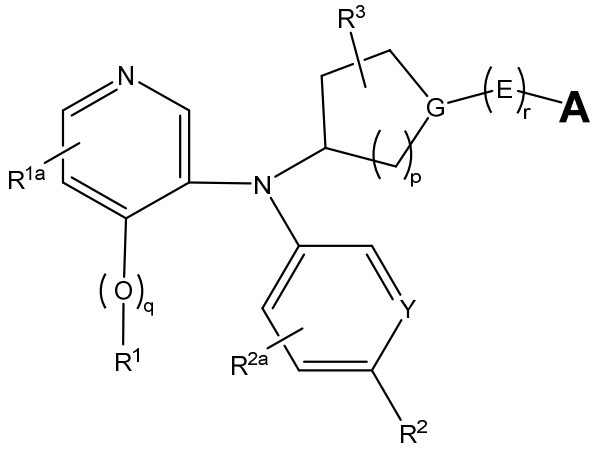
CLAIMS

1. A compound of Formula A:



A ,

wherein,

A is selected from the group consisting of C_1-C_6 alkyl, C_3-C_8 cycloalkyl, phenyl, 5- to 6-membered heteroaryl and 5- to 6-membered heterocyclyl, each of which is optionally substituted with one or more of R^{A1}, R^{A2} and R^{A3},

wherein, R^{A1}, R^{A2} and R^{A3} are each independently selected from the group consisting of C_1-C_6 alkyl, halo-C_1-C_6 alkyl, C_1-C_6 alkoxy, halo, cyano, oxo, -C(O)-R^{A4}, -S(O)-R^{A4} and -$S(O)_2$-R^{A4},

wherein, R^{A4} is C_1-C_6 alkyl or C_3-C_8 cycloalkyl, and

wherein the oxo, if present, is formed by two of R^{A1}, R^{A2} and R^{A3} together with a carbon to which each is attached;

G is -CH, C-OH, or N;

E, if present, is -C(O)- or -O-;

Y is -CH or N;

p is 1, 2 or 3;

q is 1 or 0;

r is 1 or 0;

wherein, when r is 0, A is other than C_1-C_6 alkyl;

R^1 is selected from the group consisting of C_1-C_6 alkyl, C_3-C_8 cycloalkyl and halo-C_1-C_6 alkyl; or R^1 is halo and q is 0;

R^{1a} is selected from the group consisting of hydrogen, halo, C_1-C_6 alkyl;

R^2 is selected from the group consisting of halo, halo-C_1-C_6 alkyl, halo-C_1-C_6 alkoxy and

-$S(O)_2$-(C_1-C_6 alkyl);

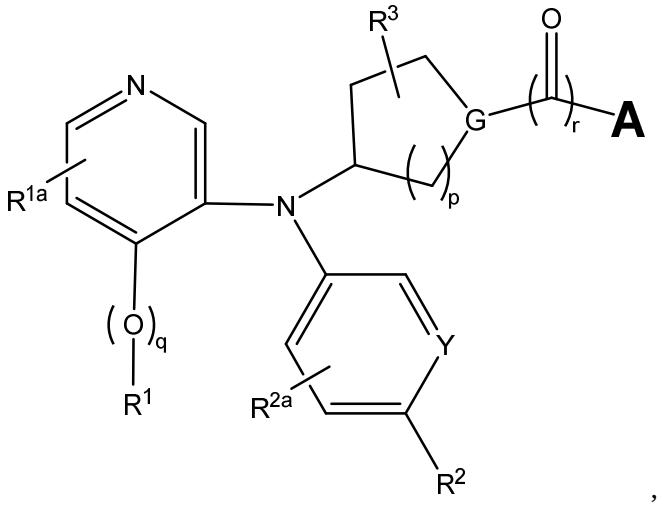
R^{2a} is selected from the group consisting of hydrogen and halo;

and,

R^3 is hydrogen, halo, or C_1-C_6 alkyl,

or a pharmaceutically acceptable salt or solvate thereof.

2. The compound of claim 1, or a pharmaceutically acceptable salt or solvate thereof, having a structure of Formula I:



I

,

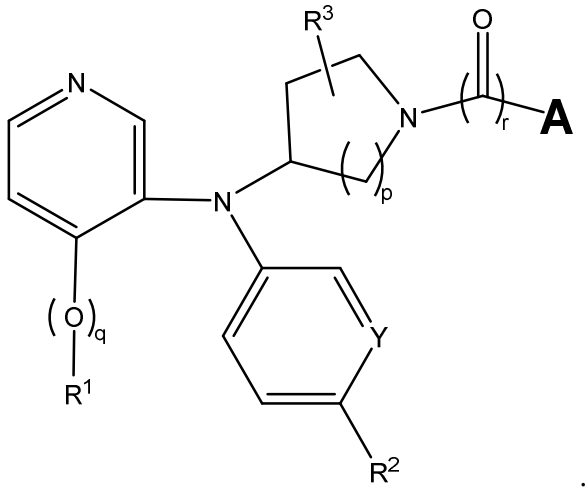
wherein,

R^{A1}, R^{A2} and R^{A3} are each independently selected from the group consisting of C_1-C_6 alkyl, halo-C_1-C_6 alkyl, halo, cyano, oxo, -C(O)-R^{A4}, -S(O)-R^{A4} and -$S(O)_2$-R^{A4};

G is -CH or N; and

R^1 is selected from the group consisting of C_1-C_6 alkyl, C_3-C_8 cycloalkyl and halo-C_1-C_6 alkyl.

3. The compound of claim 1 or 2, or a pharmaceutically acceptable salt or solvate thereof, wherein G is N and having a structure of Formula I':



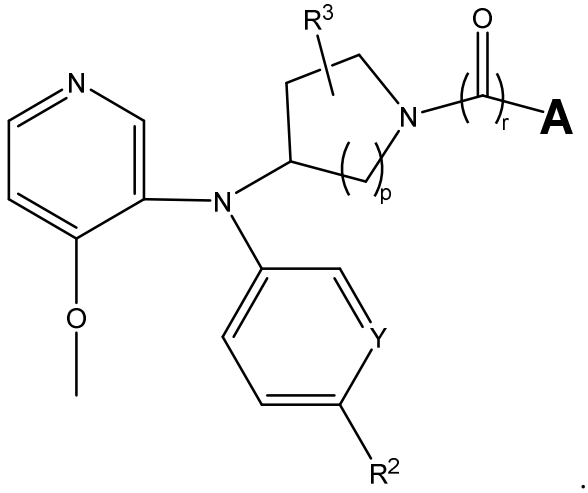
I’

4. The compound of any one of claims 1-3, or a pharmaceutically acceptable salt or solvate thereof, wherein q is 1.

5. The compound of any one of claims 1-4, or a pharmaceutically acceptable salt or solvate thereof, wherein R^1 is C_1-C_6 alkyl or C_3-C_8 cycloalkyl.

6. The compound of any one of claims 1-5, or a pharmaceutically acceptable salt or solvate thereof, wherein R^1 is methyl, ethyl or cyclopropyl.

