# Supplementary Data



**Figure S1.** Overview of the bacteria selected by the 25 best performing GA individuals for all classification task I: Kostic Colorectal Cancer Healthy/Tumor GG97 CLR.
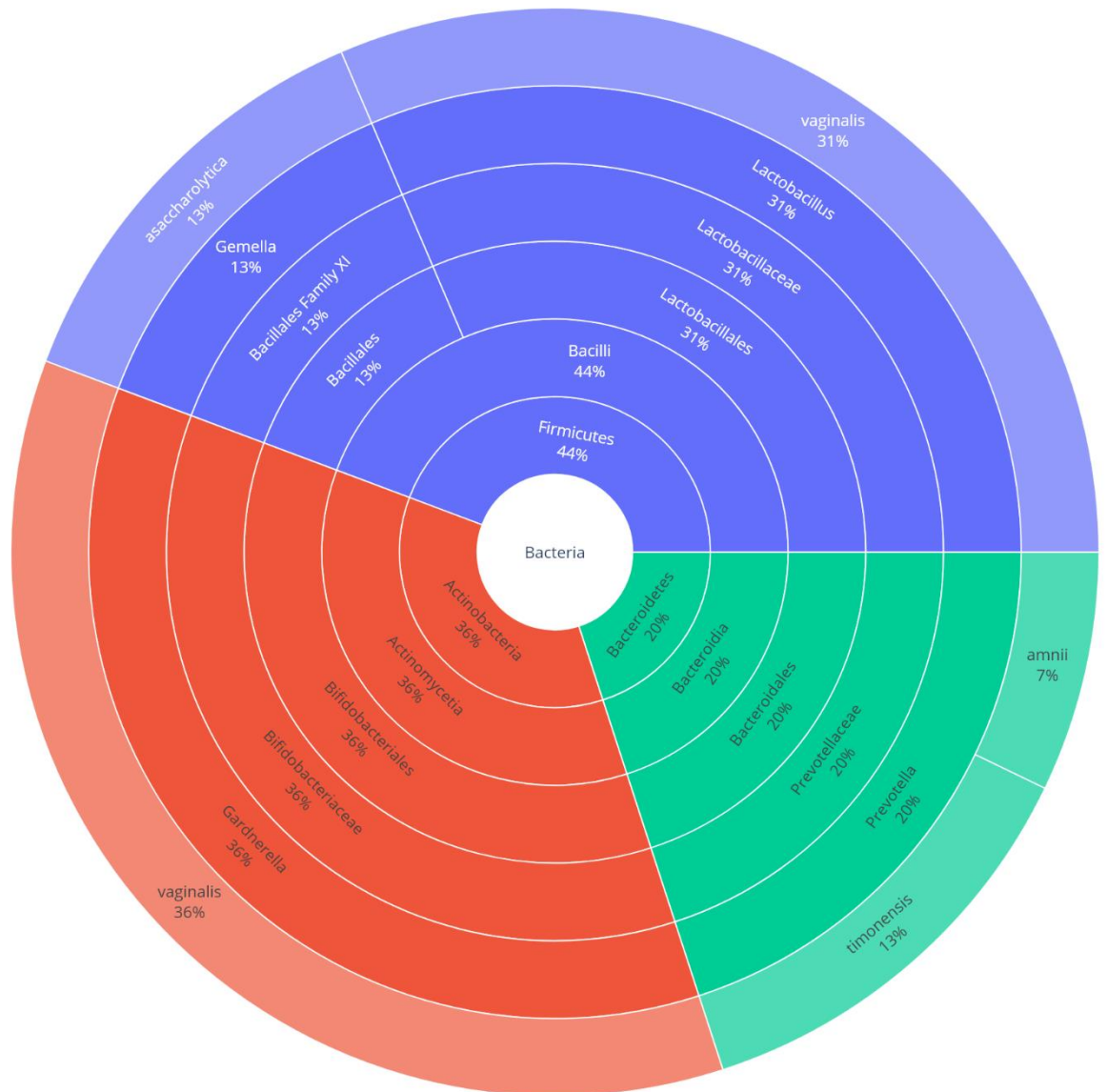
# Task II - Ravel Vaginosis RefSeq CLR



