CLAIMS

1. Use of liposomes comprising a toll-like receptor 4 agonist and a Tau phosphopeptide comprising an amino acid sequence selected from the group consisting of SEQ ID NO:1 to SEQ ID NO:3 and SEQ ID NO:5 to SEQ ID NO:12 for use in the manufacture of a medicament for treating a tauopathy without inducing a severe adverse event in a human subject in need thereof, wherein an effective amount of the liposomes is administered to the human subject, the effective amount of liposomes comprises 25 nmoles to 750 nmoles per dose of the Tau phosphopeptide, and the Tau phosphopeptide is presented on the surface of the liposome.

2. The use of claim 1, wherein the Tau phosphopeptide consists of an amino acid sequence selected from the group consisting of SEQ ID NO:27 to SEQ ID NO:29 and SEQ ID NO:31 to SEQ ID NO:38, preferably the Tau phosphopeptide consists of an amino acid sequence of SEQ ID NO:28.

3. The use of claim 1 or 2, wherein the effective amount of liposomes comprises 100 µg to 2500 µg per dose of the Tau phosphopeptide, preferably 300 µg to 2400 µg per dose, 300 µg to 1800 µg per dose, or 300 µg to 900 µg per dose of the Tau phosphopeptide.

4. The use of claim 3, wherein the effective amount of liposomes comprises 300 µg per dose, 900 µg per dose, 1800 µg per dose, or 2400 µg per dose of the Tau phosphopeptide.

5. The use of any one of claims 1 to 4, wherein the liposomes are administered subcutaneously.

6. The use of any one of claims 1 to 4, wherein the liposomes are administered intramuscularly.

7. The use of any one of claims 1 to 6, further comprising administering to the subject a second dose of the effective amount of liposomes 1 to 24 weeks after the initial administration.

8. The use of any one of claims 1 to 7, wherein the liposome further comprises a helper T-cell epitope and a lipidated CpG oligonucleotide.

9. The use of claim 8, wherein the lipidated CpG oligonucleotide has a nucleotide sequence selected from the group consisting of SEQ ID NO:18 to SEQ ID NO:22, wherein the CpG oligonucleotide has one or more phosphorothioate internucleotide linkages, and the CpG oligonucleotide is covalently linked to at least one lipophilic group, optionally via a PEG linker.

10. The use of claim 9, wherein the CpG oligonucleotide is covalently linked to at least one lipophilic group via a PEG linker.

11. The use of any one of claims 1 to 10, wherein the liposome further comprises one or more lipids selected from the group consisting of 1,2-dimyristoyl-sn-glycero-3-phosphocholine (DMPC), 1,2-dimyristoyl-sn-glycero-3-phosphoryl-3'-rac-glycerol (DMPG), and cholesterol.

12. The use of any one of claims 8 to 11, wherein the helper T-cell epitope comprises at least one amino acid sequence selected from the group consisting of SEQ ID NO:13 to SEQ ID NO:17, SEQ ID NO:23 to SEQ ID NO:26, and SEQ ID NO:39 to SEQ ID NO:44.

13. The use of any one of claims 8 to 12, wherein the effective amount of liposomes comprises the helper T-cell epitope at an amount of 2 nmoles to 110 nmoles per dose.

14. The use of any one of claims 8 to 13, wherein the effective amount of liposomes comprises the helper T-cell epitope having an amino acid sequence selected from the group consisting of SEQ ID NO:13 to SEQ ID NO:17, SEQ ID NO:23 to SEQ ID NO:26, and SEQ ID NO:39 to SEQ ID NO:44 at an amount of 25 µg to 620 µg per dose, preferably, 75 µg to 450 µg per dose, and preferably the helper T-cell epitope is a T50 helper T-cell epitope consisting of the amino acid sequence of SEQ ID NO: 13.

15. The use of any one of claims 1 to 14, wherein the effective amount of liposomes comprises the toll-like receptor 4 agonist at an amount of 30 µg to 900 µg per dose, preferably 100 µg to 585 µg per dose, and preferably the toll-like receptor 4 agonist is monophosphoryl hexa-acyl Lipid A, 3-deacyl.

16. The use of any one of claims 8 to 15, wherein the effective amount of liposomes comprises the lipidated CpG oligonucleotide having a nucleotide sequence selected from the

group consisting of SEQ ID NO:18 to SEQ ID NO:22 at an amount of 50 μg to 1250 μg per dose, preferably 150 μg to 800 μg per dose, and preferably the lipidated CpG oligonucleotide consists of the nucleotide sequence of SEQ ID NO:18.

17. The use of any one of claims 1 to 16, wherein the liposome comprises:

(1) the Tau phosphopeptide having the amino acid sequence of SEQ ID NO:28;

(2) the toll-like receptor 4 agonist comprising monophosphoryl hexa-acyl Lipid A, 3-deacyl;

(3) the helper T-cell epitope comprising the amino acid sequence of SEQ ID NO: 39;

(4) the lipidated CpG oligonucleotide comprising the nucleotide sequence of SEQ ID NO:18; and

(5) at least one lipid selected from the group consisting of 1,2-dimyristoyl-sn-glycero-3-phosphocholine (DMPC), 1,2-dimyristoyl-sn-glycero-3-phosphoryl-3'-rac-glycerol (DMPG), and cholesterol.

18. The use of any one of claims 1 to 17, wherein the subject is in need of a treatment of Alzheimer's Disease, preferably early Alzheimer's Disease, mild cognitive impairment (MCI) due to Alzheimer's Disease, or mild to moderate Alzheimer's Disease.