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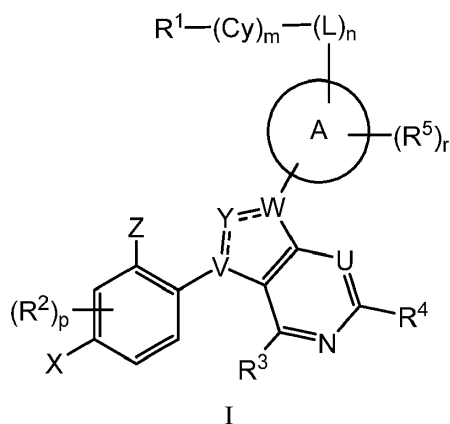
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(54)	Title	INHIBITORS OF THE MENIN-MLL INTERACTION
(56)	References Cited:	WO-A1-2015/058084 US-A1- 2010 144 758 WO-A2-2011/113798

Enclosed is a translation of the patent claims in Norwegian. Please note that as per the Norwegian Patents Acts, section 66i the patent will receive protection in Norway only as far as there is agreement between the translation and the language of the application/patent granted at the EPO. In matters concerning the validity of the patent, language of the application/patent granted at the EPO will be used as the basis for the decision. The patent documents published by the EPO are available through Espacenet (<http://worldwide.espacenet.com>) or via the search engine on our website here: <https://search.patentstyret.no/>

Patentkrav

1. Forbindelse av formel I:

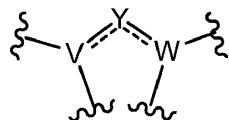


5 eller et farmasøytisk akseptabelt salt derav, hvori:

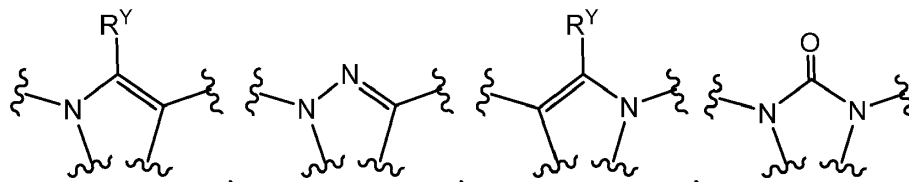
ring A er en C₆₋₁₀arylgruppe, 5-14-leddet heteroarylgruppe, C₃₋₁₄sykloalkylgruppe eller 4-14-leddet heterosykloalkylgruppe;

U er N eller CR^U, hvori R^U er H, halogen, CN, OH, C₁₋₄alkyl, C₁₋₄alkoksy, amino, C₁₋₄alkylamino eller C₂₋₈dialkylamino;

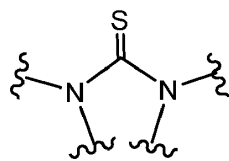
10 delen



er valgt fra:



, og



15

hvori R^Y er H, halogen, CN, OH, C₁₋₄alkyl, C₁₋₄alkoksy, amino, C₁₋₄alkylamino eller C₂₋₈dialkylamino;

X er F eller Cl;

L er valgt fra -C₁₋₆alkylen- og -(C₁₋₄alkylen)_a-Q-(C₁₋₄alkylen)_b-, hvori C₁₋₆alkylengruppen

20 og en hvilken som helst C₁₋₄alkylengruppe av -(C₁₋₄alkylen)_a-Q-(C₁₋₄alkylen)_b-gruppen er eventuelt substituert med 1, 2 eller 3 substituenten uavhengig valgt fra halogen, CN, OH, C₁₋₃alkyl, C₁₋₃alkoksy, C₁₋₃hydroksyalkyl, C₁₋₃halogenalkyl, C₁₋₃halogenalkoksy, amino, C₁₋₃alkylamino og di(C₁₋₃alkyl)amino;

Q er -O-, -S-, -S(=O)-, -S(=O)₂-, -C(=O)-, -C(=O)NR^{q1}-, -C(=O)O-, -OC(=O)NR^{q1}-, -NR^{q1}-, -NR^{q1}C(=O)O-, -NR^{q1}C(=O)NR^{q1}-, -S(=O)₂NR^{q1}-, -C(=NR^{q2})- eller -C(=NR^{q2})-NR^{q1}-, hvori hver R^{q1} er uavhengig valgt fra H, C₁₋₆alkyl og C₁₋₃hydroksyalkyl, og hvori hver R^{q2} er uavhengig valgt fra H, C₁₋₆alkyl og CN;

- 5 Cy er en bindende C₆₋₁₄aryl-, bindende C₃₋₁₈sykloalkyl-, bindende 5–16-leddet heteroaryl-, eller bindende 4–18-leddet heterosykloalkylgruppe, hver av disse er eventuelt substituert med 1, 2, 3 eller 4 substituenten uavhengig valgt fra R^{Cy};

hver R^{Cy} er uavhengig valgt fra halogen, C₁₋₆alkyl, C₁₋₄halogenalkyl, C₁₋₄cyanoalkyl, C₂₋₆alkenyl, C₂₋₆alkynyl, C₆₋₁₀aryl, C₃₋₁₀sykloalkyl, 5–10-leddet heteroaryl, 4–10-leddet heterosykloalkyl, CN, NO₂, OR^{a1}, SR^{a1}, C(O)R^{b1}, C(O)NR^{c1}R^{d1}, C(O)OR^{a1}, OC(O)R^{b1}, OC(O)NR^{c1}R^{d1}, C(=NR^{e1})NR^{c1}R^{d1}, NR^{c1}C(=NR^{e1})NR^{c1}R^{d1}, NR^{c1}R^{d1}, NR^{c1}C(O)R^{b1}, NR^{c1}C(O)OR^{a1}, NR^{c1}C(O)NR^{c1}R^{d1}, NR^{c1}S(O)R^{b1}, NR^{c1}S(O)₂R^{b1}, NR^{c1}S(O)₂NR^{c1}R^{d1}, S(O)R^{b1}, S(O)NR^{c1}R^{d1}, S(O)₂R^{b1} og S(O)₂NR^{c1}R^{d1}, hvori C₁₋₆ alkylet, C₂₋₆alkenylet, C₂₋₆alkynylet, C₆₋₁₀arylet, C₃₋₁₀sykloalkylet, det 5–10-leddede heteroarylet, og det 4–10-leddede

- 10 heterosykloalkylet er hver eventuelt substituert med 1, 2, 3 eller 4 substituenten uavhengig valgt fra CN, NO₂, OR^{a1}, SR^{a1}, C(O)R^{b1}, C(O)NR^{c1}R^{d1}, C(O)OR^{a1}, OC(O)R^{b1}, OC(O)NR^{c1}R^{d1}, C(=NR^{e1})NR^{c1}R^{d1}, NR^{c1}C(=NR^{e1})NR^{c1}R^{d1}, NR^{c1}R^{d1}, NR^{c1}C(O)R^{b1}, NR^{c1}C(O)OR^{a1}, NR^{c1}C(O)NR^{c1}R^{d1}, NR^{c1}S(O)R^{b1}, NR^{c1}S(O)₂R^{b1}, NR^{c1}S(O)₂NR^{c1}R^{d1}, S(O)R^{b1}, S(O)NR^{c1}R^{d1}, S(O)₂R^{b1} og S(O)₂NR^{c1}R^{d1};

