Claims

1. A ready to use liquid pharmaceutical composition for parenteral administration to a subject, comprising dexmedetomidine or a pharmaceutically acceptable salt thereof at a concentration of about 0.005 to about 50 μg/mL disposed within a sealed glass container, wherein the ready to use liquid pharmaceutical composition is administered to the subject without dilution.

2. A ready to use liquid pharmaceutical composition for parenteral administration to a subject, comprising dexmedetomidine or a pharmaceutically acceptable salt thereof at a concentration of about 4 ug/mL disposed within a sealed glass container, wherein the liquid pharmaceutical composition when stored in the glass container for at least five months has at least 98% potency.

3. The ready to use liquid pharmaceutical composition of claim 1, wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 0.05 to about 15 ug/mL.

4. The ready to use liquid pharmaceutical composition of claim 1, wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 0.5 to about 10 ug/mL.

5. The ready to use liquid pharmaceutical composition of claim 1, wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 1 to about 7 ug/mL.

6. The ready to use liquid pharmaceutical composition of claim 1, wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 4 μg/mL.

7. The ready to use liquid pharmaceutical composition of claim 1 or 2, further comprising sodium chloride at a concentration of between about 0.01 and about 2.0 weight percent.

8. The ready to use liquid pharmaceutical composition of claim 7, wherein the sodium chloride is present at a concentration of about 0.9 weight percent.

9. The ready to use liquid pharmaceutical composition of claim 1 or 2, wherein the composition is formulated as a total volume selected from the group consisting of 20 mL, 50 mL and 100 mL.

10. A ready to use liquid pharmaceutical composition for parenteral administration to a subject, comprising dexmedetomidine or a pharmaceutically acceptable salt thereof at a concentration of about 4 µg/mL disposed within a sealed glass container, wherein the ready to use liquid pharmaceutical composition is administered to the subject without dilution.

11. Use of dexmedetomidine or a pharmaceutically acceptable salt thereof in the preparation of a medicament for providing sedation to a patient in need thereof, wherein the medicament comprises dexmedetomidine or a pharmaceutically acceptable salt thereof at a concentration of about 0.005 to about 50 µg/mL, wherein the medicament is a ready to use liquid pharmaceutical composition for parenteral administration to the patient disposed within a sealed glass container, wherein the ready to use liquid pharmaceutical composition is administered to the patient without dilution.

12. Use of dexmedetomidine or a pharmaceutically acceptable salt thereof in the preparation of a medicament for providing analgesia to a patient in need thereof, wherein the medicament comprises dexmedetomidine or a pharmaceutically acceptable salt thereof at a concentration of about 0.005 to about 50 µg/mL, wherein the medicament is a ready to use liquid pharmaceutical composition for parenteral administration to the patient disposed within a sealed glass container, wherein the ready to use liquid pharmaceutical composition is administered to the patient without dilution.

13. The use of claim 11 or 12, wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 0.05 to about 15 µg/mL.

14. The use of claim 11 or 12, wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 0.5 to about 10 µg/mL.

15. The use of claim 11 or 12, wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 1 to about 7 μg/mL.

16. The use of claim 11 or 12, wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 4 μg/mL.

17. The method of claim 11 or 12, wherein the composition is administered perioperatively.

18. The method of claim 17, wherein the composition is administered before or after surgery.

19. The use of claim 11 or 12, wherein the composition is administered to the patient in an intensive care unit.

20. The use of claim 11 or 12, wherein the patient is non-ventilated or intubated.

21. The use of claim 11 or 12, wherein the patient is critically ill.

22. The use of claim 11 or 12, wherein the composition is administered by an intravenous infusion.

23. The use of claim 11 or 12, wherein the composition is administered as an anxiolytic.

24. The use of claim 11 or 12, wherein the composition is administered as an adjunct to an anesthetic.

25. The use of claim 11 or 12, wherein the composition is administered as an anti-hypertensive agent.

26. The use of claim 11, wherein the composition is administered as an analgesic.

27. The use of claim 12, wherein the composition is administered as a sedative.

Claims

1. A ready to use liquid pharmaceutical composition for parenteral administration to a subject, comprising dexmedetomidine or a pharmaceutically acceptable salt thereof at a concentration of about 0.005 to about 50 μg/mL disposed within a sealed glass container, wherein the ready to use liquid pharmaceutical composition is administered to the subject without dilution.

