(12) **Translation of European patent specification**

(11) **NO/EP 3353168 B1**

NORWAY

(19) NO

(51) Int Cl.

C07D 403/14 (2006.01)
A61K 31/506 (2006.01)
A61P 35/00 (2006.01)

Norwegian Industrial Property Office

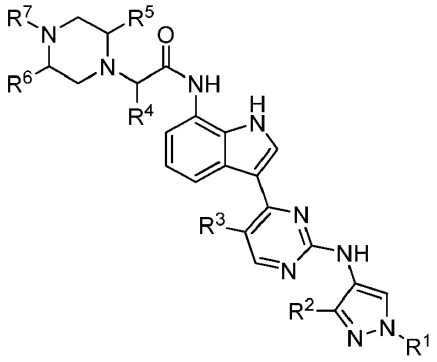
(45)	Translation Published	2023.10.16
(80)	Date of The European Patent Office Publication of the Granted Patent	2023.08.30
(86)	European Application Nr.	16770031.9
(86)	European Filing Date	2016.09.22
(87)	The European Application's Publication Date	2018.08.01
(30)	Priority	2015.09.25, US, 201562232629 P
(84)	Designated Contracting States:	AL ; AT ; BE ; BG ; CH ; CY ; CZ ; DE ; DK ; EE ; ES ; FI ; FR ; GB ; GR ; HR ; HU ; IE ; IS ; IT ; LI ; LT ; LU ; LV ; MC ; MK ; MT ; NL ; NO ; PL ; PT ; RO ; RS ; SE ; SI ; SK ; SM ; TR
(73)	Proprietor	Dizal (Jiangsu) Pharmaceutical Co., Limited, No. 199 Liangjing Road Zhangjiang Hi-Tech Park, Shanghai 201203, Kina
(72)	Inventor	ÅSTRAND, Annika, Birgitta, Margareta, AstraZeneca Sweden, SE-431 83 Mölndal, Sverige GRIMSTER, Neil, Patrick, AstraZeneca 35 Gatehouse Drive, Waltham, MA 02451, USA KAWATKAR, Sameer, AstraZeneca 35 Gatehouse Drive, Waltham, MA 02451, USA KETTLE, Jason, Grant, AstraZeneca Alderley Park, Macclesfield Cheshire SK10 4TG, Storbritannia NILSSON, Magnus, K., AstraZeneca, SE-431 83 Mölndal, Sverige RUSTON, Linette, Lys, AstraZeneca Charter Way, Macclesfield Cheshire SK10 2NA, Storbritannia SU, Qibin, AstraZeneca 35 Gatehouse Drive, Waltham, MA 02451, USA VASBINDER, Melissa, Marie, c/o AstraZeneca Intellectual Property AstraZeneca 35 Gatehouse Drive, Waltham MA 02451, USA WINTER-HOLT, Jon, James, AstraZeneca Darwin Building Cambridge Science Park Milton Road, Cambridge CB4 0WG, Storbritannia WU, Dedong, AstraZeneca 35 Gatehouse Drive, Waltham, MA 02451, USA YANG, Wenzhan, AstraZeneca 35 Gatehouse Drive, Waltham MA 02451, USA GRECU, Tudor, AstraZeneca Charter Way, Macclesfield Cheshire SK10 2NA, Storbritannia MCCABE, James, AstraZeneca Charter Way, Macclesfield Cheshire SK10 2NA, Storbritannia WOESSNER, Richard, Donald, AstraZeneca 35 Gatehouse Drive, Waltham, MA 02451, USA CHUAQUI, Claudio, Edmundo, c/o AstraZeneca Intellectual Property AstraZeneca 35 Gatehouse Drive, Waltham, MA 02451, USA
(74)	Agent or Attorney	BRYN AARFLOT AS, Stortingsgata 8, 0161 OSLO, Norge