7. The compound of any one of claims 1-6, or a pharmaceutically acceptable salt or solvate thereof, having a structure of Formula Ia:



Ia

8. The compound of any one of claims 1-7, or a pharmaceutically acceptable salt or solvate thereof, wherein Y is -CH.

9. The compound of any one of claims 1-8, or a pharmaceutically acceptable salt or solvate thereof, wherein R^2 is halo-C_1-C_6 alkyl.

10. The compound of any one of claims 1-9, or a pharmaceutically acceptable salt or solvate thereof, wherein p is 1 or 2.

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

12. The compound of any one of claims 1-11, or a pharmaceutically acceptable salt or solvate thereof, wherein r is 0.

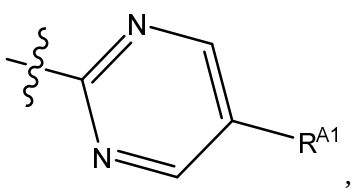
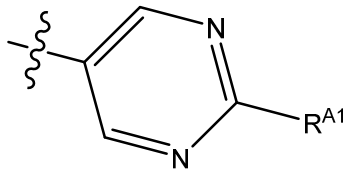
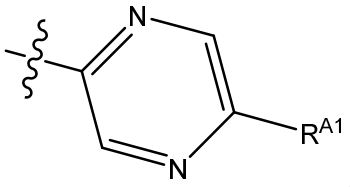
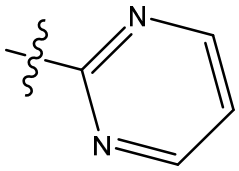
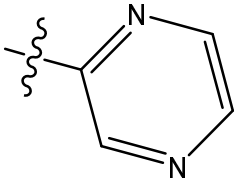
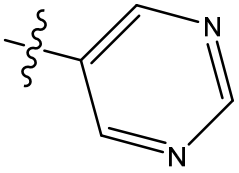
13. The compound of any one of claims 1-12, or a pharmaceutically acceptable salt or solvate thereof, wherein A is
(i) C_3-C_5 cycloalkyl, optionally substituted with one or more of R^{A1}, R^{A2} and R^{A3};
(ii) phenyl, optionally substituted with one or more of R^{A1}, R^{A2} and R^{A3}; or
(iii) 5- to 6-membered heterocyclyl, optionally substituted with one or more of R^{A1}, R^{A2} and R^{A3}.

14. The compound of any one of claims 1-12, or a pharmaceutically acceptable salt or solvate thereof, wherein A is 5- to 6-membered heteroaryl, optionally substituted with one or more of R^{A1}, R^{A2} and R^{A3}.

15. The compound of claim 14, or a pharmaceutically acceptable salt or solvate thereof, wherein A is selected from the group consisting of pyridinyl, pyridazinyl, pyrimidinyl, pyrazinyl, triazinyl, oxadiazolyl, pyrrolyl, imidazolyl, pyrazolyl, and thiazolyl, optionally substituted with one or more of R^{A1}, R^{A2} and R^{A3}.

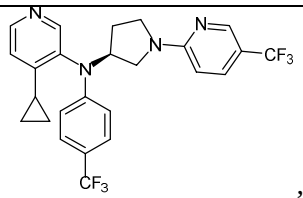
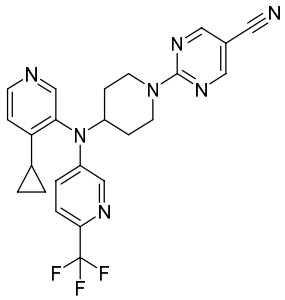
16. The compound of claim 14, or a pharmaceutically acceptable salt or solvate thereof, wherein A is pyrimidinyl or pyrazinyl, optionally substituted with one or more of R^{A1}, R^{A2} and R^{A3}.

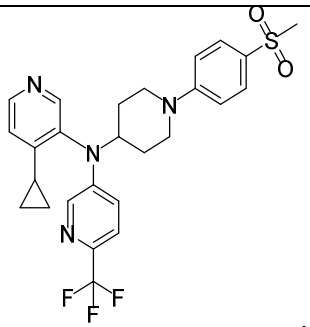
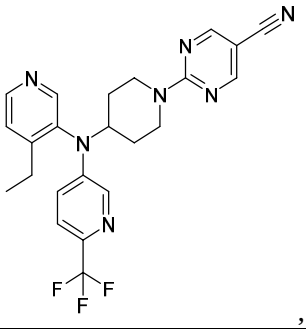
17. The compound of claim 16, or a pharmaceutically acceptable salt or solvate thereof, wherein A is

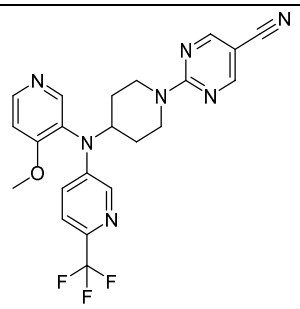
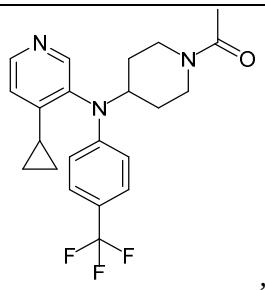
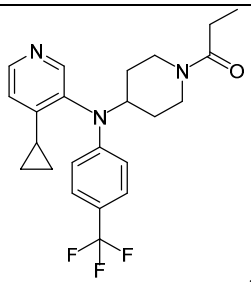
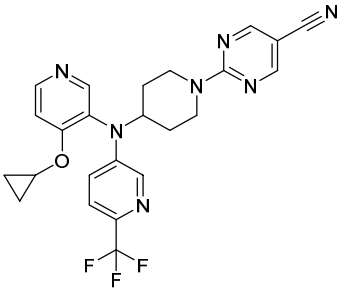
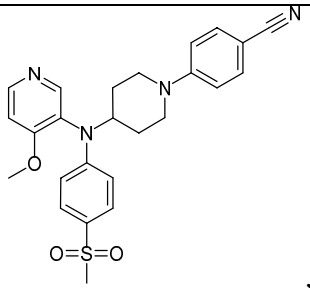

,

,

,

,

or

.

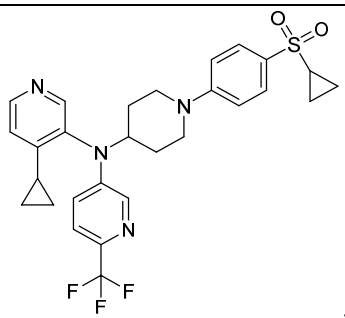
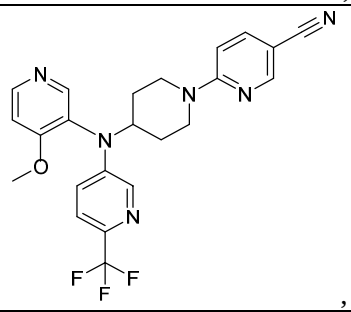
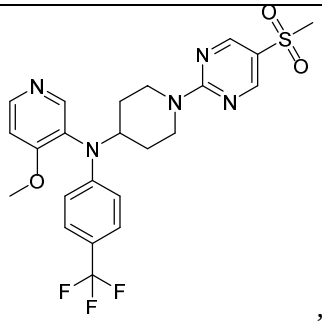
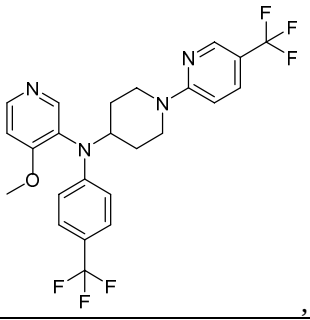
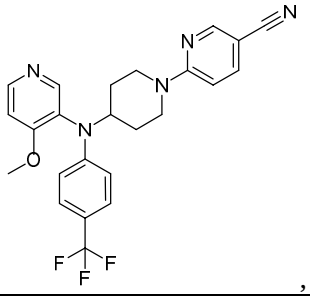
18. The compound of any one of claims 1-17, or a pharmaceutically acceptable salt or solvate thereof, wherein R^{A1} C_1-C_6 alkyl.

