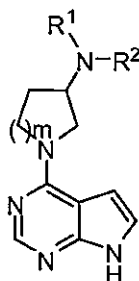


WHAT IS CLAIMED IS:

1. At least one compound of formula (I):



(I)

and/or at least one pharmaceutically acceptable salt thereof,

wherein

R^1 is chosen from hydrogen, alkyl, cycloalkyl and heterocycle,

R^2 is chosen from aryl, heterocycle, heteroaryl, $-C(O)NR^cR^d$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$,

or R^1 and R^2 , together with the N atom to which they are attached, form an optionally substituted 3- to 7-membered ring, which optionally comprises one or two additional heteroatoms and which is further optionally fused to an optionally substituted heteroaryl or optionally substituted aryl ring;

and each of the above said alkyl, aryl, cycloalkyl, heterocycle, heteroaryl in R^1 and R^2 is optionally substituted with one or more groups chosen from optionally substituted lower alkyl, optionally substituted aryl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, $-C(O)R^a$, $-C(O)OR^b$, $-CN$, $-C(O)NR^cR^d$, halo, optionally substituted haloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, $-NR^cR^d$, $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^cR^d$, $-NR^cS(O)_nR^f$, $-NR^cS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$;

m and n are independently chosen from 0, 1, and 2;

for each occurrence, R^a , R^b , R^c , R^d , R^e and R^f are each independently chosen from hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted haloalkyl, optionally substituted heteroaryl and optionally substituted heterocycle,

or R^c and R^d , with the nitrogen to which they are attached, combine to form a heterocycle ring, which is optionally substituted with one or more groups chosen from halo, lower alkyl, hydroxy, and lower alkoxy, wherein the heterocycle ring further optionally comprises one or two additional heteroatoms chosen from N, O and S.

2. At least one compound of claim 1, and/or at least one pharmaceutically acceptable salt thereof, wherein m is 1.

3. At least one compound of claim 1 or 2, and/or at least one pharmaceutically acceptable salt thereof, wherein R^1 is chosen from alkyl and cycloalkyl, each of which is optionally substituted with one or more groups chosen from optionally substituted lower alkyl, optionally substituted aryl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, $-C(O)R^a$, $-C(O)OR^b$, $-CN$, $-C(O)NR^cR^d$, halo, optionally substituted haloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, $-NR^cR^d$, $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^cR^d$, $-NR^cS(O)_nR^f$, $-NR^cS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$.

4. At least one compound of any one of claims 1 to 3, and/or at least one pharmaceutically acceptable salt thereof, wherein R^1 is alkyl optionally substituted by one or more groups chosen from alkenyl, alkynyl and cycloalkyl.

5. At least one compound of any one of claims 1 to 3, and/or at least one pharmaceutically acceptable salt thereof, wherein R^1 is cycloalkyl.

6. At least one compound of any one of claims 1 to 5, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is aryl or heteroaryl, each of which is optionally substituted with one or more groups chosen from optionally substituted lower alkyl, optionally substituted aryl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, $-C(O)R^a$, $-C(O)OR^b$, $-CN$, $-C(O)NR^cR^d$, halo, optionally substituted haloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, $-NR^cR^d$, $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^cR^d$, $-NR^cS(O)_nR^f$, $-NR^cS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$.

7. At least one compound of any one of claims 1 to 5, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is $-C(O)NR^cR^d$, or $-S(O)_nNR^cR^d$,

R^a , R^c , and R^d are each independently chosen from hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted haloalkyl, optionally substituted heteroaryl and optionally substituted heterocycle,

or R^c and R^d , with the nitrogen to which they are attached, combine to form a heterocycle ring, which is optionally substituted with one or more groups chosen from halo, lower alkyl, hydroxy, and lower alkoxy, wherein the heterocycle ring further optionally comprises one or two additional heteroatoms chosen from N, O and S.

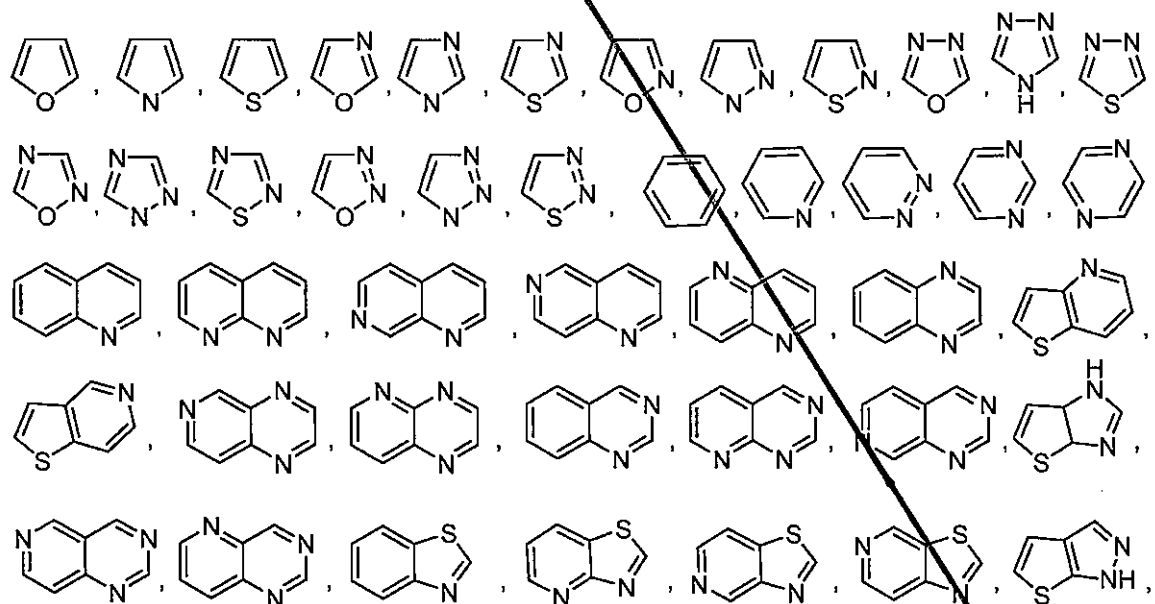
8. At least one compound of claim 7, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is $-C(O)NR^cR^d$, R^c and R^d are each independently chosen from alkyl; phenyl optionally substituted by one or more groups chosen from $-CN$, halo, alkyl and haloalkyl; indanyl optionally substituted by $-OH$; and tetrahydropyranyl.

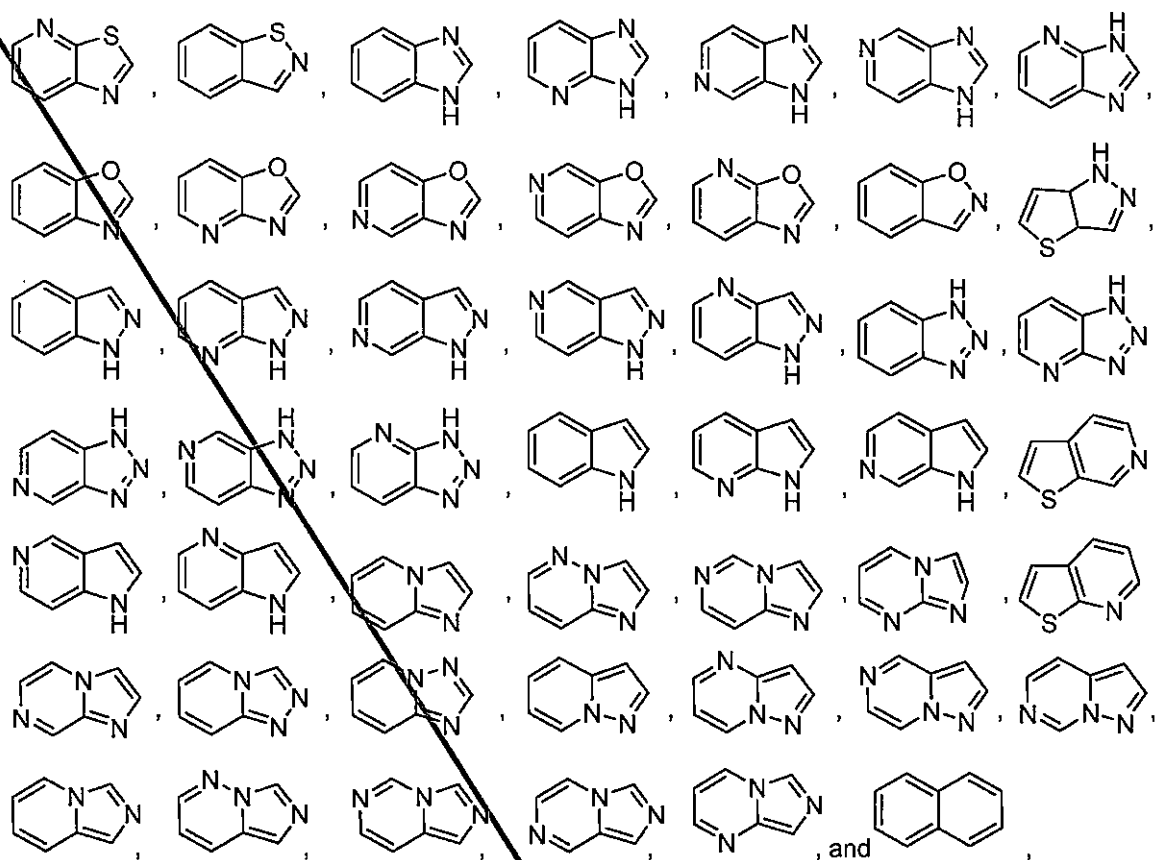
9. At least one compound of claim 7, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is $-S(O)_nNR^cR^d$, wherein n is 2, R^c and R^d are each independently chosen from H and alkyl, or R^c and R^d , with the nitrogen to which they are attached, form a pyrrolidinyl.

10. At least one compound of any one of claims 1 to 5, and/or at least one pharmaceutically acceptable salt thereof, wherein R² is -S(O)_nR^f, wherein n is 2, R^f is alkyl; phenyl optionally substituted by one or more groups chosen from halo, -CN, -NO₂ and -OR^b, wherein R^b is -H or alkyl; or cycloalkyl.

11. At least one compound of any one of claims 1 to 2, and/or at least one pharmaceutically acceptable salt thereof, wherein R¹ and R², together with the N atom to which they are attached, form indolinyl, or form imidazolonyl fused to pyridine, wherein said indolinyl and pyridine are optionally substituted by -CN.

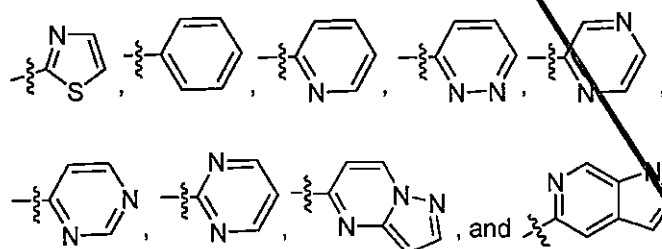
12. At least one compound of any one of claims 1 to 6, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is aryl or heteroaryl chosen from





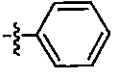
each of which is optionally substituted with one or more groups chosen from optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted cycloalkyl, optionally substituted haloalkyl, $-C(O)R^a$, $-C(O)OR^b$, $-CN$, $-C(O)NR^cR^d$, halo, optionally substituted heterocycle, optionally substituted heteroaryl, $-NR^cR^d$, $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^cR^d$, $-NR^cS(O)_nR^f$, $-NR^cS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$.

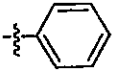
13. At least one compound of claim 12, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is aryl or heteroaryl chosen from



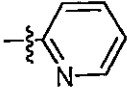
each of which is optionally substituted with one or more groups chosen from optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted cycloalkyl, optionally substituted haloalkyl,

$-C(O)R^a$, $-C(O)OR^b$, $-CN$, $-C(O)NR^cR^d$, halo, optionally substituted heterocycle, optionally substituted heteroaryl, $-NR^cR^d$, $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^cR^d$, $-NR^cS(O)_nR^f$, $-NR^cS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$.

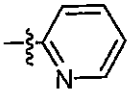
14. At least one compound of claim 13, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is , which is optionally substituted with one or more groups chosen from optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted cycloalkyl, optionally substituted haloalkyl, $-C(O)R^a$, $-C(O)OR^b$, $-CN$, $-C(O)NR^cR^d$, halo, optionally substituted heterocycle, optionally substituted heteroaryl, $-NR^cR^d$, $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^cR^d$, $-NR^cS(O)_nR^f$, $-NR^cS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$.

15. At least one compound of claim 14, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is , which is optionally substituted with one or more groups chosen from:

- $-CN$;
- halo;
- haloalkyl;
- $-NO_2$;
- amino;
- $-S(O)_nR^f$, wherein n is 2 and R^f is alkyl or haloalkyl;
- phenyl optionally substituted by one or more groups chosen from $-CN$, alkoxy, and halo;
- indanyl optionally substituted by $-OH$;
- tetrazolyl; and
- $-C(O)NR^cR^d$, wherein R^c and R^d are each independently chosen from $-H$; alkyl optionally substituted by $-OH$; alkoxy; phenyl optionally substituted by halo; and indanyl optionally substituted by $-OH$;

16. At least one compound of claim 13, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is , which is optionally substituted with one or more groups chosen from optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted cycloalkyl, optionally substituted haloalkyl, $-C(O)R^a$, $-C(O)OR^b$, $-CN$, $-C(O)NR^cR^d$, halo, optionally

substituted heterocycle, optionally substituted heteroaryl, $-NR^cR^d$, $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^cR^d$, $-NR^cS(O)_nR^f$, $-NR^cS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$.

