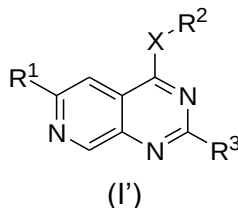


CLAIMS

1. Compound of formula (I')



5

or a salt or solvate thereof,

wherein

10 R^1 is selected from hydrogen, halogen, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{3-7} cycloalkyl, substituted or unsubstituted C_{6-10} aryl, substituted or unsubstituted 5- to 10-membered heterocyclyl, OR^4 , SR^4 , NR^4R^5 , COR^4 and $CONR^4R^5$, wherein R^4 and R^5 are independently selected from H and substituted or unsubstituted C_{1-6} alkyl;

X is selected from -O- and $-NR^6$ -, wherein R^6 is selected from H and C_{1-6} alkyl;

R^2 is selected from:

15

- unsubstituted C_{1-6} alkyl or C_{1-6} alkyl substituted by:

. C_{1-6} alkyl,

. substituted or unsubstituted C_{3-7} cycloalkyl,

. substituted or unsubstituted C_{6-10} aryl,

. substituted or unsubstituted 5- to 10-membered heterocyclyl,

20

. substituted or unsubstituted 5- to 10-membered heteroaryl, and

. OR^7 , wherein R^7 is selected from H and substituted or unsubstituted C_{1-6} alkyl;

. NR^8R^9 , wherein R^8 and R^9 are independently selected from H and substituted or unsubstituted C_{1-6} alkyl;

25

. COR^{10} , wherein R^{10} is selected from substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{6-10} aryl, substituted or unsubstituted $(C_{6-10})aryl(C_{1-6})alkyl$, substituted or unsubstituted 5- to 10-membered heterocyclyl and substituted or unsubstituted 5- to 10-membered heteroaryl;

30

. $CONR^{11}R^{12}$, wherein R^{11} and R^{12} are independently selected from H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{6-10} aryl, substituted or unsubstituted $(C_{6-10})aryl(C_{1-6})alkyl$, substituted or

- unsubstituted 5- to 10-membered heterocyclyl and substituted or unsubstituted 5- to 10-membered heteroaryl;
- 5 . SOR^{13} , wherein R^{13} is selected from substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{6-10} aryl, substituted or unsubstituted $(\text{C}_{6-10})\text{aryl}(\text{C}_{1-6})\text{alkyl}$, substituted or unsubstituted 5- to 10-membered heterocyclyl and substituted or unsubstituted 5- to 10-membered heteroaryl;
- 10 . SO_2R^{14} , wherein R^{14} is selected from substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{6-10} aryl, substituted or unsubstituted $(\text{C}_{6-10})\text{aryl}(\text{C}_{1-6})\text{alkyl}$, substituted or unsubstituted 5- to 10-membered heterocyclyl and substituted or unsubstituted 5- to 10-membered heteroaryl;
- 15 . $\text{SO}_2\text{NR}^{15}\text{R}^{16}$, wherein R^{15} and R^{16} are independently selected from H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{3-7} cycloalkyl, substituted or unsubstituted C_{6-10} aryl, substituted or unsubstituted $(\text{C}_{6-10})\text{aryl}(\text{C}_{1-6})\text{alkyl}$, substituted or unsubstituted 5- to 10-membered heterocyclyl and substituted or unsubstituted 5- to 10-membered heteroaryl; and
- 20 . $\text{SO}(=\text{NH})\text{NHR}^{17}$, wherein R^{17} is selected from H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{3-7} cycloalkyl, substituted or unsubstituted C_{6-10} aryl, substituted or unsubstituted $(\text{C}_{6-10})\text{aryl}(\text{C}_{1-6})\text{alkyl}$, substituted or unsubstituted 5- to 10-membered heterocyclyl and substituted or unsubstituted 5- to 10-membered heteroaryl;
- 25 - substituted or unsubstituted C_{3-7} cycloalkyl;
- substituted or unsubstituted C_{6-10} aryl; and
- substituted or unsubstituted $(\text{C}_{6-10})\text{aryl}(\text{C}_{1-6})\text{alkyl}$;
- R^3 is substituted or unsubstituted N-containing 5- to 10-membered heterocyclyl; provided that the compound of formula (I') is not (4-fluoro-benzyl)-(2-piperidin-1-yl-pyrido[3,4-d]pyrimidin-4-yl)-amine; [2-(3,4-dihydro-1H-isoquinolin-2-yl)-pyrido[3,4-d]pyrimidin-4-yl]-pyridin-4-ylmethyl-amine; pyridin-4-ylmethyl-[2-(8-thiazol-2-yl-3,4-dihydro-1H-isoquinolin-2-yl)-pyrido[3,4-d]pyrimidin-4-yl]-amine; {2-[8-(morpholine-4-sulfonyl)-3,4-dihydro-1H-isoquinolin-2-yl]-pyrido[3,4-d]pyrimidin-4-yl]-pyridin-4-ylmethyl-amine; N^1 -(2-morpholin-4-yl-pyrido[3,4-d]pyrimidin-4-yl)-3-phenyl-
- 30 propane-1,2-diamine; and 2-[(2,6-di-morpholin-4-yl-pyrido[3,4-d]pyrimidin-4-yl)-
- 35

methyl-amino]-ethanol;

wherein the term heterocyclyl refers to a partially or fully saturated ring and the term heteroaryl refers to an aromatic ring.

- 5 2. Compound according to claim 1, wherein the substituted groups can be substituted with one or more groups selected from halogen, substituted or unsubstituted C₁₋₆ alkyl, C₁₋₆ haloalkyl, substituted or unsubstituted C₃₋₇ cycloalkyl, substituted or unsubstituted C₆₋₁₀ aryl, substituted or unsubstituted (C₆₋₁₀)aryl(C₁₋₆)alkyl, substituted or unsubstituted 5- to 10-membered heterocyclyl, substituted or unsubstituted 5- to 10-membered heteroaryl, CN, NO₂, -N(R_a)(R_b), -OR_c, -SR_d, -C(O)R_e, -C(O)OR_f, -C(O)N(R_g)(R_h), -OC(O)R_i, -C(NR_j)NR_kR_l, -SOR_m, -SO₂R_n and -SO₂NR_oR_p; wherein R_a, R_b, R_c, R_d, R_e, R_f, R_g, R_h, R_i, R_j, R_k, R_l, R_m, R_n, R_o and R_p are independently selected from hydrogen, substituted or unsubstituted C₁₋₆ alkyl, C₁₋₆ haloalkyl, substituted or unsubstituted C₆₋₁₀ aryl, substituted or unsubstituted (C₆₋₁₀)aryl(C₁₋₆)alkyl, substituted or unsubstituted 5- to 10-membered heterocyclyl, and substituted or unsubstituted 5- to 10-membered heteroaryl; and wherein said substituted C₁₋₆ alkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, and 5- to 10-membered heteroaryl groups can in turn be substituted by one or more groups selected from halogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₃₋₇ cycloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, 5- to 10-membered heteroaryl, CN, NO₂, -N(R_a)(R_b), -OR_c, -SR_d, -C(O)R_e, -C(O)OR_f, -C(O)N(R_g)(R_h), -OC(O)R_i, -C(NR_j)NR_kR_l, -SOR_m, -SO₂R_n and -SO₂NR_oR_p; wherein R_a, R_b, R_c, R_d, R_e, R_f, R_g, R_h, R_i, R_j, R_k, R_l, R_m, R_n, R_o and R_p are independently selected from hydrogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, and 5- to 10-membered heteroaryl.
3. Compound according to any one of claims 1 or 2, or a salt or solvate thereof, wherein R¹ is selected from hydrogen, halogen, substituted or unsubstituted C₁₋₆ alkyl, OR⁴, SR⁴, NR⁴R⁵, COR⁴ and CONR⁴R⁵, wherein R⁴ and R⁵ are independently selected from H and substituted or unsubstituted C₁₋₆ alkyl.
4. Compound according to any one of claims 1 to 3, wherein X is selected from -O- and -NH-.
5. Compound according to any one of claims 1 to 4, wherein R² is selected from:

- unsubstituted C₁₋₃ alkyl or C₁₋₃ alkyl substituted by:
 - . unsubstituted C₃₋₇ cycloalkyl or C₃₋₇ cycloalkyl substituted by halogen, C₁₋₆ alkyl, C₆₋₁₀ aryl or (C₆₋₁₀)aryl(C₁₋₆)alkyl,
 - . unsubstituted C₆₋₁₀ aryl or C₆₋₁₀ aryl substituted by halogen, C₁₋₆ alkyl, C₆₋₁₀ aryl or (C₆₋₁₀)aryl(C₁₋₆)alkyl,
 - . unsubstituted 5- to 10-membered heterocyclyl or 5- to 10-membered heterocyclyl substituted by halogen, C₁₋₆ alkyl, C₆₋₁₀ aryl or (C₆₋₁₀)aryl(C₁₋₆)alkyl,
 - . unsubstituted 5- to 10-membered heteroaryl or 5- to 10-membered heteroaryl substituted by halogen, substituted or unsubstituted C₁₋₆ alkyl, substituted or unsubstituted C₃₋₇ cycloalkyl, substituted or unsubstituted C₆₋₁₀ aryl, substituted or unsubstituted (C₆₋₁₀)aryl(C₁₋₆)alkyl, substituted or unsubstituted 5- to 10-membered heterocyclyl, substituted or unsubstituted 5- to 10-membered heteroaryl, CN, NO₂, -N(R_a)(R_b), -OR_c, -SR_d, -C(O)R_e, -C(O)OR_f, -C(O)N(R_g)(R_h), -OC(O)R_i, -C(NR_j)NR_kR_l, -SOR_m, -SO₂R_n or -SO₂NR_oR_p; wherein R_a, R_b, R_c, R_d, R_e, R_f, R_g, R_h, R_i, R_j, R_k, R_l, R_m, R_n, R_o and R_p are independently selected from hydrogen, substituted or unsubstituted C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, and 5- to 10-membered heteroaryl; and wherein said substituted C₁₋₆ alkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, and 5- to 10-membered heteroaryl can in turn be substituted by one or more groups selected from halogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₃₋₇ cycloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, 5- to 10-membered heteroaryl, CN, NO₂, -N(R_a)(R_b), -OR_c, -SR_d, -C(O)R_e, -C(O)OR_f, -C(O)N(R_g)(R_h), -OC(O)R_i, -C(NR_j)NR_kR_l, -SOR_m, -SO₂R_n and -SO₂NR_oR_p; wherein R_a, R_b, R_c, R_d, R_e, R_f, R_g, R_h, R_i, R_j, R_k, R_l, R_m, R_n, R_o and R_p are independently selected from hydrogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, and 5- to 10-membered heteroaryl;
 - . COR¹⁰, wherein R¹⁰ is selected from unsubstituted C₁₋₆ alkyl, C₆₋₁₀ aryl and (C₆₋₁₀)aryl(C₁₋₆)alkyl or C₁₋₆ alkyl, C₆₋₁₀ aryl and (C₆₋₁₀)aryl(C₁₋₆)alkyl substituted by C₁₋₆ alkyl or C₆₋₁₀ aryl;
 - . CONR¹¹R¹², wherein R¹¹ and R¹² are independently selected from H and unsubstituted C₁₋₆ alkyl, C₆₋₁₀ aryl and (C₆₋₁₀)aryl(C₁₋₆)alkyl or C₁₋₆ alkyl, C₆₋₁₀ aryl and (C₆₋₁₀)aryl(C₁₋₆)alkyl substituted by C₁₋₆ alkyl or C₆₋₁₀ aryl;

- 5 . SOR¹³, wherein R¹³ is selected from unsubstituted C₁₋₆ alkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl or C₁₋₆ alkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl substituted by C₁₋₆ alkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, halogen, -N(R_a)(R_b), -OR_c, -SR_d, -C(O)R_e, -C(O)OR_f, -C(O)N(R_g)(R_h) or -OC(O)R_i, wherein R_a, R_b, R_c, R_d, R_e, R_f, R_g, R_h and R_i, are independently selected from hydrogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl;
- 10 . SO₂R¹⁴, wherein R¹⁴ is selected from unsubstituted C₁₋₆ alkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl or C₁₋₆ alkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl substituted by C₁₋₆ alkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, halogen, -N(R_a)(R_b), -OR_c, -SR_d, -C(O)R_e, -C(O)OR_f, -C(O)N(R_g)(R_h) or -OC(O)R_i, wherein R_a, R_b, R_c, R_d, R_e, R_f, R_g, R_h and R_i, are independently selected from hydrogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl;
- 15 . SO₂NR¹⁵R¹⁶, wherein R¹⁵ and R¹⁶ are independently selected from H and unsubstituted C₁₋₆ alkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl or C₁₋₆ alkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl substituted by C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, 5- to 10-membered heteroaryl, halogen, -N(R_a)(R_b), -OR_c, -SR_d, -C(O)R_e, -C(O)OR_f, -C(O)N(R_g)(R_h) or -OC(O)R_i, wherein R_a, R_b, R_c, R_d, R_e, R_f, R_g, R_h and R_i, are independently selected from hydrogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl; and
- 20 . SO(=NH)NHR¹⁷, wherein R¹⁷ is selected from H and unsubstituted C₁₋₆ alkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl or C₁₋₆ alkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl substituted by C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, 5- to 10-membered heteroaryl, halogen, -N(R_a)(R_b), -OR_c, -SR_d, -C(O)R_e, -C(O)OR_f, -C(O)N(R_g)(R_h) or -OC(O)R_i, wherein R_a, R_b, R_c, R_d, R_e, R_f, R_g, R_h and R_i, are independently selected from hydrogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl;
- 25 and
- 30 . SO(=NH)NHR¹⁷, wherein R¹⁷ is selected from H and unsubstituted C₁₋₆ alkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl or C₁₋₆ alkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl substituted by C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, 5- to 10-membered heteroaryl, halogen, -N(R_a)(R_b), -OR_c, -SR_d,
- 35

