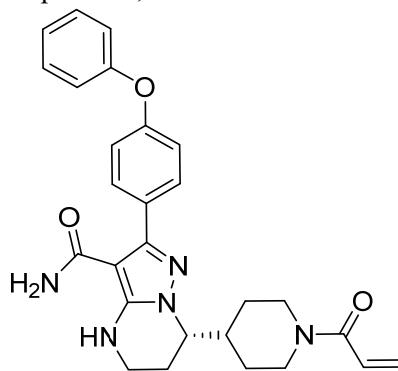


Claims

1. A composition comprising:

(i) a solid amorphous form of Compound 1,



Compound 1,

wherein the solid amorphous form has:

(a) a mid-point temperature of a glass transition temperature of about 79.7 °C; and

(b) an enantiomeric excess value of at least 97%; and

(ii) a crystalline form of Compound 1, wherein the crystalline form exhibits an X-ray powder diffraction pattern comprising diffraction peaks having 2θ angle values at $14.8 \pm 0.2^\circ$, $16.4 \pm 0.2^\circ$ and $21.4 \pm 0.2^\circ$.

2. The composition of claim 1, wherein the crystalline form has a melting point onset temperature of $139 \pm 2^\circ\text{C}$.

3. The composition of claim 1, wherein the crystalline form has an enantiomeric excess value of at least 45%.

4. The composition of claim 1, wherein the crystalline form has a purity of at least 99.3%.

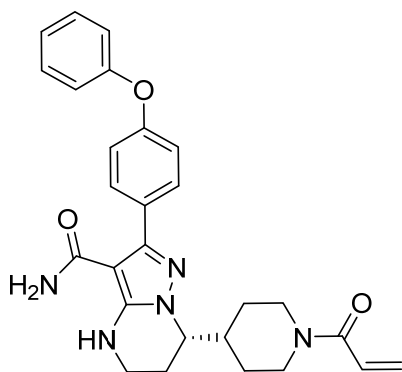
5. The composition of claim 1, wherein the crystalline form has a purity of at least 99.5%.

6. The composition of claim 1, wherein the crystalline form exhibits an X-ray powder diffraction pattern comprising diffraction peaks having 2θ angle values at $14.8 \pm 0.2^\circ$, $15.6 \pm 0.2^\circ$, $16.4 \pm 0.2^\circ$, and $21.4 \pm 0.2^\circ$.

7. The composition of claim 1, wherein the crystalline form of Compound 1 is present in about 95% by weight of the composition.

8. The composition of claim 1, wherein the crystalline form of Compound 1 is present in about 99% by weight of the composition.

9. A use of Compound 1 in the manufacture of a medicament for use in a method for treating a B-cell proliferative disease in a subject, comprising administering to the subject in need thereof Compound 1,



Compound 1,

wherein the B-cell proliferative disease is selected from a group consisting of chronic lymphocytic leukemia, small lymphocytic lymphoma, mantle cell lymphoma, Waldenström's macroglobulinemia, marginal zone lymphoma, and follicular lymphoma; and

Compound 1 is to be administrated at a dose of 160 mg twice a day (BID).

10. The use of claim 9, wherein Compound 1 has a purity of at least 99.3%.

11. The use of claim 9, wherein Compound 1 has a purity of at least 99.5%.

12. The use of claim 11, wherein the B-cell proliferative disease is mantle cell lymphoma.

13. The use of claim 12, wherein the subject has received at least one prior therapy.

14. The use of claim 11, wherein the B-cell proliferative disease is Waldenström's macroglobulinemia.

15. The use of claim 11, wherein the B-cell proliferative disease is marginal zone lymphoma.

16. The use of claim 15, wherein the subject has received at least one prior therapy.

17. The use of claim 16, wherein the marginal zone lymphoma is relapsed or refractory marginal zone lymphoma.

18. The use of claim 11, wherein the B-cell proliferative disease is chronic lymphocytic leukemia.

19. The use of claim 11, wherein the B-cell proliferative disease is small lymphocytic lymphoma.

20. The use of claim 11, wherein the B-cell proliferative disease is follicular lymphoma.

21. The use of claim 11, wherein an amorphous form or a crystalline form of Compound 1 is administered.

22. The use of claim 21, wherein a crystalline form of Compound 1 is administered.
23. The use of claim 22, wherein the crystalline form exhibits an X-ray powder diffraction pattern comprising diffraction peaks having 2θ angle values at $14.8 \pm 0.2^\circ$, $16.4 \pm 0.2^\circ$ and $21.4 \pm 0.2^\circ$.
24. The use of claim 23, wherein the crystalline form exhibits an X-ray powder diffraction pattern comprising diffraction peaks having 2θ angle values at $14.8 \pm 0.2^\circ$, $15.6 \pm 0.2^\circ$, $16.4 \pm 0.2^\circ$ and $21.4 \pm 0.2^\circ$.
25. The use of claim 24, wherein the B-cell proliferative disease is mantle cell lymphoma, wherein the subject has received at least one prior therapy.
26. The use of claim 24, wherein the B-cell proliferative disease is Waldenström's macroglobulinemia.
27. The use of claim 24, wherein the B-cell proliferative disease is relapsed or refractory marginal zone lymphoma, wherein the subject has received at least one prior therapy.
28. The use of claim 24, wherein the B-cell proliferative disease is chronic lymphocytic leukemia, or small lymphocytic lymphoma.
29. The use of claim 21, wherein an amorphous form of Compound 1 is administered.
30. The use of claim 29, wherein the amorphous form of Compound 1 has a mid-point temperature of a glass transition temperature at 79.7°C .
31. The use of claim 30, wherein the amorphous form has an enantiomeric excess value of at least 97%.
32. The use of claim 31, wherein the B-cell proliferative disease is mantle cell lymphoma, wherein the subject has received at least one prior therapy.
33. The use of claim 31, wherein the B-cell proliferative disease is Waldenström's macroglobulinemia.
34. The use of claim 31, wherein the B-cell proliferative disease is relapsed or refractory marginal zone lymphoma, wherein the subject has received at least one prior therapy.
35. The use of claim 31, wherein the B-cell proliferative disease is chronic lymphocytic leukemia, or small lymphocytic lymphoma.
36. The use of claim 11, wherein Compound 1 is administered orally.