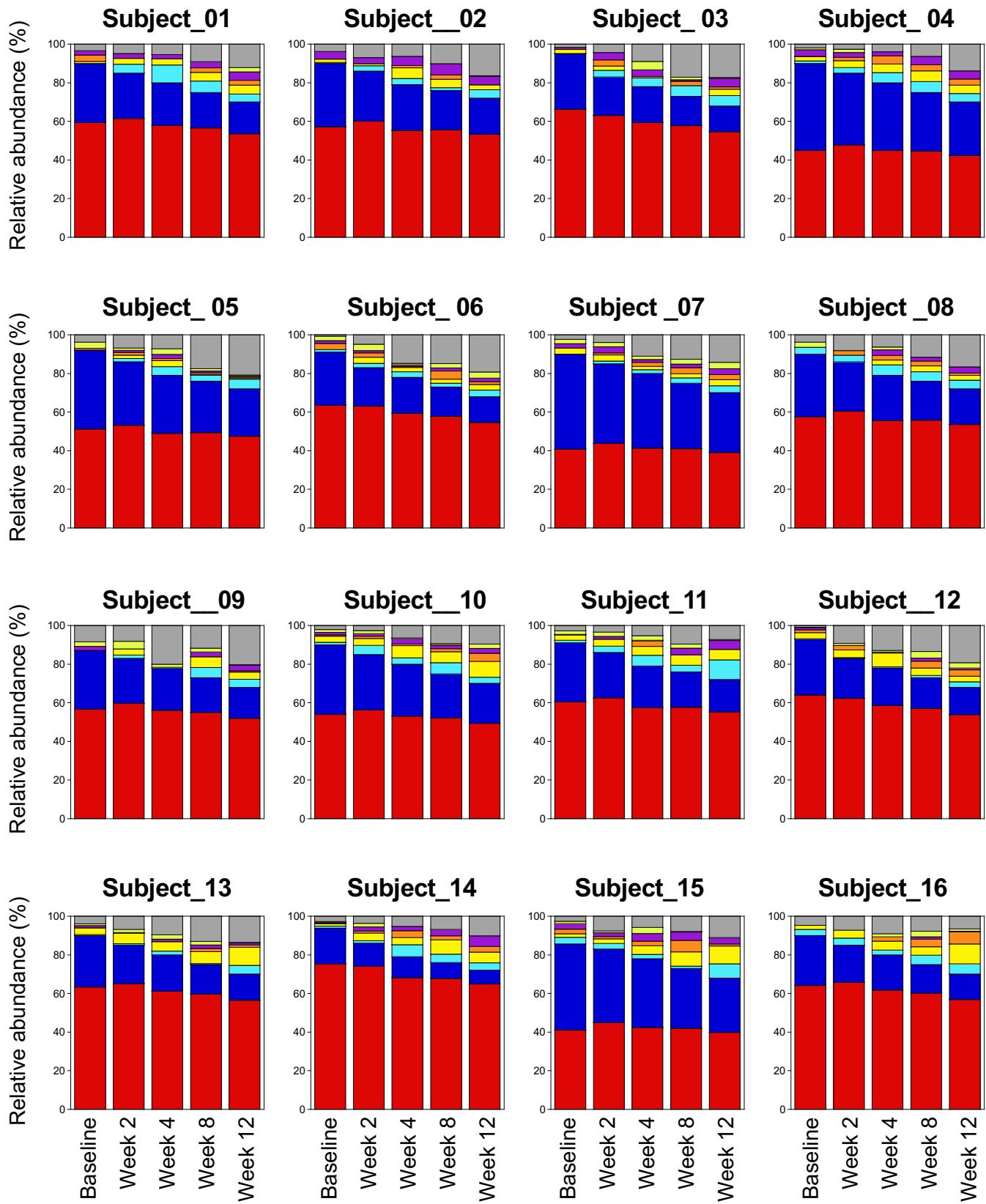