-C(O)R_e, -C(O)OR_f, -C(O)N(R_g)(R_h) or -OC(O)R_i, wherein R_a, R_b, R_c, R_d, R_e, R_f, R_g, R_h and R_i, are independently selected from hydrogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl and 5- to 10-membered heteroaryl;

- 5 - unsubstituted C₃₋₇ cycloalkyl or C₃₋₇ cycloalkyl substituted by halogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₃₋₇ cycloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, 5- to 10-membered heteroaryl, CN, NO₂, -N(R_a)(R_b), -OR_c, -SR_d, -C(O)R_e, -C(O)OR_f, -C(O)N(R_g)(R_h), -OC(O)R_i, -C(NR_j)NR_kR_l, -SOR_m, -SO₂R_n or -SO₂NR_oR_p; wherein R_a, R_b, R_c, R_d, R_e, R_f, R_g, R_h, R_i, R_j, R_k, R_l, R_m, R_n, R_o and R_p are independently selected from hydrogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, and 5- to 10-membered heteroaryl;
- 10 - unsubstituted C₆₋₁₀ aryl or C₆₋₁₀ aryl substituted by halogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₃₋₇ cycloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, 5- to 10-membered heteroaryl, CN, NO₂, -N(R_a)(R_b), -OR_c, -SR_d, -C(O)R_e, -C(O)OR_f, -C(O)N(R_g)(R_h), -OC(O)R_i, -C(NR_j)NR_kR_l, -SOR_m, -SO₂R_n or -SO₂NR_oR_p; wherein R_a, R_b, R_c, R_d, R_e, R_f, R_g, R_h, R_i, R_j, R_k, R_l, R_m, R_n, R_o and R_p are independently selected from hydrogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, and 5- to 10-membered heteroaryl;
- 15 - unsubstituted (C₆₋₁₀)aryl(C₁₋₃)alkyl or (C₆₋₁₀)aryl(C₁₋₃)alkyl substituted by halogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₃₋₇ cycloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, 5- to 10-membered heteroaryl, CN, NO₂, -N(R_a)(R_b), -OR_c, -SR_d, -C(O)R_e, -C(O)OR_f, -C(O)N(R_g)(R_h), -OC(O)R_i, -C(NR_j)NR_kR_l, -SOR_m, -SO₂R_n or -SO₂NR_oR_p; wherein R_a, R_b, R_c, R_d, R_e, R_f, R_g, R_h, R_i, R_j, R_k, R_l, R_m, R_n, R_o and R_p are independently selected from hydrogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₆₋₁₀ aryl, (C₆₋₁₀)aryl(C₁₋₆)alkyl, 5- to 10-membered heterocyclyl, and 5- to 10-membered heteroaryl.

30 6. Compound according to any one of claims 1 to 5, wherein X-R² is a group of formula



wherein:

n is selected from 1, 2 and 3;

R¹⁵ is selected from H and unsubstituted C₁₋₆ alkyl or C₁₋₆ alkyl substituted by halogen, -N(R_a)(R_b), -OR_c, -SR_d, -C(O)R_e, -C(O)OR_f, -C(O)N(R_g)(R_h) or -OC(O)R_i,

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wherein R_a , R_b , R_c , R_d , R_e , R_f , R_g , R_h and R_i , are independently selected from hydrogen, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{6-10} aryl and $(C_{6-10})\text{aryl}(C_{1-6})\text{alkyl}$;

R^{16} is selected from unsubstituted C_{1-6} alkyl, C_{6-10} aryl, $(C_{6-10})\text{aryl}(C_{1-6})\text{alkyl}$ and 5- to 10-membered heteroaryl or C_{1-6} alkyl, C_{6-10} aryl, $(C_{6-10})\text{aryl}(C_{1-6})\text{alkyl}$ and 5- to 10-membered heteroaryl substituted by C_{1-6} alkyl, C_{1-6} haloalkyl, C_{6-10} aryl, $(C_{6-10})\text{aryl}(C_{1-6})\text{alkyl}$, 5- to 10-membered heteroaryl, halogen, $-N(R_a)(R_b)$, $-OR_c$, or $-SR_d$, wherein R_a , R_b , R_c and R_d are independently selected from hydrogen, C_{1-6} alkyl and C_{1-6} haloalkyl.

7. Compound according to any one of claims 1 to 5, wherein $X-R^2$ is a group of formula $-\text{NH}-(\text{CH}_2)_n-\text{Z}$

wherein:

