CLAIMS:

1. A liposomal delivery system comprising discrete liposomes, the system comprising

   ~~a minor lipid component dimethyldioctadecylammonium (DDA);~~

   a first~~major~~ lipid component or components selected from one or more of the following glycerolipid, glycerophospholipid, and/or sphingolipid or a combination thereof; ~~which is capable of forming a stable lipid bilayer with the minor lipid component dimethyldioctadecylammonium (DDA);~~
   a second lipid component dimethyldioctadecylammonium (DDA); and

   a tocopherol polyethylene glycol (PEG) ester derivative;
   wherein the first lipid component is capable of forming a stable lipid bilayer with the second lipid component dimethyldioctadecylammonium (DDA); and
   wherein the liposomal delivery system does not comprise the lipid cholesterol.

2. The liposomal delivery system of claim 1 wherein the first~~major~~ lipid component is present in the liposomal delivery complex in an amount greater than the second~~minor~~ lipid component.

3. The liposomal delivery system of claim 1 ~~or claim 2~~ wherein the amount of the first~~major~~ lipid component in the liposomal delivery complex is greater than the amount of the second~~minor~~ lipid component DDA which is greater than the amount of the tocopherol polyethylene glycol (PEG) ester derivative.

4. The liposomal delivery system of any of the preceding claims comprising less than approximately 50% by weight, based on the total weight of the system, of the second~~minor~~ lipid component dimethyldioctadecylammonium (DDA); approximately 50% or more, by weight based on the total weight of the system, of the first~~major~~ lipid component or components; and less than approximately 10% by weight, based on the total weight of the system, of a tocopherol polyethylene glycol (PEG) ester derivative.

5. The liposomal delivery system of any of the preceding claims comprising less than approximately 20% by weight, based on the total weight of the system, of the second~~minor~~ lipid component dimethyldioctadecylammonium (DDA); approximately 80% or more, by weight based on the total weight of the system, of the first~~major~~ lipid component or components; and less than approximately 10% by weight, based on the total weight of the system, of a tocopherol polyethylene glycol (PEG) ester derivative.

6. The liposomal delivery system of any of the preceding claims comprising from 15% to 20% by weight based on the total weight of the system of the second~~minor~~ lipid component dimethyldioctadecylammonium (DDA), from 80% to 85% by weight based on the total weight of the system of the first~~major~~ lipid component or components, and from 0.1% to 10% by weight based on the total weight of the system of the tocopherol polyethylene glycol (PEG) ester derivative.

7. The liposomal delivery system according to any of claims 1 to 6 consisting of the second~~minor~~ lipid component dimethyldioctadecylammonium (DDA); the first~~major~~ lipid component or components selected from one or more of the following glycerolipid, glycerophospholipid, and/or sphingolipid or a combination thereof; and the tocopherol polyethylene glycol (PEG) ester derivative.

8. The liposomal delivery system of any of the preceding claims, wherein the second~~minor~~ lipid component is dimethyldioctadecylammonium-bromide, dimethyldioctadecylammonium-chloride, dimethyldioctadecylammonium-phosphate and/or dimethyldioctadecylammonium-acetate.

9. The liposomal delivery system of any of the preceding claims wherein the second~~minor~~ lipid component is dimethyldioctadecylammonium-bromide.

10. The liposomal delivery system of any of the preceding claims wherein the first~~major~~ lipid component is selected from one or more of the following diacylglycerophosphocholines, glycerophosphates, glycerophosphoethanolamines, glycerophosphoglycerols, glycerophosphoglycero-phosphoglycerols and/or glycerophosphoserines .

11. The liposomal delivery system of any of the preceding claims wherein the first~~major~~ lipid component is a glycerophosphocholine.

12. The liposomal delivery system of any of the preceding claims wherein the first~~major~~ lipid component is phosphatidylcholine.

13. The liposomal delivery system of any of the preceding claims wherein the tocopherol PEG ester derivative is present less than approximately 9%, preferably less than approximately 7%, more preferably less than approximately 5%, even more preferably less than approximately 4%, still more preferably less than approximately 3%, even more preferably less than approximately 2%, and most preferably less than approximately 1% by weight based on the total weight of the system.

14. The liposomal delivery system of any of the preceding claims wherein the tocopherol PEG ester derivative comprises a PEG portion which is less than approximately 10 KDa, preferably from 1 to 10 kDa, more preferably 1 to 5 kDa.

15. The liposomal delivery system of any of the preceding claims wherein the tocopherol PEG ester derivative is selected from one of more of the following tocopherol sebacate polyethylene glycol, tocopherol dodecanodioate polyethylene glycol, tocopherol suberate polyethylene glycol, tocopherol azelaate polyethylene glycol, tocopherol citraconate polyethylene glycol, tocopherol methylcitraconate polyethylene glycol, tocopherol itaconate polyethylene glycol, tocopherol maleate polyethylene glycol, tocopherol glutarate polyethylene glycol, tocopherol glutaconate polyethylene glycol and/or tocopherol phthalate polyethylene glycol.