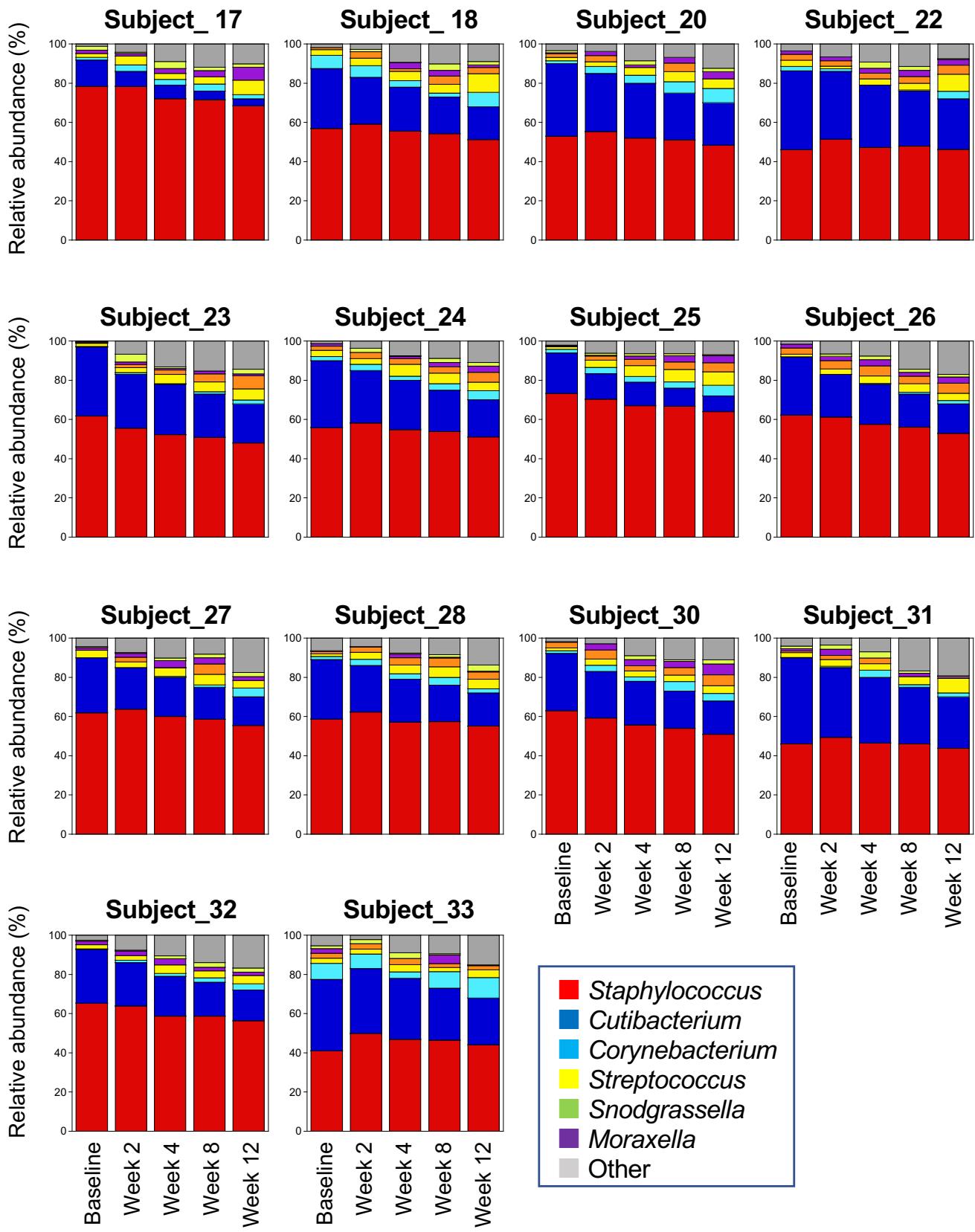


