What is claimed is:

1. A pharmaceutical composition, comprising:
   (a) a chylomicron comprising a mixture of triglyceride, phospholipid and phytosterol, wherein the ratio of triglyceride:phospholipid:phytosterol relative to the pharmaceutical composition ranges from about 80:5:0.1 (w/w) to about 92:12:1 (w/w); and
   (b) a carotenoid.
2. The pharmaceutical composition of claim 1, wherein the ratio of phytosterol is about 0.7 (w/w).
3. The pharmaceutical composition of claim 1, further comprising a pharmaceutically acceptable carrier or excipient.
4. The pharmaceutical composition of claim 3, wherein the pharmaceutically acceptable excipient is tocopherol.
5. The pharmaceutical composition of claim 1, wherein the triglyceride is selected from soy bean oil, pumpkin seed oil, linseed oil, grapeseed oil, olive oil, sunflower seed oil and combination thereof.
6. The pharmaceutical composition of claim 1, wherein the phospholipid is selected from lecithin and phosphatidylcholine.
7. The pharmaceutical composition of claim 1, wherein the carotenoid is carotene.
8. The pharmaceutical composition of claim 1, wherein the carotenoid is selected from solanorubin; octohydrogenosolanorubin, hexahydrogenosolanorubin and combination thereof.
9. The pharmaceutical composition of claim 8, wherein the weight ratio of solanorubin, octohydrogenosolanorubin and hexahydrogenosolanorubin relative to the pharmaceutical composition is about 4-5: 0.1-1: 0.1-1.
10. The pharmaceutical composition of claim 9, wherein the weight ratio of solanorubin:

octohydrogenosolanorubin: hexahydrogenosolanorubin is about 4.2-4.5: 0.3-0.5: 0.3-0.5 relative to the pharmaceutical composition.

11. The pharmaceutical composition of claim 1, wherein the diameter of the chylomicron is about 75 to about 450 nm.
12. The pharmaceutical composition of claim 1, wherein the diameter of the chylomicron is about 100 to about 150 nm.
13. The pharmaceutical composition of claim 1, wherein the carotenoid is encapsulated in the chylomicron.
14. The pharmaceutical composition of claim 1, wherein the AUC of solanorubin is about 450 to 580 min µg/mL.
15. The pharmaceutical composition of claim 1, wherein the AUC of octohydrogenosolanorubin is about 150 to about 200 min µg/mL.
16. The pharmaceutical composition of claim 1, wherein the AUC of hexahydrogenosolanorubin is about 65 to about 120 min µg/mL.
17. The pharmaceutical composition of claim 1, further comprising a beta-carotene.
18. The pharmaceutical composition of claim 1, wherein the pharmaceutical composition is constituted with water and phospholipid prior to use.
19. A pharmaceutical composition, comprising:
    (a) one or more micelles comprising a mixture of surfactant and phospholipid, wherein the ratio of surfactant:phospholipid ranges from about 5:0.01 (w/w) to about 20:0.5 (w/w) relative to the pharmaceutical composition; and
    (b) a carotenoid.
20. The pharmaceutical composition of claim 19, wherein the surfactant is polysorbate.
21. The pharmaceutical composition of claim 19, wherein the micelle comprises about 10% of surfactant (w/v) relative to the pharmaceutical composition.
22. The pharmaceutical composition of claim 19, wherein the phospholipid is selected

from lecithin and phosphatidylcholine.

23. The pharmaceutical composition of claim 19, wherein the micelle comprises about 0.06% of phospholipid (w/w) relative to the pharmaceutical composition.

24. The pharmaceutical composition of claim 19, further comprising a pharmaceutically acceptable carrier or excipient.

25. The pharmaceutical composition of claim 24, wherein the pharmaceutically acceptable excipient is tocopherol.

26. The pharmaceutical composition of claim 19, wherein the diameter of the micelle is about 1 to about 10 nm.

27. The pharmaceutical composition of claim 19, wherein the diameter of the micelle is about 3.5 to about 7.5 nm

28. The pharmaceutical composition of claim 19, wherein the carotenoid is carotene.

29. The pharmaceutical composition of claim 19, wherein the carotenoid is selected from solanorubin; octohydrogenosolanorubin, hexahydrogenosolanorubin and combination thereof.

