Figure S1. HS fibroblasts respond normally to in vitro stimulation with inflammatory cytokines. Fold change (FC) in expression of kynurenine pathway enzyme genes by primary fibroblasts from 5 HC and 5 HS patients following a 24h treatment with TNF-α (100 ng/ml) or IL-1β (2.5 ng/ml), relative to unstimulated controls. Data are shown as scatter dot plots with means.
Figure S2. Immunological parameters differing between HS patients and HC controls. (A) Representative contour plots with percentages of IL-17A, IL-22 and IFN-γ producing T cells (gated as CD3+ CD5+ CD45+) in HS patients and HC controls, following a 3h stimulation with PMA/Ionomycin. 100,000 event per contour plots are depicted for comparison. (B) Frequency of CD56br and CD56dim NK cells, amongst total lymphocytes, in HC and HS patients. (C) Proportion of CD56br and CD56dim NK cells co-expressing Granzyme B and Perforin. (D) Proportion of CD56br and CD56dim NK cells producing IFN-γ following a 3h stimulation with PMA/Ionomycin. Data are shown as scatter dot plots with means. *P<0.05, ***P<0.001 by Mann-Whitney U-test. (E) DAPI, CD45, CD3 and CD7 staining of a representative L-HS skin section, with arrows pointing to CD3+ CD7+ NK cells. Scale bar 50 µm.
Figure S3. Changes in the bacterial composition of healthy and lesional skin microbiomes. (A) Genus distribution and PCA analysis of the bacterial species found in HC, H-HS and L-HS skin biopsies. $P$ values by Permanova test. (B) Relative abundance of *Corynebacterium* spp, pooled anaerobes (*Prevotella, Porphyromonas, Actinomyces* and *Anaerococcus* spp) and *Lactobacillus* spp in HC, H-HS and L-HS skin samples. *$P$*<0.05, by Mann-Whitney U-test.