CLAIMS

1. A vaccine composition comprising i) a construct comprising the Aβ1-6 peptide bound to a virus-like particleand ii) a pharmaceutically acceptable adjuvant, wherein said vaccine composition comprises:
   (a) about 100µl to about 500µl MF59 per dose, or
   (b) about 50µg to about 850µg aluminium salt per dose.

2. A vaccine composition according to claim 1, comprising between 5 to 600µg of the construct comprising the Aβ1-6 peptide.

3. A vaccine composition according to claim 1 or claim 2, comprising 150µg or 450µg of the construct comprising the Aβ1-6 peptide.

4. A vaccine composition according to any previous claim, wherein the construct comprising the Aβ1-6 peptide is in aqueous solution.

5. A vaccine composition according to any previous claim wherein the construct comprising the Aβ1-6 peptide consists of a virus-like particle (VLP) structure chemically coupled to the Aβ1-6 peptide.

6. A vaccine composition according to claim 5, wherein the VLP is from the RNA bacteriophage Qβ, the Aβ1-6 peptide is fused at its C-terminus to the spacer GGC, and wherein the VLP is chemically coupled to said Aβ1-6 peptide with a bivalent linker.

7. The vaccine according to any previous claim, wherein the vaccine composition comprises about 125µl or about 250µl MF59 per dose.

8. The vaccine according to any of claims 1-6, wherein the vaccine composition comprises about 50µg, about 150µg, about 450µg, about 600µg or about 850µg aluminium salt per dose.

9. A vaccine according to any of claims 1, 2 or 4-6 comprising, per dose:

(i) about 150μg of the construct comprising the Aβ1-6 peptide and about 150μg aluminium salt;

(ii) about 450μg of the construct comprising the Aβ1-6 peptide and about 150μg aluminium salt;

(iii) about 450μg of the construct comprising the Aβ1-6 peptide and about 450μg aluminium salt;

(iv) about 450μg of the construct comprising the Aβ1-6 peptide and about 600μg aluminium salt;

(v) about 450μg of the construct comprising the Aβ1-6 peptide and about 800μg aluminium salt;

(vi) about 600μg of the construct comprising the Aβ1-6 peptide and about 600μg aluminium salt;

(vii) about 600μg of the construct comprising the Aβ1-6 peptide and about 800μg aluminium salt;

(viii) about 150μg of the construct comprising the Aβ1-6 peptide and about 250μl MF59;

(ix) about 450μg of the construct comprising the Aβ1-6 peptide and about 125μl MF59; or

(x) about 450μg of the construct comprising the Aβ1-6 peptide and about 250μl MF59.

10. A combination comprising a vaccine composition according to any one of claims 1-9, and at least one agent selected from the list of nootropic agents, memantine, antidepressant agents, antipsychotic agents, antidiabetic agents, antioxidative agents, anti-inflammatory agents, lipid-lowering agents, hormone substitution agents, amyloid lowering agents, aggregation inhibitors, chelators, and immunomodulatory agents.

11. A vaccine composition according to any one of claims 1-9 or a combination according to claim 10, for use in therapy.

12. A vaccine composition according to any one of claims 1-9 or a combination according to claim 10 for use in the treatment and/or prevention of dementia, Alzheimer's disease, dementia associated with Alzheimer's disease or disorders related thereto.

13. Use of a vaccine composition according to any one of claims 1-9 or a combination according to claim 10, for the manufacture of a medicament for the treatment and/or prevention of dementia, Alzheimer's disease, dementia associated with Alzheimer's disease or disorders related thereto.

14. Use of a vaccine composition according to any one of claims 1-9 or a combination according to claim 10, for the manufacture of a medicament for the treatment of subjects at risk of developing dementia, Alzheimer's Disease, dementia associated with Alzheimer's disease or disorders related thereto.

15. The use according to any one of claims 11-14, wherein the vaccine composition or combination is administered at intervals of about 6 to about 12 weeks.

16. The use according to any one of claims 11-14, wherein the vaccine composition or combination is administered twice or more at intervals of about 6 weeks and then twice or more at intervals of about 12 weeks.

17. A composition comprising an Aβ1-6 peptide for use in treating dementia, Alzheimer's Disease, dementia associated with Alzheimer's Disease or conditions related thereto, wherein the composition is administered twice or more at intervals of about 6 weeks and then twice or more at intervals of about 12 weeks.

18. A commercial package comprising: (a) the vaccine composition of any of claims 1-9 and (b) instructions for use.

19. A bottle, vial, syringe or test tube containing a vaccine composition according to any one of claims 1-9 or a combination according to claim 10.

Claims

1. An invention not claimed in any divisional application.