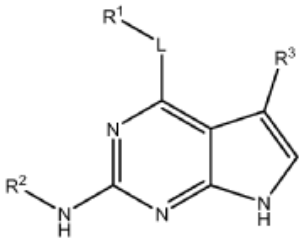
Claims

1. A compound of formula (I):



or a pharmaceutically acceptable salt, tautomer, stereoisomer, or enantiomer~~and pharmaceutically acceptable salts, tautomers, stereoisomers, enantiomers, and isotopologues~~ thereof,

wherein:

R^1 is substituted or unsubstituted C_{1-8} alkyl, substituted or unsubstituted C3-8 cycloalkyl, or substituted or unsubstituted non-aromatic heterocyclyl;

R^2 is substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl;

R^3 is substituted or unsubstituted heterocyclyl or substituted or unsubstituted aryl,

and

L is ~~NH or~~ O;

provided

R^3 is not pyridyl ~~when L is NH or~~ when R^2 is pyrazolyl; and

the compound is not

N-methyl-N-[trans-3-[[5-(~~1~~1-methyl-~~1H~~1H-pyrazol-4-yl)-2-[(~~1~~1-methyl-1~~H~~H-pyrazol-4-yl)amino]-7H-pyrrolo[2,3-d]pyrimidin-4-yl]oxy]cyclobutyl]-2-propenamide; or

N-methyl-N-[trans-3-[[5-(~~1~~1-methyl-~~1H~~1H-pyrazol-3-yl)-2-[(~~1~~1-methyl-~~1H~~1H-pyrazol-4-yl)amino]-7H-pyrrolo[2,3-d]pyrimidin-4-yl]oxy]cyclobutyl]-2-propenamide.

~~2. The compound of claim 1, wherein L is O.~~

~~3~~2. The compound of claim 1, wherein R^1 is substituted or unsubstituted C_{1-8} alkyl.

~~4~~3. The compound of claim 1, wherein R^1 is substituted or unsubstituted methyl, ethyl, propyl, isopropyl, n-butyl, sec-butyl, tert-butyl, n-pentyl, sec-pentyl, tert-pentyl, or 2,2-dimethylpropyl.

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~~5~~4. The compound of claim 1, wherein R^1 is substituted or unsubstituted methyl, ethyl, isopropyl, sec-butyl, t-butyl, or 2,2-dimethylpropyl.

~~6~~5. The compound of claim ~~3~~2, wherein the alkyl is substituted with one or more -OR or -NR_2, wherein each R is independently -H or substituted or unsubstituted (C_{1-4}) alkyl.

~~7~~6. The compound of claim 1, wherein R^1 is substituted or unsubstituted C_{3-8} cycloalkyl.

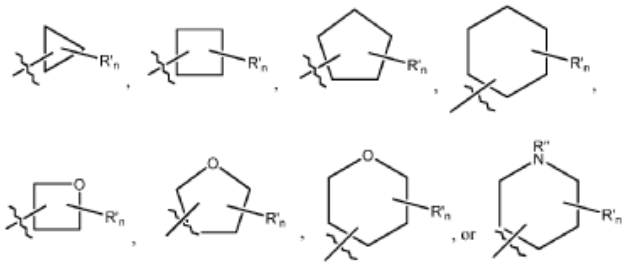
~~8~~7. The compound of claim 1, wherein R^1 is substituted or unsubstituted cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, or cycloheptyl.

~~9~~8. The compound of claim ~~7~~6, wherein the cycloalkyl is substituted with one or more -CN, halogen, -OR or a substituted or unsubstituted C_{1-3} alkyl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl.

~~10~~9. The compound of claim 1, wherein R^1 is substituted or unsubstituted non-aromatic heterocyclyl.

~~11~~10. The compound of claim 1, wherein R^1 is substituted or unsubstituted oxetanyl, tetrahydrofuranyl, tetrahydropyranyl, or piperidinyl.

~~12~~11. The compound of claim 1, wherein R^1 is substituted or unsubstituted C_{1-8} alkyl,



wherein

each R' is independently -CN, halogen, -OR or C_{1-3} alkyl;

R'' is -H or C_{1-3} alkyl;

each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl; and

n is 0-2.

~~13~~12. The compound of claim 1, wherein R^2 is substituted phenyl.

~~14~~13. The compound of claim ~~13~~12, wherein R^2 is phenyl, substituted with one or more substituted or unsubstituted C_{1-6} alkyl, halogen, -CN, -OR^5, -C(=0)NR^5_2, -C(=0)(substituted or unsubstituted heterocyclyl), -C(=0)(substituted or unsubstituted alkylheterocyclyl),

-NHC(=0)R^5, -$S0_2NR^5_2$, or substituted or unsubstituted heteroaryl, wherein each R^5 is independently -H, substituted or unsubstituted alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclyl, or substituted or unsubstituted alkylheterocyclyl.

~~15~~14. The compound of claim ~~13~~12, wherein R^2 is phenyl, substituted with one or more -(C_{1-3} alkyl), -(C_{1-3} alkyl)NR_2, -CF_3, -CI, -F, -CN, -OCH_3, -OCF_3, -C(=0)NR_2,

-C(=0)NR(substituted or unsubstituted cycloalkyl), -C(=O)NR$(CH_2)_{0-2}CR_2(CH_2)_{0-2}$OR,

-C(=0)NR$(CH_2)_{0-2}$ $CR_2(CH_2)_{0-2}$ NR_2, -C(=O)NR$(CH_2)_{0-2}$ $CR_2(CH_2)_{0-2}$ C(=O)NR_2,

-C(=0)N(substituted or unsubstituted cycloalkyl)$(CH_2)_{0-2}$ OR, -C(=O)NR$(CH_2)_{0-3}$ (substituted or unsubstituted heterocyclyl), -C(=O)$(CH_2)_{0-3}$(substituted or unsubstituted heterocyclyl),

-C(=NR)NR_2, -NRC(=0)R, -$S0_2NR_2$, -$S0_2$R, or substituted or unsubstituted heterocyclyl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl.

~~16~~15. The compound of claim ~~15~~14, wherein each R is independently -H or -CH_3.

~~17~~16. The compound of claim ~~13~~12, wherein R^2 is phenyl, substituted with one or more -CH_3, -CH_2CH_3, -CH_2 CH_2CH_3, -$CH(CH_3)_2$, -CH_2NH_2, -CF_3, -CI,- F, -CN, -OCH_3, -OCF_3, -C(=0)NH_2, -C(=0)$NHCH_3$, -C(=0)N$(CH_3)_2$, -C(=0)NH$C(CH_3)_3$ ~~-C(=0)NC(CH$_3$)$_3$~~, -C(=0)$NHCH_2CH_2F$,

-C(=0)$NHCH_2CHF_2$, -C(=0)$NHCH_2CF_3$, -C(=0)$NHCH_2CF_2CH_3$, -C(=0)$NHCH_2CN$,

-C(=0)N$(CH_3)CH_2CN$, -C(=0)$NHCH_2CH_2CN$, -C(=0)N$(CH_3)CH_2CH_2CN$,

-C(=0)NH-cyclobutyl, -C(=0)NH-(hydroxy-cyclobutyl), -C(=0)NH-cyclopentyl,

-C(=0)NH-(hydroxy-cyclopentyl), -C(=0)$NHCH_2CH_2OH$, -C(=0)$NHCH_2CH_2OCH_3$,

-C(=0)N$(CH_3)CH_2CH_2OH$, -C(=0)N$(CH_3)CH_2CH_2OCH_3$, -C(=0)$NHCH_2CH_2CH_2OH$,

-C(=0)N$(CH_3)CH_2CH_2CH_2OH$, -C(=0)N$(CH_3)CH_2CH_2CH_2OCH_3$, -C(=0)$NHCH_2CH(CH_3)OH$, -C(=0)$NHCH_2C(CH_3)_2OH$, -C(=0)$NHCH(CH_3)CH_2OH$, -C(=0)$NHC(CH_3)_2CH_2OH$,

-C(=0)$NHCH_2CH_2NH_2$, -C(=0)$NHCH_2CH_2NH(CH_3)$, -C(=0)$NHCH_2CH_2N(CH_3)_2$,

-C(=0)$NHCH_2C(=0)NH_2$, -C(=0)N$(CH_3)CH_2C(=0)NH_2$, -C(=0)$NHCH_2CH_2C(=0)NH_2$, -C(=0)N$(CH_3)CH_2CH_2C(=0)NH_2$, -C(=0)N(cyclopropyl)CH_2CH_2OH, -C(=0)NH-oxetanyl, -C(=0)N(CH_3)-oxetanyl, -C(=0)NH-(methyl-oxetanyl), -C(=0)NH-azetidinyl,

-C(=0)NH-(methylazetidinyl), -C(=0)NH-(1 -acetylazetidinyl), -C(=0)NH-pyrrolidyl, -C(=0)NH-piperidyl, -C(=0)NH-tetrahydrofuranyl, -C(=0)N(CH_3)-tetrahydrofuranyl, -C(=0)NH-tetrahydropyranyl, -C(=0)N(CH_3)-tetrahydropyranyl, -C(=0)$NHCH_2$-oxetanyl, -C(=0)N$(CH_3)CH_2$-oxetanyl, -C(=0)$NHCH_2$-(methyl-oxetanyl), -C(=0)N$(CH_3)CH_2$-(methyl-oxetanyl), -C(=0)$NHCH_2$-tetrahydrofuranyl, -C(=0)$NHCH_2$-tetrahydropyranyl,

-C(=0)$NHCH_2$-dioxanyl, -C(=0)aziridinyl, -C(=0)(methyl-aziridinyl),

-C(=0)(dimethyl-aziridinyl), -C(=0)(hydroxymethyl-aziridinyl), -C(=0)azetidinyl,

-C(=0)pyrrolidinyl, -C(=0)(hydroxyl-pyrrolidinyl), -C(=0)(hydroxyl,methoxypyrrolidinyl), -C(=0)(dimethoxypyrrolidinyl), -C(=0)morpholinyl, -C(=0)piperazinyl,

-C(=0)(methylpiperazinyl), -C(=0)(hydroxy-piperidyl), -C(=0)(fluoropiperidinyl),

-(C=0)(methoxy-piperidyl), -C(=NH)NH_2, -$NHC(=0)CH_3$, -$S0_2NHCH_3$, -$S0_2CH_3$, or substituted or unsubstituted pyrazolyl.

~~18~~17. The compound of claim ~~13~~12, wherein R^2 is phenyl, substituted with one or more -CH_3, -CH_2CH_3, -CH_2 CH_2CH_3, -$CH(CH_3)_2$, -CH_2NH_2, -CF_3, -CI,- F, -CN, -OCH_3, -OCF_3, -C(=0)NH_2, -C(=0)$NHCH_3$, -C(=0)$N(CH_3)_2$, -C(=0)$NHC(CH_3)$ ~~-C(=0)NC(CH3)3~~, -C(=0)$NHCH_2CH_2F$, -C(=0)$NHCH_2CF_2CH_3$, -C(=0)$N(CH_3)CH_2CN$, -C(=0)$N(CH_3)CH_2CH_2CN$,

-C(=0)NH-(3-hydroxy-cyclobutyl), -C(=0)NH-cyclopentyl,

-C(=0)NH-(2-hydroxycyclopentyl),-C(=0)$NHCH_2CH_2OH$, -C(=0)$NHCH_2CH_2OCH_3$, -C(=0)$N(CH_3)CH_2CH_2OH$, -C(=0)$N(CH_3)CH_2CH_2OCH_3$, -C(=0)$NHCH_2CH_2CH_2OH$, -C(=0)$N(CH_3)CH_2CH_2CH_2OH$, -C(=0)$NHCH_2CH(CH_3)OH$, -C(=0)$NHCH_2C(CH_3)_2OH$, -C(=0)$NHCH(CH_3)CH_2OH$, -C(=0)$NHC(CH_3)_2CH_2OH$, -C(=0)$NHCH_2CH_2NH_2$,

-C(=0)$NHCH_2CH_2NH(CH_3)$, -C(=0)$NHCH_2CH_2N(CH_3)_2$, -C(=0)$N(CH_3)CH_2C(=0)NH_2$, -C(=0)$N(CH_3)CH_2CH_2C(=0)NH_2$, -C(=0)N(cyclopropyl)CH_2CH_2OH, -C(=0)NH-oxetanyl, -C(=0)$N(CH_3)$-oxetanyl, -C(=0)NH-(3-methyl-oxetanyl), -C(=0)NH-(1 -methylazetidinyl), -C(=0)NH-(1 -acetylazetidinyl), -C(=0)NH-piperidyl, -C(=0)NH-tetrahydrofuranyl,

-C(=0)NH-tetrahydropyranyl, -C(=0)$N(CH_3)$-tetrahydropyranyl, -C(=0)$NHCH_2$-oxetanyl, -C(=0)$N(CH_3)CH_2$-(3-methyl-oxetanyl), -C(=0)$NHCH_2$-tetrahydrofuranyl,

-C(=0)$NHCH_2$-tetrahydropyranyl, -C(=0)$NHCH_2$-dioxanyl, -C(=0)aziridinyl,

-C(=0)(2-methyl-aziridinyl), -C(=0)(2,2-dimethyl-aziridinyl),

-C(=0)(2-(hydroxymethyl)aziridinyl), -C(=0)azetidinyl, -C(=0)pyrrolidinyl,

-C(=0)(3-hydroxy-4-methoxypyrrolidinyl), -C(=0)(3,4-dimethoxypyrrolidinyl),

-C(=0)morpholinyl, -C(=0)piperazinyl, -C(=0)(4-methylpiperazinyl),

-C(=0)(4-hydroxy-piperidyl), -C(=0)(4,4-difluoropiperidinyl), -(C=0)(4-methoxy-piperidyl), -C(=NH)NH_2,-$NHC(=0)CH_3$, -$S0_2NHCH_3$, -$S0_2CH_3$, or substituted or unsubstituted pyrazolyl.

~~19~~18. The compound of claim 1, wherein R^2 is substituted or unsubstituted pyrazolyl, substituted or unsubstituted pyridyl, substituted or unsubstituted indazolyl or substituted or unsubstituted isoindolinone.

~~20~~19. The compound of claim ~~19~~18, wherein R^2 is substituted with one or more halogen, substituted or unsubstituted (C_{1-4})alkyl, -OR, -C(=0)NR_2, or substituted or unsubstituted heterocyclyl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl.

~~21~~20. The compound of claim 1, wherein R^3 is substituted or unsubstituted heterocyclyl.

~~22~~21. The compound of claim ~~21~~20, wherein the heterocyclyl is substituted or

unsubstituted pyrazolyl, oxazolyl, isoxazolyl, oxadiazolyl, ~~pyridyl,~~ pyridazinyl, pyrimidyl, pyrazinyl, benztriazolyl, indazolyl, indolyl, benzoxazolyl, benzisoxazolyl, benzthiazolyl, benzoxazolonyl, benzoxadiazolyl, benzimidazolyl, or quinolyl; or

wherein the heterocyclyl is pyridyl when R^2 is not pyrazolyl.

~~23~~22. The compound of claim ~~21~~20, wherein the heterocyclyl is substituted with one or more substituents selected from substituted or unsubstituted (C_{1-4})alkyl, halogen, -OR, -CN, -NR_2, -C(=0)NR_2, -NRC(=0)R, or substituted or unsubstituted triazolyl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl.

~~24~~23. The compound of claim ~~21~~20, wherein the heterocyclyl is substituted with one or more substituents selected from -CH_3, -$CH(CH_3)_2$, -F, -Cl, -OH, -OCH_3, -OCH_2CH_3, -CN, -NH_2, -$NHCH_3$, -$N(CH_3)_2$, -C(=0)$NH(CH_3)$, -NHC(=0)CH_3, or substituted or unsubstituted triazolyl.

~~25~~24. The compound of claim 1, wherein R^3 is substituted or unsubstituted aryl.

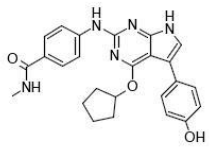
~~26~~25. The compound of claim 1, wherein R^3 is substituted or unsubstituted phenyl.

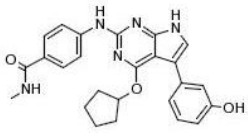
~~27~~26. The compound of claim ~~26~~25, wherein the phenyl is substituted with one or more substituents selected from substituted or unsubstituted C_{1-4} alkyl, halogen, -CN, -OR, -NR_2, -NRSO2R', -NR(C=0)NR_2, -NR(C=0)R', -COOR, -(C=0)NR_2, -C(=N)NR_2, -$S0_2$R', or substituted or unsubstituted heteroaryl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl, and R' is C_{1-3} alkyl.

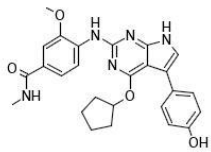
~~28~~27. The compound of claim ~~26~~25, wherein the phenyl is substituted with one or more substituents selected from -CH_3,- CH_2OH, -$CH(OH)CH_3$, -$C(CH_3)_2OH$, -CN, -F, -Cl, -OH, -OCH_3, -NH_2, -$N(CH_3)_2$, -$NHS0_2CH_3$, -NH(C=0)NH_2, -NH(C=0)CH_3, -$COOCH_3$,

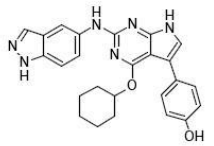
-(C=0)$NHCH_3$, -C(=NH)NH_2, -$S0_2CH_3$, substituted or unsubstituted triazolyl, substituted or unsubstituted pyrazolyl, or substituted or unsubstituted imidazolyl.

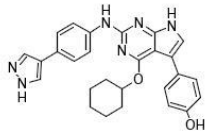
~~29~~28. The compound of claim 1, wherein the compound is ~~selected from Table 1~~,

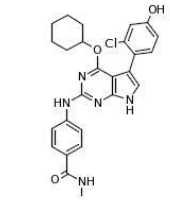


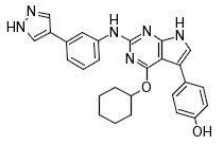


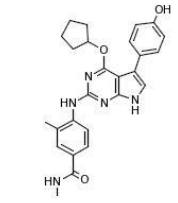


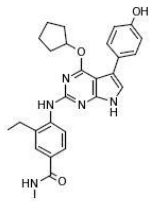


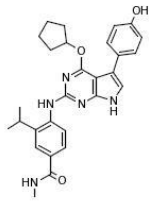


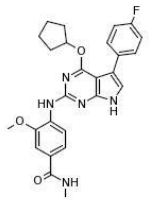


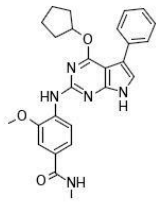


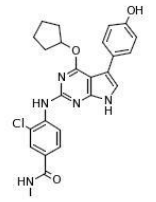


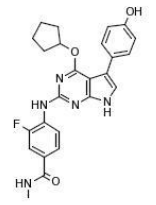


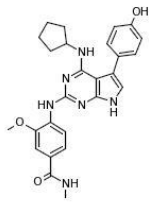


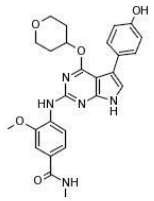


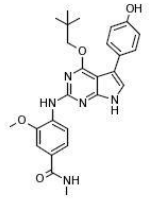


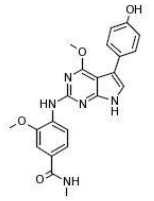


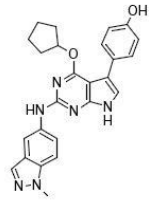


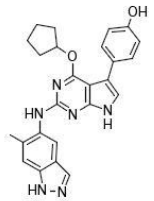


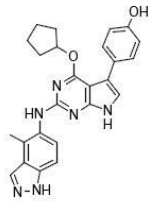








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O
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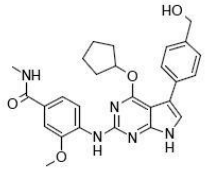
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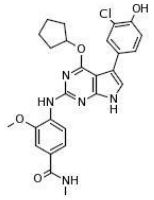
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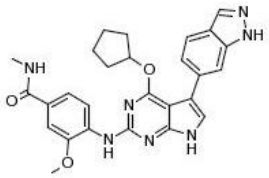
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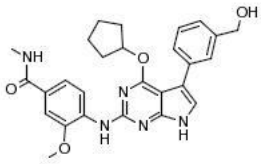
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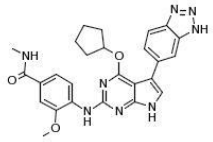
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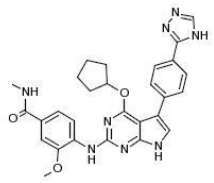