17. At least one compound of claim 16, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is , which is optionally substituted with one or more groups chosen from:

- CN;
- alkynyl;
- halo;
- $-NO_2$;
- alkyl;
- amino;
- haloalkyl;
- phenyl optionally substituted by -CN;
- heteroaryl selected from tetrazolyl, thienyl, pyridinyl and pyrazolyl, said heteroaryl is optionally substituted by alkyl;
- $-OR^b$, wherein R^b is -H or alkyl;
- $-S(O)_nR^f$ wherein n is 2 and R^f is alkyl;
- $-COOR^b$ wherein R^b is H or alkyl;
- $-C(O)NR^cR^d$, wherein R^c and R^d are each independently chosen from H; cycloalkyl optionally substituted by -OH; alkyl optionally substituted by one or more groups chosen from -OH and phenyl; phenyl optionally substituted by one or more groups chosen from alkyl, alkoxy, and halo; pyridinyl; and thiazolyl;
- $-NR^cS(O)_nR^f$, wherein n is 2, R^c is H and R^f is alkyl; cycloalkyl; benzyl optionally substituted by one or more groups chosen from halo and alkyl; phenyl optionally substituted by halo; thienyl; or pyridinyl;
- $-NR^cC(O)R^a$, wherein R^c is H, and R^a is cycloalkyl; phenyl optionally substituted by halo; or alkyl substituted by $-OR^b$, wherein R^b is alkyl;
- $-NR^cR^d$, wherein R^c and R^d are each independently benzyl optionally substituted by halo; and
- $-S(O)_nNR^cR^d$, wherein n is 2, R^c and R^d are each independently chosen from -H; alkyl optionally substituted by one or more groups chosen from alkynyl, cycloalkyl, tetrahydrofuranyl, phenyl optionally substituted by one or more groups chosen from halo, and $-OR^b$, wherein R^b is -H or alkyl; cycloalkyl optionally substituted by OH; indanyl optionally

substituted by OH; tetrahydropyranyl; tetrahydrofuranyl; oxetanyl; pyrazolyl optionally substituted by alkyl; and phenyl optionally substituted by halo; or R^c and R^d, with the nitrogen to which they are attached, form a heterocycle ring selected from pyrrolidinyl, piperazinyl and morpholinyl.

18. At least one compound of claim 13, and/or at least one pharmaceutically acceptable salt thereof, wherein R² is pyrazinyl optionally substituted with one or more groups chosen from: -CN, alkoxy, morpholino, pyrazolyl, imidazolyl, and -NR^cR^d, wherein R^c and R^d are each independently chosen from cycloalkyl and alkyl, each optionally substituted by -OH.

19. At least one compound of claim 13, and/or at least one pharmaceutically acceptable salt thereof, wherein R² is pyridazinyl optionally substituted with one or more groups chosen from -CN, halo, and haloalkyl.

20. At least one compound of claim 13, and/or at least one pharmaceutically acceptable salt thereof, wherein R² is pyrimidinyl optionally substituted with one or more groups chosen from -CN, halo, -NO₂, -OR^b, and -NR^cR^d, wherein R^b, R^c and R^d are each independently chosen from -H and alkyl.

21. At least one compound of any one of claims 1 to 20, and/or at least one pharmaceutically acceptable salt thereof, wherein R¹ is chosen from C₁₋₃ alkyl, allyl, propargyl, and cyclopropyl, each of which is optionally substituted with one or more groups chosen from optionally substituted lower alkyl, optionally substituted aryl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, -C(O)R^a, -C(O)OR^b, -CN, -C(O)NR^cR^d, halo, optionally substituted haloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, -NR^cR^d, -NR^cC(O)R^a, -NR^cC(O)OR^b, -NR^cC(O)NR^cR^d, -NR^cS(O)_nR^f, -NR^cS(O)_nNR^cR^d, -NO₂, -OR^b, -S(O)_nR^f, and -S(O)_nNR^cR^d.

22. At least one compound of claim 21, and/or at least one pharmaceutically acceptable salt thereof, wherein R¹ is methyl.

23. At least one compound of any one of claims 1 to 22, and/or at least one pharmaceutically acceptable salt thereof, wherein the absolute stereocenter bearing the -N(R¹)(R²) group is the *R*-isomer.

24. At least one compound chosen from compounds 1 to 260 and/or at least one pharmaceutically acceptable salt thereof.

25. A composition comprising at least one compound of any one of claims 1 to 24, and/or at least one pharmaceutically acceptable salt thereof and at least one pharmaceutically acceptable carrier.

26. A method of inhibiting the activity of at least one kinase chosen from JAK1, JAK2, JAK3 and TYK2 comprising contacting the at least one kinase with an effective amount of at least one compound of any one of claims 1 to 24, and/or at least one pharmaceutically acceptable salt thereof.

27. A method of treating in a subject an inflammatory disease responsive to inhibition of at least one kinase chosen from JAK1, JAK2, JAK3 and TYK2 comprising administering to said subject in need thereof an effective amount of at least one compound of any one of claims 1 to 24, and/or at least one pharmaceutically acceptable salt thereof.

28. A method of treating in a subject a cancer responsive to inhibition of at least one kinase chosen from JAK1, JAK2, JAK3 and TYK2 comprising administering to said subject in need thereof an effective amount of at least one compound of any one of claims 1 to 24, and/or at least one pharmaceutically acceptable salt thereof.

29. A method for treating in a subject a cancer responsive to inhibition of at least one kinase chosen from JAK1, JAK2, JAK3 and TYK2 comprising:

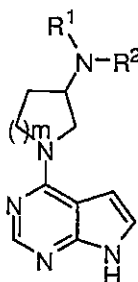
administering to said subject in need thereof an effective amount of at least one compound of any one of claims 1 to 24, and/or at least one pharmaceutically acceptable salt thereof, and

administering to the subject an amount of an anti-neoplastic agent, wherein said anti-neoplastic agent is different from said at least one compound of any one of claims 1 to 24, and/or at least one pharmaceutically acceptable salt thereof.

30. Use of at least one compound of any one of claims 1 to 24, and/or at least one pharmaceutically acceptable salt thereof in the preparation of a medication for treating an inflammatory disease or cancer responsive to inhibition of at least one kinase chosen from JAK1, JAK2, JAK3 and TYK2.

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. At least one compound of formula (I):



(I)

and/or at least one pharmaceutically acceptable salt thereof,

wherein

R^1 is chosen from hydrogen, alkyl, cycloalkyl and heterocycle,

R^2 is chosen from aryl, heterocycle, heteroaryl, $-C(O)NR^cR^d$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$,

or R^1 and R^2 , together with the N atom to which they are attached, form an optionally substituted 3- to 7-membered ring, which optionally comprises one or two additional heteroatoms and which is further optionally fused to an optionally substituted heteroaryl or optionally substituted aryl ring;

and each of the above said alkyl, aryl, cycloalkyl, heterocycle, heteroaryl in R^1 and R^2 is optionally substituted with one or more groups chosen from optionally substituted lower alkyl, optionally substituted aryl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, $-C(O)R^a$, $-C(O)OR^b$, $-CN$, $-C(O)NR^cR^d$, halo, optionally substituted haloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, $-NR^cR^d$, $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^cR^d$, $-NR^cS(O)_nR^f$, $-NR^cS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$;

m is 1;

n is independently chosen from 0, 1, and 2;

for each occurrence, R^a , R^b , R^c , R^d , R^e and R^f are each independently chosen from hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted haloalkyl, optionally substituted heteroaryl and optionally substituted heterocycle,

or R^c and R^d , with the nitrogen to which they are attached, combine to form a heterocycle ring, which is optionally substituted with one or more groups chosen from halo, lower alkyl, hydroxy, and lower alkoxy, wherein the heterocycle ring further optionally comprises one or two additional heteroatoms chosen from N, O and S.

5 2. At least one compound of claim 1, and/or at least one pharmaceutically acceptable salt thereof, wherein R^1 is chosen from alkyl and cycloalkyl, each of which is optionally substituted with one or more groups chosen from optionally substituted lower alkyl, optionally substituted aryl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, $-C(O)R^a$, $-C(O)OR^b$, $-CN$, $-C(O)NR^cR^d$, halo, optionally substituted haloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, -
10 NR^cR^d , $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^cR^d$, $-NR^eS(O)_nR^f$, $-NR^eS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$.

 3. At least one compound of claim 1 or claim 2, and/or at least one pharmaceutically acceptable salt thereof, wherein R^1 is alkyl optionally substituted by one or
15 more groups chosen from alkenyl, alkynyl and cycloalkyl.

 4. At least one compound of claim 1 or claim 2, and/or at least one pharmaceutically acceptable salt thereof, wherein R^1 is cycloalkyl.

 5. At least one compound of any one of claims 1 to 4, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is aryl or heteroaryl, each of which is
20 optionally substituted with one or more groups chosen from optionally substituted lower alkyl, optionally substituted aryl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, $-C(O)R^a$, $-C(O)OR^b$, $-CN$, $-C(O)NR^cR^d$, halo, optionally substituted haloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, -
25 NR^cR^d , $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^cR^d$, $-NR^eS(O)_nR^f$, $-NR^eS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$.

 6. At least one compound of any one of claims 1 to 4, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is $-C(O)NR^cR^d$, or $-S(O)_nNR^cR^d$,

R^c and R^d are each independently chosen from hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl,
30 optionally substituted aryl, optionally substituted haloalkyl, optionally substituted heteroaryl and optionally substituted heterocycle,

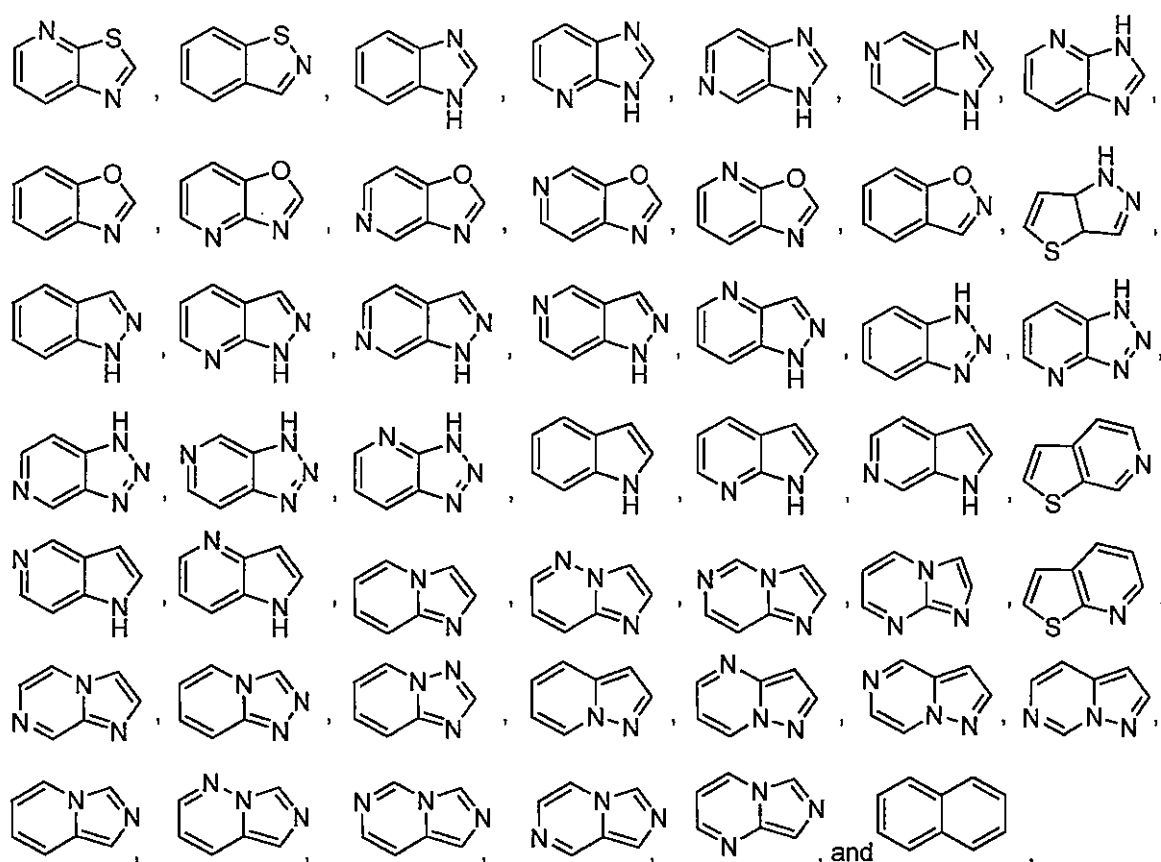
 or R^c and R^d , with the nitrogen to which they are attached, combine to form a heterocycle ring, which is optionally substituted with one or more groups chosen from halo,

7. At least one compound of claim 6, and/or at least one pharmaceutically acceptable salt thereof, wherein R² is -C(O)NR^cR^d, R^c and R^d are each independently chosen from alkyl; phenyl optionally substituted by one or more groups chosen from -CN, halo, alkyl and haloalkyl; indanyl optionally substituted by- OH; and tetrahydropyranyl.