- 15 R¹ er H, Cy¹, halogen, C₁₋₆alkyl, C₁₋₄halogenalkyl, C₁₋₄cyanoalkyl, C₂₋₆alkenyl, C₂₋₆alkynyl, CN, NO₂, OR^{a2}, SR^{a2}, C(O)R^{b2}, C(O)NR^{c2}R^{d2}, C(O)OR^{a2}, OC(O)R^{b2}, OC(O)NR^{c2}R^{d2}, C(=NR^{e2})NR^{c2}R^{d2}, NR^{c2}C(=NR^{e2})NR^{c2}R^{d2}, NR^{c2}R^{d2}, NR^{c2}C(O)R^{b2}, NR^{c2}C(O)OR^{a2}, NR^{c2}C(O)NR^{c2}R^{d2}, NR^{c2}S(O)R^{b2}, NR^{c2}S(O)₂R^{b2}, NR^{c2}S(O)₂NR^{c2}R^{d2}, S(O)R^{b2}, S(O)NR^{c2}R^{d2}, S(O)₂R^{b2} og S(O)₂NR^{c2}R^{d2}, hvori C₁₋₆alkylet, C₂₋₆alkenylet og C₂₋₆alkynylet er hver eventuelt substituert med 1, 2, 3 eller 4 substituenten uavhengig valgt fra halogen, CN, NO₂, OR^{a2}, SR^{a2}, C(O)R^{b2}, C(O)NR^{c2}R^{d2}, C(O)OR^{a2}, OC(O)R^{b2}, OC(O)NR^{c2}R^{d2}, C(=NR^{e2})NR^{c2}R^{d2}, NR^{c2}C(=NR^{e2})NR^{c2}R^{d2}, NR^{c2}R^{d2}, NR^{c2}C(O)R^{b2}, NR^{c2}C(O)OR^{a2}, NR^{c2}C(O)NR^{c2}R^{d2}, NR^{c2}S(O)R^{b2}, NR^{c2}S(O)₂R^{b2}, NR^{c2}S(O)₂NR^{c2}R^{d2}, S(O)R^{b2}, S(O)NR^{c2}R^{d2}, S(O)₂R^{b2} og S(O)₂NR^{c2}R^{d2};

- 20 Z er Cy², OR^{a3} eller C(O)NR^{c3}R^{d3}, hvori Cy² er eventuelt substituert med 1 eller 2 substituenten uavhengig valgt fra R^{Cy2};

hver R², R³, R⁴ og R⁵ er uavhengig valgt fra H, halogen, C₁₋₆alkyl, C₁₋₄halogenalkyl, C₁₋₄cyanoalkyl, C₂₋₆alkenyl, C₂₋₆alkynyl, CN, NO₂, OR^{a4}, SR^{a4}, C(O)R^{b4}, C(O)NR^{c4}R^{d4}, C(O)OR^{a4}, OC(O)R^{b4}, OC(O)NR^{c4}R^{d4}, C(=NR^{e4})NR^{c4}R^{d4}, NR^{c4}C(=NR^{e4})NR^{c4}R^{d4}, NR^{c4}R^{d4}, NR^{c4}C(O)R^{b4}, NR^{c4}C(O)OR^{a4}, NR^{c4}C(O)NR^{c4}R^{d4}, NR^{c4}S(O)R^{b4}, NR^{c4}S(O)₂R^{b4}, NR^{c4}S(O)₂NR^{c4}R^{d4}, S(O)R^{b4}, S(O)NR^{c4}R^{d4}, S(O)₂R^{b4} og S(O)₂NR^{c4}R^{d4}, hvori C₁₋₆alkylet, C₂₋₆alkenylet og C₂₋₆alkynylet er hver eventuelt substituert med 1, 2, 3 eller 4 substituenten uavhengig valgt fra halogen, CN, NO₂, OR^{a4}, SR^{a4}, C(O)R^{b4}, C(O)NR^{c4}R^{d4}, C(O)OR^{a4}, OC(O)R^{b4}, OC(O)NR^{c4}R^{d4},

- 35

$C(=NR^{e4})NR^{c4}R^{d4}$, $NR^{c4}C(=NR^{e4})NR^{c4}R^{d4}$, $NR^{c4}R^{d4}$, $NR^{c4}C(O)R^{b4}$, $NR^{c4}C(O)OR^{a4}$, $NR^{c4}C(O)NR^{c4}R^{d4}$, $NR^{c4}S(O)R^{b4}$, $NR^{c4}S(O)_2R^{b4}$, $NR^{c4}S(O)_2NR^{c4}R^{d4}$, $S(O)R^{b4}$, $S(O)NR^{c4}R^{d4}$, $S(O)_2R^{b4}$ og $S(O)_2NR^{c4}R^{d4}$;

hver Cy^1 er uavhengig valgt fra C_{6-14} aryl, C_{3-18} sykloalkyl, 5–16-leddet heteroaryl, og 4–18-leddet heterosykloalkyl, hver av disse er eventuelt substituert med 1, 2, 3 eller 4 substituenten uavhengig valgt fra R^{Cy1} ;

hver Cy^2 er uavhengig valgt fra C_{6-14} aryl, C_{3-18} sykloalkyl, 5–16-leddet heteroaryl og 4–18-leddet heterosykloalkyl, hver av disse er eventuelt substituert med 1, 2, 3 eller 4 substituenten uavhengig valgt fra R^{Cy2} ;

10 hver R^{Cy1} og R^{Cy2} er uavhengig valgt fra halogen, C_{1-6} alkyl, C_{1-4} halogenalkyl, C_{1-4} cianoalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, fenyl, C_{3-7} sykloalkyl, 5–6-leddet heteroaryl, og 4–7-leddet heterosykloalkyl, CN, NO_2 , OR^{a5} , SR^{a5} , $C(O)R^{b5}$, $C(O)NR^{c5}R^{d5}$, $C(O)OR^{a5}$, $OC(O)R^{b5}$, $OC(O)NR^{c5}R^{d5}$, $C(=NR^{e5})NR^{c5}R^{d5}$, $NR^{c5}C(=NR^{e5})NR^{c5}R^{d5}$, $NR^{c5}R^{d5}$, $NR^{c5}C(O)R^{b5}$, $NR^{c5}C(O)OR^{a5}$, $NR^{c5}C(O)NR^{c5}R^{d5}$, $NR^{c5}S(O)R^{b5}$, $NR^{c5}S(O)_2R^{b5}$, $NR^{c5}S(O)_2NR^{c5}R^{d5}$, $S(O)R^{b5}$,
15 $S(O)NR^{c5}R^{d5}$, $S(O)_2R^{b5}$ og $S(O)_2NR^{c5}R^{d5}$, hvori C_{1-6} alkylet, C_{2-6} alkenylet, C_{2-6} alkynylet, fenylet, C_{3-7} sykloalkylet, det 5–6-leddede heteroarylet, og det 4–7-leddede heterosykloalkylet er hver eventuelt substituert med 1, 2, 3 eller 4 substituenten uavhengig valgt fra CN, NO_2 , OR^{a5} , SR^{a5} , $C(O)R^{b5}$, $C(O)NR^{c5}R^{d5}$, $C(O)OR^{a5}$, $OC(O)R^{b5}$, $OC(O)NR^{c5}R^{d5}$, $C(=NR^{e5})NR^{c5}R^{d5}$, $NR^{c5}C(=NR^{e5})NR^{c5}R^{d5}$, $NR^{c5}R^{d5}$, $NR^{c5}C(O)R^{b5}$,
20 $NR^{c5}C(O)OR^{a5}$, $NR^{c5}C(O)NR^{c5}R^{d5}$, $NR^{c5}S(O)R^{b5}$, $NR^{c5}S(O)_2R^{b5}$, $NR^{c5}S(O)_2NR^{c5}R^{d5}$, $S(O)R^{b5}$, $S(O)NR^{c5}R^{d5}$, $S(O)_2R^{b5}$ og $S(O)_2NR^{c5}R^{d5}$;

