

Supporting Information

Archin et al. 10.1073/pnas.1120248109

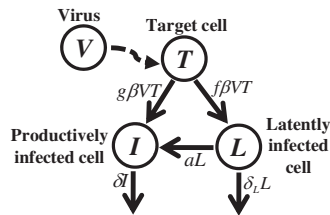


Fig. S1. Schematic diagram of the viral dynamic model (Eqs. 1 and 2). Symbols are defined in the text. We assume that a fraction, f , of infection events generates latently infected cells with replication competent genomes; a fraction contains “dead” proviruses detectable by PCR but incapable of reactivation (not shown); and the remaining fraction of infection events, g , leads to productively infected cells.

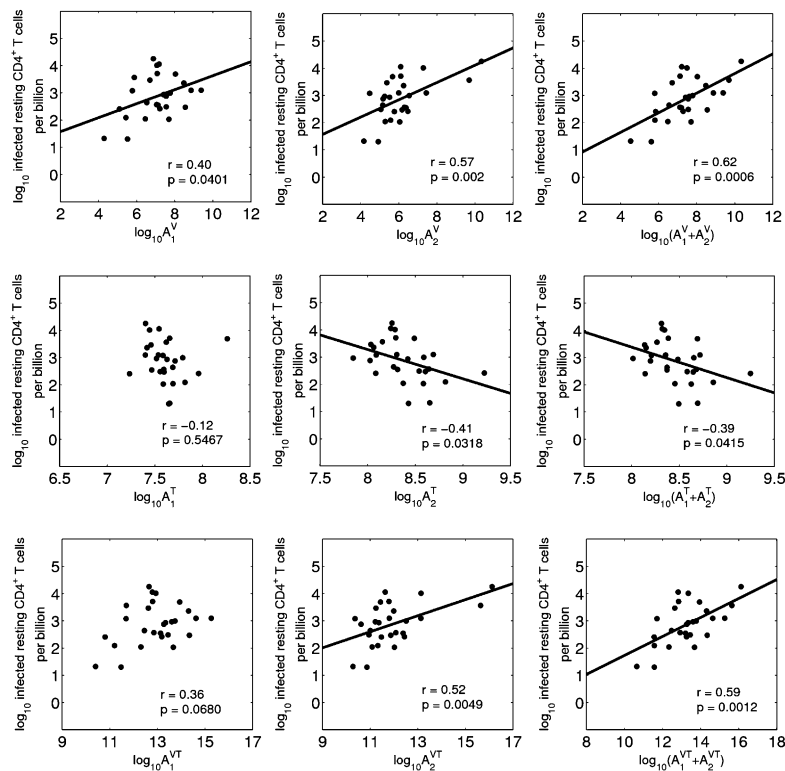


Fig. S2. Correlation analysis. (Top row) Relationship between measured RCI frequency and (Left panel) area under the viral load curve from the time of infection to the time of ART initiation. (Middle panel) Area under the viral load curve from the time of ART initiation to the time of the first leukopheresis (when the RCI frequency was measured). (Right panel) Area under the viral load curve from the time of infection to the time of first leukopheresis. (Middle row) Similar analysis but for areas under the CD4⁺ T-cell curve. (Bottom row) similar analysis but for areas under the $V(t)T(t)$ curve.

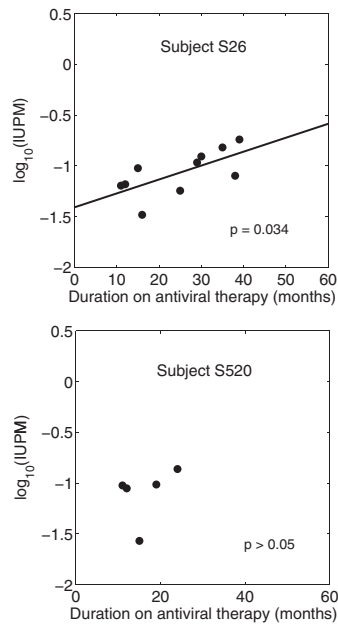


Fig. S3. Frequency of RCI in the two patients on stable ART who showed no decline in RCI. The apparent increase in RCI frequency represents a difference of one or two positive cultures of the 36 or more that were done for each data point, and thus the change may not actually be significant.

Table S1. Clinical characteristics of patients who had multiple leukophereses

Patient	Year of diagnosis	ART regimen	Months from ART start to <50 copies/mL	CD4 count at initiation of ART (cells/ μ L)	Most recent CD4 count (cells/ μ L)
S25	2004	FPV/r/ABC/3TC	6	439	1,143
S26	2004	EFV+TDF+FTC	1	541	798
S231	2006	EFV+TDF+FTC	3	277	690
S237	2006	ATV/r/ABC+3TC	4	389	537
S256	2008	EFV+TDF+FTC	1	630	763
S257	2008	EFV+TDF+FTC	8	137	496
S368	2008	EFV+TDF+FTC	7	933	1,087
S396	2009	DRV/r/ETR	3	1,022	841
S416	2009	DRV/r/ETR	5	629	907
S520	2004	TDF/FTC/NVP	3	320	840
S521	2008	EFV+TDF+FTC	4	849	1,495

ABC, abacavir; ATV, atazanavir; DRV, darunavir; EFV, efavirenz; ETR, etravirine; FPV, fosamprenavir; NVP, nevirapine; r, ritonavir; TDF, tenofovir.