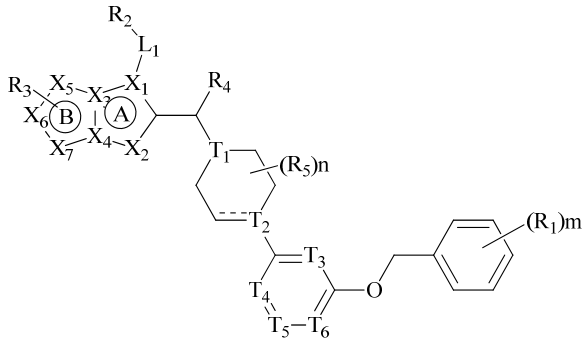
Claims

1. A compound represented by formula (III) or a pharmaceutically acceptable salt thereof,



（III）

wherein,

--- is selected from a single bond and a double bond;

T_1 is selected from N, C and CR_6;

T_2 is selected from N, C and CH;

T_3, T_4, T_5 and T_6 are each independently selected from N and CR_7;

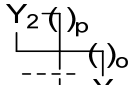
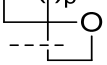
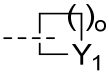
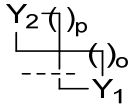
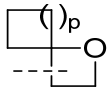
X_1, X_2, X_3 and X_4 are each independently selected from C, CH and N;

X_5, X_6 and X_7 are each independently selected from CR_8, N, O and S;

L_1 is selected from a single bond and -C_{1-3} alkyl-;

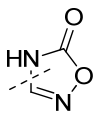
R_1 is each independently selected from F, Cl, Br, I, OH, NH_2 and CN;

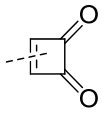
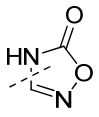
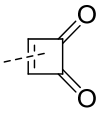
m is selected from 0, 1, 2, 3, 4 and 5;

R_2 is selected from ,  and , and the ,  and  are optionally substituted by 1, 2 or 3 R_a;

Y_1 and Y_2 are each independently selected from CH, CH_2, N, NH and O;

o and p are each independently selected from 0, 1, 2 and 3;

R_3 is selected from -C(=O)-NH-R_b, -C(=O)-R_b, -C(=O)-NH-S(=O)$_2$-R_b, -S(=O)$_2$-NH-R_b, -S(=O)$_2$-R_b, -P(=O)(R_b)$_2$, C_{1-3} alkyl, tetrazolyl, isoxazolyl,  and

, the C_{1-3} alkyl, tetrazolyl, isoxazolyl,  and  are optionally substituted by 1, 2 or 3 R_b;

R_5 is each independently selected from F, Cl, Br, I and C_{1-3} alkyl;

n is selected from 0, 1 and 2;

or, two adjacent R_5 together form C_{3-5} cycloalkyl;

R_4 is selected from H, F, Cl, Br, I and CH_3;

R_6 is selected from H, F, Cl, Br, I and CH_3;

or, R_4 and R_6 combining with the bonds to which they are attached form a double bond or C_{3-5} cycloalkyl;

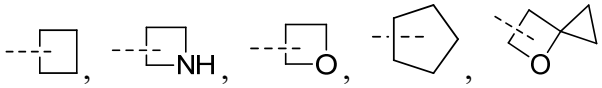
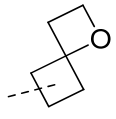
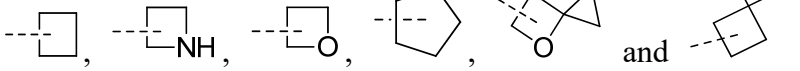
R_7 is each independently selected from H, F, Cl and CN;

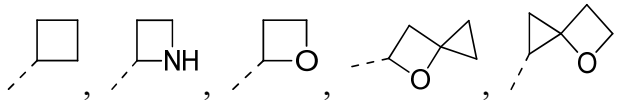
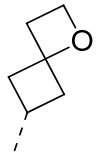
R_8 is each independently selected from H, F, Cl and CH_3;

R_a is selected from F, Cl, Br and I;

R_b is selected from OH, CN, C_{1-3} alkyl, C_{1-3} alkoxy, C_{1-3} alkylamino and oxazolyl, and the C_{1-3} alkyl, C_{1-3} alkoxy and oxazolyl are optionally substituted by 1, 2 or 3 R;

R is selected from F, Cl and Br.

2. The compound as defined in claim 1 or the pharmaceutically acceptable salt thereof, wherein, R_2 is selected from , and , the  and are optionally substituted by 1, 2 or 3 R_a.

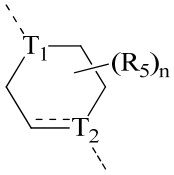
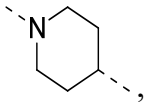
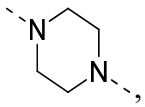
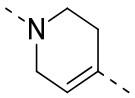
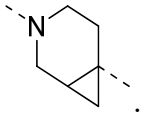
3. The compound as defined in claim 2 or the pharmaceutically acceptable salt thereof, wherein, R_2 is selected from , and .

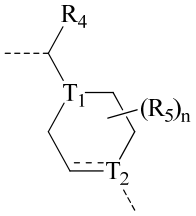
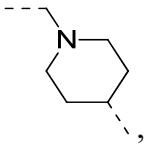
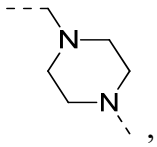
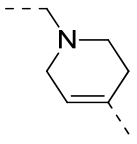
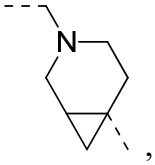
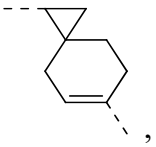
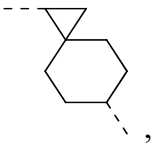
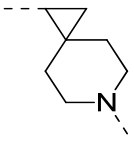
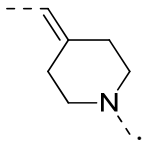
4. The compound as defined in claim 1 or the pharmaceutically acceptable salt thereof, wherein, L_1 is selected from a single bond and $-CH_2-$.

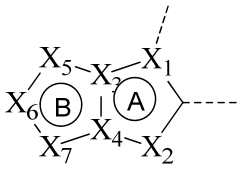
5. The compound as defined in claim 1 or the pharmaceutically acceptable salt thereof, wherein, m is selected from 0, 1 and 2.