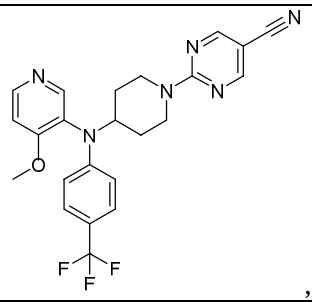
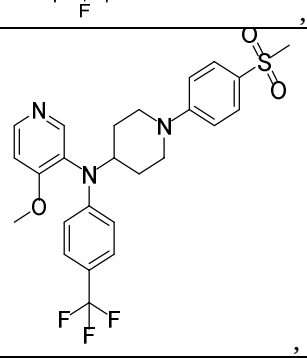
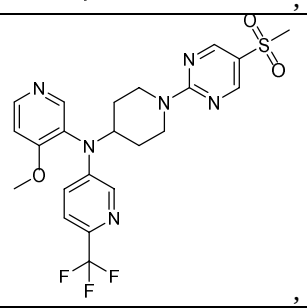
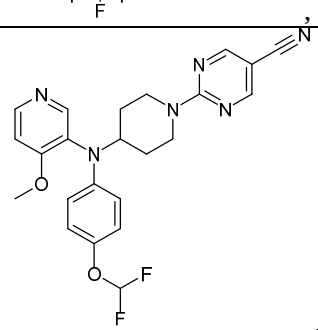
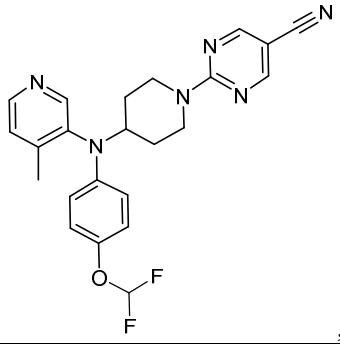
19. The compound of claim 1, selected from the group consisting of:

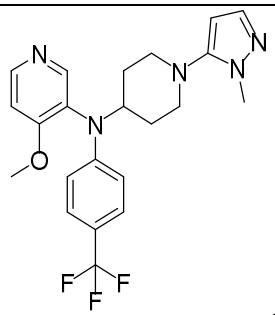
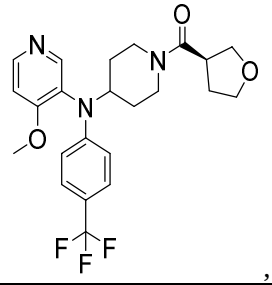
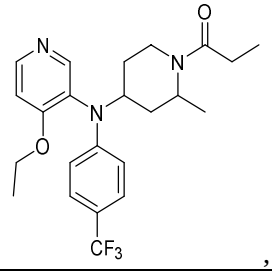
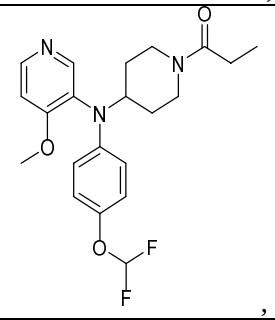
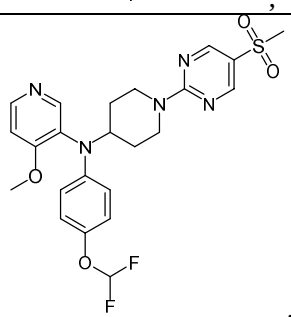
Cpd. No.	Structure
1	 ,
2	 ,

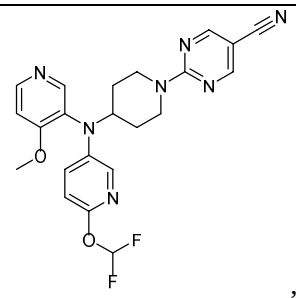
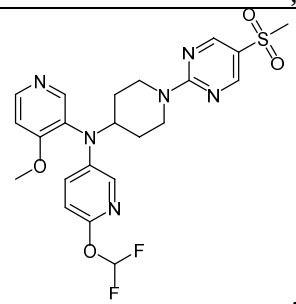
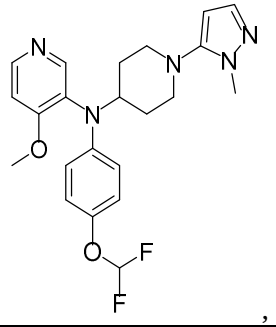
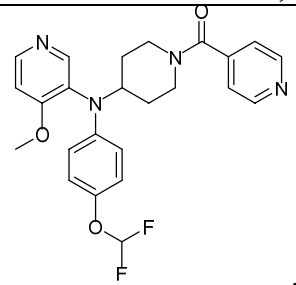
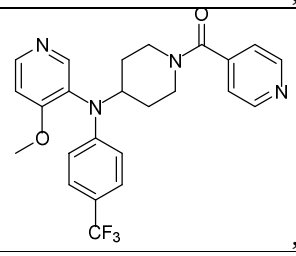
Cpd. No.	Structure
3	 ,
4	 ,

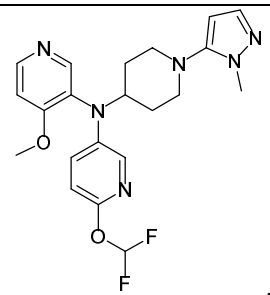
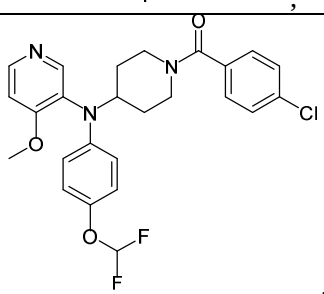
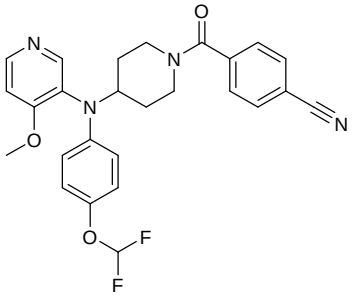
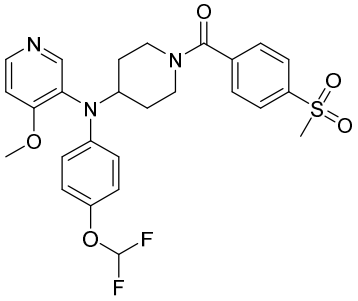
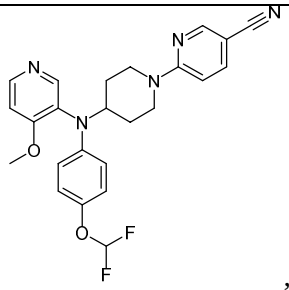
Cpd. No.	Structure
5	 ,
6	 ,
7	 ,
8	 ,
9	 ,

