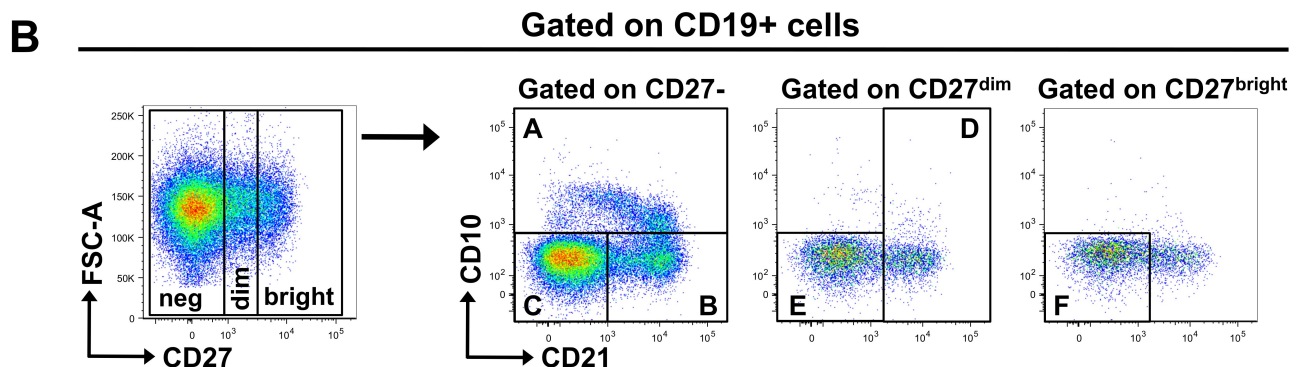
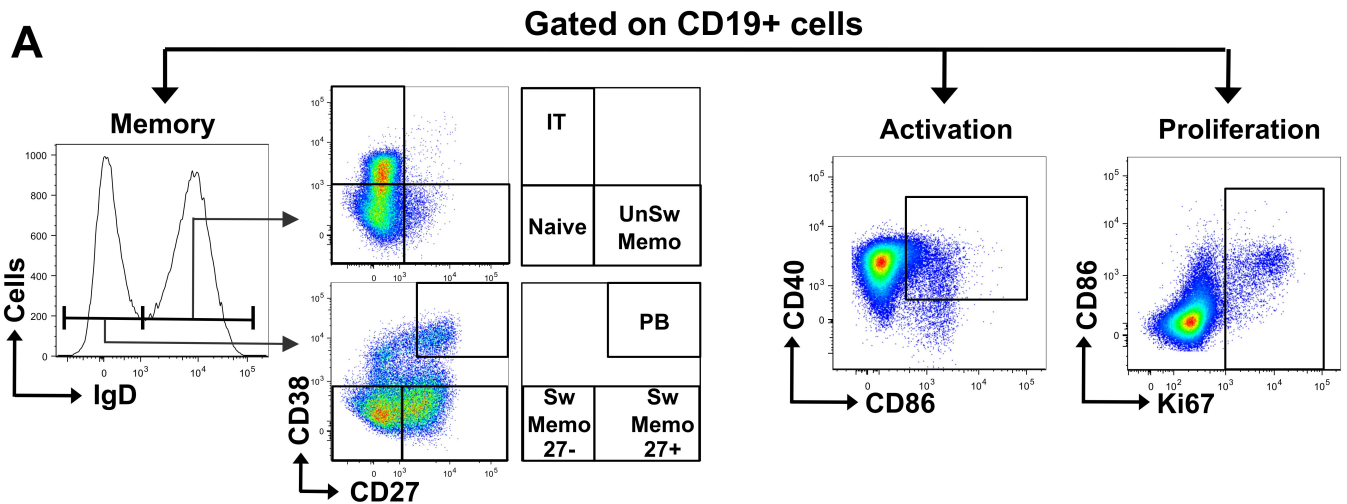
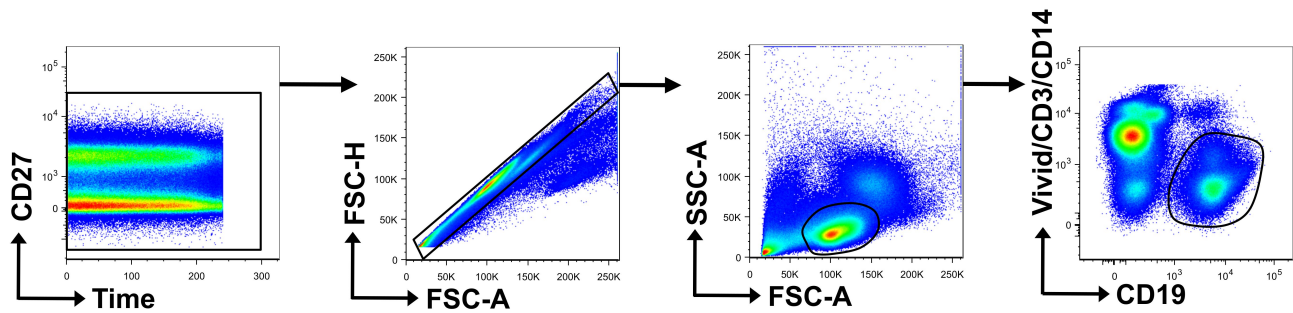