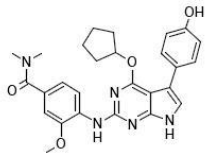

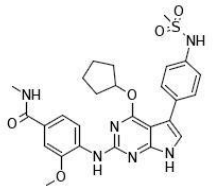

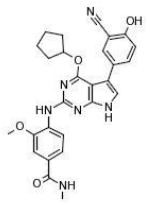

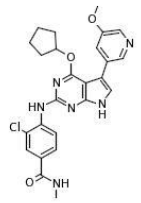

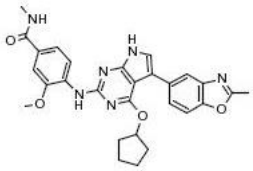

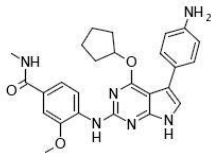

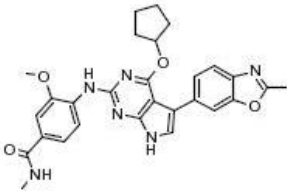

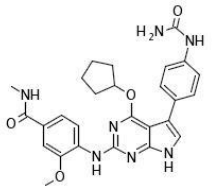

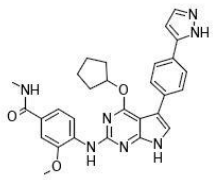

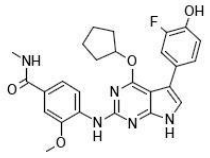

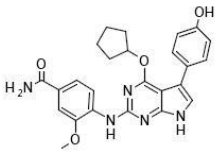

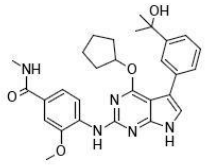

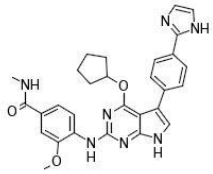

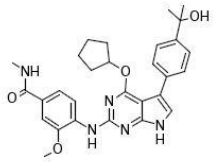

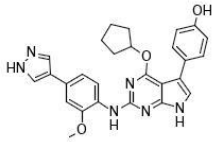

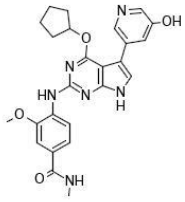

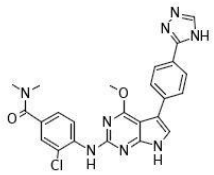

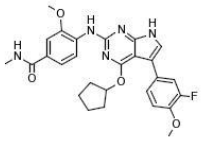

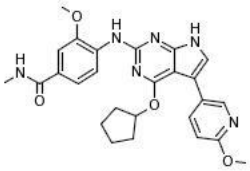

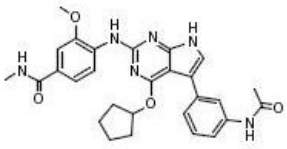

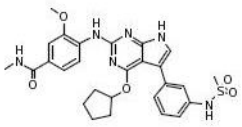

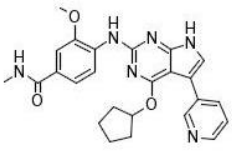

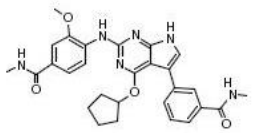

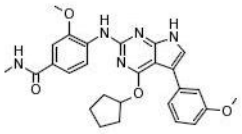

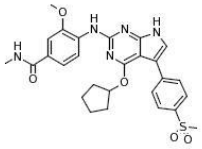

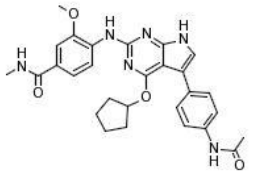

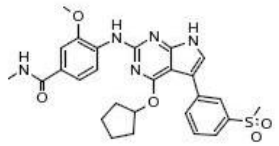

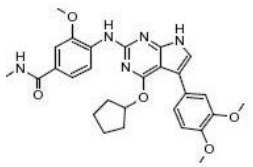

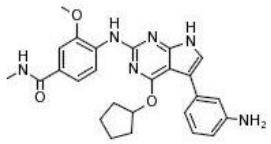

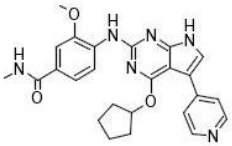

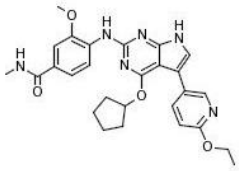

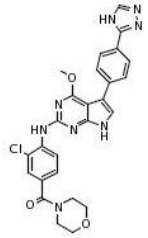

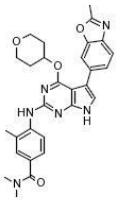

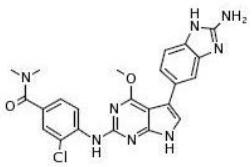

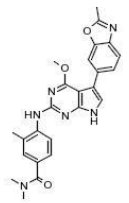

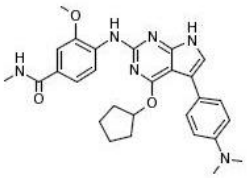

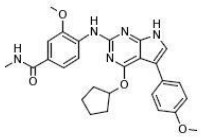

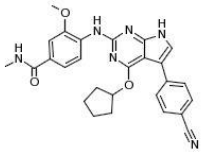

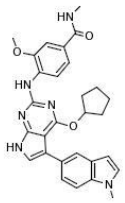

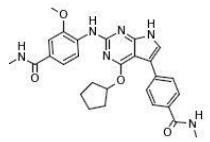

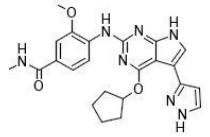

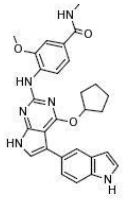

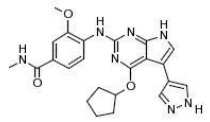

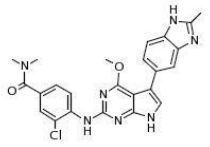

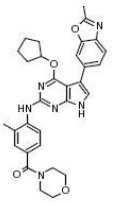

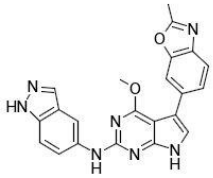

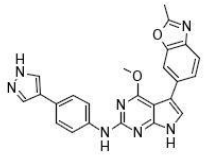

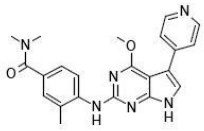

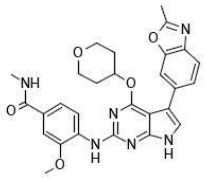

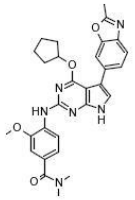

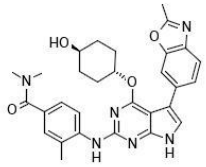

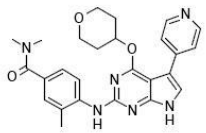

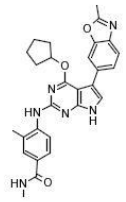

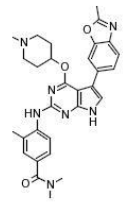

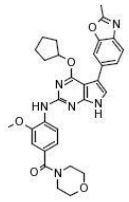

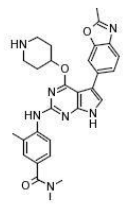

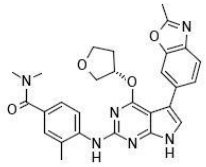

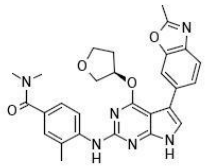

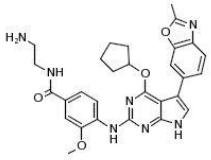

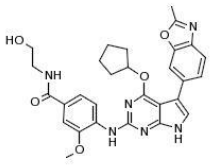

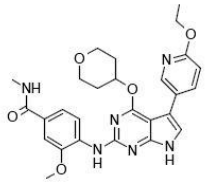

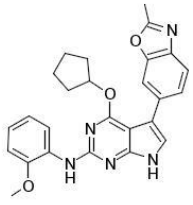

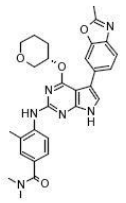

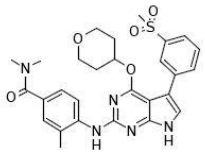

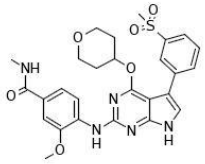

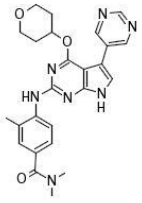

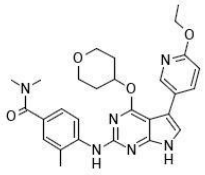

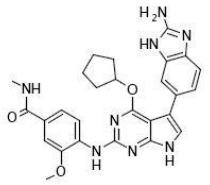

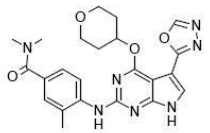

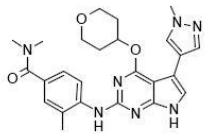

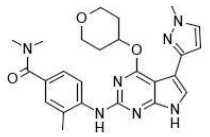

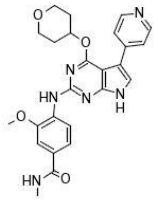

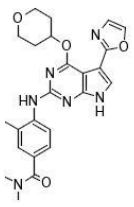

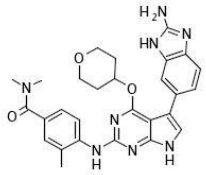

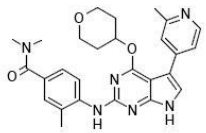

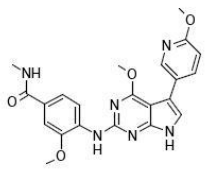

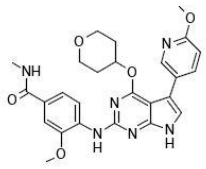

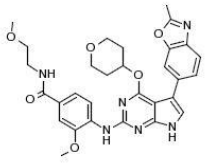

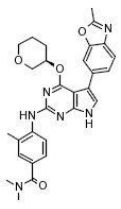

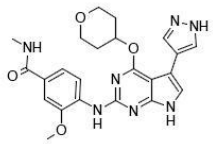

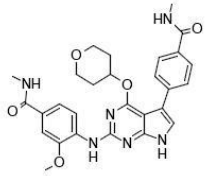

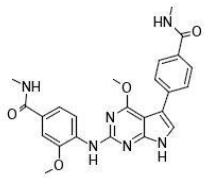

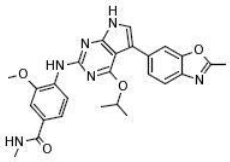

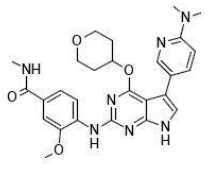

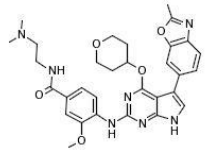

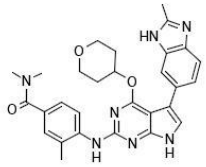

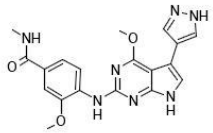

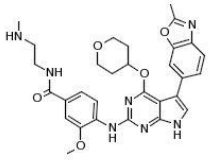

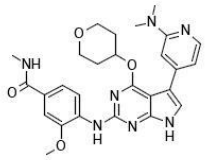

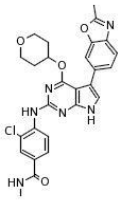

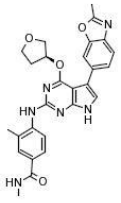

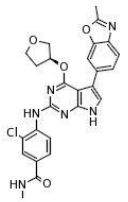

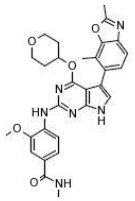

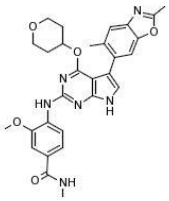

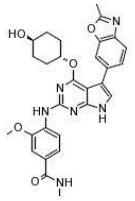

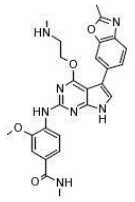

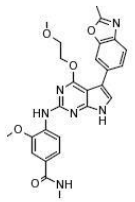

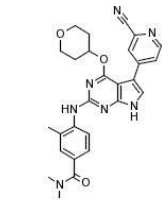

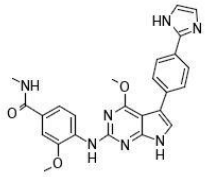

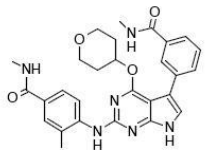

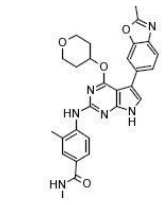

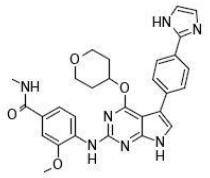

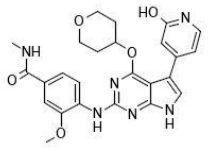

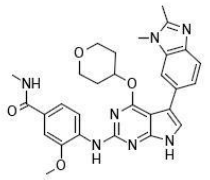

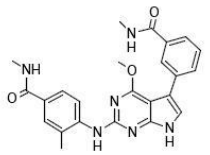

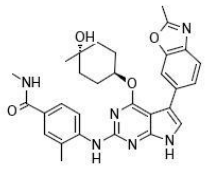

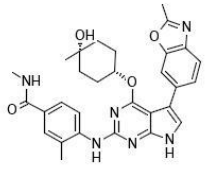

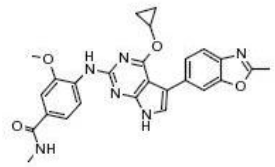

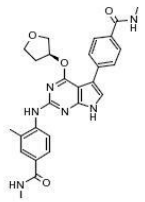

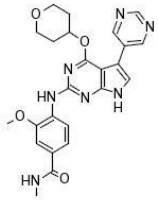

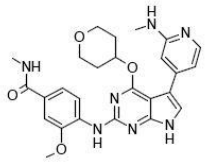

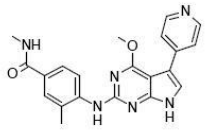

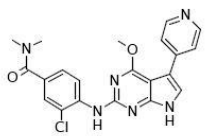

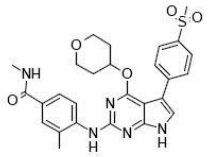

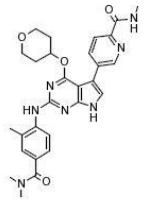

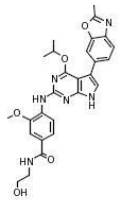

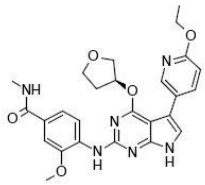

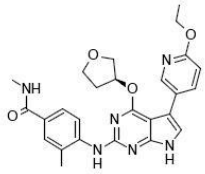

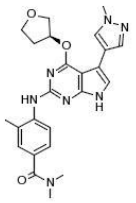

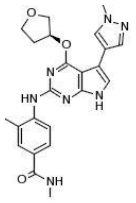

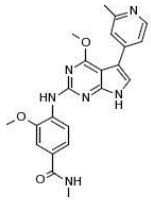

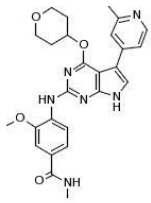

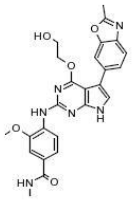

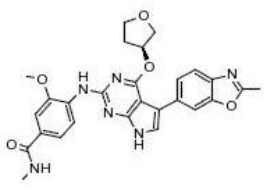

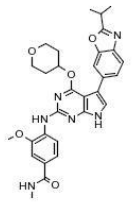

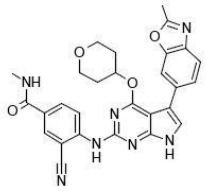

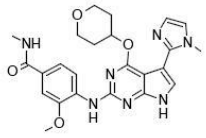

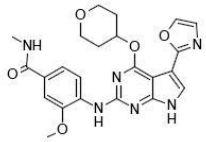

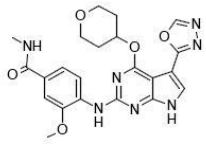

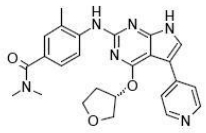

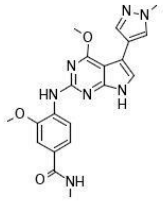

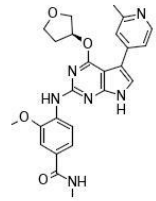

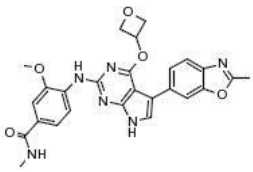

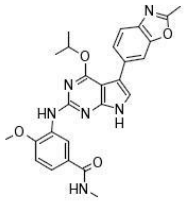

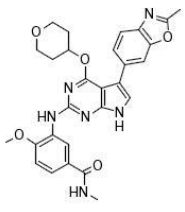

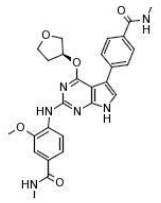

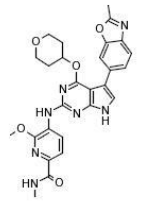

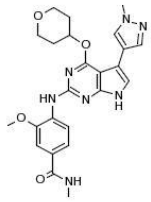

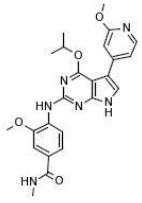

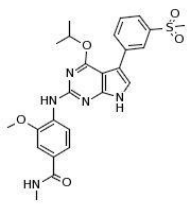

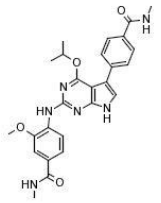

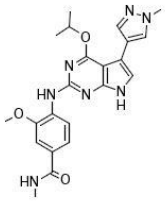

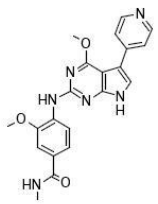

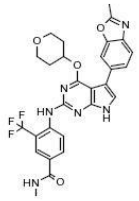

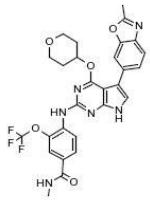

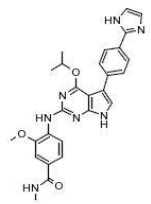

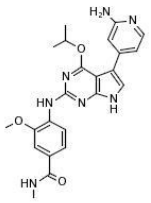

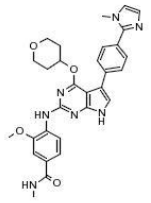

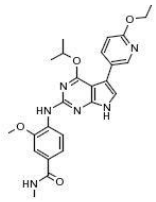

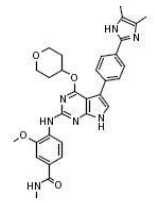

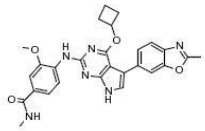

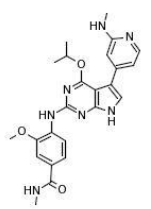

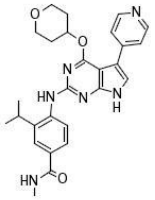

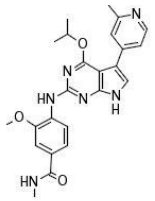

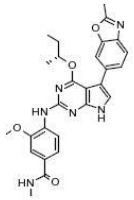

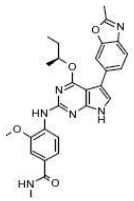

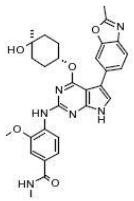

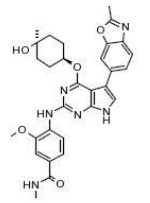

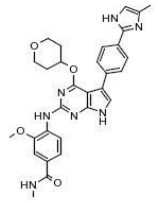

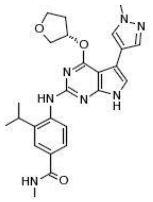

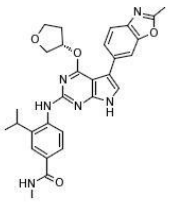

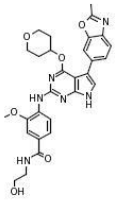

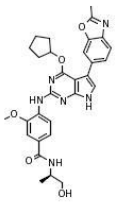

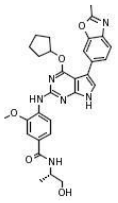

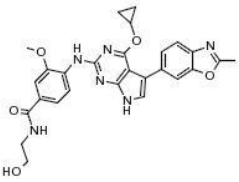

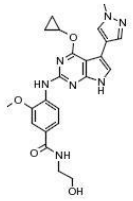

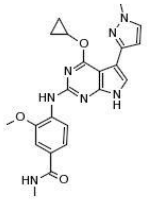

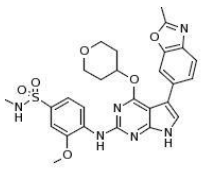

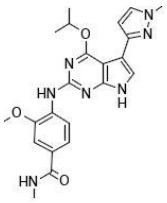

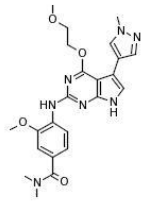

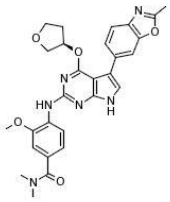

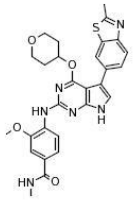

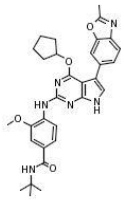

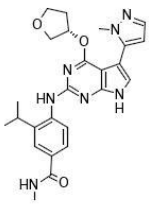

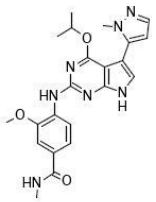

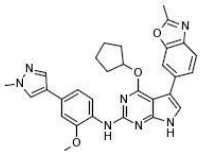

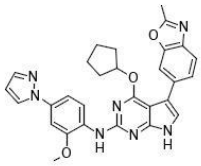

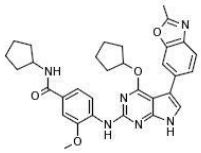

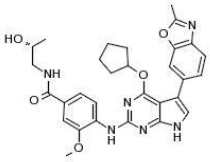

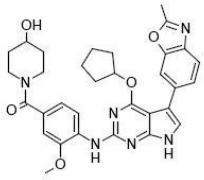

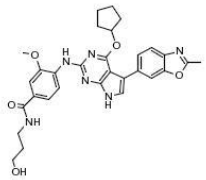

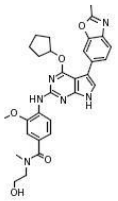

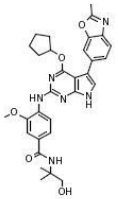

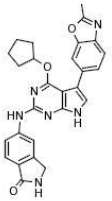

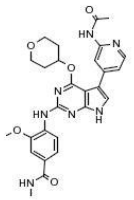

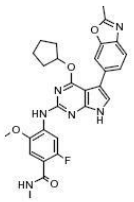

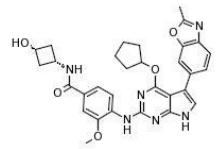

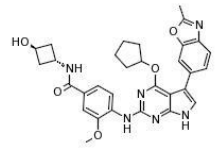

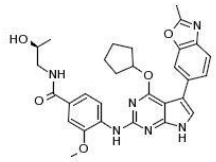

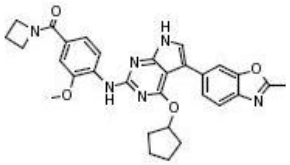

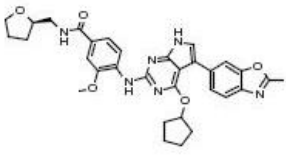

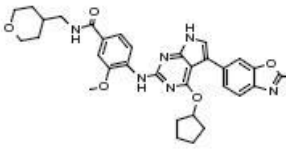

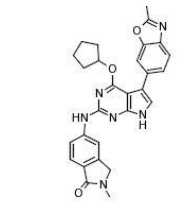

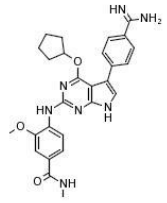

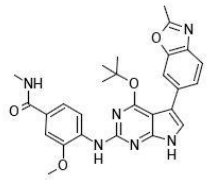

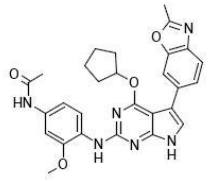

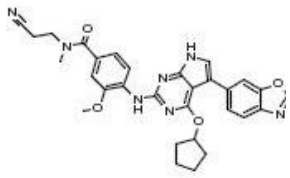

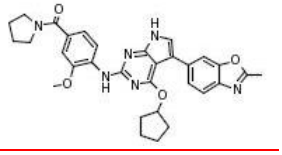

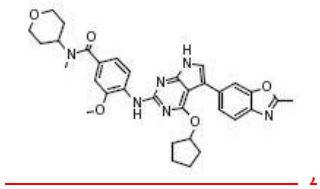

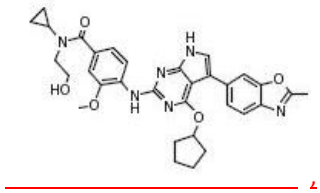

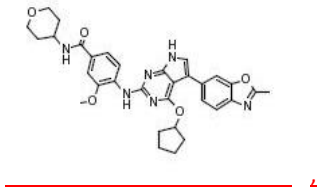

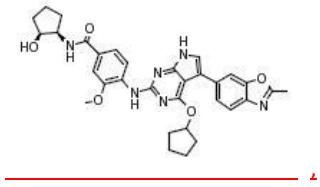

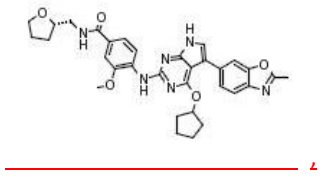

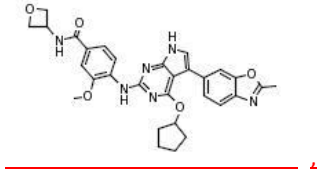

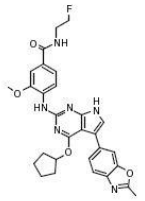

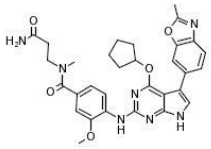

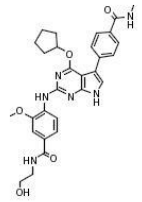

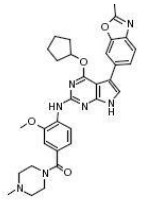