9. At least one compound of any one of claims 1 to 4, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is $-S(O)_nR^f$, wherein n is 2, R^f is alkyl; phenyl optionally substituted by one or more groups chosen from halo, $-CN$, $-NO_2$ and $-OR^b$, wherein R^b is $-H$ or alkyl; or cycloalkyl.

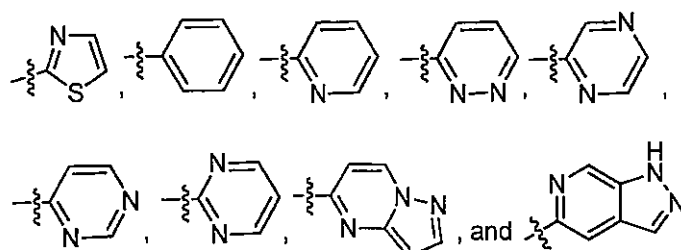
11. At least one compound of any one of claims 1 to 5, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is aryl or heteroaryl chosen from





each of which is optionally substituted with one or more groups chosen from optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted cycloalkyl, optionally substituted haloalkyl, $-C(O)R^a$, $-C(O)OR^b$, $-CN$, $-C(O)NR^cR^d$, halo, optionally substituted heterocycle, optionally substituted heteroaryl, $-NR^cR^d$, $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^eR^d$, $-NR^eS(O)_nR^f$, $-NR^eS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$.

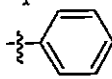
12. At least one compound of claim 11, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is aryl or heteroaryl chosen from



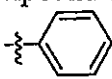
each of which is optionally substituted with one or more groups chosen from optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted cycloalkyl, optionally substituted haloalkyl, $-C(O)R^a$, $-$

$C(O)OR^b$, $-CN$, $-C(O)NR^cR^d$, halo, optionally substituted heterocycle, optionally substituted heteroaryl, $-NR^cR^d$, $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^cR^d$, $-NR^eS(O)_nR^f$, $-NR^eS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$.

13. At least one compound of claim 12, and/or at least one pharmaceutically acceptable

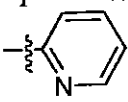
5 salt thereof, wherein R^2 is , which is optionally substituted with one or more groups chosen from optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted cycloalkyl, optionally substituted haloalkyl, $-C(O)R^a$, $-C(O)OR^b$, $-CN$, $-C(O)NR^cR^d$, halo, optionally substituted heterocycle, optionally substituted heteroaryl, $-NR^cR^d$, $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^cR^d$, $-NR^eS(O)_nR^f$, $-NR^eS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$.

14. At least one compound of claim 13, and/or at least one pharmaceutically acceptable

salt thereof, wherein R^2 is , which is optionally substituted with one or more groups chosen from:

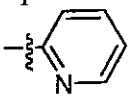
15 $-CN$;
halo;
haloalkyl;
 $-NO_2$;
amino;
 $-S(O)_nR^f$, wherein n is 2 and R^f is alkyl or haloalkyl;
20 phenyl optionally substituted by one or more groups chosen from $-CN$, alkoxy, and halo;
indanyl optionally substituted by $-OH$;
tetrazolyl; and
 $-C(O)NR^cR^d$, wherein R^c and R^d are each independently chosen from $-H$; alkyl
25 optionally substituted by $-OH$; alkoxy; phenyl optionally substituted by halo; and indanyl optionally substituted by $-OH$;

15. At least one compound of claim 12, and/or at least one pharmaceutically acceptable

30 salt thereof, wherein R^2 is , which is optionally substituted with one or more groups chosen from optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted cycloalkyl, optionally substituted haloalkyl, $-C(O)R^a$, $-C(O)OR^b$, $-CN$, $-C(O)NR^cR^d$, halo, optionally substituted heterocycle,

optionally substituted heteroaryl, $-NR^cR^d$, $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^cR^d$, $-NR^eS(O)_nR^f$, $-NR^eS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$.

16. At least one compound of claim 15, and/or at least one pharmaceutically acceptable

salt thereof, wherein R^2 is , which is optionally substituted with one or more groups
5 chosen from:

-CN;

alkynyl;

halo;

-NO₂;

10 alkyl;

amino;

haloalkyl;

phenyl optionally substituted by -CN;

heteroaryl selected from tetrazolyl, thienyl, pyridinyl and pyrazolyl, said heteroaryl is

15 optionally substituted by alkyl;

-OR^b, wherein R^b is -H or alkyl;

-S(O)_nR^f wherein n is 2 and R^f is alkyl;

-COOR^b wherein R^b is H or alkyl;

-C(O)NR^cR^d, wherein R^c and R^d are each independently chosen from H; cycloalkyl

20 optionally substituted by -OH; alkyl optionally substituted by one or more groups chosen from

-OH and phenyl; phenyl optionally substituted by one or more groups chosen from alkyl,

alkoxy, and halo; pyridinyl; and thiazolyl;

-NR^eS(O)_nR^f, wherein n is 2, R^e is H and R^f is alkyl; cycloalkyl; benzyl optionally
substituted by one or more groups chosen from halo and alkyl; phenyl optionally substituted

25 by halo; thienyl; or pyridinyl;

-NR^cC(O)R^a, wherein R^c is H, and R^a is cycloalkyl; phenyl optionally substituted by
halo; or alkyl substituted by -OR^b, wherein R^b is alkyl;

-NR^cR^d, wherein R^c and R^d are each independently benzyl optionally substituted by
halo; and

30 -S(O)_nNR^cR^d, wherein n is 2, R^c and R^d are each independently chosen from -H; alkyl
optionally substituted by one or more groups chosen from alkynyl, cycloalkyl,

tetrahydrofuranyl, phenyl optionally substituted by one or more groups chosen from halo, and

-OR^b, wherein R^b is -H or alkyl; cycloalkyl optionally substituted by OH; indanyl optionally
substituted by OH; tetrahydropyranyl; tetrahydrofuranyl; oxetanyl; pyrazolyl optionally

substituted by alkyl; and phenyl optionally substituted by halo; or R^c and R^d , with the nitrogen to which they are attached, form a heterocycle ring selected from pyrrolidinyl, piperazinyl and morpholinyl.

17. At least one compound of claim 12, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is pyrazinyl optionally substituted with one or more groups chosen from: -CN, alkoxy, morpholino, pyrazolyl, imidazolyl, and $-NR^cR^d$, wherein R^c and R^d are each independently chosen from cycloalkyl and alkyl, each optionally substituted by -OH.

18. At least one compound of claim 12, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is pyridazinyl optionally substituted with one or more groups chosen from -CN, halo, and haloalkyl.

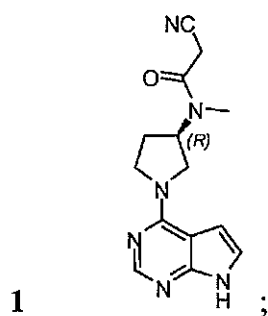
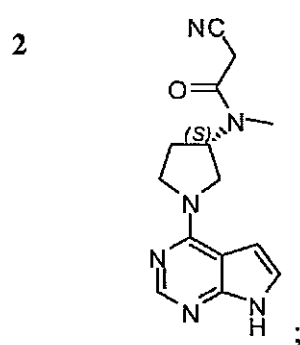
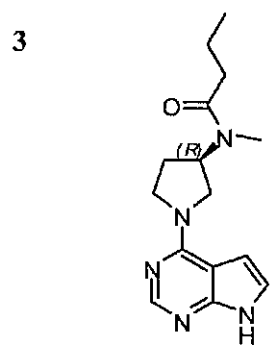
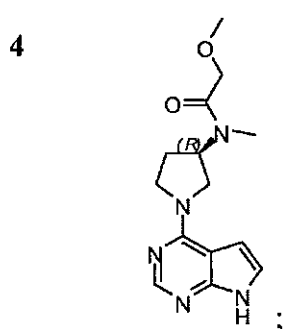
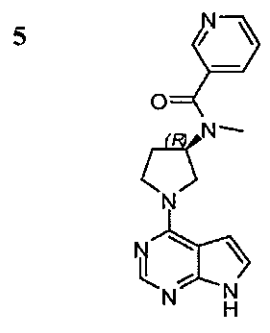
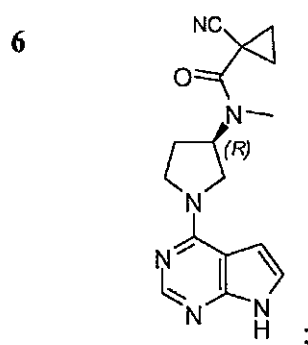
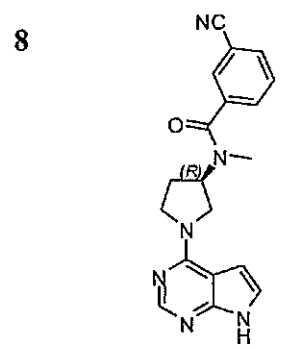
19. At least one compound of claim 12, and/or at least one pharmaceutically acceptable salt thereof, wherein R^2 is pyrimidinyl optionally substituted with one or more groups chosen from -CN, halo, $-NO_2$, $-OR^b$, and $-NR^cR^d$, wherein R^b , R^c and R^d are each independently chosen from -H and alkyl.

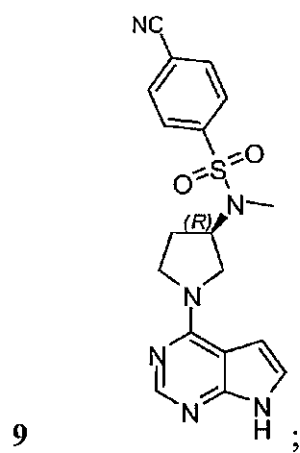
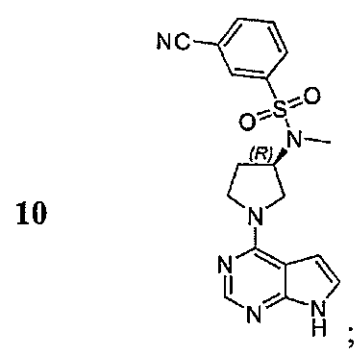
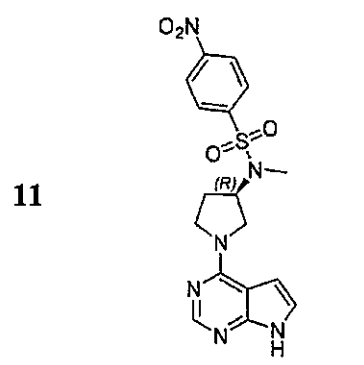
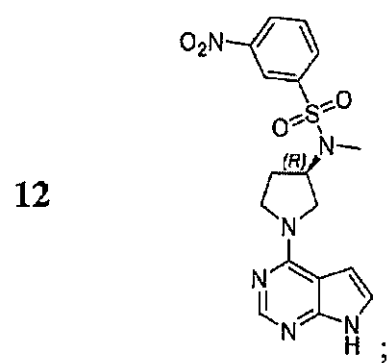
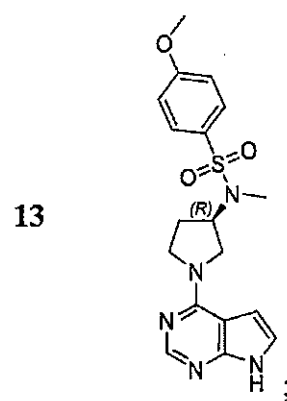
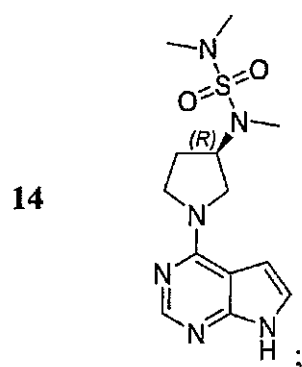
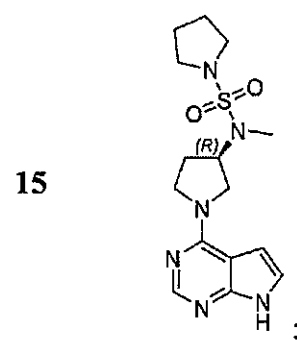
20. At least one compound of any one of claims 1 to 19, and/or at least one pharmaceutically acceptable salt thereof, wherein R^1 is chosen from C_{1-3} alkyl, allyl, propargyl, and cyclopropyl, each of which is optionally substituted with one or more groups chosen from optionally substituted lower alkyl, optionally substituted aryl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, $-C(O)R^a$, $-C(O)OR^b$, -CN, $-C(O)NR^cR^d$, halo, optionally substituted haloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, $-NR^cR^d$, $-NR^cC(O)R^a$, $-NR^cC(O)OR^b$, $-NR^cC(O)NR^cR^d$, $-NR^cS(O)_nR^f$, $-NR^cS(O)_nNR^cR^d$, $-NO_2$, $-OR^b$, $-S(O)_nR^f$, and $-S(O)_nNR^cR^d$.

21. At least one compound of claim 20, and/or at least one pharmaceutically acceptable salt thereof, wherein R^1 is methyl.

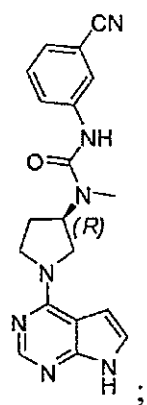
22. At least one compound of any one of claims 1 to 21, and/or at least one pharmaceutically acceptable salt thereof, wherein the absolute stereocenter bearing the $-N(R^1)(R^2)$ group is the *R*-isomer.