16. The liposomal delivery system of any of the preceding claims wherein the tocopherol PEG ester derivative is a delta tocopherol or alpha tocopherol PEG derivative.

17. The liposomal delivery system of any of the preceding claims wherein the tocopherol PEG ester derivative is D-alpha tocopherol polyethylene glycol 1000 succinate.

18. The liposomal delivery system of any of the preceding claims comprising ~~the major lipid component~~ phosphatidylcholine, preferably soy phosphatidylcholine (SPC); ~~the minor lipid component~~ dimethyldioctadecylammonium (DDA); and the tocopherol PEG ester derivative D-alpha tocopherol polyethylene glycol succinate (TPGS).

19. The liposomal delivery system of any of the preceding claims wherein each discrete liposome has an average diameter less than 150nm.

20. The liposomal delivery system of any of the preceding claims which is cationic.

21. The liposomal delivery system of any of the preceding claims which is in the form of a fluid, dispersion, dried powder or solid.

22. The liposomal delivery system of any of the preceding claims which is in the form of stable freeze dried or spray dried solid or powder.

23. The liposomal delivery system of any of the preceding claims ~~adapted~~ for mucosal administration, preferably ~~adapted~~ for intranasal administration.

24. A bioactive agent liposomal delivery complex comprising the liposomal delivery system of any of the preceding claims and a bioactive agent.

25. A pharmaceutical composition comprising the liposomal delivery system of any of the preceding claims, a bioactive agent and a pharmaceutically acceptable excipient.

26. The bioactive agent liposomal delivery complex of claim 24 or the pharmaceutical composition of claim 25 wherein the bioactive agent is selected from one or more of the following, vaccines, immunogenic compositions, proteins, nucleic acids, drugs/medicaments, therapeutic agents, imaging agents and/or diagnostic agents.

27. The liposomal delivery system of any of claims 1 to 23, bioactive agent liposomal delivery complex of claim 24 or the pharmaceutical composition of claim 25 for use in therapy.

28. A method for preparing~~the delivery of~~ a bioactive agent for delivery to a subject, the method comprising: providing~~using~~ the liposomal delivery system of any of claims 1 to 23, bioactive agent liposomal delivery complex or the pharmaceutical composition of any of claims 24 to 27; and ~~wherein the~~ adsorbing a bioactive agent ~~or agent~~ to the liposomal delivery system ~~is adsorbed to~~ or encapsulating~~ed~~ a bioactive agent within the liposomal delivery system to form a bioactive agent liposomal delivery complex. ~~and the method comprises adminstering the bioactive agent liposomal delivery complex or the pharmaceutical composition to a subject in need thereof.~~

29. A liposomal delivery system comprising discrete liposomes, the system comprising

    ~~less than approximately 50% by weight based on the total weight of the system, of a minor lipid component dimethyldioctadecylammonium (DDA);~~ more than approximately 50% by weight based on the total weight of the system, of a first~~major~~ lipid component or components selected from one or more of the following glycerolipid, glycerophospholipid, and/or sphingolipid or a combination thereof;

    less than approximately 50% by weight based on the total weight of the system, of a second lipid component dimethyldioctadecylammonium (DDA);

    ~~which is capable of forming a stable lipid bilayer with the minor lipid component dimethyldioctadecylammonium (DDA);~~ and

    less than approximately 10%, by weight based on the total weight of the system, of a tocopherol polyethylene glycol (PEG) ester derivative, wherein the first lipid component is capable of forming a stable lipid bilayer with the second lipid component dimethyldioctadecylammonium (DDA).

30. The liposomal delivery system of claim 29 comprising less than approximately 20% by weight, based on the total weight of the system, of the second~~minor~~ lipid component dimethyldioctadecylammonium (DDA); approximately 80% or more, by weight based on the total weight of the system, of the first~~major~~ lipid component or components; and

less than approximately 10% by weight, based on the total weight of the system, of a tocopherol polyethylene glycol (PEG) ester derivative.

31. The liposomal delivery system of claim 29 or 30 consisting of the secondminor lipid component dimethyldioctadecylammonium (DDA); the firstmajor lipid component or components selected from one or more of the following glycerolipid, glycerophospholipid, and/or sphingolipid or a combination thereof; and the tocopherol polyethylene glycol (PEG) ester derivative.

32. A liposomal delivery system comprising the lipid dimethyldioctadecylammonium (DDA) and a PEG (polyethylene glycol) derivative, D-alpha tocopherol polyethylene glycol succinate (TPGS), including other lipids, such as phosphatidyl choline (PC), but excluding cholesterol.

33. The liposomal delivery system according to claim 32 comprising or consisting of 1% by mass TPGS, 16.6% by mass DDA and 82.4% by mass soy phosphatidyl choline (SPC).