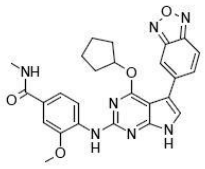

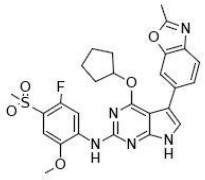

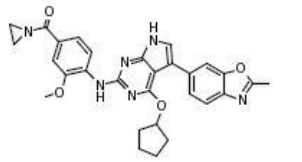

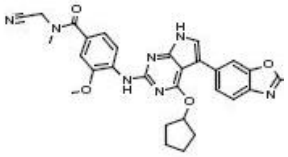

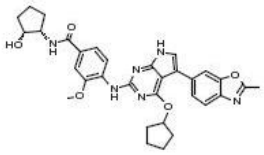

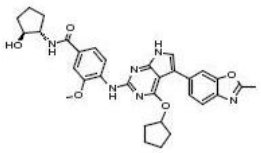

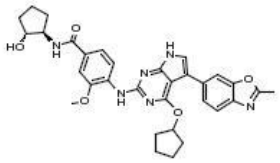

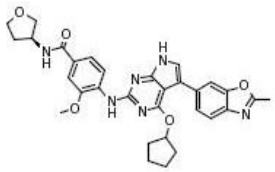

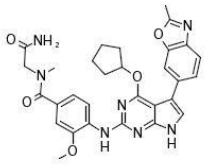

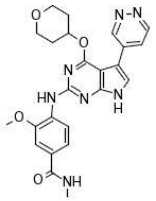

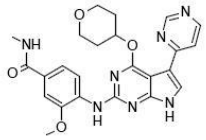

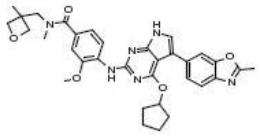

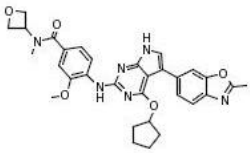

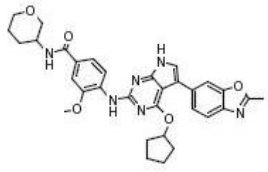

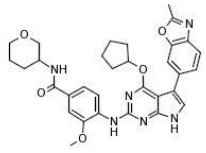

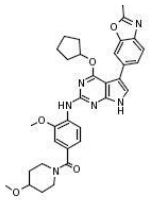

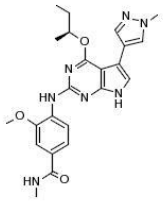

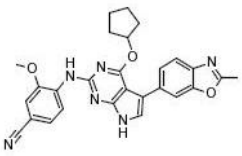

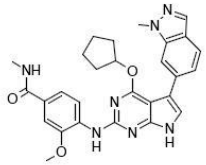

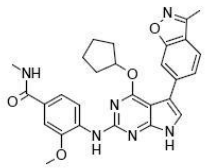

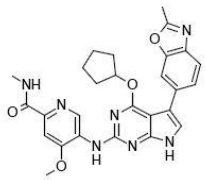

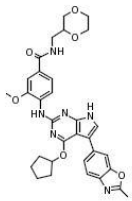

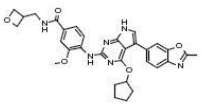

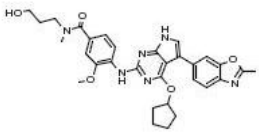

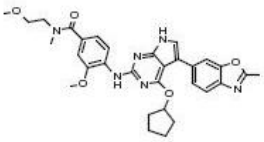

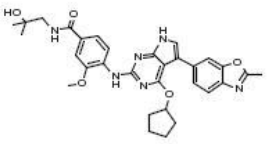

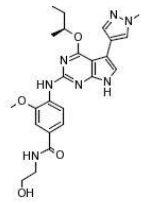

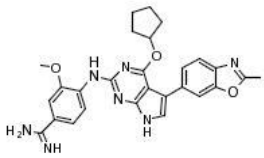

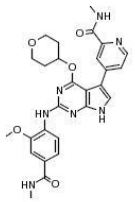

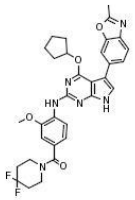

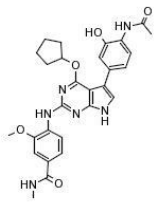

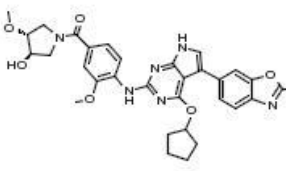

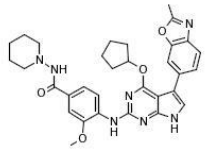

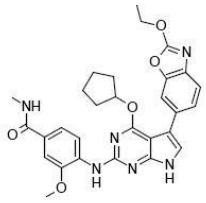

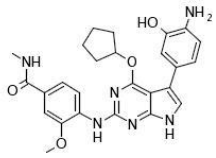

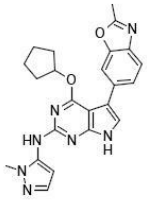

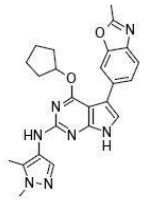

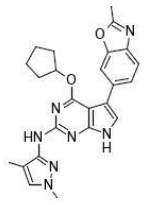

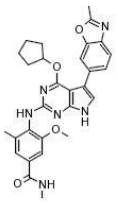

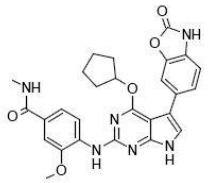

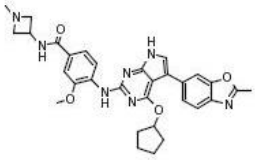

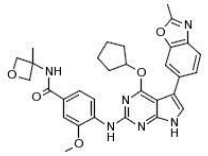

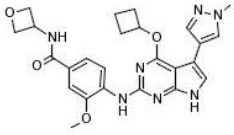

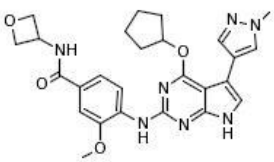

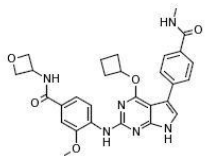

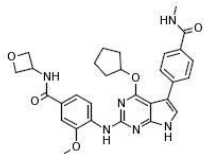

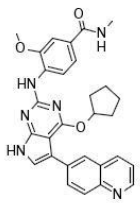

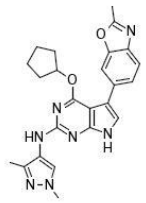

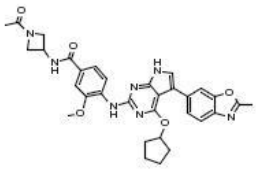

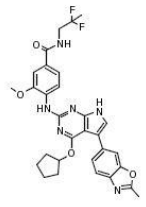

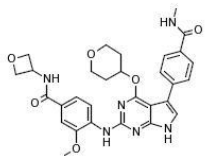

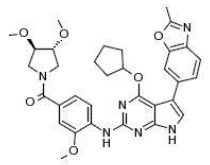

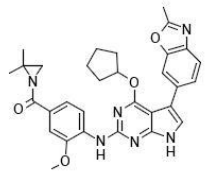

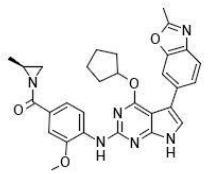

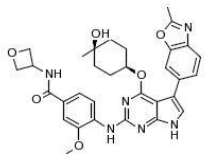

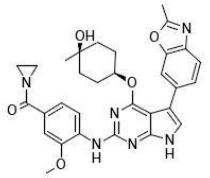

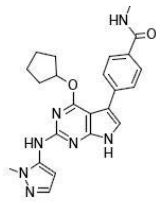

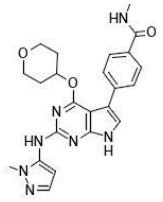

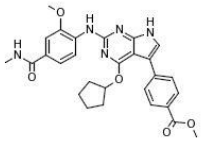

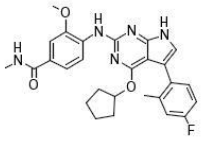

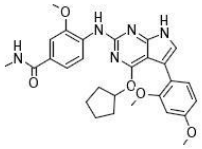

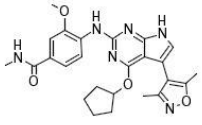

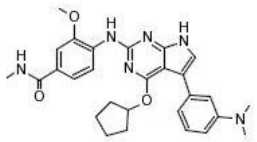

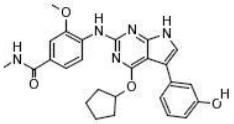

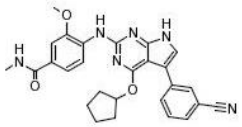

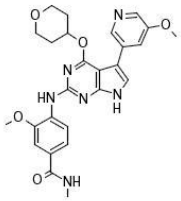

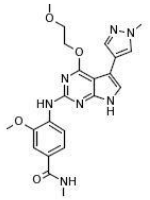

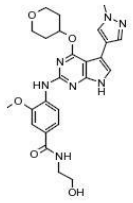

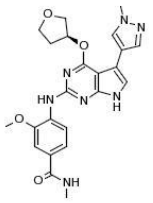

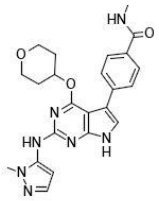

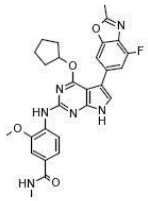

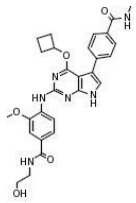

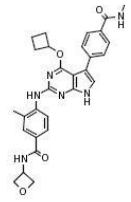

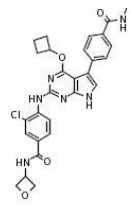

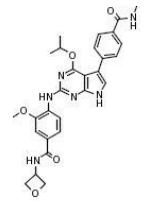

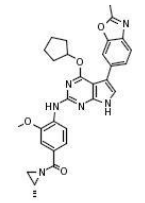

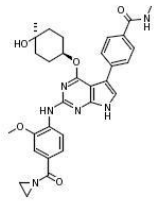

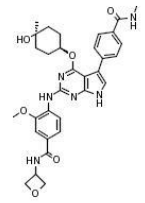

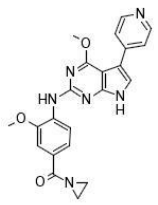

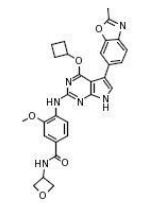

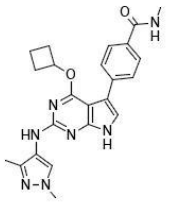

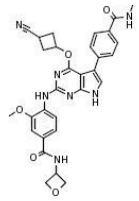

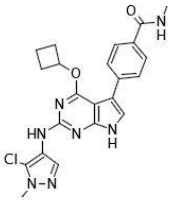

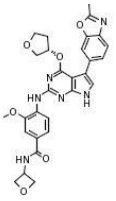

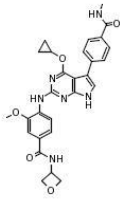

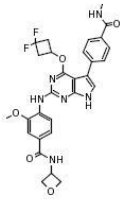

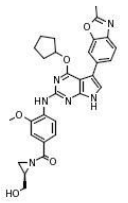

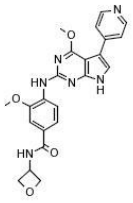

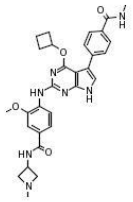

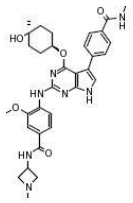

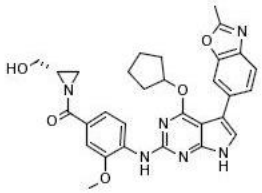

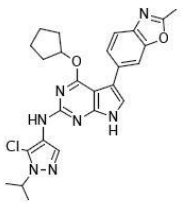

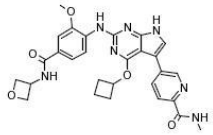

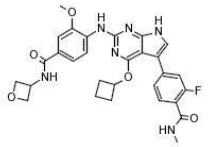

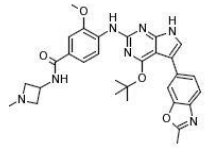

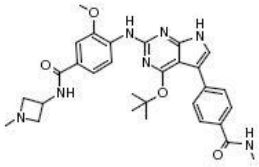

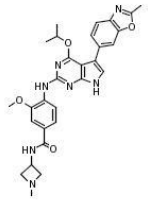

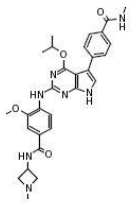

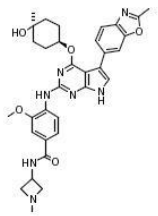

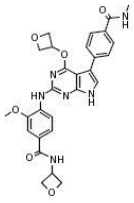

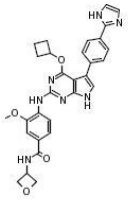

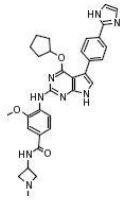

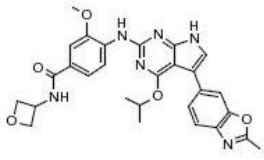

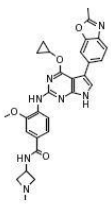

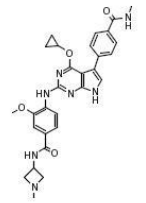

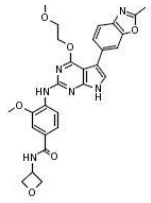

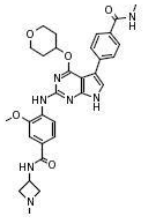

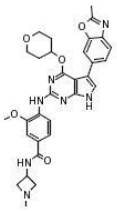

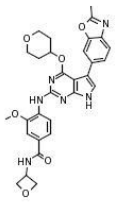

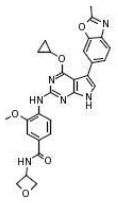

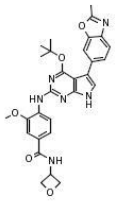

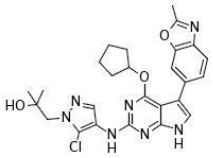

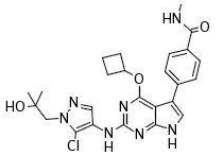

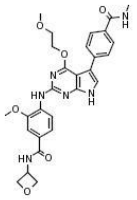

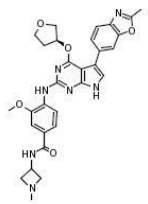

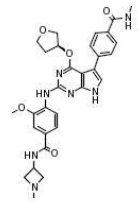

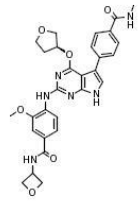

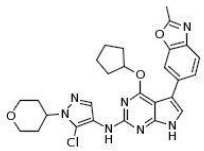

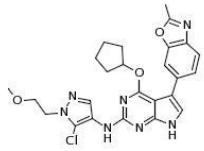

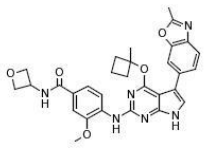

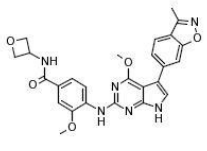

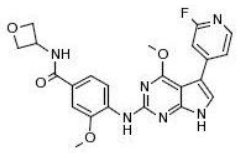

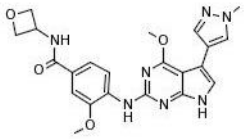

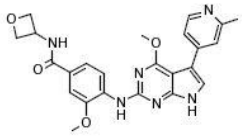

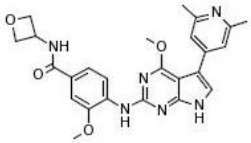

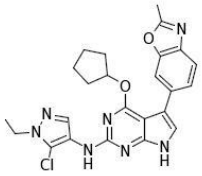

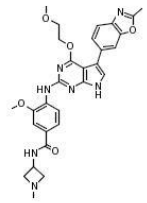

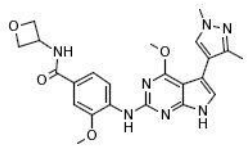

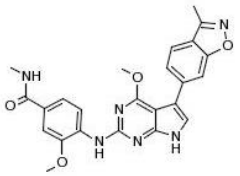

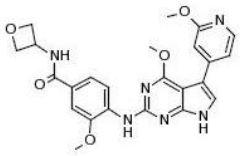

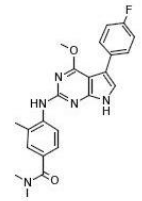

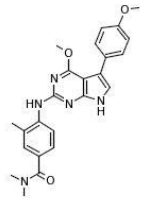

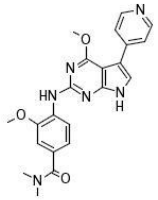

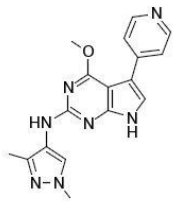

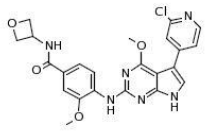

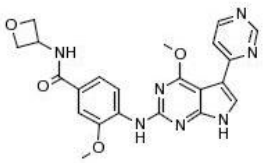

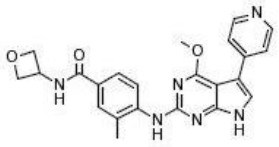

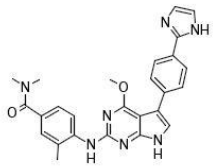

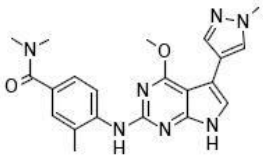

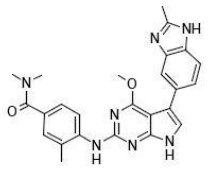

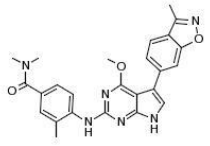

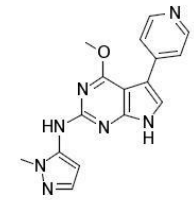

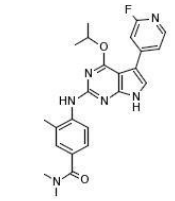

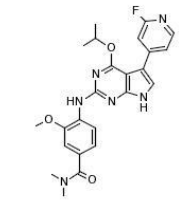

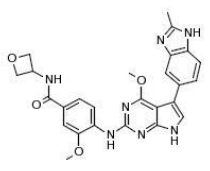

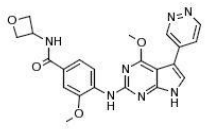

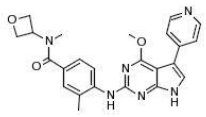

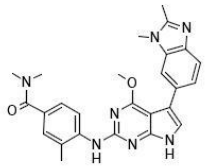

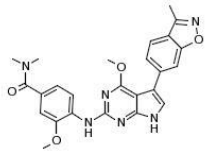

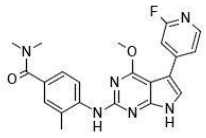

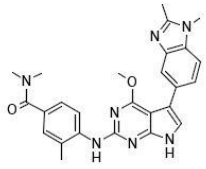

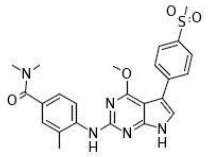

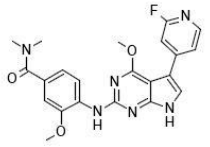

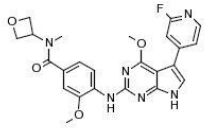

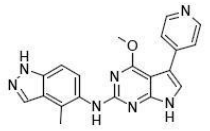

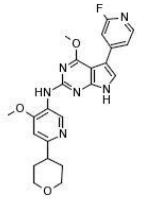

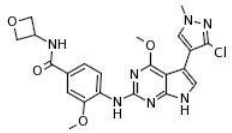

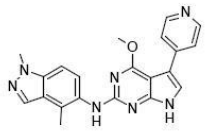

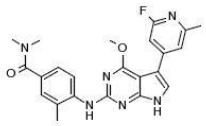

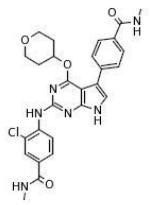

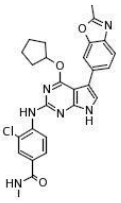

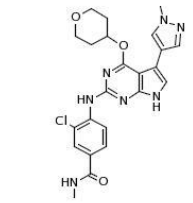

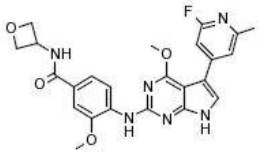

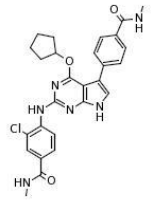

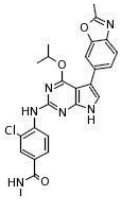

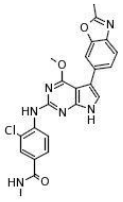

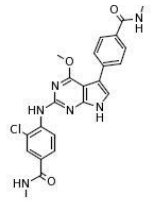

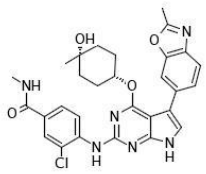

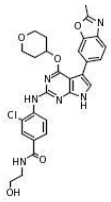

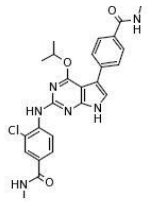

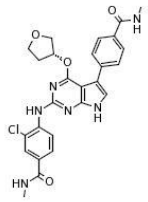

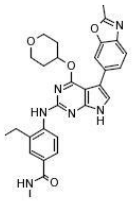

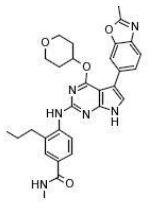

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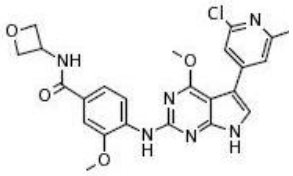
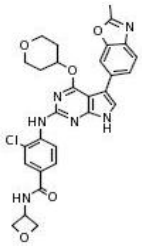


or



,

or a pharmaceutically acceptable salt, tautomer, stereoisomer~~,~~ or enantiomer~~, or isotopologue~~ thereof.

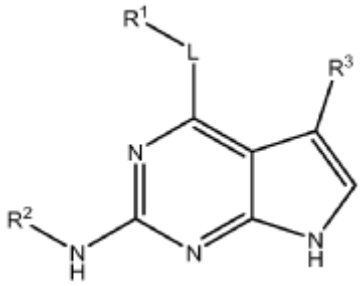
~~30~~29. The compound of claim 1 or claim ~~29~~28, wherein the compound at a concentration of 10 μM inhibits triple negative breast cancer cell proliferation by at least about 50%.

~~31~~30. A pharmaceutical composition comprising an effective amount of a compound of claim 1 or claim ~~29~~28, or a pharmaceutically acceptable salt, tautomer, stereoisomer~~,~~ or enantiomer~~, or isotopologue~~ thereof, and a pharmaceutically acceptable carrier, excipient or vehicle.

~~32~~31. Use of a compound according to claims 1 or claim ~~29~~ 28 in the manufacture of a medicament for the therapeutic ~~and/or prophylactic~~ treatment of breast cancer.

Claims

1. A compound of formula (I):



and pharmaceutically acceptable salts, tautomers, stereoisomers, enantiomers, and isotopologues thereof,

wherein:

R^1 is substituted or unsubstituted C_{1-8} alkyl, substituted or unsubstituted C3-8 cycloalkyl, or substituted or unsubstituted non-aromatic heterocyclyl;

R^2 is substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl;

R^3 is substituted or unsubstituted heterocyclyl or substituted or unsubstituted aryl,

and

L is NH or O;

provided

R^3 is not pyridyl when L is NH or when R^2 is pyrazolyl; and

