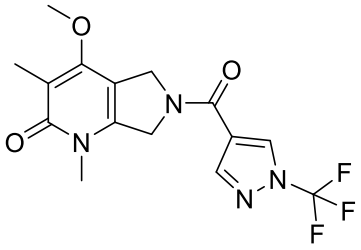
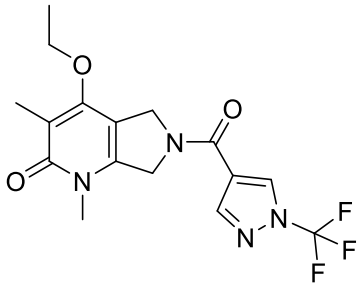
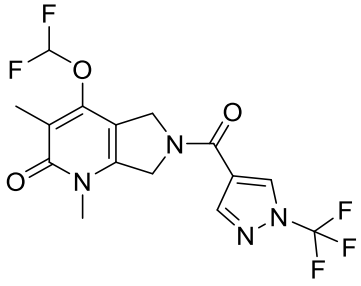
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I-56	

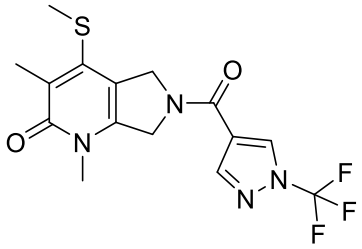
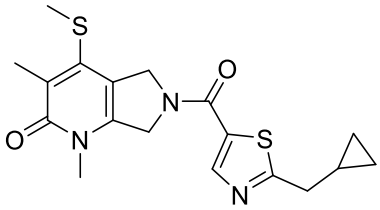
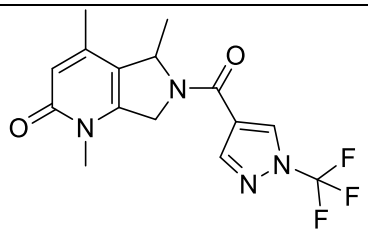
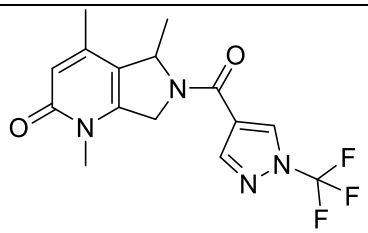
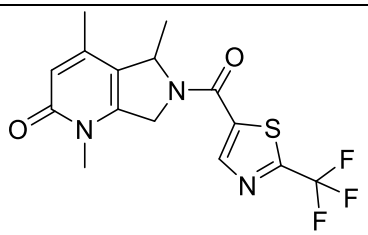
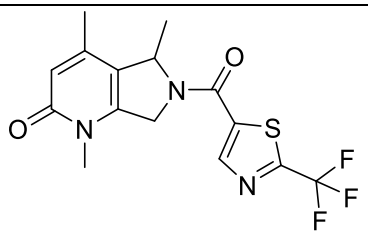
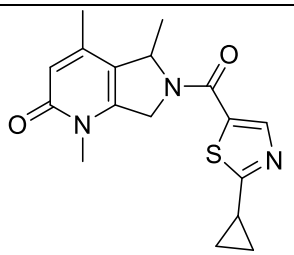
Compound No.	Structure
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I-62	

