CLAIMS

1. A pharmaceutically acceptable composition ~~having a pH of about 9.1 to about 9.8 at 25°C,~~ comprising:

~~active components comprising~~(i) 2.5% to 10%, 4% to 7%, 7.5% to 12%, 5% to 30%, or 10% to 20%, by weight levodopa; carbidopa; and ~~at least about 4% by weight levodopa~~ 9% to 20% or to 30%, 10% to 18% or to 20%, 15% to 30%, or 12%, 13%, 14% or 15%, by weight arginine, wherein said composition has a pH of 8 to 10, or 9.1 to 9.8, at 25°C; or

~~arginine and optionally meglumine,~~

~~preferably wherein said composition comprises (i) about 4% to about 12%, or about 5% to about 30%, by weight levodopa; or (ii) about 1% to about 6%, or about 1% to about 2%, by weight carbidopa; or (iii) about 10% to about 35% by weight arginine.~~

(ii) 4% to 7%, 2% to 12%, 4% or 5% to 10%, 6% to 11%, or 5% to 20%, by weight levodopa; 1% to 6%, 1% to 2%, 1.25% to 1.5%, 2% to 4% or to 5%, by weight carbidopa; and arginine, meglumine, or both arginine and meglumine, wherein the composition has a pH of 9.1 to 9.8 at 25°C.

2. The pharmaceutically acceptable composition of claim 1, wherein the molar ratio of ~~active components~~levodopa and carbidopa, to the arginine is ~~about~~ 1:1.8 to ~~about~~ 1:3.5~~, or about 1:2.3~~.

3. The pharmaceutically acceptable composition of claim 1(i) or 2, comprising:

(i) 5% to 30% by weight levodopa and 9% to 20% by weight arginine; or

(ii) 4% to 7% by weight levodopa and 10% to 20% by weight arginine.

4. The pharmaceutically acceptable composition of any one of claims 1(i), 2 or 3, further comprising meglumine, wherein said composition has a pH of 9.1 to 9.8 at 25°C.

5. The pharmaceutically acceptable composition of claim 1(ii) or 2, comprising:

(i) 5% to 20% by weight levodopa and 1% to 6% by weight carbidopa; or

(ii) 2% to 12% by weight levodopa and 2% to 4% by weight carbidopa;

6. The pharmaceutically acceptable composition of claim 5, comprising 8% to 12% by weight levodopa, 1% to 3% by weight carbidopa, and 15% to 35% weight arginine;

7. The pharmaceutically acceptable composition of any one of claims 1(ii), 2 or 5, comprising either arginine or meglumine.

8. The pharmaceutically acceptable composition of any one of claims 1(ii), 2 or 5, comprising both arginine and meglumine.

~~3~~9. The pharmaceutically acceptable composition of ~~any one of claims 1-2~~claim 8, ~~comprising meglumine, preferably~~ wherein the molar ratio of ~~active components~~levodopa and carbidopa to the arginine is ~~about~~ 1:1.1 to ~~about~~ 1:1.9, and the molar ratio of ~~active components~~levodopa and carbidopa to the meglumine is ~~about~~ 1:0.3 to ~~about~~ 1:1.5.

410. The pharmaceutically acceptable composition of claim ~~3~~9, wherein the molar ratio of ~~active components~~levodopa and carbidopa to the meglumine is ~~about~~ 1:0.3 to ~~about~~ 1:1.2, ~~about~~ 1:0.4, or ~~about~~ 1:1.1.

~~5~~11. The pharmaceutically acceptable composition of claim ~~3 or 4~~9 or 10, wherein the composition comprises ~~about~~ 2.0% to ~~about~~ 11% by weight meglumine.

12. The pharmaceutically acceptable composition of claim 4, comprising 4% to 10% by weight levodopa, 0.5% to 3% by weight carbidopa, 9% to 16% by weight arginine, and 2% to 10% by weight meglumine.

13. The pharmaceutically acceptable composition of claim 8, comprising 8% to 12% by weight levodopa, 1% to 3% by weight carbidopa, 12% to 15% by weight arginine, 3% to 10% by weight meglumine, and optionally 0.25% to 3% by weight ascorbic acid.

~~6~~14. The pharmaceutically acceptable composition of any one of claims ~~1-5~~1 to 13, further comprising an agent that inhibits the formation of oxidation products~~, preferably wherein said agent is selected from ascorbic acid or a pharmaceutically acceptable salt thereof, Na-ascorbate, L-cysteine, N-acetylcysteine (NAC), gluthatione (GSH), Na_2-EDTA, Na_2-EDTA-Ca, sodium bisulfite, or combinations thereof~~.