(54) Title **COMPOUNDS AND METHODS FOR INHIBITING JAK**

(56) References Cited:
WO-A1-2012/116247
WO-A1-2012/030910

Patentkrav

1. Forbindelse med formel (I):

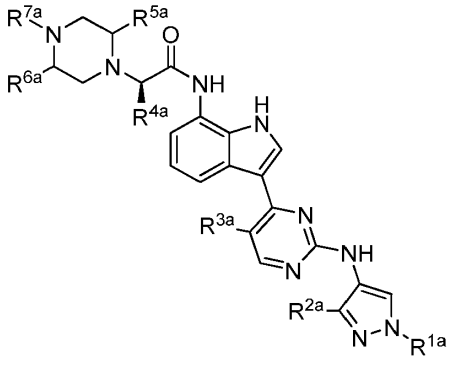


(I)

hvori

R^1 er metyl eller etyl;
R^2 er valgt fra metyl, etyl, metoksy og etoksy;
R^3 er valgt fra hydrogen, klor, fluor, brom og metyl;
R^4 er valgt fra metyl, etyl og $-CH_2OCH_3$;
R^5 og R^6 er hver individuelt metyl eller hydrogen; og
R^7 er valgt fra metyl, etyl, $-(CH_2)_2OH$ og $-(CH_2)_2OCH_3$, eller et farmasøytisk akseptabelt salt derav.

2. Forbindelse ifølge krav 1, med strukturen med formel (Ia):

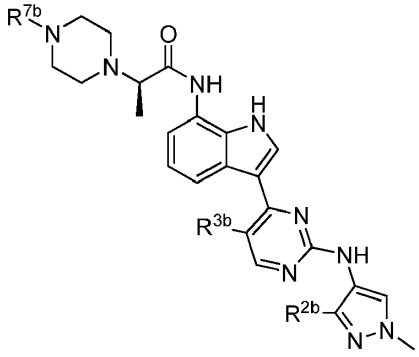


(Ia)

hvori

R^{1a} er metyl eller etyl;
R^{2a} er valgt fra metyl, etyl, metoksy og etoksy;
R^{3a} er valgt fra hydrogen, klor, fluor, brom og metyl;
R^{4a} er valgt fra metyl, etyl og $-CH_2OCH_3$;
R^{5a} og R^{6a} er hver individuelt metyl eller hydrogen; og
R^{7a} er valgt fra metyl, etyl, $-(CH_2)_2OH$ og $-(CH_2)_2OCH_3$, eller et farmasøytisk akseptabelt salt derav.

3. Forbindelse ifølge krav 1 som har strukturen med formel (Ib):



(Ib)

hvori

R^{2b} er valgt fra metyl, etyl, metoksy og etoksy;
R^{3b} er valgt fra hydrogen, klor, fluor, brom og metyl; og
R^{7b} er valgt fra metyl, etyl, $-(CH_2)_2OH$ og $-(CH_2)_2OCH_3$, eller et farmasøytisk akseptabelt salt derav.

4. Forbindelse ifølge hvilket som helst av kravene 1-3 valgt fra:

(2*R*)-2-[(2*S*)-2,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(3*R*)-3,4-dimetylpiperazin-1-yl]-*N*-(3-{5-fluor-2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-*N*-(3-{5-fluor-2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)-2-[4-(2-metoksyetyl)piperazin-1-yl]propanamid;
(2*R*)-2-(4-etylpiperazin-1-yl)-*N*-(3-{5-fluor-2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(3*S*)-3,4-dimetylpiperazin-1-yl]-*N*-(3-{5-fluor-2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(2*R*)-2,4-dimetylpiperazin-1-yl]-*N*-(3-{5-fluor-2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(2*S*)-2,4-dimetylpiperazin-1-yl]-*N*-(3-{5-fluor-2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*S*)-2-[(2*S*)-2,4-dimetylpiperazin-1-yl]-*N*-(3-{5-fluor-2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-fluorpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-etylpiperazin-1-yl)propanamid;
(2*R*)-2-[(2*S*)-2,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-fluorpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*S*)-2-[(2*S*)-2,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-fluorpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(3*S*)-3,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-fluorpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*S*)-2-[(3*S*)-3,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-fluorpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(2*R*)-2,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-fluorpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(3*R*)-3,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-fluorpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(3*S*)-3,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[4-(2-hydroksyetyl)piperazin-1-yl]-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;

