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Norwegian Industrial Property Office

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(54) Title **COMPOUNDS AND COMPOSITIONS FOR TREATING HEMATOLOGICAL DISORDERS**

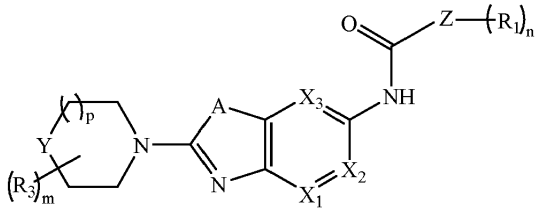
(56) References Cited:

WO-A1-2015/104688
US-A1- 2015 094 315
US-A1- 2013 035 326
WO-A1-2017/009806

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 II, eller et farmasøytisk akseptabelt salt derav, for anvendelse i behandling eller forebygging av akutt myelogen leukemi (AML), hvori AML er resistent mot behandling med en FMS-lignende tyrosinkinase 3 (FLT-3)-inhibitor;



(II)

hvori

X_1 og X_3 uavhengig er CH eller N; X_2 er CR_2 eller N; gitt at én og ikke mer enn én av X_1, X_2 eller X_3 er N;

A er O eller S;

Y er $-CH_2-$ eller O;

Z er aryl eller heterosyklyl;

Ri, ved hver forekomst, er uavhengig halogen eller eventuelt substituert heterosyklyl; hvori substituenten er alkyl, alkoksy, aminoalkyl, halogen, hydroksyl, hydroksyalkyl eller $-NR_aR_b$;

R_2 er hydrogen, eventuelt substituert sykloalkyl, eventuelt substituert aryl, eventuelt substituert heterosyklyl eller $-NR_aR_b$; hvori substituenten er alkyl, amino, halogen eller hydroksyl;

R_3, ved hver forekomst, er alkyl eller hydroksyl;

R_a og R_b er uavhengig hydrogen, alkyl, acyl eller heterosyklyl;

'm' og 'n' er uavhengig 0, 1 eller 2; og

'p' er 0 eller 1.

2. Forbindelse for anvendelse ifølge krav 1, hvori

A er O eller S;

Y er $-CH_2-$ eller O;

Z er aryl eller heterosyklyl;

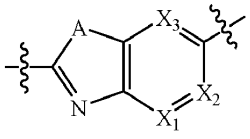
Ri, ved hver forekomst, er uavhengig halogen eller eventuelt substituert heterosyklyl; hvori substituenten er alkyl, alkoksy, aminoalkyl, halogen, hydroksyl eller -NR_aR_b; der R_a og R_b er uavhengig hydrogen, alkyl eller heterosyklyl;

R_2 er hydrogen, sykloalkyl, eventuelt substituert heterosyklyl eller -NR_aR_b, der substituenten velges fra amino, halogen eller hydroksyl;

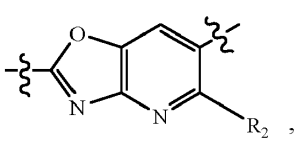
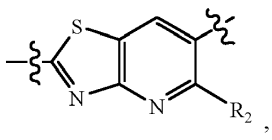
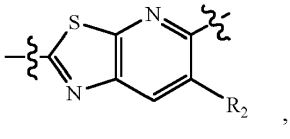
'm' og 'n' er uavhengig 0, 1 eller 2; og

'p' er 0 eller 1.

3. Forbindelse for anvendelse ifølge krav 1, hvori



er


, 
, 
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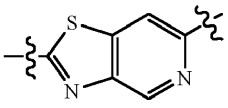
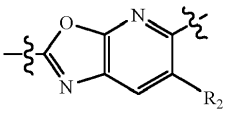
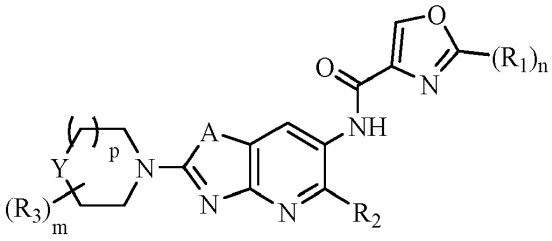

