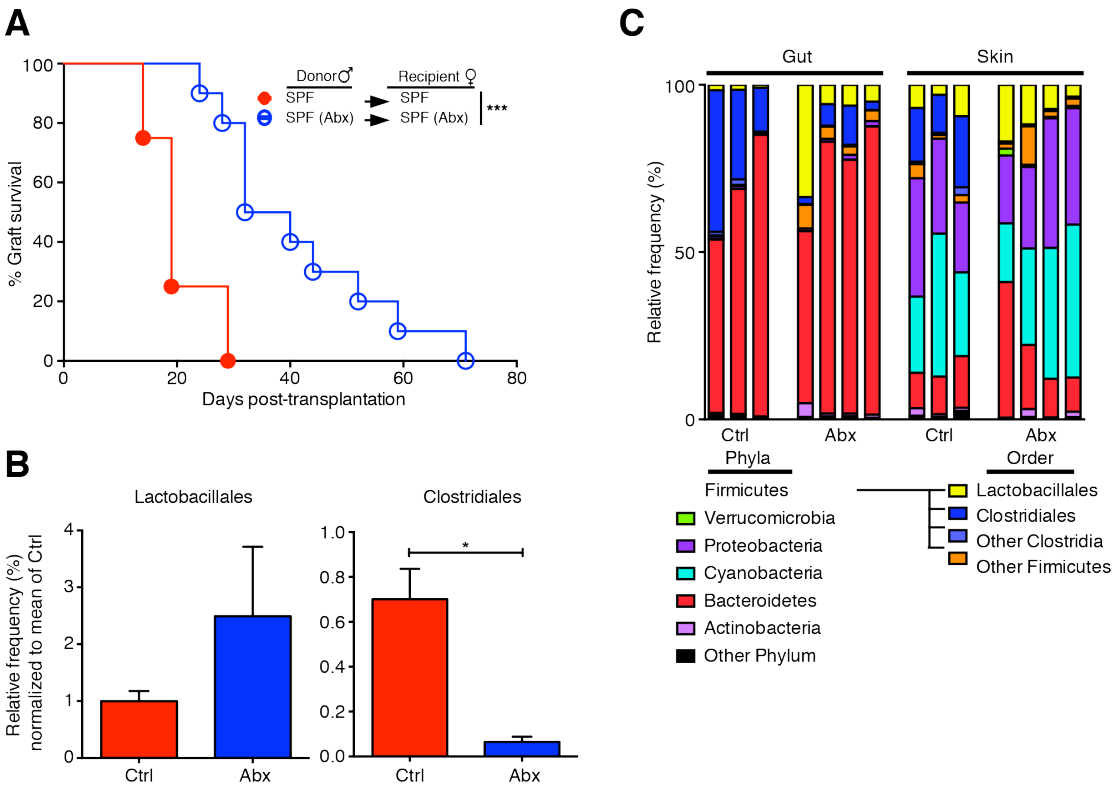
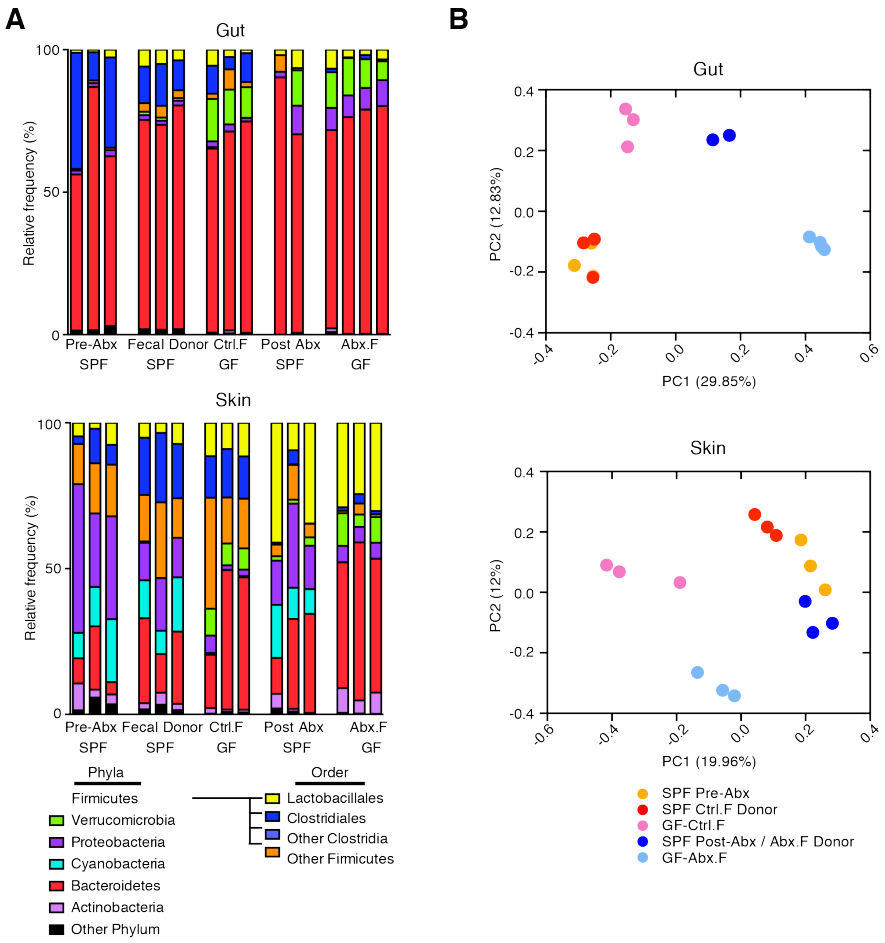
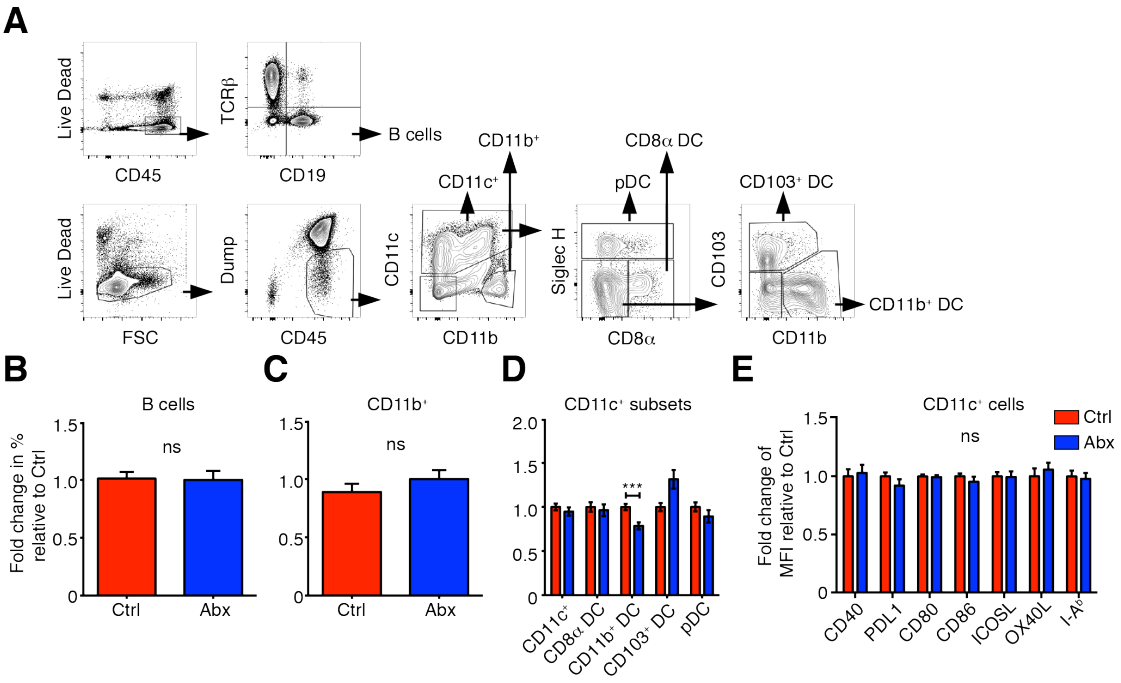


