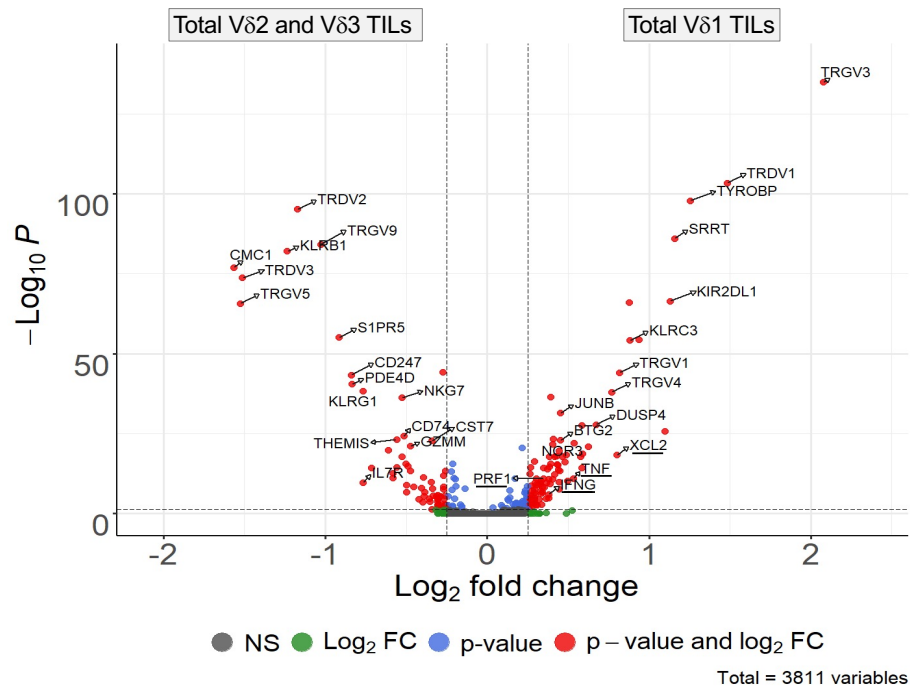


Bruni E. et al. - Supplemental Figure 1

Supplemental Figure 1.**Peritumoral tissue (PT) and metastatic tumor (MT) areas CLM specimens and flow cytometry gating strategy.**

(A) Representative macroscopic examples (out of 93) of CLM liver specimen classified as peritumoral tissue (PT; left panel) or metastatic tumor (MT; right panel) parenchyma. **(B)** Representative (out of 93) flow cytometry pseudocolor plot graphs showing the gating strategy used to detect V δ 1 and V δ 2 T cell subsets among viable CD3⁺ T lymphocytes and identification of differential phenotypes (T_{EMRA}, T_{NAIVE}, T_{CM} and T_{EM}) based on CD27 and CD45RA markers expression among V δ 1 and V δ 2 T cells from PB of a CLM patient (out of 93). **(C)** Heatmap of flow cytometry data showing Spearman's rank between the mean of different cell markers expression (%) in PT V δ 1 TILs from CLM patients ($n=61$).