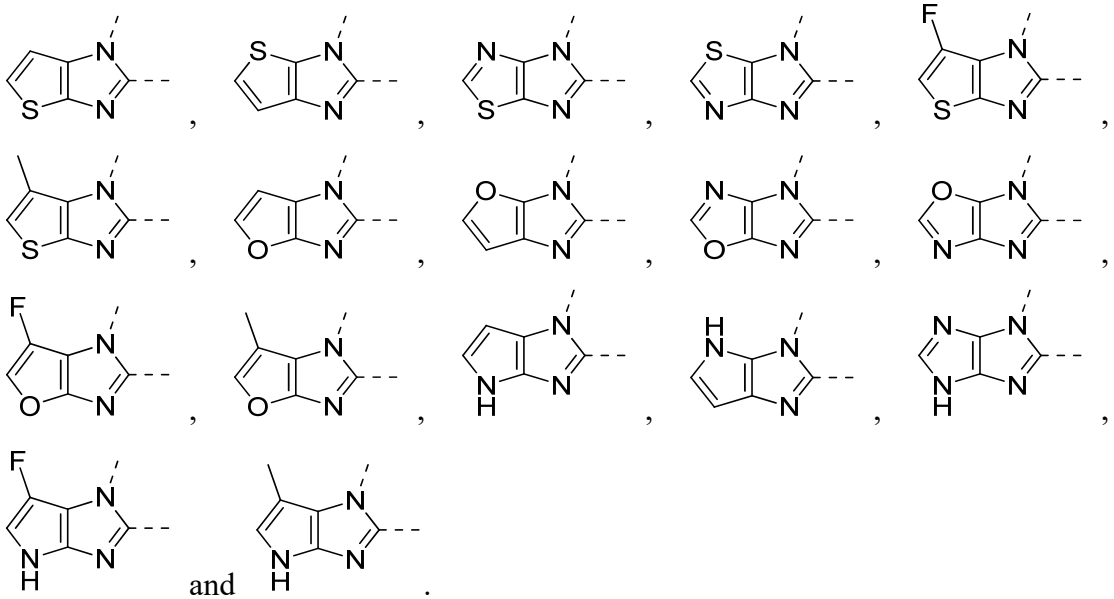
6. The compound as defined in claim 1 or the pharmaceutically acceptable salt thereof, wherein, R_b is selected from OH, CN, CH_3, CF_3 and OCH_3.

7. The compound as defined in claim 1 or 6 or the pharmaceutically acceptable salt thereof, wherein, R_3 is selected from -COOH, -C(=O)-NH-CN, -C(=O)-NH-OH, -C(=O)-NH-OCH_3, -C(=O)-CF_3, -S(=O)$_2$-NH-CH_3 and-S(=O)$_2$-OH.

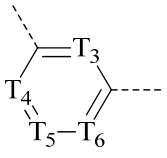
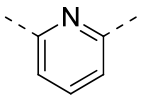
8. The compound as defined in claim 1 or the pharmaceutically acceptable salt thereof, wherein, the structural moiety  is selected from , ,  and .

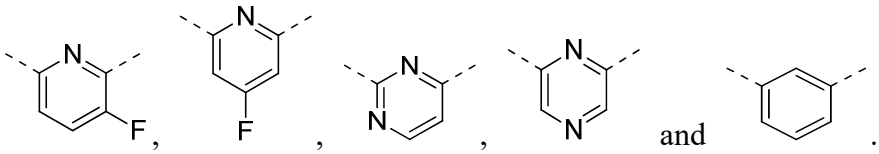
9. The compound as defined in claim 1 or the pharmaceutically acceptable salt thereof, wherein, the structural moiety  is selected from , , , , , ,  and .

10. The compound as defined in claim 1 or the pharmaceutically acceptable salt thereof, wherein, the structural moiety  is selected from



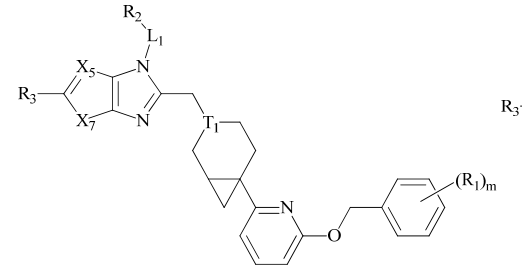
and .

11. The compound as defined in claim 1 or the pharmaceutically acceptable salt thereof, wherein the structural moiety  is selected from ,

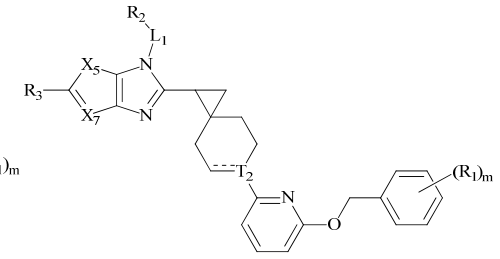


and .

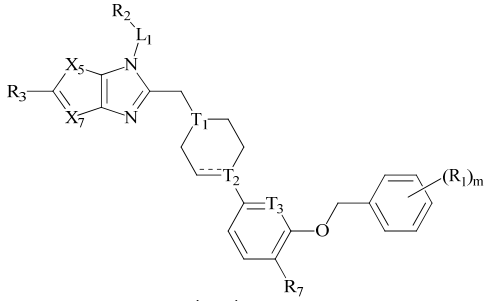
12. The compound as defined in any one of claims 1-7 or the pharmaceutically acceptable salt thereof, wherein the compound is selected from,



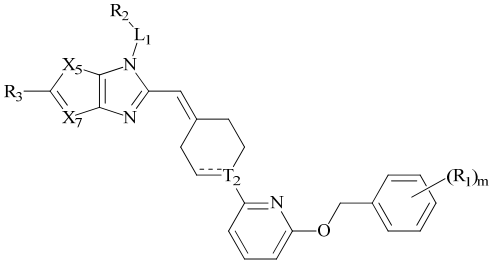
(I-2)



(I-3)

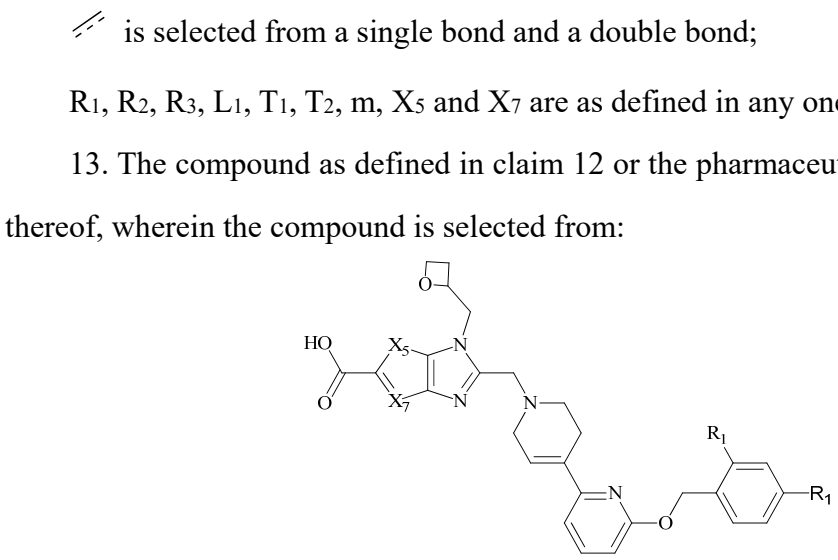


(P-1)



