

Supplemental Text.

6 Melanoma Helper Peptide Vaccine

The peptides in 6MHP vaccines were Tyrosinase⁵⁶⁻⁷⁰ (AQNILLSNAPLGPQFP), Tyrosinase³⁸⁶⁻⁴⁰⁶ (FLLHHAFVDSIFEQWLQRHRP), Melan-A/MART-1⁵¹⁻⁷³ (RNGYRALMDKSLHVGVTQCALTRR), MAGE-3²⁸¹⁻²⁹⁵ (TSYVKVLHHMVKISG), MAGE-1,2,3,6¹²¹⁻¹³⁴ (LLKYRAREPVTKAE), gp100⁴⁴⁻⁵⁹ (WNRQLYPEWTEAQRDL).

Tumor Microenvironment- Multiplex Immunohistochemistry and Analysis

Multiplex immunohistochemistry (mIHC) was performed according to the manufacturer's protocol using the OPAL Multiplex Manual IHC kit, and antigen retrieval (AR) buffers AR6 and AR9 (Akoya Biosciences, Marlborough, Massachusetts, USA). DIVA Decloaker AR buffer (Biocare Medical, Pacheco, California, USA) was also used. Staining sequence, antibodies, and AR buffers were as follows for the 2 multiplex-IFH panels.

Panel 1, TLS Identification

AR9, CD8 (1:500, clone C8/144B, Agilent Technologies, Santa Clara, California, USA) Opal540;
AR6, CD20 (1:1000, clone L26, Agilent Technologies) Opal520;
DIVA, FoxP3 (1:500, clone D2W8E, Cell Signaling Technologies, Danvers, Massachusetts) O570
AR6, PNA^d (1:1000 clone MECA-79, BioLegend, San Diego, California, USA) Opal620;
AR6, CD83 (1:200, Abcam catalog# ab205343, Cambridge, Massachusetts, USA) O650
AR6, Ki67 (1:20, SP6, Abcam) Opal690;
and AR6, spectral DAPI (Akoya Biosciences, Marlborough, Massachusetts, USA).

Panel 2, T_h Cell Lineage Panel

AR9, CD4 (1:100, clone SP35, Cell Marque) Opal520;
AR9, CD8 (1:500, clone C8/144B, Agilent Technologies, Santa Clara, California, USA) Opal540;
AR9, Granzyme B (1:2000, clone GB7, Bio-Rad, Hercules, CA, USA) Opal620;
DIVA, FoxP3 (1:500, clone D2W8E, Cell Signaling Technologies, Danvers, MA, USA) Opal570;
DIVA, T-bet (1:200, clone 4B10, Santa Cruz Biotechnology, Dallas, TX, USA) Opal650;
DIVA, ROR γ t (1:6000, clone 6F3.1, Millipore Sigma, Burlington, MA, USA) Opal690;
and AR6, spectral DAPI (Akoya Biosciences, Marlborough, Massachusetts, USA).

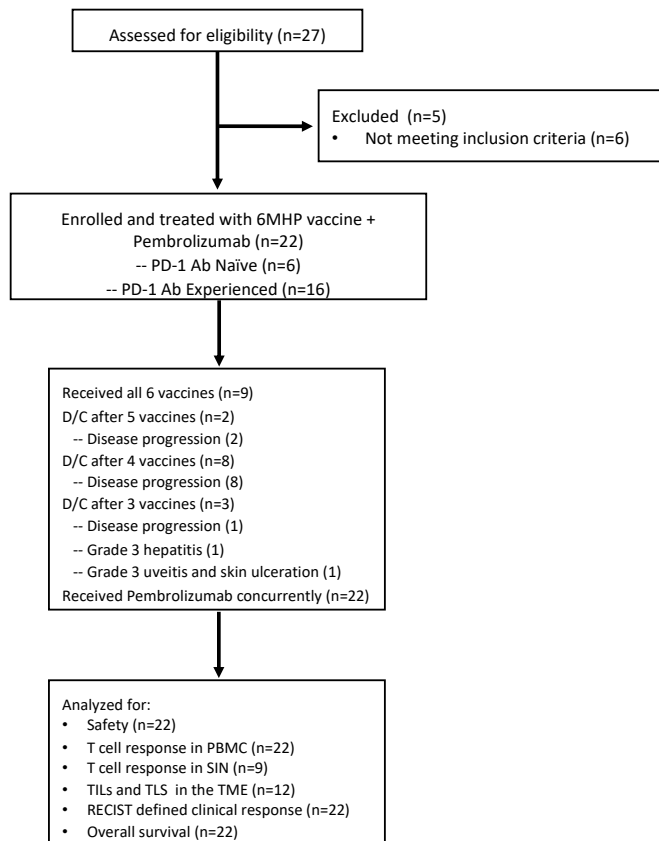
Stained slides were mounted using prolong diamond antifade (Life Technologies, Carlsbad, California, USA) and scanned using the PerkinElmer Vectra V.3.0 system and Vectra software (Akoya Biosciences, Marlborough, Massachusetts, USA).