eller 

4. Forbindelse for anvendelse ifølge et hvilket som helst av kravene 1–3, hvori Z er (a) et aryl eller 5- eller 6-leddet heterosyklyl, eller (b) valgt fra fenyl, furanyl, tienyl, pyrrolyl, pyrazolyl, imidazolyl, oksazolyl, isoksazolyl, tiazolyl, isotiazolyl, 1H-tetrazolyl, oksadiazolyl, triazolyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, azetidinyl, oksetanyl, imidazolidinyl, pyrrolidinyl, oksazolidinyl, tiazolidinyl, pyrazolidinyl, tetrahydrofuranyl, piperidinyl, piperazinyl, tetrahydropyranyl, morfolinyl, tiomorfolinyl, 1,4-dioksanyl, dioksidotiomorfolinyl, oksapiperazinyl, oksapiperidinyl, tetrahydrofuryl, tetrahydropyranyl, tetrahydrotiofenyl, dihydropyranyl og azabisyklo[3.2.1]oktanyl; hver av disse substitueres eventuelt med alkyl,

alkoksy, halogen, hydroksyl, hydroksyalkyl eller
$-NR_aR_b$; og R_a og R_b er uavhengig hydrogen, alkyl eller acyl.

5. Forbindelse for anvendelse ifølge krav 1 representert av formel (IIA):



(IIA)

eller et farmasøytisk akseptabelt salt derav.

6. Forbindelse for anvendelse ifølge krav 5, hvori

A er O eller S;

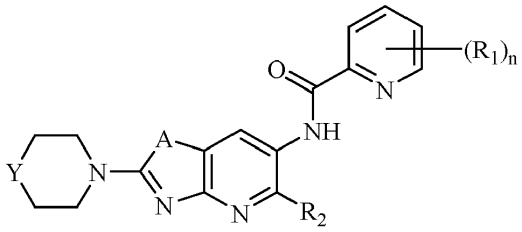
Y er $-CH_2-$ eller O;

Ri, ved hver forekomst, er uavhengig halogen eller eventuelt substituert heterosyklyl; hvori substituenten er alkyl, alkoksy, aminoalkyl, halogen, hydroksyl eller $-NR_aR_b$; der R_a og R_b er uavhengig hydrogen, alkyl eller heterosyklyl;

R_2 er hydrogen, sykloalkyl, eventuelt substituert heterosyklyl eller $-NR_aR_b$, der substituenten velges fra amino, halogen eller hydroksyl; og

'm' og 'n' er uavhengig 0, 1 eller 2.

7. Forbindelse for anvendelse ifølge krav 1, representert av (IIB):



(IIB)

eller et farmasøytisk akseptabelt salt derav.

8. Forbindelse for anvendelse ifølge krav 7, hvori

A er O eller S;

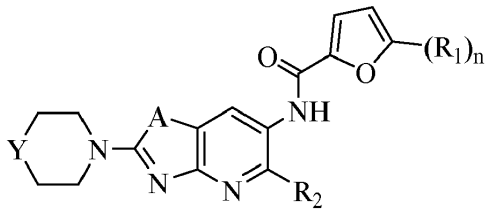
Y er $-CH_2-$ eller O;

Ri, ved hver forekomst, er uavhengig halogen eller eventuelt substituert heterosyklyl; hvori substituenten er alkyl, alkoksy, aminoalkyl, halogen, hydroksyl eller $-NR_aR_b$; der R_a og R_b er uavhengig hydrogen, alkyl eller heterosyklyl;

R_2 er hydrogen, sykloalkyl, eventuelt substituert heterosyklyl eller $-NR_aR_b$, der substituenten velges fra amino, halogen eller hydroksyl; og

'm' og 'n' er uavhengig 0, 1 eller 2.

9. Forbindelse for anvendelse ifølge krav 1, hvori forbindelsen er en forbindelse av formel (IIC)



(IIC)

eller et farmasøytisk akseptabelt salt derav.