the compound is not

N-methyl-N-[trans-3-[[5-(l-methyl-lH-pyrazol-4-yl)-2-[(l-methyl-lH-pyrazol-4-yl)amino]-7H-pyrrolo[2,3-d]pyrimidin-4-yl]oxy]cyclobutyl]-2-propenamide; or

N-methyl-N-[trans-3-[[5-(l-methyl-lH-pyrazol-3-yl)-2-[(l-methyl-lH-pyrazol-4-yl)amino]-7H-pyrrolo[2,3-d]pyrimidin-4-yl]oxy]cyclobutyl]-2-propenamide.

2. The compound of claim 1, wherein L is O.

3. The compound of claim 1, wherein R^1 is substituted or unsubstituted alkyl.

4. The compound of claim 1, wherein R^1 is substituted or unsubstituted methyl, ethyl, propyl, isopropyl, n-butyl, sec-butyl, tert-butyl, n-pentyl, sec-pentyl, tert-pentyl, or 2,2-dimethylpropyl.

5. The compound of claim 1, wherein R^1 is substituted or unsubstituted methyl, ethyl, isopropyl, sec-butyl, t-butyl, or 2,2-dimethylpropyl.

6. The compound of claim 3, wherein the alkyl is substituted with one or more -OR or -NR_2, wherein each R is independently -H or substituted or unsubstituted (C_{1-4}) alkyl.

7. The compound of claim 1, wherein R^1 is substituted or unsubstituted C_{3-8} cycloalkyl.

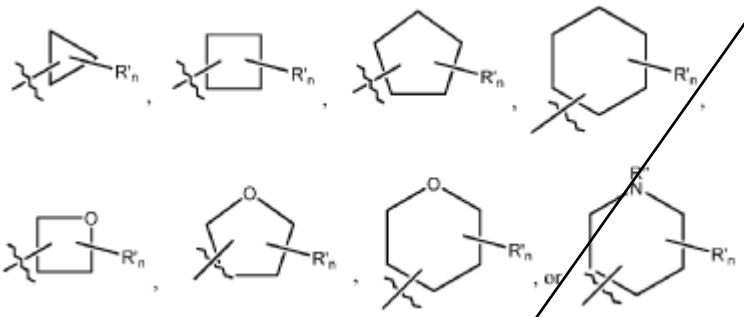
8. The compound of claim 1, wherein R^1 is substituted or unsubstituted cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, or cycloheptyl.

9. The compound of claim 7, wherein the cycloalkyl is substituted with one or more -CN, halogen, -OR or a substituted or unsubstituted C_{1-3} alkyl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl.

10. The compound of claim 1, wherein R^1 is substituted or unsubstituted non-aromatic heterocyclyl.

11. The compound of claim 1, wherein R^1 is substituted or unsubstituted oxetanyl, tetrahydrofuranyl, tetrahydropyranyl, or piperidinyl.

12. The compound of claim 1, wherein R^1 is substituted or unsubstituted C_{1-8} alkyl,



wherein

each R' is independently -CN, halogen, -OR or C_{1-3} alkyl;

R" is -H or C_{1-3} alkyl;

each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl; and

n is 0-2.

13. The compound of claim 1, wherein R^2 is substituted phenyl.

14. The compound of claim 13, wherein R^2 is phenyl, substituted with one or more substituted or unsubstituted C_{1-6} alkyl, halogen, -CN, -OR^5, -$C(=0)NR^5_2$, -C(=0)(substituted or unsubstituted heterocyclyl), -C(=0)(substituted or unsubstituted alkylheterocyclyl),

-$NHC(=0)R^5$, -$S0_2NR^5_2$, or substituted or unsubstituted heteroaryl, wherein each R^5 is independently -H, substituted or unsubstituted alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclyl, or substituted or unsubstituted alkylheterocyclyl.

15. The compound of claim 13, wherein R^2 is phenyl, substituted with one or more -(C_{1-3} alkyl), -(C_{1-3} alkyl)NR_2, -CF_3, -Cl, -F, -CN, -OCH_3, -OCF_3, -$C(=0)NR_2$,

-C(=0)NR(substituted or unsubstituted cycloalkyl), -C(=O)NR$(CH_2)_{0-2}CR_2(CH_2)_{0-2}$OR,

-C(=0)NR$(CH_2)_{0-2}$ $CR_2(CH_2)_{0-2}$ NR_2, -C(=O)NR$(CH_2)_{0-2}$ $CR_2(CH_2)_{0-2}$ C(=O)NR_2,

-C(=0)N(substituted or unsubstituted cycloalkyl)$(CH_2)_{0-2}$ OR, -C(=O)NR$(CH_2)_{0-3}$ (substituted or unsubstituted heterocyclyl), -C(=O)$(CH_2)_{0-3}$(substituted or unsubstituted heterocyclyl),

-C(=NR)NR_2, -NRC(=0)R, -S0$_2$$NR_2$, -S0$_2$R, or substituted or unsubstituted heterocyclyl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl.

16. The compound of claim 15, wherein each R is independently -H or -CH_3.

17. The compound of claim 13, wherein R^2 is phenyl, substituted with one or more -CH_3, -CH_2CH_3, -CH_2 CH_2CH_3, -$CH(CH_3)_2$, -CH_2NH_2, -CF_3, -Cl,- F, -CN, -OCH_3, -OCF_3, -C(=0)NH_2, -C(=0)$NHCH_3$, -C(=0)$N(CH_3)_2$, -C(=0)$NC(CH_3)_3$, -C(=0)$NHCH_2CH_2F$,

-C(=0)$NHCH_2CHF_2$, -C(=0)$NHCH_2CF_3$, -C(=0)$NHCH_2CF_2CH_3$, -C(=0)$NHCH_2CN$,

-C(=0)$N(CH_3)CH_2CN$, -C(=0)$NHCH_2CH_2CN$, -C(=0)$N(CH_3)CH_2CH_2CN$,

-C(=0)NH-cyclobutyl, -C(=0)NH-(hydroxy-cyclobutyl), -C(=0)NH-cyclopentyl,

-C(=0)NH-(hydroxy-cyclopentyl), -C(=0)$NHCH_2CH_2OH$, -C(=0)$NHCH_2CH_2OCH_3$,

-C(=0)$N(CH_3)CH_2CH_2OH$, -C(=0)$N(CH_3)CH_2CH_2OCH_3$, -C(=0)$NHCH_2CH_2CH_2OH$,

-C(=0)$N(CH_3)CH_2CH_2CH_2OH$, -C(=0)$N(CH_3)CH_2CH_2CH_2OCH_3$, -C(=0)$NHCH_2CH(CH_3)OH$, -C(=0)$NHCH_2C(CH_3)_2OH$, -C(=0)$NHCH(CH_3)CH_2OH$, -C(=0)$NHC(CH_3)_2CH_2OH$,

-C(=0)$NHCH_2CH_2NH_2$, -C(=0)$NHCH_2CH_2NH(CH_3)$, -C(=0)$NHCH_2CH_2N(CH_3)_2$,

-C(=0)$NHCH_2C(=0)NH_2$, -C(=0)$N(CH_3)CH_2C(=0)NH_2$, -C(=0)$NHCH_2CH_2C(=0)NH_2$, -C(=0)$N(CH_3)CH_2CH_2C(=0)NH_2$, -C(=0)N(cyclopropyl)CH_2CH_2OH, -C(=0)NH-oxetanyl, -C(=0)$N(CH_3)$-oxetanyl, -C(=0)NH-(methyl-oxetanyl), -C(=0)NH-azetidinyl,

-C(=0)NH-(methylazetidinyl), -C(=0)NH-(1 -acetylazetidinyl), -C(=0)NH-pyrrolidyl, -C(=0)NH-piperidyl, -C(=0)NH-tetrahydrofuranyl, -C(=0)$N(CH_3)$-tetrahydrofuranyl, -C(=0)NH-tetrahydropyranyl, -C(=0)$N(CH_3)$-tetrahydropyranyl, -C(=0)$NHCH_2$-oxetanyl, -C(=0)$N(CH_3)CH_2$-oxetanyl, -C(=0)$NHCH_2$-(methyl-oxetanyl), -C(=0)$N(CH_3)CH_2$-(methyl-oxetanyl), -C(=0)$NHCH_2$-tetrahydrofuranyl, -C(=0)$NHCH_2$-tetrahydropyranyl,

-C(=0)$NHCH_2$-dioxanyl, -C(=0)aziridinyl, -C(=0)(methyl-aziridinyl),

-C(=0)(dimethyl-aziridinyl), -C(=0)(hydroxymethyl-aziridinyl), -C(=0)azetidinyl,

-C(=0)pyrrolidinyl, -C(=0)(hydroxyl-pyrrolidinyl), -C(=0)(hydroxyl,methoxypyrrolidinyl), -C(=0)(dimethoxypyrrolidinyl), -C(=0)morpholinyl, -C(=0)piperazinyl,

-C(=0)(methylpiperazinyl), -C(=0)(hydroxy-piperidyl), -C(=0)(fluoropiperidinyl),

-(C=0)(methoxy-piperidyl), -C(=NH)NH_2, -NHC(=0)CH_3, -S0$_2$$NHCH_3$, -S0$_2$$CH_3$, or substituted or unsubstituted pyrazolyl.

18. The compound of claim 13, wherein R^2 is phenyl, substituted with one or more $-CH_3$, $-CH_2CH_3$, $-CH_2\ CH_2CH_3$, $-CH(CH_3)_2$, $-CH_2NH_2$, $-CF_3$, -Cl,- F, -CN, $-OCH_3$, $-OCF_3$, $-C(=0)NH_2$, $-C(=0)NHCH_3$, $-C(=0)N(CH_3)_2$, $-C(=0)NC(CH_3)_3$, $-C(=0)NHCH_2CH_2F$, $-C(=0)NHCH_2CF_2CH_3$, $-C(=0)N(CH_3)CH_2CN$, $-C(=0)N(CH_3)CH_2CH_2CN$,

-C(=0)NH-(3-hydroxy-cyclobutyl), -C(=0)NH-cyclopentyl,

-C(=0)NH-(2-hydroxycyclopentyl),$-C(=0)NHCH_2CH_2OH$, $-C(=0)NHCH_2CH_2OCH_3$, $-C(=0)N(CH_3)CH_2CH_2OH$, $-C(=0)N(CH_3)CH_2CH_2OCH_3$, $-C(=0)NHCH_2CH_2CH_2OH$, $-C(=0)N(CH_3)CH_2CH_2CH_2OH$, $-C(=0)NHCH_2CH(CH_3)OH$, $-C(=0)NHCH_2C(CH_3)_2OH$, $-C(=0)NHCH(CH_3)CH_2OH$, $-C(=0)NHC(CH_3)_2CH_2OH$, $-C(=0)NHCH_2CH_2NH_2$,

$-C(=0)NHCH_2CH_2NH(CH_3)$, $-C(=0)NHCH_2CH_2N(CH_3)_2$, $-C(=0)N(CH_3)CH_2C(=0)NH_2$, $-C(=0)N(CH_3)CH_2CH_2C(=0)NH_2$, -C(=0)N(cyclopropyl)$CH_2CH_2OH$, -C(=0)NH-oxetanyl, $-C(=0)N(CH_3)$-oxetanyl, -C(=0)NH-(3-methyl-oxetanyl), -C(=0)NH-(1 -methylazetidinyl), -C(=0)NH-(1 -acetylazetidinyl), -C(=0)NH-piperidyl, -C(=0)NH-tetrahydrofuranyl,

-C(=0)NH-tetrahydropyranyl, $-C(=0)N(CH_3)$-tetrahydropyranyl, $-C(=0)NHCH_2$-oxetanyl, $-C(=0)N(CH_3)CH_2$-(3-methyl-oxetanyl), $-C(=0)NHCH_2$-tetrahydrofuranyl,

$-C(=0)NHCH_2$-tetrahydropyranyl, $-C(=0)NHCH_2$-dioxanyl, -C(=0)aziridinyl,

-C(=0)(2-methyl-aziridinyl), -C(=0)(2,2-dimethyl-aziridinyl),

-C(=0)(2-(hydroxymethyl)aziridinyl), -C(=0)azetidinyl, -C(=0)pyrrolidinyl,

-C(=0)(3-hydroxy-4-methoxypyrrolidinyl), -C(=0)(3,4-dimethoxypyrrolidinyl),

-C(=0)morpholinyl, -C(=0)piperazinyl, -C(=0)(4-methylpiperazinyl),

-C(=0)(4-hydroxy-piperidyl), -C(=0)(4,4-difluoropiperidinyl), -(C=0)(4-methoxy-piperidyl), $-C(=NH)NH_2$,$-NHC(=0)CH_3$, $-S0_2NHCH_3$, $-S0_2CH_3$, or substituted or unsubstituted pyrazolyl.

19. The compound of claim 1, wherein R^2 is substituted or unsubstituted pyrazolyl, substituted or unsubstituted pyridyl, substituted or unsubstituted indazolyl or substituted or unsubstituted isoindolinone.

20. The compound of claim 19, wherein R^2 is substituted with one or more halogen, substituted or unsubstituted (C_{1-4})alkyl, -OR, $-C(=0)NR_2$, or substituted or unsubstituted heterocyclyl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl.

21. The compound of claim 1, wherein R^3 is substituted or unsubstituted heterocyclyl.

22. The compound of claim 21, wherein the heterocyclyl is substituted or

unsubstituted pyrazolyl, oxazolyl, isoxazolyl, oxadiazolyl, pyridyl, pyridazinyl, pyrimidyl, pyrazinyl, benztriazolyl, indazolyl, indolyl, benzoxazolyl, benzisoxazolyl, benzthiazolyl, benzoxazolonyl, benzoxadiazolyl, benzimidazolyl, or quinolyl.

23. The compound of claim 21, wherein the heterocyclyl is substituted with one or more substituents selected from substituted or unsubstituted (C_{1-4})alkyl, halogen, -OR, -CN, $-NR_2$, $-C(=0)NR_2$, -NRC(=0)R, or substituted or unsubstituted triazolyl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl.

24. The compound of claim 21, wherein the heterocyclyl is substituted with one or more substituents selected from $-CH_3$, $-CH(CH_3)_2$, -F, -Cl, -OH, $-OCH_3$, $-OCH_2CH_3$, -CN, $-NH_2$, $-NHCH_3$, $-N(CH_3)_2$, $-C(=0)NH(CH_3)$, $-NHC(=0)CH_3$, or substituted or unsubstituted triazolyl.