Densities of CD8⁺ and FoxP3⁺ T cells were obtained in both the TLS and TIL panels; thus, their respective densities were averaged between the two panels for reporting.

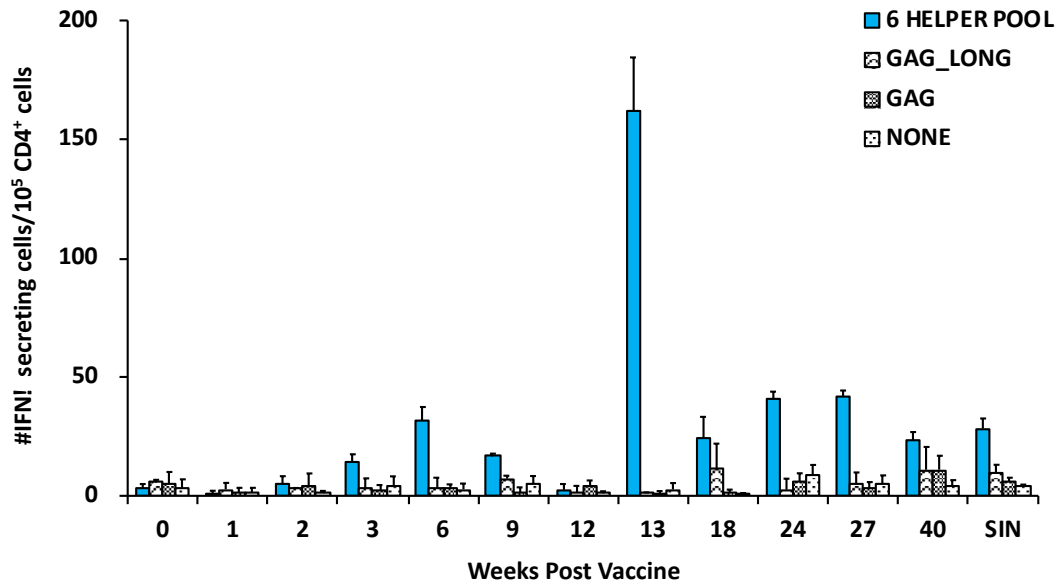
CONSORT FLOW DIAGRAM

Abbreviations:

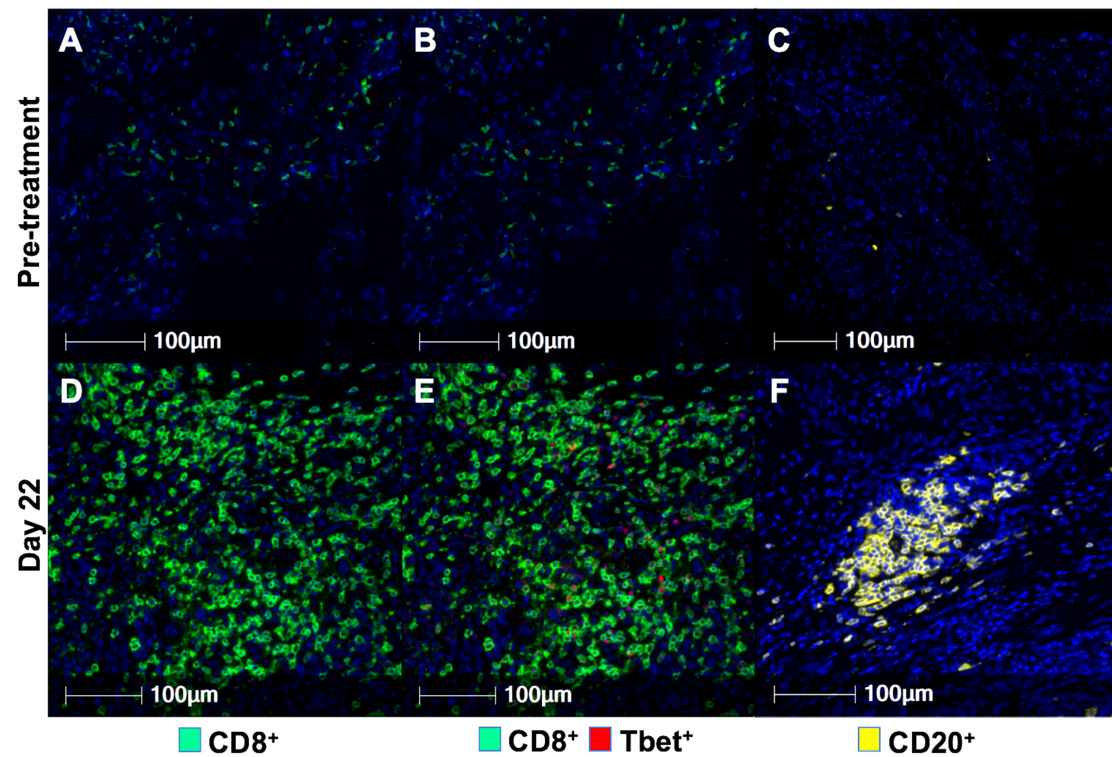
6MHP= 6 melanoma helper peptide
 Ab= antibody
 D/C = discontinued
 PBMC= peripheral blood mononuclear cells
 SIN= sentinel immunized node
 TIL= tumor infiltrating lymphocytes
 TLS= tertiary lymphoid structures
 TME= tumor microenvironment



