



Supplemental Material to:

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**Effects of conventional therapeutic interventions
on the number and function of regulatory T cells**

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Supplemental Table 1A. Immune Cell Subsets

Immune cell	Meaning
ALC	Absolute lymphocyte count
CD4	T helper cells
CD4 _{CM}	Central memory T helper cells (CD45RA ^{NEG} CD62L ⁺ CCR7 ⁺)
PD-1 ⁺ TIM-3 ^{NEG}	Activated central memory CD4 T cells, negative immune regulator
CD4 _{CM}	
PD-1 ^{NEG} TIM-3 ⁺	Activated central memory CD4 T cells, negative immune regulator
CD4 _{CM}	
PD-1 ⁺ TIM-3 ⁺ CD4 _{CM}	Severe exhaustion of central memory CD4 T cells
CD4 _{EM}	Effector memory T helper cells (CD45RA ^{NEG} CD62L ^{NEG} CCR7 ^{NEG})
PD-1 ⁺ TIM-3 ^{NEG}	Activated effector memory CD4 T cells, negative immune regulator
CD4 _{EM}	
PD-1 ^{NEG} TIM-3 ⁺	Exhausted effector memory CD4 T cells, negative immune regulator
CD4 _{EM}	
PD-1 ⁺ TIM-3 ⁺ CD4 _{EM}	Severe exhaustion of effector memory CD4 T cells
ICOS ⁺ CD4	Activated T helper cells
IFN γ ⁺ CD4	Activated T helper cells
T _H 17	T helper cell type 17, unclear role in cancer
IFN γ ⁺ T _H 17	More activated T helper cell type 17
CD8	Cytotoxic T cells
PD-1 ^{NEG} TIM-3 ⁺ CD8	Activated CD8 T cells, negative immune regulator
CD8 _{CM}	Central memory cytotoxic T cells (CD45RA ^{NEG} CD62L ⁺ CCR7 ⁺)
PD-1 ⁺ TIM-3 ^{NEG}	Activated central memory CD8 T cells, negative immune regulator
CD8 _{CM}	
PD-1 ^{NEG} TIM-3 ⁺	Activated central memory CD8 T cells, negative immune regulator
CD8 _{CM}	
PD-1 ⁺ TIM-3 ⁺ CD8 _{CM}	Severe exhaustion of central memory cytotoxic T cells
CD8 _{EM}	Effector memory CD8 T cells (CD45RA ^{NEG} CD62L ^{NEG} CCR7 ^{NEG})
PD-1 ⁺ TIM-3 ^{NEG}	Activated effector memory CD8 T cells, negative immune regulator
CD8 _{EM}	
PD-1 ^{NEG} TIM-3 ⁺	Activated effector memory CD8 T cells, negative immune regulator
CD8 _{EM}	
PD-1 ⁺ TIM-3 ⁺ CD8 _{EM}	Severe exhaustion of effector memory cytotoxic T cells
ICOS ⁺ CD8	Activated cytotoxic T cells

Supplemental Table 1B. Immune Cell Subsets

Immune cell	Meaning
TREGS	Regulatory T cells (CD4 ⁺ CD25 ^{HI} CD127 ^{NEG})
CD4 : TREG RATIO	Ratio of effector T cells to regulatory T cells
CD8 : TREG RATIO	Ratio of effector T cells to regulatory T cells
NK CELLS	Natural killer cells
CD16 ⁺ CD56 ^{BR}	Functional intermediate, lytic and cytokine production
TIM-3 ⁺	Fully functional intermediate
CD16 ⁺ CD56 ^{BR}	
CD16 ⁺ CD56 ^{DIM}	Mature, more cytokine production
TIM-3 ⁺	Fully functional mature
CD16 ⁺ CD56 ^{DIM}	
CD16 ^{NEG} CD56 ^{BR}	Immature, more lytic
TIM-3 ⁺	Immature NK cells transitioning into more mature
CD16 ^{NEG} CD56 ^{BR}	(CD16 ⁺ CD56 ^{DIM}) phenotype
MDSC	Myeloid derived suppressor cells (HLA-DR ^{NEG} CD33 ⁺ CD11b ⁺)
MDSC _{MO}	Monocytic MDSC (CD14 ⁺ CD15 ^{NEG})
MDSC _{GR}	Granulocytic MDSC (CD14 ^{NEG} CD15 ⁺)
MDSC _{LIN-}	Non-lineage MDSC (CD14 ^{NEG} CD15 ^{NEG})
MARKERS	
CTLA-4	Cytotoxic T lymphocyte-associated antigen-4
ICOS	Inducible co-stimulator Co-stimulatory for the activation of T cells.
PD-1	Programmed death 1 receptor On activated T cells and B cells, and on mature dendritic cells. Negative immune regulator, engagement with PD-L1 can down regulate T cell activation.
TIM-3	T cell immunoglobulin and mucin domain-containing molecule-3 Activation and maturation marker, and negative regulator of NK cells. Negative immune regulator expressed on T cells.