hver R^{a1} , R^{b1} , R^{c1} , R^{d1} , R^{a2} , R^{b2} , R^{c2} , R^{d2} , R^{a3} , R^{b3} , R^{c3} , R^{d3} , R^{a4} , R^{b4} , R^{c4} , R^{d4} , R^{a5} , R^{b5} , R^{c5} og R^{d5} er uavhengig valgt fra H, C_{1-6} alkyl, C_{1-4} halogenalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, C_{3-10} sykloalkyl, 5–10-leddet heteroaryl, 4–10-leddet heterosykloalkyl, C_{6-10} aryl- C_{1-6} alkyl, C_{3-10} sykloalkyl- C_{1-6} alkyl, (5–10-leddet heteroaryl)- C_{1-6} alkyl, og (4–10-leddet heterosykloalkyl)- C_{1-6} alkyl, hvori C_{1-6} alkylet, C_{2-6} alkenylet, C_{2-6} alkynylet, C_{6-10} arylet, C_{3-10} sykloalkylet, det 5–10-leddede heteroarylet, det 4–10-leddede heterosykloalkylet, C_{6-10} aryl- C_{1-6} alkylet, C_{3-10} sykloalkyl- C_{1-6} alkylet, (det 5–10-leddede heteroaryl)- C_{1-6} alkylet og (det 4–10-leddede heterosykloalkyl)- C_{1-6} alkylet er hver eventuelt substituert med 1, 2, 3,
25 4 eller 5 substituenten uavhengig valgt fra R_g ;

hver R^{e1} , R^{e2} , R^{e3} , R^{e4} og R^{e5} er uavhengig valgt fra H, C_{1-4} alkyl og CN;

hver R^g er uavhengig valgt fra gruppen som består av OH, NO_2 , CN, halogen, C_{1-20} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-4} halogenalkyl, C_{1-6} alkoksy, C_{1-6} halogenalkoksy, cyano- C_{1-3} alkyl, HO- C_{1-3} alkyl, amino, C_{1-6} alkylamino, di(C_{1-6} alkyl)amino, tiol, C_{1-6} alkyltio, C_{1-6} alkylsulfinyl, C_{1-6} alkylsulfonyl, karboksy, C_{1-6} alkylkarbonyl og C_{1-6} alkoksykarbonyl;

n er 0 eller 1;

m er 0 eller 1;

p er 0, 1, 2 eller 3;

r er 0, 1 eller 2;

a er 0 eller 1; og

b er 0 eller 1,

hvor i en hvilken som helst sykloalkyl- eller heterosykloalkylgruppe er eventuelt substituert

5 med 1 eller 2 oksogrupper.

2. Forbindelsen ifølge krav 1, eller et farmasøytisk akseptabelt salt derav, hvori m er 1.

10 3. Forbindelsen ifølge krav 1 eller 2, hvori

(a) U er N; eller

(b) U er CR^U.

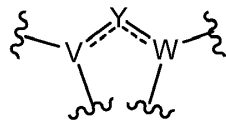
15 4. Forbindelsen ifølge et hvilket som helst av kravene 1 til 3, eller et farmasøytisk akseptabelt salt derav, hvori;

(a) X er F; eller

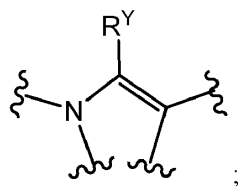
(b) X er Cl.

20 5. Forbindelsen ifølge et hvilket som helst av kravene 1 til 4, eller et farmasøytisk akseptabelt salt derav, hvori:

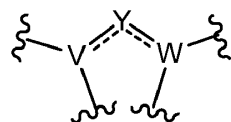
(a) delen



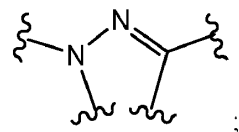
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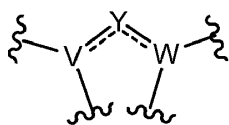
25 (b) delen



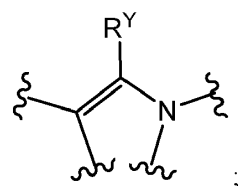
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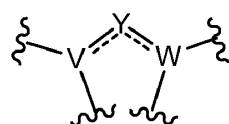
(c) delen



er

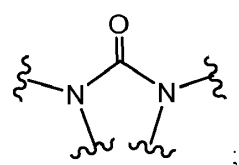


(d) delen



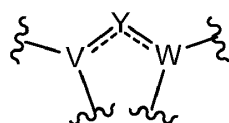
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er



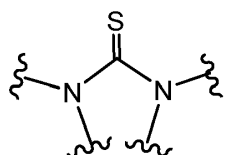
eller

(e) delen



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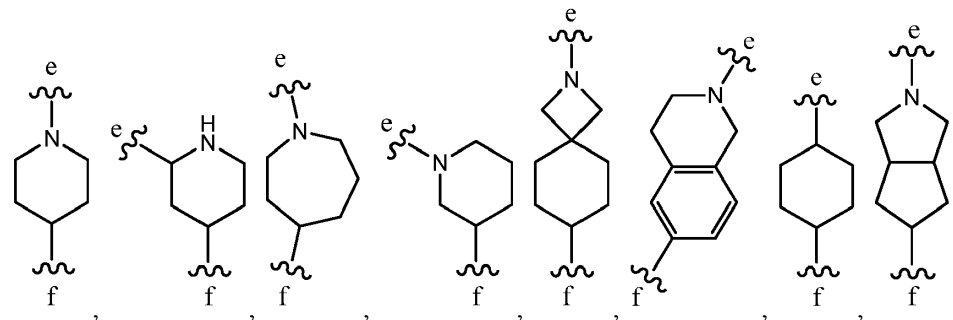
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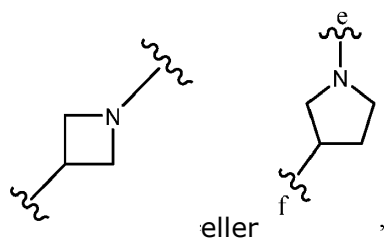


6. Forbindelsen ifølge et hvilket som helst av kravene 1 til 5, eller et farmasøytisk
15 akseptabelt salt derav, hvori:

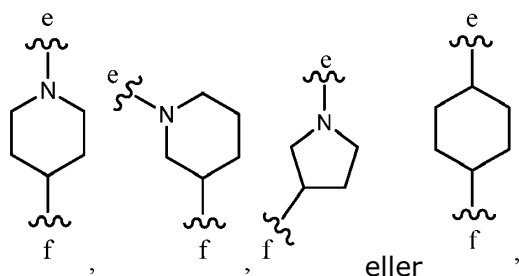
(a) ring A er en 5-10-leddet heteroarylgruppe, C₃₋₁₀sykloalkylgruppe eller en 4-10-leddet heterosykloalkylgruppe;

(b) ring A er en gruppe som har formelen:





hvor e og f indikerer festepunkter til resten av molekylet; eller
(c) ring A er en gruppe som har formelen:



5 hvor e og f indikerer festepunkter til resten av molekylet.