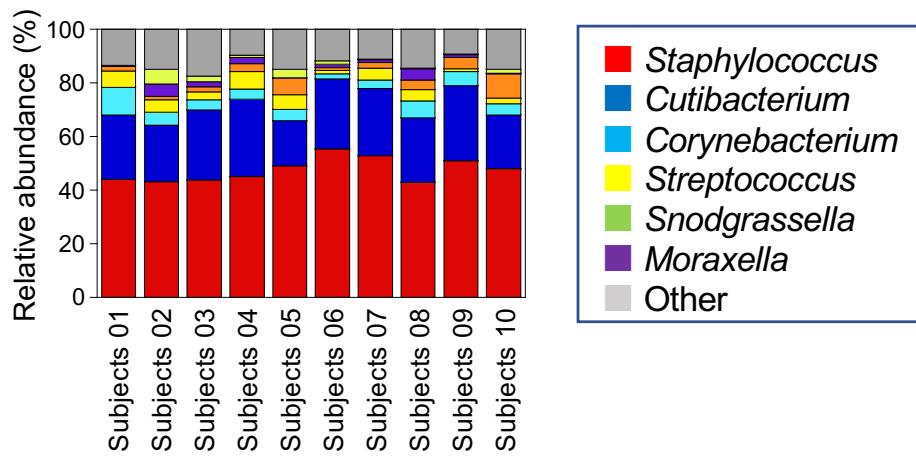
**Figure S1. Fungal microbiome of the lesional site of 30 patients with atopic dermatitis after administration of dupilumab.** Information on 10 healthy individuals is also included. Genera with a relative abundance >2% are shown.

