

Supplemental table 1. Comparison of peripheral inflammatory mediator levels between PLWH and HIV-uninfected participants

Biomarkers	PLWH (N=380)	HIV-uninfected participants (N=147)	P value
Th1 cytokines			
IL-2	3.94 (2.02-7.13)	2.98 (1.83-4.72)	<0.001
IL-12p70	4.4 (2.2-7.7)	2.57 (1.43-4.46)	<0.001
IFN-γ	4.39 (2.48-8.28)	3.46 (2.29-5.71)	<0.001
TNF-α	25.34 (15.12-38.19)	19.52 (13.37-26.75)	<0.001
Th2 cytokines			
IL-4	1.14 (0.62-1.98)	0.6 (0.38-1.17)	<0.001
IL-5	7.13 (3.33-13.3)	4.59 (2.94-8.35)	<0.001
IL-6	0.51 (0.23-1.23)	0.13 (0.0-0.42)	<0.001
IL-10	2.7 (1.0-5.8)	1.98 (0.9-3.65)	0.15
IL-13	1.01 (0.47-1.91)	0.53 (0.16-1.12)	<0.001
Th17 cytokines			
IL-17a	7.09 (3.74-12.50)	5.33 (3.33-8.74)	<0.001
Chemokines			
CCL2	18.62 (10.42-27.53)	14.96 (9.86-20.82)	0.011
CCL4	7.74 (4.46-12.31)	7.25 (4.83-11.35)	0.8
IL-8	9.1 (6.1-13.6)	6.9 (5.16-9.06)	<0.001
Others			
IL-1β	0.40 (0.21-0.74)	0.24 (0.08-0.38)	<0.001
IL-7		7.02 (5.46-9.81)	0.033
G-CSF	0.96 (0.22-2.08)	0 (0-15.58)	<0.001
GM-CSF	4.44 (2.48-8.28)	0.48 (0.06-1.19)	<0.001
CRP	1813 (737-3584)	1757 (744-3371)	0.9
ET1	2.01 (1.59-2.61)	1.90 (1.41-2.40)	0.014

G-CSF: Granulocyte colony-stimulating factor; GM-CSF: Granulocyte-macrophage colony-stimulating factor; CRP: C-reactive protein; ET1: Endothelin 1

Supplemental table 2. Correlation of pulmonary function variables with peripheral inflammatory mediator levels in PLWH and HIV-uninfected participants

Biomarkers	PLWH (N=373)			HIV-uninfected participants (N=147)		
	Post FEV1 %	Post FVC%	DLco	Post FEV1 %	Post FVC%	DLco
Th1 cytokines						
IL-2	-0.23 (<0.001)	-0.26 (<0.001)	-0.13 (0.011)	-0.08 (0.3)	-0.10 (0.2)	-0.12 (0.15)
IL-12p70	-0.18 (<0.001)	-0.21 (<0.001)	-0.08 (0.14)	-0.03 (0.7)	-0.06 (0.5)	-0.04 (0.6)
IFN-γ	-0.12 (0.026)	-0.18 (<0.001)	-0.07 (0.2)	-0.14 (0.09)	-0.20 (0.018)	-0.20 (0.014)
TNF-α	-0.07 (0.2)	-0.09 (0.07)	-0.08 (0.14)	-0.13 (0.13)	-0.08 (0.3)	0.03 (0.7)
Th2 cytokines						
IL-4	-0.16 (0.002)	-0.21 (<0.001)	-0.08 (0.11)	-0.13 (0.13)	-0.18 (0.030)	-0.19 (0.023)
IL-5	-0.22 (<0.001)	-0.27 (<0.001)	-0.11 (0.034)	-0.08 (0.4)	-0.10 (0.2)	-0.16 (0.06)
IL-6	-0.22 (<0.001)	-0.23 (<0.001)	-0.12 (0.018)	-0.07 (0.4)	-0.03 (0.7)	0.13 (0.12)
IL-10	-0.21 (<0.001)	-0.25 (<0.001)	-0.13 (0.009)	0.00 (>0.9)	-0.01 (0.9)	-0.05 (0.6)
IL-13	-0.16 (0.003)	-0.18 (<0.001)	-0.06 (0.3)	-0.02 (0.8)	-0.05 (0.6)	-0.01 (0.9)
Th17 cytokines						
IL-17a	-0.22 (<0.001)	-0.26 (<0.001)	-0.05 (0.3)	-0.13 (0.11)	-0.15 (0.06)	-0.19 (0.020)
Chemokines						
CCL2	-0.04 (0.4)	-0.10 (0.06)	0.02 (0.8)	-0.02 (0.8)	-0.05 (0.6)	0.06 (0.5)
CCL4	0.03 (0.6)	-0.01 (0.8)	-0.01 (0.9)	0.10 (0.2)	0.17 (0.044)	0.19 (0.018)
IL-8	-0.13 (0.013)	-0.13 (0.013)	-0.18 (<0.001)	-0.10 (0.2)	-0.13 (0.11)	-0.10 (0.2)
Others						
IL-1β	-0.08 (0.12)	-0.07 (0.21)	-0.01 (0.8)	-0.01 (0.9)	0.00 (>0.9)	0.00 (>0.9)
IL-7	-0.19 (<0.001)	-0.25 (<0.001)	-0.11 (0.022)	-0.11 (0.18)	-0.14 (0.10)	-0.14 (0.09)
G-CSF	-0.24 (<0.001)	-0.29 (<0.001)	-0.09 (0.09)	-0.17 (0.041)	-0.19 (0.019)	-0.17 (0.042)
GM-CSF	-0.25 (<0.001)	-0.31 (<0.001)	-0.13 (0.009)	-0.10 (0.2)	-0.15 (0.06)	-0.22 (0.008)
CRP	-0.26 (<0.001)	-0.27 (<0.001)	-0.16 (0.002)	-0.21 (0.012)	-0.23 (0.005)	-0.03 (0.7)
ET1	-0.12 (0.019)	-0.11 (0.035)	-0.18 (<0.001)	-0.05 (0.6)	0.05 (0.5)	0.03 (0.7)