7. Forbindelsen ifølge et hvilket som helst av kravene 1 til 6, eller et farmasøytisk akseptabelt salt derav, hvor L er -C₁₋₆alkylen- eventuelt substituert med 1, 2 eller 3 substituent uavhengig valgt fra halogen, CN, OH, C₁₋₃alkyl, C₁₋₃alkoksy, C₁₋₃halogenalkyl, C₁₋₃halogenalkoksy, amino, C₁₋₃alkylamino og di(C₁₋₃alkyl)amino; eventuelt hvor L er -C₁₋₆alkylen-; videre eventuelt metylen, etylen eller butylen;
10 eller hvor L er -(C₁₋₄alkylen)_a-Q-(C₁₋₄alkylen)_b-, hvor en hvilken som helst C₁₋₄alkylengruppe av -(C₁₋₄alkylen)_a-Q-(C₁₋₄alkylen)_b-gruppen er eventuelt substituert med 1, 2 eller 3 substituent uavhengig valgt fra halogen, CN, OH, C₁₋₃alkyl, C₁₋₃alkoksy, C₁₋₃halogenalkyl, C₁₋₃halogenalkoksy, amino, C₁₋₃alkylamino og di(C₁₋₃alkyl)amino.
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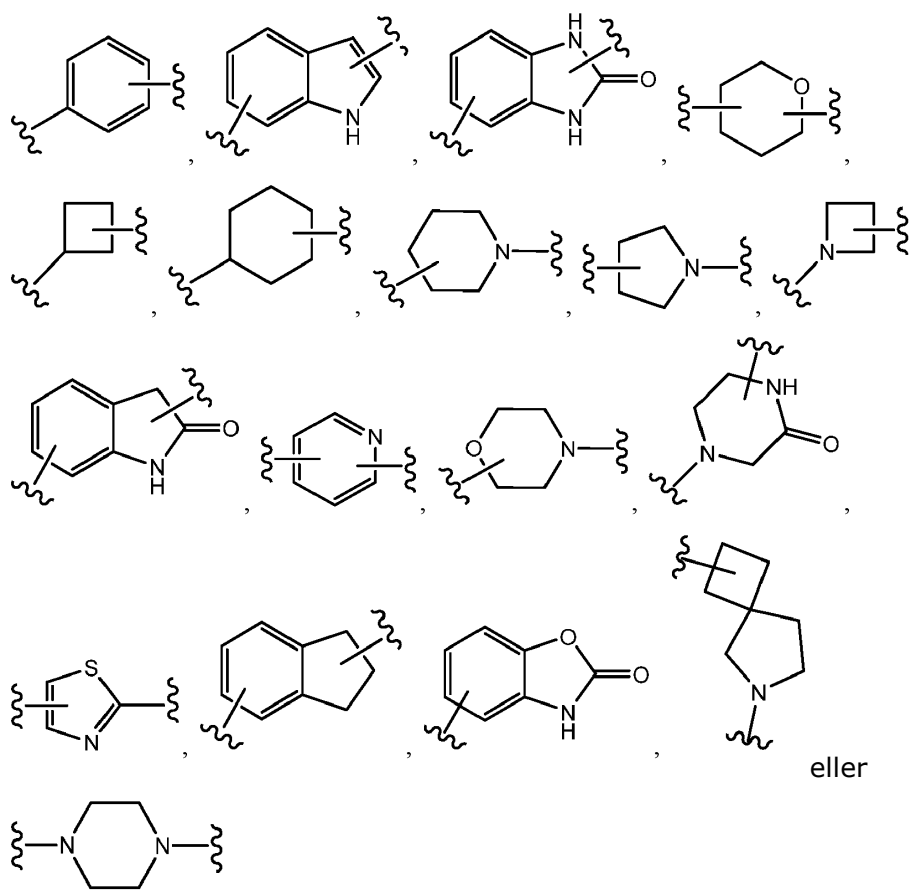
8. Forbindelsen ifølge et hvilket som helst av kravene 1 til 6, eller et farmasøytisk akseptabelt salt derav, hvor L er valgt fra -NHCH₂-, -N(CH₃)CH₂-, -O-, -C(O)- og -C(O)CH₂-.
20

9. Forbindelsen ifølge et hvilket som helst av kravene 1 til 8, eller et farmasøytisk akseptabelt salt derav, hvor Cy er:

(a) en bindende C₆₋₁₀aryl-, bindende C₃₋₁₀sykloalkyl-, bindende 5-10-leddet heteroaryl-, eller bindende 4-10-leddet heterosykloalkylgruppe, som hver er eventuelt substituert med 1, 2, 3 eller 4 substituent uavhengig valgt fra R^{Cy};
25

(b) en bindende fenyl-, bindende C₃₋₁₀sykloalkyl-, bindende 5-10-leddet heteroaryl-, eller bindende 4-10-leddet heterosykloalkylgruppe, hver av disse er eventuelt substituert med 1, 2, 3 eller 4 substituent uavhengig valgt fra R^{Cy};

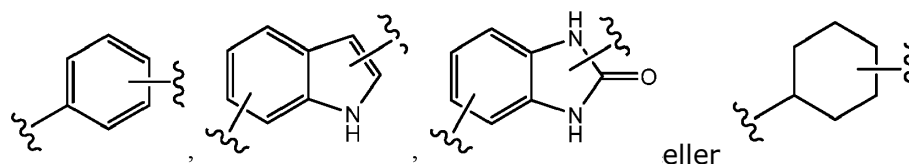
(c) en bindende gruppe som har formelen:



hver av disse er eventuelt substituert med 1, 2, 3 eller 4 substituenten uavhengig valgt fra

5 R^{Cy} ; eller

(d) en bindende gruppe som har formelen:



hver av disse er eventuelt substituert med 1, 2, 3 eller 4 substituenten uavhengig valgt fra R^{Cy} .

10

10. Forbindelsen ifølge et hvilket som helst av kravene 1 til 9, eller et farmasøytisk akseptabelt salt derav, hvori:

(a) Z er $C(O)NR^cR^{d3}$;

(b) Z er $C(O)NR^cR^{d3}$, og R^c og R^{d3} er uavhengig valgt fra H og C_{1-6} alkyl;

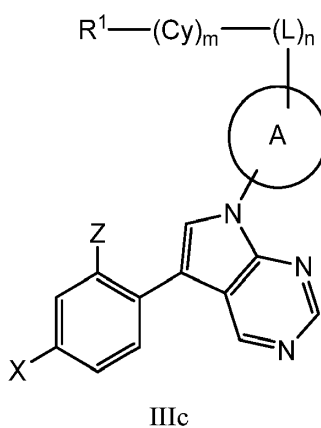
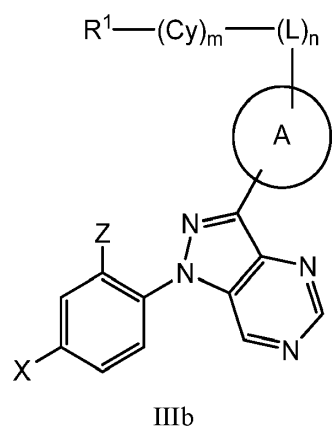
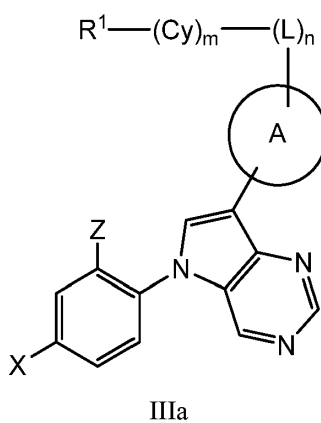
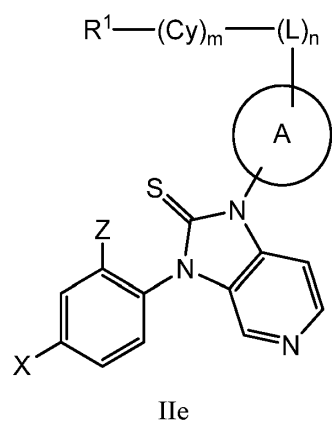
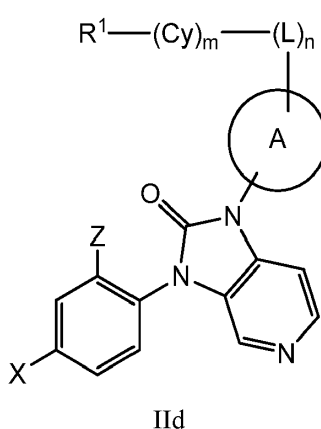
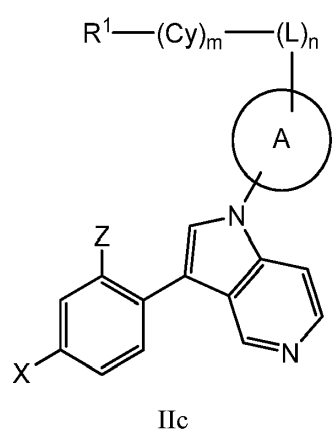
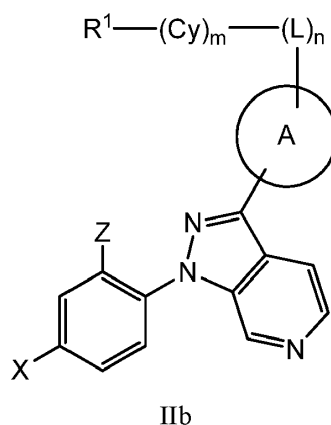
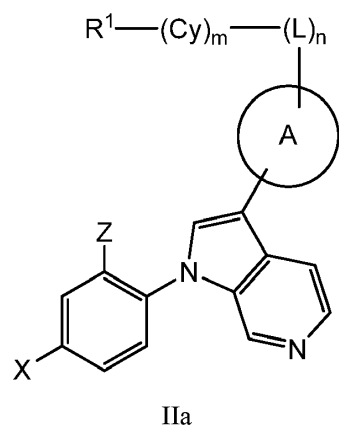
15 (c) Z er $C(O)NR^cR^{d3}$, og R^c og R^{d3} er begge C_{1-6} alkyl; eller

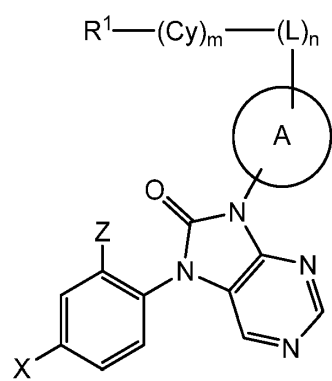
(d) Z er $C(O)NR^cR^{d3}$, og R^c og R^{d3} er uavhengig valgt fra metyl og isopropyl.