(2*R*)-2-(4-etylpiperazin-1-yl)-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[4-(2-metoksyetyl)piperazin-1-yl]-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(3*R*)-3,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(2*S*)-2,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-etylpiperazin-1-yl)propanamid;
(2*R*)-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-[4-(2-metoksyetyl)piperazin-1-yl]propanamid;
(2*R*)-2-[(2*S*)-2,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(2*R*)-2,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(3*R*)-3,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-*N*-(3-{5-fluor-2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-2-[(3*S*)-3,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[4-(2-metoksyetyl)piperazin-1-yl]-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-(4-etylpiperazin-1-yl)-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(2*R*)-2,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(*R*)-3,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-2-[(3*S*)-3,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*S*)-2-[(3*S*)-3,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*S*)-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-*N*-(3-{5-klor-2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-*N*-(3-{5-brom-2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-2-[(2*R*)-2,4-dimetylpiperazin-1-yl]-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)propanamid;
(2*R*)-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-fluorpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-*N*-(3-{5-klor-2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-*N*-(3-{2-[(1,3-dimetyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1 *H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*S*)-*N*-(3-{2-[(1,3-dimetyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;

(2*S*)-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)butanamid;
(2*R*)-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)butanamid;
(2*R*)-3-metoksy-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*S*)-3-metoksy-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)butanamid;
(2*S*)-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)butanamid;
(2*R*)-*N*-(3-{2-[(1,3-dimetyl-1*H*-pyrazol-4-yl)amino]-5-fluorpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)butanamid;
(2*S*)-*N*-(3-{2-[(1,3-dimetyl-1*H*-pyrazol-4-yl)amino]-5-fluorpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)butanamid;
(2*R*)-*N*-(3-{5-fluor-2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)butanamid;
(2*S*)-*N*-(3-{5-fluor-2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)butanamid;
(2*R*)-*N*-(3-{2-[(1,3-dimetyl-1*H*-pyrazol-4-yl)amino]-5-fluorpyrimidin-4-yl}-1*H*-indol-7-yl)-3-metoksy-2-(4-metylpiperazin-1-yl)propanamid;
(2*S*)-*N*-(3-{2-[(1,3-dimetyl-1*H*-pyrazol-4-yl)amino]-5-fluorpyrimidin-4-yl}-1*H*-indol-7-yl)-3-metoksy-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-*N*-(3-{2-[(3-etyl-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-*N*-(3-{2-[(1,3-dimetyl-1*H*-pyrazol-4-yl)amino]-5-fluorpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-*N*-(3-{2-[(1,3-dimetyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-*N*-(3-{2-[(1-etyl-3-metoksy-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-*N*-(3-{2-[(3-etoksy-1-etyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-3-metoksy-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*S*)-3-metoksy-*N*-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid;
(2*R*)-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)butanamid;
(2*S*)-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)butanamid;
(2*R*)-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-3-metoksy-2-(4-metylpiperazin-1-yl)propanamid; og
(2*S*)-*N*-(3-{2-[(3-etoksy-1-metyl-1*H*-pyrazol-4-yl)amino]-5-metylpyrimidin-4-yl}-1*H*-indol-7-yl)-3-metoksy-2-(4-metylpiperazin-1-yl)propanamid; eller et farmasøytisk akseptabelt salt derav.

5. Forbindelse ifølge krav 4 som er (2*R*)-N-(3-{2-[(3-metoksy-1-metyl-1H-pyrazol-4-yl)amino]pyrimidin-4-yl}-1H-indol-7-yl)-2-(4) -metylpiperazin-1-yl)propanamid, eller et farmasøytisk akseptabelt salt derav.

6. Forbindelse ifølge krav 5.

7. Farmasøytisk akseptabelt salt av forbindelsen ifølge krav 5.

8. En fast form av (2*R*)-N-(3-{2-[(3-metoksy-1-metyl-1H-pyrazol-4-yl)amino]pyrimidin-4-yl}-1H-indol-7-yl)-2-(4-metylpiperazin-1-yl)propenamid ifølge krav 1, eller et farmasøytisk akseptabelt salt derav.