(P-2) ,

wherein,



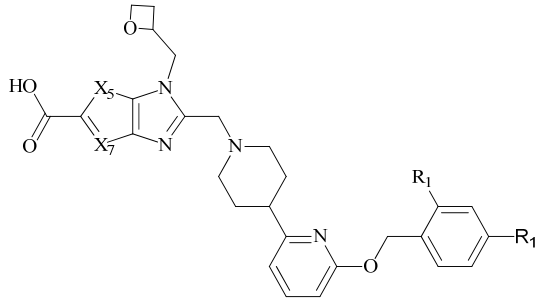
is selected from a single bond and a double bond;

R_1, R_2, R_3, L_1, T_1, T_2, m, X_5 and X_7 are as defined in any one of claims 1-7.

13. The compound as defined in claim 12 or the pharmaceutically acceptable salt thereof, wherein the compound is selected from:

(III-1a)

and

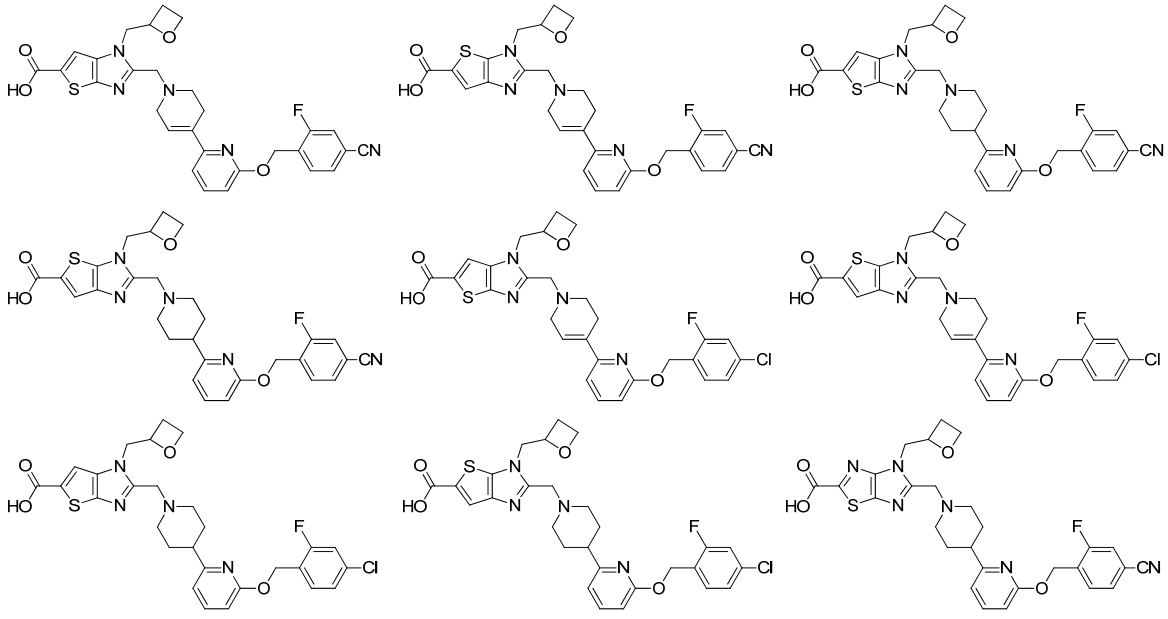


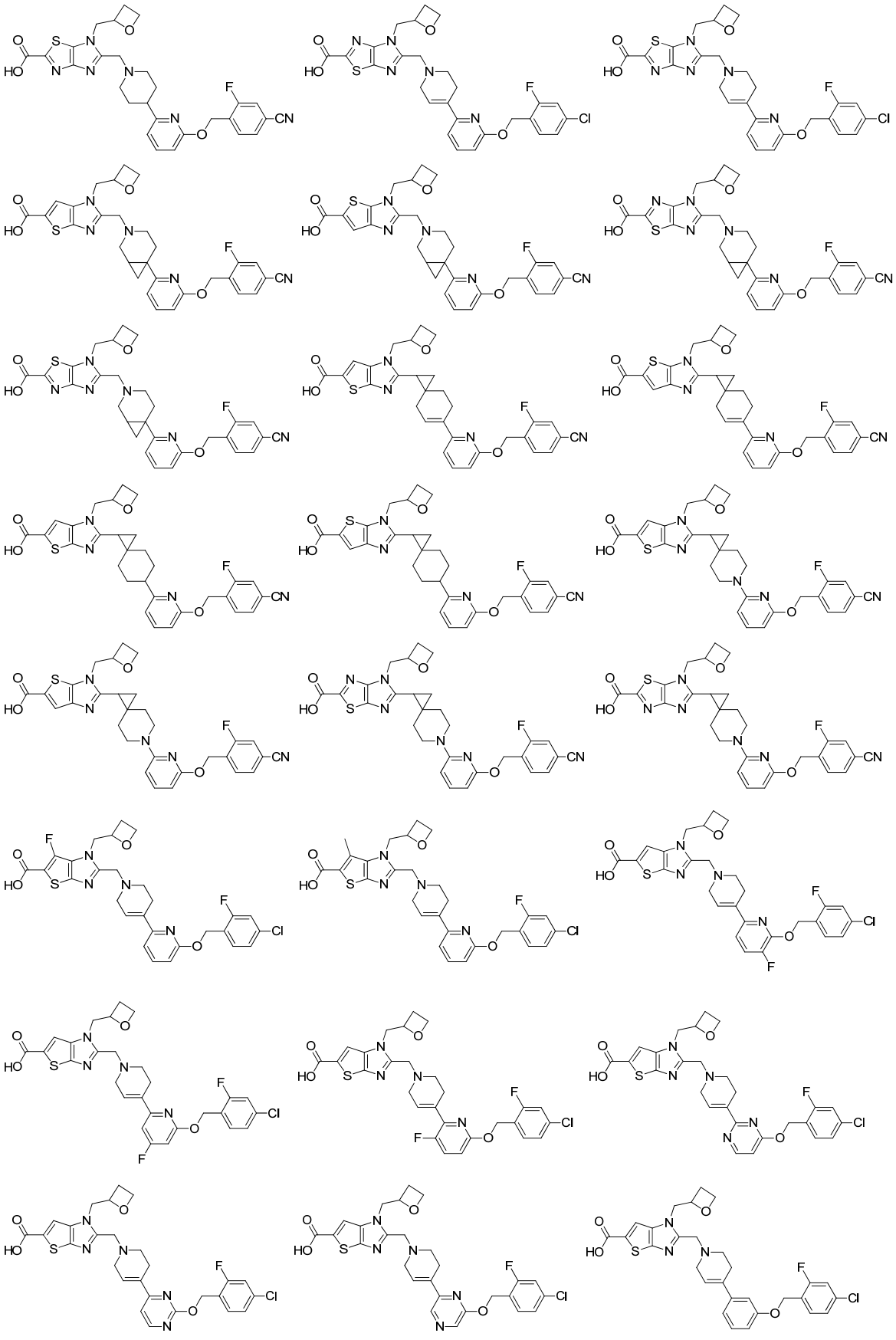
(III-1b)