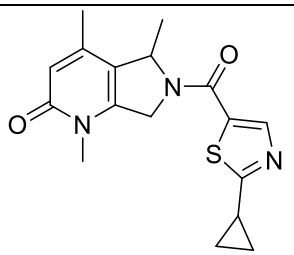
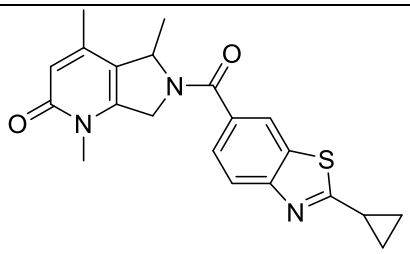
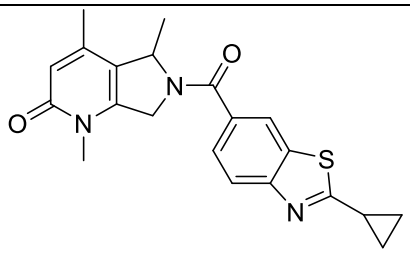
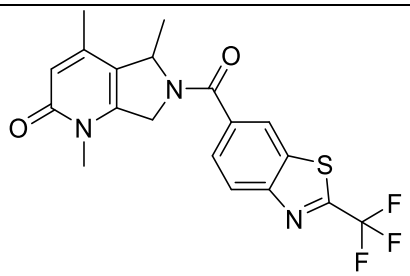
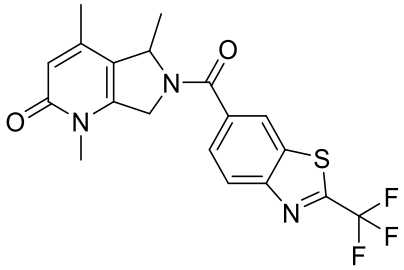
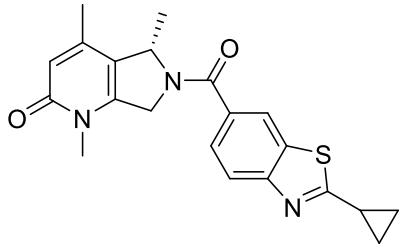
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I-70	

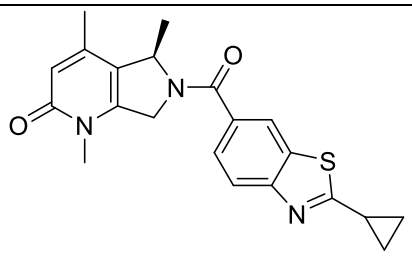
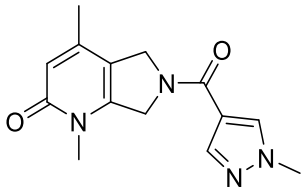
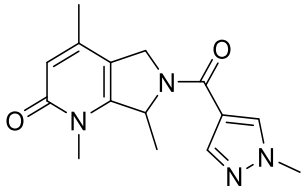
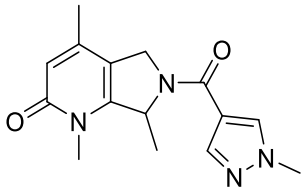
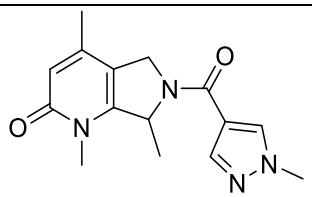
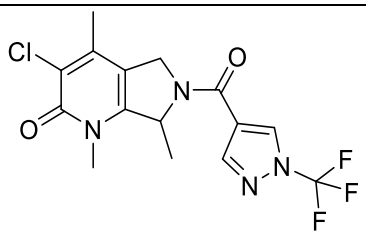
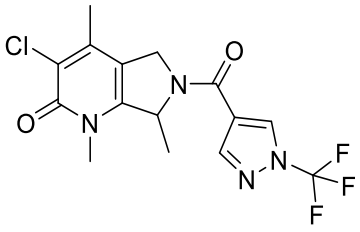
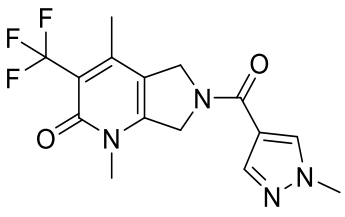
Compound No.	Structure
I-71	
I-72	
I-73	
I-74	
I-75	
I-76	
I-77	