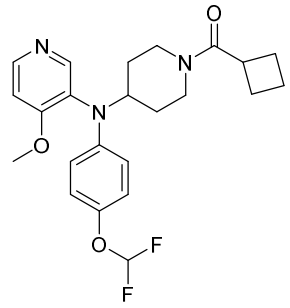
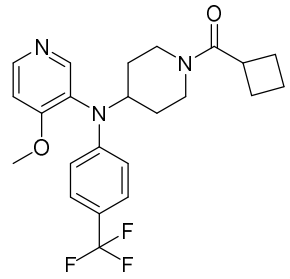
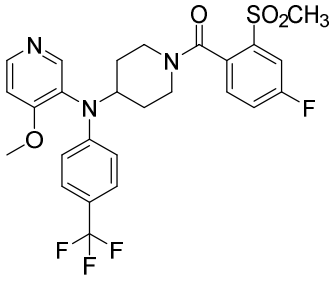
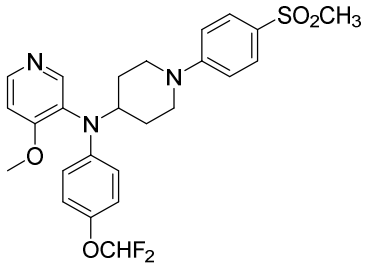
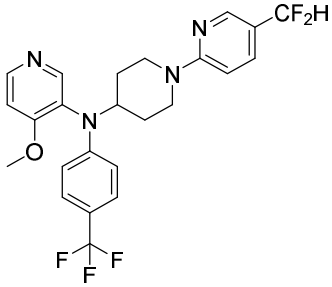
Cpd. No.	Structure
10	 ,
11	 ,
12	 ,
13	 ,
14	 ,

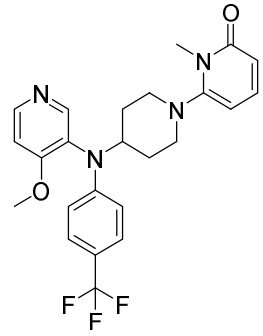
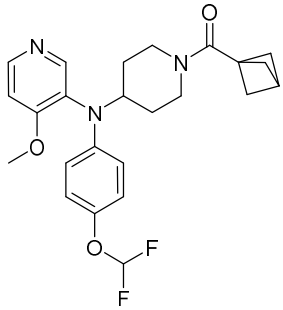
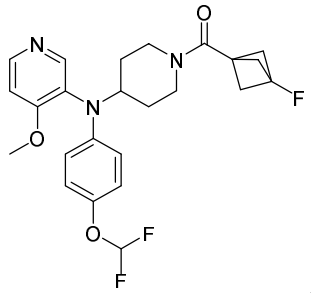
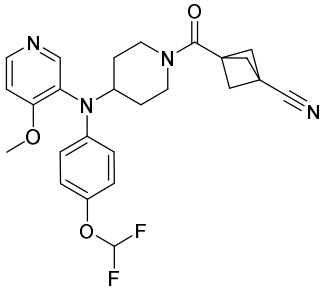
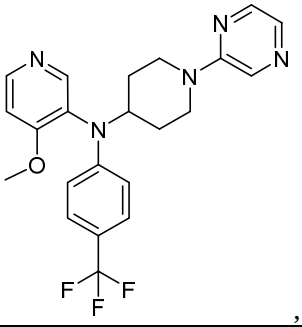
Cpd. No.	Structure
15	 ,
16	 ,
17	 ,
18	 ,
19	 ,

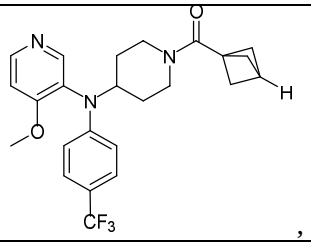
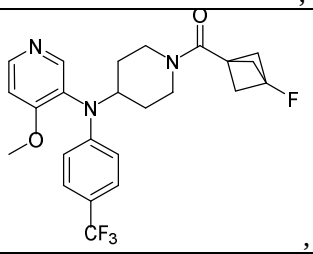
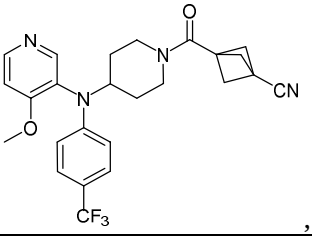
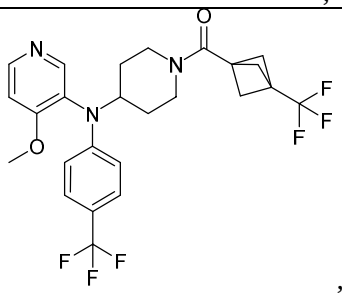
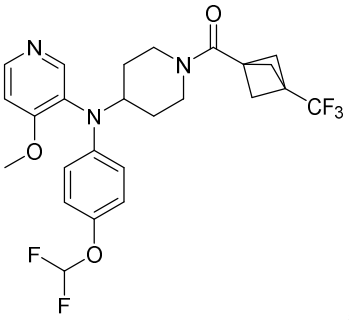
Cpd. No.	Structure
20	 ,
21	 ,
22	 ,
23	 ,
24	 ,

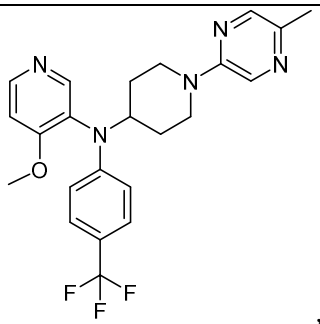
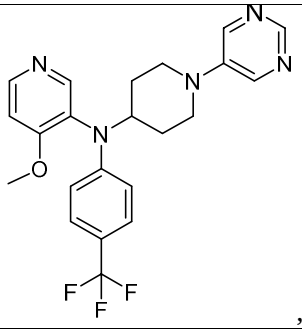
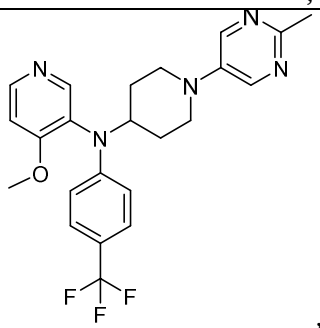
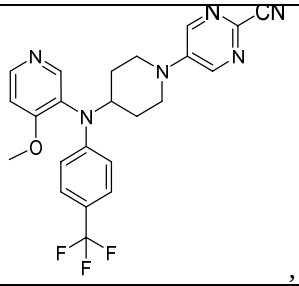
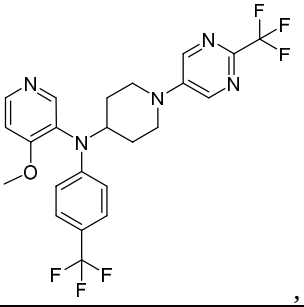
Cpd. No.	Structure
25	 ,
26	 ,
27	 ,
28	 ,
29	 ,

