

Table S1. List of antibodies used for Flow Cytometry analysis

	Fluorophore	Marker	Clone	Supplier	Volume/test (μl)
Checkpoint Panel	ef506	Viability (Fixable)	65-0866-14	Thermo Fisher	0.1
	AF700	CD45	HI30	Biolegend	2.5
	FITC	CD3	UCHT1	Biolegend	5
	APC/Fire 750	CD4	RPA-T4	Biolegend	3.5
	PerCP/Cy5.5	CD8	SK1	Biolegend	3
	BV421	PD-1	EH12.2H7	Biolegend	4
	PE	TIM-3	F38-2E2	Biolegend	5
	PE-Cy7	LAG-3	11C3C65	Biolegend	5
	PE/Dazzle 594	CTLA-4	BNI3	Biolegend	5
	APC	TIGIT	MBSA43	Biolegend	5

	Fluorophore	Marker	Clone	Supplier	Volume/test (μl)
Lymphocyte Quantification Panel	ef506	Viability (Fixable)	65-0866-14	Thermo Fisher	0.1
	AF700	CD45	HI30	Biolegend	2.5
	FITC	CD3	UCHT1	Biolegend	5
	PE	TRAV1-2 (TCR Va7.2)	3C10	Biolegend	4
	PE/Dazzle 594	CD19	HIB19	Biolegend	5
	PerCP/Cy5.5	CD16	3G8	Biolegend	5
	PE-Cy7	CD56	HCD56	Biolegend	5
	APC	pan-γδ TCR	B1	Biolegend	5
	APC/Fire 750	CD161	HP-3G10	Biolegend	5
	BV421	CD27	M-T271	Biolegend	4

Table S2. List of antibodies used for CyTOF analysis of T cells.

Metal conjugate	Marker	Clone	Supplier	Volume/test (μl)
089Y	CD45	HI30	Fluidigm	0.25
103Rh	Viability	201103A	Fluidigm	4 μM
141Pr	CD103	Ber-ACT8	Biologend	1
142Nd	CD57	HCD57	Fluidigm	0.1
143Nd	CD45RA	HI100	Fluidigm	0.3
144Nd	CD38	HIT2	Fluidigm	1
145Nd	CD4	RPA-T4	Fluidigm	0.5
146Nd	IgD	IA62	Fluidigm	1
147Sm	CXCR3	G025H7	Fluidigm	1
148Sm	CD69	FN50	Fluidigm	1
149Sm	CD127	A019D5	Fluidigm	1
150Nd	HLA-DR	L243	Fluidigm	1
151Eu	CCR6	11A9	Fluidigm	1
152Sm	TCRγδ	11F2	Fluidigm	0.5
153Eu	TRAV1-2 (Va7.2)	3C10	Fluidigm	1
154Sm	TIGIT	MBSA43	Fluidigm	1
155Gd	Siglec 9	K8	Fluidigm	1
156Gd	CD85j	GHI/75	Fluidigm	1
158Eu	CCR4	L291H4	Fluidigm	1
159Tb	CD161	HP-3G10	Fluidigm	1
160Gd	CD28	CD28.2	Fluidigm	0.5
161Dy	CD39	A1	Fluidigm	0.5
162Dy	CD27	L128	Fluidigm	1
163Dy	CRTH2	BM16	Fluidigm	1
164Dy	CD95	DX2	Fluidigm	1
165Ho	CD19	HIB19	Fluidigm	0.25
166Er	Siglec 7	6434	Fluidigm	1
167Er	CCR7	G043H7	Fluidigm	1
168Er	CD8	SK1	Fluidigm	0.25
169Tm	CD25	2A3	Fluidigm	1
170Er	iNKT (Va24-Ja18)	6B11	Fluidigm	1
171Yb	DNAM	11A8	Fluidigm	1
172Yb	CX3CR1	2A91	Fluidigm	1
173Yb	CD3	UCHT1	Biologend	0.25
174Yb	PD-1	EH12.2H7	Fluidigm	1
175Lu	CD14	M5E2	Fluidigm	0.5
176Yb	CD56	HCD56	Fluidigm	1
191/193Ir	Cell-ID Intercalator -Ir	201192A	Fluidigm	0.125 μM
209Bi	CD16	3G8	Fluidigm	0.5

Table S3. List of antibodies used for CyTOF analysis of myeloid cells.