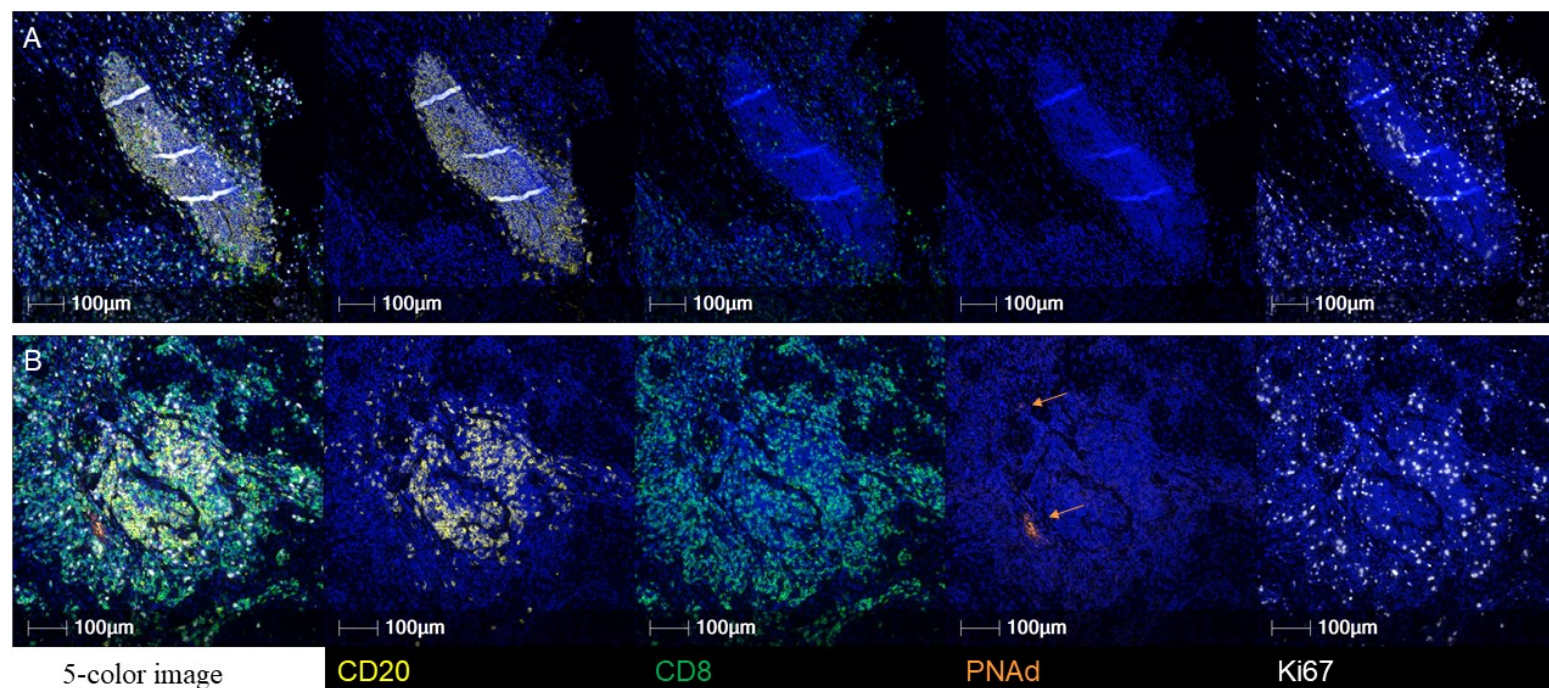
Supplemental Figure 1: CONSORT Flow Diagram



Supplemental Figure 2: Representative direct ex vivo ELIspot assay (VMM1278) showing a high durable immune response (hdRsp) in PBMC (Weeks 0-40). Sentinel Immunized Node (SIN) was obtained on Week 3. PBMC were stimulated in vitro with the pool of 6 melanoma helper peptides (blue). Negative controls included PBMC stimulated with a long HIV-gag peptide (GAG_long), short HIV gag peptide (GAG), and no peptide (none).



