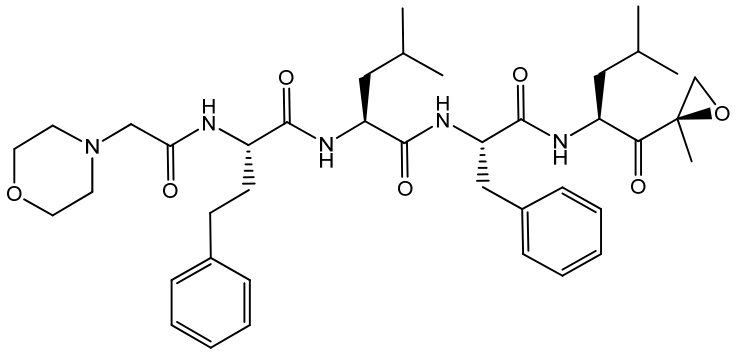
In one aspect of the present disclosure, there is provided a method for preparing a pharmaceutical composition, the method comprising:

(**i**) providing a first combination comprising:

(**a**) a compound:



or a pharmaceutically acceptable salt thereof;

(**b**) a low-chloride cyclodextrin having a chloride ion content of 0.05% w/w or less; and

(**c**) water;

wherein the first combination is heterogeneous and the compound or salt has a low solubility in the first combination; and

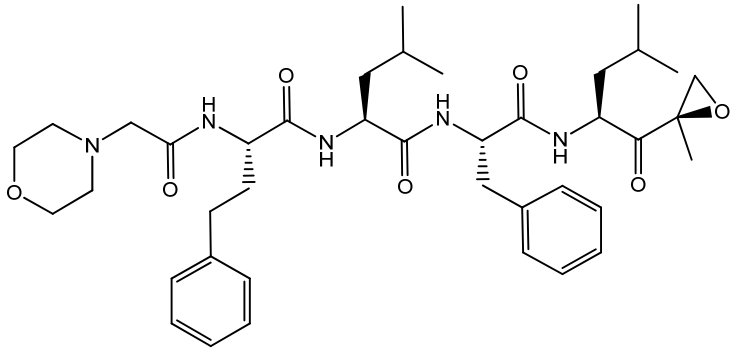
(**ii**) contacting the first combination with an acid to form a second combination, wherein the compound is more soluble in the second combination than in the first combination,

wherein the method is performed in the absence of a strong acid.

In a further aspect of the present disclosure, there is provided a method for preparing a pharmaceutical composition, the method comprising:

(**i**) providing a first combination comprising:

(**a**) a compound:



or a pharmaceutically acceptable salt thereof;

(**b**) a low-chloride SBECD having a chloride ion content of 0.05% w/w or less; and

(**c**) water for injection;

wherein the first combination is heterogeneous and the compound or salt has a low solubility in the first combination; and

(**ii**) contacting the first combination with an aqueous solution of citric acid to form a second combination, wherein the compound is more soluble in the second combination than in the first combination.

In an embodiment, methods for preparing a pharmaceutical composition are featured, which include:

(**i**) providing a first combination that includes:

(**a**) one (or more) peptide proteasome inhibitors (e.g., a compound of formula (1) - (5) or a pharmaceutically acceptable salt thereof);

(**b**) one or more cyclodextrins ("CDs"); and

(**c**) water;

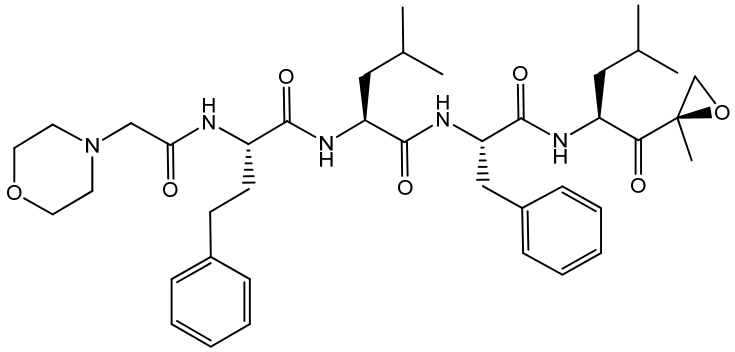
wherein the first combination is heterogeneous and the compound or salt has a low solubility in the first combination; and

**WHAT IS CLAIMED IS:**

1. A method for preparing a pharmaceutical composition, the method comprising:

(**i**) providing a first combination comprising:

(**a**) a compound:



or a pharmaceutically acceptable salt thereof;

(**b**) a low-chloride cyclodextrin having a chloride ion content of 0.05% w/w or less; and

(**c**) water;

wherein the first combination is heterogeneous and the compound or salt has a low solubility in the first combination; and

(**ii**) contacting the first combination with an acid to form a second combination, wherein the compound is more soluble in the second combination than in the first combination,

wherein the method is performed in the absence of a strong acid.

2. The method of claim 1, wherein the first combination contains less than 0.5% w/w or w/v of organic solvent.

3. The method of claim 1, wherein the first combination contains less than 0.5% w/w or w/v of buffer.

4. The method of claim 1, wherein the second combination comprises a complex of the compound and the low-chloride cyclodextrin.

