1953, TSV01, DS09-280106, DS31-291005, 1349, GD01/03, 44, 43, China 04, FJ11/99, FJ-10, QHD13CAIQ, CO/BID-V3358, FJ/UH21/1971, GU/BID-V2950, American Asian, GWL18, IN/BID-V2961, Od2112, RR44, 1392, 1016DN, 1017DN, 1070DN, 98900663DHF, BA05i, 1022DN, NGC, Pak-L-2011, Pak-K-2009, Pak-M-2011, PakL-2013, Pak—L-2011, Pak-L-2010, Pak-L-2008, PE/NFI1159, PE/IQA 2080, SG/D2Y98P-PP1, SG/05K3295DK1, LK/BID/V2421, LK/BID-V2422, LK/BID-V2416, 1222-DF-06, TW/BID-V5056, TH/BID-V3357, US/BID-V5412, US/BID-V5055, IQT1797, VN/BID-V735, US/Hawaii/1944, CH53489, or 341750.

[0007] Provided herein are methods for treatment or reduction of a melanoma, comprising: administering DENV1 #45AZ5 to a subject in need thereof, wherein the subject has melanoma; obtaining dendritic cells from the subject; contacting the dendritic cells with a tumor antigen from the subject to generate primed dendritic cells; and administering the primed dendritic cells to the subject. Further provided herein are methods wherein the melanoma is advanced melanoma. Further provided herein are methods wherein the melanoma is advanced and is Stage III or Stage IV melanoma. Further provided herein are methods wherein the DENV1 #45AZ5 is administered in an amount between 10^4 pfu and 10^8 pfu. Further provided herein are methods wherein the DENV1 #45AZ5 is administered in an amount between 10^5 pfu and 10^7 pfu. Further provided herein are methods wherein the DENV1 #45AZ5 is administered in a concentration of 10,000 PFU/mL to 90,000 PFU/mL. Further provided herein are methods wherein the DENV1 #45AZ5 is administered in a concentration of about 30,000 PFU/mL.

[0008] Provided herein are methods for treatment or reduction of a melanoma, comprising: administering DENV2 #1710 to a subject in need thereof, wherein the subject has melanoma; obtaining dendritic cells from the subject; contacting the dendritic cells with a tumor antigen from the subject to generate primed dendritic cells; and administering the primed dendritic cells to the subject. Further provided herein are methods wherein the melanoma is advanced melanoma. Further provided herein are methods wherein the melanoma is advanced and is Stage III or Stage IV melanoma. Further provided herein are methods wherein the DENV2 #1710 is administered in an amSOount between 10^4 pfu and 10^8 pfu. Further provided herein are methods wherein the DENV2 #1710 is administered in an amount between 10^5 pfu and 10^7 pfu. Further provided herein are methods wherein the DENV2 #1710 is administered in a concentration of 10,000 PFU/mL to 90,000 PFU/mL. Further provided herein are methods wherein the DENV2 #1710 is administered in a concentration of about 30,000 PFU/mL.

[0008a] Provided herein are uses of a Dengue virus in the manufacture of a medicament for treatment or reduction of advanced melanoma, wherein the Dengue virus is to be administered to a subject in need thereof, wherein the subject has advanced melanoma; and wherein primed dendritic cells are to be further administered to the subject, wherein the primed dendritic cells are produced by contacting dendritic cells with a tumor antigen.

CLAIMS

WHAT IS CLAIMED IS:

1. Use of a Dengue virus in the manufacture of a medicament for treatment or reduction of advanced melanoma, wherein the Dengue virus is to be administered to a subject in need thereof, wherein the subject has advanced melanoma; and

wherein primed dendritic cells are to be further administered to the subject, wherein the primed dendritic cells are produced by contacting dendritic cells with a tumor antigen.

2. The use of claim 1, wherein the advanced melanoma is Stage III or Stage IV melanoma.

3. The use of claim 1, comprising obtaining the dendritic cells from the subject at least a week prior to administration of the Dengue virus.

4. The use of claim 1, wherein the Dengue virus is to be administered in an amount between 10^4 pfu and 10^8 pfu.

5. The use of claim 1, wherein the Dengue virus is to be administered in an amount between 10^5 pfu and 10^7 pfu.

6. The use of claim 1, wherein the Dengue virus is to be administered in a concentration of 10,000 PFU/mL to 90,000 PFU/mL.

7. The use of claim 1, wherein the Dengue virus is to be administered in a concentration of about 30,000 PFU/mL.

8. The use of claim 1, wherein the primed dendritic cells are to be administered 4 days to 10 days after administration of the Dengue virus.

9. The use of claim 1, wherein the Dengue virus is to be administered subcutaneously or via intratumoral injection.

10. The use of claim 1, wherein the primed dendritic cells are to be administered when the subject presents a febrile symptom.

11. The use of claim 1, wherein the primed dendritic cells are to be administered when the subject has reached a temperature of 101°F.

12. The use of claim 1, wherein a first aliquot of primed dendritic cells is to be administered to the subject at a first time and a second aliquot of primed dendritic cells at a second time.

13. The use of claim 12, wherein the first time and the second time are separated by up to 30 days.

14. The use of claim 12, wherein the first time and the second time are separated by about 3 days.

15. The use of claim 12, wherein the number of primed dendritic cells in the first aliquot of primed dendritic cells is 10^4 cells to 10^8 cells.

16. The use of claim 12, wherein the total number of primed dendritic cells in each of the first aliquot of primed dendritic cells and second aliquot of primed dendritic cells is 10^6 cells to 10^9 cells.

17. The use of claim 1, wherein the dendritic cells are allogeneic to the subject.

18. The use of claim 1, wherein the dendritic cells are autologous to the subject.

19. The use of claim 1, wherein the dendritic cells are obtained from the subject.

20. The use of claim 1, wherein the dendritic cells are contacted with tumor lysate from the subject.

21. The use of claim 1, wherein the primed dendritic cells produce at least about 16 ng/mL or at least about 29 ng/mL IL-12p70.

22. The use of claim 1, wherein the Dengue virus is a serotype 1, 2, 3, 4 or 5.

23. The use of claim 1, wherein the Dengue virus is DENV2 #1710.

24. The use of claim 1, wherein the Dengue virus is DENV1 #45AZ5.

25. The use of claim 1, wherein the Dengue virus is S16803, HON 1991 C, HON 1991 D, HON 1991 B, HON 1991 A, SAL 1987, TRI 1981, PR 1969, IND 1957, TRI 1953, TSV01, DS09-280106, DS31-291005, 1349, GD01/03, 44, 43, China 04, FJ11/99, FJ-10, QHD13CAIQ, CO/BID-V3358, FJ/UH21/1971, GU/BID-V2950, American Asian, GWL18, IN/BID-V2961, Od2112, RR44, 1392, 1016DN, 1017DN, 1070DN, 98900663DHF, BA05i, 1022DN, NGC, Pak-L-2011, Pak-K-2009, Pak-M-2011, PakL-2013, Pak—L-2011, Pak-L-2010, Pak-L-2008, PE/NFI1159, PE/IQA 2080, SG/D2Y98P-PP1, SG/05K3295DK1, LK/BID/V2421, LK/BID-V2422, LK/BID-V2416,

1222-DF-06, TW/BID-V5056, TH/BID-V3357, US/BID-V5412, US/BID-V5055, IQT1797, VN/BID-V735, US/Hawaii/1944, CH53489, or 341750.