23. At least one compound chosen from compounds 1 to 6 and 8 to 260 shown below, and/or at least one pharmaceutically acceptable salt thereof:

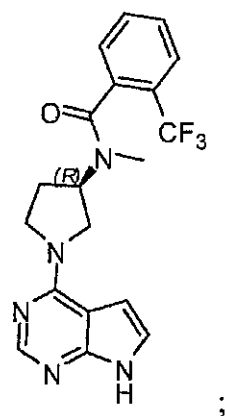




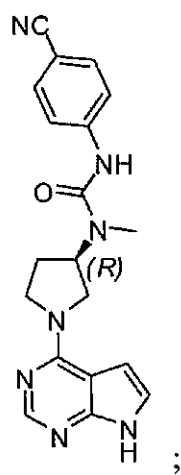
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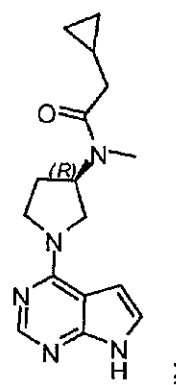
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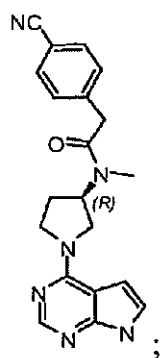
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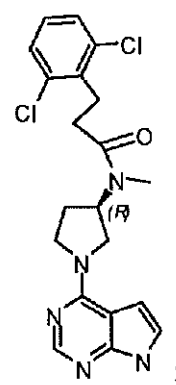
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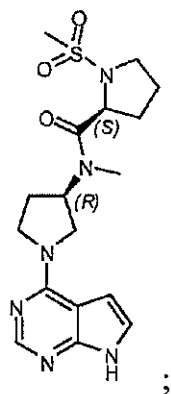
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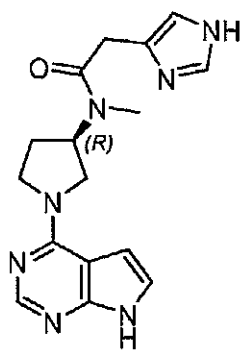
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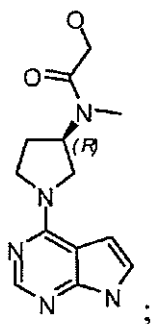
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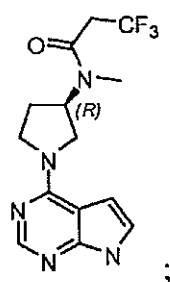
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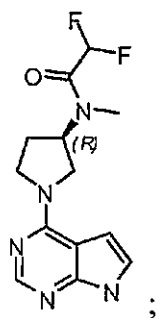
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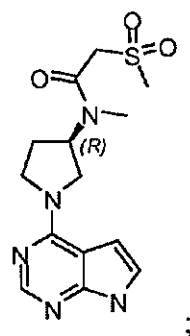
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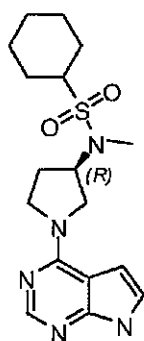
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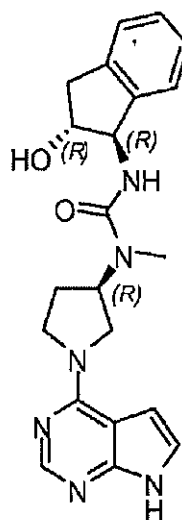


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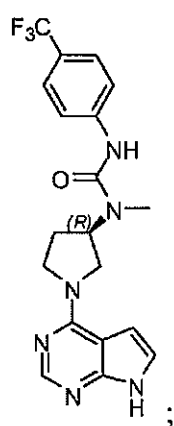
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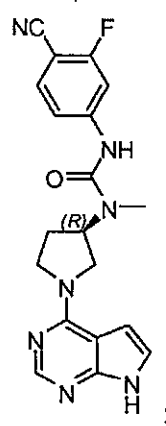
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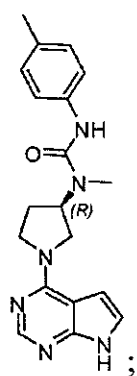
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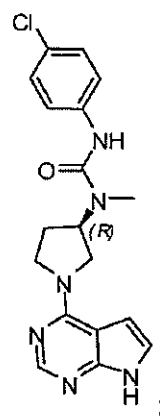


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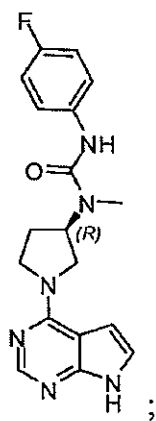
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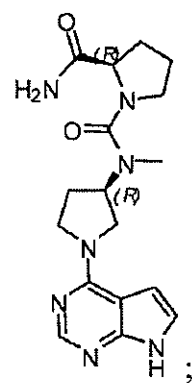
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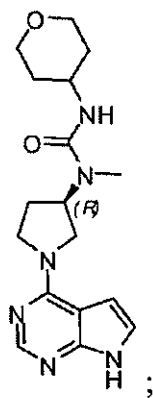
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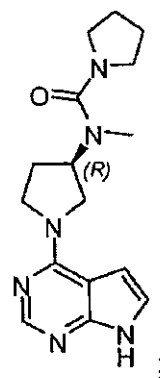
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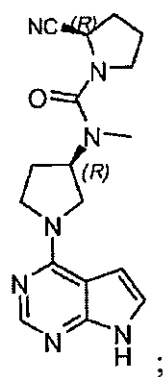
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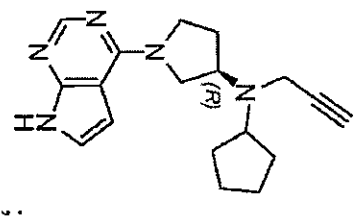
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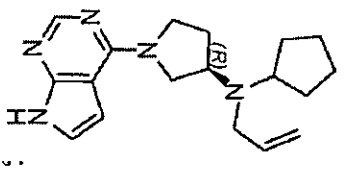
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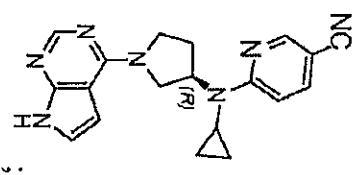
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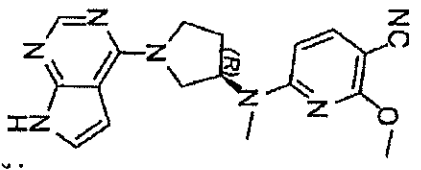
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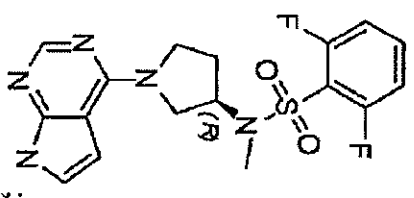
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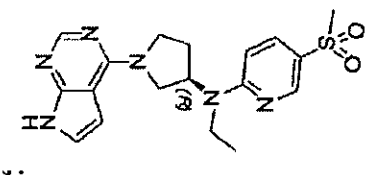
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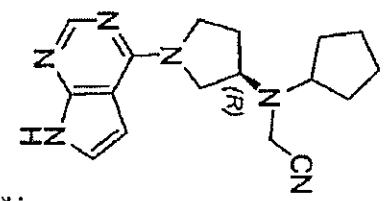
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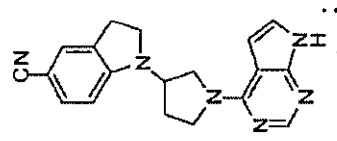
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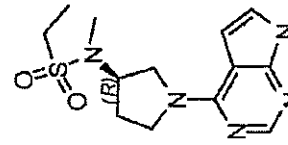


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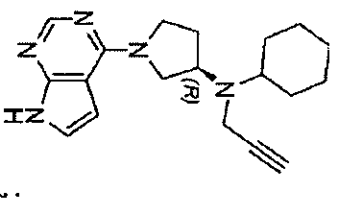


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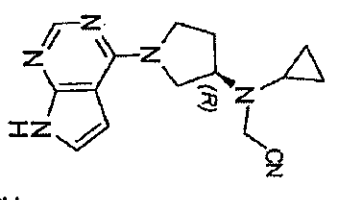
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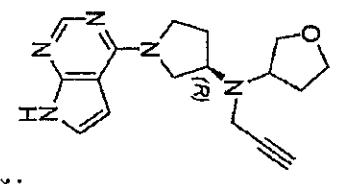
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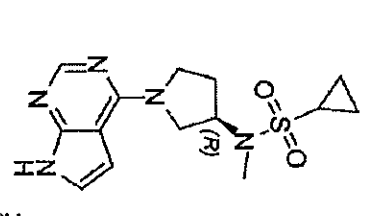
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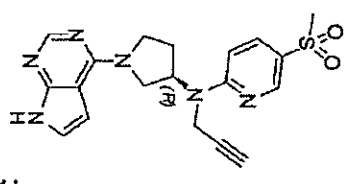
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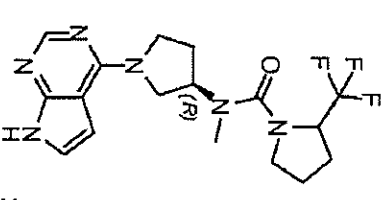
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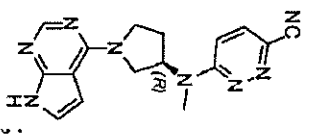
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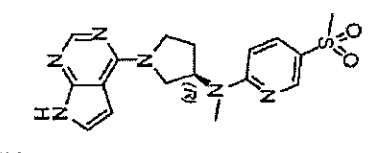
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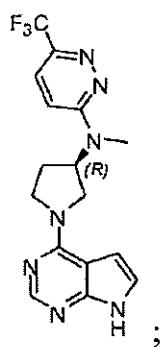


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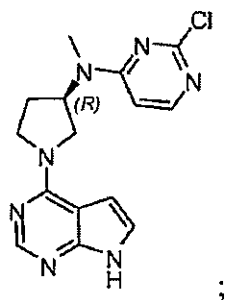


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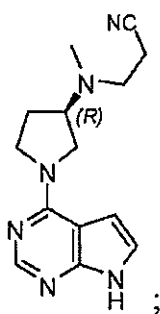
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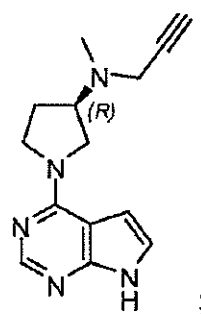
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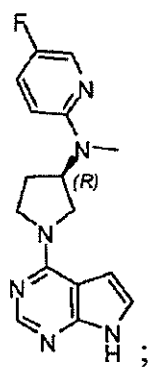
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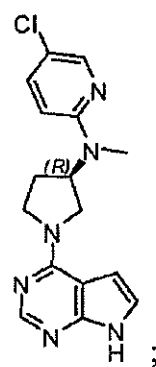
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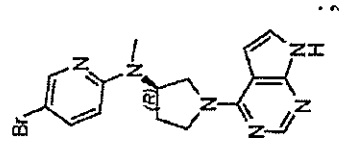
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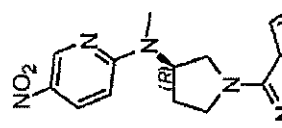


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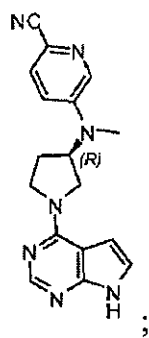
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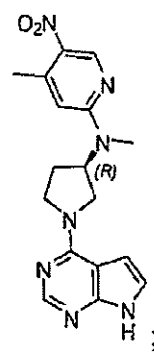