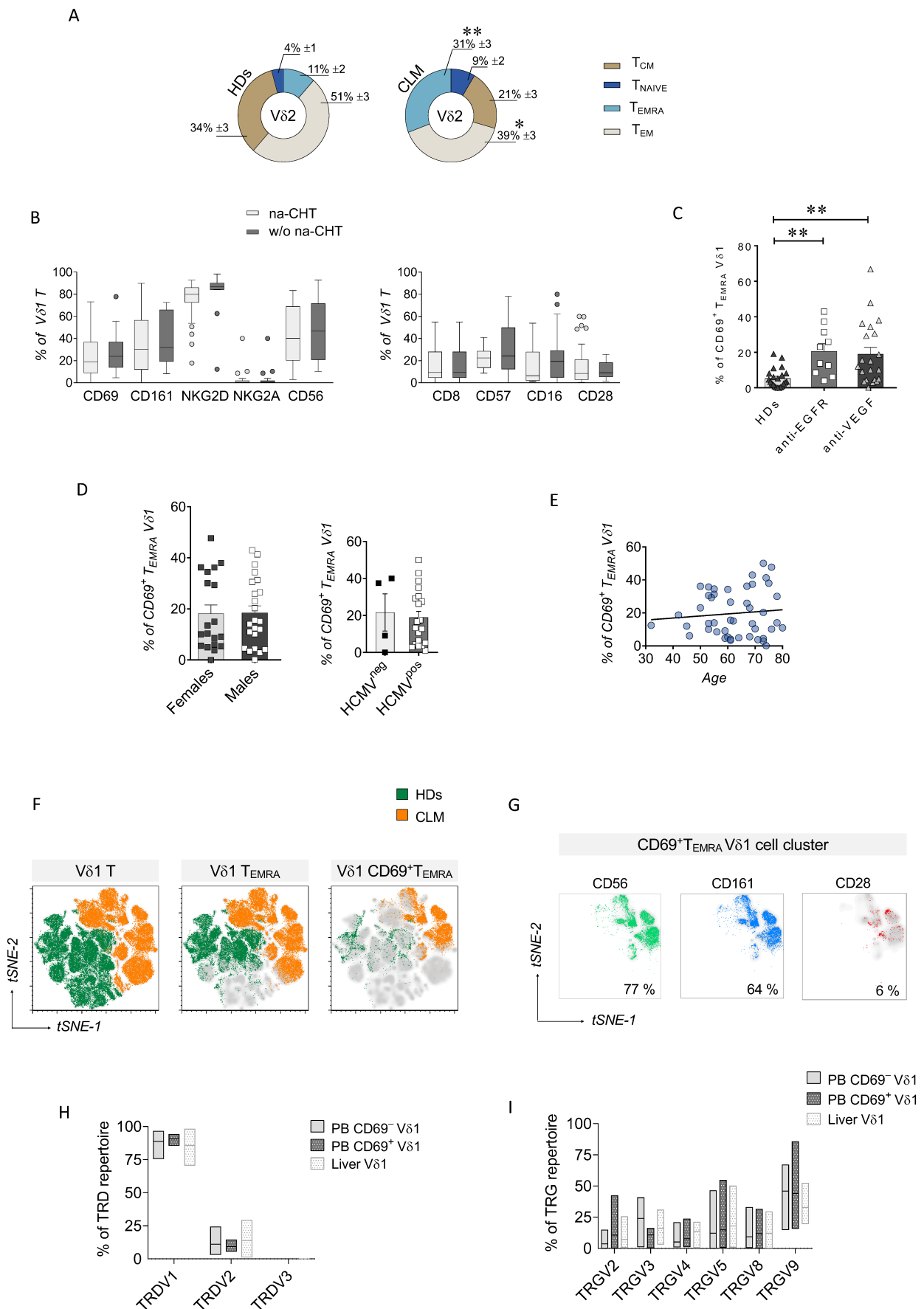
Bruni E. et al. - Supplemental Figure 2

Supplemental Figure 2.**Analysis of differentially expressed genes between V δ 1 and V δ 2-3 TIL subsets from CLM.**

Volcano plot showing differentially expressed genes (DEGs) between total V δ 1 (cluster 0 and 3) versus total V δ 2 (cluster 2 and 5) and V δ 3 (cluster 1 and 6) TILs. Red circles represent genes with *adj. P value* < 0.05 and Log₂-FoldChange differential expression > 0.25, blue circles genes with *adj. P value* < 0.05 and Log₂-FoldChange < 0.25; green circles genes with *adj. P value* > 0.05 and Log₂-FoldChange > 0.25 and grey ones represent genes with *adj. P value* > 0.05 and Log₂-FoldChange < 0.25.

Supplemental Figure 3.**scRNA-seq integrated analysis comparing differentially expressed genes of circulating and tumor infiltrating $\gamma\delta$ T cells from CLM patients.**

(A) Violin plots showing the transcript levels of *TRGV* genes among the 6 $\gamma\delta$ T cell clusters identified by the integrated analyses of peripheral blood (PB) and peritumor (PT) samples from 3 CLM patients undergone surgical resections. (B-C) Volcano plots showing differently expressed genes (DEGs) between total PB and PT V δ 2 T cells (B), and V δ 1 T cells (C). Red circles represent genes with *adj. P value* <0.05 and *Log₂-FoldChange differential expression* > 0.25, blue circles genes with *adj. P value* < 0.05 and *Log₂-FoldChange* < 0.25; green circles genes with *adj. P value* >0.05 and *Log₂-FoldChange* > 0.25 and grey ones represent genes with *adj. P value* >0.05 and *Log₂-FoldChange* <0.25.



