**What is Claimed:**

1. A crystalline form of bendamustine free base said bendamustine free base selected from the group consisting of

bendamustine free base Form 1 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 10.34, 22.30, 24.03, 28.43, and 29.50 ± 0.2 degrees 2θ,

bendamustine free base Form 2 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 10.28, 20.59, 21.55, 21.69, and 24.78 ± 0.2 degrees 2θ ,

bendamustine free base Form 3 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.41, 9.46, 14.15, 23.42, and 23.65 ± 0.2 degrees 2θ,

bendamustine free base Form 4 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.88, 15.13, 19.92, 22.99, 24.72, and 24.98 ± 0.2 degrees 2θ,

bendamustine free base Form 5 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 8.94, 13.39, 16.04, 21.31, and 22.38 ± 0.2 degrees 2θ,

bendamustine free base Form 6 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 8.67, 18.15, 20.94, 22.55, and 25.46 ± 0.2 degrees 2θ,

bendamustine free base Form 7 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 8.51, 17.97, 21.25, 28.09, and 36.31 ± 0.2 degrees 2θ,

bendamustine free base Form 8 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.34, 10.45, 11.17, 15.32, 22.48, 24.98, and 26.40 ± 0.2 degrees 2θ,

bendamustine free base Form 9 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 4.44, 13.34, 16.73, 19.54, and 22.32 ± 0.2 degrees 2θ,

bendamustine free base Form 10 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 16.82, 16.93, 17.06,

19.68, 19.83, 22.87, 24.24, 28.63, and 29.72 ± 0.2 degrees 2θ,

bendamustine free base Form 11 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 8.90, 9.28, 13.94, 22.36, and 23.33 ± 0.2 degrees 2θ,

bendamustine free base Form 12 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.31, 9.35, 13.97, 14.03, and 23.38 ± 0.2 degrees 2θ,

bendamustine free base Form 13 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.84, 14.76, 19.67, and 24.62 ± 0.2 degrees 2θ,

bendamustine free base Form 14 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.14, 17.72, 19.19, 21.13, 22.10, 23.12, and 23.61 ± 0.2 degrees 2θ,

bendamustine free base Form 15 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 24.56, 19.92, 10.26, 8.10, and 4.09 ± 0.2 degrees 2θ, or a mixture thereof.

2. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 1 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 10.34, 22.30, 24.03, 28.43, and 29.50 ± 0.2 degrees 2θ.

3. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 2 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 10.28, 20.59, 21.55, 21.69, and 24.78 ± 0.2 degrees 2θ.

4. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 3 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.41, 9.46, 14.15, 23.42, and 23.65 ± 0.2 degrees 2θ.

5. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 4 that produces an X-ray powder diffraction pattern

comprising one or more of the following reflections: 9.88, 15.13, 19.92, 22.99, 24.72, and 24.98 ± 0.2 degrees 2θ.

6. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 5 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 8.94, 13.39, 16.04, 21.31, and 22.38 ± 0.2 degrees 2θ.

7. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 6 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 8.67, 18.15, 20.94, 22.55, and 25.46 ± 0.2 degrees 2θ.

8. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 7 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 8.51, 17.97, 21.25, 28.09, and 36.31 ± 0.2 degrees 2θ.

9. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 8 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.34, 10.45, 11.17, 15.32, 22.48, 24.98, and 26.40 ± 0.2 degrees 2θ.

10. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 9 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 4.44, 13.34, 16.73, 19.54, and 22.32 ± 0.2 degrees 2θ.

11. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 10 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 16.82, 16.93, 17.06, 19.68, 19.83, 22.87, 24.24, 28.63, and 29.72 ± 0.2 degrees 2θ.

12. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 11 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 8.90, 9.28, 13.94, 22.36, and 23.33 ± 0.2 degrees 2θ.

13. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 12 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.31, 9.35, 13.97, 14.03, and 23.38 ± 0.2 degrees 2θ.

14. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 13 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.84, 14.76, 19.67, and 24.62 ± 0.2 degrees 2θ.

15. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 14 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.14, 17.72, 19.19, 21.13, 22.10, 23.12, and 23.61 ± 0.2 degrees 2θ.