Supplemental Figure 1



- A:** Immature transitional (CD10+CD27-)
- B:** Naive (CD10-CD21+CD27-)
- C:** Tissue-like memory (CD10-CD21-CD27-)
- D:** Resting memory (CD21+CD27dim)
- E:** Activated memory (CD10-CD21-CD27dim)
- F:** Plasmablasts (CD10-CD21-CD27bright)

Figure S1. Gating strategies. A time gate was included to ensure no shift in fluorescence intensity over time, followed by a singlet gate to exclude doublets from the analysis. CD3 and CD14 markers were used to exclude T cells and monocytes, respectively, which were on the same channel as the viability dye Vivid, used to exclude dead cells. The core marker CD19 was used to identify B cells. **(A)** Identification of B cell memory subsets based on IgD, CD27 and CD38 expression. **(B)** Alternative gating strategy based on CD27, CD10 and CD21 expression to delineate memory B cell subsets.

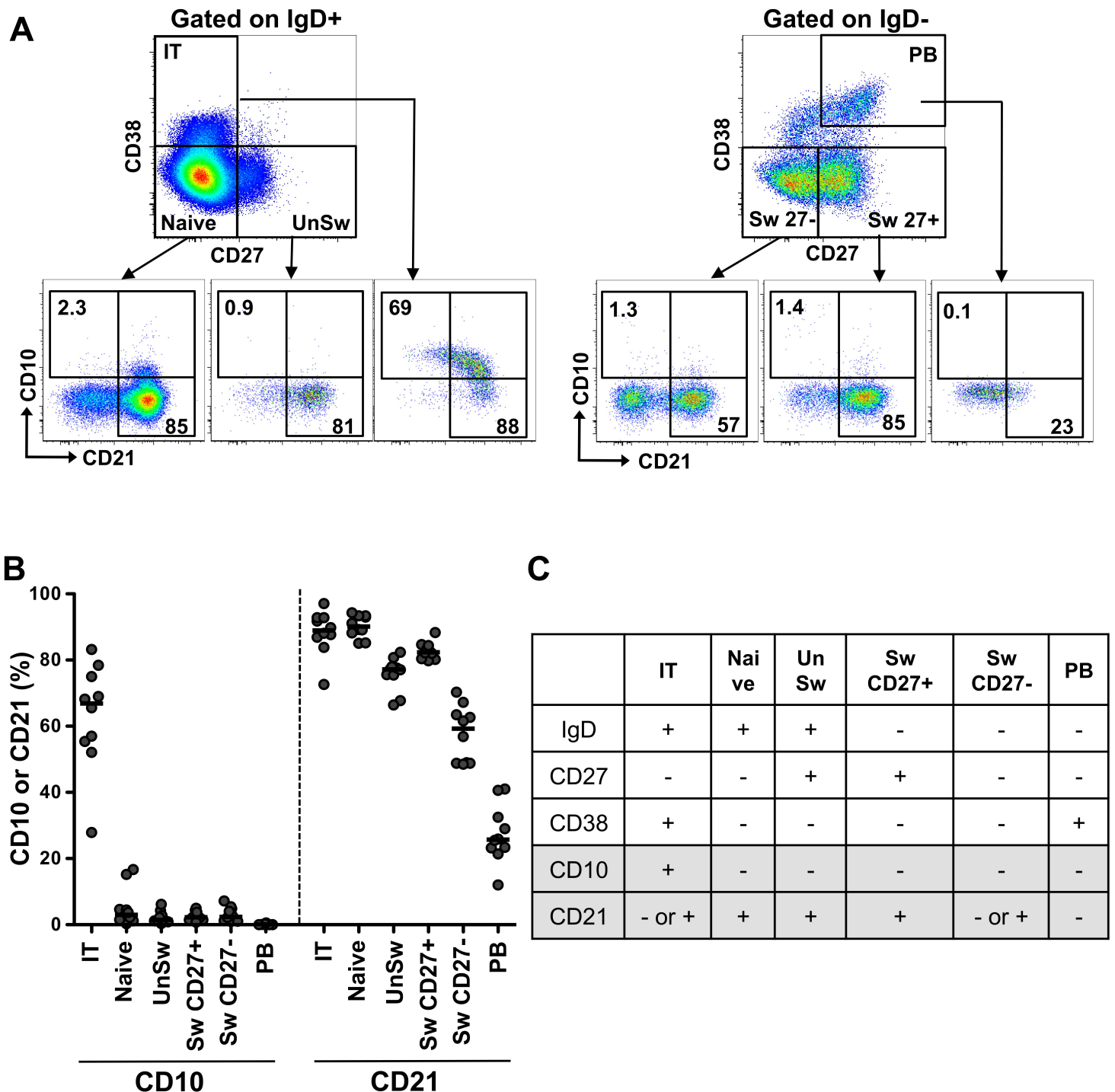


Figure S2: Expression of CD10 and CD21 in B cell subsets delineated using IgD, CD27 and CD38 expression. (A) Representative flow plots from one HIV-infected individual after ART. **(B)** Frequencies of CD10 and CD21 in each B cell subsets in HIV-infected individuals post-ART (n=10). The majority (~70%) of immature transitional B cells express CD10, while all other B cell subsets were predominantly negative for this marker. CD10 expression on IT B cells may be an underestimation due to non-optimal CD10 separation. **(C)** Summary of the phenotype of B cells subsets. Although the majority of IT B cells express CD21, T1 IT B cells are CD21lo.