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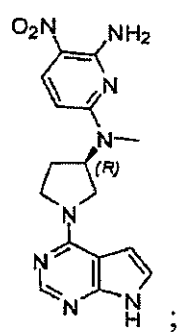
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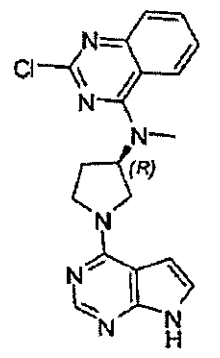
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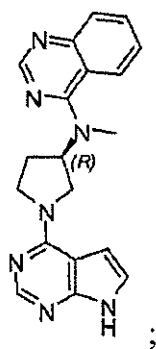
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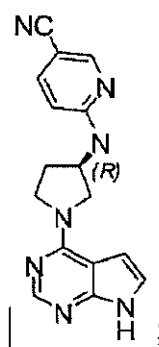
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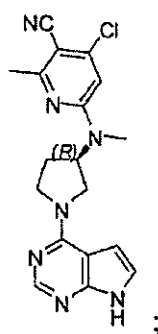
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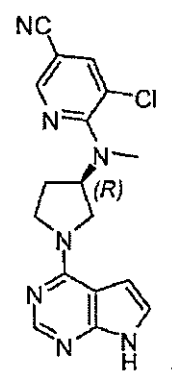
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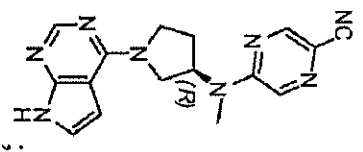
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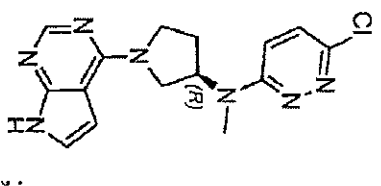
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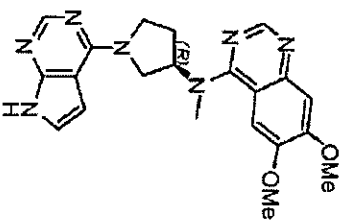
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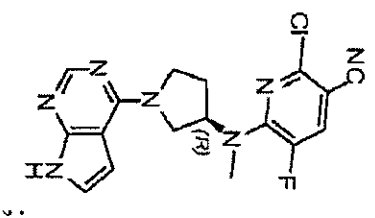
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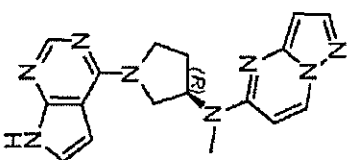
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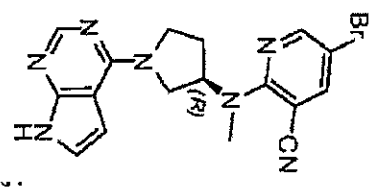
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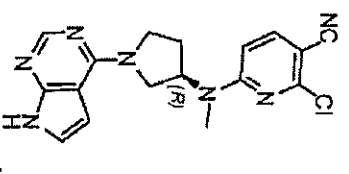
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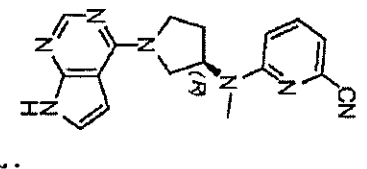
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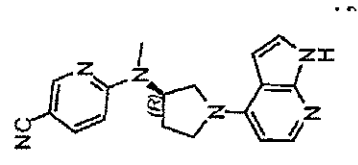
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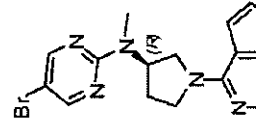


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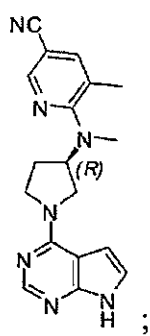
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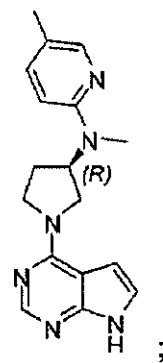


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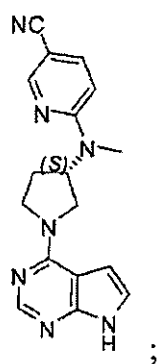
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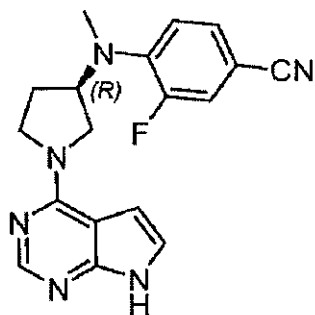
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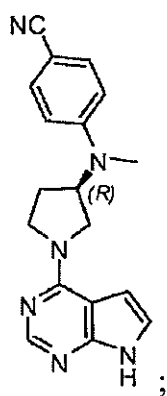


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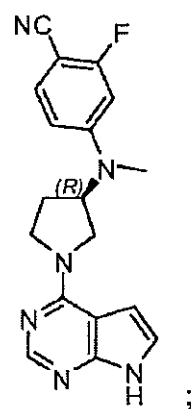


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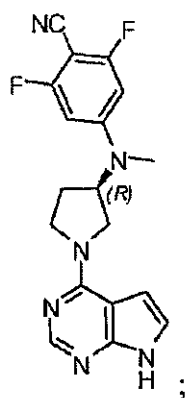


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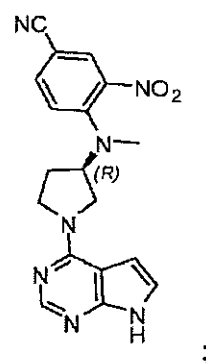


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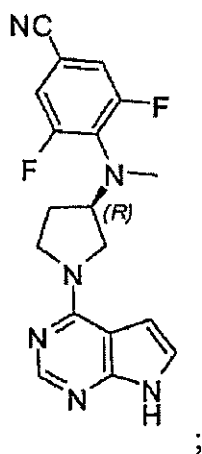
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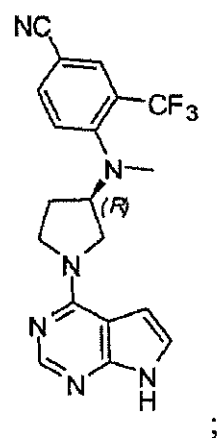
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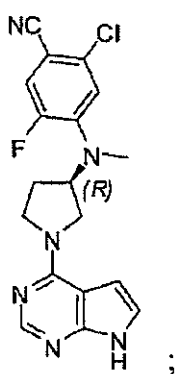
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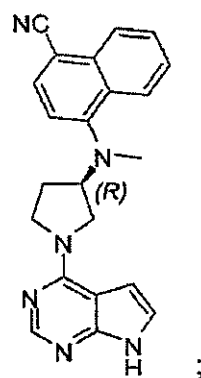
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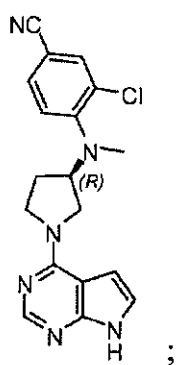
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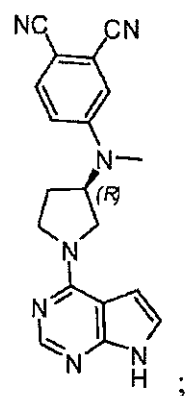
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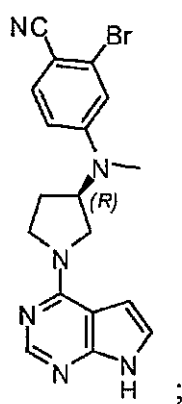
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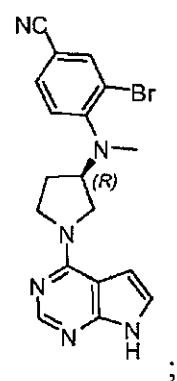
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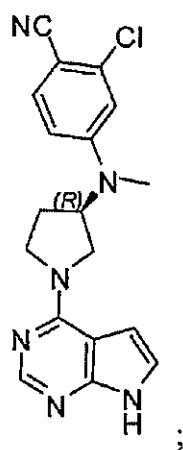
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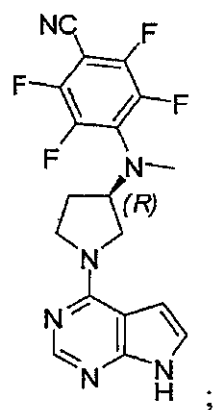
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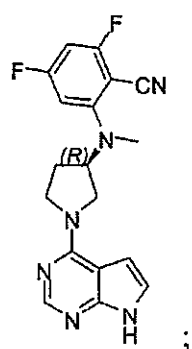
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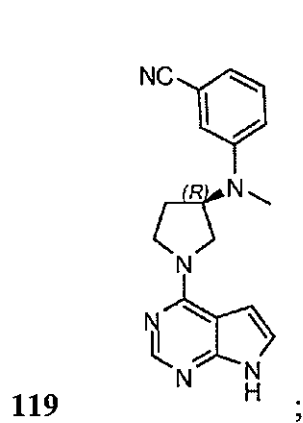
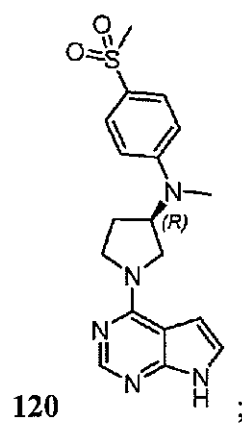
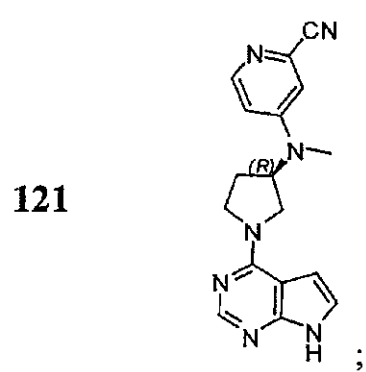
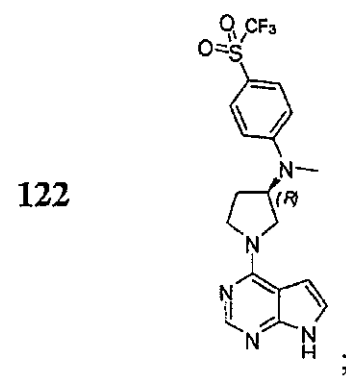
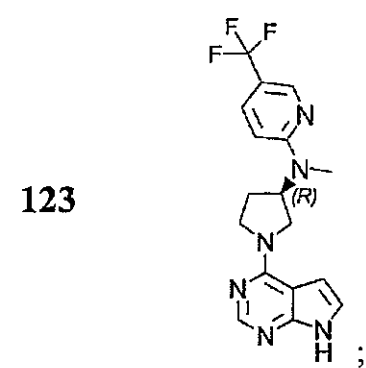
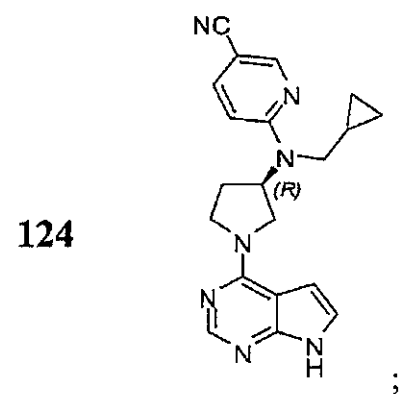
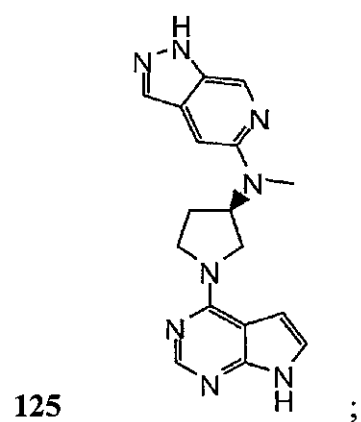
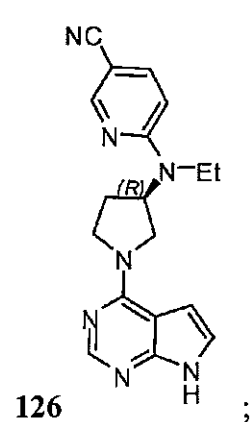


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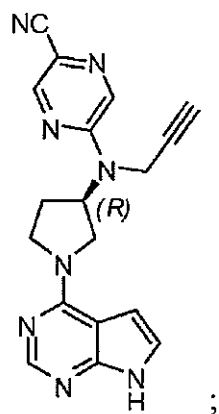


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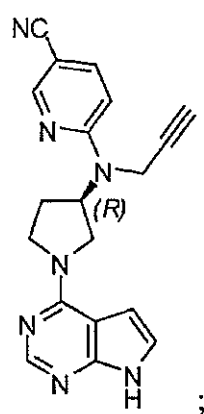




