CLAIMS

I Claim:

1. A non-toxic parenteral pharmaceutical formulation comprising:
    i. at least one cannabinoid;
    ii. at least one surfactant;
    iii. at least one anti-oxidant; ~~and~~
    iv. at least one chelating agent; and
    v. at least one buffering agent selected from the group consisting of hypotonic buffering agents and hypertonic buffering agents.

2. The formulation of Claim 1, wherein the at least one cannabinoid is cannabidiol.

3. The formulation of Claim 2, wherein the at least one cannabidiol is synthetically prepared.

4. The formulation of Claim 3, wherein the synthetic cannabidiol contains less than 0.3% of any form of tetrahydrocannabinol.

5. The formulation of Claim 3, wherein the synthetic cannabinoid is devoid of any form of tetrahydrocannabinol.

6. The formulation of Claim 3, wherein the at least one surfactant is ~~Kolliphor HS 15~~ polyoxyethylated 12-hydroxystearic acid.

7. The formulation of Claim 6, wherein said at least one antioxidant is selected from the group consisting of ascorbic acid, ascorbyl palmitate and citric acid.

8. The formulation of Claim 7, wherein the chelating agent is selected from at least one form of EDTA.

9. The formulation of Claim 8 wherein the form of EDTA is selected from the group consisting of disodium EDTA and calcium EDTA.

~~10. The formulation of Claim 1, further comprising at least one buffering agent. selected from the group consisting of hypotonic buffering agents and hypertonic buffering agents.~~

~~11. The formulation of Claim 10, wherein the optional buffering agent is sodium bicarbonate.~~

~~12.~~ 10. A non-toxic parenteral pharmaceutical formulation comprising:

i. at least one cannabinoid;

ii. at least one surfactant;

iii. at least one anti-oxidant; ~~and~~

iv. at least one chelating agent; and

v. at least one buffering agent selected from the group consisting of hypotonic buffering agents and hypertonic buffering agents;

providing such formulation does not include an isotonic agent.

~~13. The formulation of Claim 12, further comprising at least one buffering agent. selected from the group consisting of hypotonic buffering agents and hypertonic buffering agents.~~

~~14.~~ 11.The formulation of Claim ~~12~~10, wherein the at least one cannabinoid is synthetically-prepared cannabidiol.

~~15.~~12. A non-toxic parenteral pharmaceutical formulation comprising:

i at least one cannabinoid;

ii. at least one surfactant;

iii. at least two different anti-oxidants; ~~and~~

iv. at least one chelating agent; and

v.at least one buffering agent selected from the group consisting of hypotonic buffering agents and hypertonic buffering agents.

~~16.~~13. The formulation of Claim ~~15~~12, wherein the at least one cannabinoid is synthetically-prepared cannabidiol.

~~17. The formulation of Claim 15, further comprising at least one buffering agent selected from the group consisting of hypotonic buffering agents and hypertonic buffering agents.~~

~~18.~~14. A non-toxic parenteral pharmaceutical formulation comprising:

i. at least one cannabinoid;

ii. at least one surfactant;

iii. at least two different anti-oxidants;~~ and~~

iv. at least one chelating agent; and

v.at least one buffering agent selected from the group consisting of hypotonic buffering agents and hypertonic buffering agents;

providing such formulation does not include an isotonic agent;
wherein the parenteral administration in intravenous administration; and
wherein such formulation is devoid of any form of tetrahydrocannabinol.

15. The formulation of Claim 14, wherein: the at least one cannabinoid is synthetically-prepared cannabidiol; the at least one surfactant is polyoxyethylated 12-hydroxystearic acid; the at least two different antioxidants are tocopherol and ascorbic acid; the at least one chelating agent is EDTA; and the at least one buffering agent selected from the group consisting of hypotonic buffering agents and hypertonic buffering agents is sodium bicarbonate.

16. A non-toxic parenteral pharmaceutical formulation consisting of:

i. at least one cannabinoid;

i. at least one surfactant;

ii. at least one anti-oxidant;

iii. at least one chelating agent; and

iv. at least one buffering agent selected from the group consisting of hypotonic buffering agents and hypertonic buffering agents.

17. A non-toxic parenteral pharmaceutical formulation consisting of:

i. at least one cannabinoid;

ii. at least one surfactant;

iii. at least two different anti-oxidants;

iv. at least one chelating; and

v. at least one buffering agent selected from the group consisting of hypotonic buffering agents and hypertonic buffering agents.

~~19. The formulation of Claim 18, wherein the at least one cannabinoid is synthetically prepared cannabidiol.~~

~~20. The formulation of Claim 18, further comprising at least one buffering agent. selected from the group consisting of hypotonic buffering agents and hypertonic buffering agents.~~

~~21.~~18. A method of preparing a formulation of the present invention comprising:

i. combining at least one surfactant with an at least one antioxidant and at least one cannabinoid to a first vessel;

ii. combining at least one of the same or different second antioxidant and at least one chelating agent to a second vessel; and

iii. combining the contents of the first and second vessels.

~~22.~~19. The method of Claim ~~21~~18 further comprising adding at least one buffering agent selected from the group consisting of hypotonic buffering agents and a hypertonic buffering agents.

~~23. The method of Claim 22, wherein the at least one cannabinoid is synthetically prepared cannabidiol.~~

~~24. The method of Claim 22, wherein said formulation is filled into a vial or other appropriate final container and followed by an inert gas sparge.~~

~~25.~~20. A method of preparing a formulation of the present invention comprising:

i. combining at least one surfactant with an at least one antioxidant and at least one cannabinoid to a first vessel;

ii. combining at least one of the same or different second antioxidant and at least one chelating agent to a second vessel; and

iii. combining the contents of the first and second vessels;

providing an isotonic agent is not added to the formulation.

~~26.~~21. The method of Claim ~~25~~20 further comprising adding at least one buffering agent selected from the group consisting of hypotonic buffering agents and a hypertonic buffering agents.

~~27. The method of Claim 26, wherein the at least one cannabinoid is synthetically prepared cannabidiol.~~

~~28. The method of Claim 26, wherein said formulation is filled into a vial or other appropriate final container and followed by an inert gas sparge.~~

~~29. A method of treating a mammal in need of treatment comprising parenteral administration of a pharmaceutical formulation of the present invention.~~

~~30. The method of according Claim 29, wherein the parenteral administration is intravenous administration.~~

~~31. The method of Claim 30, wherein the need for such treatment is pain selected from the group consisting of acute pain and chronic pain.~~

~~32. The method of Claim 31, wherein the pain is peri operative pain.~~

~~33. The method of Claim 32, wherein the composition of the present invention contains synthetically prepared cannabidiol as the cannabinoid.~~

~~34. The method of Claim 33, wherein the synthetic cannabinoid contains less than 0.3% of any form of tetrahydrocannabinol.~~

~~35. A pharmaceutical formulation of the present invention having a shelf life of at least twelve months without refrigeration.~~

~~36. A pharmaceutical formulation of the present invention that is terminally sterilized.~~

~~37. A pharmaceutical formulation of the present invention prepared on or~~

~~in a pharmaceutically acceptable patch for the transdermal delivery.~~

~~38. A method of delivering a pharmaceutical formulation of the present invention via one or more pharmaceutically acceptable patch delivery systems.~~