

**Supplementary Table 1. Biomarker levels in participants without HIV Infection or with chronic HIV infection pre-ART or after 48 weeks of ART**

	HIV Uninfected	Chronic HIV Infected	
		Pre-ART	Week 48 of ART
CRP (µg/mL)	0.26	1.94 <sup>a</sup>	2.13 <sup>a</sup>
TNF (pg/mL)	1.11	3.51 <sup>b</sup>	n/a
IL-6 (pg/mL)	0.51	0.66 <sup>b</sup>	n/a
sIL-6R (ng/mL)	12.5	14.7 <sup>b</sup>	n/a
sgp130 (ng/mL)	109	98 <sup>b</sup>	n/a
I-FABP (pg/mL)	728	2005 <sup>a</sup>	3111 <sup>a</sup>
sCD14 (µg/mL)	0.79	1.73 <sup>a</sup>	1.68 <sup>a</sup>
D-dimer (µg/mL)	0.17	0.47 <sup>a</sup>	0.31 <sup>a</sup>
HA (ng/mL)	9.0	n/a	43.3 <sup>a</sup>

<sup>a</sup>N=27, <sup>b</sup>N=14

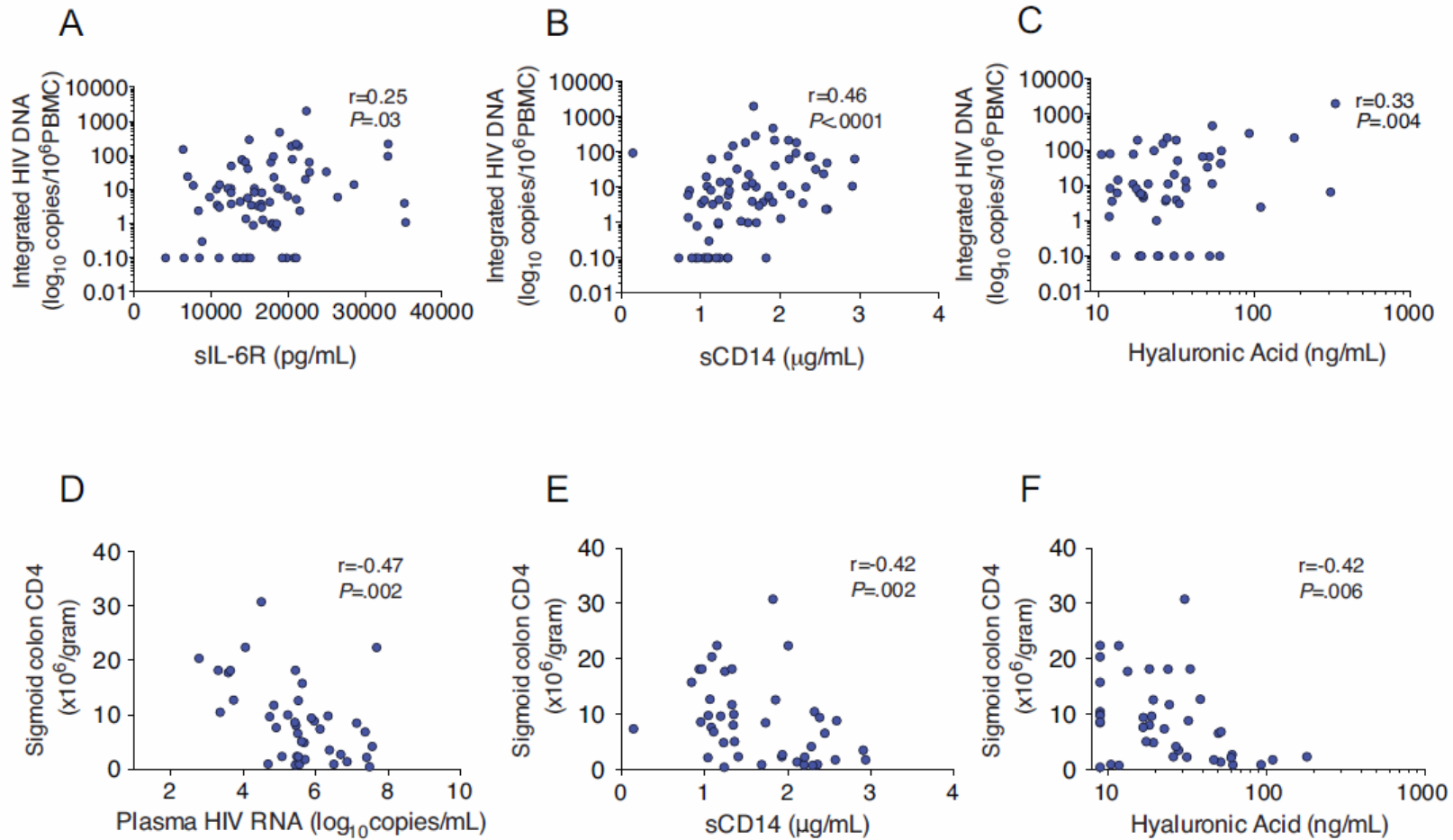
**Supplementary Table 2. Linear regression model for biomarkers at week 48, adjusted by age and gender**

	Coefficient	P
CRP	-2.4 (-1.0 to -3.9)	0.001
I-FABP	270 (-381 to 922)	0.41
sCD14	-0.50 (-0.32 to -0.67)	<0.001
D-dimer	-0.15 (-0.08 to -0.23)	<0.001
HA	-29 (-23 to -35)	<0.001

**Supplementary Table 3. Correlations among CD4 T-cell counts, HIV burden, and biomarkers**

	sIL-6R	I-FABP	sCD14	HA	D-dimer	CRP
Plasma HIV RNA	r=0.38 P = .001	r=0.23 P = .05	r=0.23 P = .05	r=0.26 P = .03	r=0.35 P = .003	n.s.
Total HIV DNA in PBMCs	n.s.	r=0.25 P = .04	r=0.41 P = .0003	n.s.	r=0.26 P = .03	n.s.
Integrated HIV DNA in PBMCs	r=0.23 P = .05	r=0.28 P = .02	r=0.46 P < .0001	r=0.34 P = .004	r=0.31 P = .01	n.s.
Total HIV DNA in the gut	n.s.	n.s.	n.s.	n.s.	n.s.	r=0.39 P = .05
Integrated HIV DNA in the gut	n.s.	n.s.	r=0.48 P = .02	n.s.	r=0.49 P = .02	r=0.41 P = .05
Peripheral CD4 T-cell counts	n.s.	n.s.	n.s.	n.s.	n.s.	r=-0.26 P = .03
Gut CD4 T-cell counts	n.s.	n.s.	r=-0.41 P = .008	r=-0.41 P = .008	n.s.	n.s.

**Supplementary Figure 1.** Associations of biomarkers with HIV disease state. Association of the HIV reservoir (measured by the frequency of cells harboring integrated HIV DNA) with biomarkers of A) IL-6 transsignaling (sIL-6R), B) LPS-induced monocyte activation (sCD14), and C) fibrosis (HA). Association of sigmoid colon CD4 counts with D) plasma HIV RNA levels, E) sCD14, and F) HA.



Supplementary Figure 2. Associations of changes in biomarkers with changes in other HIV disease parameters. Decreases in (A) sCD14 and (B) CRP correlate with increases in CD4 T cell counts. (C) Decreases in HIV DNA levels in the gut tissue are associated with decreases in coagulation cascade activation, represented by D-dimer levels.