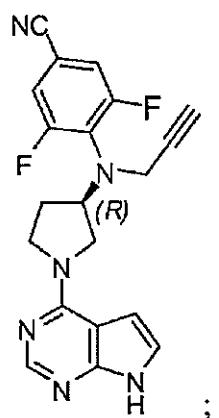
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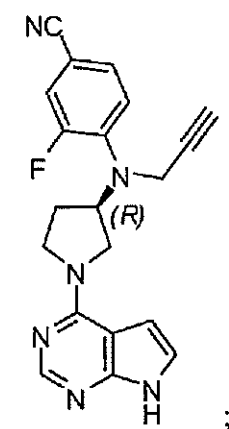
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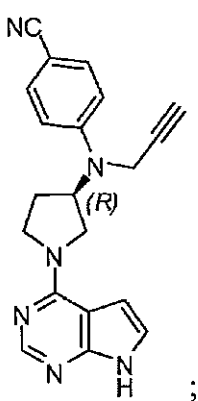
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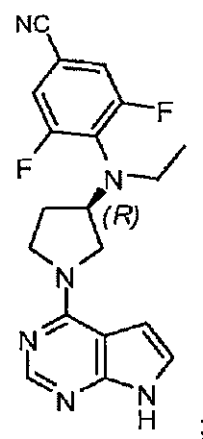
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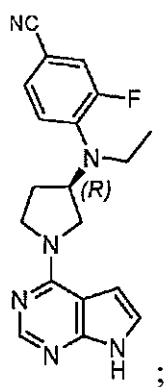
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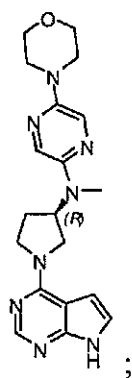
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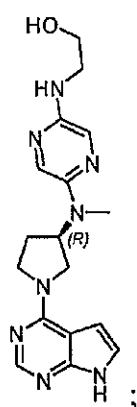
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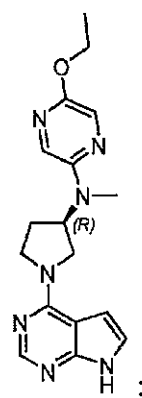
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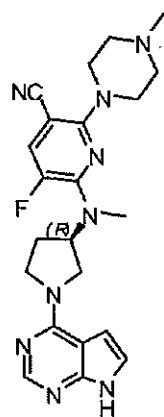
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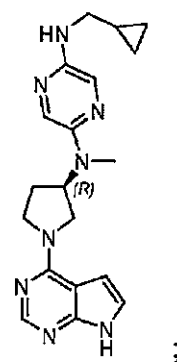
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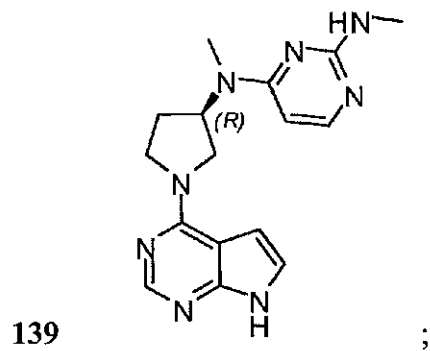
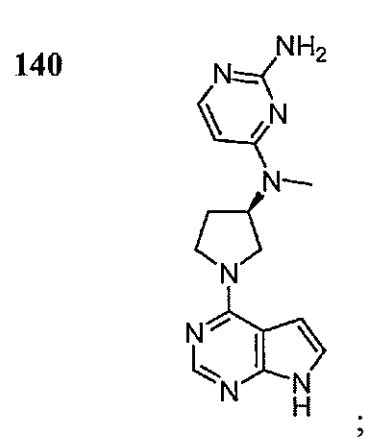
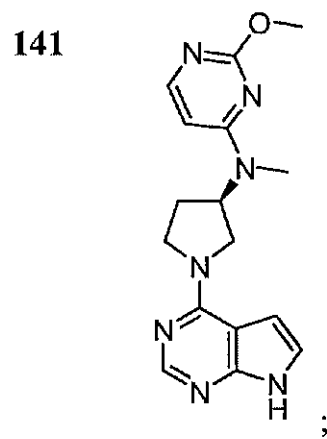
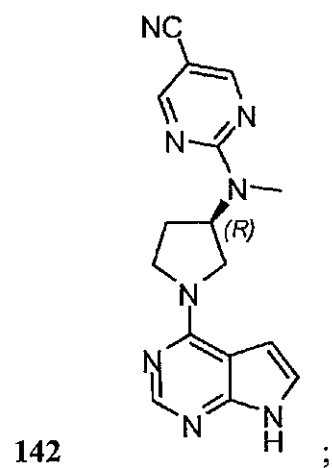
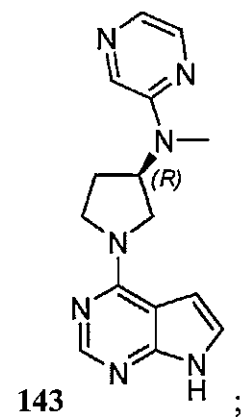
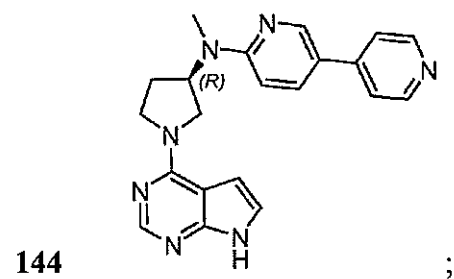


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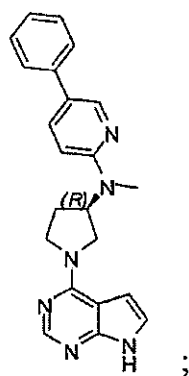


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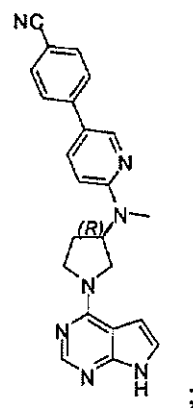




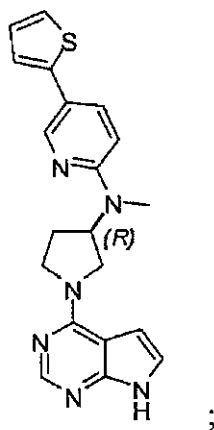
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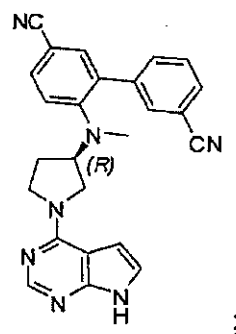
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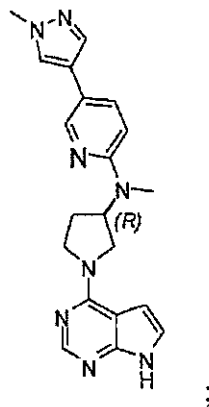
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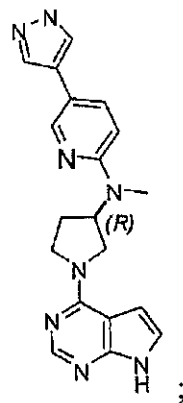
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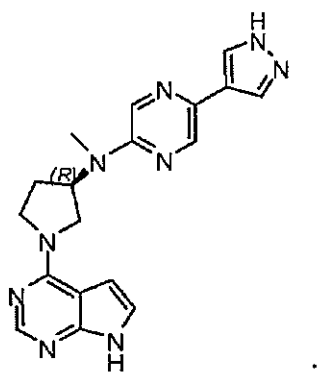
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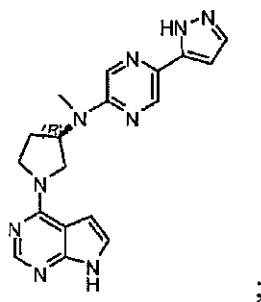
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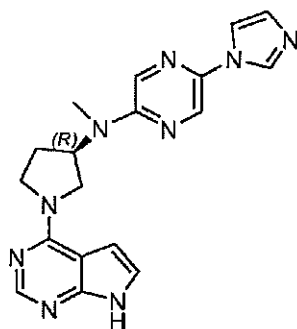


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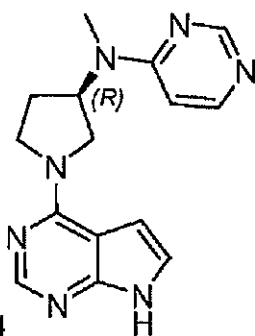


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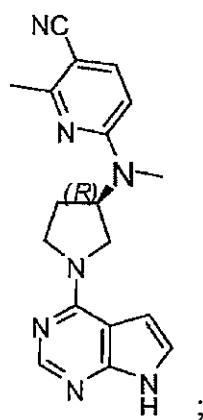


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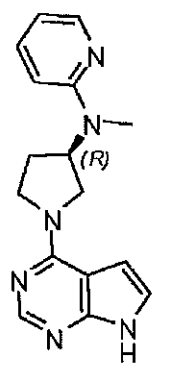


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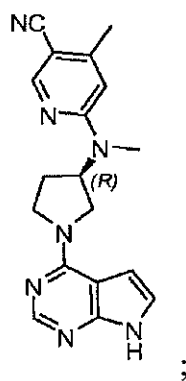


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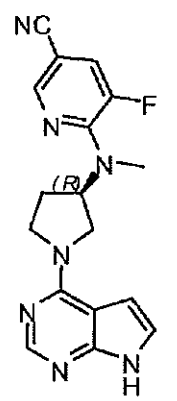
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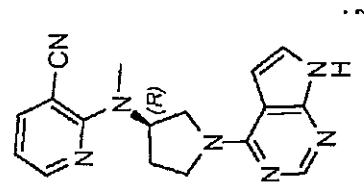


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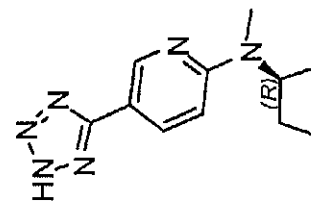
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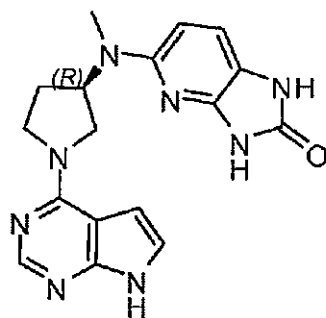
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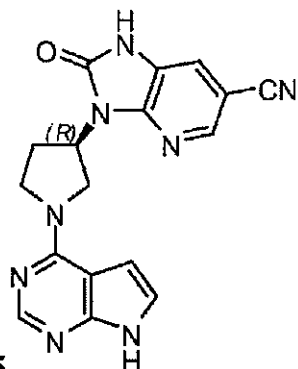
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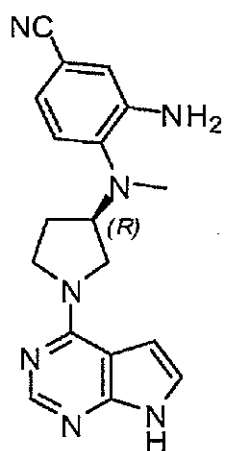


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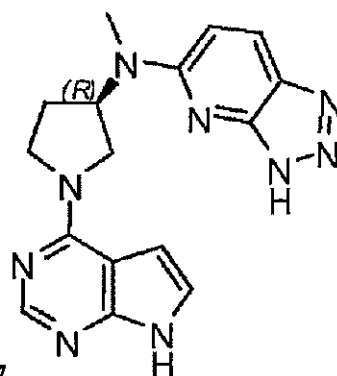
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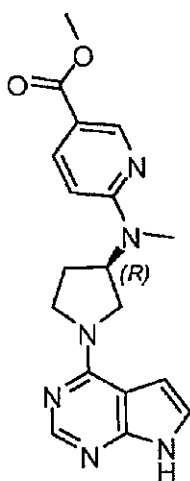
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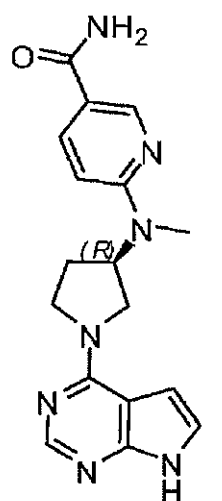
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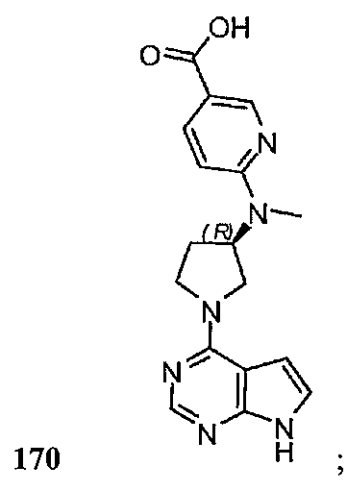
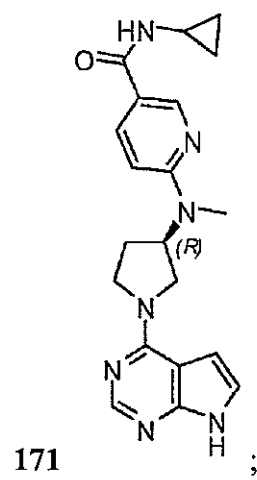
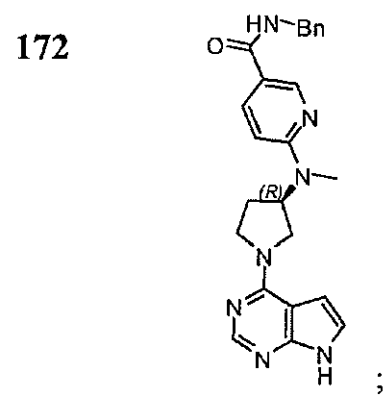
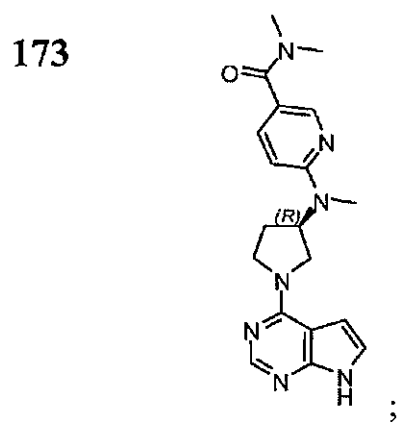
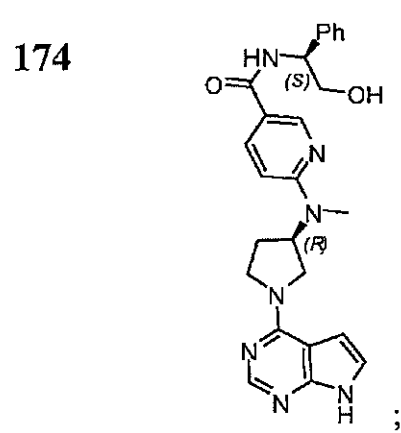
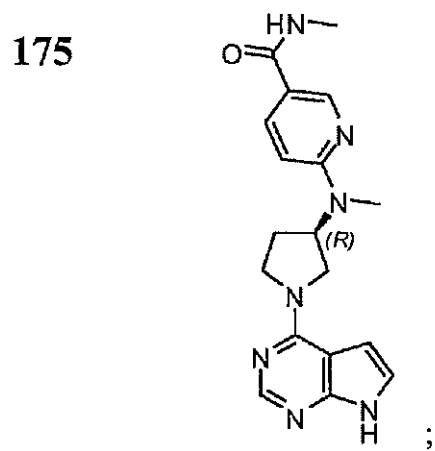