25. The compound of claim 1, wherein R^3 is substituted or unsubstituted aryl.

26. The compound of claim 1, wherein R^3 is substituted or unsubstituted phenyl.

27. The compound of claim 26, wherein the phenyl is substituted with one or more substituents selected from substituted or unsubstituted C_{1-4} alkyl, halogen, -CN, -OR, $-NR_2$, -NRSO2R', $-NR(C=0)NR_2$, -NR(C=0)R', -COOR, $-(C=0)NR_2$, $-C(=N)NR_2$, $-S0_2R'$, or substituted or unsubstituted heteroaryl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl, and R' is C_{1-3} alkyl.

28. The compound of claim 26, wherein the phenyl is substituted with one or more substituents selected from $-CH_3$,- CH_2OH, $-CH(OH)CH_3$, $-C(CH_3)_2OH$, -CN, -F, -Cl, -OH, $-OCH_3$, $-NH_2$, $-N(CH_3)_2$, $-NHS0_2CH_3$, $-NH(C=0)NH_2$, $-NH(C=0)CH_3$, $-COOCH_3$,

$-(C=0)NHCH_3$, $-C(=NH)NH_2$, $-S0_2CH_3$, substituted or unsubstituted triazolyl, substituted or unsubstituted pyrazolyl, or substituted or unsubstituted imidazolyl.

29. The compound of claim 1, wherein the compound is selected from Table 1, or a pharmaceutically acceptable salt, tautomer, stereoisomer, enantiomer, or isotopologue thereof.

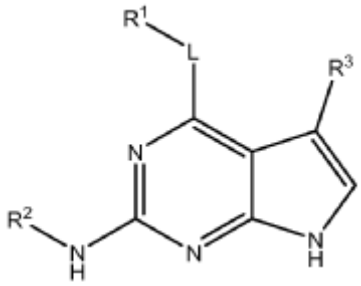
30. The compound of claim 1 or claim 29, wherein the compound at a concentration of 10 μM inhibits triple negative breast cancer cell proliferation by at least about 50%.

31. A pharmaceutical composition comprising an effective amount of a compound of claim 1 or claim 29, or a pharmaceutically acceptable salt, tautomer, stereoisomer, enantiomer, or isotopologue thereof, and a pharmaceutically acceptable carrier, excipient or vehicle.

32. Use of a compound according to claims 1 or claim 29 in the manufacture of a medicament for the therapeutic and/or prophylactic treatment of breast cancer.

Claims

1. A compound of formula (I):



or a pharmaceutically acceptable salt, tautomer, stereoisomer, or enantiomer thereof,

wherein:

R^1 is substituted or unsubstituted C_{1-8} alkyl, substituted or unsubstituted C_{3-8} cycloalkyl, or substituted or unsubstituted non-aromatic heterocyclyl;

R^2 is substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl;

R^3 is substituted or unsubstituted heterocyclyl or substituted or unsubstituted aryl,

and

L is O;

provided

R^3 is not pyridyl when R^2 is pyrazolyl; and

the compound is not

N-methyl-N-[trans-3-[[5-(1-methyl-1H-pyrazol-4-yl)-2-[(1-methyl-1H-pyrazol-4-yl)amino]-7H-pyrrolo[2,3-d]pyrimidin-4-yl]oxy]cyclobutyl]-2-propenamide; or

N-methyl-N-[trans-3-[[5-(1-methyl-1H-pyrazol-3-yl)-2-[(1-methyl-1H-pyrazol-4-yl)amino]-7H-pyrrolo[2,3-d]pyrimidin-4-yl]oxy]cyclobutyl]-2-propenamide.

2. The compound of claim 1, wherein R^1 is substituted or unsubstituted C_{1-8} alkyl.

3. The compound of claim 1, wherein R^1 is substituted or unsubstituted methyl, ethyl, propyl, isopropyl, n-butyl, sec-butyl, tert-butyl, n-pentyl, sec-pentyl, tert-pentyl, or 2,2-dimethylpropyl.

4. The compound of claim 1, wherein R^1 is substituted or unsubstituted methyl, ethyl, isopropyl, sec-butyl, t-butyl, or 2,2-dimethylpropyl.

5. The compound of claim 2, wherein the alkyl is substituted with one or more -OR or -NR_2, wherein each R is independently -H or substituted or unsubstituted (C_{1-4}) alkyl.

6. The compound of claim 1, wherein R^1 is substituted or unsubstituted C_{3-8} cycloalkyl.

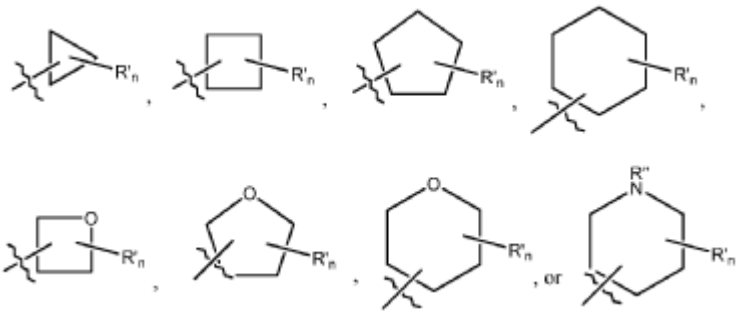
7. The compound of claim 1, wherein R^1 is substituted or unsubstituted cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, or cycloheptyl.

8. The compound of claim 6, wherein the cycloalkyl is substituted with one or more -CN, halogen, -OR or a substituted or unsubstituted C_{1-3} alkyl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl.

9. The compound of claim 1, wherein R^1 is substituted or unsubstituted non-aromatic heterocyclyl.

10. The compound of claim 1, wherein R^1 is substituted or unsubstituted oxetanyl, tetrahydrofuranyl, tetrahydropyranyl, or piperidinyl.

11. The compound of claim 1, wherein R^1 is substituted or unsubstituted C_{1-8} alkyl,



wherein

each R' is independently -CN, halogen, -OR or C_{1-3} alkyl;

R'' is -H or C_{1-3} alkyl;

each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl; and

n is 0-2.

12. The compound of claim 1, wherein R^2 is substituted phenyl.

13. The compound of claim 12, wherein R^2 is phenyl, substituted with one or more substituted or unsubstituted C_{1-6} alkyl, halogen, -CN, $-OR^5$, $-C(=0)NR^5_2$, -C(=0)(substituted or unsubstituted heterocyclyl), -C(=0)(substituted or unsubstituted alkylheterocyclyl),

$-NHC(=0)R^5$, $-S0_2NR^5_2$, or substituted or unsubstituted heteroaryl, wherein each R^5 is independently -H, substituted or unsubstituted alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocyclyl, or substituted or unsubstituted alkylheterocyclyl.

14. The compound of claim 12, wherein R^2 is phenyl, substituted with one or more -(C_{1-3} alkyl), -(C_{1-3} alkyl)NR_2, $-CF_3$, -CI, -F, -CN, $-OCH_3$, $-OCF_3$, $-C(=0)NR_2$,

-C(=0)NR(substituted or unsubstituted cycloalkyl), $-C(=O)NR(CH_2)_0$-$_2CR_2(CH_2)_0$-$_2OR$,

$-C(=0)NR(CH_2)_{0-2}$ $CR_2(CH_2)_{0-2}$ NR_2, $-C(=O)NR(CH_2)_{0-2}$ $CR_2(CH_2)_{0-2}$ $C(=O)NR_2$,

-C(=0)N(substituted or unsubstituted cycloalkyl)$(CH_2)_{0-2}$OR, -C(=O)NR$(CH_2)_{0-3}$(substituted or unsubstituted heterocyclyl), -C(=O)$(CH_2)_{0-3}$(substituted or unsubstituted heterocyclyl),

-C(=NR)NR_2, -NRC(=0)R, -$S0_2NR_2$, -$S0_2$R, or substituted or unsubstituted heterocyclyl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl.

15. The compound of claim 14, wherein each R is independently -H or -CH_3.

16. The compound of claim 12, wherein R^2 is phenyl, substituted with one or more -CH_3, -CH_2CH_3, -CH_2 CH_2CH_3, -$CH(CH_3)_2$, -CH_2NH_2, -CF_3, -Cl,- F, -CN, -OCH_3, -OCF_3, -C(=0)NH_2, -C(=0)$NHCH_3$, -C(=0)$N(CH_3)_2$, -C(=0)$NHC(CH_3)_3$, -C(=0)$NHCH_2CH_2F$,

-C(=0)$NHCH_2CHF_2$, -C(=0)$NHCH_2CF_3$, -C(=0)$NHCH_2CF_2CH_3$, -C(=0)$NHCH_2CN$,

-C(=0)$N(CH_3)CH_2CN$, -C(=0)$NHCH_2CH_2CN$, -C(=0)$N(CH_3)CH_2CH_2CN$,

-C(=0)NH-cyclobutyl, -C(=0)NH-(hydroxy-cyclobutyl), -C(=0)NH-cyclopentyl,

-C(=0)NH-(hydroxy-cyclopentyl), -C(=0)$NHCH_2CH_2OH$, -C(=0)$NHCH_2CH_2OCH_3$,

-C(=0)$N(CH_3)CH_2CH_2OH$, -C(=0)$N(CH_3)CH_2CH_2OCH_3$, -C(=0)$NHCH_2CH_2CH_2OH$,

-C(=0)$N(CH_3)CH_2CH_2CH_2OH$, -C(=0)$N(CH_3)CH_2CH_2CH_2OCH_3$, -C(=0)$NHCH_2CH(CH_3)OH$, -C(=0)$NHCH_2C(CH_3)_2OH$, -C(=0)$NHCH(CH_3)CH_2OH$, -C(=0)$NHC(CH_3)_2CH_2OH$,

-C(=0)$NHCH_2CH_2NH_2$, -C(=0)$NHCH_2CH_2NH(CH_3)$, -C(=0)$NHCH_2CH_2N(CH_3)_2$,

-C(=0)$NHCH_2C(=0)NH_2$, -C(=0)$N(CH_3)CH_2C(=0)NH_2$, -C(=0)$NHCH_2CH_2C(=0)NH_2$, -C(=0)$N(CH_3)CH_2CH_2C(=0)NH_2$, -C(=0)N(cyclopropyl)CH_2CH_2OH, -C(=0)NH-oxetanyl, -C(=0)$N(CH_3)$-oxetanyl, -C(=0)NH-(methyl-oxetanyl), -C(=0)NH-azetidinyl,

-C(=0)NH-(methylazetidinyl), -C(=0)NH-(1 -acetylazetidinyl), -C(=0)NH-pyrrolidyl, -C(=0)NH-piperidyl, -C(=0)NH-tetrahydrofuranyl, -C(=0)$N(CH_3)$-tetrahydrofuranyl, -C(=0)NH-tetrahydropyranyl, -C(=0)$N(CH_3)$-tetrahydropyranyl, -C(=0)$NHCH_2$-oxetanyl, -C(=0)$N(CH_3)CH_2$-oxetanyl, -C(=0)$NHCH_2$-(methyl-oxetanyl), -C(=0)$N(CH_3)CH_2$-(methyl-oxetanyl), -C(=0)$NHCH_2$-tetrahydrofuranyl, -C(=0)$NHCH_2$-tetrahydropyranyl,

-C(=0)$NHCH_2$-dioxanyl, -C(=0)aziridinyl, -C(=0)(methyl-aziridinyl),

-C(=0)(dimethyl-aziridinyl), -C(=0)(hydroxymethyl-aziridinyl), -C(=0)azetidinyl,

-C(=0)pyrrolidinyl, -C(=0)(hydroxyl-pyrrolidinyl), -C(=0)(hydroxyl,methoxypyrrolidinyl), -C(=0)(dimethoxypyrrolidinyl), -C(=0)morpholinyl, -C(=0)piperazinyl,

-C(=0)(methylpiperazinyl), -C(=0)(hydroxy-piperidyl), -C(=0)(fluoropiperidinyl),

-(C=0)(methoxy-piperidyl), -C(=NH)NH_2, -NHC(=0)CH_3, -$S0_2NHCH_3$, -$S0_2CH_3$, or substituted or unsubstituted pyrazolyl.

17. The compound of claim 12, wherein R^2 is phenyl, substituted with one or more -CH_3, -CH_2CH_3, -CH_2 CH_2CH_3, -$CH(CH_3)_2$, -CH_2NH_2, -CF_3, -Cl,- F, -CN, -OCH_3, -OCF_3, -C(=0)NH_2, -C(=0)$NHCH_3$, -C(=0)$N(CH_3)_2$, -C(=0)$NHC(CH_3)$, -C(=0)$NHCH_2CH_2F$, -C(=0)$NHCH_2CF_2CH_3$, -C(=0)$N(CH_3)CH_2CN$, -C(=0)$N(CH_3)CH_2CH_2CN$,

-C(=0)NH-(3-hydroxy-cyclobutyl), -C(=0)NH-cyclopentyl,

-C(=0)NH-(2-hydroxycyclopentyl),-C(=0)$NHCH_2CH_2OH$, -C(=0)$NHCH_2CH_2OCH_3$, -C(=0)$N(CH_3)CH_2CH_2OH$, -C(=0)$N(CH_3)CH_2CH_2OCH_3$, -C(=0)$NHCH_2CH_2CH_2OH$, -C(=0)$N(CH_3)CH_2CH_2CH_2OH$, -C(=0)$NHCH_2CH(CH_3)OH$, -C(=0)$NHCH_2C(CH_3)_2OH$, -C(=0)$NHCH(CH_3)CH_2OH$, -C(=0)$NHC(CH_3)_2CH_2OH$, -C(=0)$NHCH_2CH_2NH_2$,

-C(=0)$NHCH_2CH_2NH(CH_3)$, -C(=0)$NHCH_2CH_2N(CH_3)_2$, -C(=0)$N(CH_3)CH_2C(=0)NH_2$, -C(=0)$N(CH_3)CH_2CH_2C(=0)NH_2$, -C(=0)N(cyclopropyl)CH_2CH_2OH, -C(=0)NH-oxetanyl, -C(=0)$N(CH_3)$-oxetanyl, -C(=0)NH-(3-methyl-oxetanyl), -C(=0)NH-(1 -methylazetidinyl), -C(=0)NH-(1 -acetylazetidinyl), -C(=0)NH-piperidyl, -C(=0)NH-tetrahydrofuranyl,

-C(=0)NH-tetrahydropyranyl, -C(=0)$N(CH_3)$-tetrahydropyranyl, -C(=0)$NHCH_2$-oxetanyl, -C(=0)$N(CH_3)CH_2$-(3-methyl-oxetanyl), -C(=0)$NHCH_2$-tetrahydrofuranyl,

-C(=0)$NHCH_2$-tetrahydropyranyl, -C(=0)$NHCH_2$-dioxanyl, -C(=0)aziridinyl,

-C(=0)(2-methyl-aziridinyl), -C(=0)(2,2-dimethyl-aziridinyl),

-C(=0)(2-(hydroxymethyl)aziridinyl), -C(=0)azetidinyl, -C(=0)pyrrolidinyl,

-C(=0)(3-hydroxy-4-methoxypyrrolidinyl), -C(=0)(3,4-dimethoxypyrrolidinyl),

-C(=0)morpholinyl, -C(=0)piperazinyl, -C(=0)(4-methylpiperazinyl),

-C(=0)(4-hydroxy-piperidyl), -C(=0)(4,4-difluoropiperidinyl), -(C=0)(4-methoxy-piperidyl), -C(=NH)NH_2,-$NHC(=0)CH_3$, -$S0_2NHCH_3$, -$S0_2CH_3$, or substituted or unsubstituted pyrazolyl.

18. The compound of claim 1, wherein R^2 is substituted or unsubstituted pyrazolyl, substituted or unsubstituted pyridyl, substituted or unsubstituted indazolyl or substituted or unsubstituted isoindolinone.

19. The compound of claim 18, wherein R^2 is substituted with one or more halogen, substituted or unsubstituted (C_{1-4})alkyl, -OR, -C(=0)NR_2, or substituted or unsubstituted heterocyclyl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl.

20. The compound of claim 1, wherein R^3 is substituted or unsubstituted heterocyclyl.

21. The compound of claim 20, wherein the heterocyclyl is substituted or

unsubstituted pyrazolyl, oxazolyl, isoxazolyl, oxadiazolyl, pyridazinyl, pyrimidyl, pyrazinyl, benztriazolyl, indazolyl, indolyl, benzoxazolyl, benzisoxazolyl, benzthiazolyl, benzoxazolonyl, benzoxadiazolyl, benzimidazolyl, or quinolyl; or

wherein the heterocyclyl is pyridyl when R^2 is not pyrazolyl.

22. The compound of claim 20, wherein the heterocyclyl is substituted with one or more substituents selected from substituted or unsubstituted (C_{1-4})alkyl, halogen, -OR, -CN, -NR_2, -C(=0)NR_2, -NRC(=0)R, or substituted or unsubstituted triazolyl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl.

23. The compound of claim 20, wherein the heterocyclyl is substituted with one or more substituents selected from $-CH_3$, $-CH(CH_3)_2$, -F, -Cl, -OH, $-OCH_3$, $-OCH_2CH_3$, -CN, $-NH_2$, $-NHCH_3$, $-N(CH_3)_2$, $-C(=0)NH(CH_3)$, $-NHC(=0)CH_3$, or substituted or unsubstituted triazolyl.

24. The compound of claim 1, wherein R^3 is substituted or unsubstituted aryl.

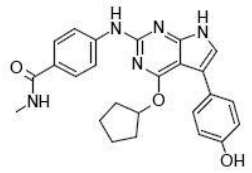
25. The compound of claim 1, wherein R^3 is substituted or unsubstituted phenyl.

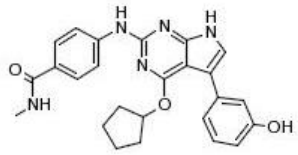
26. The compound of claim 25, wherein the phenyl is substituted with one or more substituents selected from substituted or unsubstituted C_{1-4} alkyl, halogen, -CN, -OR, $-NR_2$, -NRSO2R', $-NR(C=0)NR_2$, -NR(C=0)R', -COOR, $-(C=0)NR_2$, $-C(=N)NR_2$, $-S0_2R'$, or substituted or unsubstituted heteroaryl, wherein each R is independently -H or substituted or unsubstituted (C_{1-4})alkyl, and R' is C_{1-3} alkyl.

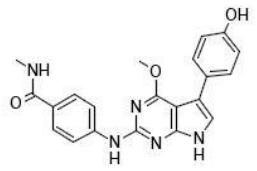
27. The compound of claim 25, wherein the phenyl is substituted with one or more substituents selected from $-CH_3$,- CH_2OH, $-CH(OH)CH_3$, $-C(CH_3)_2OH$, -CN, -F, -Cl, -OH, $-OCH_3$, $-NH_2$, $-N(CH_3)_2$, $-NHS0_2CH_3$, $-NH(C=0)NH_2$, $-NH(C=0)CH_3$, $-COOCH_3$,

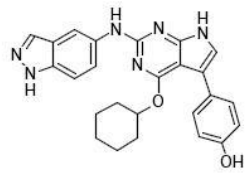
$-(C=0)NHCH_3$, $-C(=NH)NH_2$, $-S0_2CH_3$, substituted or unsubstituted triazolyl, substituted or unsubstituted pyrazolyl, or substituted or unsubstituted imidazolyl.