Supplemental Figure 3: Representative multiplex immunofluorescence histology of tumor biopsies (VMM1301) showing increased infiltration of CD8⁺ (A, D), CD8⁺Tbet⁺ (B, E), and CD20⁺ (C, F) cells between pre-treatment (A-C) and day 22 (D-F). Blue fluorescence is nuclear staining via DAPI (4',6-diamidino-2-phenylindole).



Supplemental Figure 4. Representative images of TLS-like structures in day 22 participant specimens (A&B). Image A is of an organized TLS-like structure that lacks PNAd+ vasculature, and image B is of a TLS-like structure lacking organized B and T cell regions, but containing PNAd+ vasculature. Images from left to right are of 5-color mIHC, CD20+ B cells (yellow), CD8+ T cells (green), PNAd+ vasculature (orange), Ki67 (white), and DAPI (blue).

Supplemental Table 1. Clinical and Immunologic Data for PD-1 Ab Naïve and Experienced Participants

	PD-1 Ab Naïve (n=6)	PD-1 Ab Experienced (n=16)	All Participants (n=22)
Age at Enrollment, median (range)	71.5 (44-81)	62.5 (36-75)	63 (36-81)
Sex, n			
Male	5 (83%)	8 (50%)	13 (59%)
Female	1 (17%)	8 (50%)	9 (41%)
Race, n			
Caucasian	6 (100%)	15 (94%)	21 (95%)
African-American	0 (0%)	1 (6%)	1 (5%)
Ethnicity, n			
Non-Hispanic	6 (100%)	16 (100%)	22 (100%)
ECOG Performance Status at Enrollment, n			
ECOG 0	4 (67%)	9 (56%)	13 (59%)
ECOG 1	2 (33%)	7 (44%)	9 (41%)
Primary Melanoma, n			
Skin, non-acral	5 (83%)	7 (44%)	12 (54%)
Skin, acral	0 (0%)	5 (31%)	5 (23%)
Anal, mucosal	0 (0%)	2 (12.5%)	2 (9%)
Uveal	1 (17%)	2 (12.5%)	3 (14%)
Stage at Enrollment, n			
Stage IIIC	1 (17%)	0 (0%)	1 (5%)
Stage IV	5 (83%)	16 (100%)	21 (95%)
Metastatic Site			
None	1 (17%)	0 (0%)	1 (4.5%)
Distant Skin/ SQ Tissue	1 (17%)	7 (44%)	8 (36%)
Lung	3 (50%)	11 (69%)	14 (64%)
Liver	1 (17%)	9 (56%)	10 (46%)
Distant Lymph Nodes	1 (17%)	5 (31%)	6 (27%)
Distant Soft Tissue	1 (17%)	6 (38%)	7 (32%)
Bone	0 (0%)	6 (38%)	6 (27%)
Brain	0 (0%)	5 (31%)	5 (23%)
LDH Level at Enrollment, n above ULN^a	1 (17%)	7 (44%)	8 (36%)
Biopsiable tumor^b, n	3 (50%)	9 (56%)	12 (50%)
PD-L1 Status, n			
PD-L1 <1% ^c	2 (33%)	3 (19%)	5 (23%)
PD-L1 ≥1% ^c	3 (50%)	6 (37%)	9 (41%)
PD-L1 Unknown	1 (17%)	7 (44%)	8 (36%)
BRAF Mutation, n			
Wild Type	3 (50%)	11 (69%)	14 (63%)
BRAF V600E	2 (33%)	5 (31%)	7 (32%)
Unknown	1 (17%)	0 (0%)	1 (5%)

Abbreviations: PD-1, programmed cell death protein 1; Ab, antibody; ECOG, Eastern Cooperative Oncology Group; LDH, lactic acid dehydrogenase; ULN, upper limit of normal; PD-L1, programmed death-ligand 1

^a The normal range for blood LDH level is between 125-250 units per liter (U/L).

^b Participants who had one or more additional sites of metastasis available for biopsy pretreatment and on day 22.

