CLAIMS

1. A vaccine composition comprising a flavivirus peptide comprising one or more of the CD8+ T cell epitopes set out in SEQ ID NOs: 1 to 10.

2. The vaccine composition of claim 1, wherein the flavivirus peptide is attached to a nanoparticle.

3. The vaccine composition of claim 2, wherein the nanoparticle is a gold nanoparticle, a calcium phosphate nanoparticle, or a silicon nanoparticle.

4. The vaccine composition of claim 3, wherein the gold nanoparticle is coated with alpha-galactose and/or beta-GlcNHAc.

5. The vaccine composition of any one of claim 2s to 4, wherein the flavivirus peptide is attached to the nanoparticle via a linker.

6. The vaccine composition of any one of the preceding claims, which comprises two or more flavivirus peptides each comprising a different CD8+ T cell epitope.

7. The vaccine composition of claim 6, wherein the two or more flavivirus peptides are two or more of the peptides set out in SEQ ID NOs: 1 to 10.

8. The vaccine composition of claim 6 or 7, wherein each of the two or more flavivirus peptides is attached to a nanoparticle.

9. The vaccine composition of any one of the preceding claims, comprising at least two flavivirus peptides comprising a CD8+ T cell epitope, each of which interacts with a different HLA supertype.

10. The vaccine composition of any one of the preceding claims, which comprises at least one flavivirus peptide comprising a CD8+ T cell epitope that interacts with at least

two different HLA supertypes.

11. The vaccine composition of claim 9 or 10, wherein the at least two different HLA supertypes are selected from HLA-A1, HLA-A2, HLA-A3, HLA-A24, HLA-B7, HLA-B8, HLA-B27, HLA-B44, HLA-B58 and HLA-B62.

12. The vaccine composition of claim 11, wherein the at least two different HLA supertypes are HLA-A2 and HLA-A24.

13. The vaccine composition of any one of the preceding claims, wherein the CD8+ T cell epitope is conserved between flaviviruses.

14. The vaccine composition of any one of the preceding claims, wherein the CD8+ T cell epitope is conserved between Zika viruses, West Nile viruses and/or Dengue viruses.

15. The vaccine composition of any one of the preceding claims, comprising a peptide comprising a CD4+ T cell epitope.

16. The vaccine composition of claim 15, wherein the CD4+ T cell epitopes interacts with all HLA class II types.

17. The vaccine composition of claim 15 or 16, wherein the CD4+ T cell epitope comprises the sequence set out in SEQ ID NO: 10 or 11.

18. A method of preventing or treating a flavivirus infection, comprising administering the vaccine composition of any one of the preceding claims to an individual infected with, or at risk of being infected with, a flavivirus.

19. The vaccine composition of any one of claims 1 to 17 for use in a method of preventing or treating a flavivirus infection in an individual.

20. The method of claim 18 or vaccine composition of claim 19, wherein the flavivirus infection is a Zika virus infection, West Nile virus infection and/or Dengue virus infection.

21. The method or vaccine composition of claim 20, wherein:

(a) the Zika virus infection is an African Zika virus or an Asian Zika virus infection; and/or

(b) the Dengue virus infection is a Dengue virus 1, Dengue virus 2, Dengue virus 3, or Dengue virus 4 infection.

CLAIMS

1. A vaccine composition comprising a flavivirus peptide comprising one or more CD8+ T cell epitopes, in which the epitopes comprise at least the epitope set out in SEQ ID NO: 8.

2. A vaccine composition according to Claim 1, in which the flavivirus peptide is attached to a nanoparticle.

3. A vaccine composition according to Claim 2, in which the nanoparticle is a gold nanoparticle, a calcium phosphate nanoparticle, or a silicon nanoparticle.

4. A vaccine composition according to Claim 3, in which the gold nanoparticle is coated with alpha-galactose and/or beta-GlcNHAc.

5. A vaccine composition according to Claim 2, 3 or 4, in which the flavivirus peptide is attached to the nanoparticle via a linker.

6. A vaccine composition according to any preceding claim, which comprises two or more flavivirus peptides each comprising a different CD8+ T cell epitope.

7. A vaccine composition according to Claim 6, in which the two or more flavivirus peptides are two or more of the peptides set out in SEQ ID NOs: 1 to 10.

8. A vaccine composition according to Claim 6 or 7, in which each of the two or more flavivirus peptides is attached to a nanoparticle.

9. A vaccine composition according to any preceding claim, comprising at least two flavivirus peptides comprising a CD8+ T cell epitope, each of which interacts with a different HLA supertype.

10. A vaccine composition according to any preceding claim, which comprises at least one flavivirus peptide comprising a CD8+ T cell epitope that interacts with at least two different HLA supertypes.

11. A vaccine composition according to Claim 9 or 10, in which the at least two different HLA supertypes are selected from HLA-A1, HLA-A2, HLA-A3, HLA-A24, HLA-B7, HLA-B8, HLA-B27, HLA-B44, HLA-B58 and HLA-B62.

12. A vaccine composition according to Claim 11, in which the at least two different HLA supertypes are HLA-A2 and HLA-A24.

13. A vaccine composition according to any preceding claim, in which the CD8+ T cell epitope is conserved between flaviviruses.

14. A vaccine composition according to any preceding claim, in which the CD8+ T cell epitope is conserved between Zika viruses, West Nile viruses and/or Dengue viruses.

15. A vaccine composition according to any preceding claim, comprising a peptide comprising a CD4+ T cell epitope.

16. A vaccine composition according to Claim 15, in which the CD4+ T cell epitopes interacts with all HLA class II types.

17. A vaccine composition according to Claim 15 or 16, in which the CD4+ T cell epitope comprises the sequence set out in SEQ ID NO: 11 or 12.

18. A vaccine composition according to any preceding claim for use in the prevention or treatment of a Zika virus infection or a Dengue virus infection in an individual.

19. Use of a vaccine composition according to any of Claims 1 to 17 in the preparation of a medicament for treating a Zika virus infection or a Dengue virus infection in an individual.