



Supplementary Figure S1. The gating strategy for the different Innate Lymphoid Cell (ILC) subsets. Once single cells were identified (A), Peripheral Blood Mononuclear Cells (PBMCs) were gated (B) to isolate non-NK cells (C). Resting and post-exercise total ILC (tILC) (D), Helper ILC1 (E), ILCP (E) and ILC 3 (F) were quantified from this gate. Representative plots are displayed from a post-exercise CMV^{neg} participant.

Supplementary Table S1. The number of NK cell expressing different Chemokine receptors before (pre) and after (post) exercise in all participants (n=22).

Phenotype	NK cell subtype	Pre-Exercise (cell/uL)	Post-Exercise (cell/uL)	p-value
CX3CR1+/CXCR1-	NK total	127.33±75.97	405.06±230.34	p<0.001
	CD56 ^{dim}	112.22±71.12	367.18±207.30	p<0.001
	CD56 ^{bright}	6.23±3.0	46.80±15.77	p<0.001
CX3CR1+/CXCR1+	NK total	18.98±15.49	79.06±52.90	p<0.001
	CD56 ^{dim}	18.28±17.83	76.59±52.70	p<0.001
	CD56 ^{bright}	0.96±0.89	2.80±2.50	p<0.001
CX3CR1-/CXCR1+	NK total	3.97±3.45	5.34±4.02	p<0.05
	CD56 ^{dim}	3.71±3.09	4.06±3.8.3	p>0.05
	CD56 ^{bright}	0.39±0.34	1.00±1.16	p<0.05
CCR7+/CD62L-	NK total	3.32±4.13	4.61±4.08	p>0.05
	CD56 ^{dim}	3.35±4.30	4.57±4.11	p>0.05
	CD56 ^{bright}	0.09±0.22	0.15±0.18	p>0.05
CCR7+/CD62L+	NK total	6.38±4.22	10.94±6.65	p<0.001
	CD56 ^{dim}	5.25±3.53	9.16±5.81	p<0.001
	CD56 ^{bright}	1.26±1.03	2.04±2.40	p>0.05
CCR7-/CD62L+	NK total	73.74±32.30	186.66±87.22	p<0.001
	CD56 ^{dim}	61.61±30.06	161.41±77.48	p<0.001
	CD56 ^{bright}	11.37±5.65	24.01±16.7	p<0.001
CXCR3+/CCR4-	NK total	8.45±4.76	21.17±14.94	p<0.001
	CD56 ^{dim}	4.42±2.63	11.37±10.08	p<0.001
	CD56 ^{bright}	3.81±2.86	: 8.51±5.18	p<0.001
CXCR3+/CCR4+	NK total	0.42±0.32	1.17±1.18	p<0.01
	CD56 ^{dim}	0.14±0.15	0.52±0.90	p<0.05
	CD56 ^{bright}	0.25±0.24	0.62±0.67	p<0.01
CXCR3-/CCR4+	NK total	2.02±1.53	8.38±12.17	p<0.05
	CD56 ^{dim}	1.66±1.41	7.62±11.50	p<0.05
	CD56 ^{bright}	1.41±1.29	0.81±0.83	p<0.01
CCR6+/CCR4-	NK total	4.66 2.72	11.32±6.64	p<0.001
	CD56 ^{dim}	1.61±1.16	4.35±4.11	p<0.01
	CD56 ^{bright}	3.43±2.66	7±5.51	p<0.001
CCR6+/CCR4+	NK total	0.32±0.29	0.75±0.58	p<0.001
	CD56 ^{dim}	0.09±0.17	0.35±0.58	p<0.05

	CD56 ^{bright}	0.26±0.27	0.42±0.41	p<0.01
CCR6-/CCR4+	NK total	2.26±1.63	6.98±9.25	p<0.05
	CD56 ^{dim}	1.77±1.34	6.01±8.40	p<0.05
	CD56 ^{bright}	0.54±0.40	0.97±0.96	p<0.01
CXCR5+/S1P5-	NK total	5.09±2.40	12.37±8.42	p<0.001
	CD56 ^{dim}	1.97±1.32	5.87±5.86	p<0.01
	CD56 ^{bright}	3.23±1.83	7.17±4.84	p<0.001
CXCR5+/S1P5+	NK total	0.44±0.34	1.31±1.90	p<0.05
	CD56 ^{dim}	0.07±0.08	0.38±1.10	p>0.05
	CD56 ^{bright}	0.39±0.29	1.04±1.12	p<0.01
CXCR5-/S1P5+	NK total	2.43±1.34	7.12±9.76	p<0.05
	CD56 ^{dim}	1.69±1.04	5.50±8.92	p<0.05
	CD56 ^{bright}	9.24±5.15	25.79±13.46	p<0.001
CCR7+/CXCR4-	NK total	4.45±1.53	10.72±4.88	p<0.001
	CD56 ^{dim}	1.92±1.08	4.89±3.50	p<0.001
	CD56 ^{bright}	2.57±1.49	5.72±3.52	p<0.001
CCR7+/CXCR4+	NK total	1.66±1.4	3.16±3.38	p<0.05
	CD56 ^{dim}	1.55±1.36	2.78±3.16	p<0.05
	CD56 ^{bright}	0.15±0.14	0.25±0.35	p>0.05
CCR7-/CXCR4+	NK total	3.76±2.85	7.68±3.89	p<0.001
	CD56 ^{dim}	3.33±2.86	6.96±3.48	p<0.001
	CD56 ^{bright}	0.37±0.31	0.52±0.45	p>0.05
CXCR6+/LFA-1-	NK total	4.36±2.56	11.78±6.56	p<0.001
	CD56 ^{dim}	2.78±1.81	7.79±5.11	p<0.001
	CD56 ^{bright}	1.77±1.29	3.70±2.13	p<0.001
CXCR6+/LFA-1+	NK total	0.87±0.79	2.16±2.40	p<0.01
	CD56 ^{dim}	0.65±0.52	1.66±1.59	p<0.001
	CD56 ^{bright}	0.11±0.10	0.35±0.50	p<0.01
CXCR6-/LFA-1+	NK total	1.22±1.35	3.75±4.09	p<0.05
	CD56 ^{dim}	1.00±1.30	3.23±4.16	p<0.05
	CD56 ^{bright}	0.25±0.20	0.45±0.41	p<0.05