9. Forbindelse ifølge krav 1, som er en amorf form av (2*R*)-N-(3-{2-[(3-metoksy-1-metyl-1*H*-pyrazol-4-yl)amino]pyrimidin-4-yl}-1*H*-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid, eller et farmasøytisk akseptabelt salt derav.

10. Forbindelse ifølge krav 1, som er en oppløst form av forbindelse av (2R)-N-(3-{2-[(3-metoksy-1-metyl-1H-pyrazol-4-yl)amino]pyrimidin-4- yl}-1H-indol-7-yl)-2-(4-metylpiperazin-1-yl)propanamid, eller et farmasøytisk akseptabelt salt derav.

11. Forbindelse ifølge krav 10, hvori den oppløste formen er en hemi-toluen oppløst form eller en hemi-EtOAc oppløst form.

12. Forbindelse ifølge krav 11, som har en krystallinsk struktur.

13. Forbindelse ifølge krav 12, som har et røntgenpulverdiffraksjons (XRPD) mønster som omfatter minst én, to eller tre spesifikke topper uttrykt som 2θ (±0,2°) valgt fra toppene oppført i tabellen nedenfor:

Vinkel (2θ±0,2°)	**Vinkel (2θ±0,2°)**	**Vinkel (2θ±0,2°)**	**Vinkel (2θ±0,2°)**
18.6	21.8	20.6	26.3
24.1	6.4	26.6	10.9
25.8	16.6	9.5	12.1
28.9	8.9	16.0	14.8
32.1	22.5	14.0	28.4
33.0	8.1	28.9	30.0
36.5	19.1	13.4	15.2.
38.9	19.9	25.4	

14. Forbindelse ifølge krav 12, som har et røntgenpulverdiffraksjons (XRPD) mønster som omfatter minst én, to eller tre spesifikke topper uttrykt som 2θ (±0,2°) valgt fra toppene oppført i tabellen nedenfor:

Vinkel (2θ±0,2°)	**Vinkel (2θ±0,2°)**	**Vinkel (2θ±0,2°)**	**Vinkel (2θ±0,2°)**
16.3	21.6	13.9	31.8
23.9	6.3	26.4	25.5
24.4	8.8	28.6	28.1
25.1	19.0	16.7	14.6
28.1	8.0	15.9	29.8
29.3	9.5	10.8	29.3
31.8	22.4	11.9	15.0.
32.7	20.4	13.4	

Vinkel (2θ±0,2°)	**Vinkel (2θ±0,2°)**	**Vinkel (2θ±0,2°)**	**Vinkel (2θ±0,2°)**
37.5	19.7	23.9	

15. Farmasøytisk sammensetning omfattende en forbindelse ifølge hvilket som helst av kravene 1-14, og et farmasøytisk akseptabelt fortynningsmiddel, hjelpestoff eller bærer.

16. Forbindelse ifølge hvilket som helst av kravene 1-14, eller et farmasøytisk akseptabelt salt derav for bruk i en fremgangsmåte for behandling av en JAK-relatert lidelse hos et individ omfattende administrering til individet av en effektiv mengde av en forbindelse som angitt i hvilket som helst av kravene 1-14, eller et farmasøytisk akseptabelt salt derav.

17. Forbindelse ifølge hvilket som helst av kravene 1-14, eller et farmasøytisk akseptabelt salt derav, for bruk ved behandling av en JAK-relatert lidelse.

18. Farmasøytisk sammensetning omfattende en forbindelse ifølge hvilket som helst av kravene 1-14, eller et farmasøytisk akseptabelt salt derav, for bruk ved behandling av en JAK-relatert lidelse.

19. Anvendelse av en forbindelse ifølge hvilket som helst av kravene 1-14, eller et farmasøytisk akseptabelt salt derav, ved fremstilling av et medikament for behandling av en JAK-relatert lidelse.