11. Forbindelsen ifølge et hvilket som helst av kravene 1 til 10, eller et farmasøytisk akseptabelt salt derav, hvori R^3 er H, og/eller R^4 er H.

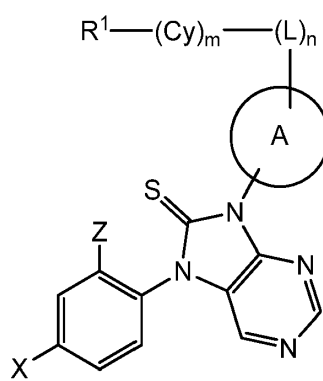
20

12. Forbindelsen ifølge krav 1, eller et farmasøytisk akseptabelt salt derav, som har
(a) formel IIa, IIb, IIc, IId, IIe, IIIa, IIIb, IIIc eller IIId:





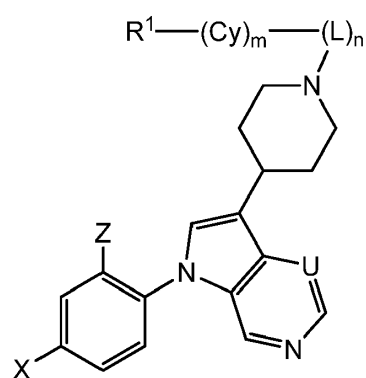
IIIId



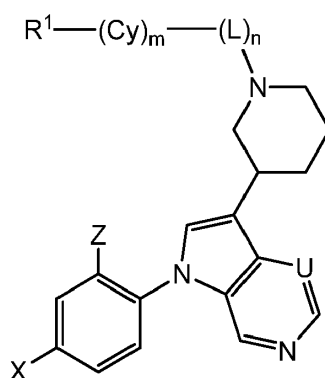
IIIe;

eller

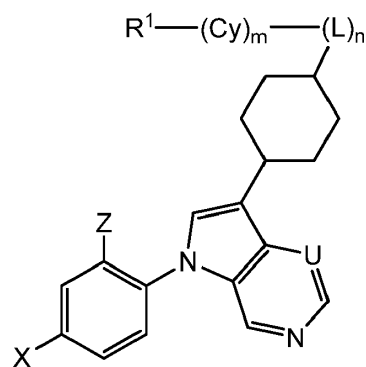
(b) formel IVa, IVb, IVc, IVd, Va, Vb eller Vc:



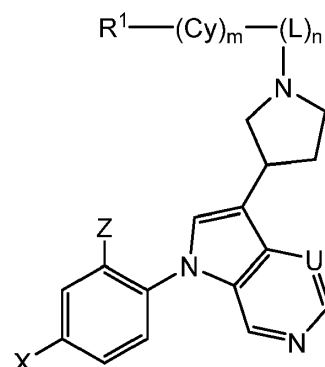
IVa



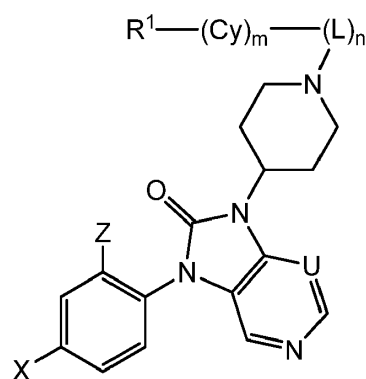
IVb



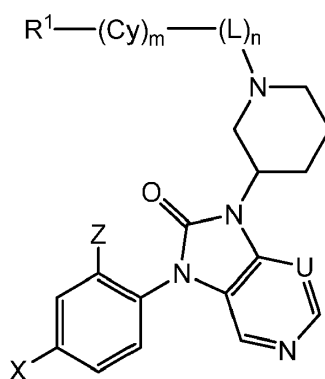
IVc



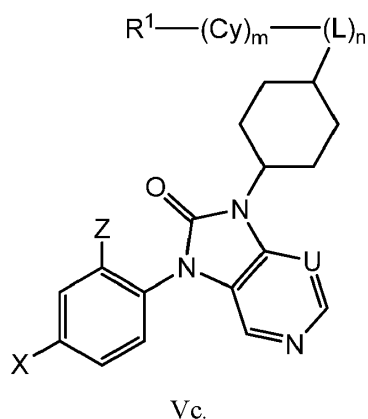
IVd



Va



Vb



13. Forbindelsen ifølge krav 1, hvori forbindelsen er valgt fra:

- 5 5-((7-(5-(4-fluor-2-(trifluormetyl)fenoksy)pyrimidin-4-yl)-2,7-diazaspiro[4.4]nonan-2-yl)metyl)-1H-benzo[d]imidazol-2(3H)-on;
- 2-(3-(1-((2-cyano-4-metyl-1H-indol-5-yl)metyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 5-((7-(5-(2,4-diklorfenoksy)pyrimidin-4-yl)-2,7-diazaspiro[4.4]nonan-2-yl)metyl)-1H-benzo[d]imidazol-2(3H)-on;
- 10 5-fluor-N-isopropyl-N-metyl-2-(3-(1-((tetrahydro-2H-pyran-4-yl)metyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(1-((2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(1-(2-(tetrahydro-2H-pyran-4-yl)etyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 15 2-(3-(1-((2-cyano-1H-indol-5-yl)metyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 2-(3-(1-((2-cyano-1H-indol-6-yl)metyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 20 5-fluor-2-(3-(1-(4-fluorbenzyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 2-(3-(1-(4-klorbenzyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(1-(4-(trifluormetyl)benzyl)piperidin-4-yl)-1H-pyrrolo
- 25 [2,3-c]pyridin-1-yl)benzamid;
- 2-(3-(1-(4-cyanobenzyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(1-(4-(metylsulfonyl)benzyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;

- 5-fluor-N-isopropyl-N-metyl-2-(3-(1-(2-metylbenzyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 2-(3-(1-(2-klorbenzyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 5 2-(3-(1-((3,3-difluorsyklobutyl)metyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(1-metyl-piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- tert-butyl-(trans-4-(2-(4-(1-(4-fluor-2-(isopropyl(metyl)karbamoyl)fenyl)-1H-pyrrolo[2,3-c]pyridin-3-yl)piperidin-1-yl)etyl)sykloheksyl)karbamat;
- 10 2-(3-(1-(2-(trans-4-acetamidosykloheksyl)etyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(1-(2-(trans-4-(metylsulfonamido)sykloheksyl)etyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-
- 15 yl)benzamid;
- tert-butyl-(trans-4-((4-(1-(4-fluor-2-(isopropyl(metyl)karbamoyl)fenyl)-1H-pyrrolo[2,3-c]pyridin-3-yl)piperidin-1-yl)metyl)sykloheksyl)karbamat;
- 2-(3-(1-(1-(trans-4-acetamidosykloheksyl)metyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 20 5-fluor-N-isopropyl-N-metyl-2-(3-(1-((trans-4-(metylsulfonamido)sykloheksyl)metyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 2-(3-(1-(4-acetamidobenzyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 25 5-fluor-N-isopropyl-N-metyl-2-(3-(1-(4-(metylsulfonamido)benzyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(1-(4-(metylsulfonyl)fenetyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 2-(3-(1-(3-cyanofenetyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 30 5-fluor-N-isopropyl-N-metyl-2-(3-(1-(3-(metylkarbamoyl)fenetyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- trans-(5-fluor-2-(3-(1-((4-hydroksysykloheksyl)metyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid);
- 35 cis-(5-fluor-2-(3-(1-((4-hydroksysykloheksyl)metyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid);
- 5-fluor-N-isopropyl-N-metyl-2-(3-(1-(2-(1-(metylsulfonyl)piperidin-4-yl)etyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;

