

**Supplementary Table 1.** Intraclass Correlation Coefficients (ICC) with 95% Confidence Intervals (CI) for 14 immune biomarkers measured in 200 HIV seronegative men, calculated across three visits and by pairs of consecutive study visits

Biomarker	<u>Overall</u>		<u>Visits 1 and 2</u>		<u>Visits 2 and 3</u>	
	ICC <sup>a</sup>	95% CI	ICC	95% CI	ICC	95% CI
<b>N observations</b>		600		400		400
<b>Biomarker<sup>b</sup></b>						
ApoA1	0.88	(0.85, 0.90)	0.91	(0.88, 0.93)	0.88	(0.85, 0.91)
sCD14	0.56	(0.49, 0.64)	0.64	(0.56, 0.72)	0.56	(0.47, 0.65)
sgp130	0.69	(0.63, 0.75)	0.64	(0.56, 0.72)	0.73	(0.66, 0.79)
sIL-6R	0.82	(0.78, 0.85)	0.84	(0.79, 0.87)	0.82	(0.78, 0.86)
sIL-2R $\alpha$	0.79	(0.75, 0.83)	0.82	(0.77, 0.86)	0.79	(0.74, 0.84)
sTNF-R2	0.73	(0.68, 0.78)	0.70	(0.63, 0.77)	0.78	(0.72, 0.83)
BAFF/BLyS	0.70	(0.64, 0.76)	0.72	(0.64, 0.78)	0.71	(0.64, 0.78)
CXCL13 <sup>c</sup>	0.70	(0.64, 0.76)	0.72	(0.65, 0.78)	0.70	(0.63, 0.77)
IFN- $\gamma$	0.55	(0.47, 0.62)	0.47	(0.36, 0.58)	0.57	(0.48, 0.66)
IL-1 $\beta$	0.48	(0.40, 0.56)	0.48	(0.37, 0.58)	0.50	(0.40, 0.61)
IL-6	0.54	(0.47, 0.62)	0.55	(0.46, 0.65)	0.61	(0.52, 0.69)
IL-8	0.33	(0.24, 0.42)	0.37	(0.26, 0.49)	0.35	(0.24, 0.48)
IL-10	0.70	(0.63, 0.75)	0.65	(0.56, 0.72)	0.65	(0.56, 0.72)
TNF- $\alpha$	0.87	(0.84, 0.90)	0.91	(0.88, 0.93)	0.88	(0.84, 0.91)

<sup>a</sup> All ICCs adjusted for age at visit (continuous) and ethnicity

<sup>b</sup> Undetectable values were assigned a value equal to one-half the plate-specific lower limit of detection

<sup>c</sup> One observation with an implausible value for CXCL13 was excluded only from analyses of CXCL13

**Supplementary Table 2.** Spearman correlation coefficients between biomarker levels measured at different pairs of study visits among 200 men

<b>Biomarker</b>	<b>Visits 1 and 2</b>	<b>Visits 2 and 3</b>	<b>Visits 1 and 3</b>
APOA1	0.87 <sup>a</sup>	0.88	0.85
sCD14	0.65	0.57	0.55
sGP130	0.60	0.64	0.68
sIL-2R $\alpha$	0.84	0.83	0.79
sIL-6R	0.88	0.86	0.81
sTNF-R2	0.73	0.78	0.72
BAFF/BLyS	0.73	0.71	0.69
CXCL13	0.57	0.64	0.53
IFN- $\gamma$	0.52	0.63	0.63
IL-1 $\beta$	0.42	0.54	0.46
IL-6	0.55	0.52	0.45
IL-8	0.52	0.52	0.52
IL-10	0.64	0.61	0.68
TNF- $\alpha$	0.84	0.85	0.77

<sup>a</sup> All correlation coefficients adjusted for age at study visit

**Supplementary Table 3.** Spearman correlation coefficients between biomarkers measured at visit 1, adjusted for age at visit 1<sup>a</sup>

<b>Biomarker</b>	ApoA1	sCD14	sgp130	sIL-6R	sIL-2R $\alpha$	sTNF-R2	BAFF/BLyS	CXCL13 <sup>2</sup>	IFN- $\gamma$	IL-1 $\beta$	IL-6	IL-8	IL-10	TNF- $\alpha$
ApoA1	1.00	0.05	0.12	-0.01	0.05	-0.12	0.08	0.12	-0.03	-0.01	0.09	-0.17	-0.01	-0.10
sCD14		1.00	0.42	0.32	0.25	0.30	0.34	0.12	0.10	0.11	0.12	0.03	-0.09	-0.11
sgp130			1.00	0.22	0.34	0.30	0.41	0.23	0.06	0.03	-0.03	-0.02	0.02	0.001
sIL-6R				1.00	0.31	0.35	0.28	0.10	0.11	0.12	0.07	0.03	-0.06	-0.01
sIL-2R $\alpha$					1.00	0.61	0.39	0.04	0.11	0.13	0.10	0.07	0.20	0.05
sTNF-R2						1.00	0.33	-0.003	0.12	0.18	0.07	0.16	0.20	0.08
BAFF/BLyS							1.00	0.24	0.06	0.06	0.09	0.10	0.07	-0.03
CXCL13 <sup>b</sup>								1.00	0.06	0.01	0.03	-0.07	0.16	-0.08
IFN- $\gamma$									1.00	0.27	0.26	0.18	0.10	0.23
IL-1 $\beta$										1.00	0.39	0.32	0.39	0.28
IL-6											1.00	0.25	0.23	0.18
IL-8												1.00	0.19	0.33
IL-10													1.00	0.23
TNF- $\alpha$														1.00