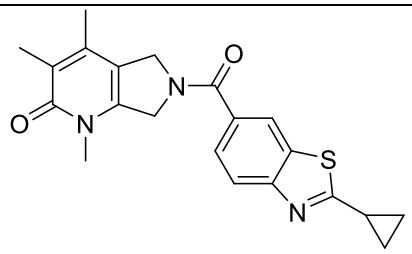
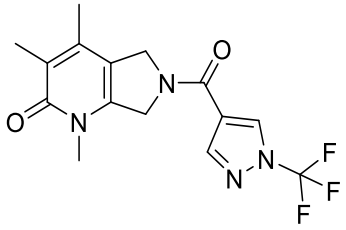
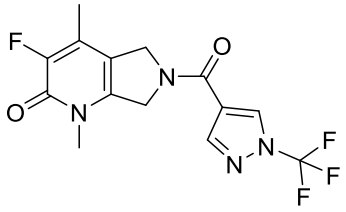
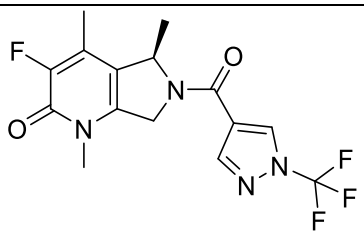
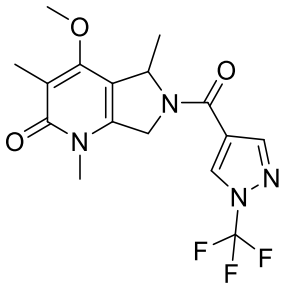
Compound No.	Structure
I-78	
I-79	
I-80	
I-81	
I-82	
I-83	 Stereoisomer 1

Compound No.	Structure
I-84	 Stereoisomer 2
I-85	
I-86	
I-87	
I-88	
I-89	

Compound No.	Structure
I-90	
I-91	
I-92	
I-93	
I-94	
I-95	
I-96	

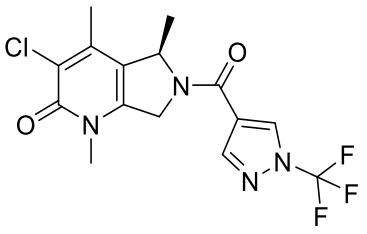
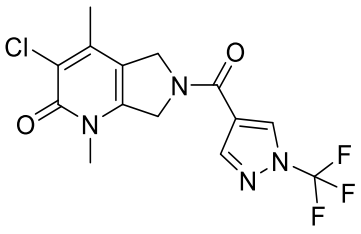
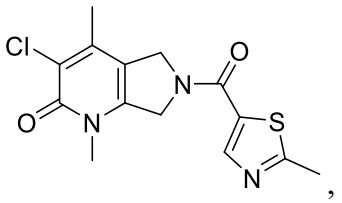
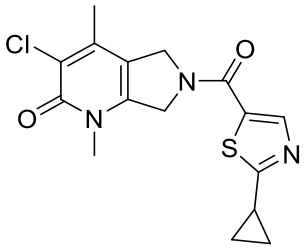
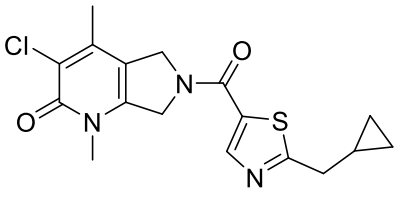