### Patients with atopic dermatitis

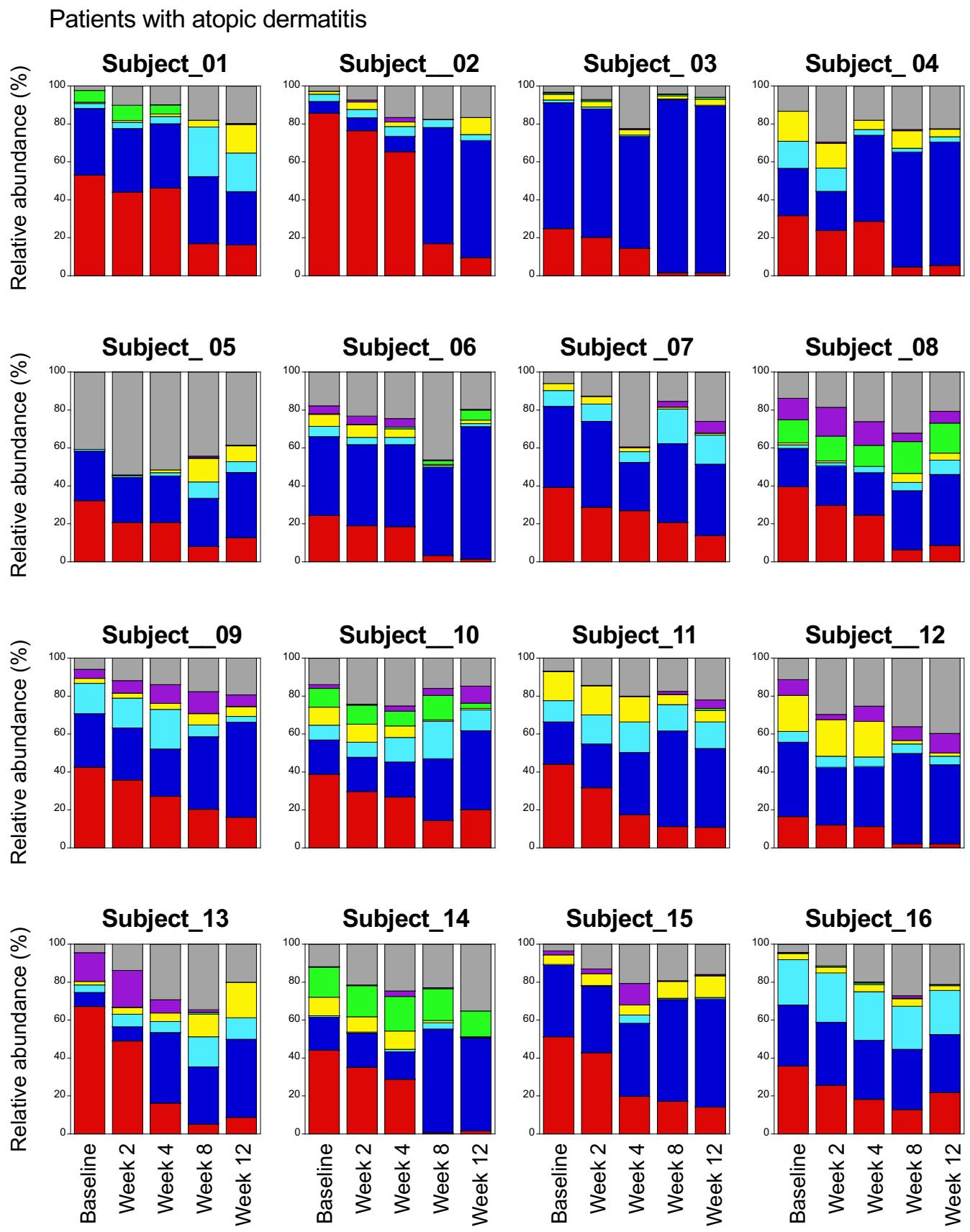


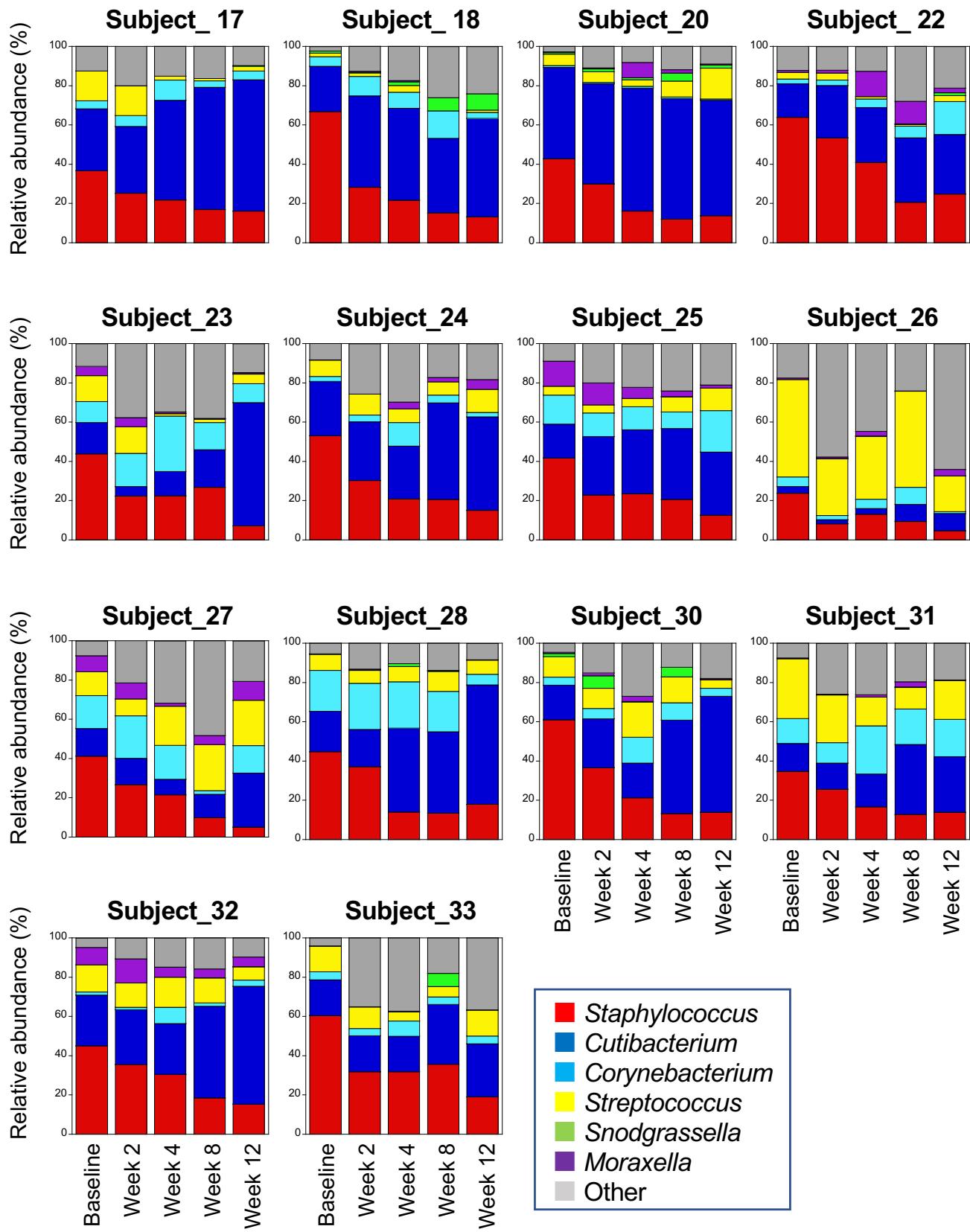


## Healthy individuals

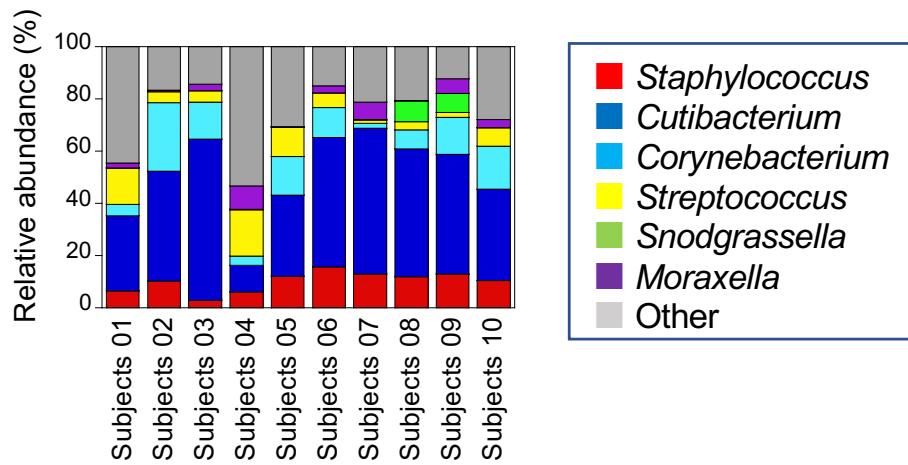


**Figure S2. Bacterial microbiome of the lesional site of 30 patients with atopic dermatitis after administration of dupilumab.** Information on 10 healthy individuals is also included. Genera with a relative abundance >3% are shown.



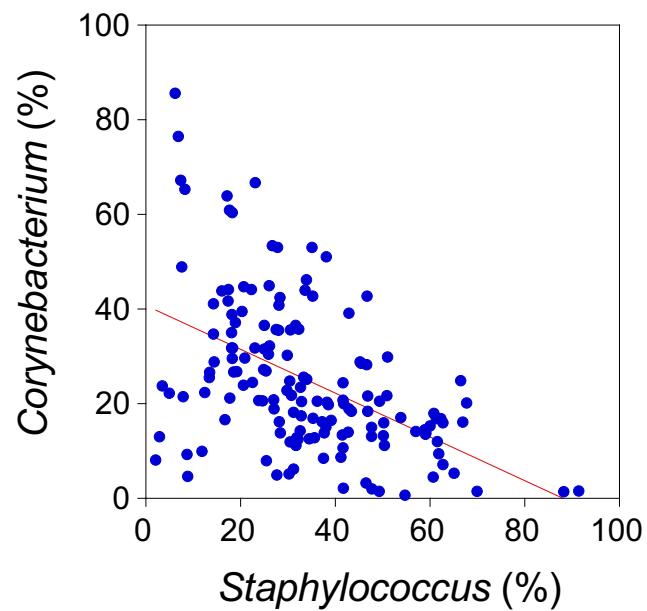


## Healthy individuals



**Figure S3. Correlation of relative abundance between genera**

*Staphylococcus* and *Cutibacterium*. A good correlation with  $r = 0.5$  was observed. Data were calculated from all sampling points ( $n = 150$ ).



**Figure S4. Comparison of colonization levels by *Malassezia* or *Staphylococcus aureus* between patients who achieved EASI-75, and those who did not. NS, not significant; Mann–Whitney U test. EASI, Eczema Area and Severity Index.**