^c Percent of tumor cells expressing PD-L1.

Supplemental Table 2A. Treatment Related Adverse Events

MEL64 Maximum Grade Toxicities (Related) 11Nov2021		N=22 ----- Total					
Category	AE	G1 (%)	G2 (%)	G3 (%)	G4 (%)	G5 (%)	Total (%)
OVERALL MAXIMUM	ALL	6 (27)	9 (41)	6 (27)	1 (5)	.	22 (100)
BLOOD/LYMPHATIC	ANEMIA	5 (23)	3 (14)	1 (5)	.	.	9 (41)
CARDIAC	SINUS TACHYCARDIA	1 (5)	.	.	.	.	1 (5)
ENDOCRINE	ADRENAL INSUFFICIENCY	.	.	2 (9)	.	.	2 (9)
	HYPOTHYROIDISM	.	1 (5)	.	.	.	1 (5)
EYE	BLURRED VISION	.	1 (5)	.	.	.	1 (5)
	FLOATERS	.	1 (5)	.	.	.	1 (5)
	OTHER: Cystic macular degeneration (uveitis)	.	.	1 (5)	.	.	1 (5)
	UVEITIS	.	.	1 (5)	.	.	1 (5)
GASTROINTESTINAL	ABDOMINAL PAIN	1 (5)	1 (5)	.	.	.	2 (9)
	DIARRHEA	1 (5)	.	1 (5)	.	.	2 (9)
	DRY MOUTH	.	1 (5)	.	.	.	1 (5)
	DYSPEPSIA	.	3 (14)	.	.	.	3 (14)
	GASTROESOPHAGEAL REFLUX DISEASE	.	1 (5)	.	.	.	1 (5)
	MUCOSITIS ORAL	1 (5)	.	.	.	.	1 (5)
	NAUSEA	4 (18)	1 (5)	.	.	.	5 (23)
	VOMITING	1 (5)	.	.	.	.	1 (5)
GENERAL AND ADMINISTRATION SITE	CHILLS	3 (14)	.	.	.	.	3 (14)
	FATIGUE	10 (45)	7 (32)	1 (5)	.	.	18 (82)
	FEVER	5 (23)	1 (5)	.	.	.	6 (27)
	FLU LIKE SYMPTOMS	1 (5)	1 (5)	.	.	.	2 (9)
	INJECTION SITE REACTION	18 (82)	1 (5)	1 (5)	.	.	20 (91)
	PAIN	2 (9)	.	.	.	.	2 (9)
INJURY/POISONING/PROCEDURAL	BRUISING	5 (23)	.	.	.	.	5 (23)
INVESTIGATIONS	ALANINE AMINOTRANSFERASE INCREASED	1 (5)	1 (5)	.	.	.	2 (9)
	ALKALINE PHOSPHATASE INCREASED	2 (9)	.	.	.	.	2 (9)
	ASPARTATE AMINOTRANSFERASE INCREASED	5 (23)	.	1 (5)	.	.	6 (27)
	CREATININE INCREASED	.	2 (9)	.	.	.	2 (9)
	LYMPHOCYTE COUNT DECREASED	2 (9)	2 (9)	1 (5)	1 (5)	.	6 (27)
	NEUTROPHIL COUNT DECREASED	1 (5)	.	.	.	.	1 (5)
METABOLISM/NUTRITION	ANOREXIA	1 (5)	3 (14)	.	.	.	4 (18)
	DEHYDRATION	.	2 (9)	.	.	.	2 (9)
	HYPERGLYCEMIA	.	1 (5)	.	.	.	1 (5)
	HYPERKALEMIA	1 (5)	.	.	.	.	1 (5)
	HYPERURICEMIA	2 (9)	.	.	.	.	2 (9)
	HYPOGLYCEMIA	.	1 (5)	.	.	.	1 (5)
	HYPONATREMIA	2 (9)	.	.	.	.	2 (9)
MUSCULOSKELETAL/CONNECTIVE TISSUE	ARTHRALGIA	5 (23)	.	.	.	.	5 (23)
	GENERALIZED MUSCLE WEAKNESS	.	1 (5)	.	.	.	1 (5)
	MYALGIA	4 (18)	.	.	.	.	4 (18)
	OTHER: Muscle leg cramping	1 (5)	.	.	.	.	1 (5)
NERVOUS SYSTEM	DIZZINESS	.	1 (5)	.	.	.	1 (5)
	HEADACHE	3 (14)	1 (5)	.	.	.	4 (18)
	LETHARGY	.	1 (5)	.	.	.	1 (5)
RESPIRATORY/THORACIC/MEDIASTINAL	ALLERGIC RHINITIS	2 (9)	.	.	.	.	2 (9)
	COUGH	1 (5)	.	.	.	.	1 (5)
	DYSPNEA	1 (5)	1 (5)	.	.	.	2 (9)
	NASAL CONGESTION	1 (5)	.	.	.	.	1 (5)
	PNEUMONITIS	1 (5)	.	.	.	.	1 (5)
	PNEUMOTHORAX	1 (5)	.	.	.	.	1 (5)
SKIN/SUBCUTANEOUS TISSUE	HYPERHIDROSIS	4 (18)	.	.	.	.	4 (18)
	OTHER: Diaphoresis	1 (5)	.	.	.	.	1 (5)
	PRURITUS	5 (23)	1 (5)	.	.	.	6 (27)
	RASH ACNEIFORM	1 (5)	.	.	.	.	1 (5)
	RASH MACULO-PAPULAR	4 (18)	1 (5)	1 (5)	.	.	6 (27)
	SKIN INDURATION	11 (50)	5 (23)	.	.	.	16 (73)
	SKIN ULCERATION	1 (5)	.	1 (5)	.	.	2 (9)
VASCULAR	HOT FLASHES	1 (5)	.	.	.	.	1 (5)
	HYPOTENSION	.	1 (5)	1 (5)	.	.	2 (9)