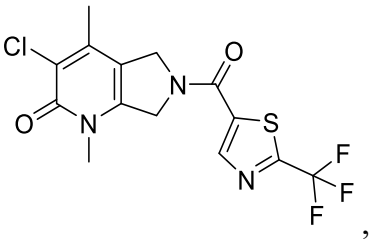
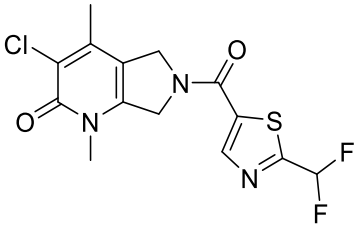
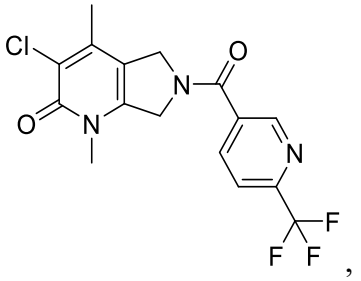
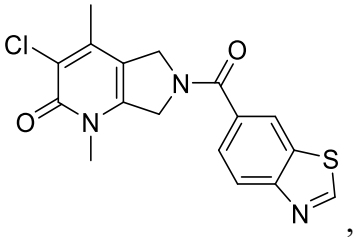
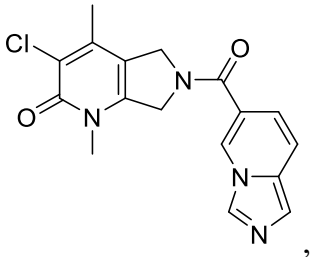
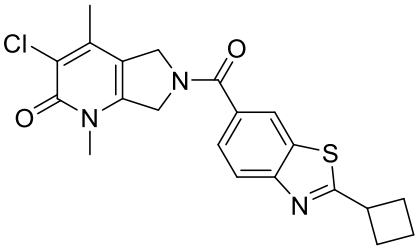
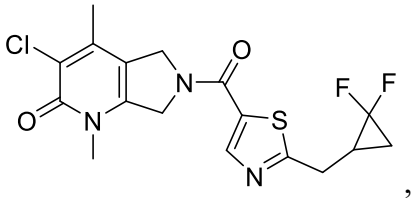
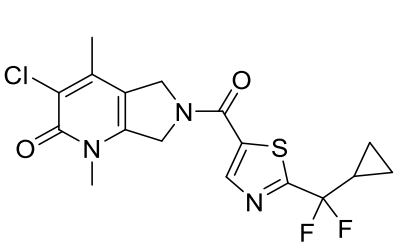
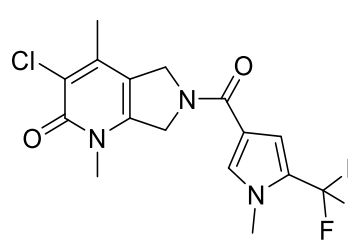
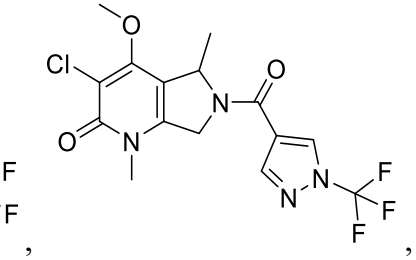
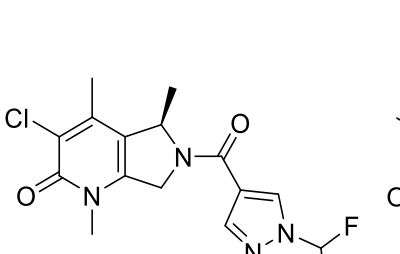
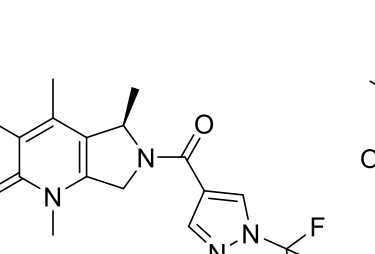
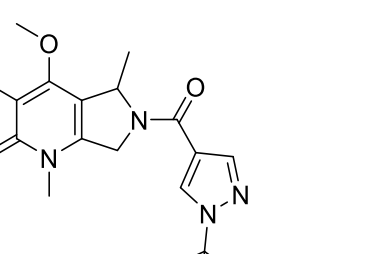
Compound No.	Structure
I-97	
I-98	
I-99	
I-100	
I-101	
I-102	