<i>Metal conjugate</i>	Marker	Clone	Supplier	Volume/test (μl)
089Y	CD45	HI30	Fluidigm	0.25
103Rh	Viability	201103A	Fluidigm	4 μM
141Pr	IL-6R	UV4	Biolegend	1
142Nd	CD40	5C3	Fluidigm	1
143Nd	HLA-DR	L243	Biolegend	0.3
144Nd	CD38	HIT2	Fluidigm	1
145Nd	CD163	GHI/61	Fluidigm	1
146Nd	CD64	10.1	Fluidigm	0.5
147Sm	IFNGRa (CD119)	GIR-208	Biolegend	0.5
148Sm	PD-L1	29E.2A3	Fluidigm	1
149Sm	IL-10R	3F9	Biolegend	1
150Nd	CD86	IT2.2	Fluidigm	1
151Eu	IL-4Ra	G077F6	Biolegend	1
152Sm	CD112	TX31	Biolegend	1
153Eu	CD32	FUN-2	Fluidigm	1
154Sm	CD3	UCHT1	Fluidigm	1
155Gd	Siglec9	K8	Fluidigm	1
156Gd	CD204	7C9C20	Biolegend	0.75
158Eu	CD155	TX24	Biolegend	1
159Tb	Lox-1	15C4	Biolegend	1
160Gd	CD14	M5E2	Fluidigm	0.5
161Dy	CX3CR1	8F1/CXCR1	Biolegend	0.5
162Dy	CD80	2D10.4	Fluidigm	1
163Dy	CD33	WM53	Fluidigm	1
164Dy	CD116	4H1	Biolegend	0.5
165Ho	CD19	HIB19	Fluidigm	0.25
166Er	Siglec7	6434	Fluidigm	1
167Er	CD11b	ICRF44	Fluidigm	0.5
168Er	CD206	15-2	Fluidigm	1
169Tm	CD304	12C2	Fluidigm	1
170Er	CD54	HA58	Fluidigm	1
171Yb	CD68	Y1/82A	Fluidigm	0.25
172Yb	PD-L2	24F.10C12	Fluidigm	1
173Yb	CD115	9-4D2-1E4	Biolegend	1
174Yb	TIE-2	33.1 (Ab33)	Biolegend	1
175Lu	CXCR4	12G5	Fluidigm	1
176Yb	CD56	HCD56	Fluidigm	1
191/193Ir	Cell-ID Intercalator -Ir	201192A	Fluidigm	0.125 μM
209Bi	CD16	3G8	Fluidigm	0.5

Table S4. List of antibodies used for Immunofluorescence staining

Target	Clone	Isotype	Vendor
EpCAM	Polyclonal	Rabbit IgG	Abcam
CD68	KP1	Mouse IgG1	Dako Omnis
aSMA	1A4	Mouse IgG2A	R&D
CD155 (PVR)	Polyclonal	Rabbit IgG	Atlas Antibodies
CD112 (PVRL2)	Polyclonal	Rabbit IgG	Atlas Antibodies
PD-L1	IHC411	Rabbit IgG	GenomeMe
PD-L2	D7U8C	Rabbit IgG	Cell Signalling

Table S5. List of antibodies used for multiplex IHC on Lunaphore COMET platform

Mouse antibodies		
Target	Clone	Vendor
aSMA	1A4	Thermo Fisher Cat No. 14-9760-82
CD45	2B11+PD7/26	Agilent Cat no. M070101-2
CD8	4B11	Biorad Cat No. MCA1817
PanCK	AE1/AE3	Agilent Cat no. M351501-2
CD20	L26	CellMarque Cat No. 120M-86
anti-mouse IgG AF555	Polyclonal	Thermo Fisher Cat No A32727

Rabbit antibodies		
Target	Clone	Vendor
TIGIT	E5Y1W	Cell Signalling Cat No. 99567
PD-L2	D7U8C	Cell Signalling Cat No. 82723
PVR (CD155)	Polyclonal	Atlas Antibodies Cat No. HPA012568
PD-1	EPR4877(2)	Abcam Cat No. ab137132
PD-L1	IHC411	GenomeMe Cat No. IHC411-100
CD4	EPR6855	Abcam Cat No. ab133616
CD3	MRQ39	CellMarque Cat No. 103R-96
NA/K ATPase	EP1845Y	Abcam Cat No: ab76020
anti-rabbit IgG AF647	Polyclonal	Thermo Fisher Cat No. A32733