Table S1: Changes in %HLA-DR+ and %CD38+ T cells during Maraviroc Intensification.

	Placebo (n=22)			**Maraviroc** (n=23)			**Between-Arm**
Biomarker	**Baseline Median (%)**	**Mean Δ from Wk 0-24 in log_{10}% (95% CI)**	**P Value**	**Baseline Median (%)**	**Mean Δ from Wk 0-24 in log_{10}% (95% CI)**	**P Value**	**P Value**
%HLA-DR+ CD8+ T Cells	28.7	-0.04 (-0.007 to -0.04)	0.026	37.9	+0.05 (0.004 to 0.09)	0.031	<0.001
%HLA-DR+ CD4+ T Cells	22.9	-0.07 (-0.12 to -0.03)	0.002	25.9	-0.001 (-0.05 to 0.05)	0.96	0.15
%CD38+ CD8+ T Cells	40.1	-0.02 (-0.07 to 0.03)	0.40	45.6	+0.01 (-0.05 to 0.06)	0.77	0.061
%CD38+ CD4+ T Cells	60.5	-0.03 (-0.06 to 0.005)	0.098	61.2	-0.01 (-0.05 to 0.02)	0.39	0.20

Table S2: Changes in T Cell Activation in Fresh (non-Cryopreserved) PBMC during Maraviroc Intensification.

	Placebo (n=8)			**Maraviroc** (n=7)			**Between-Arm**
Biomarker	**Baseline Median (%)**	**Mean Δ from Wk 0-22 in % (95% CI)**	**P Value**	**Baseline Median (%)**	**Mean Δ from Wk 0-22 in % (95% CI)**	**P Value**	**P Value**
%CD38+HLA-DR+ CD8+ T cells (fresh)	8.0	+1.8 (-3.8 to 7.4)	0.52	8.7	+5.5 (-1.8 to 12.7)	0.14	0.45
%CD38+HLA-DR+ CD4+ T cells (fresh)	6.8	-5.3 (-9.5 to -1.0)	0.015	6.9	+4.6 (0.1 to 9.2)	0.045	0.002

Figure S3: Frequency of CCR5+ T cells in Peripheral Blood and Rectal Tissue by Maturational Phenotype. The frequency of CCR5+ CD8+ **(A)** and CD4+ T cells **(B)** in peripheral blood (green) and rectal tissue (purple) are plotted by maturational phenotypes defined according to CD45RA and CCR7 expression. Samples were obtained from the date of rectal biopsy prior to the baseline visit and data from both the maraviroc and placebo arms are combined. All differences between peripheral blood and rectal biopsies within each maturational subset were statistically significant by Wilcoxon signrank test (P=0.003 for all).