Supplemental Table 2B. Dose Limiting Toxicities

VMM	Study Day of AE	Category (AE)	Agents	Expectedness	Relatedness (Attribution)	Grade
1088	Day 22	Investigations (aspartate aminotransferase increased)	Pembrolizumab	Expected	Probable	3
			6MHP vaccine	Unexpected	Possible	
			Combination	--	--	
1290	Day 39	Eye disorders (uveitis)	Pembrolizumab	Expected	Definite	3
			6MHP vaccine	Unexpected	Unrelated	
			Combination	Unexpected	Possible	
	Day 50	Skin and subcutaneous tissue disorders (skin ulceration)	Pembrolizumab	--	--	3
			6MHP vaccine	Unexpected	Definite	
			Combination	--	--	
1301	Day 356	Eye disorders: other: Cystic macular degeneration (uveitis), and recent cataract surgery.	Pembrolizumab	Expected	Possible	3
			6MHP vaccine*	Unexpected	Unrelated	
			Combination	--	--	

*The last vaccine was 1 year prior to the DLT occurrence

Supplemental Table 2C. All Grade ≥ 3 Treatment Related Adverse Events

VMM	Cohort	AE	Study Day of AE	Grade	Vaccine	DLT
1275	PD-1 Ab Experienced	Adrenal insufficiency	Day 76	3	Probable	No
		Hypotension	Day 76	3	Probable	No
		Lymphocyte count decreased	Day 85	3	Definite	No
1276	PD-1 Ab Naïve	Rash maculo-papular	Day 148	3	Definite	No
1278	PD-1 Ab Naïve	Injection site reaction	Day 64	3	Definite	No
1088	PD-1 Ab Experienced	Aspartate aminotransferase increased	Day 22	3	Probable	Yes
1290	PD-1 Ab Experienced	Diarrhea	Day 22	3	Possible	No
		Uveitis	Day 39	3	Possible	Yes
		Skin ulceration	Day 50	3	Definite	Yes
1297	PD-1 Ab Experienced	Fatigue	Day 12	3	Probable	No
		Adrenal insufficiency	Day 15	3	Probable	No
		Anemia	Day 36	3	Possible	No
		Lymphocyte count decreased	Day 36	4	Possible	No
1301	PD-1 Ab Experienced	Eye disorders: other: Cystic macular degeneration (uveitis), and recent cataract surgery.	Day 356	3	Possible	Yes

Supplemental Table 3. IFN γ -secreting cells per 100,000 CD4⁺ T cells in peripheral blood and sentinel immunized node