- 2-(3-(1-(4-(2-cyanopropan-2-yl)fenetyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
5-fluor-N-isopropyl-N-metyl-2-(3-(1-(1-fenyletyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5 2-(3-(2-benzylpiperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
2-(3-(1-benzylpiperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-etyl-5-fluor-N-isopropylbenzamid;
2-(3-(1-benzylpiperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N,N-
- 10 diisopropylbenzamid;
N-(trans-4-(2-(4-(1-(2-(syklopropylmetoksy)-4-fluorfenyl)-1H-pyrrolo[2,3-c]pyridin-3-yl)piperidin-1-yl)etyl)sykloheksyl)metansulfonamid;
1-(2-(syklopropylmetoksy)-4-fluorfenyl)-3-(1-(4-fluorbenzyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin;
- 15 2-(3-(1-benzylpiperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-(2-hidroksyetyl)-N-isopropylbenzamid;
5-fluor-N-isopropyl-N-metyl-2-(3-(1-(((1r,4r)-4-(metylsulfonamido)sykloheksyl)metyl)azepan-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 20 2-(3-(azepan-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
5-((4-(1-(4-fluor-2-isobutylfenyl)-1H-pyrrolo[2,3-c]pyridin-3-yl)piperidin-1-yl)metyl)-4-metyl-1H-indol-2-karbonitril;
5-fluor-N-isopropyl-N-metyl-2-(3-(1-((2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 25 5-fluor-2-(3-(1-((1-(2-hidroksyetyl)-2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
2-(3-(1-benzylpiperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
2-(3-(1-(sykloheksylmetyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-
- 30 isopropyl-N-metylbenzamid;
N-etyl-5-fluor-N-isopropyl-2-(3-(1-((2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
(S)-N-etyl-5-fluor-N-isopropyl-2-(3-(1-((2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 35 (R)-N-etyl-5-fluor-N-isopropyl-2-(3-(1-((2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
N-etyl-5-fluor-2-(3-(1-((1-(2-hidroksyetyl)-2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropylbenzamid;

- (S)-N-etyl-S-fluor-2-(3-(1-((1-(2-hydroksyetyl)-2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropylbenzamid;
- (R)-N-etyl-5-fluor-2-(3-(1-((1-(2-hydroksyetyl)-2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropylbenzamid;
- 5 2-(3-(2-azaspiro[3.5]nonan-7-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(2-metyl-2-azaspiro[3.5]nonan-7-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 10 5-fluor-N-isopropyl-N-metyl-2-(3-(2-metyl-1,2,3,4-tetrahydroisokinolin-6-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-2-(3-(4-hydroksysykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 15 2-(3-(4-(dimetylamino)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(trans-4-(pyrrolidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(cis-4-(pyrrolidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 20 2-(3-(trans-4-aminosykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 2-(3-(cis-4-aminosykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 25 5-fluor-N-isopropyl-N-metyl-2-(3-(4-fenoksysykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(4-(((2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)amino)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(4-(((4-
- 30 (metylsulfonamido)sykloheksyl)metyl)amino)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 2-(7-(1-((2-cyano-4-metyl-1H-indol-5-yl)metyl)piperidin-4-yl)-SH-pyrrolo[3,2-d]pyrimidin-5-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 2-(7-(1-((2-cyano-4-metyl-1H-indol-5-yl)metyl)piperidin-4-yl)-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-5-fluor-N,N-dimetylbenzamid;
- 35 5-(4-fluorfenyl)-7-(1-((tetrahydro-2H-pyran-4-yl)metyl)piperidin-4-yl)-5H-pyrrolo[3,2-d]pyrimidin;

- 5-((4-(5-(4-fluorfenyl)-5H-pyrrolo[3,2-d]pyrimidin-7-yl)piperidin-1-yl)metyl)-4-metyl-1H-indol-2-karbonitril;
- 5-((4-(5-(4-fluorfenyl)-5H-pyrrolo[3,2-d]pyrimidin-7-yl)piperidin-1-yl)metyl)-1H-benzo[d]imidazol-2(3H)-on;
- 5 7-(1-((1H-indol-6-yl)metyl)piperidin-4-yl)-5-(4-fluorfenyl)-SH-pyrrolo[3,2-d]pyrimidin;
- 7-(1-((1H-indol-5-yl)metyl)piperidin-4-yl)-5-(4-fluorfenyl)-SH-pyrrolo[3,2-d]pyrimidin;
- 5-((4-(5-(4-fluor-2-metylfenyl)-5H-pyrrolo[3,2-d]pyrimidin-7-yl)piperidin-1-yl)metyl)-4-metyl-1H-indol-2-karbonitril;
- 5-((4-(5-(3-fluorfenyl)-5H-pyrrolo[3,2-d]pyrimidin-7-yl)piperidin-1-yl)metyl)-4-metyl-1H-indol-2-karbonitril;
- 10 4-metyl-5-((4-(5-fenyl-5H-pyrrolo[3,2-d]pyrimidin-7-yl)piperidin-1-yl)metyl)-1H-indol-2-karbonitril;
- 5-((4-(5-fenyl-SH-pyrrolo[3,2-d]pyrimidin-7-yl)piperidin-1-yl)metyl)-1H-benzo[d]imidazol-2(3H)-on;
- 15 5-fluor-N-isopropyl-N-metyl-2-(1-(1-((2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-1H-pyrrolo[3,2-c]pyridin-3-yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(1-(1-(2-((1r,4r)-4-(metylsulfonamido)sykloheksyl)etyl)piperidin-4-yl)-2-okso-1,2-dihydro-3H-imidazo[4,5-c]pyridin-3-yl)benzamid;
- 20 5-fluor-N-isopropyl-N-metyl-2-(2-okso-1-(1-((2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-4-yl)-1,2-dihydro-3H-imidazo[4,5-c]pyridin-3-yl)benzamid;
- 5-((4-(3-(4-fluorfenyl)-2-okso-2,3-dihydro-1H-imidazo[4,5-c]pyridin-1-yl)piperidin-1-yl)metyl)-4-metyl-1H-indol-2-karbonitril;
- 2-(1-(1-(sykloheksylmetyl)piperidin-4-yl)-2-okso-1,2-dihydro-3H-imidazo[4,5-c]pyridin-3-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 25 2-(1-(1-((2-cyano-4-metyl-1H-indol-5-yl)metyl)piperidin-4-yl)-2-okso-1,2-dihydro-3H-imidazo[4,5-c]pyridin-3-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 5-fluor-2-(1-(1-(4-fluorbenzyl)piperidin-4-yl)-2-okso-1,2-dihydro-3H-imidazo[4,5-c]pyridin-3-yl)-N-isopropyl-N-metylbenzamid;
- 30 5-fluor-2-(3-(1-((1-(2-hidroksyetyl)-2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N,N-diisopropylbenzamid;
- 5-fluor-N,N-diisopropyl-2-(3-(1-((2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-N,N-diisopropyl-2-(3-(piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 35 (R)-2-(5-((3-(1-(4-fluor-2-(isopropyl(metyl)karbamoyl)fenyl)-1H-pyrrolo[2,3-c]pyridin-3-yl)piperidin-1-yl)metyl)-2-okso-2,3-dihydro-1H-benzo[d]imidazol-1-yl)etylacetat;
- (R)-2-(5-((3-(1-(4-fluor-2-(isopropyl(metyl)karbamoyl)fenyl)-1H-pyrrolo[2,3-c]pyridin-3-yl)piperidin-1-yl)metyl)-2-okso-2,3-dihydro-1H-benzo[d]imidazol-1-yl)etylstearat;