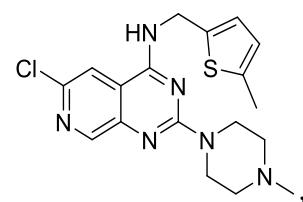
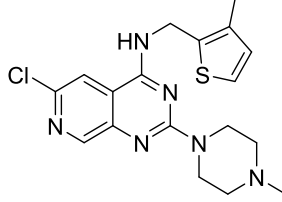
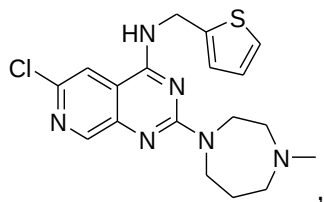
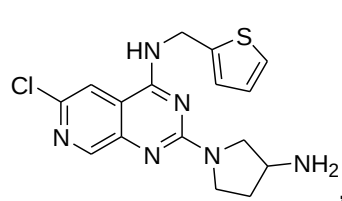
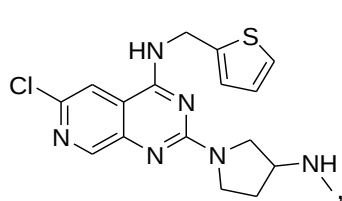
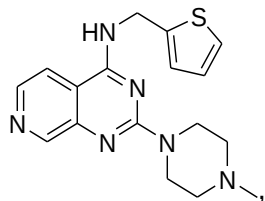
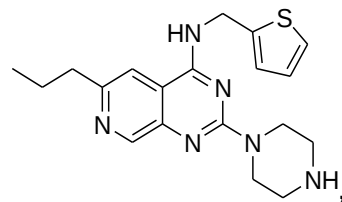
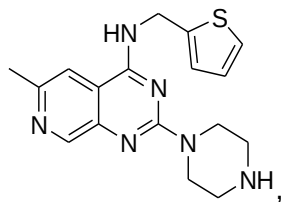
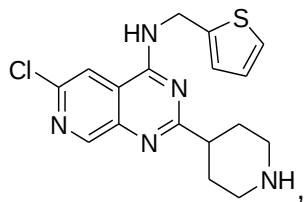
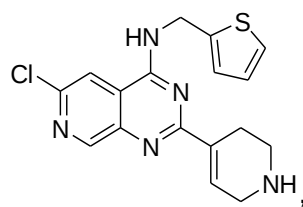
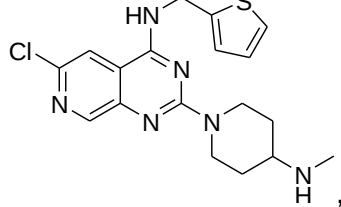
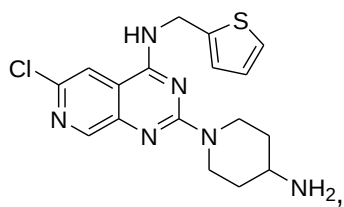
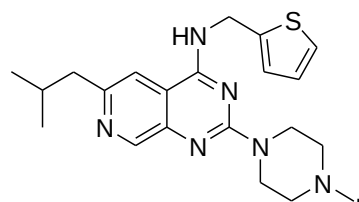
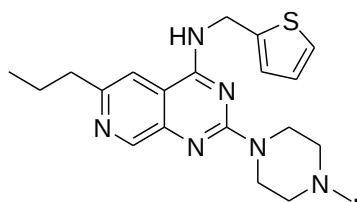
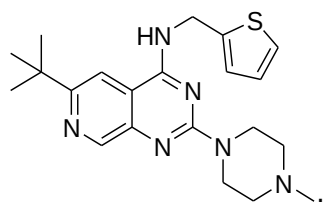
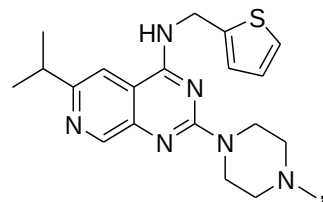
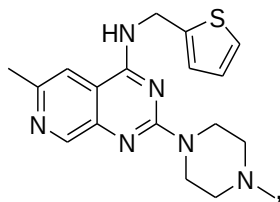
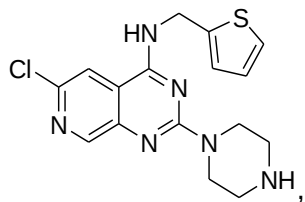
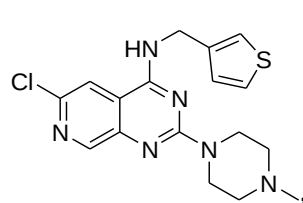
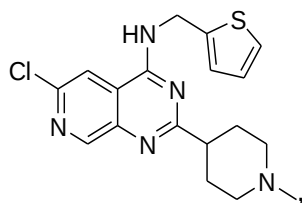
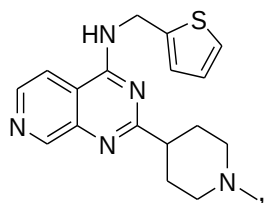
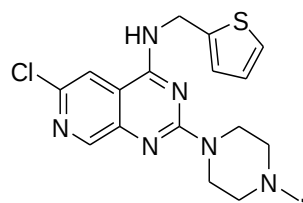
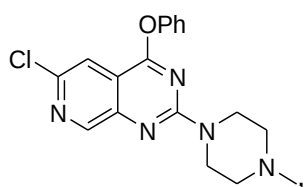
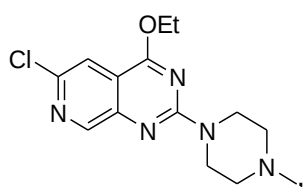
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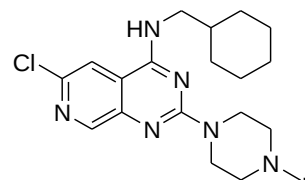
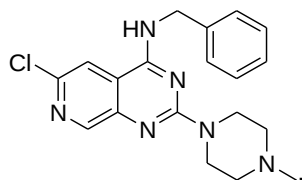
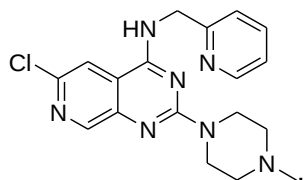
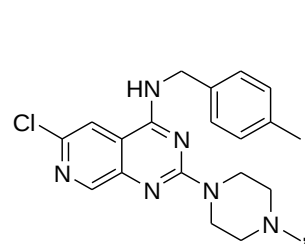
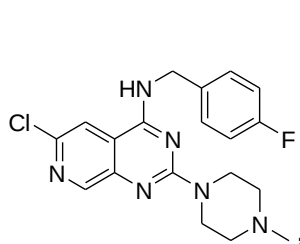
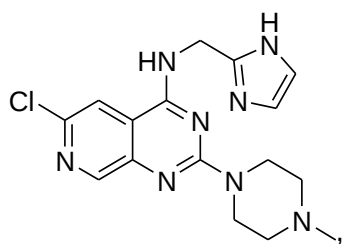
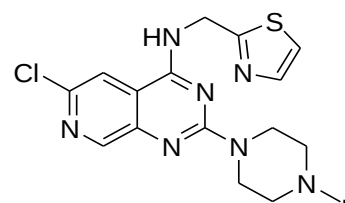
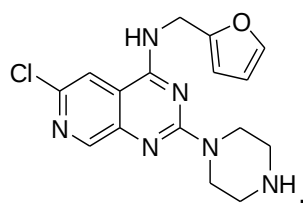
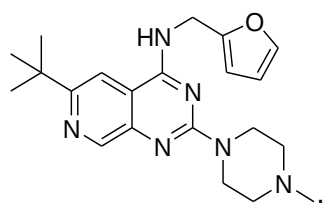
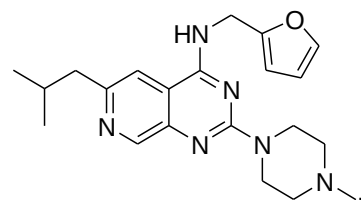
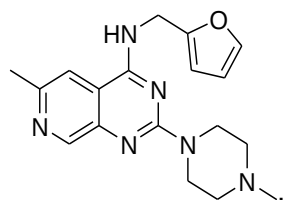
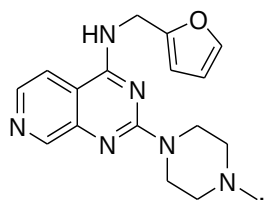
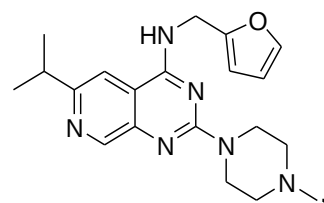
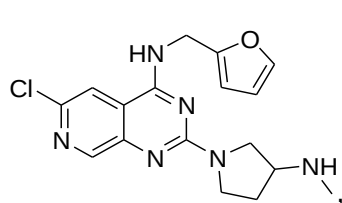
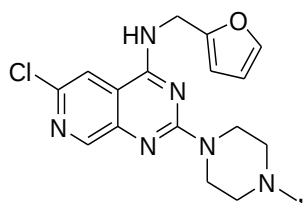
Z is selected from unsubstituted 5- or 6-membered heterocyclyl and 5- or 6-membered heteroaryl or 5- or 6-membered heterocyclyl and 5- or 6-membered heteroaryl substituted by halogen, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted $(C_{6-10})\text{aryl}(C_{1-6})\text{alkyl}$, substituted or unsubstituted 5- to 10-membered heteroaryl, CN , $-N(R_a)(R_b)$, $-OR_c$, $-SR_d$, $-C(O)R_e$, $-C(O)OR_f$, $-C(O)N(R_g)(R_h)$, $-OC(O)R_i$, $-C(NR_j)NR_kR_l$, $-SOR_m$, $-SO_2R_n$ and $-SO_2NR_oR_p$; wherein R_a , R_b , R_c , R_d , R_e , R_f , R_g , R_h , R_i , R_j , R_k , R_l , R_m , R_n , R_o and R_p are independently selected from hydrogen, substituted or unsubstituted C_{1-6} alkyl, C_{1-6} haloalkyl, C_{6-10} aryl, $(C_{6-10})\text{aryl}(C_{1-6})\text{alkyl}$, 5- to 10-membered heterocyclyl, and 5- to 10-membered heteroaryl; and wherein said substituted C_{1-6} alkyl, substituted $(C_{6-10})\text{aryl}(C_{1-6})\text{alkyl}$, substituted 5- to 10-membered heteroaryl can in turn be substituted by one or more groups selected from C_{1-6} alkyl, C_{1-6} haloalkyl, C_{6-10} aryl, 5- to 10-membered heteroaryl, halogen, $-N(R_a)(R_b)$ and $-OR_c$, wherein R_a , R_b and R_c are independently selected from hydrogen, C_{1-6} alkyl and C_{1-6} haloalkyl.