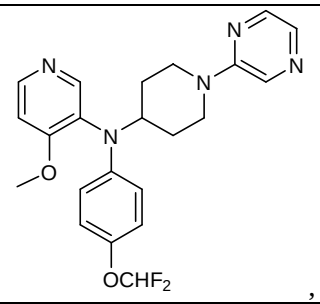
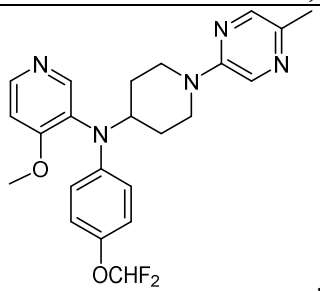
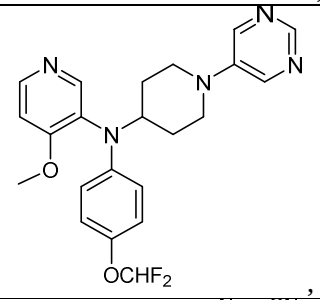
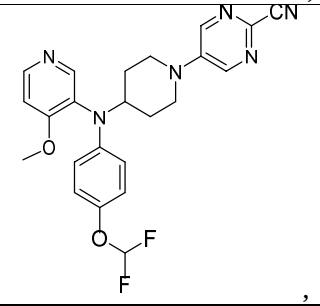
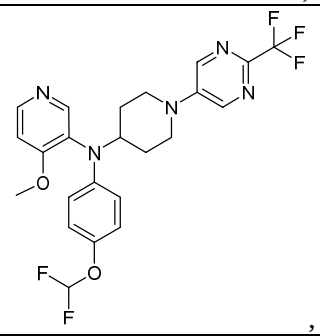
Cpd. No.	Structure
30	 ,
31	 ,
32	 ,
33	 ,
34	 ,

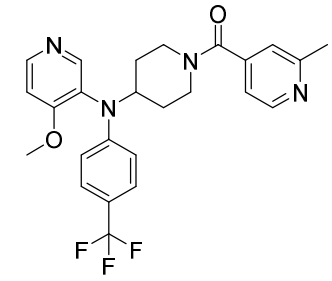
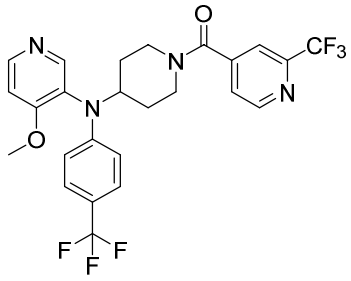
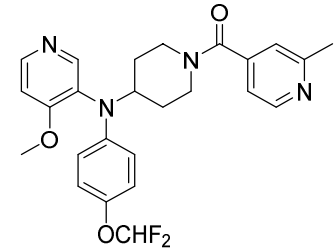
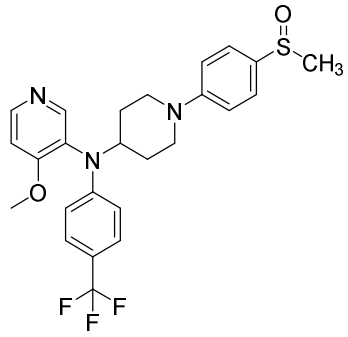
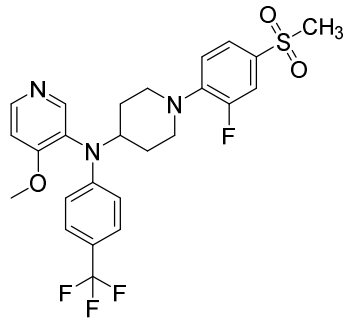
Cpd. No.	Structure
35	 ,
36	 ,
37	 ,
38	 ,
39	 ,

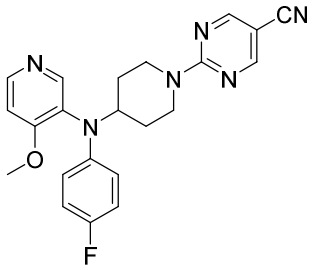
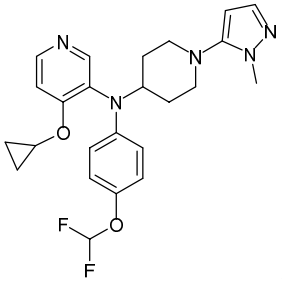
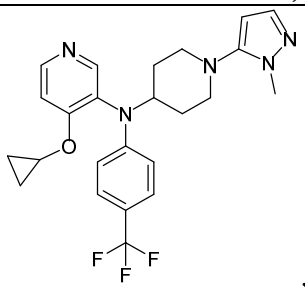
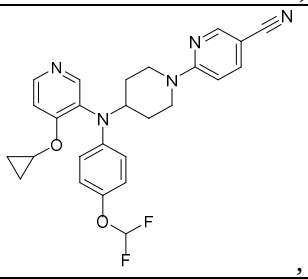
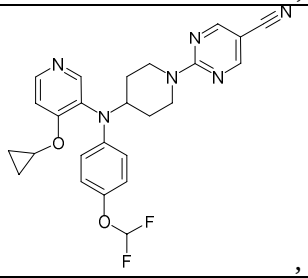
Cpd. No.	Structure
40	 ,
41	 ,
42	 ,
43	 ,
44	 ,

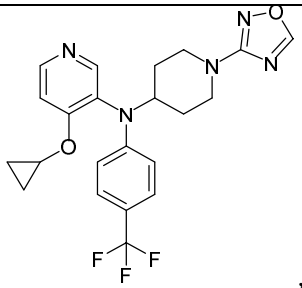
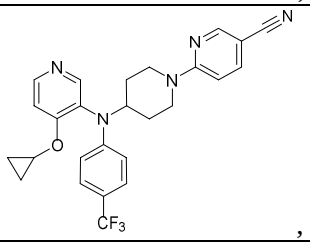
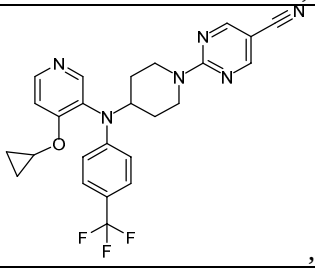
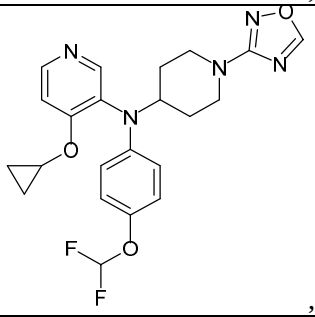
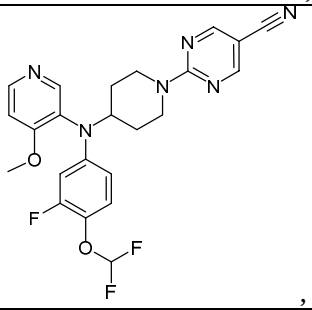
Cpd. No.	Structure
45	 ,
46	 ,
47	 ,
48	 ,
49	 ,

