Feature Weights Feature z-score Metagenomic Features lasso model (|W| = 50)LOW (n=165) Case (n=1639) -3 -1 1 3 effect size robustness s__Dorea_formicigenerans 100% s Streptococcus parasanguinis s_Anaerostipes_hadrus 100% s_Akkermansia_muciniphila 100% s Ruminococcus bromii 100% s Coprococcus comes 100% s_Bacteroidales_bacterium_ph8 100% s_Ruminococcus_torques 100% s_Roseburia_inulinivorans s_Collinsella_aerofaciens 100% s__Eubacterium_siraeum 0.8 100% s Fuhacterium rectale 100% s_Roseburia_hominis 100% s_Eubacterium_ramulus 100% s Roseburia intestinalis 100% s_Bacteroides_dorei 100% s_Bifidobacterium_longum 100% s_Bacteroides_vulgatus 100% s Flavonifractor plautii s_Bacteroides_stercoris 9 s_Eubacterium_hallii ö 100% s Barnesiella intestinihominis 80% s_Bacteroides_thetaiotaomicron NON Case 100% s_Ruminococcus_gnavus 90% 90% s_Eubacterium_eligens s_Lachnospiraceae_bacterium_7_1_58FAA 100% s__Alistipes_onderdonkii 90% 100% s__Dorea_longicatena s Clostridium lentum 0.4 100% s__Alistipes_putredinis s_Alistipes_shahii s_Bacteroides_ovatus 90% 100% 100% s_Bacteroides_uniformis s_Bifidobacterium_adolescentis s_Clostridium_bartlettii 100% 100% 100% s_Bacteroides_caccae 100% s__Veillonella_parvula 0.2 100% s Coprococcus catus 100% s_Bilophila_wadsworthia 100% s_Ruminococcus_sp_5_1_39BFAA 100% s_Bacteroides_xylanisolven s_Bacteroides_fragilis 100% 100% s__Haemophilus_parainfluenzae s_Lachnospiraceae_bacterium_5_1_63FAA 100% s_Alistipes_finegoldii 100% s_Escherichia_coli 0.0 100% s Lachnospiraceae bacterium 3 1 46FAA 100% s_Faecalibacterium_prausnitzii Classification result Surv Angulion Commission and Commission and Commission Commission and Commission and Commission -0.06 -0.02 0.02 proportion of median relative feat. weight weight shown for 191 out for amate decarboxylase 2 antibody creatinine