Claims

1. The use of a peptide of at least 5 contiguous amino acids of Nle3 A(1-7) in the manufacture of a medicament comprising about 0.5% to about 4% hydroxyethyl cellulose (HEC) on a weight (mg)/volume (ml) basis or on a weight/weight (mg), for the therapeutic treatment of diabetic foot ulcers.

2. The use of claim 1, wherein the peptide comprises Asp-Arg-Nle-Tyr-Ile-His-Pro (SEQ ID NO: 1).

3. The use of claim 1, wherein the peptide consists of Asp-Arg-Nle-Tyr-Ile-His-Pro (SEQ ID NO: 1).

4. The use of claim 1, wherein the diabetic foot ulcer is one caused, at least in part, by neuropathy and resulting pressure.

5. The use of claim 1, wherein the diabetic foot ulcer comprises one or more calluses.

6. The use of claim 1, wherein the diabetic foot ulcer is a chronic ulcer.

7. The use of claim 6, wherein the chronic foot ulcer has not responded to any other treatment.

8. The use of claim 1, wherein the peptide is administered as a topical formulation forming a continuous film covering the entire area of the diabetic ulcer.

9. The use of claim 1, wherein the peptide is administered in a hydrogel formulation.

10. The use of claim 1, wherein the peptide is administered at a concentration of about 0.03% to about 1% on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

11. The use of claim 2, wherein the diabetic foot ulcer is one caused, at least in part, by

neuropathy and resulting pressure.

12. The use of claim 2, wherein the diabetic foot ulcer comprises one or more calluses.

13. The use of claim 2, wherein the diabetic foot ulcer is a chronic ulcer.

14. The use of claim 13, wherein the chronic foot ulcer has not responded to any other treatment.

15. The use of claim 2, wherein the peptide is administered as a topical formulation forming a continuous film covering the entire area of the diabetic ulcer.

16. The use of claim 2, wherein the peptide is administered in a hydrogel formulation.

17. The use of claim 2, wherein the peptide is administered at a concentration of about 0.03% to about 1% on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

18. The use of claim 3, wherein the diabetic foot ulcer is one caused, at least in part, by neuropathy and resulting pressure.

19. The use of claim 3, wherein the diabetic foot ulcer comprises one or more calluses.

20. The use of claim 3, wherein the diabetic foot ulcer is a chronic ulcer.

21. The use of claim 20, wherein the chronic foot ulcer has not responded to any other treatment.

22. The use of claim 3, wherein the peptide is administered as a topical formulation forming a continuous film covering the entire area of the diabetic ulcer.

23. The use of claim 3, wherein the peptide is administered in a hydrogel formulation.

24. The use of claim 3, wherein the peptide is administered at a concentration of about 0.03% to about 1% on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

25. A pharmaceutical formulation, comprising: (a) about 0.5% to about 4% HEC on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis; and (b) a peptide of at least 5 contiguous amino acids of Nle3 A(1-7); wherein the peptide is present at a concentration of about 0.03% to about 1% on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

26. The pharmaceutical formulation of claim 25, wherein the peptide comprises Asp-Arg-Nle-Tyr-Ile-His-Pro (SEQ ID NO:1).

27. The pharmaceutical formulation of claim 25, wherein the peptide consists of Asp-Arg-Nle-Tyr-Ile-His-Pro (SEQ ID NO:1).

28. The pharmaceutical formulation of claim 25, comprising about 1% to about 3% HEC on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

29. The pharmaceutical formulation of claim 25, comprising about 2% HEC on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

30. The pharmaceutical formulation of claim 25, wherein the formulation comprises a hydrogel formulation.

31. The pharmaceutical formulation of claim 26, comprising about 1% to about 3% HEC on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

32. The pharmaceutical formulation of claim 26, comprising about 2% HEC on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

33. The pharmaceutical formulation of claim 26, wherein the formulation comprises a hydrogel formulation.

34. The pharmaceutical formulation of claim 27, comprising about 1% to about 3% HEC on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

35. The pharmaceutical formulation of claim 27, comprising about 2% HEC on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

36. The pharmaceutical formulation of claim 27, wherein the formulation comprises a hydrogel formulation.

Claims

1. The use of a peptide of at least 5 contiguous amino acids of Nle3 A(1-7), or a salt thereof, in the manufacture of a medicament comprising 0.5% to 4% hydroxyethyl cellulose (HEC) on a weight (mg)/volume (ml) basis or on a weight/weight (mg), for the therapeutic treatment of diabetic foot ulcers.