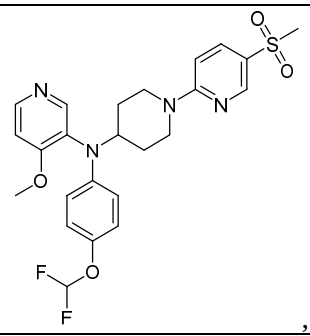
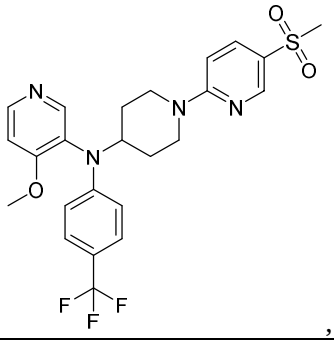
Cpd. No.	Structure
50	 ,
51	 ,
52	 ,
53	 ,
54	 ,

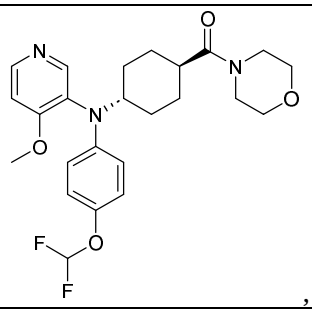
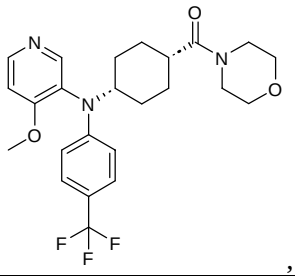
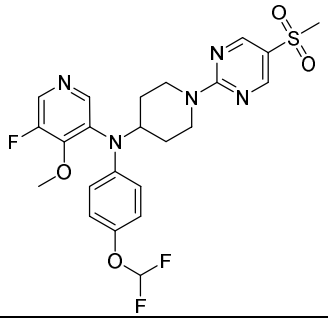
Cpd. No.	Structure
55	 ,
56	 ,
57	 ,
58	 ,
59	 ,

Cpd. No.	Structure
60	 ,
61	 ,
62	 ,
63	 ,
64	 ,

Cpd. No.	Structure
65	 ,
66	 ,
67	 ,
68	 ,
69	 ,

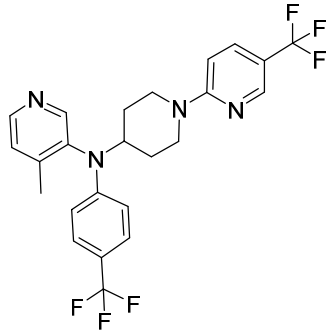
Cpd. No.	Structure
70	 ,
71	 ,
72	 ,
73	 ,
74	 ,

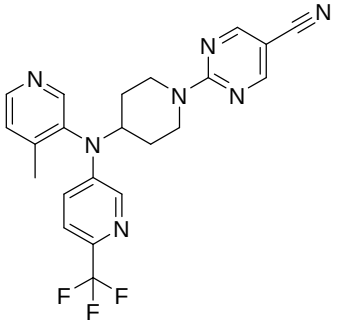
Cpd. No.	Structure
75	 ,
76	 ,

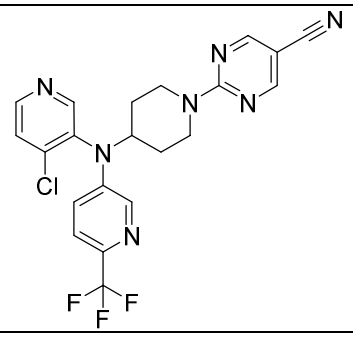
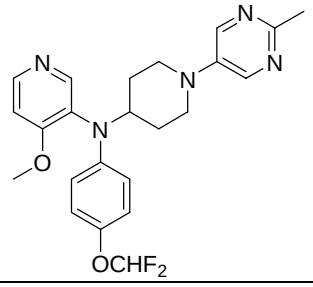
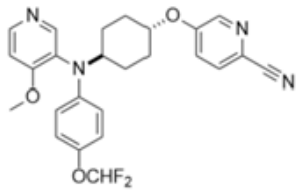
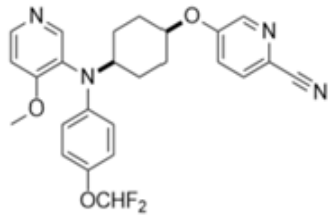
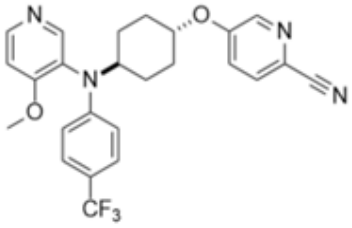
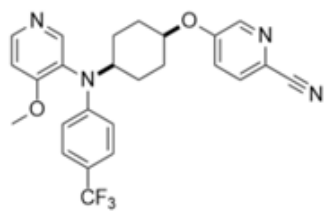
Cpd. No.	Structure
77	 ,
78	 , and
79	

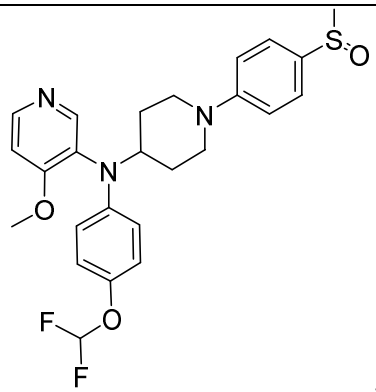
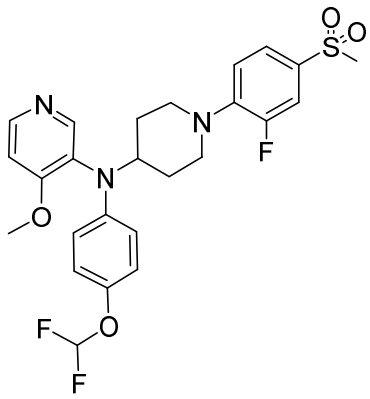
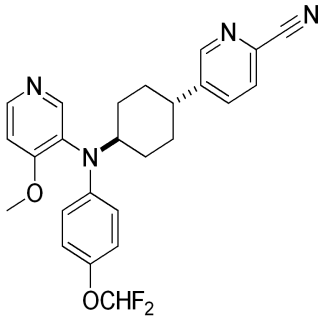
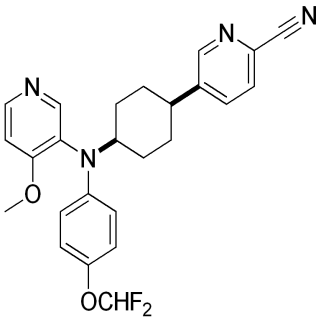
or a pharmaceutically acceptable salt or solvate thereof.