<sup>a</sup> All moderate to strong correlations ( $r \geq 0.30$ ) were statistically significant at the level of  $p \leq 0.01$

<sup>b</sup> One individual with implausible values for CXCL13 was not included in the correlations with CXCL13

**Supplementary Table 4.** Spearman correlation coefficients between biomarkers measured at visit 2, adjusted for age at visit 2<sup>a</sup>

<b>Biomarker</b>	ApoA1	sCD14	sgp130	sIL-6R	sIL-2R $\alpha$	sTNF-R2	BAFF/BLyS	CXCL13 <sup>2</sup>	IFN- $\gamma$	IL-1 $\beta$	IL-6	IL-8	IL-10	TNF- $\alpha$
ApoA1	1.00	-0.01	0.16	-0.07	0.07	-0.11	0.08	0.20	-0.07	0.04	0.13	-0.14	-0.03	-0.06
sCD14		1.00	0.34	0.33	0.30	0.37	0.39	0.07	0.09	0.06	0.16	0.12	0.07	-0.04
sgp130			1.00	0.24	0.32	0.25	0.48	0.29	0.08	0.01	-0.13	0.05	-0.03	0.02
sIL-6R				1.00	0.33	0.46	0.28	0.07	0.16	0.03	0.13	-0.04	0.05	0.03
sIL-2R $\alpha$					1.00	0.59	0.43	0.12	0.21	0.03	0.12	-0.02	0.06	0.06
sTNF-R2						1.00	0.34	-0.001	0.23	0.05	0.13	0.10	0.08	0.12
BAFF/BLyS							1.00	0.23	0.15	0.05	0.11	0.02	0.05	-0.02
CXCL13 <sup>b</sup>								1.00	0.01	-0.14	-0.06	-0.11	0.11	-0.14
IFN- $\gamma$									1.00	0.24	0.15	0.18	0.17	0.14
IL-1 $\beta$										1.00	0.30	0.35	0.26	0.20
IL-6											1.00	0.15	0.16	0.07
IL-8												1.00	0.08	0.27
IL-10													1.00	0.08
TNF- $\alpha$														1.00

<sup>a</sup> All moderate to strong correlations ( $r \geq 0.30$ ) were statistically significant at the level of  $p \leq 0.01$

<sup>b</sup> One individual with implausible values for CXCL13 was not included in the correlations with CXCL13

**Supplementary Table 5.** Spearman correlation coefficients between biomarkers measured at visit 3, adjusted for age at visit 3<sup>a</sup>

<b>Biomarker</b>	ApoA1	sCD14	sgp130	sIL-6R	sIL-2R $\alpha$	sTNF-R2	BAFF/BLyS	CXCL13 <sup>2</sup>	IFN- $\gamma$	IL-1 $\beta$	IL-6	IL-8	IL-10	TNF- $\alpha$
ApoA1	1.00	-0.03	0.17	-0.02	0.05	-0.06	0.05	0.21	-0.03	0.11	0.18	-0.12	0.13	-0.05
sCD14		1.00	0.27	0.26	0.25	0.31	0.25	-0.05	0.01	0.09	0.16	0.02	0.04	-0.03
sgp130			1.00	0.25	0.29	0.21	0.38	0.22	0.12	0.09	0.01	-0.02	-0.05	-0.08
sIL-6R				1.00	0.31	0.39	0.30	0.12	0.04	0.11	0.11	-0.10	-0.03	-0.07
sIL-2R $\alpha$					1.00	0.58	0.40	0.09	0.12	0.19	0.19	0.06	0.12	0.06
sTNF-R2						1.00	0.36	-0.04	0.15	0.23	0.21	0.15	0.11	0.13
BAFF/BLyS							1.00	0.23	0.08	0.22	0.20	0.11	0.07	0.06
CXCL13 <sup>b</sup>								1.00	0.01	-0.04	-0.11	-0.09	0.10	-0.07
IFN- $\gamma$									1.00	0.20	0.13	0.14	0.13	0.07
IL-1 $\beta$										1.00	0.35	0.39	0.31	0.23
IL-6											1.00	0.20	0.30	0.16
IL-8												1.00	0.19	0.29
IL-10													1.00	0.16
TNF- $\alpha$														1.00

<sup>a</sup> All moderate to strong correlations ( $r \geq 0.30$ ) were statistically significant at the level of  $p \leq 0.01$

<sup>b</sup> One individual with implausible values for CXCL13 was not included in the correlations with CXCL13