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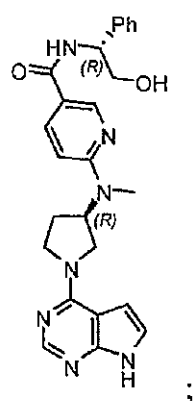
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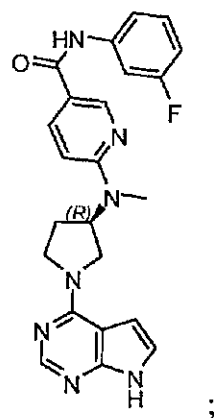
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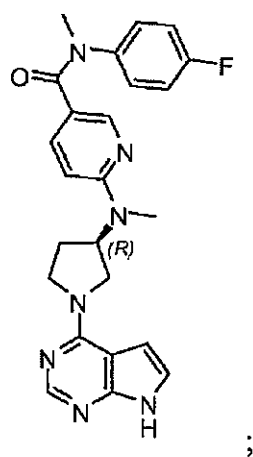
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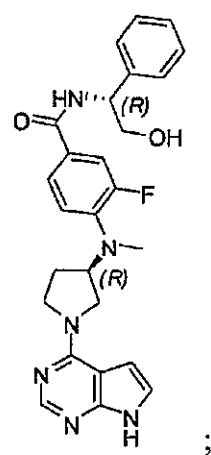
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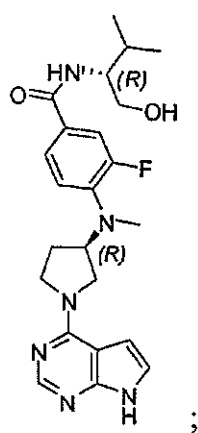
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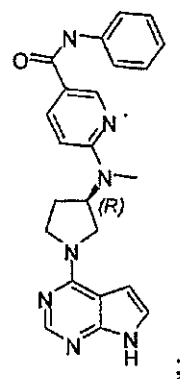
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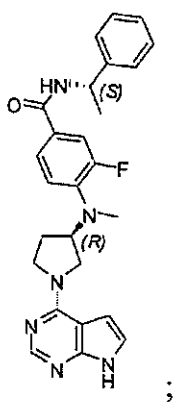
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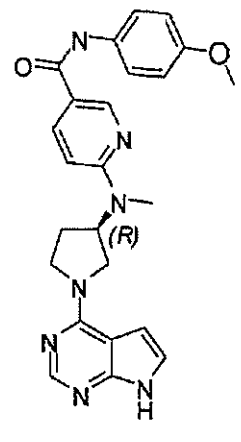
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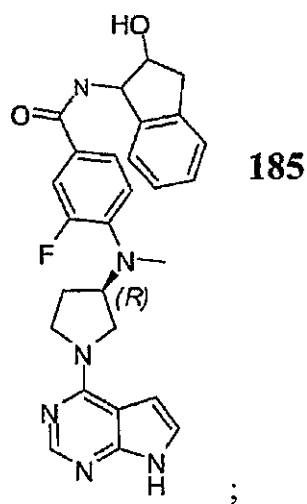
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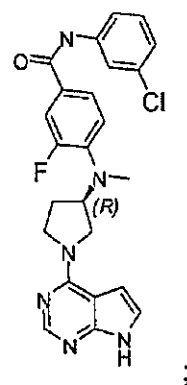
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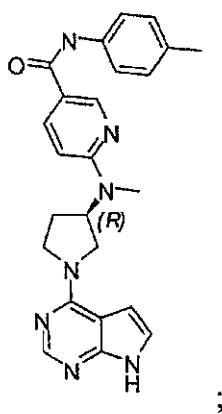
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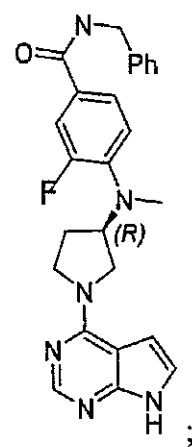
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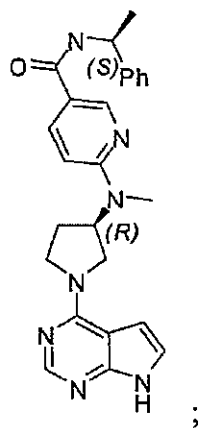
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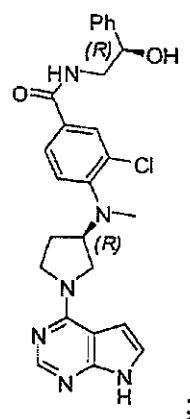
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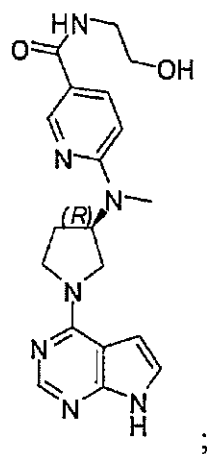
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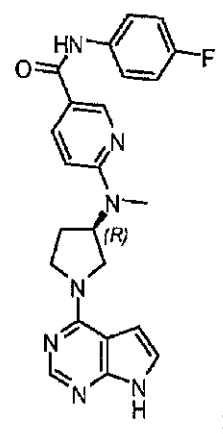
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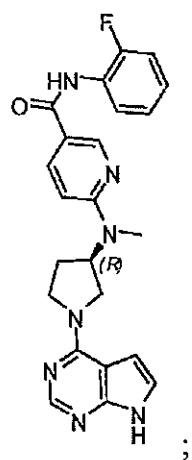
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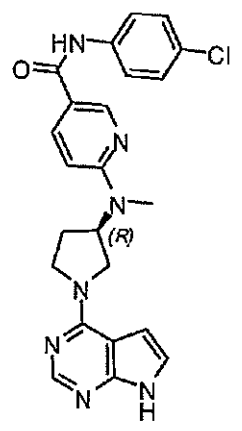
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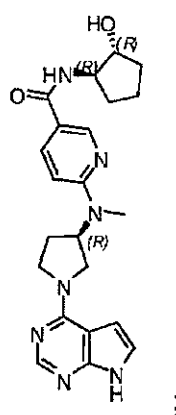
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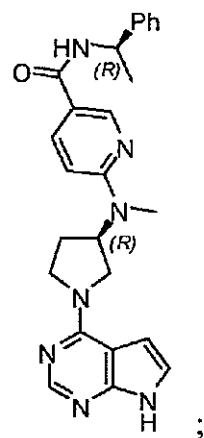
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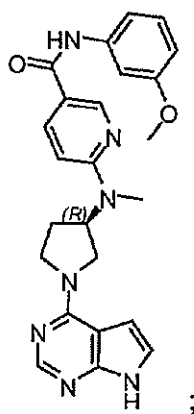
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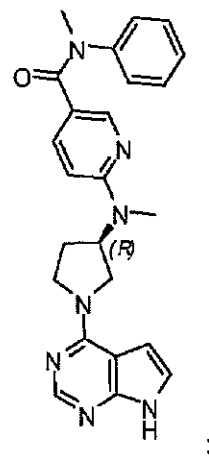
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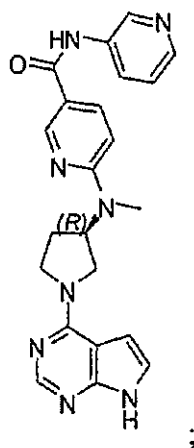
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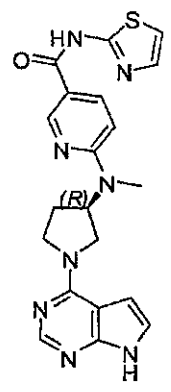
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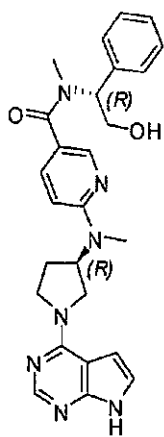
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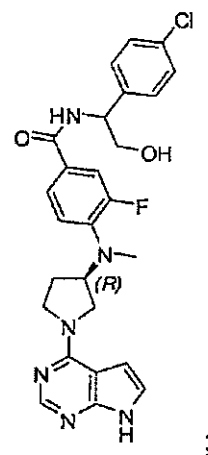
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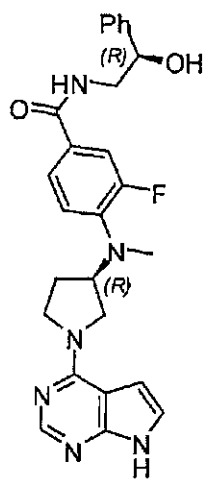
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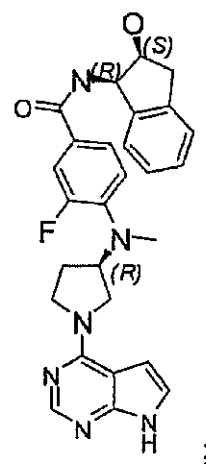
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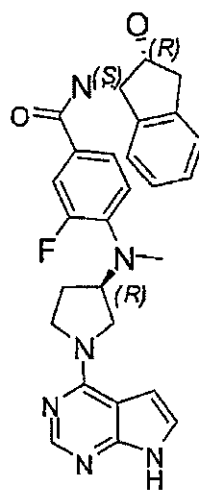
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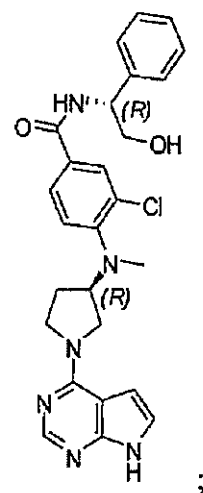
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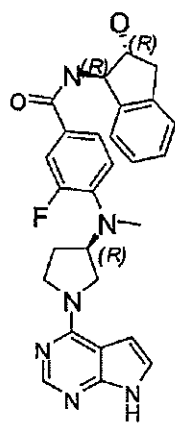
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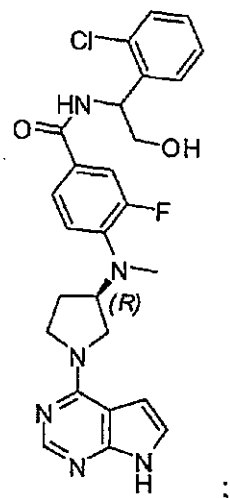
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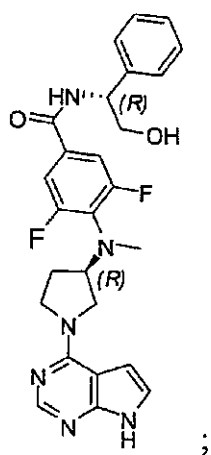
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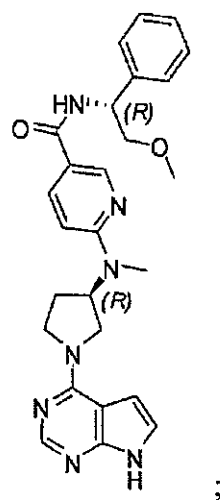
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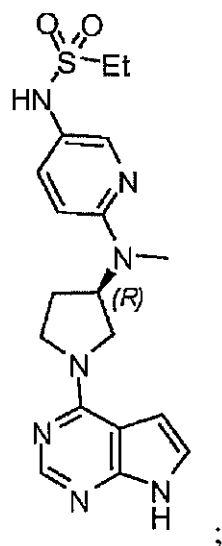
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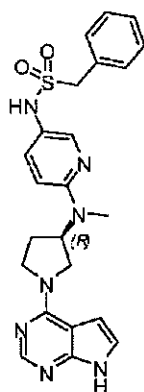
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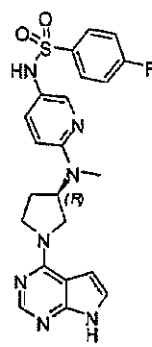
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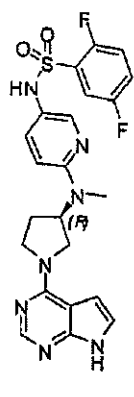
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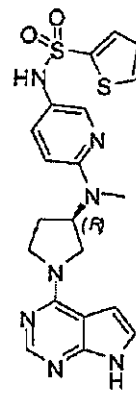
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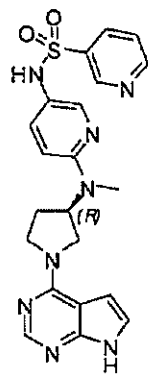
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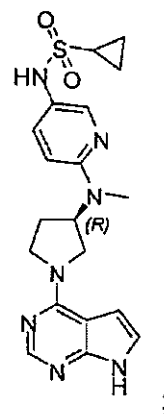
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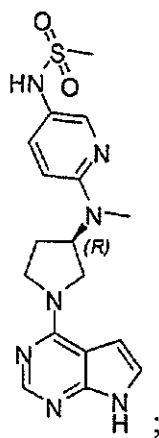
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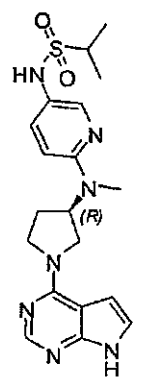
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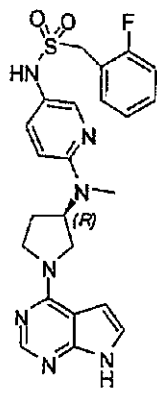
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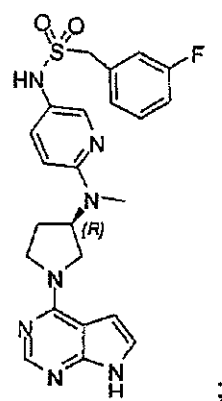