2. The use of claim 1, wherein the peptide comprises Asp-Arg-Nle-Tyr-Ile-His-Pro (SEQ ID NO:1), or a salt thereof.

3. The use of claim 1, wherein the peptide consists of Asp-Arg-Nle-Tyr-Ile-His-Pro (SEQ ID NO:1), or a salt thereof.

4. The use of claim 1, wherein the diabetic foot ulcer is one caused, at least in part, by neuropathy and resulting pressure.

5. The use of claim 1, wherein the diabetic foot ulcer comprises one or more calluses.

6. The use of claim 1, wherein the diabetic foot ulcer is a chronic ulcer.

7. The use of claim 6, wherein the chronic foot ulcer has not responded to any other treatment.

8. The use of claim 1, wherein the peptide is administered as a topical formulation forming a continuous film covering the entire area of the diabetic ulcer.

9. The use of claim 1, wherein the peptide is administered in a hydrogel formulation.

10. The use of claim 1, wherein the peptide is administered at a concentration of 0.03% to 1% on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

11. The use of claim 2, wherein the diabetic foot ulcer is one caused, at least in part, by

neuropathy and resulting pressure.

12. The use of claim 2, wherein the diabetic foot ulcer comprises one or more calluses.

13. The use of claim 2, wherein the diabetic foot ulcer is a chronic ulcer.

14. The use of claim 13, wherein the chronic foot ulcer has not responded to any other treatment.

15. The use of claim 2, wherein the peptide is administered as a topical formulation forming a continuous film covering the entire area of the diabetic ulcer.

16. The use of claim 2, wherein the peptide is administered in a hydrogel formulation.

17. The use of claim 2, wherein the peptide is administered at a concentration of 0.03% to 1% on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

18. The use of claim 3, wherein the diabetic foot ulcer is one caused, at least in part, by neuropathy and resulting pressure.

19. The use of claim 3, wherein the diabetic foot ulcer comprises one or more calluses.

20. The use of claim 3, wherein the diabetic foot ulcer is a chronic ulcer.

21. The use of claim 20, wherein the chronic foot ulcer has not responded to any other treatment.

22. The use of claim 3, wherein the peptide is administered as a topical formulation forming a continuous film covering the entire area of the diabetic ulcer.

23. The use of claim 3, wherein the peptide is administered in a hydrogel formulation.

24. The use of claim 3, wherein the peptide is administered at a concentration of 0.03% to 1% on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

25. A pharmaceutical formulation, comprising: (a) 0.5% to 4% HEC on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis; and (b) a peptide of at least 5 contiguous amino acids of Nle3 A(1-7)), or a salt thereof; wherein the peptide is present at a concentration of 0.03% to 1% on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

26. The pharmaceutical formulation of claim 25, wherein the peptide comprises Asp-Arg-Nle-Tyr-Ile-His-Pro (SEQ ID NO:1), or a salt thereof.

27. The pharmaceutical formulation of claim 25, wherein the peptide consists of Asp-Arg-Nle-Tyr-Ile-His-Pro (SEQ ID NO:1), or a salt thereof.

28. The pharmaceutical formulation of claim 25, comprising 1% to 3% HEC on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

29. The pharmaceutical formulation of claim 25, comprising 2% HEC on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

30. The pharmaceutical formulation of claim 25, wherein the formulation comprises a hydrogel formulation.

31. The pharmaceutical formulation of claim 26, comprising 1% to 3% HEC on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

32. The pharmaceutical formulation of claim 26, comprising 2% HEC on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

33. The pharmaceutical formulation of claim 26, wherein the formulation comprises a hydrogel formulation.

34. The pharmaceutical formulation of claim 27, comprising 1% to 3% HEC on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

35. The pharmaceutical formulation of claim 27, comprising 2% HEC on a weight (mg)/volume (ml) basis, or on a weight/weight (mg) basis.

36. The pharmaceutical formulation of claim 27, wherein the formulation comprises a hydrogel formulation.