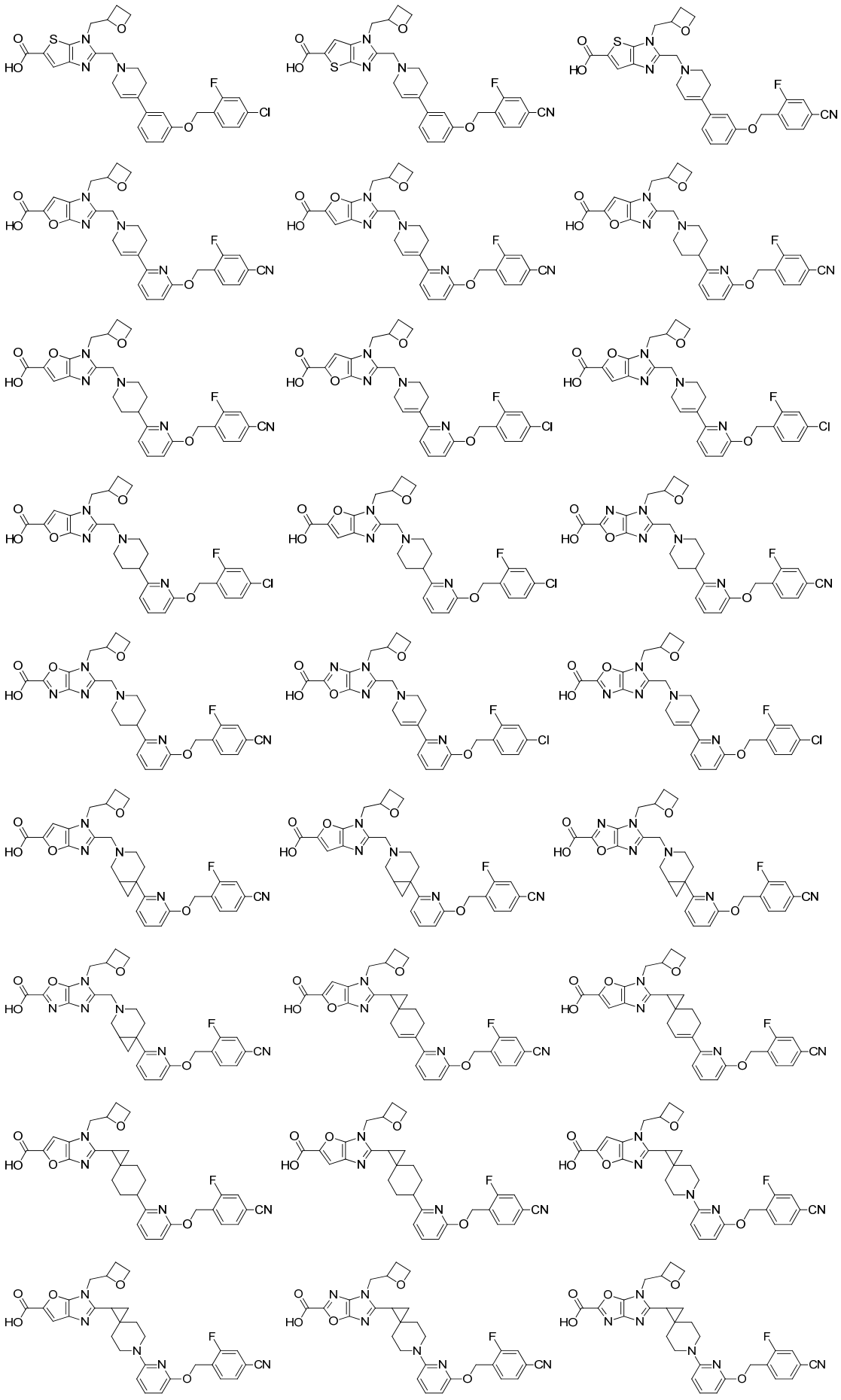
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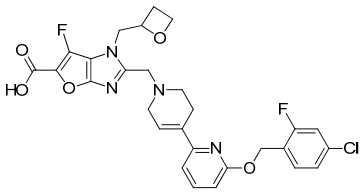
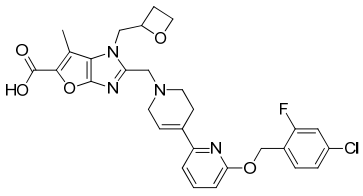
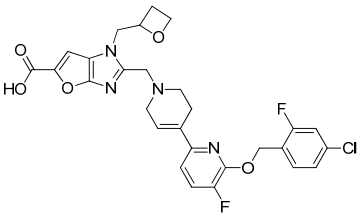
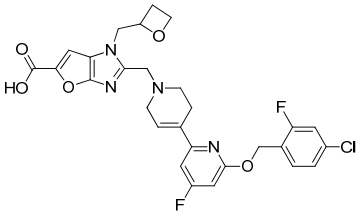
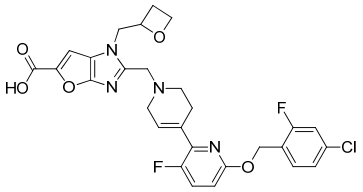
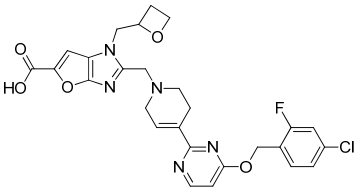
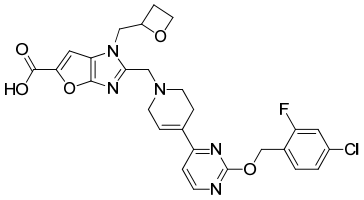
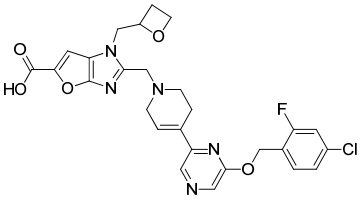
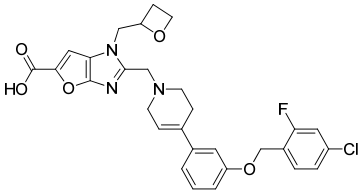
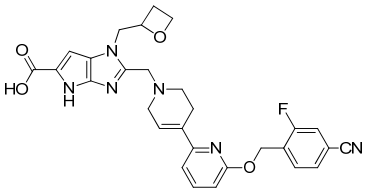
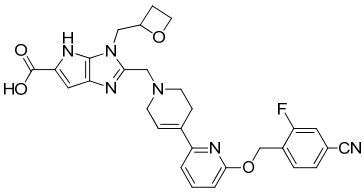
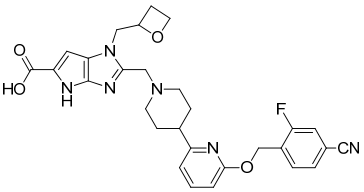
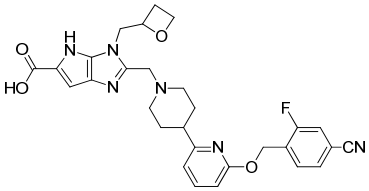
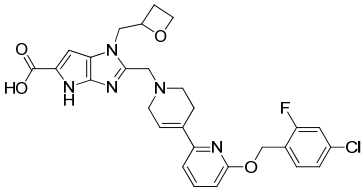
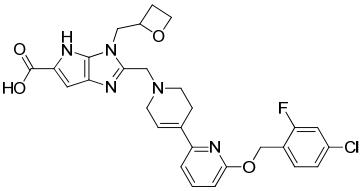
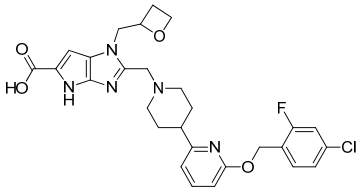
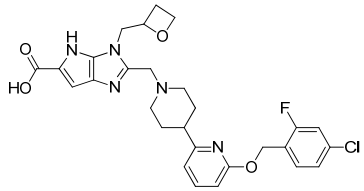
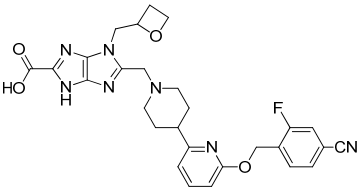
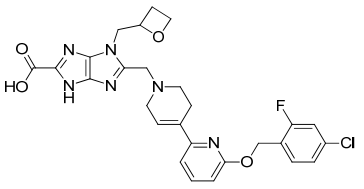
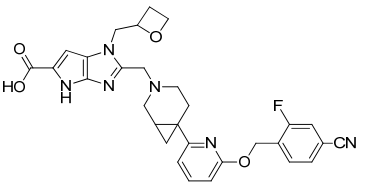
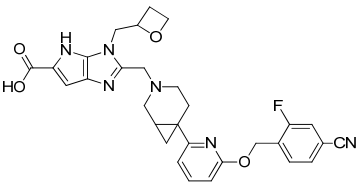
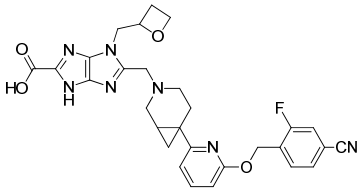
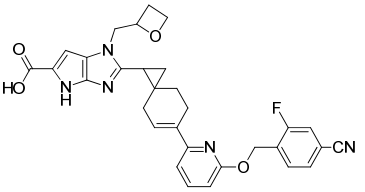
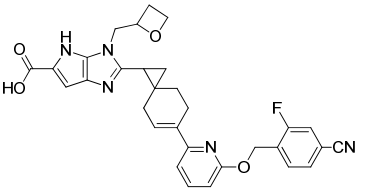
wherein, R_1, X_5 and X_7 are as defined in claim 12.