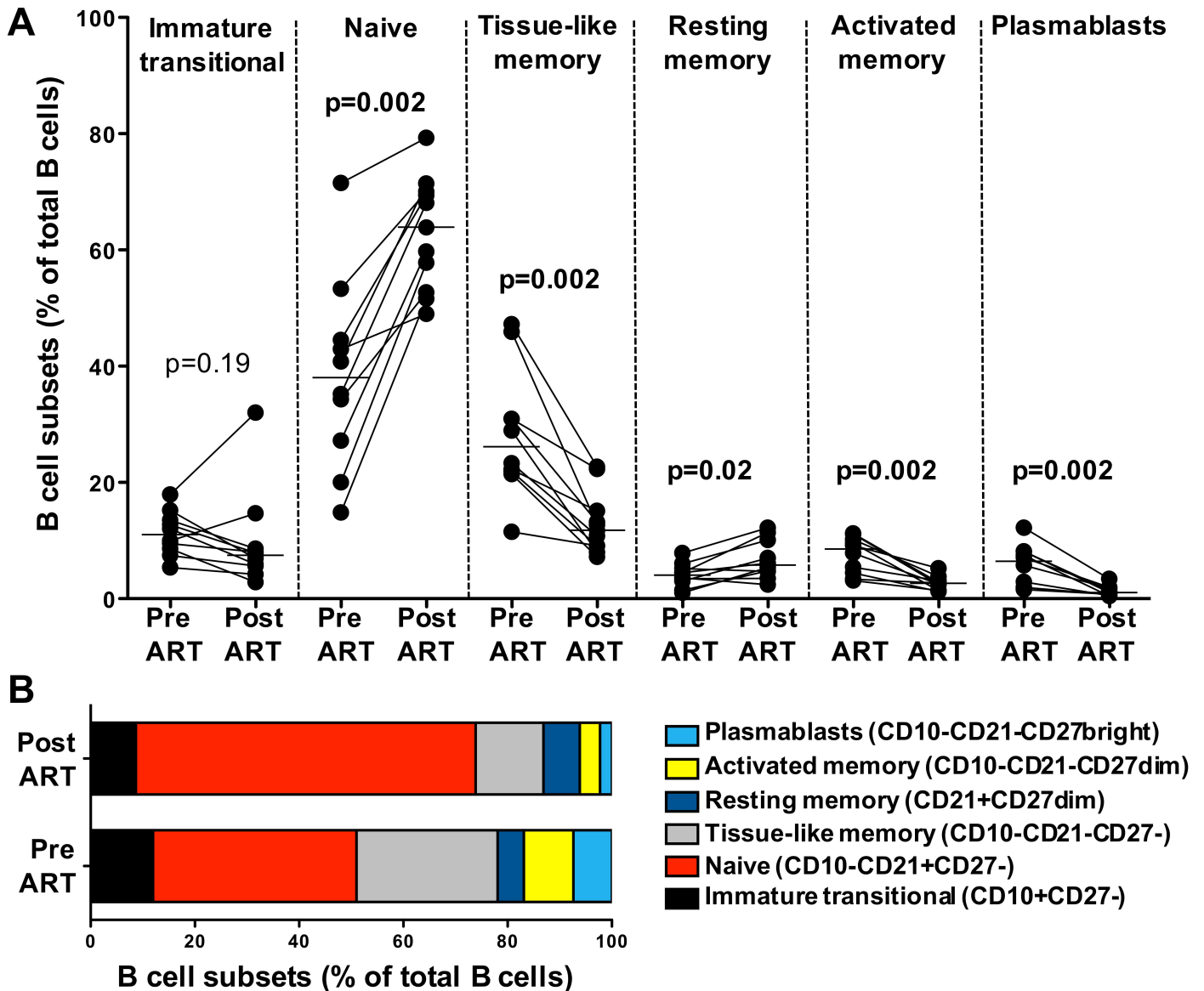


Figure S3. Evolution of B cell subsets defined based on CD27, CD10 and CD21 expression pre- and post-ART. (A) Frequencies of B cell subpopulations before and after ART in 10 HIV-infected participants. Horizontal lines indicate the median. Statistical significance was calculated using Wilcoxon paired test. (B) Stacked bar graph showing the median frequency of each B cell subset before and after ART. Each color identifies a B cell subpopulation, as indicated in the adjacent key. The gating strategy is shown in Supplemental Figure S1.