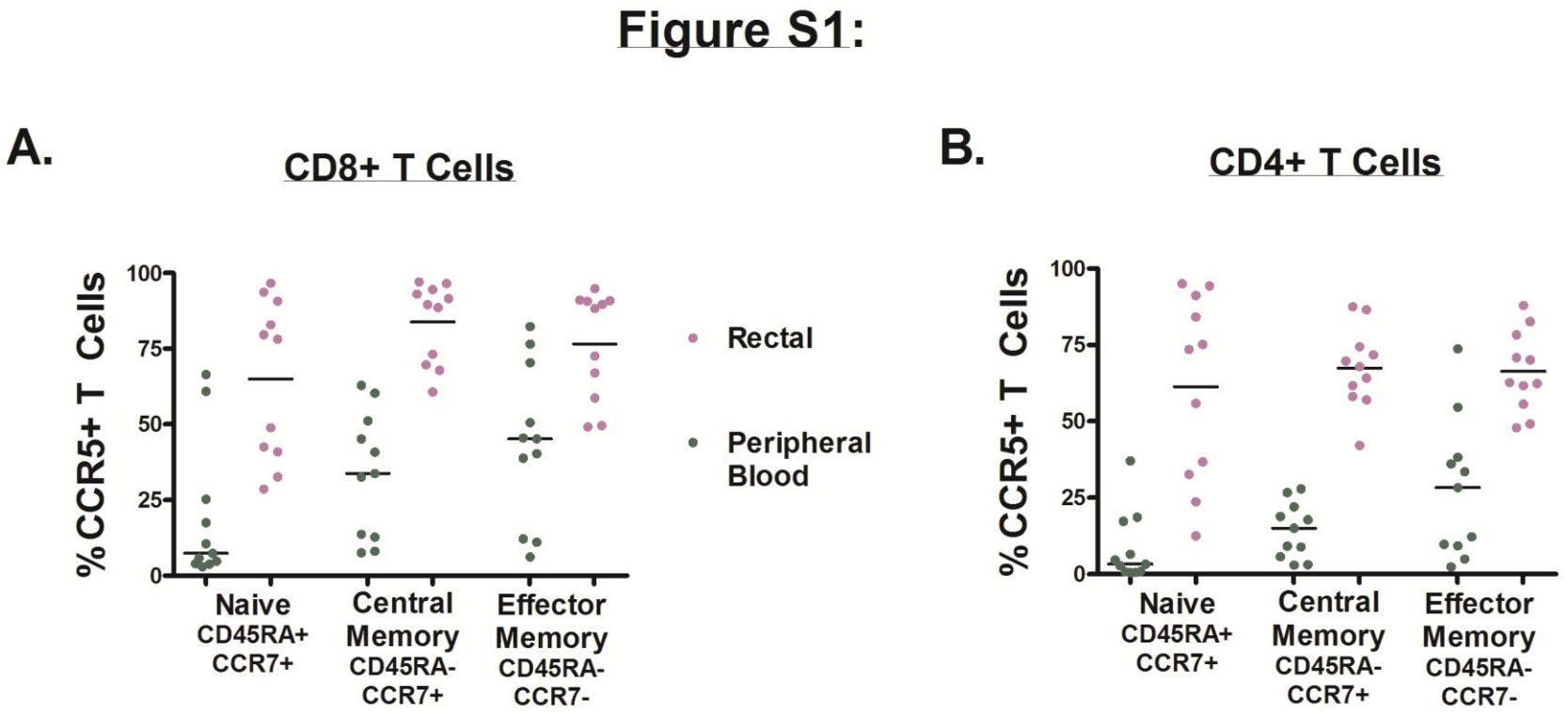

Table S4: Changes in Rectal T Cell Maturational Phenotype Frequencies during Maraviroc Intensification.

	Placebo (n=8)			**Maraviroc** (n=7)			**Between-Arm**
Biomarker	**Baseline Median (%)**	**Mean Δ from Wk 0-22 in % (95% CI)**	**P Value**	**Baseline Median (%)**	**Mean Δ from Wk 0-24 in % (95% CI)**	**P Value**	**P Value**
%Naive CD8+ T Cells	3.0	+1.4 (-1.3 to 4.0)	0.32	3.4	+0.8 (-2.0 to 3.6)	0.57	0.74
%Central Memory CD8+ T Cells	69.8	+1.7 (-12.6 to 16.1)	0.81	71.6	+8.2 (-1.9 to 18.4)	0.11	0.48
%Effector Memory CD8+ T Cells	24.4	-2.8 (-15.1 to 9.4)	0.65	19.7	-8.5 (-15.3 to -1.6)	0.02	0.44
%TEMRA CD8+ T Cells	0.9	+0.004 (-2.9 to 3.0)	0.99	1.1	-0.6 (-1.7 to 0.6)	0.34	0.74
%Naive CD4+ T Cells	2.2	-0.5 (-1.3 to 0.3)	0.19	3.3	+0.3 (-1.5 to 2.1)	0.74	0.40
%Central Memory CD4+ T Cells	78.9	+1.1 (-9.0 to 11.2)	0.83	78.9	+6.6 (-1.9 to 15.2)	0.13	0.42
%Effector Memory CD4+ T Cells	19.7	-0.6 (-10.8 to 9.7)	0.91	16.9	-6.9 (-14.3 to 0.5)	0.07	0.33
%TEMRA CD4+ T Cells	0.1	-0.01 (-0.3 to 0.3)	0.95	0.06	-0.04 (-0.1 to 0.03)	0.25	0.90

Table S5: Changes in Soluble IL-6 and D-Dimer Levels during Maraviroc Intensification.

	Placebo			**Maraviroc**			**Between-Arm**
Biomarker	**Baseline Median** (IQR)	**Mean $\log_{10}$ Δ from Wk 0-24 (95% CI)**	**P Value**	**Baseline Median** (IQR)	**Mean $\log_{10}$ Δ from Wk 0-24 (95% CI)**	**P Value**	**P Value**
IL-6 (pg/ml)	1.3 (0.6 to 1.9)	-0.07 (-0.3 to 0.08)	0.34	1.1 (0.7 to 1.6)	+0.01 (-0.2 to 0.2)	0.93	0.37
D-dimer (ng/ml)	172 (116 to 251)	+0.11 (-0.0005 to 0.21)	0.051	147 (93 to 241)	+0.08 (-0.07 to 0.23)	0.32	0.77