Compound No.	Structure
I-103	
I-104	
I-105	
I-106	
I-107	
I-108	
I-109	
I-110	

Compound No.	Structure
I-111	
I-112	
I-113	
I-114	
I-115	

and a pharmaceutically acceptable salt of any of the foregoing.

16. The compound of claim 15, wherein the compound is selected from the group consisting of:


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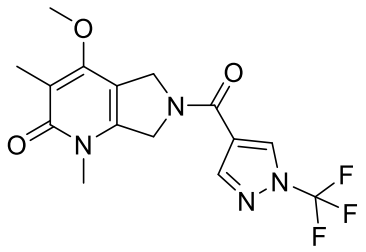
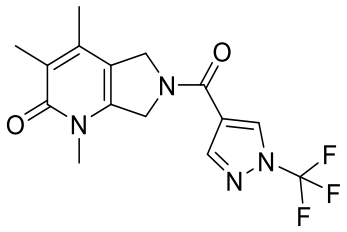
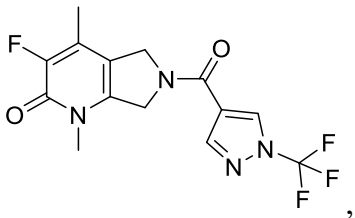
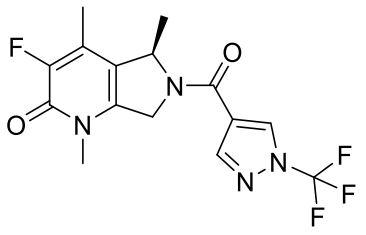
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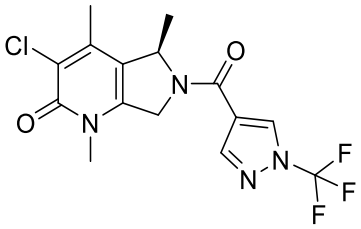
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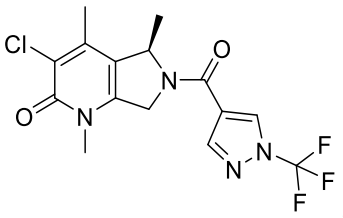
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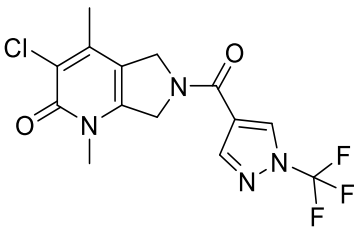
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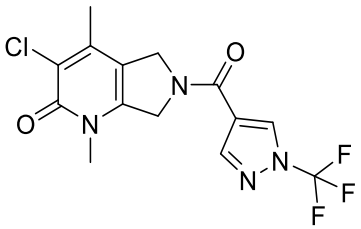
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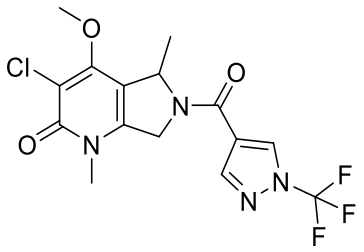




, and a pharmaceutically acceptable salt of any of the foregoing.

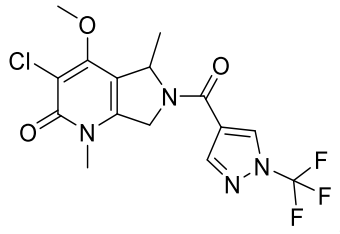
17. A compound having a structure:  or a pharmaceutically acceptable salt thereof.

18. The compound of claim 17, wherein the compound is .

19. A compound having a structure:  or a pharmaceutically acceptable salt thereof.

20. The compound of claim 19, wherein the compound is .

21. A compound having a structure:  or a pharmaceutically acceptable salt thereof.

22. The compound of claim 21, wherein the compound is .

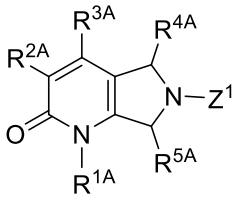
23. A pharmaceutical composition comprising a compound or pharmaceutically acceptable salt thereof of any one of claims 1-22 and a pharmaceutically acceptable carrier.

24. A compound or pharmaceutically acceptable salt thereof of any one of claims 1-22 for use in treating a muscarinic acetylcholine receptor mediated disorder.

25. The compound for use of claim 24, wherein the muscarinic acetylcholine receptor mediated disorder is schizophrenia.

26. The compound for use of claim 24 or 25, wherein in compound or pharmaceutically acceptable salt thereof is to be administered in combination with an orthosteric agonist of the muscarinic acetylcholine receptor.

27. A compound represented by Formula II:



(II)

or a salt thereof; wherein:

R^{1A} is C_{1-6} alkyl, C_{1-6} haloalkyl, C_{3-6} cycloalkyl, -(C_{1-6} alkylene)-(C_{3-6} cycloalkyl), or hydrogen;

R^{2A} is halo, C_{1-4} alkyl, C_{1-4} haloalkyl, or hydrogen;

R^{3A} is C_{1-4} alkyl, C_{1-4} haloalkyl, C_{1-4} alkoxyl, C_{1-4} haloalkoxyl, -S-(C_{1-4} alkyl), or halo;

R^{4A} and R^{5A} are independently hydrogen, C_{1-4} alkyl, C_{1-4} haloalkyl, or halo; and

Z^1 is hydrogen or -$C(O)_2(C_{1\text{-}6}$ alkyl).