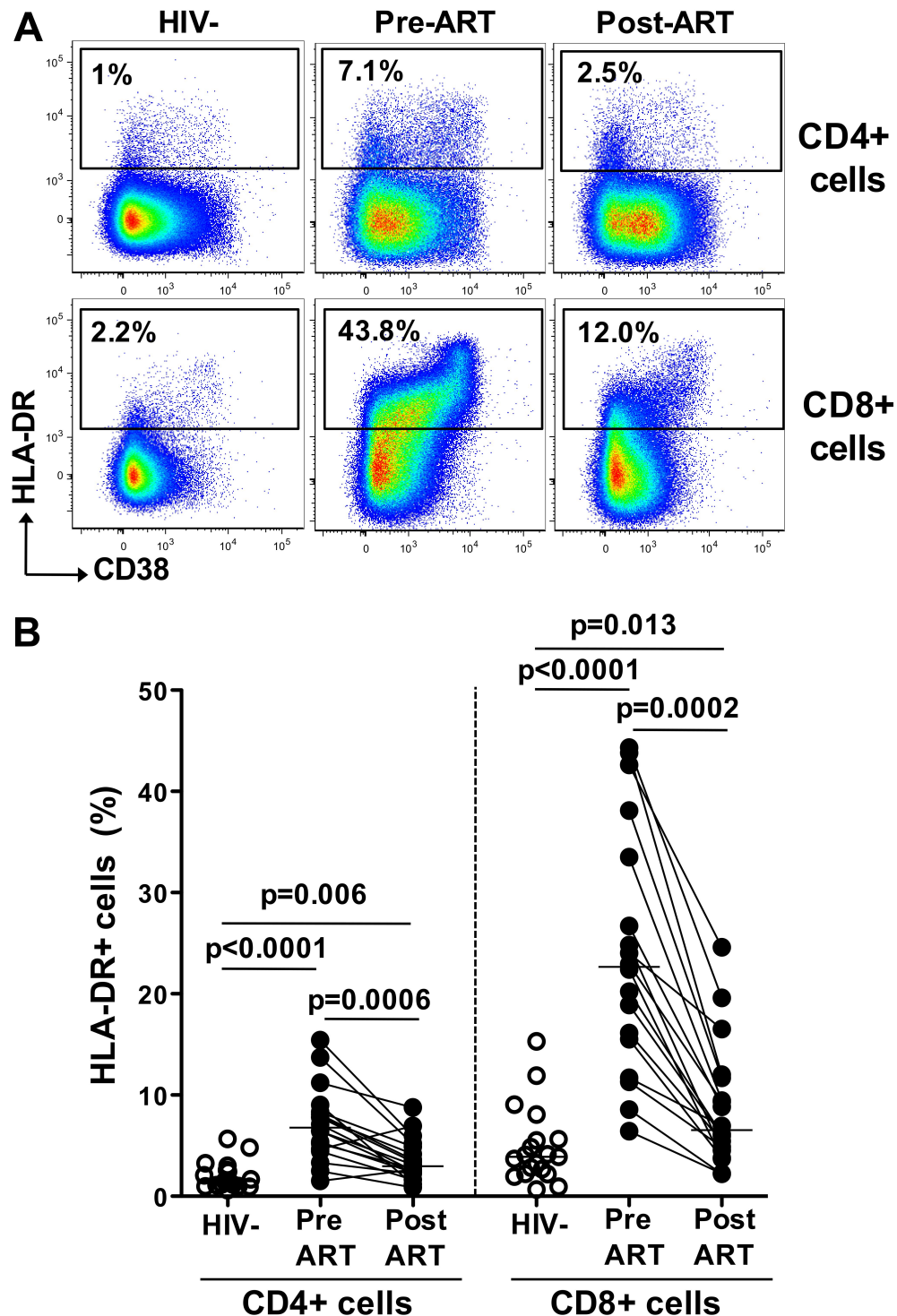


Figure S4. Effect of ART on CD4+ and CD8+ T cell activation levels measured by HLA-DR expression. (A) Representative flow plots of HLA-DR expression on T cells from one HIV-uninfected and one HIV-infected (pre- and post-ART) individual. **(B)** Frequencies of HLA-DR+ CD4+ and CD8+ T cells in 19 HIV-uninfected (open circles) and 18 HIV-infected (closed circles) individuals pre- and post-ART. Horizontal lines represent the median. Statistical significance was calculated using Mann-Whitney