10. Forbindelse for anvendelse ifølge et hvilket som helst av kravene 1–9, hvori R_1 er eventuelt substituert heterosyklyl; hvori substituenten er alkyl, alkoksy, aminoalkyl, halogen, hydroksyl, hydroksyalkyl eller $-NR_aR_b$; og R_a og R_b er uavhengig hydrogen eller acyl, eller

hvori R_1 er eventuelt substituert heterosyklyl; og substituenten er alkyl, alkoksy, aminoalkyl, halogen, hydroksyl eller $-NR_aR_b$; der R_a og R_b er uavhengig hydrogen, alkyl eller heterosyklyl; eller

hvori R_1 er halogen.

11. Forbindelse for anvendelse ifølge krav 10, hvori R_1 er eventuelt substituert pyrazolyl, hvori den valgfrie substituenten er alkyl, hydroksyl eller $-NR_aR_b$.

12. Forbindelsen for anvendelse ifølge et hvilket som helst av kravene 1–11, hvori R_2 er hydrogen, sykloalkyl, slik som syklopropyl; eventuelt substituert heterosyklyl, slik som piperidinyl, pyrrolidinyl, morfolinyl, piperazinyl, azetidinyl, pyrazolyl, furanyl eller azabisyklo[3.2.1]oktanyl; hvori substituenten er hydroksyl, halogen, alkyl eller amino; eller $-NR_aR_b$, der substituenten velges fra amino, halogen eller hydroksyl.

13. Forbindelse for anvendelse ifølge et hvilket som helst av kravene 1–12, hvori R_3 er alkyl.

14. Forbindelse for anvendelse ifølge et hvilket som helst av kravene 1–13, hvori m er 0 eller 2, og p er 0 eller 1.

15. Forbindelse for anvendelse ifølge krav 1, hvori forbindelsen av formel (II) velges fra:

6'-amino-N-(2-morfolinooksazolo[4,5-b]pyridin-6-yl)-[2,3'-bipyridin]-6-karboksamid;
6'-amino-N-(5-syklopropyl-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-[2,3'-bipyridin]-6-karboksamidhydroklorid;
N-(5-syklopropyl-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamidhydroklorid;
N-(2,5-di(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)-6-(1H-pyrazol-4-yl)pikolinamidhydroklorid;
N-(2,5-di(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
N-(2-morfolino-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)-6-(1H-pyrazol-4-yl)pikolinamid;

2-(2-metylpyridin-4-yl)-N-(2-morfolino-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
6-klor-N-(2-morfolino-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)pikolinamid;
N-(2,5-di(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)-6-(1-metyl-1H-pyrazol-4-yl)pikolinamid;
2-(2-klorpyridin-4-yl)-N-(2,5-di(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
(S)-2-(2-metylpyridin-4-yl)-N-(2-morfolino-5-(pyrrolidin-3-ylamino)oksazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
6'-amino-N-(2-morfolinooksazolo[5,4-b]pyridin-5-yl)-[2,3'-bipyridin]-6-karboksamid;
6'-amino-N-(2-morfolinotiazolo[4,5-c]pyridin-6-yl)-[2,3'-bipyridin]-6-karboksamid;
6'-amino-N-(2-morfolinotiazolo[5,4-b]pyridin-5-yl)-[2,3'-bipyridin]-6-karboksamid;
2-(2-metylpyridin-4-yl)-N-(2-morfolinotiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
6'-amino-N-(2-morfolinotiazolo[4,5-b]pyridin-6-yl)-[2,3'-bipyridin]-6-karboksamid;
N-(2-morfolinotiazolo[4,5-b]pyridin-6-yl)-6-(1H-pyrazol-4-yl)pikolinamid;
3-(4-(aminometyl)piperidin-1-yl)-5-fluor-N-(2-morfolinotiazolo[4,5-b]pyridin-6-yl)benzamid;
2-(4-(aminometyl)piperidin-1-yl)-5-fluor-N-(2-morfolinotiazolo[4,5-b]pyridin-6-yl)benzamid;
2-(2-metylpyridin-4-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;