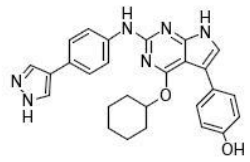
28. The compound of claim 1, wherein the compound is,

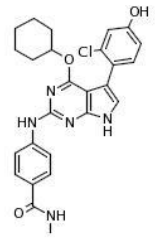


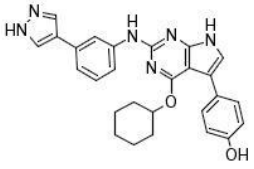


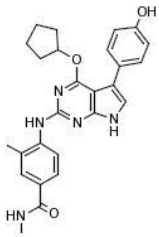


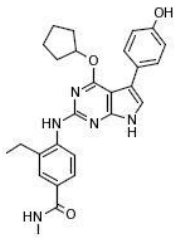


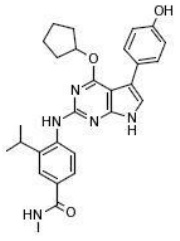


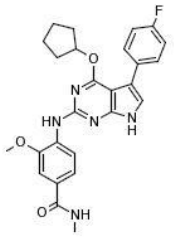


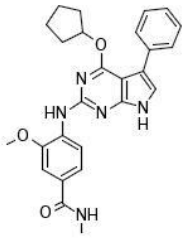


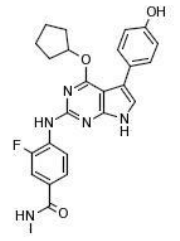


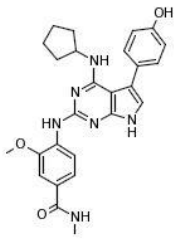


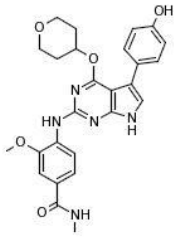


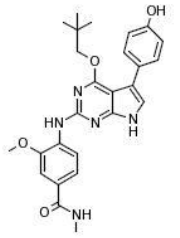


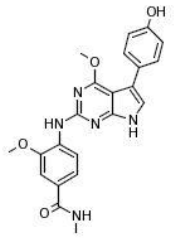


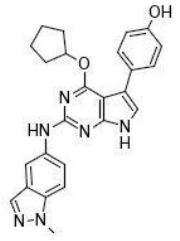


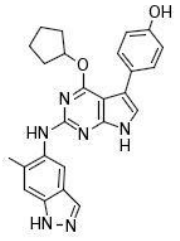


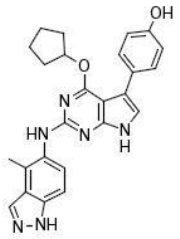


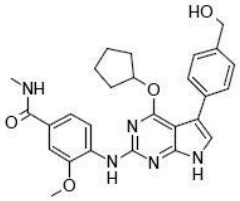


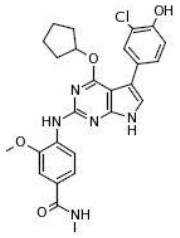


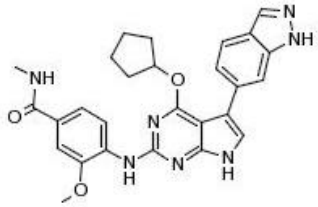


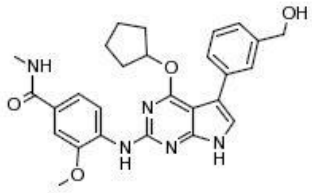


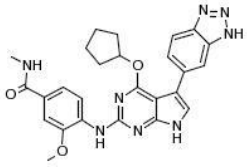


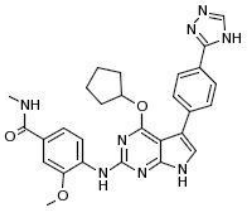


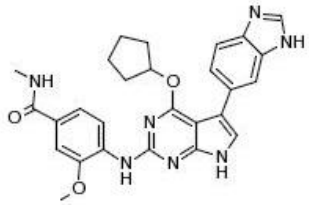


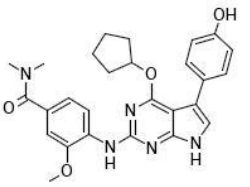


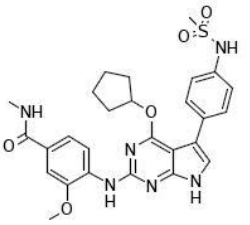


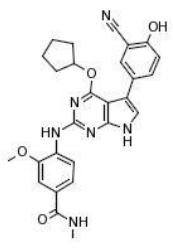


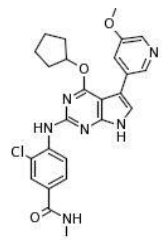


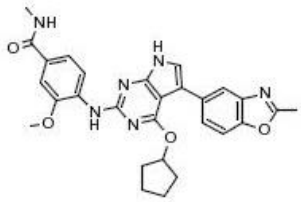


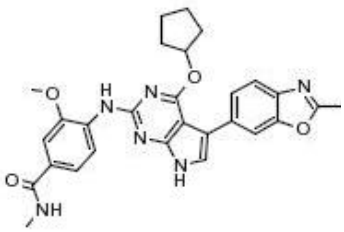


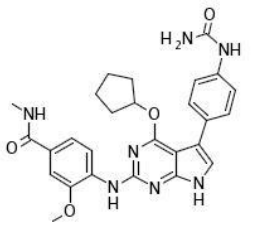


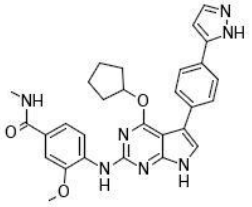


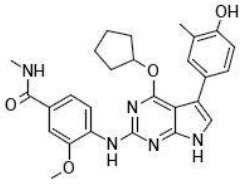


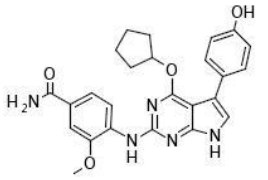


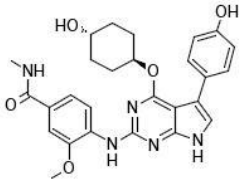


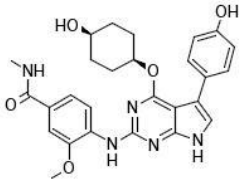


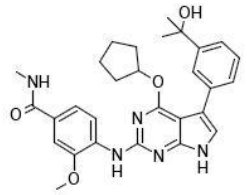


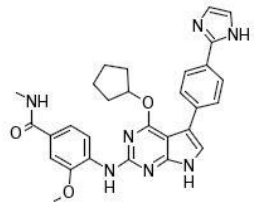


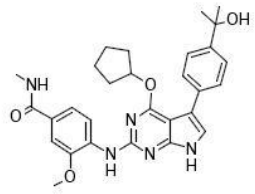


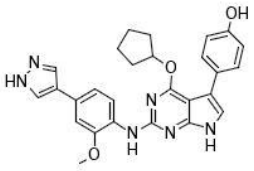


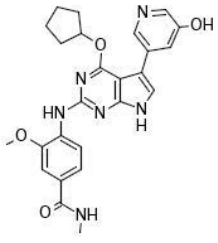


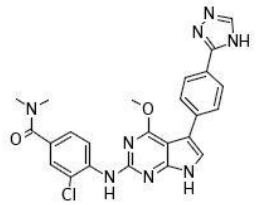


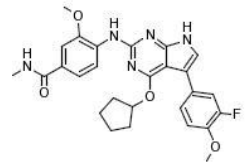


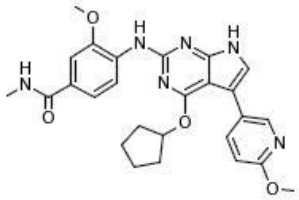


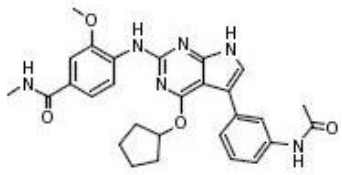


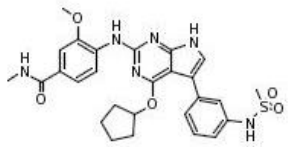


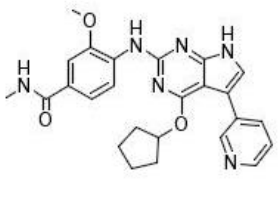


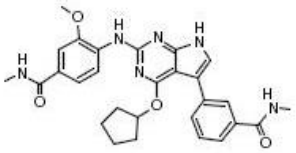


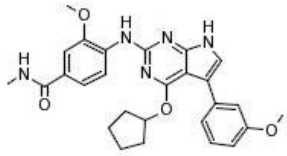


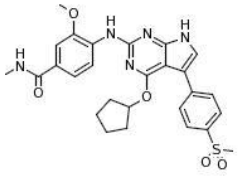


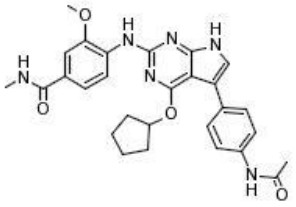


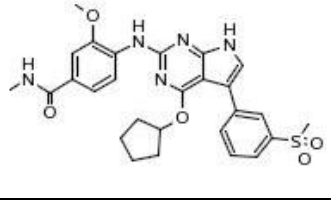


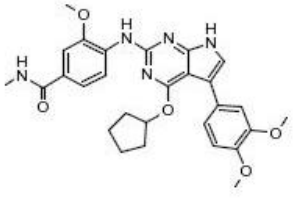


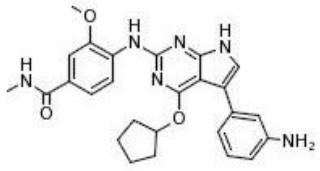


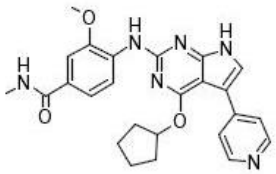


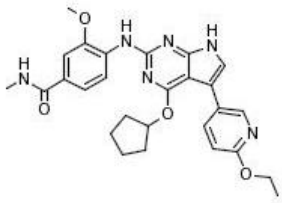


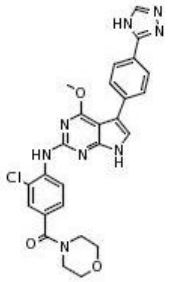


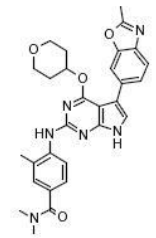


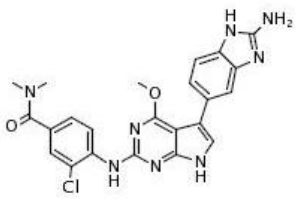


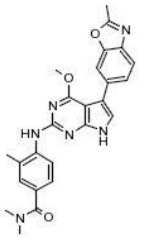


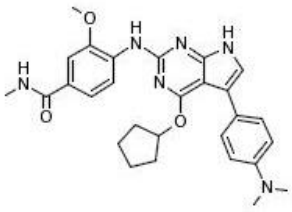


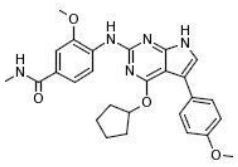


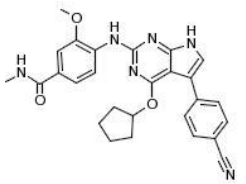


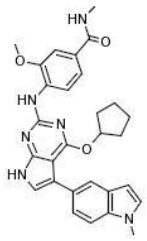


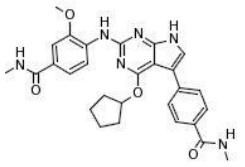


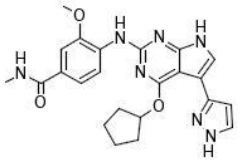


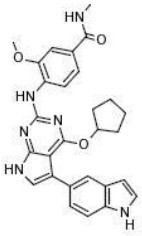


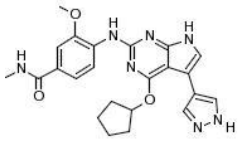


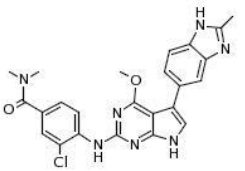


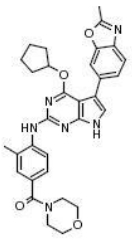


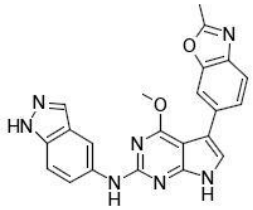


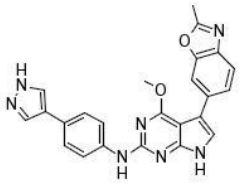


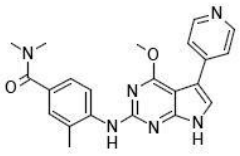


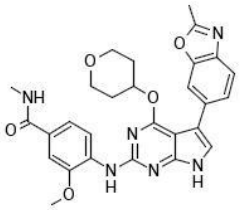


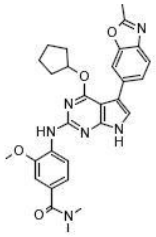


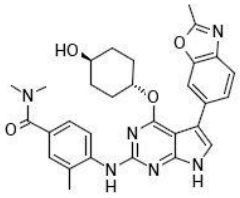


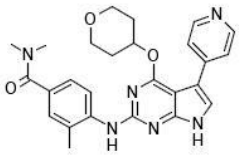


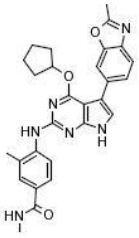


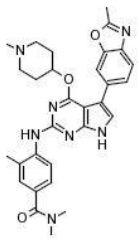


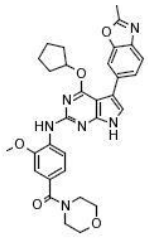


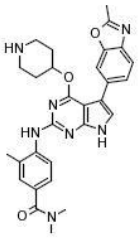


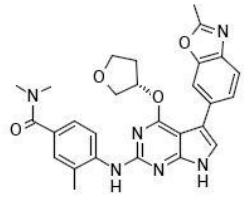


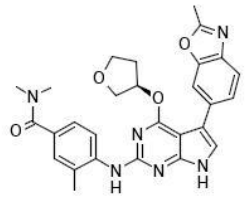


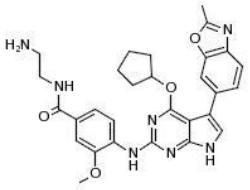


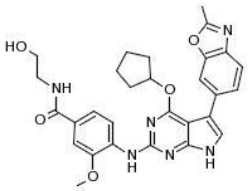


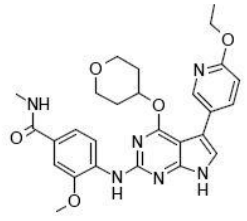


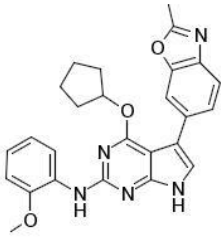


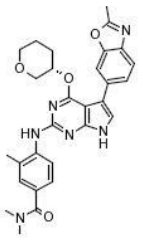


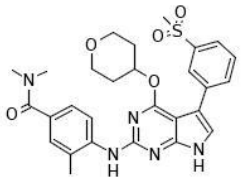


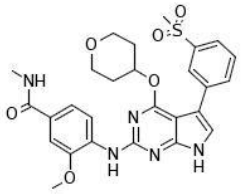


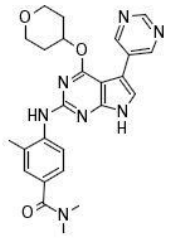


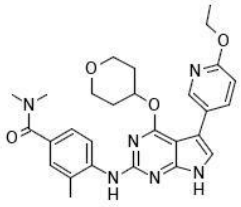


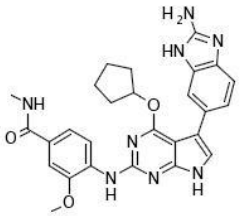


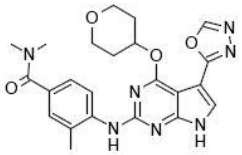


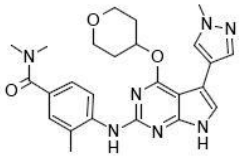


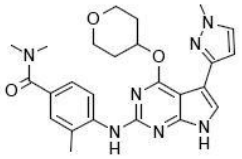


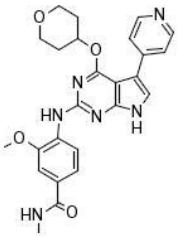


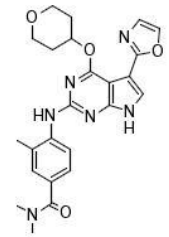


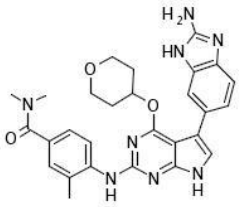


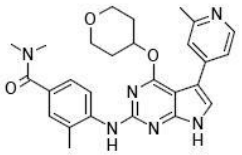


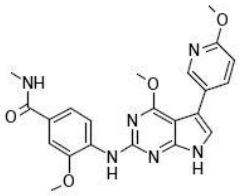


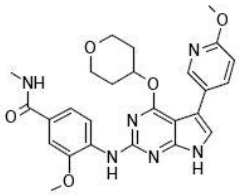


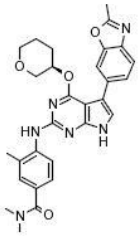


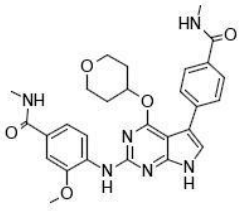


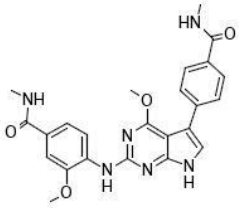


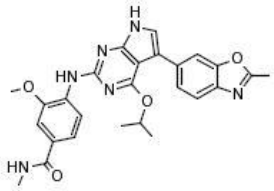


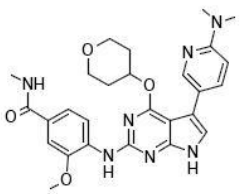


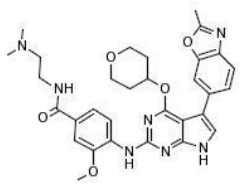


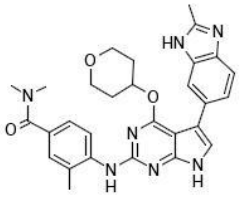


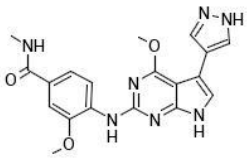


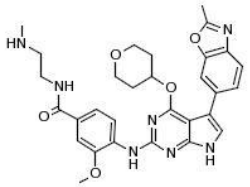


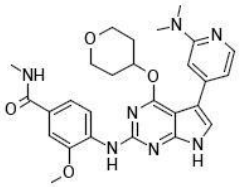


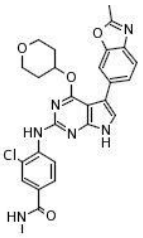


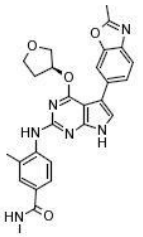


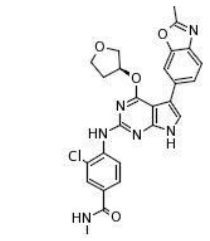


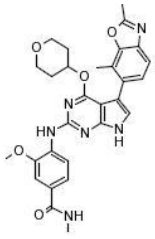


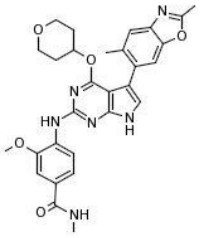


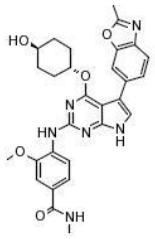


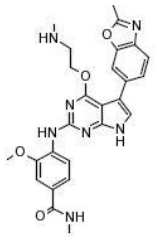


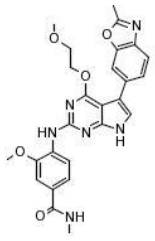


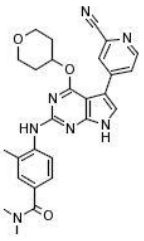


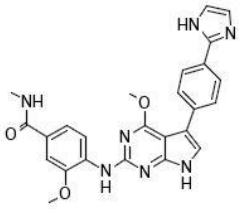


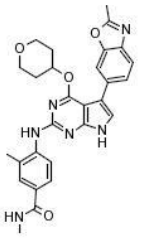


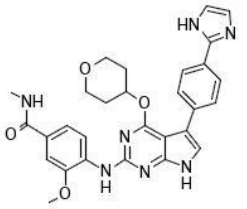


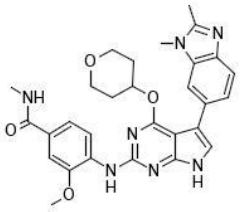


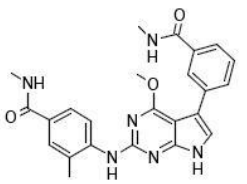


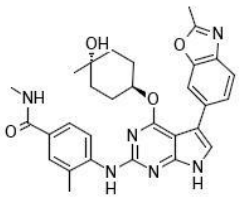


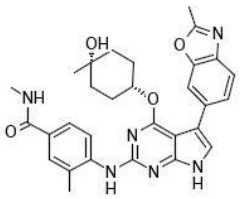


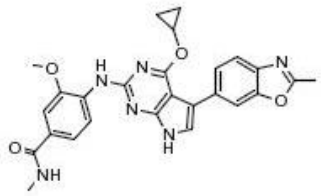


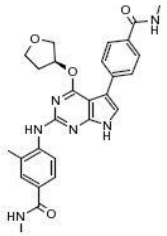


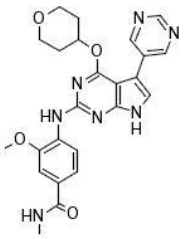


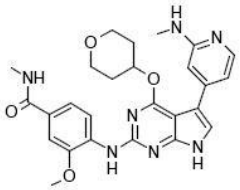


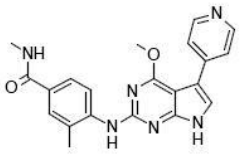


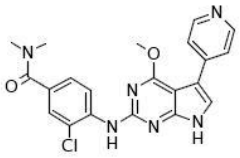


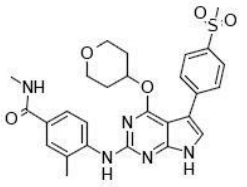


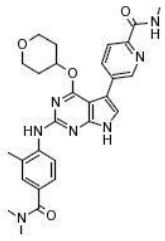


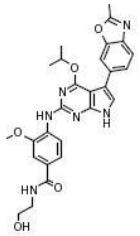


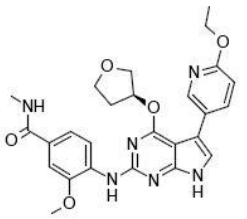