- 5-fluor-N,N-diisopropyl-2-(3-(1-(((1r,4r)-4-(
(metylsulfonamido)sykloheksyl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-
yl)benzamid;
- 2-(3-(1-((3-cyano-3-metyl-2-oksoindolin-6-yl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-
5 c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(2-((trans-3-
(metylsulfonamido)syklobutyl)metyl)oktahydrosyklopenta[c]pyrrol-5-yl)-1H-pyrrolo[2,3-
c]pyridin-1-yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(2-((trans-4-
10 (metylsulfonamido)sykloheksyl)metyl)oktahydrosyklopenta[c]pyrrol-5-yl)-1H-
pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(2-((1-(metylsulfonyl)piperidin-4-
yl)metyl)oktahydrosyklopenta[c]pyrrol-5-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(1-((cis-3-
15 (metylsulfonamido)syklobutyl)metyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-
yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(1-(2-(4-(metylsulfonamido)piperidin-1-
yl)etyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(1-(pyridin-2-yl)piperidin-4-yl)-1H-pyrrolo[2,3-
20 c]pyridin-1-yl)benzamid;
- 5-fluor-2-(3-(4-(3-hydroksypyrrolidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-
N-isopropyl-N-metylbenzamid;
- 5-fluor-2-(3-(trans-4-((S)-2-(hydroksymetyl)pyrrolidin-1-yl)sykloheksyl)-1H-
pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 25 5-fluor-2-(3-(cis-4-((S)-2-(hydroksymetyl)pyrrolidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-
c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 5-fluor-2-(3-(trans-4-(3-(hydroksymetyl)azetidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-
c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 5-fluor-2-(3-(cis-4-(3-(hydroksymetyl)azetidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-
30 c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 5-fluor-2-(3-(trans-4-((R)-2-(hydroksymetyl)pyrrolidin-1-yl)sykloheksyl)-1H-
pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 5-fluor-2-(3-(cis-4-((R)-2-(hydroksymetyl)pyrrolidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-
c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 35 5-fluor-2-(3-(trans-4-((R)-3-(hydroksymetyl)pyrrolidin-1-yl)sykloheksyl)-1H-
pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 5-fluor-2-(3-(cis-4-((R)-3-(hydroksymetyl)pyrrolidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-
c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;

- 5-fluor-2-(3-(trans-4-((S)-3-(hydroksymetyl)pyrrolidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 5-fluor-2-(3-(cis-4-((S)-3-(hydroksymetyl)pyrrolidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 5 5-fluor-N-isopropyl-N-metyl-2-(3-(trans-4-(piperidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(cis-4-(piperidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-2-(3-(trans-4-(4-hydroksypiperidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 10 5-fluor-2-(3-(cis-4-(4-hydroksypiperidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 2-(3-(trans-4-(4,4-difluorpiperidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 15 2-(3-(cis-4-(4,4-difluorpiperidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 5-fluor-2-(3-(trans-4-(3-hydroksypiperidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 5-fluor-2-(3-(cis-4-(3-hydroksypiperidin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 20 5-fluor-2-(3-(trans-4-(4-(2-hydroksyetyl)piperazin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 5-fluor-2-(3-(cis-4-(4-(2-hydroksyetyl)piperazin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
- 25 5-fluor-N-isopropyl-N-metyl-2-(3-(4-(3-okso-piperazin-1-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(trans-4-morfolinosykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(cis-4-morfolinosykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 30 1-(trans-4-(1-(4-fluor-2-(isopropyl(metyl) karbamoyl)fenyl)-1H-pyrrolo[2,3-c]pyridin-3-yl)sykloheksyl)piperidin-4-karboksylsyre;
- 1-(cis-4-(1-(4-fluor-2-(isopropyl(metyl) karbamoyl)fenyl)-1H-pyrrolo[2,3-c]pyridin-3-yl)sykloheksyl)piperidin-4-karboksylsyre;
- 35 5-((3-(1-(2-(3-syklopropyl-5-metyl-4H-1,2,4-triazol-4-yl)-4-fluorfenyl)-1H-pyrrolo[2,3-c]pyridin-3-yl)piperidin-1-yl)metyl)-1H-benzo[d]imidazol-2(3H)-on;
- 5-fluor-N-isopropyl-N-metyl-2-(3-(1-((2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)pyrrolidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;

- 5-fluor-2-(3-(1-((1-(2-hydroksyetyl)-2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)pyrrolidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N-isopropyl-N-metylbenzamid;
N-metyl-5-fluor-N-isopropyl-2-(3-(1-((trans-4-(metylsulfonamido)sykloheksyl)metyl)pyrrolidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5 N-etyl-5-fluor-N-isopropyl-2-(3-(1-((trans-4-(metylsulfonamido)sykloheksyl)metyl)pyrrolidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 10 5-fluor-2-(3-(1-((1-(2-hydroksyetyl)-2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)pyrrolidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N,N-diisopropylbenzamid;
5-fluor-N,N-diisopropyl-2-(3-(1-((trans-4-(metylsulfonamido)sykloheksyl)metyl)pyrrolidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 15 5-fluor-N-isopropyl-N-metyl-2-(3-(4-(metyl((4-(metylsulfonamido)sykloheksyl)metyl)amino)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 2-(3-(trans-4-benzamidosisykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 2-(3-(trans-4-(sykloheksankarboksamido)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 20 2-(3-(trans-4-benzamidosisykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 2-(3-(1-(2,3-dihydro-1H-inden-2-karbonyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;
- 25 5-fluor-N-isopropyl-N-metyl-2-(3-(1-(2-fenylacetyl)piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 5-fluor-2-(3-(1-((1-(2-hydroksyetyl)-2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-N,N-diisopropylbenzamid;
- 5-fluor-N-isopropyl-N-metyl-2-(1-(1-((2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-2-tiokso-1,2-dihydro-3H-imidazo[4,5-c]pyridin-3-yl)benzamid;
- 30 tert-butyl-((1r,4r)-4-(2-(3-(1-(2-(diisopropylkarbamoyl)-4-fluorfenyl)-1H-pyrrolo[2,3-c]pyridin-3-yl)azetidin-1-yl)etyl)sykloheksyl)karbamat;
- 5-fluor-N,N-diisopropyl-2-(3-(1-(2-((1r,4r)-4-(metylsulfonamido)sykloheksyl)etyl)azetidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;
- 35 5-fluor-N,N-diisopropyl-2-(3-(1-(((1r,4r)-4-(metylsulfonamido)sykloheksyl)metyl)azetidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;

5-fluor-N,N-diisopropyl-2-(3-(4-(2-(metylsulfonamido)-6-azaspiro[3.4]oktan-6-yl)sykloheksyl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;

5-fluor-N,N-diisopropyl-2-(3-(1-((2-okso-2,3-dihydrobenzo[d]oksazol-5-yl)metyl)pyrrolidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;

5 eller et farmasøytisk akseptabelt salt derav.