N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)-6-(1H-pyrazol-4-yl)pikolinamid;
N-(2,5-di(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)-6-(1H-pyrazol-4-yl)pikolinamid;
N-(2,5-di(piperidin-1-yl)tiazolo[4, 5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
N-(2,5-dimorfolinooksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
N-(5-(4-metylpiperazin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
N-(2,5-di(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)-2-(6-metoksypyridin-3-yl)oksazol-4-karboksamid;
N-(2,5-di(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-3-yl)oksazol-4-karboksamid;
N-(2, 5-di(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)-2-(2-hydroksypyridin-3-yl)oksazol-4-karboksamid;
2-(2-hydroksypyridin-3-yl)-N-(2-morfolino-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
N-(2, 5-di(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)-2-(6-hydroksypyridin-3-yl)oksazol-4-karboksamid;
2-(2-metoksypyridin-4-yl)-N-(2-morfolino-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
2-(2-metylpyridin-3-yl)-N-(2-morfolino-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
2-(3-metylpyridin-4-yl)-N-(2-morfolino-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;

N-(2, 5-di(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)-2-(3-metylpyridin-4-yl)oksazol-4-karboksamid;
2-(6-metylpyridin-3-yl)-N-(2-morfolino-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
6-(1-metyl-1H-pyrazol-4-yl)-N-(2-morfolino-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)pikolinamid;
N-(2,5-di(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)-2-(6-metylpyridin-3-yl)oksazol-4-karboksamid;
(S)-N-(5-(3-aminopyrrolidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
(S)-N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
(R)-N-(5-(3-aminopyrrolidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
(R)-N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
(S)-2-(3-aminopyrrolidin-1-yl)-N-(2-morfolino-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
(S)-6-(3-hydroksypyrrolidin-1-yl)-N-(2-morfolino-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)pikolinamid;
(S)-6-(3-aminopyrrolidin-1-yl)-N-(2-morfolino-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)pikolinamid;
(S)-2-(3-hydroksypyrrolidin-1-yl)-N-(2-morfolino-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
(S)-N-(5-syklopropyl-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(3-hydroksypyrrolidin-1-yl)oksazol-4-karboksamid;

(S)-2-(3-aminopyrrolidin-1-yl)-N-(5-syklopropyl-2-morfolinooksazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
2-(2-metylpyridin-4-yl)-N-(5-(piperidin-1-yl)-2-(pyrrolidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamidhydroklorid;
N-(2-(2,6-dimetylmorfolino)-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamidhydroklorid;
N-(2,5-di(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)-6-(1-metyl-1H-pyrazol-4-yl)pikolinamidhydroklorid;
6-(1-metyl-1H-pyrazol-4-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)pikolinamid;
N-(2,5-di(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-3-yl)oksazol-4-karboksamidhydroklorid;
N-(2-((2S,6R)-2,6-dimetylmorfolino)-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
2-(2-metylpyridin-3-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
2-(2-hydroksypyridin-3-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
N-(2,5-di(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)-2-(2-metoksypyridin-4-yl)oksazol-4-karboksamid;
2-(6-metoksypyridin-3-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
2-(2-metoksypyridin-4-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
(S)-N-(5-(3-fluorpiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;

2-(6-metylpyridin-3-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
2-(3-metylpyridin-4-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
(S)-6-(3-aminopyrrolidin-1-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)pikolinamid;
(S)-6-(3-hydroksypyrrolidin-1-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)pikolinamid;
(S)-6-(3-aminopyrrolidin-1-yl)-N-(2,5-di(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)pikolinamid;
(S)-N-(2, 5-di(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)-6-(3-hydroksypyrrolidin-1-yl)pikolinamid;
(S)-2-(3-aminopyrrolidin-1-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
(S)-N-(5-(3-aminopyrrolidin-1-yl)-2-morfolinotiazolo[4, 5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
(S)-2-(3-aminopyrrolidin-1-yl)-N-(5-syklopropyl-2-morfolinotiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
N-(5-syklopropyl-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
(S)-2-(3-hydroksypyrrolidin-1-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
(S)-N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
(S)-N-(5-syklopropyl-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-6-(3-hydroksypyrrolidin-1-yl)pikolinamid;