16. The crystalline form of claim 1, wherein the bendamustine free base is bendamustine free base Form 15 that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 24.56, 19.92, 10.26, 8.10, and 4.09 ± 0.2 degrees 2θ.

17. The crystalline form of any of claims 1 to 16, further comprising amorphous bendamustine free base.

18. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to any one of the preceding claims.

19. A preparation prepared from a composition according to claim 18, for use in a method of treating chronic lymphocytic leukemia, Hodgkin's disease, non-Hodgkin's lymphoma, multiple myeloma or breast cancer.

**What is Claimed is:**

1. A pharmaceutical composition comprising bendamustine free base selected from the group consisting of bendamustine free base Form 1, bendamustine free base Form 2, bendamustine free base Form 3, bendamustine free base Form 4, bendamustine free base Form 5, bendamustine free base Form 6, bendamustine free base Form 7, bendamustine free base Form 8, bendamustine free base Form 9, bendamustine free base Form 10, bendamustine free base Form 11, bendamustine free base Form 12, bendamustine free base Form 13, bendamustine free base Form 14, bendamustine free base Form 15, or a mixture thereof.

2. A crystalline form of bendamustine free base said bendamustine free base selected from the group consisting of bendamustine free base Form 1, bendamustine free base Form 2, bendamustine free base Form 3, bendamustine free base Form 4, bendamustine free base Form 5, bendamustine free base Form 6, bendamustine free base Form 7, bendamustine free base Form 8, bendamustine free base Form 9, bendamustine free base Form 10, bendamustine free base Form 11, bendamustine free base Form 12, bendamustine free base Form 13, bendamustine free base Form 14, bendamustine free base Form 15, or a mixture thereof.

3. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 10.34, 22.30, 24.03, 28.43, and 29.50 ± 0.2 degrees 2θ.

4. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 3.

5. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 10.28, 20.59, 21.55, 21.69, and 24.78 ± 0.2 degrees 2θ.

6. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 5.

7. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.41, 9.46, 14.15, 23.42, and 23.65 ± 0.2 degrees 2θ.



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8. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 7.

9. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.88, 15.13, 19.92, 22.99, 24.72, and 24.98 ± 0.2 degrees 2θ.

10. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 9.

11. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 8.94, 13.39, 16.04, 21.31, and 22.38 ± 0.2 degrees 2θ.

12. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 11.

13. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 8.67, 18.15, 20.94, 22.55, and 25.46 ± 0.2 degrees 2θ.

14. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 13.

15. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 8.51, 17.97, 21.25, 28.09, and 36.31 ± 0.2 degrees 2θ.

16. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 15.

17. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.34, 10.45, 11.17, 15.32, 22.48, 24.98, and 26.40 ± 0.2 degrees 2θ.



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18. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 17.

19. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 4.44, 13.34, 16.73, 19.54, and 22.32 ± 0.2 degrees 2θ.

20. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 19.

21. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 16.82, 16.93, 17.06, 19.68, 19.83, 22.87, 24.24, 28.63, and 29.72 ± 0.2 degrees 2θ.

22. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 21.

23. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 8.90, 9.28, 13.94, 22.36, and 23.33 ± 0.2 degrees 2θ.

24. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 23.

25. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.31, 9.35, 13.97, 14.03, and 23.38 ± 0.2 degrees 2θ.

26. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 25.

27. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.84, 14.76, 19.67, and 24.62 ± 0.2 degrees 2θ.



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28. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 27.

29. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 9.14, 17.72, 19.19, 21.13, 22.10, 23.12, and 23.61 ± 0.2 degrees 2θ.

30. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 29.

31. A crystalline form of bendamustine free base, according to claim 2, that produces an X-ray powder diffraction pattern comprising one or more of the following reflections: 24.56, 19.92, 10.26, 8.10, and 4.09 ± 0.2 degrees 2θ.

32. A pharmaceutical composition comprising the crystalline form of bendamustine free base according to claim 31.

33. A method of treating chronic lymphocytic leukemia, Hodgkin's disease, non-Hodgkin's lymphoma, multiple myeloma or breast cancer comprising administering to a patient in need thereof a therapeutically effective amount of a preparation prepared from a composition according to claim 1.



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