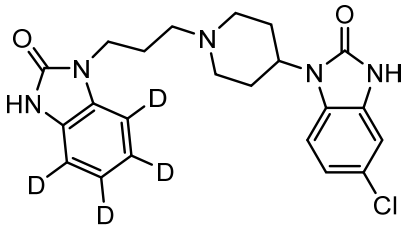
What is Claimed is:

1. A pharmaceutical formulation comprising:

   (i) deuterated d_4-domperidone of the formula (I):

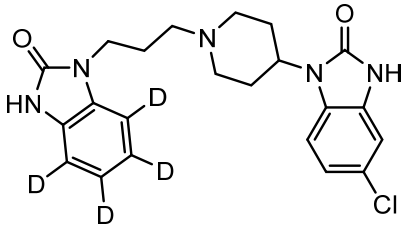


(I) or a pharmaceutically acceptable salt thereof;

a glyceryl stearate, and a medium chain triglyceride;

or

(ii) deuterated d_4-domperidone of the formula (I):

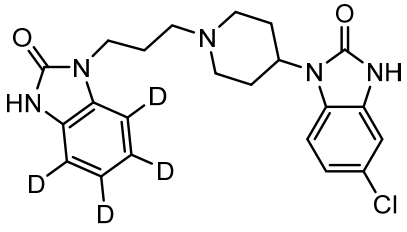


(I) or a pharmaceutically acceptable salt thereof;

a stearoyl polyoxyl glyceride, a nonionic poly(ethylene oxide) polymer, and a medium chain triglyceride;

or

(iii) deuterated d_4-domperidone of the formula (I):



(I) or a pharmaceutically acceptable salt thereof;

a nonionic poly(ethylene oxide) polymer, and a polyethylene glycol.

2. The pharmaceutical formulation of claim 1, comprising a compound of formula (I) or a pharmaceutically acceptable salt thereof, a glyceryl stearate, and a medium chain triglyceride.

3. The pharmaceutical formulation of claim 1 or 2, wherein the glyceryl stearate is a glyceryl palmitostearate, a glycerol distearate, a glyceryl distearate, or a combination thereof.

4. The pharmaceutical formulation of any one of the preceding claims, comprising 2 to 20% (w/w), based on the weight of the formulation, of the glyceryl stearate, preferably 5 to 15% (w/w), or more preferably 10% (w/w).

5. The pharmaceutical formulation of any one of the preceding claims, comprising 70 to 90% (w/w), based on the weight of the formulation, of the medium chain triglyceride, or preferably 80 to 85% (w/w).

6. The pharmaceutical formulation of any one of the preceding claims, wherein the glyceryl stearate is Precirol® ATO 5.

7. The pharmaceutical formulation of claim 1, comprising a compound of formula (I) or a pharmaceutically acceptable salt thereof, a stearoyl polyoxyl glyceride, a nonionic poly(ethylene oxide) polymer, and a medium chain triglyceride.

8. The pharmaceutical formulation of claim 1, comprising a compound of formula (I) or a pharmaceutically acceptable salt thereof, a nonionic poly(ethylene oxide) polymer, and a polyethylene glycol.

9. The pharmaceutical formulation of any one of the preceding claims, further comprising an antioxidant.

10. The pharmaceutical formulation of claim 9, wherein the antioxidant is ascorbic acid, ascorbyl palmitate, butylated hydroxyanisole, butylated hydroxytoluene, propyl gallate, potassium metabisulfite, sodium metabisulfite, sodium thiosulfate, or vitamin E, or preferably butylated hydroxyanisole or butylated hydroxytoluene.

11. The pharmaceutical formulation of any one of the preceding claims, comprising 1 to 20% (w/w), based on the weight of the formulation, of d_4-domperidone, preferably 5 to 12% (w/w), or more preferably 10% (w/w).

12. The pharmaceutical formulation of any one of the preceding claims, comprising 1 to 50 mg of d_4-domperidone.

13. A pharmaceutical formulation of any one of claims 1 to 12 for use in treating a disorder that is gastroparesis, nausea apart from gastroparesis, vomiting apart from gastroparesis, nausea associated with gastroparesis, vomiting associated with gastroparesis, gastroesophageal reflux disease, insufficient lactation, or a combination thereof in a patient.

14. The pharmaceutical composition for use according to claim 13, wherein the formulation is in the form of a tablet, capsule, softgel, suspension, liquid, or combination thereof.

15. The pharmaceutical composition for use according to claim 13 or 14, wherein the disorder is gastroparesis.

16. The pharmaceutical composition for use according to claim 13 or 14, wherein the disorder is gastroesophageal reflux disease.

17. The pharmaceutical composition for use according to claim 13 or 14, wherein the disorder is insufficient lactation.

18. Use of a pharmaceutical formulation of any one of claims 1 to 12 in the manufacture of a medicament for treating a disorder that is gastroparesis, nausea apart from gastroparesis, vomiting apart from gastroparesis, nausea associated with gastroparesis, vomiting associated with gastroparesis, gastroesophageal reflux disease, insufficient lactation, or a combination thereof in a patient.

19. The use according to claim 18, wherein the formulation is in the form of a tablet, capsule, softgel, suspension, liquid, or combination thereof.

20. The use according to claim 18 or 19, wherein the disorder is gastroparesis.

21. The use according to claim 18 or 19, wherein the disorder is gastroesophageal reflux disease.

22. The use according to claim 18 or 19, wherein the disorder is insufficient lactation.