G-CSF: Granulocyte colony-stimulating factor; GM-CSF: Granulocyte-macrophage colony-stimulating factor; CRP: C-reactive protein; ET1: Endothelin 1

Supplemental table 3. Partial correlation (P value) of pulmonary function variables with peripheral inflammatory mediator levels adjusted for pack-years in PLWH and HIV-uninfected participants

Biomarkers	PLWH (N=373)			HIV-uninfected participants (N=147)		
	Post FEV1 %	Post FVC%	DLco	Post FEV1 %	Post FVC%	DLco
Th1 cytokines						
IL-2	-0.20 (<0.001)	-0.26 (<0.001)	-0.09 (0.07)	-0.08 (0.3)	-0.10 (0.2)	-0.12 (0.15)
IL-12p70	-0.16 (0.002)	-0.20 (<0.001)	-0.05 (0.3)	-0.03 (0.7)	-0.06 (0.5)	-0.04 (0.6)
IFN-γ	-0.11 (0.027)	-0.18 (<0.001)	-0.08 (0.13)	-0.14 (0.09)	-0.20 (0.018)	-0.20 (0.014)
TNF-α	-0.05 (0.3)	-0.09 (0.10)	-0.06 (0.3)	-0.13 (0.13)	-0.08 (0.3)	0.03 (0.7)
Th2 cytokines						
IL-4	-0.16 (0.002)	-0.21 (<0.001)	-0.08 (0.11)	-0.13 (0.13)	-0.18 (0.030)	-0.19 (0.023)
IL-5	-0.22 (<0.001)	-0.27 (<0.001)	-0.09 (0.10)	-0.08 (0.4)	-0.10 (0.2)	-0.16 (0.06)
IL-6	-0.20 (<0.001)	-0.22 (<0.001)	-0.08 (0.12)	-0.07 (0.4)	-0.03 (0.7)	0.13 (0.12)
IL-10	-0.18 (<0.001)	-0.24 (<0.001)	-0.10 (0.06)	0.00 (>0.9)	-0.01 (0.9)	-0.05 (0.6)
IL-13	-0.14 (0.007)	-0.17 (0.001)	-0.03 (0.5)	-0.02 (0.8)	-0.05 (0.6)	-0.01 (0.9)
Th17 cytokines						
IL-17a	-0.21 (<0.001)	-0.25 (<0.001)	-0.05 (0.3)	-0.13 (0.11)	-0.15 (0.06)	-0.19 (0.020)
Chemokines						
CCL2	-0.04 (0.4)	-0.10 (0.06)	0.01 (0.8)	-0.02 (0.8)	-0.05 (0.6)	0.06 (0.5)
CCL4	0.01 (0.9)	0.00 (0.9)	-0.04 (0.4)	0.10 (0.2)	0.17 (0.044)	0.19 (0.018)
IL-8	-0.11 (0.028)	-0.12 (0.019)	-0.16 (0.002)	-0.10 (0.2)	-0.13 (0.11)	-0.10 (0.2)
Others						
IL-1β	-0.07 (0.16)	-0.06 (0.25)	-0.01 (0.9)	-0.01 (0.9)	0.00 (>0.9)	0.00 (>0.9)
IL-7	-0.17 (0.001)	-0.24 (<0.001)	-0.09 (0.09)	-0.11 (0.18)	-0.14 (0.10)	-0.14 (0.09)
G-CSF	-0.23 (<0.001)	-0.28 (<0.001)	-0.09 (0.09)	-0.17 (0.041)	-0.19 (0.019)	-0.17 (0.042)
GM-CSF	-0.25 (<0.001)	-0.30 (<0.001)	-0.07 (0.06)	-0.10 (0.2)	-0.15 (0.06)	-0.22 (0.008)
CRP	-0.25 (<0.001)	-0.26 (<0.001)	-0.13 (0.009)	-0.21 (0.012)	-0.23 (0.005)	-0.03 (0.7)
ET1	-0.09 (0.07)	-0.09 (0.07)	-0.13 (0.011)	-0.05 (0.6)	0.05 (0.5)	0.03 (0.7)

G-CSF: Granulocyte colony-stimulating factor; GM-CSF: Granulocyte-macrophage colony-stimulating factor; CRP: C-reactive protein; ET1: Endothelin 1. Using Bonferroni correction for multiple hypothesis testing (n = 3), P < 0.017 remains statistically significant.