

# Microbiota signature of oral chronic graft-versus-host disease 6+ years after transplantation

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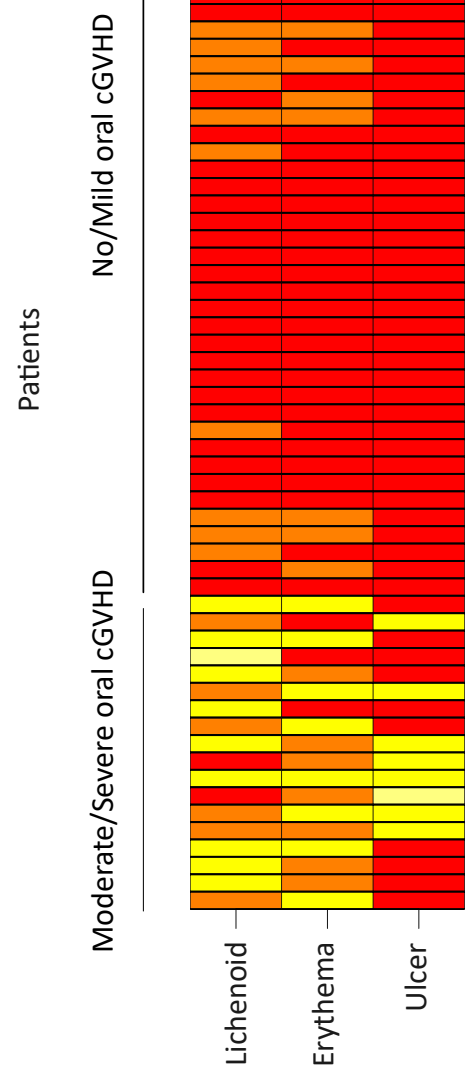
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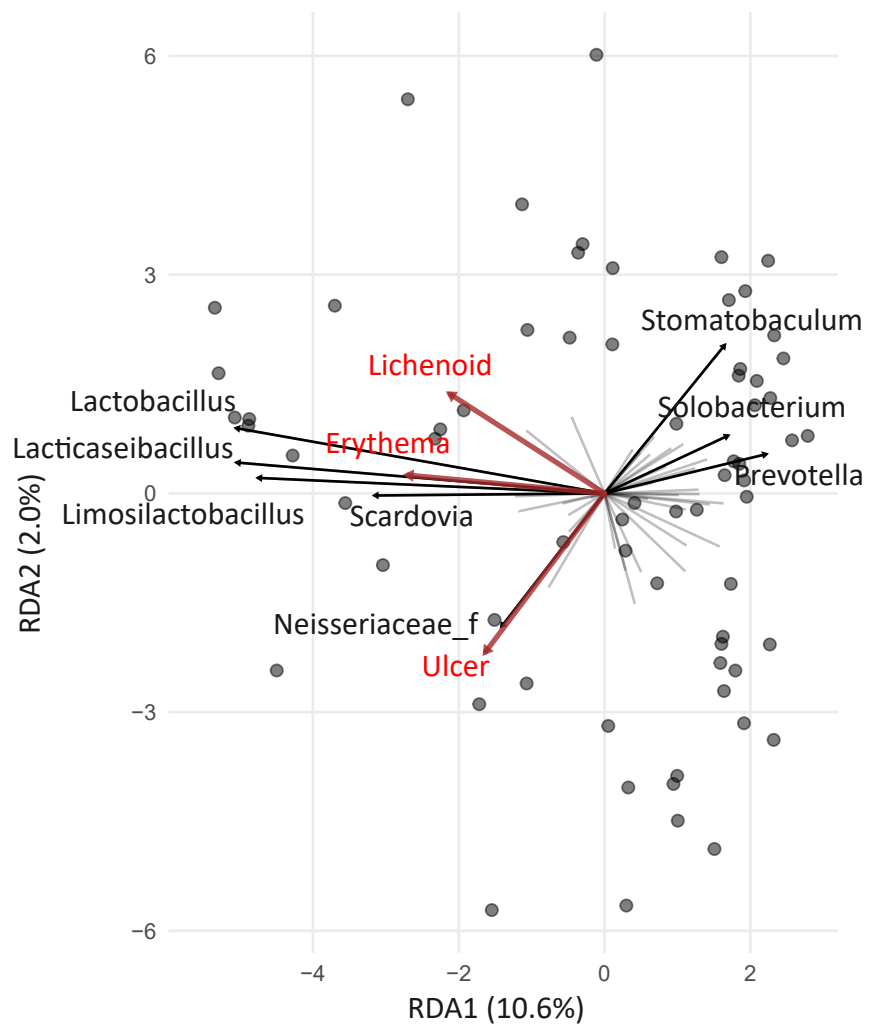
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a