U test and Wilcoxon Signed Rank for unmatched and matched samples, respectively.

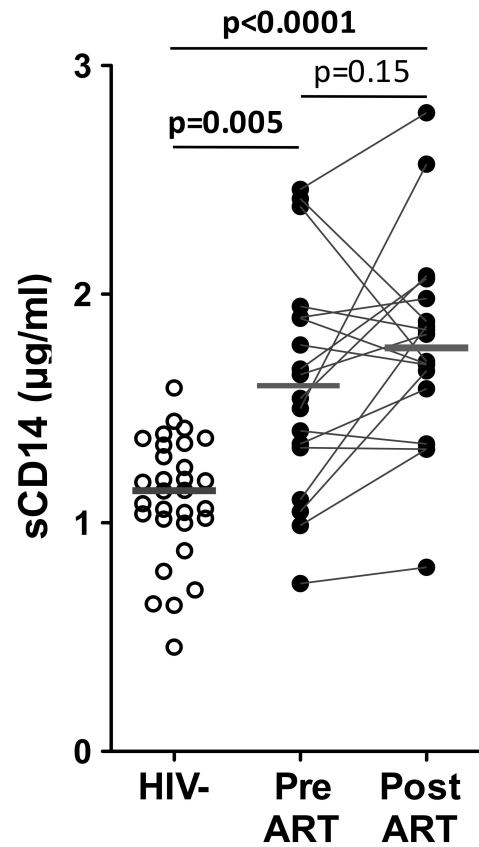


Figure S5. Effect of ART on plasma levels of sCD14. Soluble CD14 was measured in 18 HIV-infected women and 30 HIV-uninfected women from the same community by ELISA (R&D Systems). Horizontal black lines represent the median. Statistical significance was calculated using a non-parametric Wilcoxon matched test (pre- and post-ART) and the Mann-Whitney test for comparisons with HIV-uninfected individuals.