2. A ready to use liquid pharmaceutical composition for parenteral administration to a subject, comprising dexmedetomidine or a pharmaceutically acceptable salt thereof at a concentration of about 4 ug/mL disposed within a sealed glass container, wherein the liquid pharmaceutical composition when stored in the glass container for at least five months has at least 98% potency.

3. The ready to use liquid pharmaceutical composition of claim 1 wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 0.05 to about 15 ug/mL.

4. The ready to use liquid pharmaceutical composition of claim 1 wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 0.5 to about 10 ug/mL.

5. The ready to use liquid pharmaceutical composition of claim 1 wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 1 to about 7 ug/mL.

6. The ready to use liquid pharmaceutical composition of claim 1 wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 4 μg/mL.

7. The ready to use liquid pharmaceutical composition of claim 1 or 2, further comprising sodium chloride at a concentration of between about 0.01 and about 2.0 weight percent.

8. The ready to use liquid pharmaceutical composition of claim 7, wherein the sodium chloride is present at a concentration of about 0.9 weight percent.

9. The ready to use liquid pharmaceutical composition of claim 1 or 2, wherein the composition is formulated as a total volume selected from the group consisting of 20 mL, 50 mL and 100 mL.

10. A ready to use liquid pharmaceutical composition for parenteral administration to a subject, comprising dexmedetomidine or a pharmaceutically acceptable salt thereof at a concentration of about 4 μg/mL disposed within a sealed glass container, wherein the ready to use liquid pharmaceutical composition is administered to the subject without dilution.

11. Use of dexmedetomidine or a pharmaceutically acceptable salt thereof in the preparation of a medicament for providing sedation to a patient in need thereof, wherein the medicament comprises dexmedetomidine or a pharmaceutically acceptable salt thereof at a concentration of about 0.005 to about 50 μg/mL, wherein the medicament is a ready to use liquid pharmaceutical composition for parenteral administration to the patient disposed within a sealed glass container, wherein the ready to use liquid pharmaceutical composition is administered to the patient without dilution.

12. Use of dexmedetomidine or a pharmaceutically acceptable salt thereof in the preparation of a medicament for providing analgesia to a patient in need thereof, wherein the medicament comprises dexmedetomidine or a pharmaceutically acceptable salt thereof at a concentration of about 0.005 to about 50 μg/mL, wherein the medicament is a ready to use liquid pharmaceutical composition for parenteral administration to the patient

disposed within a sealed glass container, wherein the ready to use liquid pharmaceutical composition is administered to the patient without dilution.

13. The use of claim 11 or 12, wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 0.05 to about 15 μg/mL.

14. The use of claim 11 or 12, wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 0.5 to about 10 μg/mL.

15. The use of claim 11 or 12, wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 1 to about 7 μg/mL.

16. The use of claim 11 or 12, wherein the dexmedetomidine or pharmaceutically acceptable salt thereof is at a concentration of about 4 μg/mL.

17. The use of claim 11 or 12, wherein the composition is administered perioperatively.

18. The use of claim 17, wherein the composition is administered before or after surgery.

19. The use of claim 11 or 12, wherein the composition is administered to the patient in an intensive care unit.

20. The use of claim 11 or 12, wherein the patient is non-ventilated or intubated.

21. The use of claim 11 or 12, wherein the patient is critically ill.

22. The use of claim 11 or 12, wherein the composition is administered by an intravenous infusion.

23. The use of claim 11 or 12, wherein the composition is administered as an anxiolytic.

24. The use of claim 11 or 12, wherein the composition is administered as an adjunct to an anesthetic.

25. The use of claim 11 or 12, wherein the composition is administered as an anti-hypertensive agent.

26. The use of claim 11, wherein the composition is administered as an analgesic.

27. The use of claim 12, wherein the composition is administered as a sedative.

28. The ready to use liquid pharmaceutical composition of any one of claims 1-10, or use of any one of claims 11-27, wherein the dexmedetomidine is formulated as a hydrochloride salt.

29. The ready to use liquid pharmaceutical composition of any one of claims 1-10, or use of any one of claims 11-27, wherein the liquid pharmaceutical composition is terminally sterilized.

30. The ready to use liquid pharmaceutical composition of claim 29, wherein the liquid pharmaceutical composition is terminally sterilized by autoclave.