5. The method of claim 1, wherein the acid is added in the form of an aqueous solution.

6. The method of claim 1, wherein the low-chloride cyclodextrin is HPBCD or SBECD.

7. The method of claim 1, wherein the low chloride cyclodextrin is a low chloride SBECD.

8. The method of claim 1, wherein the mole ratio of chloride ion to the compound in the first combination is not more than 0.32.

9. The method of claim 1, wherein providing a first combination (step **(i)**) comprises adding the compound to a solution of the low-chloride cyclodextrin and the water.

10. The method of claim 9, wherein the compound is a crystalline solid.

11. The method of claim 10, wherein the crystalline form of the compound has an X-ray powder diffraction pattern comprising 2 to 8 characteristic peaks expressed in degrees 2θ at 6.10, 9.32, 10.10, 12.14, 13.94, 18.44, 20.38, and 23.30.

12. The method of claim 1, wherein the method further comprises mixing the first combination prior to contacting the first combination with an acid.

13. The method of claim 1, wherein (**i**) and (**ii**) are both performed in a single vessel.

14. The method of claim 1, wherein method further comprises mixing the second combination for a time sufficient to achieve a homogeneous third combination.

15. The method of claim 14, wherein the dissolved and complexed concentration of the compound in the third combination is from 1 mg/mL to 20 mg/mL.

16. The method of claim 15, wherein the dissolved and complexed concentration of the compound in the third combination is from 4 to 8 mg/mL.

17. The method of claim 14, wherein the pH of the third combination is from 2 to 4.

18. The method of claim 14, wherein the method further comprises filtering the third combination.

19. The method of claim 14, wherein the method further comprises lyophilizing the third combination to provide a lyophilizate.

20. The method of claim 19, wherein the method further comprises mixing the lyophilizate with a pharmaceutically acceptable carrier.

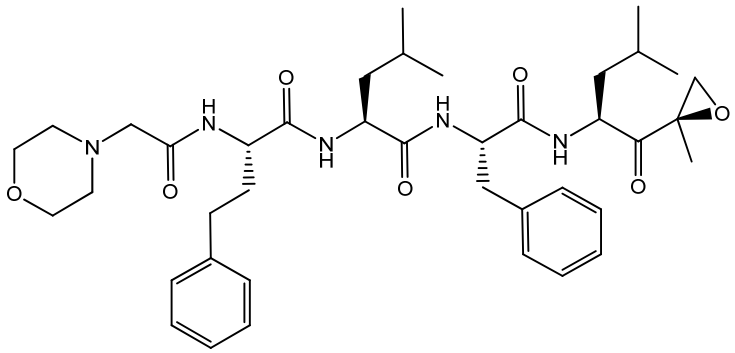
21. The method of claim 20, wherein the pharmaceutically acceptable carrier comprises sterile water for injection.

22. The method of claim 21, wherein the pharmaceutically acceptable carrier further comprises citric acid.

23. A method for preparing a pharmaceutical composition, the method comprising:

(**i**) providing a first combination comprising:

(**a**) a compound:



or a pharmaceutically acceptable salt thereof;

(**b**) a low-chloride SBECD having a chloride ion content of 0.05% w/w or less; and

(**c**) water for injection;

wherein the first combination is heterogeneous and the compound or salt has a low solubility in the first combination; and

(**ii**) contacting the first combination with an aqueous solution of citric acid to form a second combination, wherein the compound is more soluble in the second combination than in the first combination.

24. The method of claim 23, wherein the first combination contains less than 0.5% w/w or w/v of organic solvent.

25. The method of claim 23, wherein the first combination contains less than 0.5% w/w or w/v of buffer.

26. The method of claim 23, wherein the second combination comprises a complex of the compound and the low- chloride SBECD.

27. The method of claim 23, wherein the mole ratio of chloride ion to compound in the first combination is not more than 0.32.

28. The method of claim 23, wherein providing a first combination (step **(i)**) comprises adding the compound to a solution of the low-chloride SBECD and the water for injection.

29. The method of claim 28, wherein the compound is a crystalline solid.

30. The method of claim 29, wherein the crystalline form of the compound has an X-ray powder diffraction pattern comprising 2 to 8 characteristic peaks expressed in degrees 2θ at 6.10, 9.32, 10.10, 12.14, 13.94, 18.44, 20.38, and 23.30.

31. The method of claim 23, wherein the method further comprises mixing the first combination prior to contacting the first combination with an acid.

32. The method of claim 23, wherein (**i**) and (**ii**) are both performed in a single vessel.

33. The method of claim 23, wherein method further comprises mixing the second combination for a time sufficient to achieve a homogeneous third combination.

34. The method of claim 33, wherein the dissolved and complexed concentration of the compound in the third combination is from 1 mg/mL to 20 mg/mL.

35. The method of claim 34, wherein the dissolved and complexed concentration of the compound in the third combination is from 4 to 8 mg/mL.

36. The method of claim 33, wherein the pH of the third combination is from 2 to 4.

37. The method of claim 33, wherein the method further comprises filtering the third combination.

38. The method of claim 33, wherein the method further comprises lyophilizing the third combination to provide a lyophilizate.

39. The method of claim 38, wherein the method further comprises mixing the lyophilizate with a pharmaceutically acceptable carrier.

40. The method of claim 39, wherein the pharmaceutically acceptable carrier comprises sterile water for injection.

41. The method of claim 40, wherein the pharmaceutically acceptable carrier further comprises citric acid.