VMM	Week 0		Week 1		Week 2		Week 3		Week 6		Week 9		Week 12		Week 13		Week 16		Week 24		Week 27		Week 40		SIN			
	C*	6MHP	C	6MHP	C	6MHP	C	6MHP	C	6MHP	C	6MHP	C	6MHP	C	6MHP	C	6MHP	C	6MHP	C	6MHP	C	6MHP	C	6MHP		
1014	2.8	0.0	7.3	4.2	6.1	2.0	3.9	33.5	2.8	17.4	9.3	7.2	3.4	2.3	5.1	1.3	X	X	--	--	--	--	--	--	--	--	X	X
1088	3.3	2.6	0.9	1.8	X	X	2.5	0.6	3.5	6.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	X	X	
1265	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1274	0.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.7	0.0	0.5	2.0	0.6	0.6	0.0	1.1	X	X	--	--	--	--	--	--	--	--	--	
1275	26.8	7.4	33.2	9.5	6.0	0.0	3.8	4.7	2.7	0.0	1.6	0.8	13.2	10.5	11.6	11.6	--	--	--	--	--	--	--	--	--	--	--	
1284	2.6	1.5	0.3	0.3	3.0	0.0	0.6	1.4	0.8	0.6	1.7	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--	1.8	1.1	
1287	1.6	7.2	0.6	0.0	3.8	2.6	3.8	3.0	0.8	0.0	2.8	10.2	8.5	10.7	2.5	3.0	X	X	X	X	--	--	--	--	2.0	2.4		
1290	4.9	2.3	7.4	4.5	2.5	3.0	3.2	0.0	2.2	4.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.9	119.8		
1291	4.3	12.8	8.8	9.6	11.4	7.9	13.1	1.9	11.4	6.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.7	2.0		
1293	1.7	0.0	0.0	0.6	12.4	1.5	1.0	2.6	3.9	3.9	38.6	28.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1296	2.5	0.0	1.0	4.2	1.5	2.2	2.5	1.7	3.2	3.2	1.6	3.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1297	2.7	4.0	2.3	1.4	1.4	2.4	0.4	0.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1301	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
1302	X	X	X	X	X	X	X	X	X	X	X	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1305	4.3	3.1	1.6	1.6	3.0	1.8	17.0	1.3	5.1	9.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1306	6.3	3.4	4.5	1.9	3.0	17.4	2.2	15.5	9.3	32.3	2.7	33.3	2.3	6.5	2.0	7.1	1.2	1.2	0.8	8.3	2.0	3.6	6.0	2.8	--	--		
1272	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1276	3.6	1.4	8.0	9.2	12.2	7.7	4.6	1.5	4.7	7.2	12.7	9.3	--	--	7.1	32.0	X	X	X	X	X	X	X	X	X	X	--	--
1278	2.8	2.8	2.7	0.8	4.4	5.0	4.2	14.3	3.2	31.9	7.3	16.6	4.1	2.6	4.4	125.5	11.4	24.5	9.1	40.8	5.2	42.0	8.3	17.8	9.5	28.4		
1285	5.7	3.1	1.1	1.1	7.4	0.7	0.9	1.7	1.1	4.3	2.3	4.1	0.4	7.2	0.4	22.7	X	X	X	X	X	X	X	X	X	X	X	
1295	7.0	2.3	12.1	1.5	35.3	23.5	10.4	5.2	4.7	8.4	10.4	30.1	9.2	2.6	136.2	155.7	X	X	X	X	X	X	X	X	X	X	X	
1299	3.8	3.0	1.3	0.3	8.6	5.2	3.7	24.7	6.5	13.0	15.9	19.0	7.8	23.4	--	--	--	--	--	--	--	--	--	--	--	--	--	

*C= negative control (maximum of 2-3 negative controls)

“X” marks samples where CD4⁺ data were not obtained as these samples did not meet our specified criteria for T cell response.

“--” indicates samples not evaluable or not collected.

All values are from PBMC except the last column.

The last 6 participants are PD-1 Ab naïve.

Samples met criteria for a 2-fold T cell response (Rsp) when **bolded and underlined**.

Supplemental Table 4. Density of immune cells (per mm²) per participant tumor, pre-treatment and day 22.