8. Compound according to any one of claims 1 to 7, wherein R^3 is a substituted or unsubstituted N-containing 5- to 10-membered heterocyclyl, wherein the 5- to 10-membered heterocyclyl is not morpholine or tetrahydroisoquinoline.

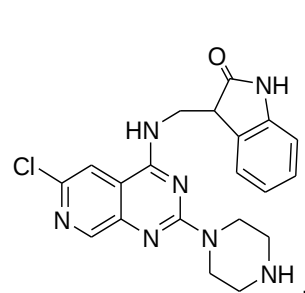
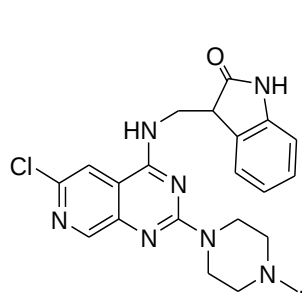
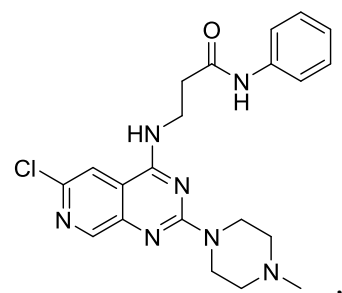
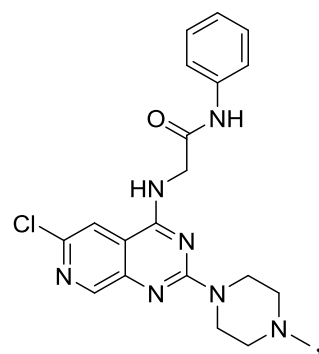
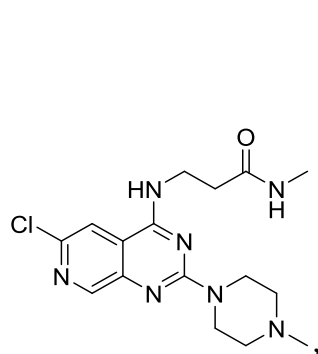
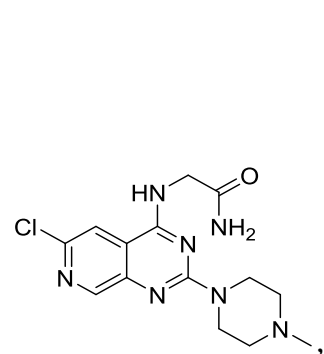
9. Compound according to any one of claims 1 to 8, wherein the compound of formula (I') is selected from:

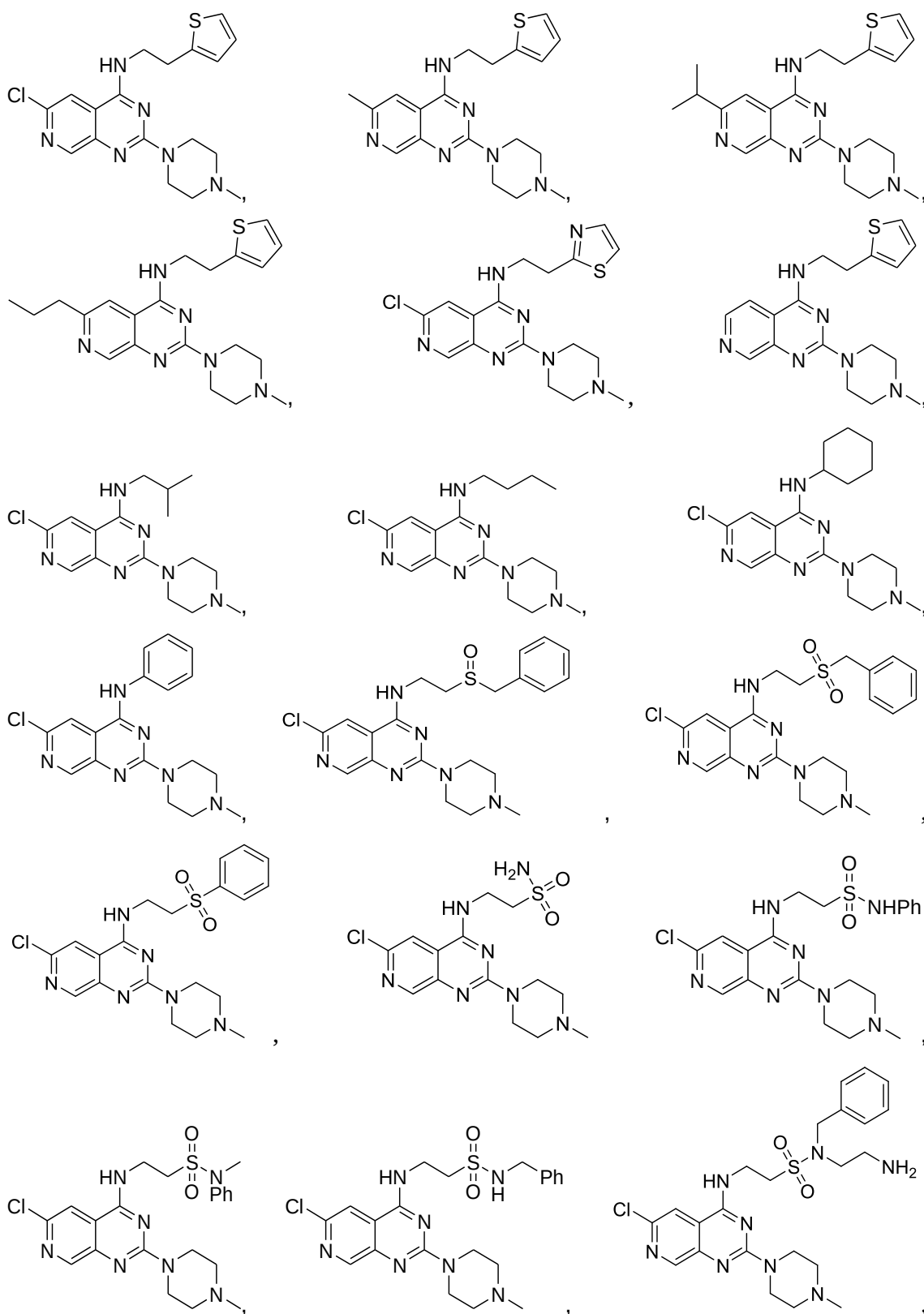
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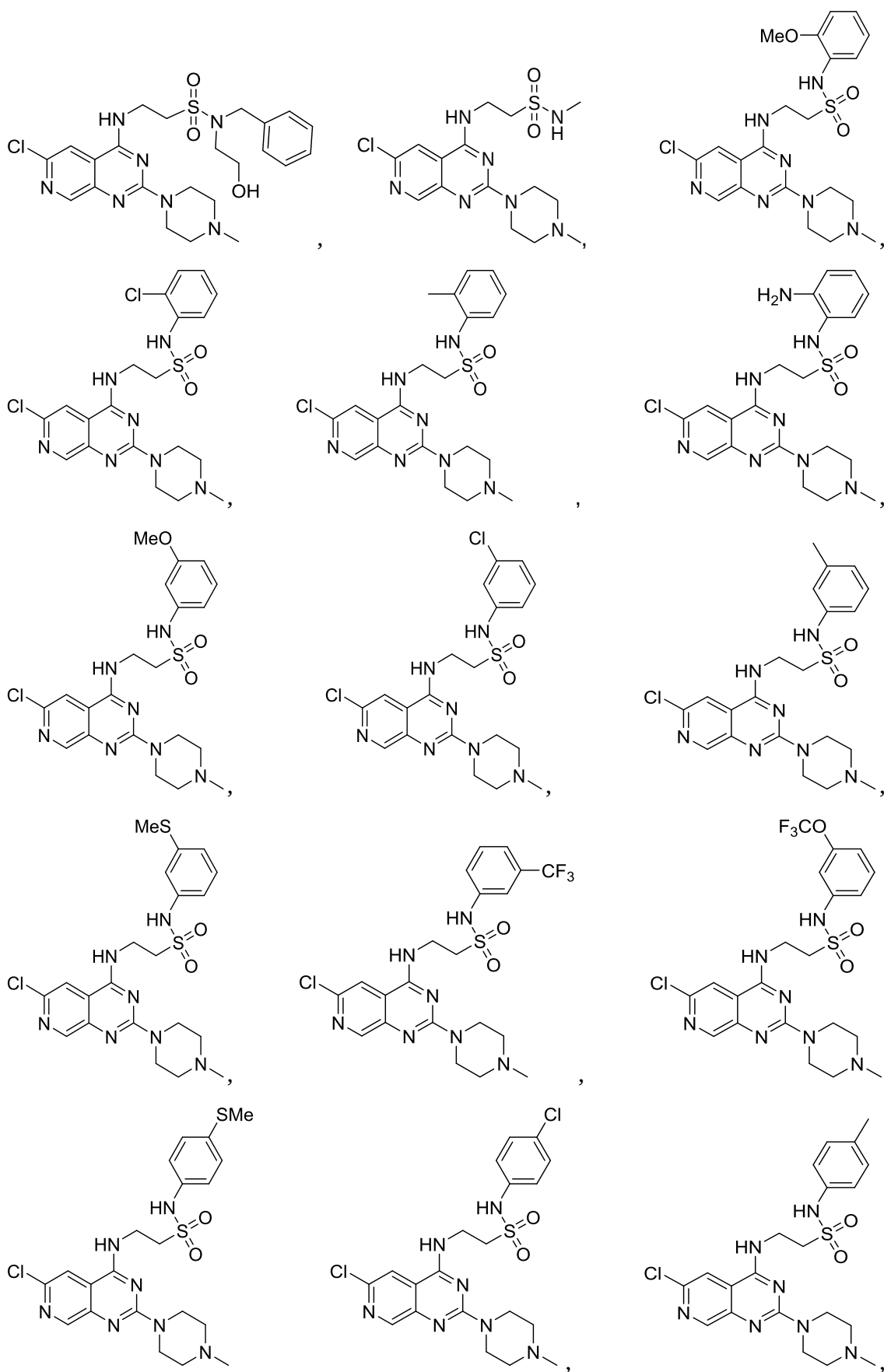