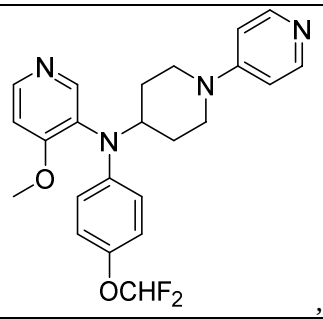
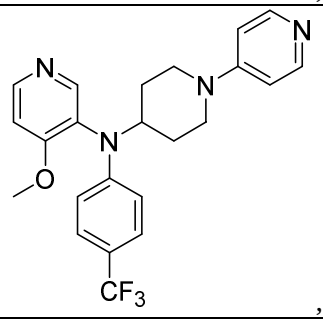
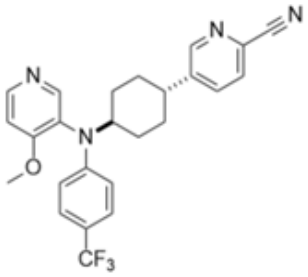
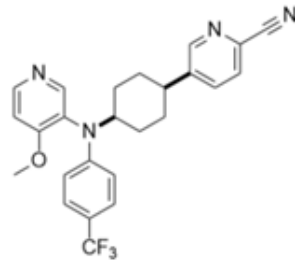
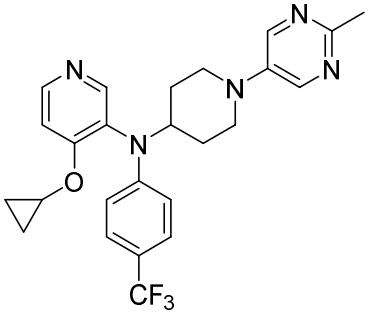
20. The compound of claim 1, selected from the group consisting of:

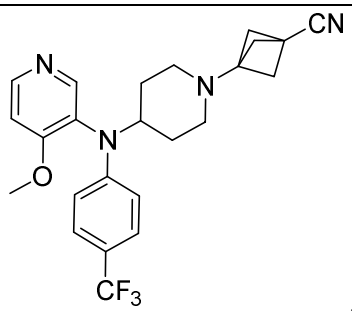
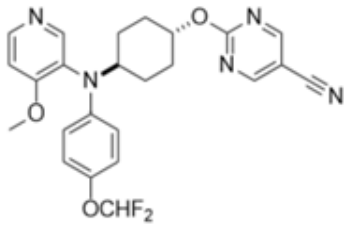
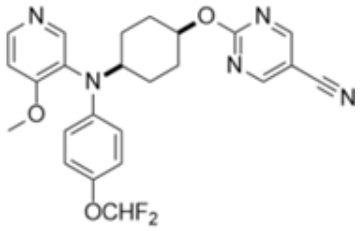
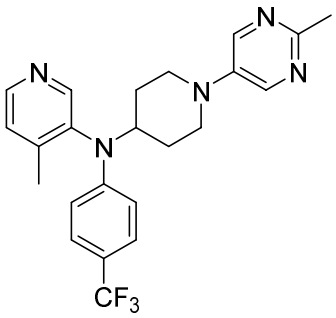
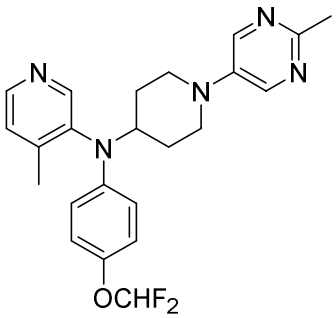
Cpd. No.	Structure
100	 ,

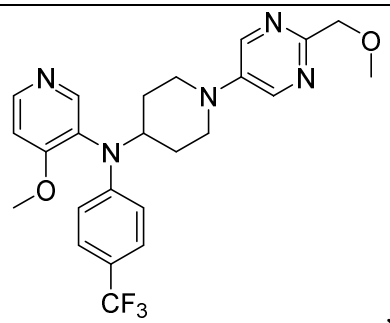
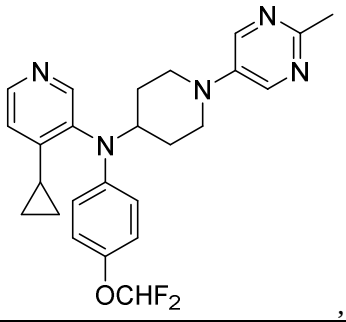
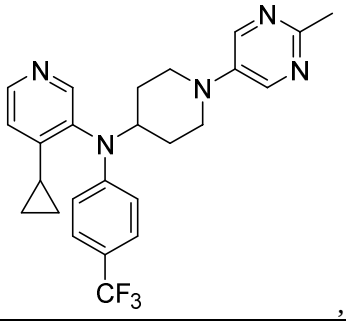
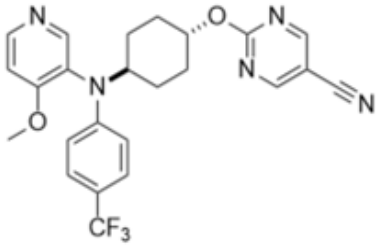
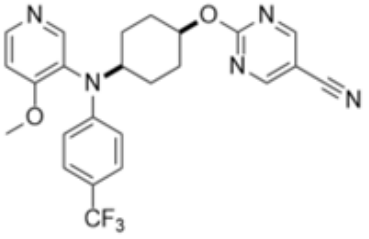
Cpd. No.	Structure
101	

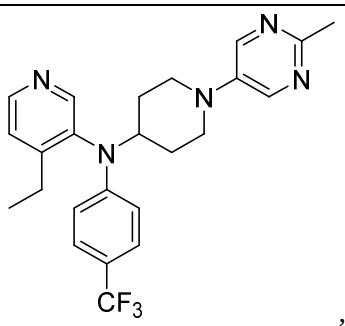
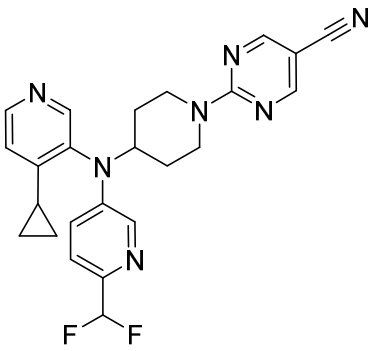
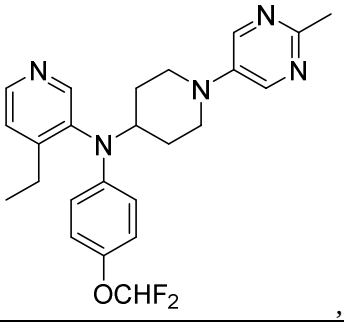
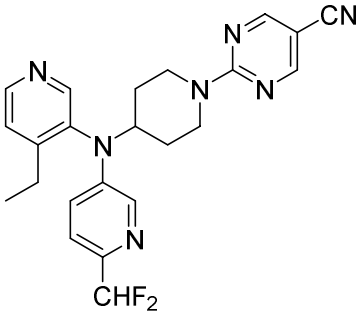
Cpd. No.	Structure
102	
103	
104-a	
104-b	 ,
105-a	 ,
105-b	 ,