VMM	Total DAPI ⁺ cells ^a	CD8 ⁺ cells ^a	CD8 ⁺ GzmB ⁺ cells ^a	CD8 ⁺ Tbet ⁺ cells ^a	FoxP3 ⁺ cells ^a	GranzymeB ⁺ cells ^a	Tbet ⁺ cells ^a	CD20 ⁺ cells ^a	CD8 ⁺ Ki67 ⁺ cells ^a	CD20 ⁺ Ki67 ⁺ cells ^a	CD83 ⁺ cells ^a	Ki67 ⁺ cells ^a
Pre-treatment Baseline												
1265	6759.3	12.1	2.6	0.11	11.0	9.8	0.20	0.37	3.2	0.09	12.2	1648.3
1276	1795.9	423.6	119.5	0.66	49.2	128.0	1.2	27.9	237.5	6.3	0.05	909.2
1088	3402.0	90.0	24.7	1.8	15.5	32.6	6.7	4.5	46.1	0.85	0.53	955.9
1272	2346.9	12.7	2.3	0.25	2.2	3.7	1.8	0.25	7.1	0.17	0.00	1628.4
1014	3065.6	233.3	23.0	0.75	12.8	28.4	1.5	10.2	72.8	3.9	0.00	1641.1
1291	1420.2	304.2	228.6	11.1	27.6	245.1	14.8	0.54	106.7	0.36	0.12	1004.1
1297	7129.9	10.9	1.8	0.16	7.9	3.1	0.48	0.90	6.1	0.23	27.7	2670.1
1299	1731.2	32.4	1.3	0.30	5.7	1.9	0.45	0.66	15.2	0.24	3.8	816.4
1301	535.0	125.5	7.4	0.13	12.3	8.4	0.20	0.76	85.3	0.35	0.29	294.9
1302	460.9	3.8	0.00	0.00	0.17	0.33	0.00	0.99	3.3	0.66	0.33	688.3
1305	4992.0	152.3	0.46	3.3	16.0	2.3	11.8	2.1	145.8	0.56	16.1	2111.6
1306	1570.5	253.1	26.9	7.0	10.5	41.8	10.2	0.25	102.7	0.25	0.25	571.6
Day 22												
1265	6847.5	11.5	2.7	0.22	9.6	3.5	0.73	0.28	6.7	0.15	30.4	1253.2
1276	1067.1	442.1	105.6	4.8	35.6	107.3	5.6	35.5	161.0	6.3	0.00	224.2
1088	4550.5	164.7	68.2	10.2	15.7	82.4	29.2	6.3	95.3	0.79	0.00	929.9
1272	2813.7	153.1	59.6	8.2	11.8	75.9	17.5	6.0	64.0	1.2	0.00	1308.2
1014	2145.6	268.8	43.0	0.75	16.9	47.8	1.2	32.4	116.1	10.4	0.00	1406.1
1291	3346.0	164.0	71.2	5.6	24.8	94.2	12.0	1.1	68.0	0.39	3.4	2341.9
1297	5737.3	36.2	8.1	0.46	7.9	10.3	1.7	0.81	6.6	0.04	11.3	2039.0
1299	1769.5	224.7	20.3	1.2	9.3	27.4	1.9	13.8	138.2	6.8	26.3	758.5
1301	4230.9	1346.7	47.6	25.5	3.4	62.6	45.0	253.4	900.9	58.1	1.3	2371.7
1302	1138.0	72.0	1.0	0.34	9.1	1.8	0.75	2.1	69.9	0.99	0.20	1002.3
1305	5392.9	995.9	18.7	31.7	20.5	23.8	44.9	6.5	934.5	3.2	0.19	3557.8
1306	2060.2	301.2	0.37	2.6	20.2	3.4	9.3	12.4	113.9	1.0	0.00	347.8

Abbreviations: VMM, participant study identification number; DAPI, 4',6-diamidino-2-phenylindole.

^a Measured in cells/mm²

Supplemental Table 5. Presence of tertiary lymphoid structures per participant tumor, pre-treatment and day 22.

VMM	Biopsy Type	Specimen Size	Classical Organized TLS	TLS-like Structure
Pre-treatment Baseline				
1265	Excisional/ Incisional	18 mm x 13 mm	No	No
1276	Core	12 mm x 7 mm	No	No
1088	Excisional/ Incisional	10 mm x 8 mm	No	No
1272	Core	22 mm x 13 mm	No	No
1014	Core	11 mm x 12 mm	No	No
1291	Core	36 mm x 18 mm	No	No
1297	Excisional/ Incisional	8 mm x 7 mm	No	No
1299	Core	40 mm x 15 mm	No	No
1301	Core	43 mm x 12 mm	No	No
1302	Core	7 mm 9 mm	No	No
1305	Excisional/ Incisional	7 mm x 6 mm	No	No
1306	Core	14 mm x 6 mm	No	No
Day 22				
1265	Excisional/ Incisional	18 mm x 13 mm	No	Yes
1276	Core	32 mm x 18 mm	No	No
1088	Excisional/ Incisional	19 mm x 15 mm	No	No
1272	Core	37 mm x 10 mm	No	No
1014	Core	36 mm x 15 mm	No	Yes
1291	Core	24 mm x 11 mm	No	No
1297	Excisional/ Incisional	11 mm x 12 mm	No	No
1299	Core	37 mm x 18 mm	No	No
1301	Excisional/ Incisional	15 mm x 12 mm	No	Yes
1302	Core	24 mm x 7 mm	No	No
1305	Core	17 mm x 13 mm	No	No
1306	Core	6 mm x 7 mm	No	No

Abbreviations: VMM, participant study identification number; TLS, tertiary lymphoid structures