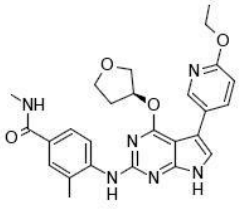


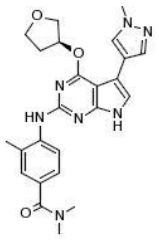


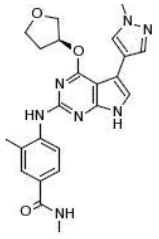


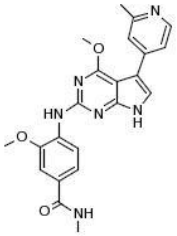


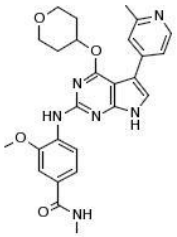


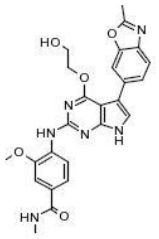


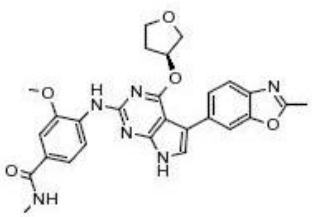


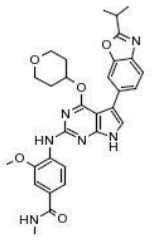


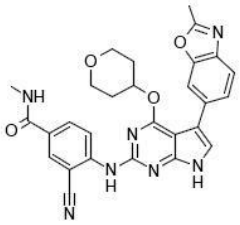


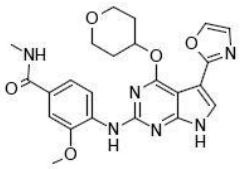


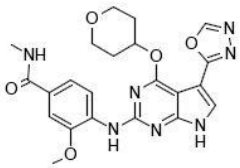


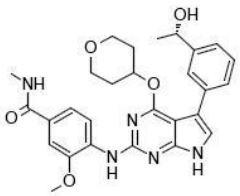


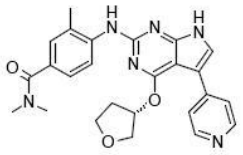


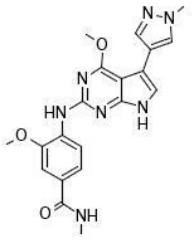


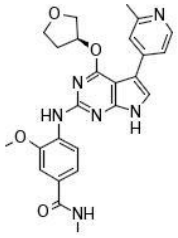


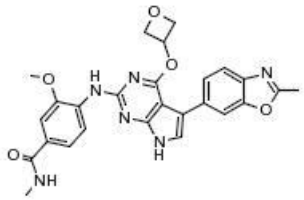


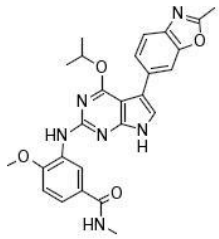


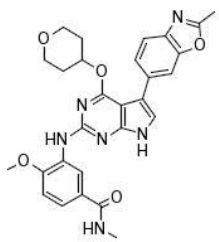


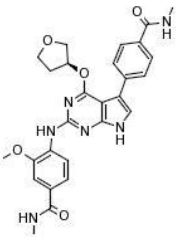


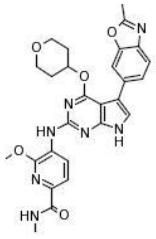


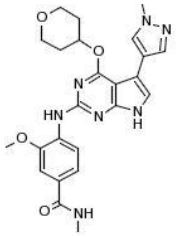


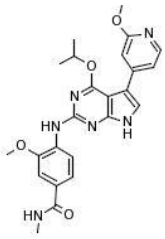


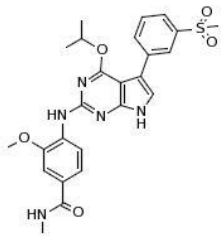


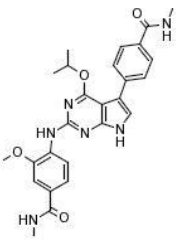


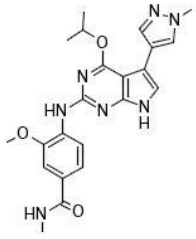


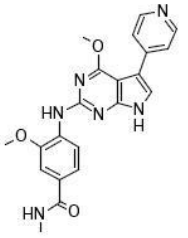


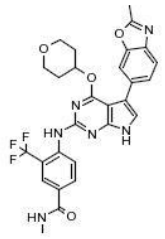


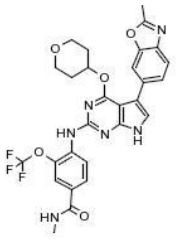


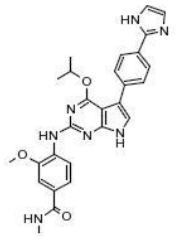


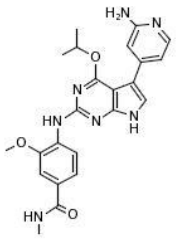


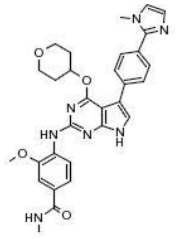


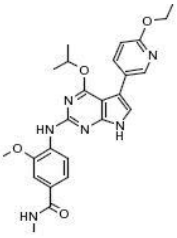


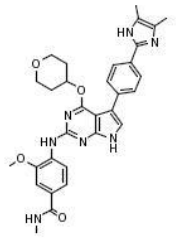


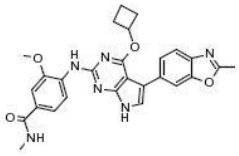


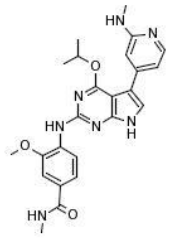


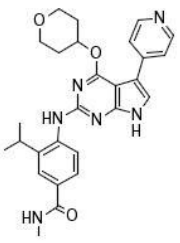


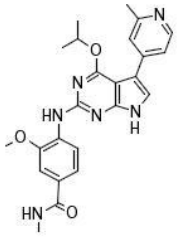


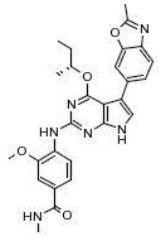


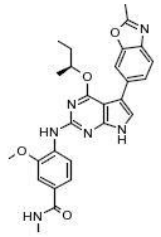


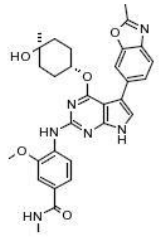


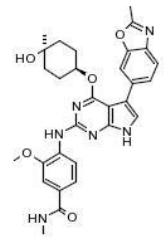


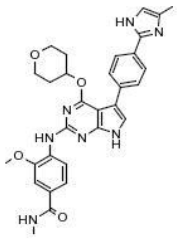


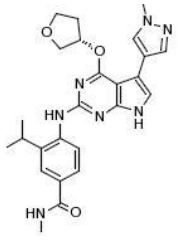


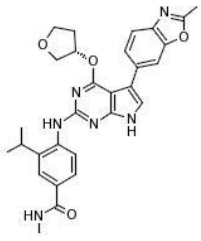


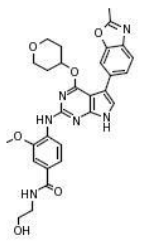


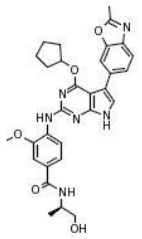


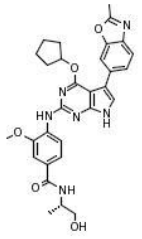


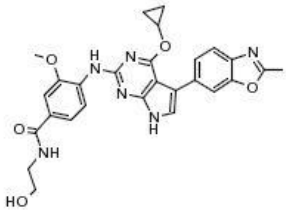


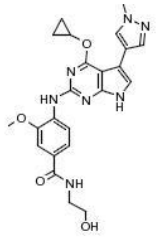


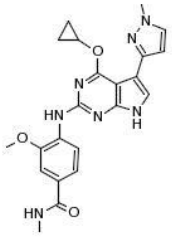


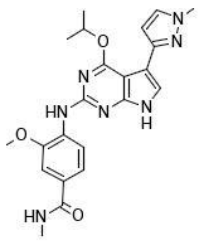


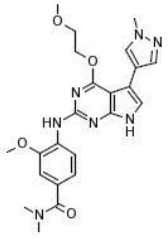


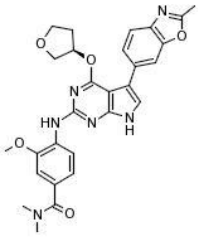


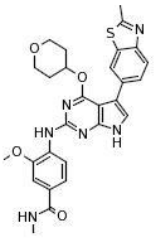


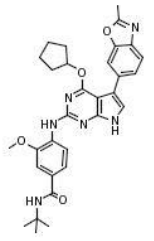


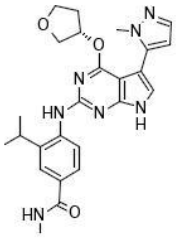


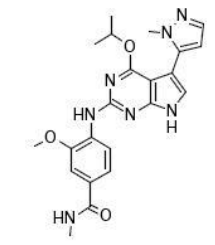


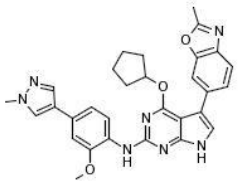


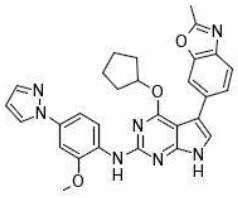


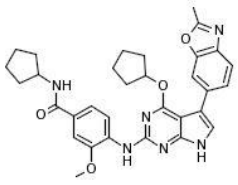


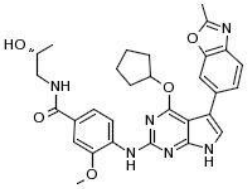


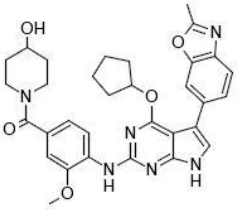


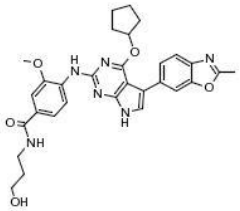


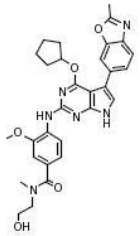


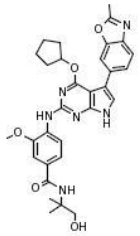


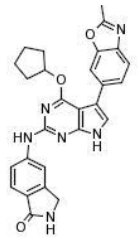


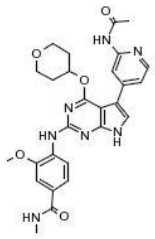


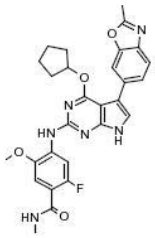


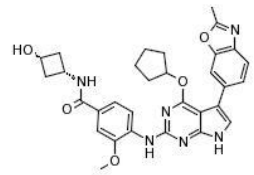


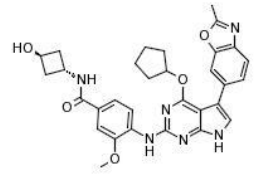


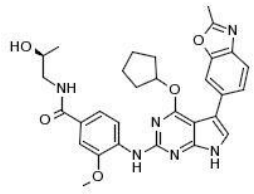


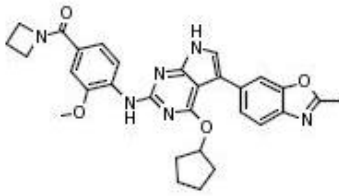


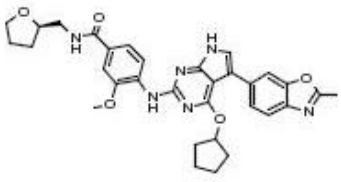


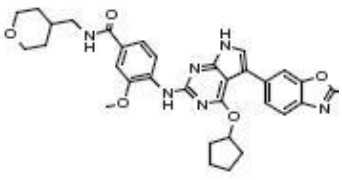


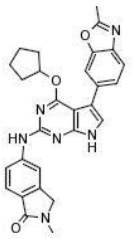


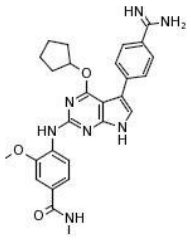


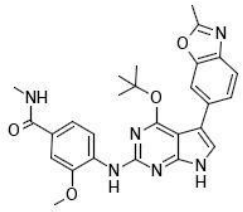


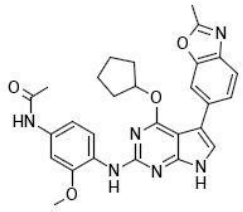


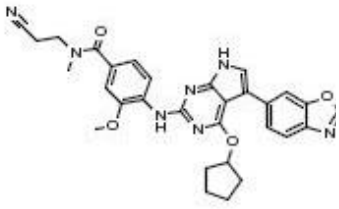


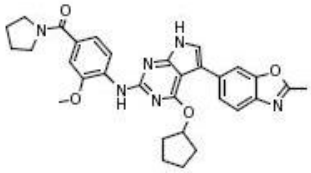


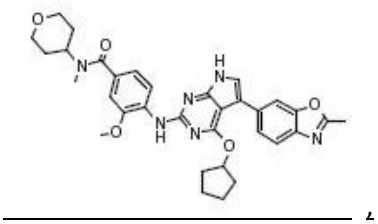


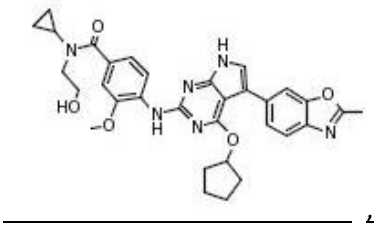


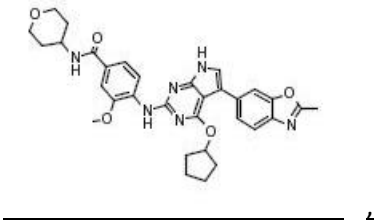


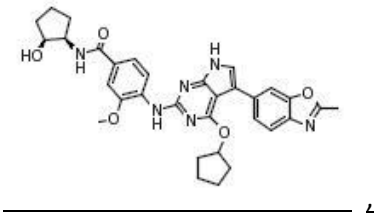


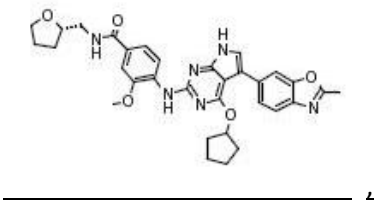


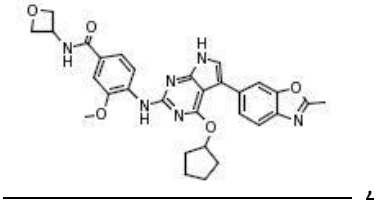


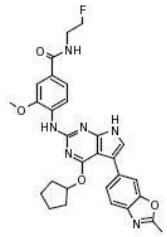


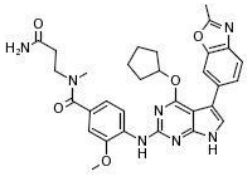


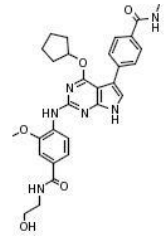


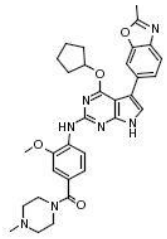


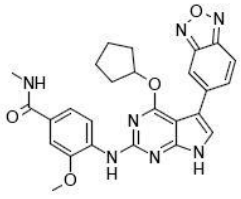


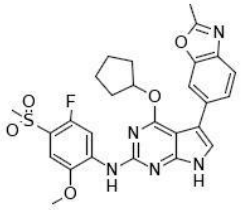


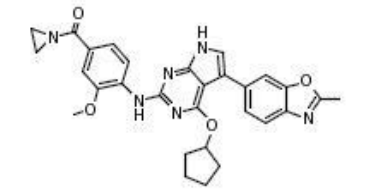


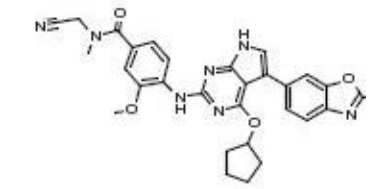


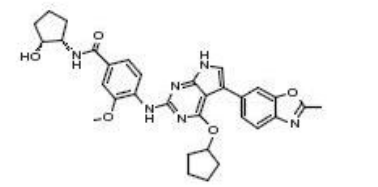


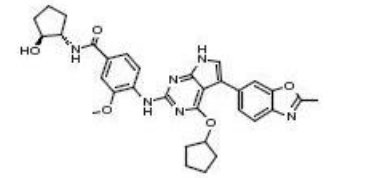


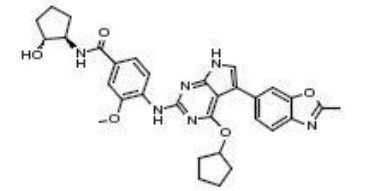


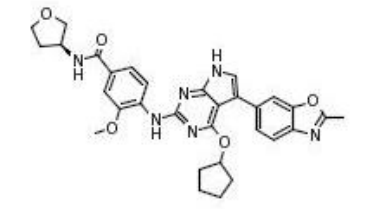


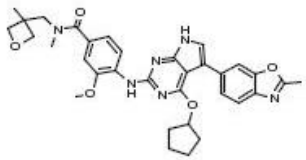


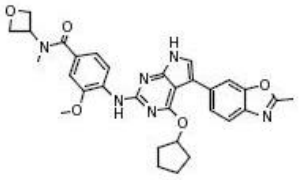


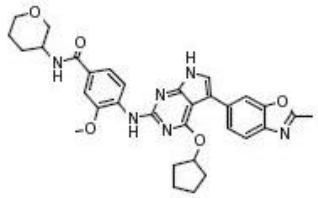


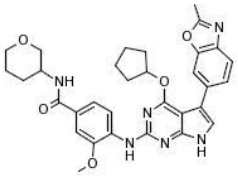


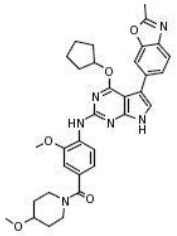


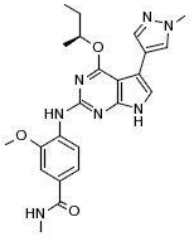


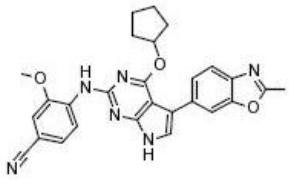


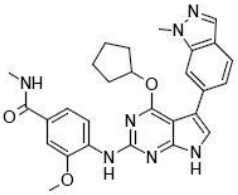


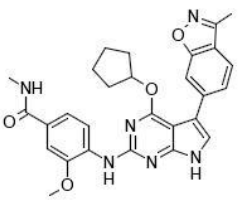


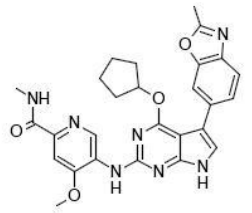


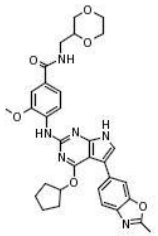


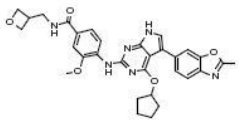


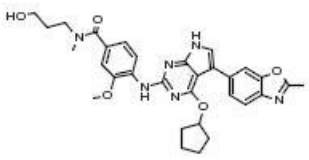


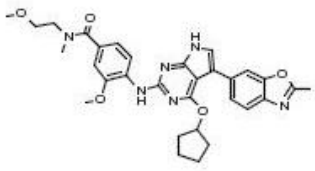


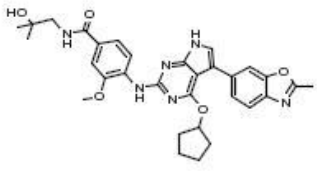


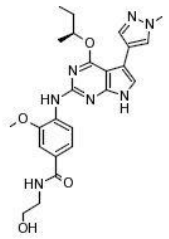


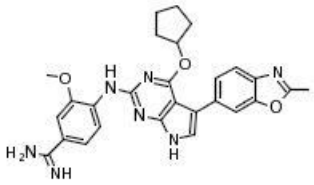


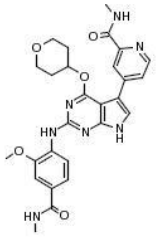


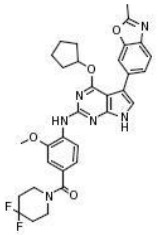


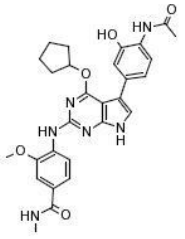


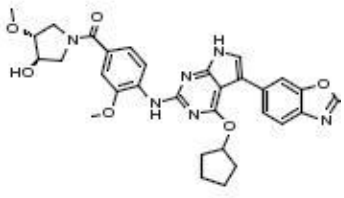


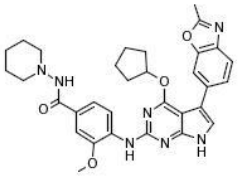


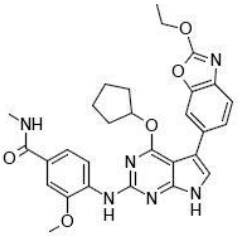


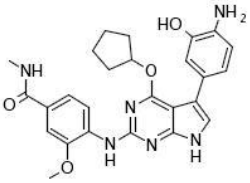


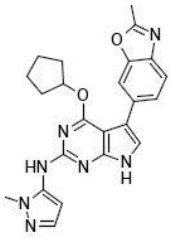


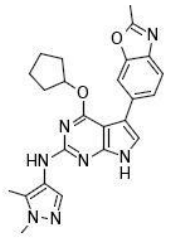


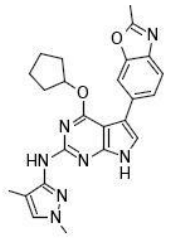


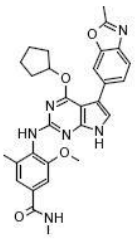


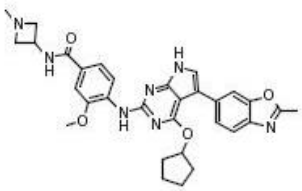


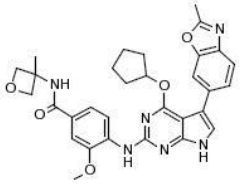


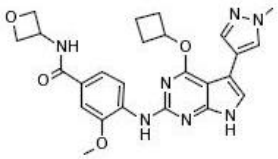


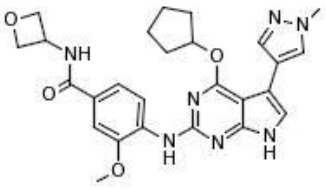


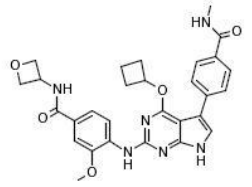


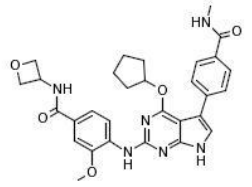


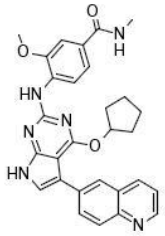


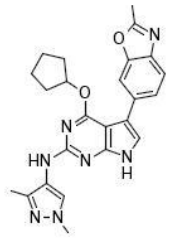


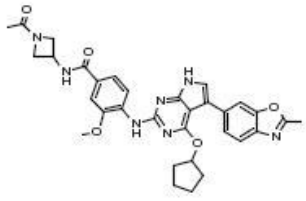


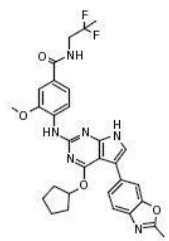


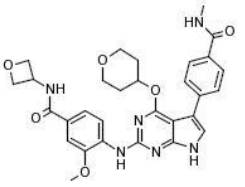


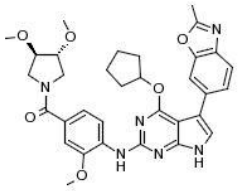