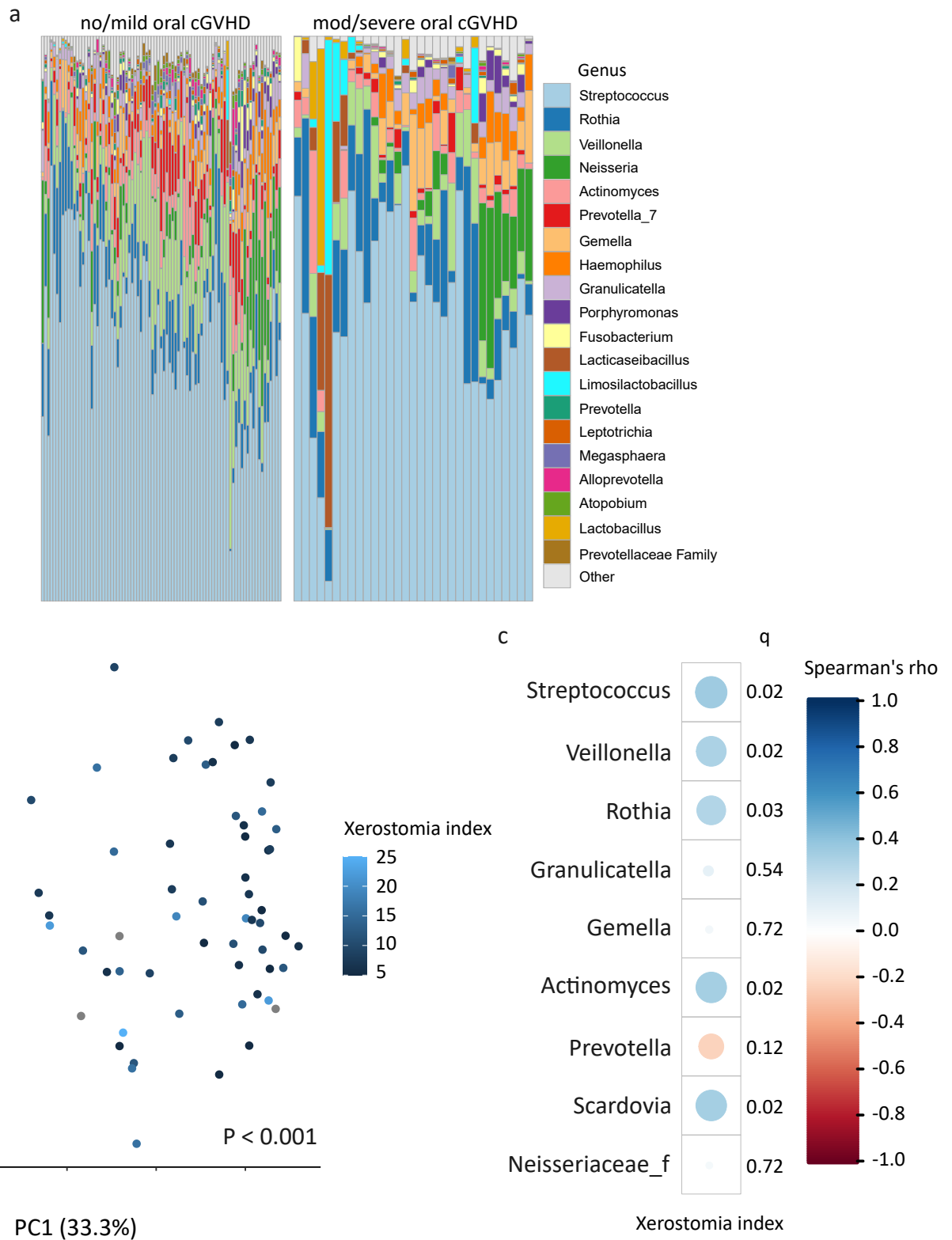


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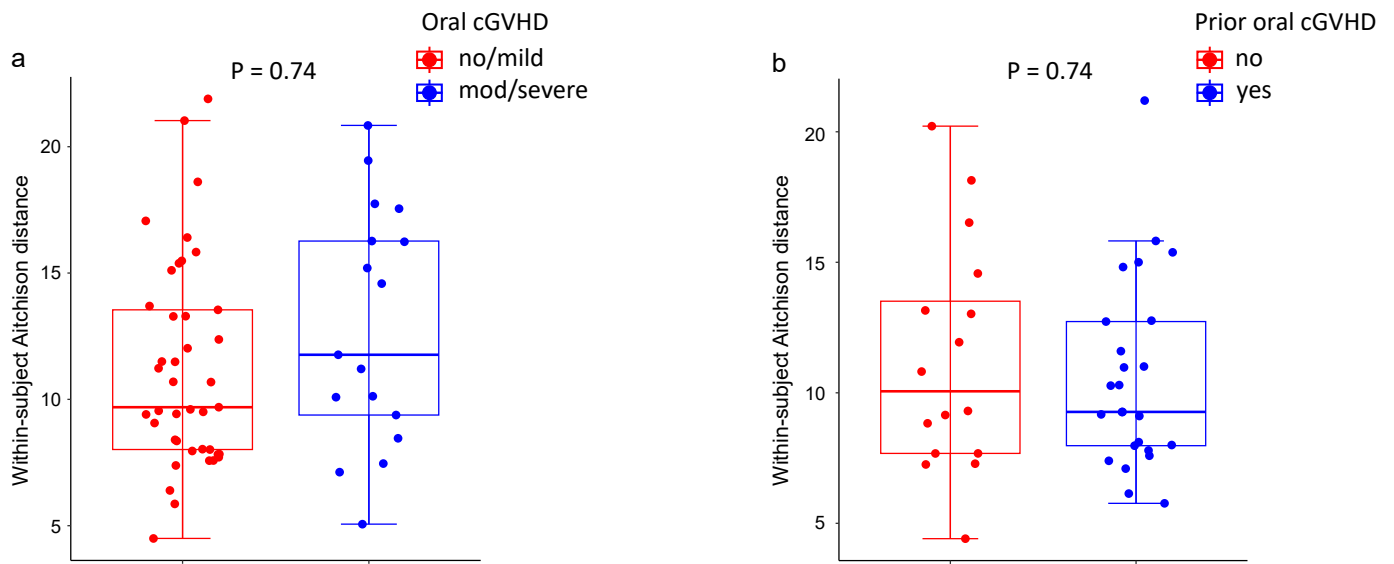
### Figure S1: Modified OMRS subscores and their microbiota associations

(a) Modified OMRS subscores. The maximum score in each domain during protocol-defined visits for each subject is plotted, with subjects sorted along the y axis based on oral cGVHD status and domains plotted along the x axis. (b) Redundancy analysis using modified OMRS subscores in each of the 3 domains. Beta diversity was calculated and ordination visualized similar to Fig. 1b. Taxa with the strongest associations with subscores are shown.



**Figure S2: Contribution of xerostomia to microbiota variation**

(a) The distribution of the 20 most abundant genera in each sample. Less abundant genera were combined in one category. Each column is a sample and its corresponding stacked bars indicate relative abundances of different genera in that sample. (b) Beta diversity was calculated and ordination visualized similar to Fig. 1b. Xerostomia index corresponding to the examination at the time of collection of each sample is colored using the gradient shown. The P value is from an adonis test with 999 permutations, reflecting lower scores in patients clustered to the left. (c) Correlation plot showing the Spearman's correlation coefficients (color gradient and circle size) and corresponding q values for the correlation between the xerostomia index and significant taxa from differential abundance analysis in Fig. 1c.



**Figure S3: Microbiota stability over time**

(a) Compositional dissimilarity over time in same-patient microbiota compared between patients with moderate/severe vs. no/mild oral cGVHD. (b) Similar comparison between patients with vs. without prior oral cGVHD in the group with current no/mild oral cGVHD. Each box shows median (horizontal middle line) and interquartile range. Whisker lines indicate non-outlier maximum and minimum values. A small jitter is included for better visualization. P values are from a Wilcoxon's test.