Bruni E. et al. - Supplemental Figure 4

Supplemental Figure 4.**Frequencies, phenotype and TCR repertoires of PB V δ 1 and V δ 2 T cells from CLM patients.**

(A) Pie charts showing the mean frequency distribution (%) of PB T_{NAIVE}, T_{CM}, T_{EM} and T_{EMRA} V δ 2 T cells in healthy donors (HDs) ($n=33$) and in CLM ($n=50$). **(B)** Statistical bar graph showing the mean (\pm SEM) frequency (%) of several surface markers differentially expressed on PB V δ 1 T cells in CLM patients either in the absence ($n=13$) (grey) or in the presence ($n=40$) (white) of na-CHT. **(C)** Mean (\pm SEM) frequency (%) of CD69⁺T_{EMRA} V δ 1 cell cluster in HDs and CLM patients underwent either anti-EGFR ($n=10$) or anti-VEGF ($n=20$) mAbs therapy. **(D)** Statistical bar graph showing the mean (\pm SEM) frequency (%) of PB CD69⁺T_{EMRA} V δ 1 cells in CLM patients according to sex (Female, $n=18$; Male, $n=26$) (left panel) and HCMV infection status (HCMV^{neg}, $n=4$; HCMV^{pos}, $n=20$) (right panel). **(E)** Pearson's rank correlation between frequency (%) of PB CD69⁺T_{EMRA} V δ 1 cells and age of CLM patients ($n=49$). **(F-G)** *t*-distributed Stochastic Neighbor Embedding (*t*-SNE) plots showing projection of total V δ 1 T cells or either the specific T_{EMRA} or CD69⁺T_{EMRA} V δ 1 cells in HDs ($n=22$; green) and CLM ($n=22$; orange) **(F)**, and the overlapping of different cell surface markers in CLM CD69⁺T_{EMRA} V δ 1 cells ($n=22$) **(G)**. **(H-I)** TCR-repertoire analysis of the liver and PB V δ 1 T cells. Quantification (%) of V chains for TCR- δ (TRD) **(H)** and TCR- γ (TRG) **(I)** repertoires of PB CD69⁺ and CD69⁻ V δ 1 and liver PT V δ 1 of CLM patients ($n=5$).

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**Supplemental Table 1|
Monoclonal antibodies (mAbs) used for flow cytometry analysis.**

Marker	Fluorochrome	Clone	Company	Catalogue Number
CD3	BUV661	UCHT1	BD	565065
CD8	BUV805	SK1	BD	564912
CD16	BUV496	348	BD	564653
CD16	PR-CY7	3G8	BD	557744
CD45	AF700	HI30	BD	560566
CD45RA	BUV737	HI100	BD	564442
CD56	BUV563	NCAM16.2	BD	565704
CD56	PE-CF594	B159	BD	562289
CD107a	PE	H4A3	BD	555801
CCR7	AF700	150503	BD	561143
CXCR3	APC	1C6	BD	550967
NKG2D	BV780	1D11	BD	743560
Vδ2	BUV395	B6	BD	743754
Vδ2	FITC	IMMU 389	Beckman Coulter	IM1464
CD3	BV650	OKT3	BioLegend	317324
CD28	PE-CY7	CD28.2	BioLegend	302926
CD69	BV605	FN50	BioLegend	310938
CD161	BV421	HP-3G10	BioLegend	339914
CD14	BV570	M5E2	BioLegend	301832
CD27	APC eFluor780	0323	eBioscience	47027942
CD45	APC-Vio770	5B1	Miltenyi	130096609
CD57	PE-Vio615	REA769	Miltenyi	130111815
Vδ1	PE	REA173	Miltenyi	130120440
Vδ1	PE-Vio770	REA173	Miltenyi	130117697
CD19	APC-Vio770	REA675	Miltenyi	130113643