(S)-N-(5-syklopropyl-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(3-hydroksypyrrolidin-1-yl)oksazol-4-karboksamid;
(S)-N-(5-syklopropyl-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-6-(1-(2-hydroksypropyl)-1H-pyrazol-4-yl)pikolinamid;
(S)-N-(5-syklopropyl-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(1-(2-hydroksypropyl)-1H-pyrazol-4-yl)oksazol-4-karboksamid;
N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(6-metoksypyridin-3-yl)oksazol-4-karboksamid;
(S)-N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(6-metoksypyridin-3-yl)oksazol-4-karboksamid;
(R)-N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(6-metoksypyridin-3-yl)oksazol-4-karboksamid;
(S)-N-(5-(azetidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-6-(3-hydroksypyrrolidin-1-yl)pikolinamid;
N-(5-(3-hydroksyazetidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
(S)-N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-5-(2-metylpyridin-4-yl)tiofen-2-karboksamid;
(S)-N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-5-(2-metylpyridin-4-yl)furan-2-karboksamid;
(S)-N-(5-(3-hydroksypiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
N-(5-(4-hydroksypiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid
(R)-N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;

N-(5-(4-hydroksypiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-5-(2-metylpyridin-4-yl)furan-2-karboksamid;
N-(5-(azetidin-1-yl)-2-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
2-(2-metylpyridin-4-yl)-N-(2-(piperidin-1-yl)-5-(pyrrolidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
2-(2-metylpyridin-4-yl)-N-(2-morfolino-5-(pyrrolidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
5-(2-metylpyridin-4-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)furan-2-karboksamid;
N-(5-(azepan-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
2-(2-aminopyridin-4-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamidhydroklorid;
N-(5-(azetidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
(R)-N-(5-(3-hydroksypiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
(R)-N-(5-(3-hydroksypiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-5-(2-metylpyridin-4-yl)furan-2-karboksamid;
(S)-6-(1-(2-hydroksypropyl)-1H-pyrazol-4-yl)-N-(2-morfolino-5-(piperidin-1-yl)tiazolo[4, 5-b]pyridin-6-yl)pikolinamid
N-(5-(4-fluorpiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-5-(2-metylpyridin-4-yl)furan-2-karboksamid
N-(5-(4-fluorpiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamidhydroklorid

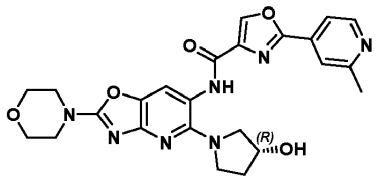
N-(5-(1-metyl-1H-pyrazol-4-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
N-(5-(3-fluorfenyl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
N-(5-(4-hydroksypiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-5-(2-metylpyridin-4-yl)furan-2-karboksamid;
N-(5-(3-fluorpiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-5-(2-metylpyridin-4-yl)furan-2-karboksamid;
(S)-N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(6-metoksypyridin-3-yl)oksazol-4-karboksamid;
N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
(R)-N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(6-metoksypyridin-3-yl)oksazol-4-karboksamid;
N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(6-metoksypyridin-3-yl)oksazol-4-karboksamid;
(S)-N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-5-(2-metylpyridin-4-yl)furan-2-karboksamid;
(S)-N-(5-(3-hydroksypyrrolidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-5-(2-metylpyridin-4-yl)tiofen-2-karboksamid;
N-(5-(azetidin-1-yl)-2-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
2-(2-metylpyridin-4-yl)-N-(2-(piperidin-1-yl)-5-(pyrrolidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
5-(2-metylpyridin-4-yl)-N-(2-morfolino-5-(piperidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)furan-2-karboksamid;