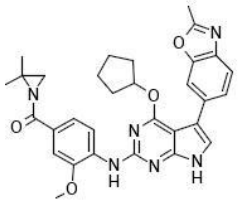


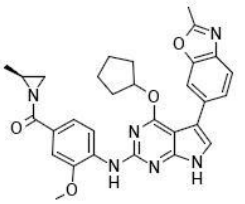


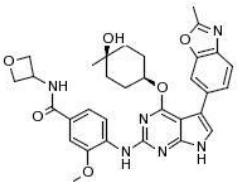


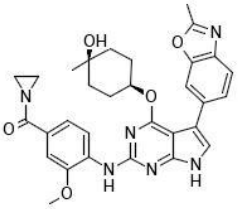


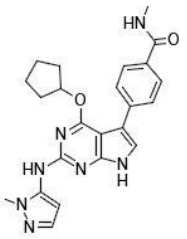


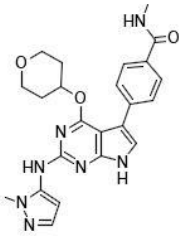


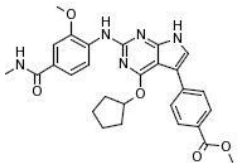


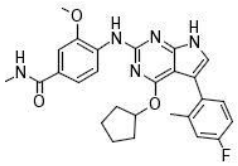


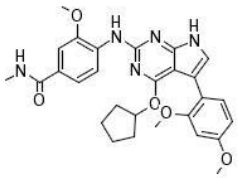


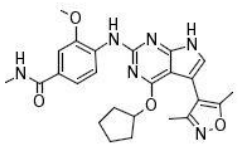


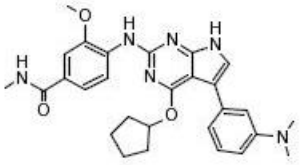


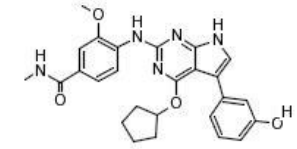


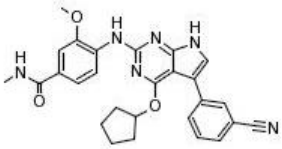


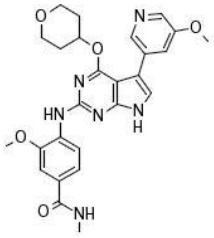


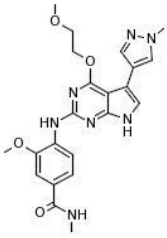


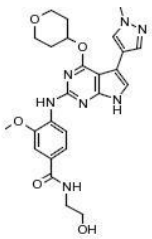


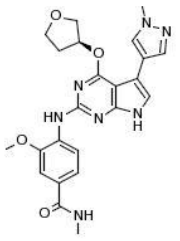


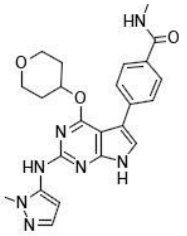


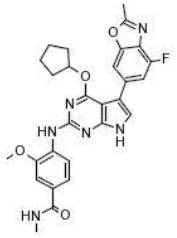


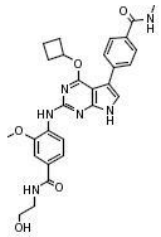


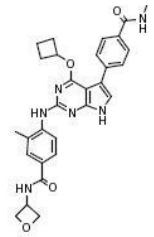


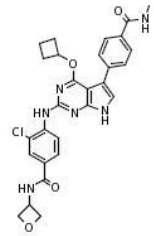


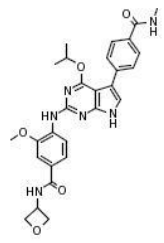


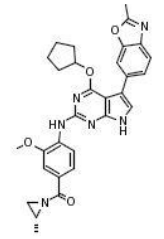


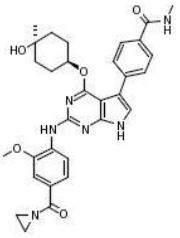


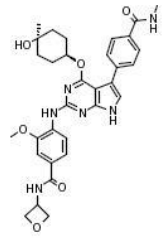


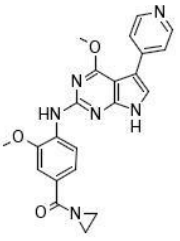


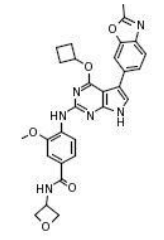


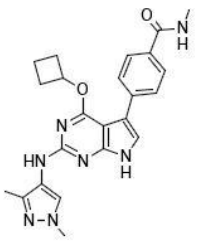


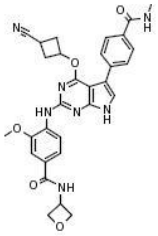


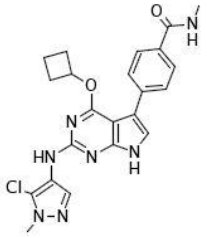


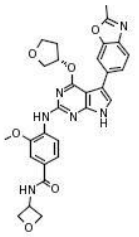


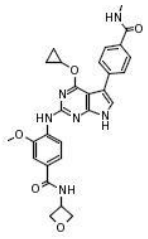


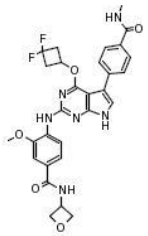


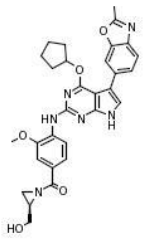


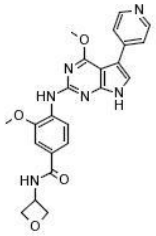


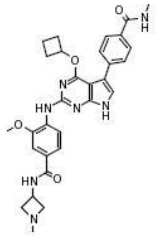


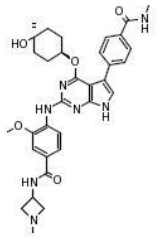


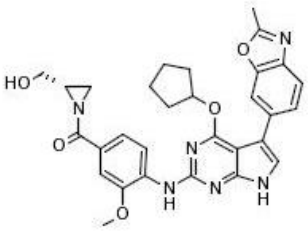


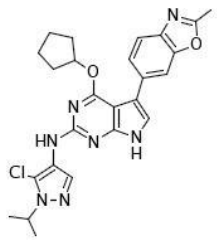


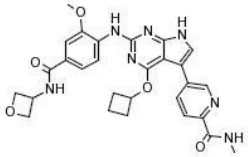


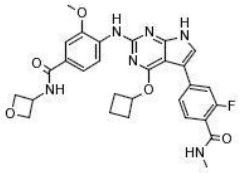


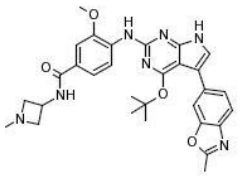


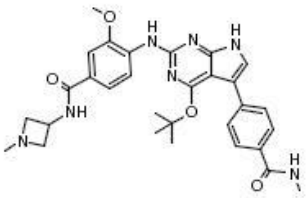


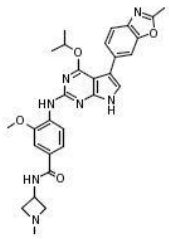


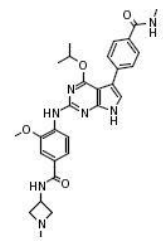


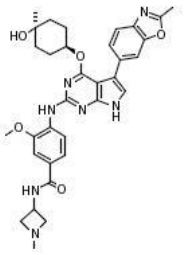


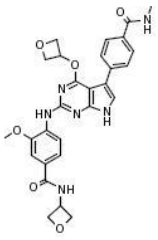


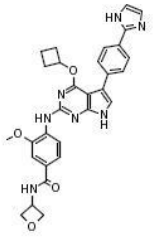


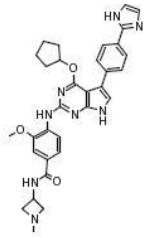


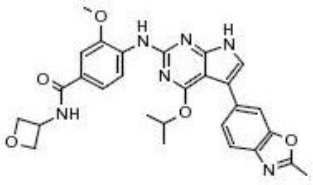


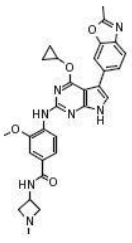


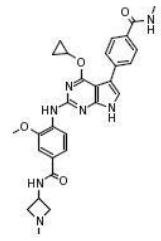


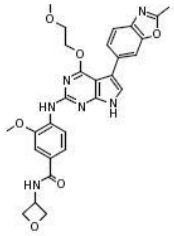


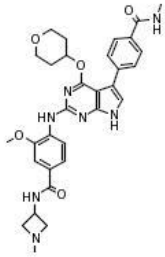


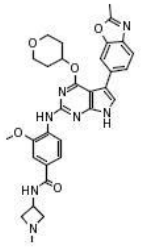


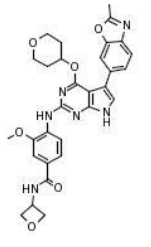


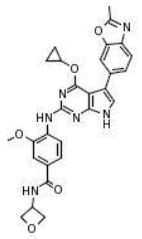


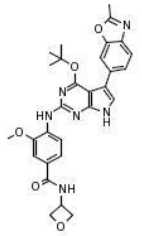


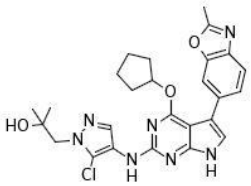


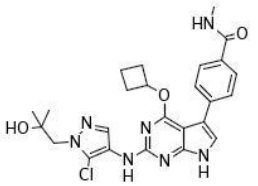


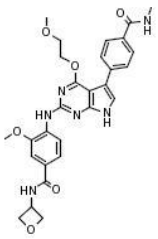


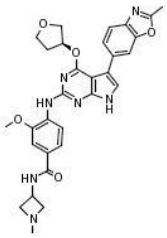


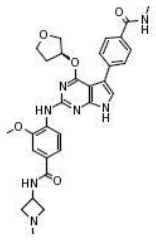


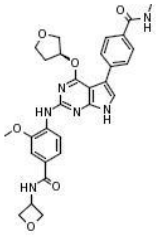


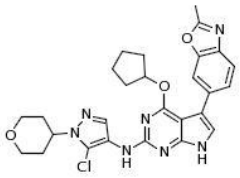


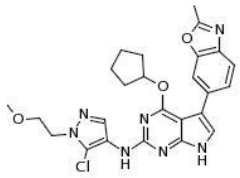


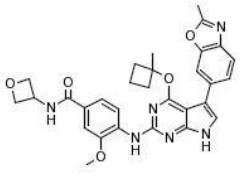


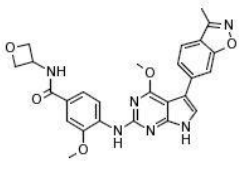


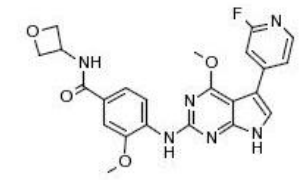


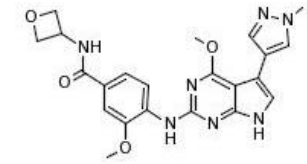


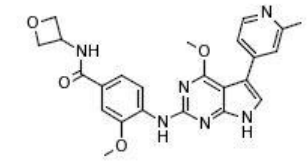


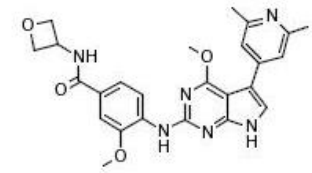


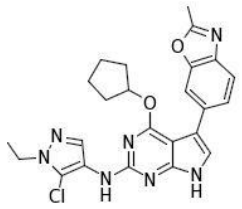


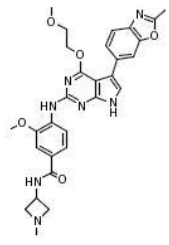


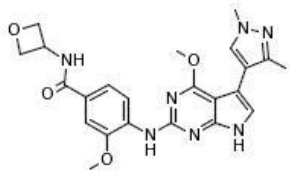


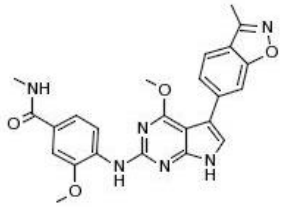


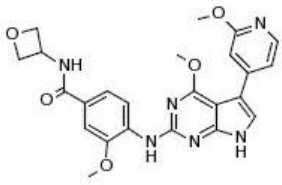


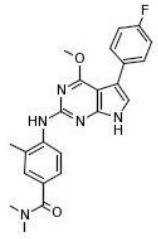


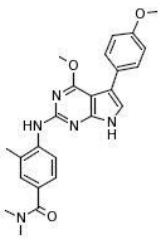


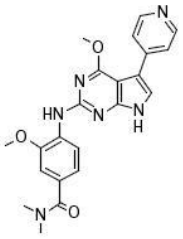


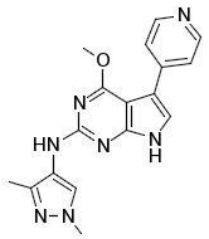


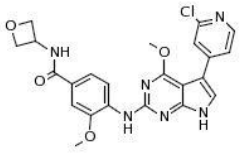


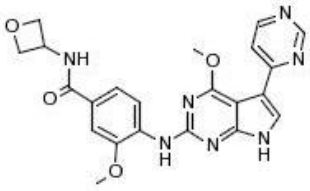


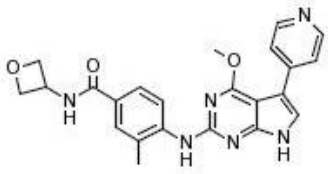


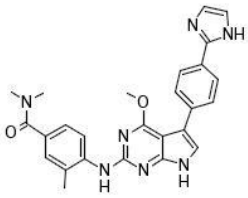


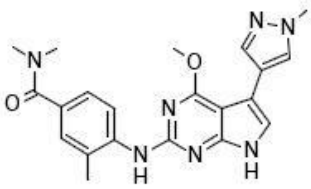


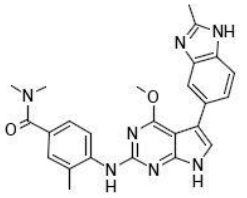


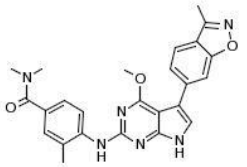


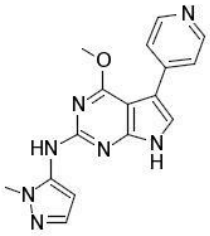


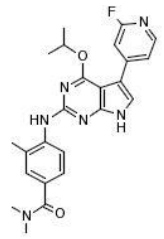


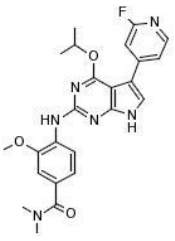


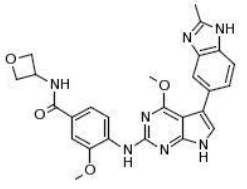


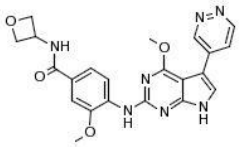


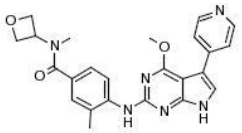


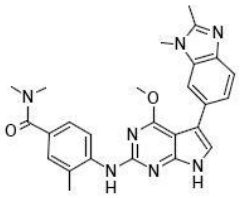


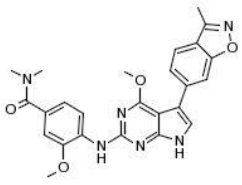


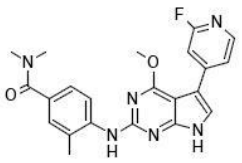


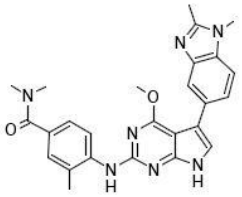


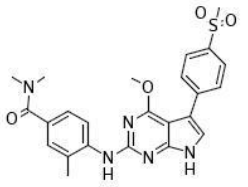


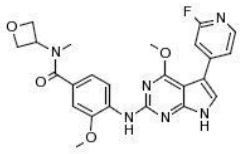


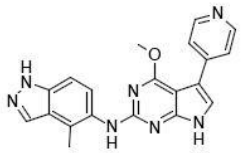


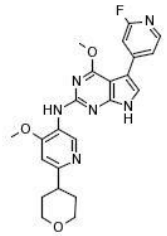


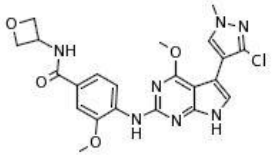


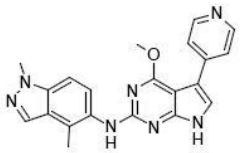


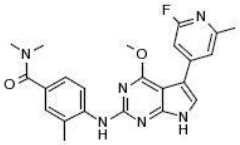


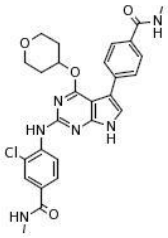


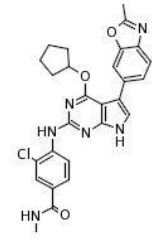


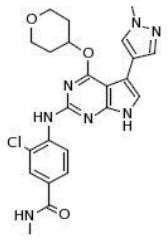


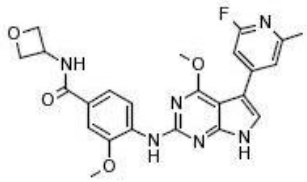


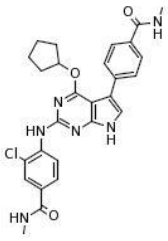


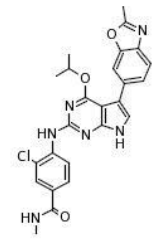


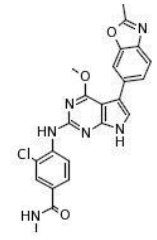


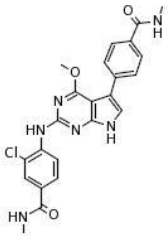


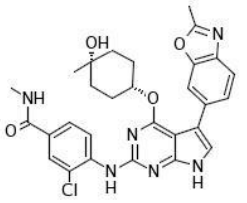


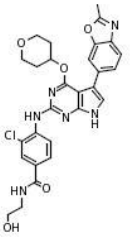


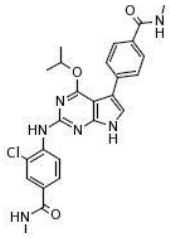


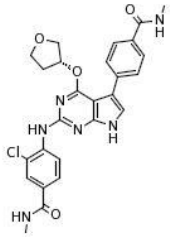


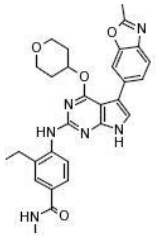


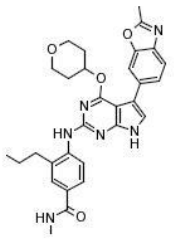


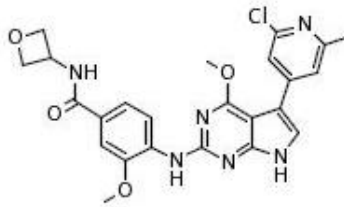












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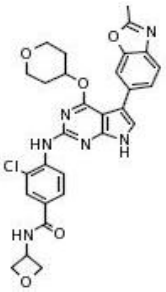

or a pharmaceutically acceptable salt, tautomer, stereoisomer or enantiomer thereof.

29. The compound of claim 1 or claim 28, wherein the compound at a concentration of 10 μM inhibits triple negative breast cancer cell proliferation by at least about 50%.

30. A pharmaceutical composition comprising an effective amount of a compound of claim 1 or claim 28, or a pharmaceutically acceptable salt, tautomer, stereoisomer or enantiomer thereof, and a pharmaceutically acceptable carrier, excipient or vehicle.

31. Use of a compound according to claims 1 or claim 28 in the manufacture of a medicament for the therapeutic treatment of breast cancer.