14. Forbindelse valgt fra gruppen som består av:

5-fluor-N-isopropyl-N-metyl-2-(3-(piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;

10 2-(3-((2S,6R)-2,6-dimetyl piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)-5-fluor-N-isopropyl-N-metylbenzamid;

5-fluor-N,N-diisopropyl-2-(3-(piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;

5-fluor-N-isopropyl-N-metyl-2-(3-(oktahydrosyklopenta[c]pyrrol-5-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid;

15 5-((4-(1-(4-fluorfenyl)-1H-pyrrolo[2,3-c]pyridin-3-yl)piperidin-1-yl)metyl)-4-metyl-1H-indol-2-karbonitril;

5-((4-(1-(4-klorfenyl)-1H-pyrrolo[2,3-c]pyridin-3-yl)piperidin-1-yl)metyl)-4-metyl-1H-indol-2-karbonitril;

1-(4-fluorfenyl)-3-(1-isopentylpiperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin;

20 1-(4-fluorfenyl)-3-(1-fenetyl piperidin-4-yl)-1H-pyrrolo[2,3-c]pyridin;

5-(4-fluorfenyl)-7-(1-((tetrahydro-2H-pyran-4-yl)metyl)piperidin-4-yl)-5H-pyrrolo[3,2-d]pyrimidin;

5-((4-(5-(4-fluorfenyl)-5H-pyrrolo[3,2-d]pyrimidin-7-yl)piperidin-1-yl)metyl)-4-metyl-1H-indol-2-karbonitril;

25 5-((4-(5-(4-fluorfenyl)-5H-pyrrolo[3,2-d]pyrimidin-7-yl)piperidin-1-yl)metyl)-1H-benzo[d]imidazol-2(3H)-on;

7-(1-((1H-indol-6-yl)metyl)piperidin-4-yl)-5-(4-fluorfenyl)-SH-pyrrolo[3,2-d]pyrimidin;

7-(1-((1H-indol-5-yl)metyl)piperidin-4-yl)-5-(4-fluorfenyl)-SH-pyrrolo[3,2-d]pyrimidin;

5-((4-(5-(3-fluorfenyl)-5H-pyrrolo[3,2-d]pyrimidin-7-yl)piperidin-1-yl)metyl)-4-metyl-

30 1H-indol-2-karbonitril;

metyl-5-((4-(5-fenyl-5H-pyrrolo[3,2-d]pyrimidin-7-yl)piperidin-1-yl)metyl)-1H-indol-2-karbonitril;

4-metyl-5-((4-(5-fenyl-SH-pyrrolo[3,2-d]pyrimidin-7-yl)piperidin-1-yl)metyl)-1H-indol-2-karbonitril;

35 5-((4-(3-(4-fluorfenyl)-2-okso-2,3-dihydro-1H-imidazo[4,5-c]pyridin-1-yl)piperidin-1-yl)metyl)-4-metyl-1H-indol-2-karbonitril;

eller et farmasøytisk akseptabelt salt derav.

15. Forbindelsen ifølge krav 1, som er 5-fluor-N-isopropyl-N-metyl-2-(3-(1-((2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid, eller et farmasøytisk akseptabelt salt derav.

- 5 16. Farmasøytisk akseptabelt salt av forbindelsen ifølge krav 15, som er et mono-(2R,3S,4R,5S)-2,3,4,5-tetrahydroksyheksandisyresalt, en krystallinsk form derav, hvori den krystallinske formen er karakterisert av et XRPD-mønster som har minst én, minst to, minst tre eller minst fire toppe, i form av 2-theta, valgt fra ca. 7,2°, ca. 11,4°, ca. 12,4°, ca. 14,5°, ca. 15,7°, ca. 16,2°, ca. 17,6°, ca. 18,4°, ca. 18,8°, ca. 20,9°, ca. 21,6°, ca. 21,8°, ca. 23,9°, ca. 24,6°, ca. 24,8°, ca. 29,9°, ca. 28,0°, ca. 35,0° og ca. 37,3° eller
- 10 hvori den krystallinske formen av 5-fluor-N-isopropyl-N-metyl-2-(3-(1-((2-okso-2,3-dihydro-1H-benzo[d]imidazol-5-yl)metyl)piperidin-3-yl)-1H-pyrrolo[2,3-c]pyridin-1-yl)benzamid-mono-(2R,3S,4R,5S)-2,3,4,5-tetrahydroksyheksandionsyre (mucat) salt er
- 15 karakterisert av et XRPD-mønster som har minst én, minst to, minst tre eller minst fire toppe, i form av 2-theta, valgt fra ca. 7,2°, ca. 12,4°, ca. 17,6°, ca. 18,4°, ca. 20,9°, ca. 21,6°, ca. 21,8°, ca. 23,9°, ca. 24,6°, ca. 24,8° og ca. 29,9°.

17. Farmasøytisk sammensetning omfattende

- 20 (a) en forbindelse ifølge et hvilket som helst av kravene 1 til 15, eller et farmasøytisk akseptabelt salt derav, og minst én farmasøytisk akseptabel bærer; eller
- (b) saltet eller den krystallinske formen ifølge krav 16, og minst én farmasøytisk akseptabel bærer.

- 25 18. Forbindelsen ifølge et hvilket som helst av kravene 1 til 15 eller et farmasøytisk akseptabelt salt derav, eller saltet eller den krystallinske formen ifølge krav 16, for anvendelse i en fremgangsmåte for å inhibere interaksjonen mellom menin og MLL omfattende å bringe meninet og MLL i kontakt med forbindelsen, saltet eller den krystallinske formen.

30

19. Forbindelsen ifølge et hvilket som helst av kravene 1 til 15 eller et farmasøytisk akseptabelt salt derav, eller saltet eller den krystallinske formen ifølge krav 16, for anvendelse i en fremgangsmåte for behandling av kreft hos en pasient omfattende administrering til pasienten av en terapeutisk effektiv mengde av forbindelsen, saltet eller

35 den krystallinske formen.

20. Forbindelsen, saltet eller den krystallinske formen for anvendelse ifølge krav 19, hvori kreften er:

- (a) en hematologisk kreft;
- (b) leukemi;
- (c) lymfom;
- (d) blandet avstammingsleukemi (MLL), MLL-relatert leukemi, MLL-assosiert leukemi, MLL-positiv leukemi, MLL-indusert leukemi, omorganisert blandet avstammingsleukemi (MLL-r), leukemi assosiert med en MLL-omorganisering eller en omorganisering av *MLL*-genet, akutt leukemi, kronisk leukemi, indolent leukemi, lymfoblastisk leukemi, lymfatisk leukemi, myeloid leukemi, myelogen leukemi, barneleukemi, akutt lymfatisk leukemi (ALL), akutt myeloid leukemi (AML), akutt granulocytisk leukemi, akutt granulocytisk leukemi, kronisk lymfatisk leukemi (KLL), kronisk myelogen leukemi (KML), terapirelatert leukemi, myelodysplastisk syndrom (MDS), myeloproliferativ sykdom (MPD), myeloproliferativ neoplasi (MPN), plasmacelleneoplasme, multippelt myelom, myelodysplasi, kutant T-cellelymfom, lymfoid neoplasma, AIDS-relatert lymfom, tymom, tymisk karsinom, mycosis fungoides, Alibert-Bazin syndrom, granuloma fungoides, Sézary syndrom, hårcelleleukemi, T-celleprolymfocytisk leukemi (T-PLL), stor granulær lymfatisk leukemi, meningeal leukemi, leukemisk leptomeningitt, leukemisk meningitt, multippelt myelom, Hodgkins lymfom, non-Hodgkins lymfom (malignt lymfom), eller Waldenströms makroglobulinemi; eller
- (e) abstrakt nukleofosmin (NPM1)-mutert akutt myeloid leukemi (dvs. NPM1^{mut} akutt myeloid leukemi).

21. Forbindelsen ifølge et hvilket som helst av kravene 1 til 15 eller et farmasøytisk akseptabelt salt derav, eller saltet eller den krystallinske formen ifølge krav 16, for anvendelse i:

- (a) en fremgangsmåte for behandling av insulinresistens, pre-diabetes, diabetes eller risiko for diabetes hos en pasient omfattende administrering til pasienten av en terapeutisk effektiv mengde av forbindelsen, saltet eller den krystallinske formen; eller
- (b) en fremgangsmåte for behandling av hyperglykemi hos en pasient omfattede administrering til pasienten av en terapeutisk effektiv mengde av forbindelsen, saltet eller den krystallinske formen.