N-(5-(azetidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
2-(2-metylpyridin-4-yl)-N-(2-morfolino-5-(pyrrolidin-1-yl)oksazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
N-(5-(4-hydroksypiperidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-5-(2-metylpyridin-4-yl)furan-2-karboksamid;
(R)-N-(5-(3-hydroksypiperidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-5-(2-metylpyridin-4-yl)furan-2-karboksamid;
N-(5-(furan-3-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
N-(5-(3-fluorpiperidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
N-(5-(4-hydroksypiperidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
N-(5-(4-fluorpiperidin-1-yl)-2-morfolinooksazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
(S)-N-(5-(3-aminopiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
2-(2-metylpyridin-4-yl)-N-(2-morfolino-5-(1H-pyrazol-4-yl)tiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
N-(5-(6-fluorpyridin-3-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
N-(5-(3-hydroksy-8-azabisyklo[3.2.1]oktan-8-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
N-(2-(3-hydroksypiperidin-1-yl)-5-(piperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;

2-(2-acetamidopyridin-4-yl)-N-(5-(4-hydroksypiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
N-(2-(3-hydroksypiperidin-1-yl)-5-(4-hydroksypiperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
2-(2-acetamidopyridin-4-yl)-N-(5-(3-hydroksypiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamid;
2-(2-aminopyridin-4-yl)-N-(5-(3-hydroksypiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamidhydroklorid;
5-(2-aminopyridin-4-yl)-N-(5-(4-hydroksypiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)furan-3-karboksamidhydroklorid;
2-(2-aminopyridin-4-yl)-N-(5-(4-hydroksypiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamidhydroklorid;
2-(2-aminopyridin-4-yl)-N-(5-(4-fluorpiperidin-1-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)oksazol-4-karboksamidhydroklorid;
N-(5-(2-fluorpyridin-4-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
N-(5-(4-fluorpiperidin-1-yl)-2-(3-hydroksypiperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamid;
N-(5-(4-aminopiperidin-1-yl)-2-(3-hydroksypiperidin-1-yl)tiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamidhydroklorid; og
N-(5-(2-hydroksypyridin-4-yl)-2-morfolinotiazolo[4,5-b]pyridin-6-yl)-2-(2-metylpyridin-4-yl)oksazol-4-karboksamidhydroklorid;

eller et farmasøytisk akseptabelt salt derav.

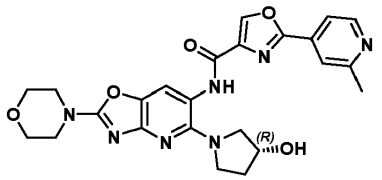
16. Forbindelse for anvendelse ifølge krav 1, hvori forbindelsen er



,

eller et farmasøytisk akseptabelt salt derav.

17. Forbindelse for anvendelse ifølge krav 1, hvori forbindelsen er



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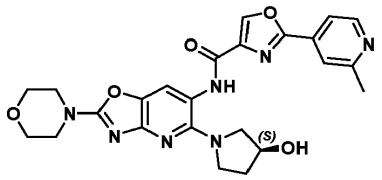
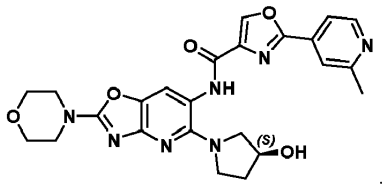
18. Forbindelse for anvendelse ifølge krav 1, hvori forbindelsen er



,

eller et farmasøytisk akseptabelt salt derav.

19. Forbindelse for anvendelse ifølge krav 1, hvori forbindelsen er



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20. Forbindelse for anvendelse ifølge et hvilket som helst av de foregående kravene, hvori AML er **karakterisert av** en mutasjon i et FLT3-gen.

21. Forbindelsen for anvendelse ifølge krav 20, hvori mutasjonen er en intern tandem duplisering (ITD).

22. Forbindelsen for anvendelse ifølge krav 20, hvori mutasjonen er en D835H-, D835V-, D835Y-, K663Q-, N841L- eller F691L-mutasjon.

23. Forbindelsen for anvendelse ifølge krav 20, hvori mutasjonen er en D835Y-mutasjon.