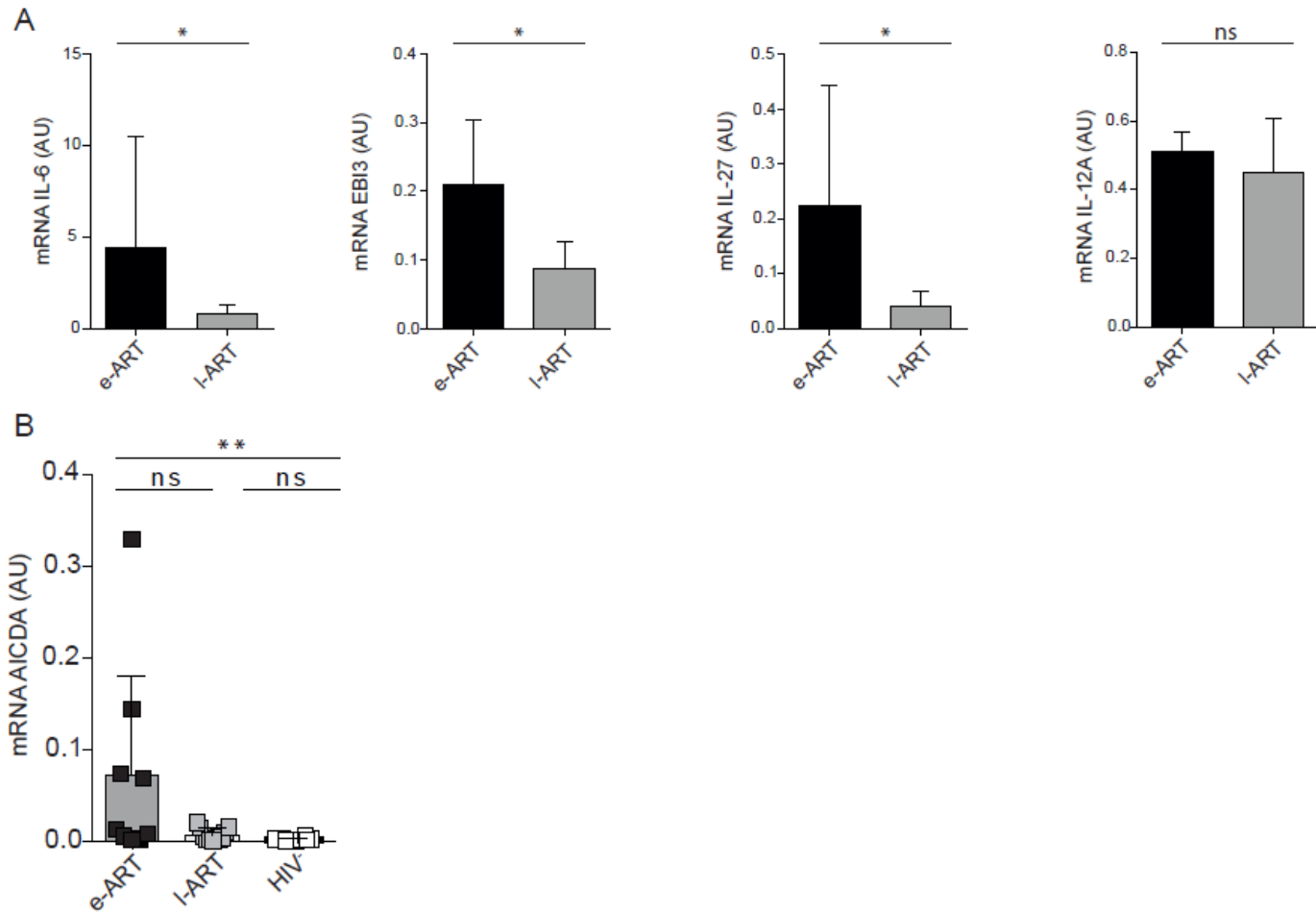


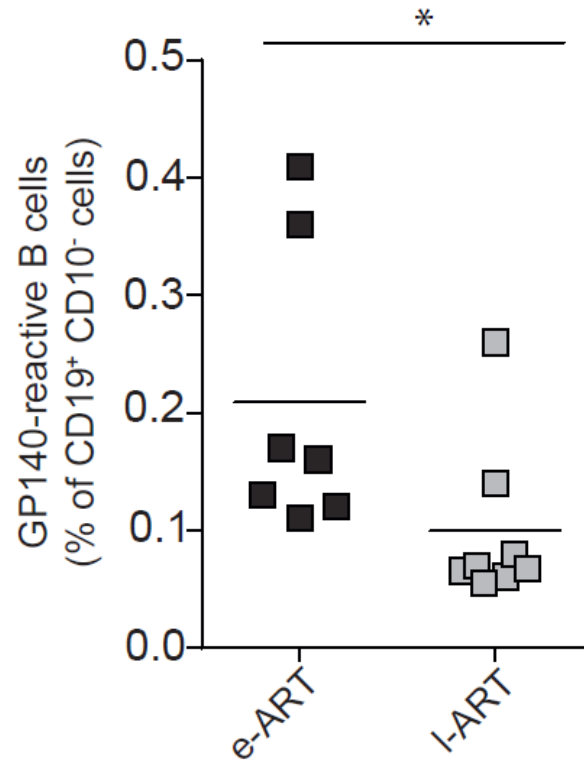
Supplemental Figure 1. Early treatment of HIV-1-infected patients preserves resting memory B-cells in blood.

Frequencies of mature naive B cells (MN, CD21⁺ CD27⁻), resting memory B cells (RM, CD21⁺ CD27⁺), activated memory B cells (AM, CD21⁻ CD27⁺), and tissue-like memory B cells (TLM, CD21⁻ CD27⁻) among CD19⁺ CD38^{low} CD10⁻ mature B cells in the blood from early-treated patients (e-ART, blue squares) and late-treated patients (l-ART, red squares) and from healthy HIV-negative controls (HIV⁻, white squares)



Supplemental Figure 2. mRNA factors important for the germinal center's functions are higher in the gut of early-treated HIV-1-infected patients.

(A) IL-6-, IL-27p28-, IL-27 EBI-3-, and IL-12A mRNA expressions in rectal biopsies of HIV-1-infected patients, quantified by qPCR. The histograms depict mean \pm SEM. The two-sided nonparametric Mann-Whitney U test was used: ns, non significant; * $P < 0.05$ **(B)** AICDA mRNA transcripts in rectal biopsies from the patients, quantified by qPCR. Histograms depict mean values \pm SEM. Kruskal-Wallis test: ns, non significant and ** $P < 0.01$



Supplemental Figure 3. The frequency of gp140-reactive B cells is higher in the blood of early-treated HIV-1-infected patients. Frequencies of total gp140-reactive CD19⁺ cells in the blood and gut of e-ART and I-ART patients. Two-sided nonparametric Mann-Whitney U test: * $P < 0.05$.