**Figure S2.** Overview of the bacteria selected by the 25 best performing GA individuals for all classification task II: Ravel Vaginal Nugent Category RefSeq CLR.
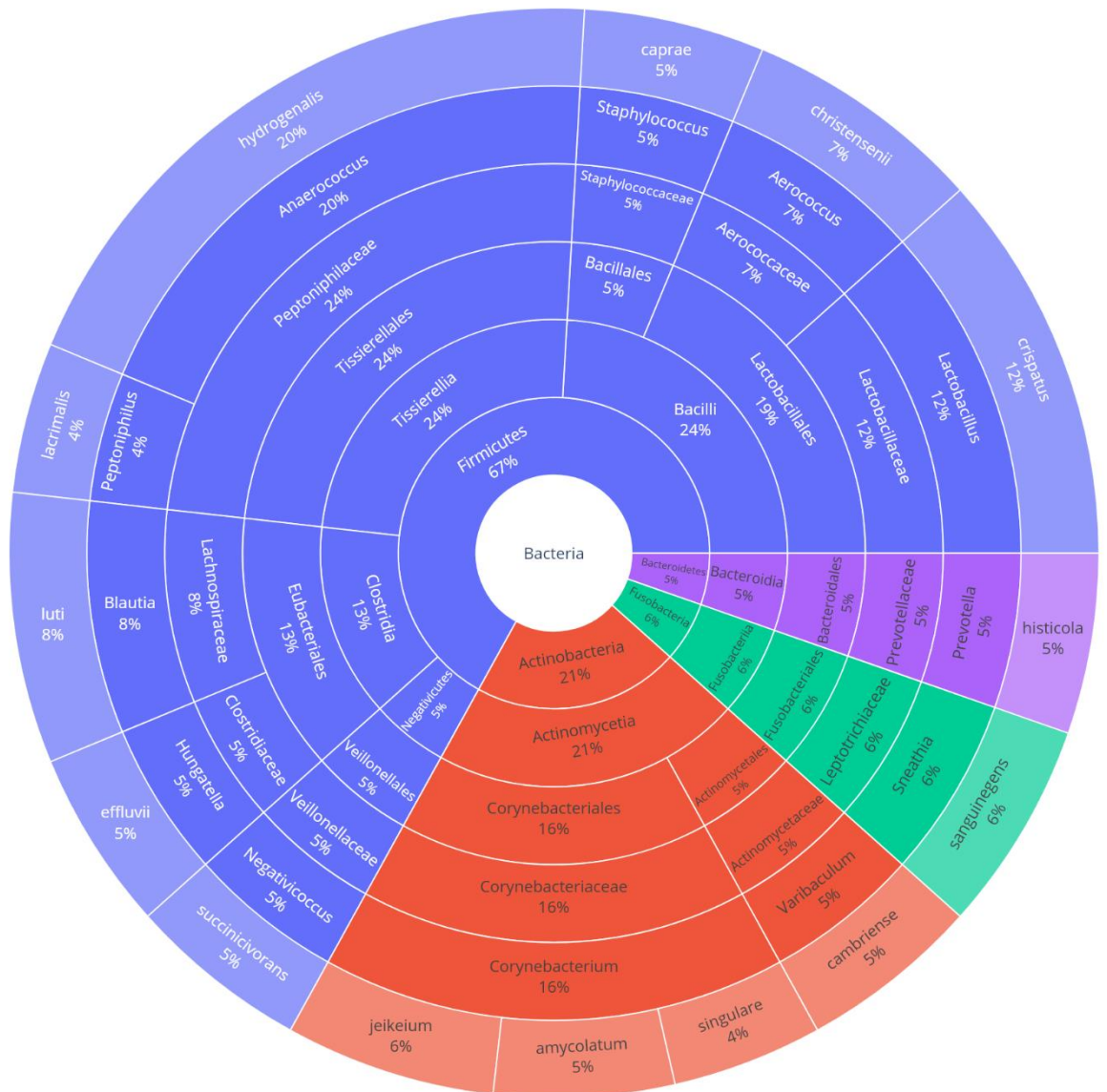
# Task III - Ravel BW RefSeq Rel



**Figure S3.** Overview of the bacteria selected by the 25 best performing GA individuals for all classification task II: Ravel Vaginal Black/White RefSeq RefSeq CLR.

# Task IV - Qin Cirrhosis RefSeq CLR



**Figure S4.** Overview of the bacteria selected by the 25 best performing GA individuals for all classification task IV: Qin Cirrhosis RefSeq CLR.