Supplemental Figure 1. Abx treatment prolonged minor-mismatched skin graft survival and altered bacterial composition in both gut and skin. (**A**) In-house bred B6 littermates were used as male donors of skin grafts and female recipients. Untreated, n = 4, Abx-pre-treated n = 10. Log rank test. (**B,C**) Fecal and skin samples were harvested and sequenced using the 16S MiSeq platform. (**B**) Relative frequency of bacterial phyla and order in Ctrl mice and mice on day 10 of Abx treatment. Each bar represents an individual mouse. Representative of 4 independent experiments. (**C**) Normalized relative frequencies of *Lactobacilliale* and *Clostridiales*. Data were pooled from 5 individual experiments with n = 3-4 for Ctrl and n = 4-5 for Abx groups. Student t-test. Data represent the mean +/- SEM.



Supplemental Figure 2. Reconstituted GF mice had different microbial communities than their corresponding fecal donor. Fecal and skin bacterial DNA was sequenced using the 16S MiSeq platform. (**A**) Relative frequency of bacterial phyla and order in SPF mice prior to Abx treatment (pre-Abx), in SPF mice on day 10 of Abx treatment (post-Abx), or in GF mice 7 days post oral gavage with fecal material from untreated SPF mice (GF-Ctrl.F) or from 10-day Abx-treated SPF mice (GF-Abx.F). (**B**) Principal component analysis. Data were pooled from 2 individual experiments with n = 2-4.



Supplemental Figure 3. Abx pre-treatment did not alter the composition of APCs in dLN. APCs from the peripheral LNs of Abx mice were analyzed by flow cytometry (**A**) Gating strategy for B cells, CD11b$^+$ cells and DCs. **(B-D)**. Fold change relative to controls in percentage of B (**B**), CD11b$^+$ (**C**), and CD11c$^+$ cells (**D**). Student t test. **(E).** Fold change in mean fluorescence intensity (MFI) relative to that in controls for costimulatory molecules on CD11c$^+$-gated cells. One-way ANOVA. Data were normalized from 3 individual experiments with n = 5 per group. Data represent the mean +/- SEM.