14. A compound represented by the following formula or a pharmaceutically acceptable salt thereof,

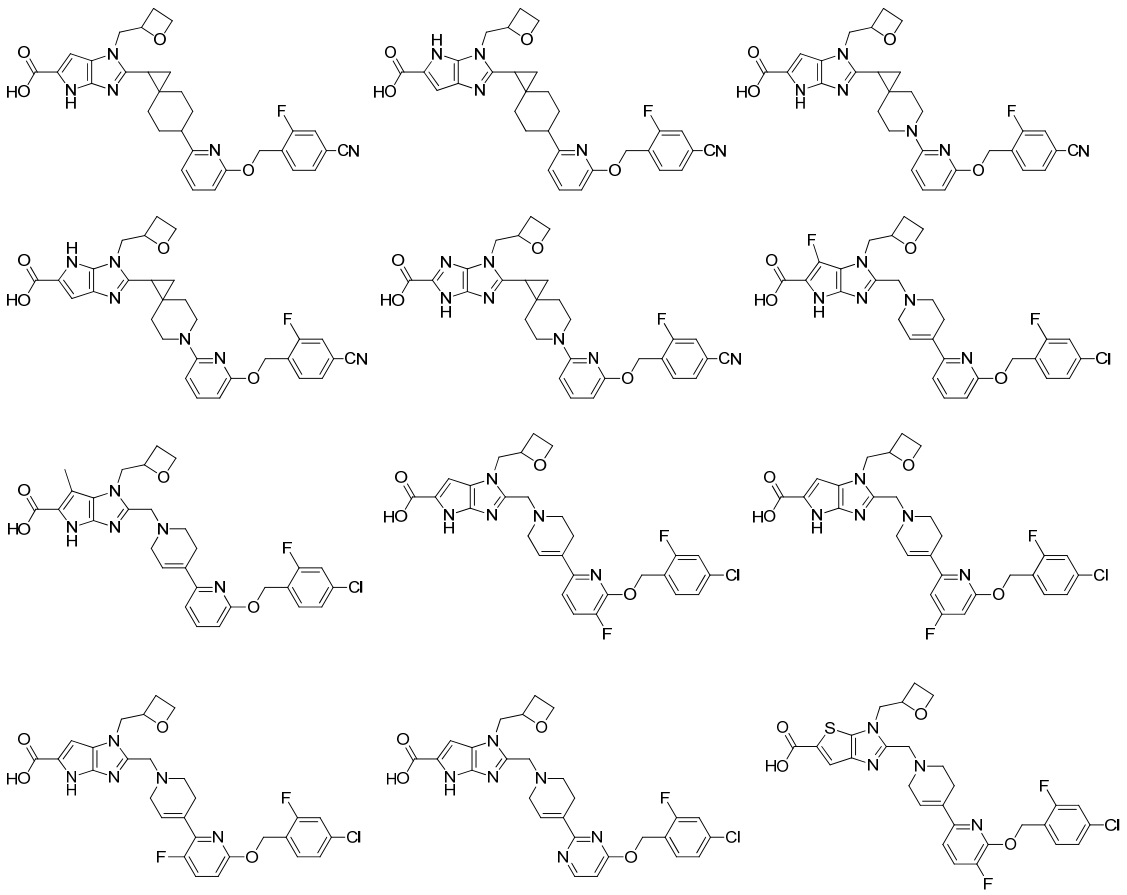






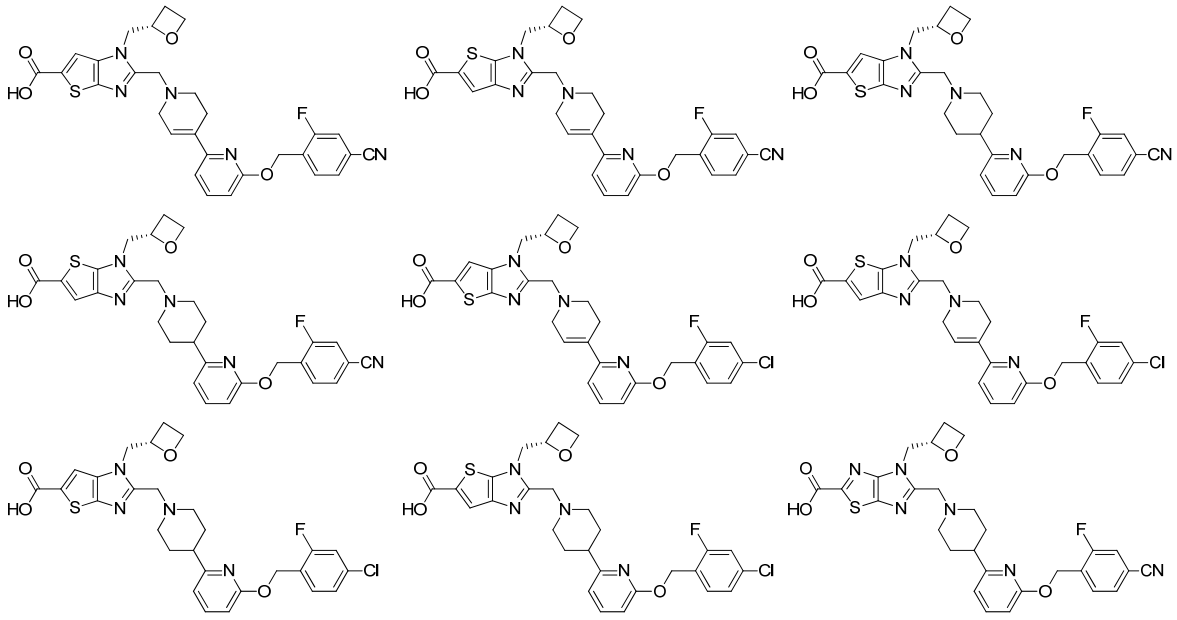

