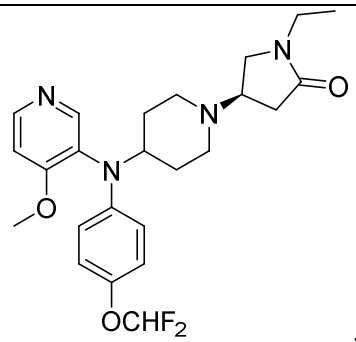
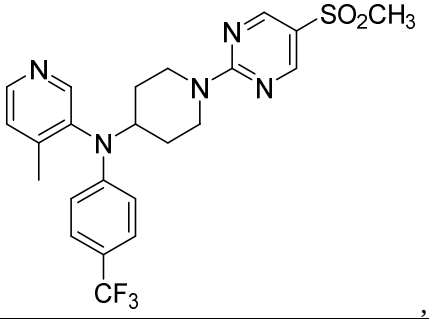
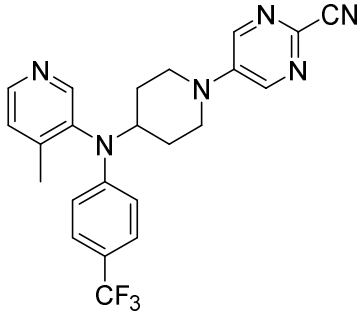
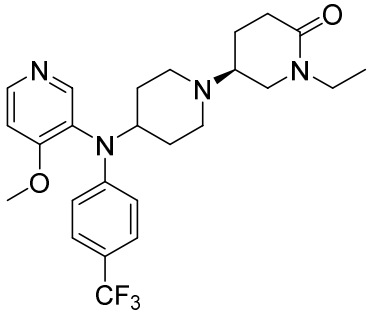
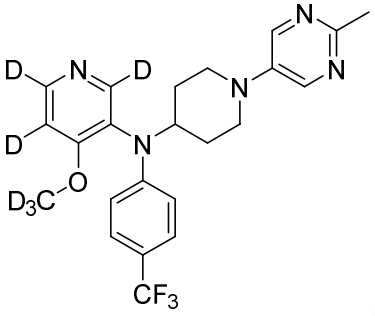
Cpd. No.	Structure
106	 ,
107	 ,
108-a	 ,
108-b	 ,

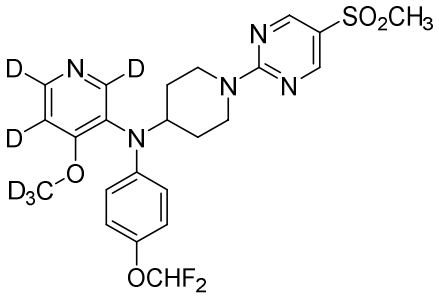
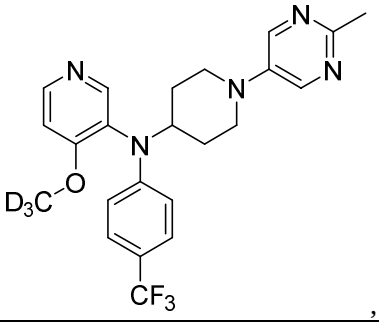
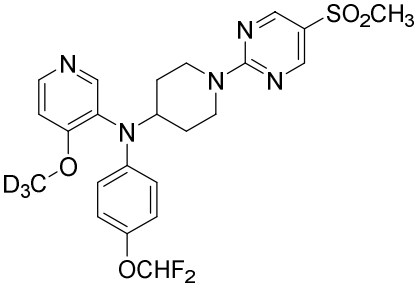
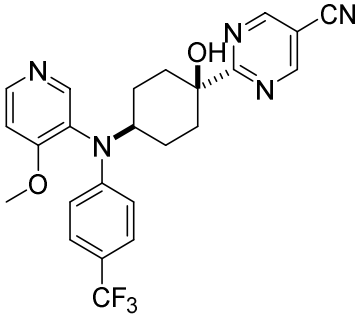
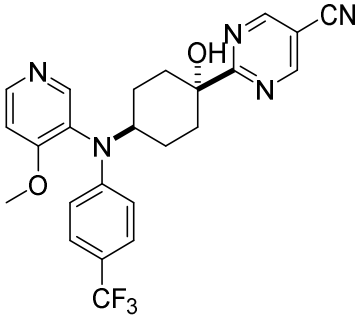
Cpd. No.	Structure
109	 ,
110	 ,
111-a	 ,
111-b	 ,
112	 ,

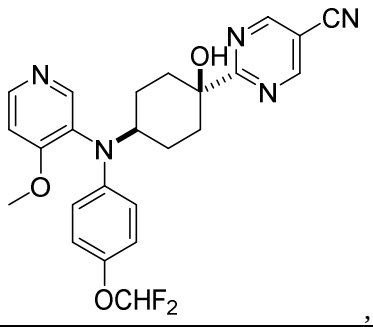
Cpd. No.	Structure
113	 ,
114-a	 ,
114-b	 ,
115	 ,
116	 ,

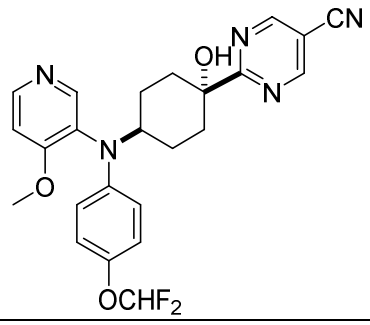
Cpd. No.	Structure
117	 ,
118	 ,
119	 ,
120-a	 ,
120-b	 ,

Cpd. No.	Structure
121	 ,
122	 ,
123	 ,
124	 ,

Cpd. No.	Structure
126	 ,
127	 ,
128	 ,
129	 ,
130	 ,

Cpd. No.	Structure
131	 ,
132	 ,
133	 ,
134-a	 ,
134-b	 ,

Cpd. No.	Structure
135-a	 , and

Cpd. No.	Structure
135-b	

or a pharmaceutically acceptable salt or solvate thereof.

21. A pharmaceutical composition comprising a compound of any one of claims 1-20, or a pharmaceutically acceptable salt or solvate thereof, and a pharmaceutically acceptable excipient.

22. Use of a compound of any one of claims 1-20 or a pharmaceutically acceptable salt or solvate thereof, or the pharmaceutical composition of claim 21, in the manufacture of a medicament for treating a disorder in a subject in need thereof or for promoting myelination in a subject in need thereof.

23. The use of claim 22, wherein the subject has a myelin-related disorder.

24. The use of claim 23, wherein the myelin-related disorder is multiple sclerosis (MS), neuromyelitis optica (NMO), optic neuritis, pediatric leukodystrophy, neonatal white matter injury, age-related dementia, schizophrenia, progressive multifocal leukoencephalopathy (PML), encephalomyelitis (EPL), central pontine myelolysis (CPM), adrenoleukodystrophy, Alexander's disease, Pelizaeus Merzbacher disease (PMD), Vanishing White Matter Disease, Wallerian Degeneration, transverse myelitis, amylotrophic lateral sclerosis (ALS), Huntington's disease, Alzheimer's disease, Parkinson's disease, spinal cord injury, traumatic brain injury, post radiation injury, neurologic complications of chemotherapy, stroke, acute ischemic optic neuropathy, vitamin E deficiency, isolated vitamin E deficiency syndrome, Bassen-Kornzweig syndrome, Marchiafava-Bignami syndrome, metachromatic leukodystrophy, trigeminal neuralgia, acute disseminated encephalitis, Guillian-Barre syndrome, Charcot-Marie-Tooth disease, Bell's palsy, or radiation-induced demyelination.

25. The use of claim 23, wherein the myelin-related disorder is multiple sclerosis.