30. The pharmaceutical composition of claim 29, wherein the weight ratio of solanorubin: octohydrogenosolanorubin: hexahydrogenosolanorubin is about 0.02-0.05: 0.002-0.005: 0.002-0.005 relative to the pharmaceutical composition.

31. The pharmaceutical composition of claim 29, wherein the weight ratio of solanorubin: octohydrogenosolanorubin: hexahydrogenosolanorubin is about 0.036: 0.0036: 0.0036 relative to the pharmaceutical composition.

32. The pharmaceutical composition of claim 29, wherein the AUC of solanorubin is about 450 to 8000 min µg/mL.

33. The pharmaceutical composition of claim 29, wherein the AUC of octohydrogenosolanorubin is about 180 to about 540 min µg/mL.

34. The pharmaceutical composition of claim 29, wherein the AUC of

hexahydrogenosolanorubin is about 180 to 720 min μg/mL.

35. The pharmaceutical composition of claim 19, wherein the carotenoid is encapsulated in the micelle.

36. The pharmaceutical composition of claim 19, further comprising a beta-carotene.

37. The pharmaceutical composition of claim 19, where in the pharmaceutical composition is for intravenous administration.

What is claimed is:

1. A pharmaceutical composition, comprising:
   (a) a chylomicron comprising a mixture of triglyceride, phospholipid and phytosterol, wherein the ratio of triglyceride:phospholipid:phytosterol relative to the pharmaceutical composition ranges from about 80:5:0.1 (w/w) to about 92:12:1 (w/w); and
   (b) a carotenoid.
2. The pharmaceutical composition of claim 1, wherein the ratio of phytosterol is about 0.7 (w/w).
3. The pharmaceutical composition of claim 1, further comprising a pharmaceutically acceptable carrier or excipient.
4. The pharmaceutical composition of claim 3, wherein the pharmaceutically acceptable excipient is tocopherol.
5. The pharmaceutical composition of claim 1, wherein the triglyceride is selected from soy bean oil, pumpkin seed oil, linseed oil, grapeseed oil, olive oil, sunflower seed oil and combination thereof.
6. The pharmaceutical composition of claim 1, wherein the phospholipid is selected from lecithin and phosphatidylcholine.
7. The pharmaceutical composition of claim 1, wherein the carotenoid is carotene.
8. The pharmaceutical composition of claim 1, wherein the carotenoid is selected from solanorubin; octohydrogenosolanorubin, hexahydrogenosolanorubin and combination thereof.
9. The pharmaceutical composition of claim 8, wherein the weight ratio of solanorubin, octohydrogenosolanorubin and hexahydrogenosolanorubin relative to the pharmaceutical composition is about 4-5: 0.1-1: 0.1-1.
10. The pharmaceutical composition of claim 9, wherein the weight ratio of

solanorubin: octohydrogenosolanorubin: hexahydrogenosolanorubin is about 4.2-4.5: 0.3-0.5: 0.3-0.5 relative to the pharmaceutical composition.

11. The pharmaceutical composition of claim 1, wherein the diameter of the chylomicron is about 75 to about 450 nm.
12. The pharmaceutical composition of claim 1, wherein the diameter of the chylomicron is about 100 to about 150 nm.
13. The pharmaceutical composition of claim 1, wherein the carotenoid is encapsulated in the chylomicron.
14. The pharmaceutical composition of claim 8, wherein the area under the drug concentration–time curve (AUC) of solanorubin is about 450 to 580 min μg/mL.
15. The pharmaceutical composition of claim 8, wherein the area under the drug concentration–time curve (AUC) of octohydrogenoso- lanorubin is about 150 to about 200 min μg/mL.
16. The pharmaceutical composition of claim 8, wherein the area under the drug concentration–time curve (AUC) of hexahydrogenoso- lanorubin is about 65 to about 120 min μg/mL.
17. The pharmaceutical composition of claim 1, further comprising a beta-carotene.
18. The pharmaceutical composition of claim 1, wherein the pharmaceutical composition is constituted with water and phospholipid prior to use.