15. The pharmaceutically acceptable composition of claim 14, wherein the agent is selected from ascorbic acid or a pharmaceutically acceptable salt thereof, L-cysteine, N-acetylcysteine (NAC), gluthatione (GSH), Na_2-EDTA, Na_2-EDTA-Ca, sodium bisulfite, or combinations thereof.

16. The pharmaceutically acceptable composition of claim 15, wherein the ascorbic acid salt is selected from ascorbate, sodium ascorbate, calcium ascorbate, potassium ascorbate, ascorbyl palmitate, or ascorbyl stearate.

~~7~~17. ~~A~~ The pharmaceutically acceptable composition of claims 15 or 16, comprising ~~levodopa, arginine and optionally meglumine; and further comprising ascorbic acid or a pharmaceutically acceptable salt thereof, preferably wherein said composition comprises about~~ 0.25% ~~or more~~, ~~about~~ 0.2% to ~~about~~ 3%, or ~~about~~ 0.5% to ~~about~~ 1%, by weight ascorbic acid or a pharmaceutically acceptable salt thereof ~~such as ascorbate, sodium ascorbate, calcium ascorbate, potassium ascorbate, ascorbyl palmitate, or ascorbyl stearate, preferably sodium ascorbate~~.

~~8. The pharmaceutically acceptable composition of claim 7, wherein the molar ratio of levodopa to the arginine is about 1:1.8 to about 1:3.5, or about 1:2.3, preferably wherein said composition comprises about 4% to about 12% by weight levodopa.~~

~~9. The pharmaceutically acceptable composition of claim 7 or 8, further comprising carbidopa, preferably about 1% to about 2% by weight carbidopa.~~

~~10. The pharmaceutically acceptable composition of claim 9, wherein the molar ratio of the levodopa and the carbidopa together, to the arginine, is about 1:1.8 to about 1:3.5, or about 1:2.3.~~

~~11. The pharmaceutically acceptable composition of claim 9 or 10, wherein the composition has a pH of about 9.1 to about 9.8 at 25°C.~~

~~12. The pharmaceutically acceptable composition of any one of claims 1-11, wherein the formulation is liquid at room temperature.~~

~~13. The pharmaceutically acceptable composition of any one of claims 1-12, further comprising entacapone or tolcapone.~~

~~14. A transdermal patch suitable for administering a pharmaceutically acceptable composition according to any one of claims 1-13.~~

~~15. Use of the pharmaceutically acceptable composition of any one of claims 1-13 for the preparation of a medicament for treatment of a neurological or movement disorder such as Parkinson's disease.~~

~~16. The use of claim 15, wherein the medicament is formulated for subcutaneous, transdermal, intraduodenal or intravenous administration.~~

~~17. A pharmaceutically acceptable formulation comprising about 2.5 to about 7% by weight levodopa, about 0 to about 2% by weight carbidopa, about 5 to about 18% by~~

18. The pharmaceutically acceptable composition of claim 3, comprising:

(i) 5.4% by weight levodopa, 1.5% by weight carbidopa, and 13.5% or 14.8% by weight arginine;

(ii) 6% by weight levodopa, 1.5% by weight carbidopa, and 14.8% or 16% by weight arginine;

(iii) 7% by weight levodopa, 2% by weight carbidopa, and 17.8% by weight arginine;

(iv) 6% by weight levodopa, 0.5% by weight carbidopa, and 14.2% by weight arginine;

(v) 6% by weight levodopa, 1% by weight carbidopa, and 14.8% by weight arginine;

(vi) 6% by weight levodopa, 2% by weight carbidopa, and 16.5% by weight arginine; or

(vii) 4.8% by weight levodopa, 1.4% by weight carbidopa, and 11%, 12.1% or 12.7% by weight arginine.

~~weight arginine, and about 0.25% to about 3% by weight ascorbic acid or a pharmaceutically acceptable salt thereof.~~

~~18. A pharmaceutically acceptable formulation comprising (i) about 8 to about 12% by weight levodopa, about 1 to about 3% by weight carbidopa, and about 15 to about 35% weight arginine; or (ii) about 8 to about 12% by weight levodopa, about 1 to about 3% by weight carbidopa, about 12 to about 15% weight arginine, and about 3% to about 10% by weight meglumine, wherein said pharmaceutically acceptable formulation optionally further comprising about 0.25-3% by weight ascorbic acid.~~

~~19. A pharmaceutically acceptable liquid composition comprising arginine and entacapone or tolcapone, preferably wherein said composition comprises at least about 2%, at least about 4%, or at least about 2% to about 12%, by weight entacapone or tolcapone.~~