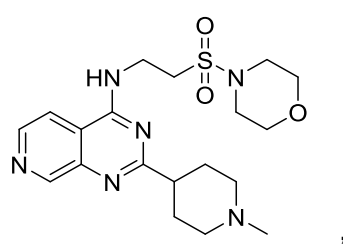
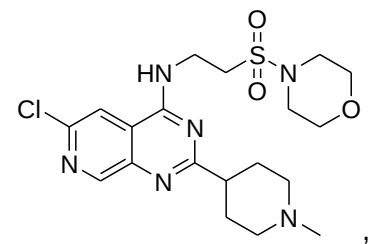
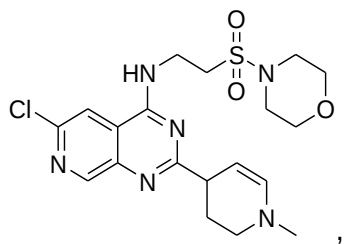
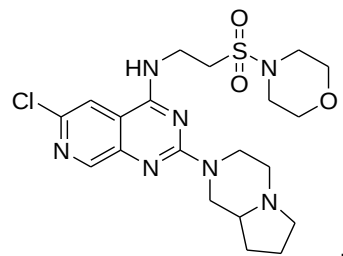
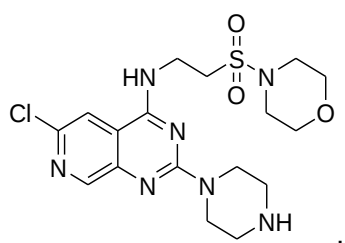
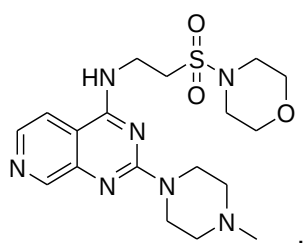
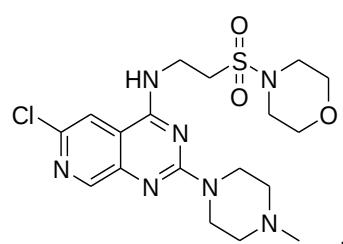
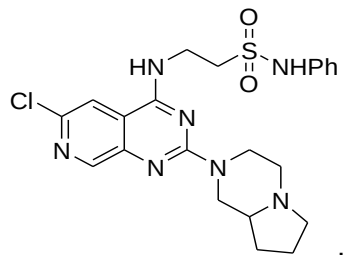
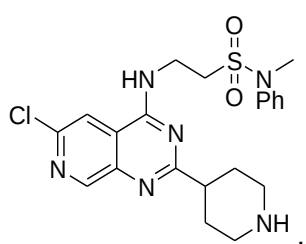
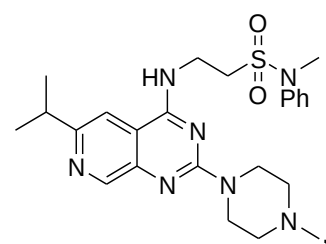
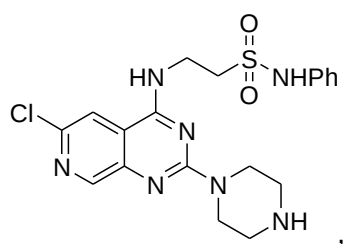
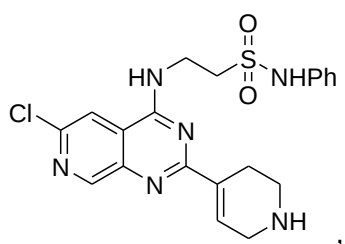
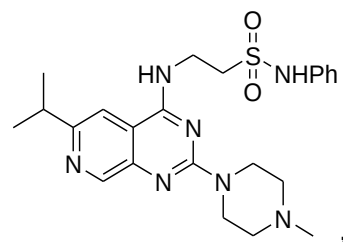
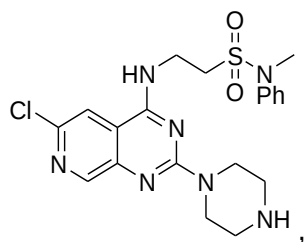
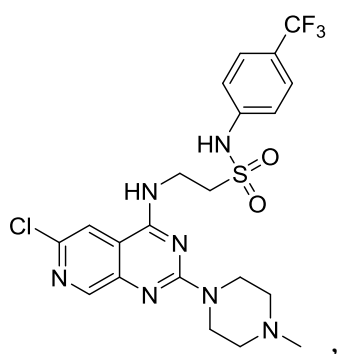


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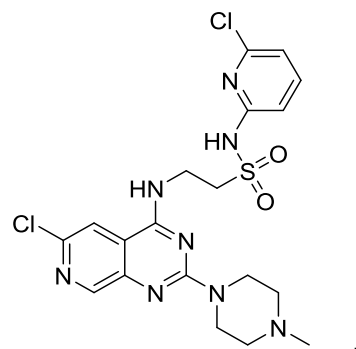
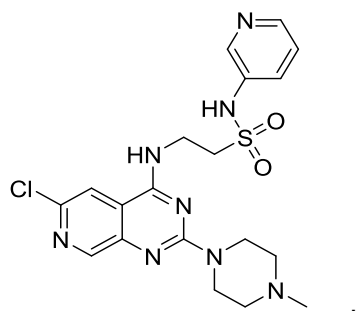
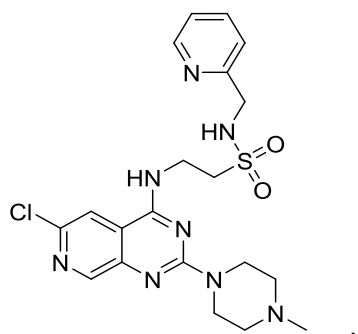


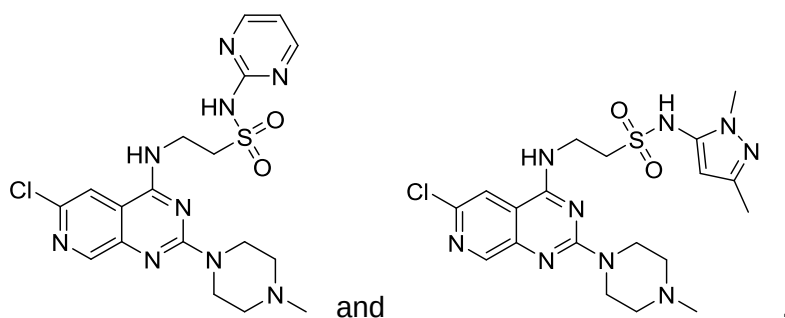






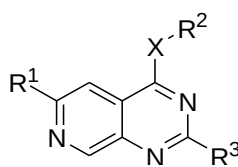
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or a salt or solvate thereof.