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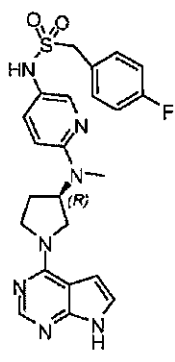
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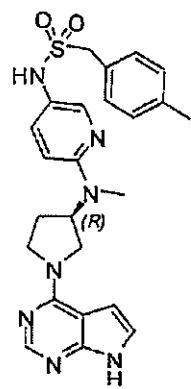
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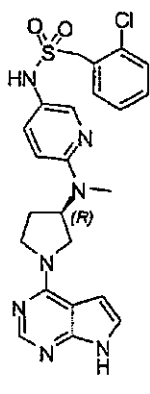
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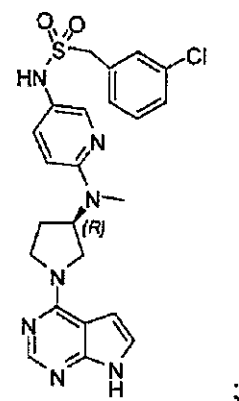
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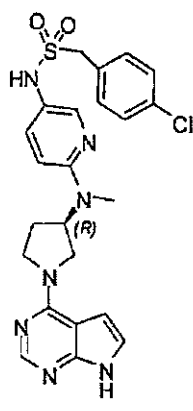
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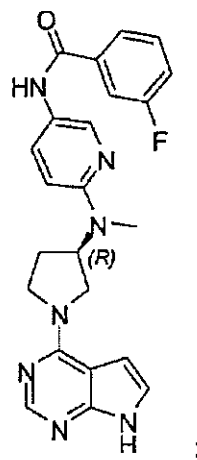
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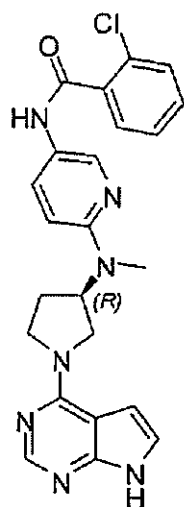
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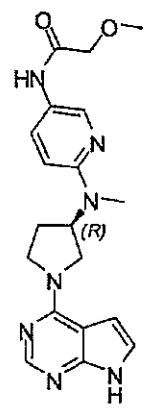
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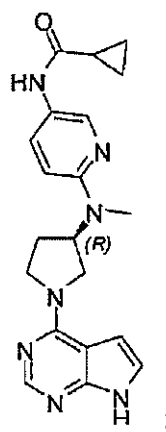
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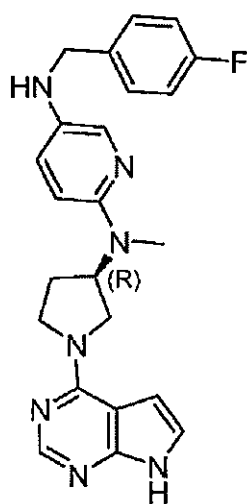
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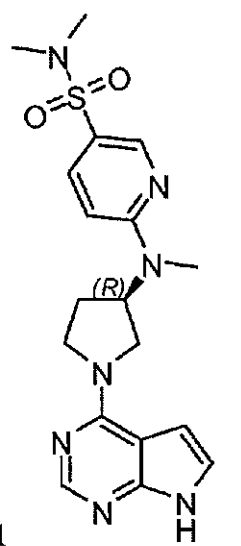
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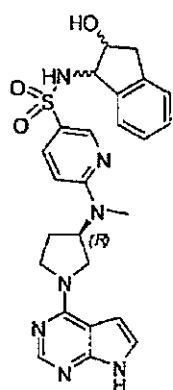
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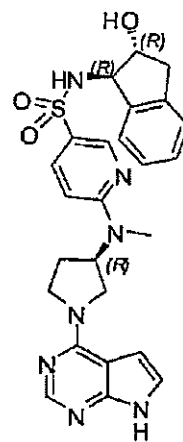
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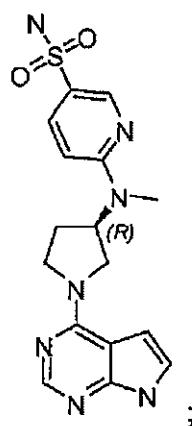
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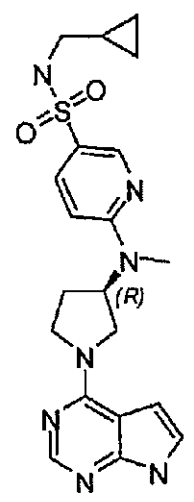
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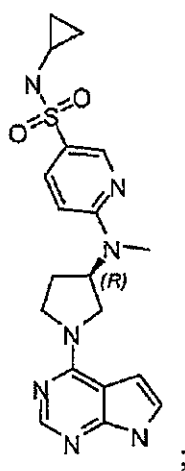
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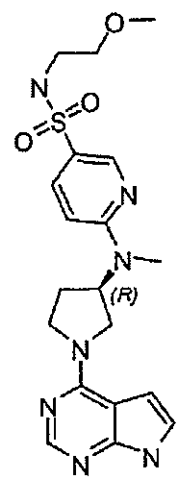
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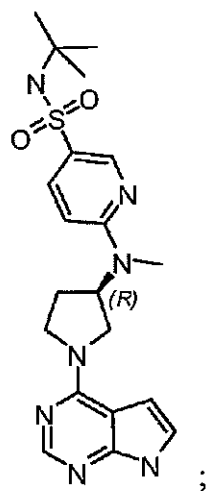
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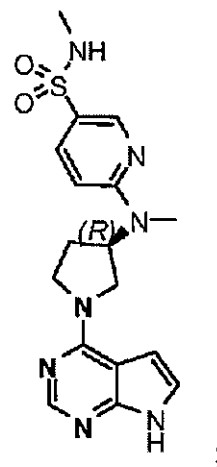
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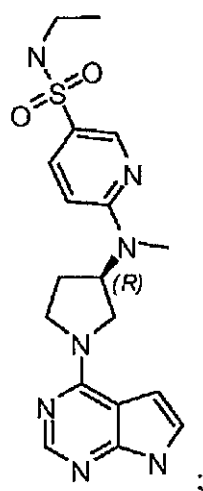
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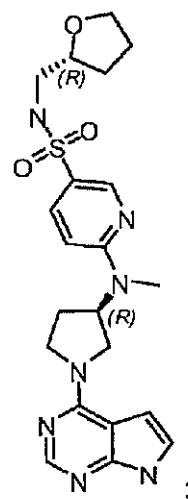
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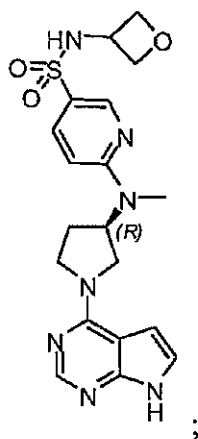
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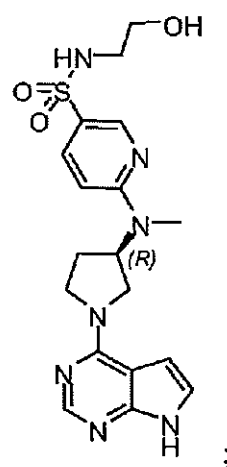
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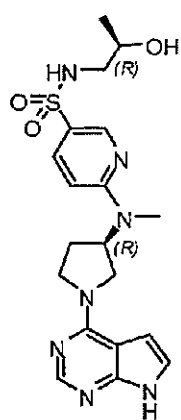
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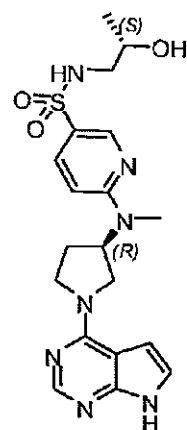
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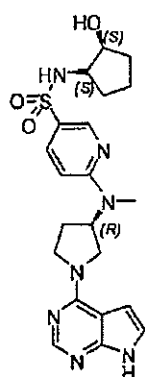
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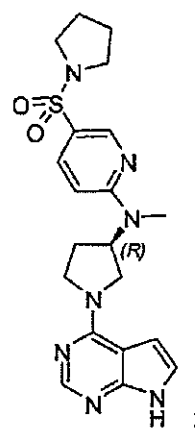
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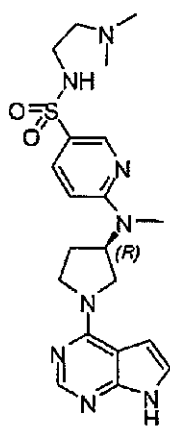
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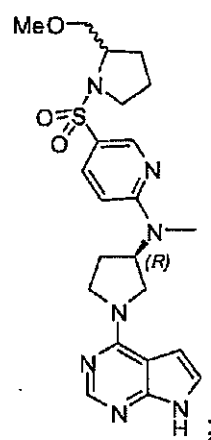
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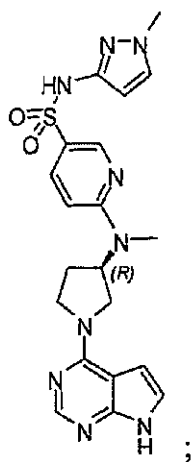
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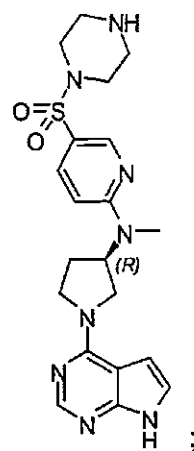
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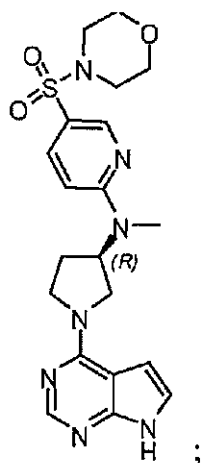
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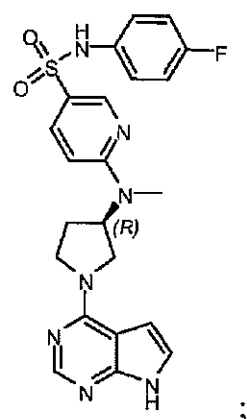
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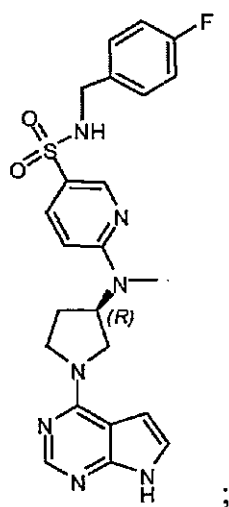
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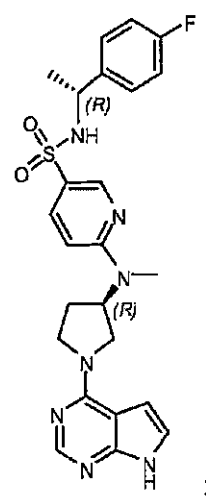
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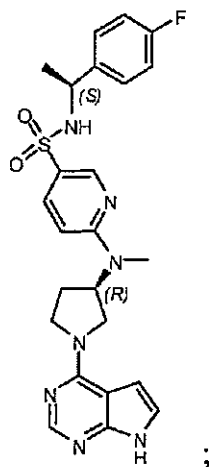
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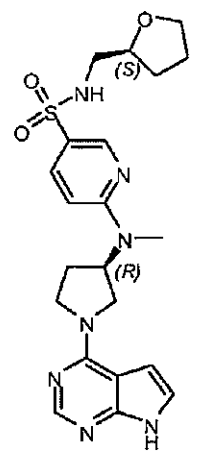
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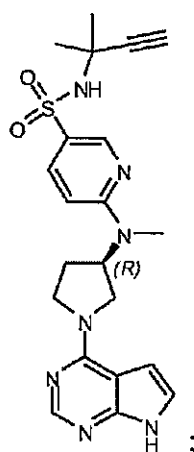
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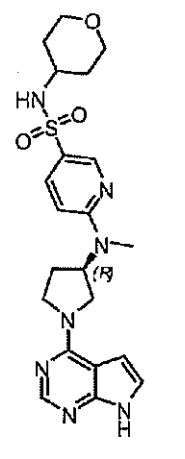
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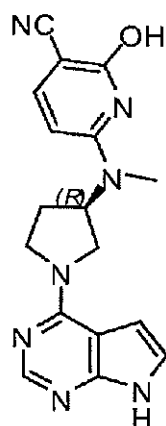
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24. A composition comprising at least one compound of any one of claims 1 to 23, and/or at least one pharmaceutically acceptable salt thereof and at least one pharmaceutically acceptable carrier.

25. Use of at least one compound of any one of claims 1 to 23, and/or at least one pharmaceutically acceptable salt thereof in the preparation of a medication for treating an inflammatory disease or cancer responsive to inhibition of at least one kinase chosen from JAK1, JAK2, JAK3 and TYK2.