~~20. The pharmaceutically acceptable liquid composition of claim 19, wherein the entacapone or tolcapone and the arginine have a molar ratio of about 1:0.5 to about 1:2.5, or about 1:1 to about 1:1.5.~~

~~21. The pharmaceutically acceptable liquid composition of claim 19, wherein the pH of the liquid composition is about 6 to about 9 at 25°C, or the liquid composition is substantially stable at 25°C for 48 hours or more.~~

19. The pharmaceutically acceptable composition of claim 5, comprising:

(i) 8% by weight levodopa, 1.5% by weight carbidopa, 15.7% by weight arginine and 3.2% by weight meglumine;

(ii) 8% by weight levodopa, 1.5% by weight carbidopa, 12.2% by weight arginine and 7.9% by weight meglumine;

(iii) 10% by weight levodopa, 1.5% by weight carbidopa, 19.2% by weight arginine and 4% by weight meglumine;

(iv) 10% by weight levodopa, 1.5% by weight carbidopa, 14.6% by weight arginine and 9.9% by weight meglumine;

(v) 7% by weight levodopa, 1.5% by weight carbidopa, 14.1% by weight arginine and 2.8% by weight meglumine;

(vi) 7% by weight levodopa, 1.5% by weight carbidopa, 10.7% by weight arginine and 6.9% by weight meglumine; or

(vii) 12% by weight levodopa, 3% by weight carbidopa, and 24.4%, 29.6% or 32.1%, by weight arginine.

20. The pharmaceutically acceptable composition of claim 15, comprising:

(i) 6% by weight levodopa, 1.5% by weight carbidopa, 1% by weight Na-ascorbate, and 13.5%, 14.2%, 14.8% or 16.0%, by weight arginine;

(ii) 4.8% by weight levodopa, 1.4% by weight carbidopa, 1% by weight Na-ascorbate, and 11%, 11.6%, 12.1% or 12.7%, by weight arginine;

(iii) 6% by weight levodopa, 1.5% by weight carbidopa, 1% by weight ascorbic acid or Na-ascorbate, and 14.8%, 15.8%, 16% or 16.8%, by weight arginine;

(iv) 5.4% by weight levodopa, 1.5% by weight carbidopa, 1% by weight ascorbic acid or Na ascorbate, and 12.3%, 13.5 or 14.8%, by weight arginine;

(v) 7% by weight levodopa, 2% by weight carbidopa, 1% by weight ascorbic acid or Na ascorbate, and 17.8%, by weight arginine;

(vi) 6% by weight levodopa, 1.5% by weight carbidopa, ascorbic acid or Na-ascorbate, and 14.8%, 15.8% or 16.8%, by weight arginine; or

(vii) 5.4% by weight levodopa, 1.5% by weight carbidopa, ascorbic acid or Na-ascorbate, and 12.3%, 13.5%, or 14.8%, by weight arginine.

21. The pharmaceutically acceptable composition of claim 1, comprising 4.8% to 7% by weight levodopa, 0.5% to 2% by weight carbidopa, and 11% to 17.8% by weight arginine.

22. The pharmaceutically acceptable ~~formulation~~ composition of any one of claims ~~18-21~~1 to 21, ~~wherein said formulation is suitable~~formulated for ~~substantially~~ continuous subcutaneous, transdermal, intraduodenal or intravenous administration.

~~23. A process for preparing a stable liquid solution comprising levodopa and/or carbidopa, and arginine, comprising:~~

~~providing levodopa and/or carbidopa, and arginine to form a powder mixture;~~

~~adding water to said powder mixture to form a suspension;~~

~~heating said suspension at a temperature of about 40°C to about 90°C to form a solution; and~~

~~cooling said solution to provide the stable liquid composition.~~

~~24~~23. ~~A~~ The pharmaceutically acceptable composition ~~comprising (i) carbidopa, at least 4% by weight levodopa, arginine and optionally meglumine; or (ii) levodopa, arginine, optionally meglumine, and ascorbic acid or a pharmaceutically acceptable salt thereof~~of any one of claims 1 to 22, for use in treatment of a neurological or movement disorder ~~such as Parkinson's disease~~.

24. The pharmaceutically acceptable composition of claim 23, wherein said neurological or movement disorder is Parkinson's disease.

25. A transdermal patch suitable for administering a pharmaceutically acceptable composition according to any one of claims 1 to 21.

26. Use of a pharmaceutically acceptable composition of any one of claims 1 to 21, for the preparation of a medicament for treatment of a neurological or movement disorder.

27. The use of claim 26, wherein the disorder is Parkinson's disease.

28. The use of claim 26 or 27, wherein the medicament is formulated for subcutaneous, transdermal, intraduodenal or intravenous administration.