10. Pharmaceutical composition comprising a compound of formula (I'), or a pharmaceutically acceptable salt or solvate thereof, as defined in any one of claims 1 to 9 and a pharmaceutically acceptable excipient.
11. Compound of formula (I'), or a pharmaceutically acceptable salt or solvate thereof, as defined in any one of claims 1 to 9, for use as a medicament.
12. Compound of formula (I'), or a pharmaceutically acceptable salt or solvate thereof, as defined in any one of claims 1 to 9, for use in the prevention or treatment of a H4 receptor mediated condition selected from inflammatory disorders, including inflammatory skin diseases, inflammatory diseases of the gastrointestinal tract and inflammatory eye diseases; allergic disorders; dermatological disorders; autoimmune diseases; pruritic diseases, lymphatic disorders, immunodeficiency disorders, respiratory diseases, cardiac diseases, kidney diseases, pain disorders, overactive bladder conditions, vestibular disorders, joint diseases and macular degenerative disorders.
13. Compound for use according to claim 12, wherein the condition is selected from allergy, asthma, dry eye, conjunctivitis, uveitis, allergic rhinitis, rhinoconjunctivitis, chronic obstructive airway disease (COPD), atopic dermatitis, psoriasis, itchy skin, uraemic pruritus, urticaria, rheumatoid arthritis, psoriatic arthritis, colitis, Crohn's disease and ulcerative colitis, myocardial ischaemia, diabetic nephropathy, inflammatory pain, neuropathic pain, vertigo, tinnitus, atherosclerosis, multiple sclerosis, mastocytosis and inflammatory or systemic lupus erythematosus.
14. Use of a compound of formula (I)



(I)

or a pharmaceutically acceptable salt or solvate thereof,
wherein

- 5 R^1 is selected from hydrogen, halogen, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{3-7} cycloalkyl, substituted or unsubstituted C_{6-10} aryl, substituted or unsubstituted 5- to 10-membered heterocyclyl, OR^4 , SR^4 , NR^4R^5 , COR^4 and $CONR^4R^5$, wherein R^4 and R^5 are independently selected from H and substituted or unsubstituted C_{1-6} alkyl;
- 10 X is selected from $-O-$ and $-NR^6-$, wherein R^6 is selected from H and C_{1-6} alkyl;
 R^2 is selected from:
- unsubstituted C_{1-6} alkyl or C_{1-6} alkyl substituted by:
 - . C_{1-6} alkyl,
 - . substituted or unsubstituted C_{3-7} cycloalkyl,
 - 15 . substituted or unsubstituted C_{6-10} aryl,
 - . substituted or unsubstituted 5- to 10-membered heterocyclyl,
 - . substituted or unsubstituted 5- to 10-membered heteroaryl, and
 - . OR^7 , wherein R^7 is selected from H and substituted or unsubstituted C_{1-6} alkyl;
 - 20 . NR^8R^9 , wherein R^8 and R^9 are independently selected from H and substituted or unsubstituted C_{1-6} alkyl;
 - . COR^{10} , wherein R^{10} is selected from substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{6-10} aryl, substituted or unsubstituted $(C_{6-10})aryl(C_{1-6})alkyl$, substituted or unsubstituted 5- to 10-membered heterocyclyl and substituted or unsubstituted 5- to 10-membered heteroaryl;
 - 25 . $CONR^{11}R^{12}$, wherein R^{11} and R^{12} are independently selected from H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{6-10} aryl, substituted or unsubstituted $(C_{6-10})aryl(C_{1-6})alkyl$, substituted or unsubstituted 5- to 10-membered heterocyclyl and substituted or unsubstituted 5- to 10-membered heteroaryl;
 - 30 . SOR^{13} , wherein R^{13} is selected from substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted C_{6-10} aryl, substituted or unsubstituted

(C₆₋₁₀)aryl(C₁₋₆)alkyl, substituted or unsubstituted 5- to 10-membered heterocyclyl and substituted or unsubstituted 5- to 10-membered heteroaryl;

5 . SO₂R¹⁴, wherein R¹⁴ is selected from substituted or unsubstituted C₁₋₆ alkyl, substituted or unsubstituted C₆₋₁₀ aryl, substituted or unsubstituted (C₆₋₁₀)aryl(C₁₋₆)alkyl, substituted or unsubstituted 5- to 10-membered heterocyclyl and substituted or unsubstituted 5- to 10-membered heteroaryl;

10 . SO₂NR¹⁵R¹⁶, wherein R¹⁵ and R¹⁶ are independently selected from H, substituted or unsubstituted C₁₋₆ alkyl, substituted or unsubstituted C₃₋₇ cycloalkyl, substituted or unsubstituted C₆₋₁₀ aryl, substituted or unsubstituted (C₆₋₁₀)aryl(C₁₋₆)alkyl, substituted or unsubstituted 5- to 10-membered heterocyclyl and substituted or unsubstituted 5- to 10-membered heteroaryl; and

15 . SO(=NH)NHR¹⁷, wherein R¹⁷ is selected from H, substituted or unsubstituted C₁₋₆ alkyl, substituted or unsubstituted C₃₋₇ cycloalkyl, substituted or unsubstituted C₆₋₁₀ aryl, substituted or unsubstituted (C₆₋₁₀)aryl(C₁₋₆)alkyl, substituted or unsubstituted 5- to 10-membered heterocyclyl and substituted or unsubstituted 5- to 10-membered heteroaryl;

- 20
- substituted or unsubstituted C₃₋₇ cycloalkyl;
 - substituted or unsubstituted C₆₋₁₀ aryl; and
 - substituted or unsubstituted (C₆₋₁₀)aryl(C₁₋₆)alkyl;

R³ is substituted or unsubstituted N-containing 5- to 10-membered heterocyclyl; provided that the compound of formula (I) is not [2-(3,4-dihydro-1H-isoquinolin-2-yl)-pyrido[3,4-d]pyrimidin-4-yl]-pyridin-4-ylmethyl-amine; pyridin-4-ylmethyl-[2-(8-thiazol-2-yl-3,4-dihydro-1H-isoquinolin-2-yl)-pyrido[3,4-d]pyrimidin-4-yl]-amine; {2-[8-(morpholine-4-sulfonyl)-3,4-dihydro-1H-isoquinolin-2-yl]-pyrido[3,4-d]pyrimidin-4-yl]-pyridin-4-ylmethyl-amine; and N¹-(2-morpholin-4-yl-pyrido[3,4-d]pyrimidin-4-yl)-3-phenyl-propane-1,2-diamine;

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wherein the term heterocyclyl refers to a partially or fully saturated ring and the term heteroaryl refers to an aromatic ring;

in the manufacture of a medicament for the prevention or treatment of a H4 receptor mediated condition selected from inflammatory disorders, including inflammatory skin diseases, inflammatory diseases of the gastrointestinal tract and inflammatory

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eye diseases; allergic disorders; dermatological disorders; autoimmune diseases; pruritic diseases, lymphatic disorders, immunodeficiency disorders, respiratory diseases, cardiac diseases, kidney diseases, pain disorders, overactive bladder conditions, vestibular disorders, joint diseases and macular degenerative disorders.

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15. Use according to claim 14, wherein the condition is selected from allergy, asthma, dry eye, conjunctivitis, uveitis, allergic rhinitis, rhinoconjunctivitis, chronic obstructive airway disease (COPD), atopic dermatitis, psoriasis, itchy skin, uraemic pruritus, urticaria, rheumatoid arthritis, psoriatic arthritis, colitis, Crohn's disease and
 10 ulcerative colitis, myocardial ischaemia, diabetic nephropathy, inflammatory pain, neuropathic pain, vertigo, tinnitus, atherosclerosis, multiple sclerosis, mastocytosis and inflammatory or systemic lupus erythematosus.