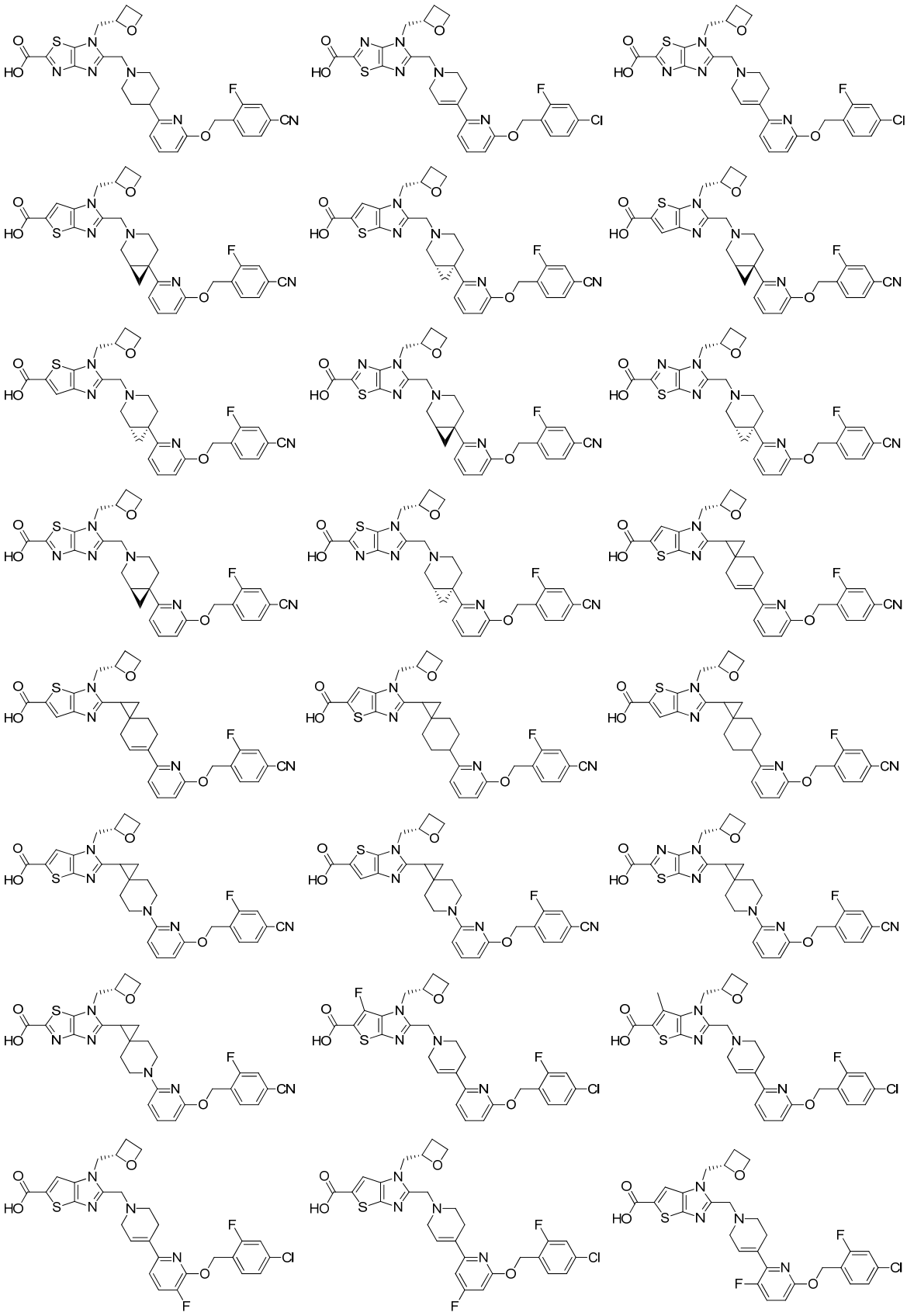


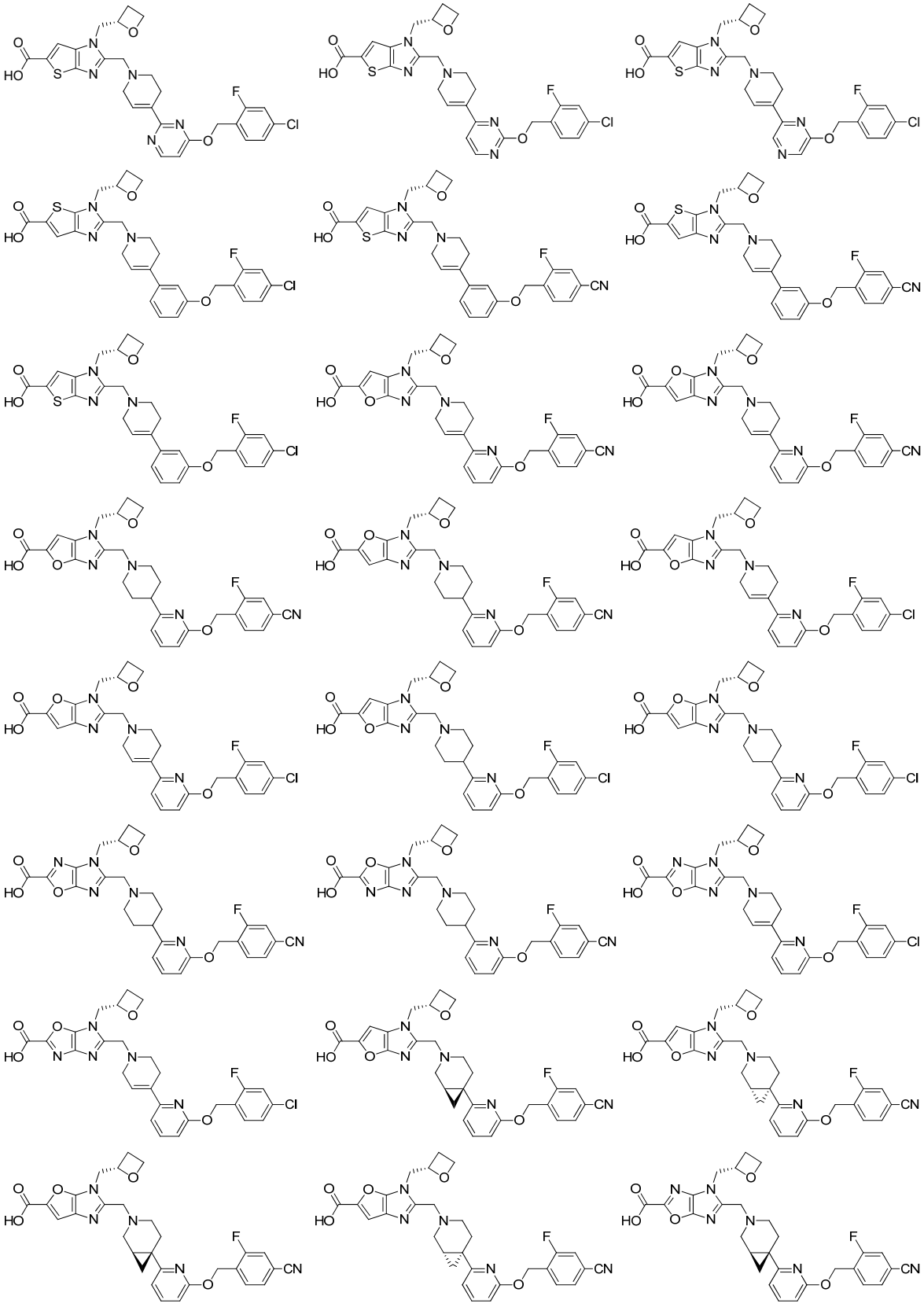


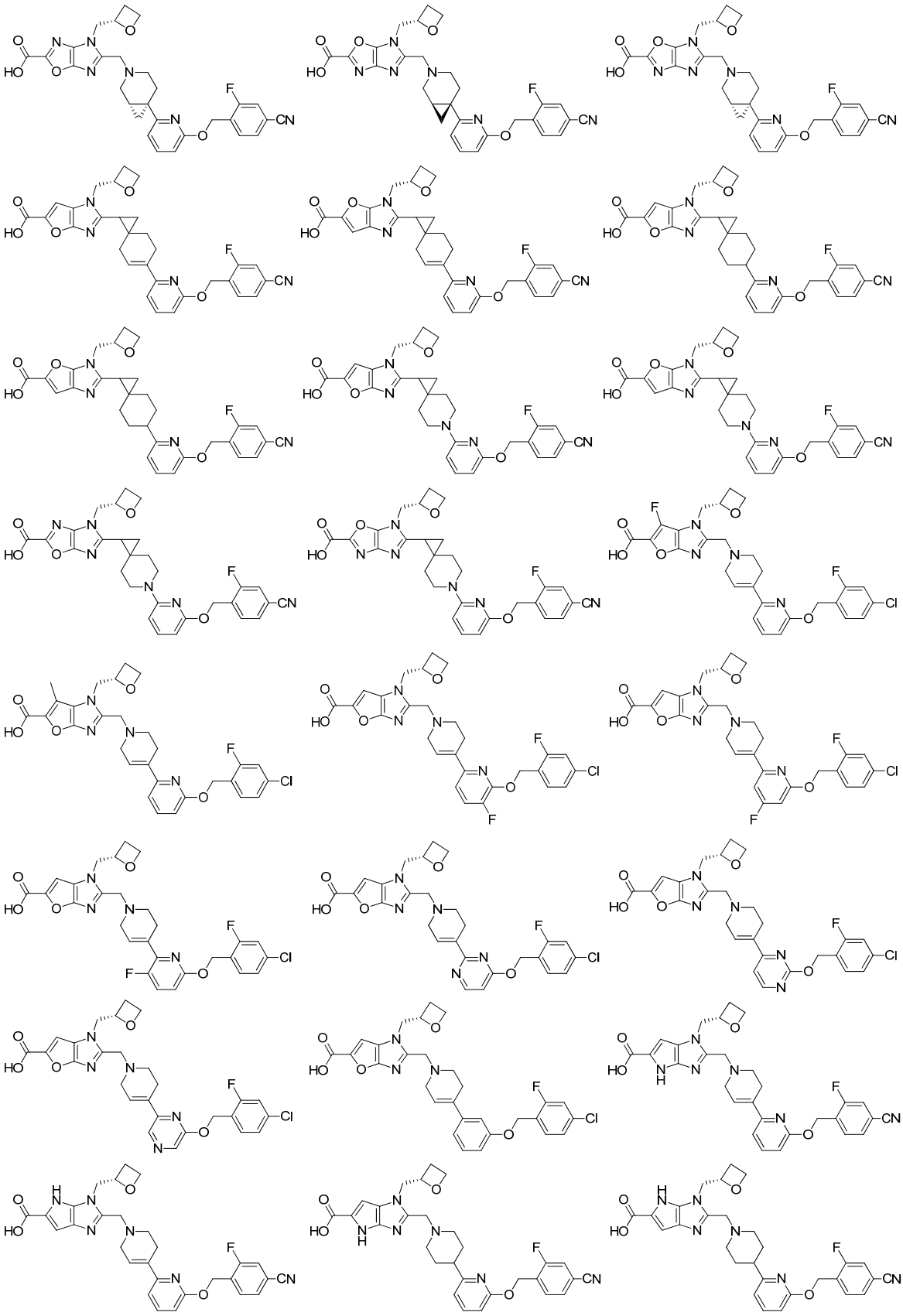
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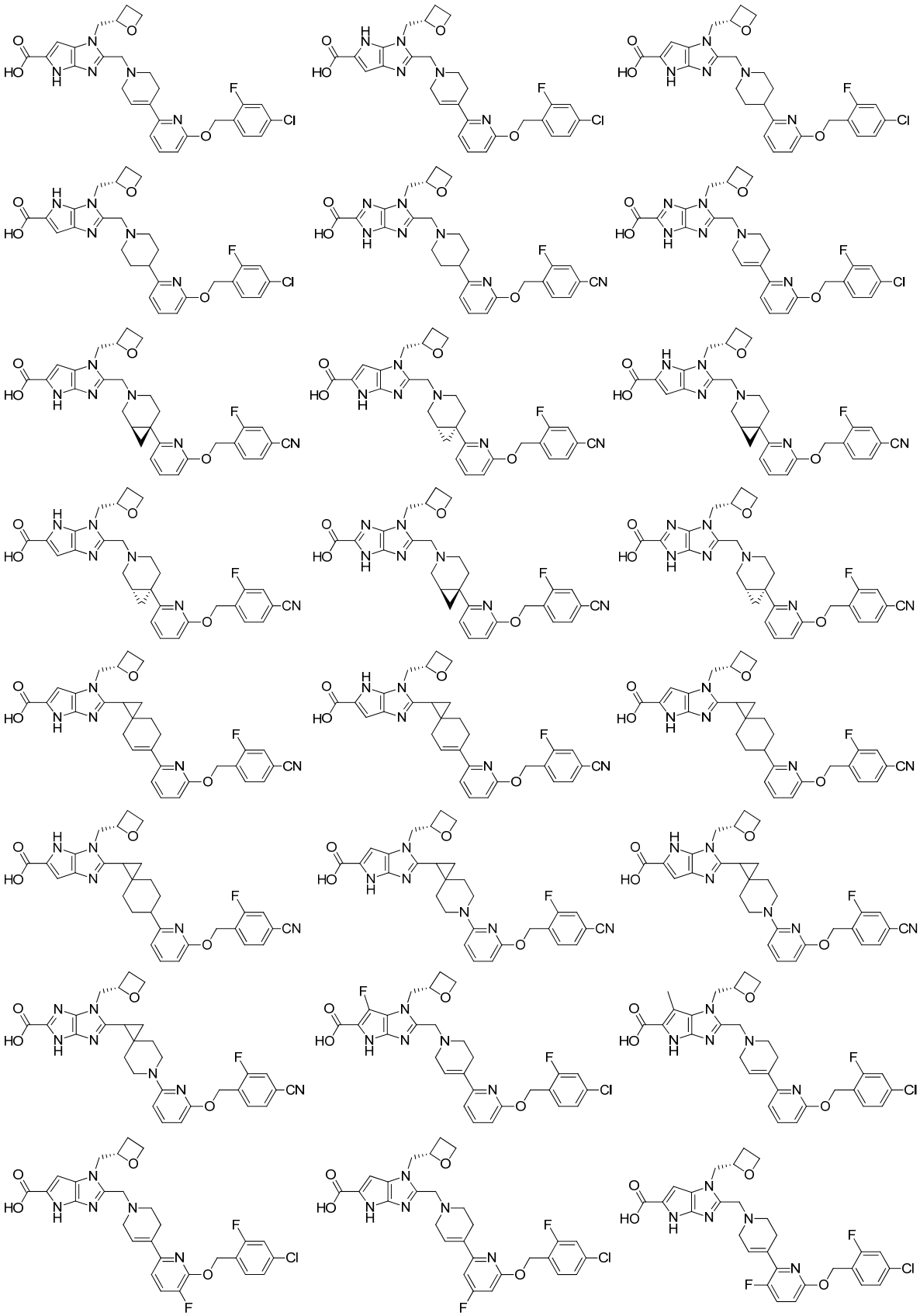
15. The compound as defined in claim 14 or the pharmaceutically acceptable salt thereof, wherein the compound is selected from:

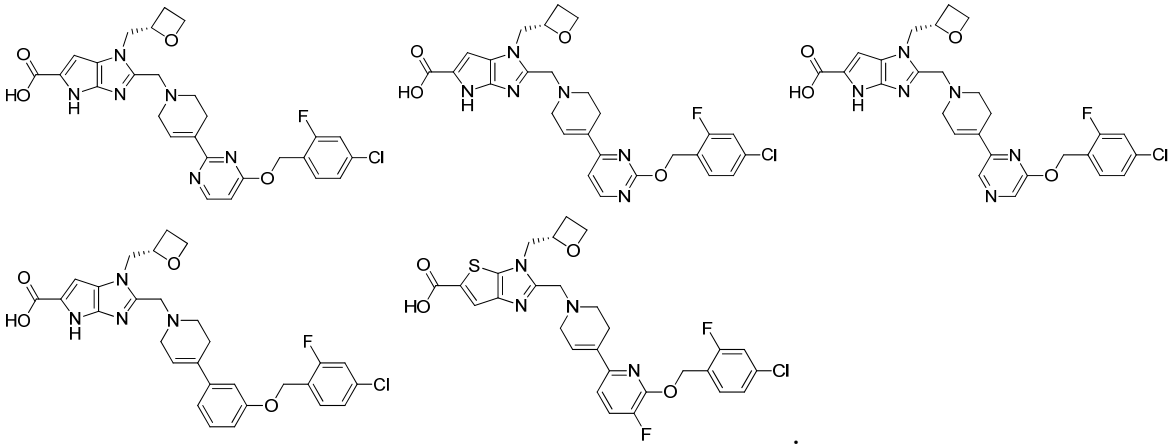












16. Use of the compound as defined in any one of claims 1-15 or the pharmaceutically acceptable salt thereof in the preparation of a medicament for the treatment of type II diabetes.