Shannon	
low Bacteroides	**lme.formula, marg.R^2: NA, cond.R^2: NA** fixed~group.ref+poly(age,5), random~(1|ID.S), zi_fixed~FALSE, zi_random~(FALSE) Intrcpt: 2.39(2.3,2.49)*** - age^1: 18.3(17.2,19.4)*** - age^2: -2.18(-3.22,-1.15)*** - age^3: -1.74(-2.74,-0.738)*** - age^4: 1.6(0.601,2.6)** - age^5: 0.0083(-0.992,1.01) - pre45-225: 0.0081(-0.214,0.23) - post0-30: -0.415(-0.727,-0.102)** - post>90: -0.203(-0.445,0.039)
high Bacteroides	**lme.formula, marg.R^2: NA, cond.R^2: NA** fixed~group.ref+poly(age,5), random~(1|ID.S), zi_fixed~FALSE, zi_random~(FALSE) Intrcpt: 2.51(2.44,2.58)*** - age^1: 15.5(14.6,16.5)*** - age^2: -2.2(-3.09,-1.31)*** - age^3: -1.88(-2.75,-1.01)*** - age^4: 2.07(1.21,2.92)*** - age^5: -0.126(-0.985,0.732) - pre45-225: 0.112(-0.064,0.288) - pre0-30: 0.417(0.04,0.795)* - post0-30: -0.0331(-0.319,0.252) - post>90: 0.175(-0.00137,0.351)
low Blautia	**lme.formula, marg.R^2: NA, cond.R^2: NA** fixed~group.ref+poly(age,5), random~(1|ID.S), zi_fixed~FALSE, zi_random~(FALSE) Intrcpt: 2.32(2.25,2.4)*** - age^1: 18.4(17.3,19.4)*** - age^2: -1.89(-2.91,-0.873)*** - age^3: -2.78(-3.78,-1.78)*** - age^4: 2.56(1.56,3.56)*** - age^5: -0.132(-1.13,0.868) - pre45-225: 0.0168(-0.203,0.237) - pre0-30: 0.0173(-0.727,0.762) - post0-30: -0.293(-0.732,0.147) - post>90: 0.0701(-0.16,0.301)
high Blautia	**lme.formula, marg.R^2: NA, cond.R^2: NA** fixed~group.ref+poly(age,5), random~(1|ID.S), zi_fixed~FALSE, zi_random~(FALSE) Intrcpt: 2.6(2.52,2.68)*** - age^1: 15.1(14.2,16.1)*** - age^2: -2.51(-3.38,-1.63)*** - age^3: -0.794(-1.64,0.0513) - age^4: 1.1(0.264,1.93)** - age^5: 0.142(-0.694,0.978) - pre45-225: 0.0265(-0.152,0.205) - pre0-30: 0.495(0.0431,0.946)* - post0-30: -0.236(-0.469,-0.00247)* - post>90: -0.0568(-0.243,0.13)
BC	
low Bacteroides	**lme.formula, marg.R^2: NA, cond.R^2: NA** fixed~group.ref+poly(age,5), random~(1|ID.S), zi_fixed~FALSE, zi_random~(FALSE) Intrcpt: 0.679(0.661,0.698)*** - age^1: 0.356(0.154,0.558)*** - age^2: -0.215(-0.406,-0.0237)* - age^3: -0.618(-0.803,-0.433)*** - age^4: 0.604(0.42,0.788)*** - age^5: -0.323(-0.507,-0.138)*** - pre45-225: -0.00833(-0.0518,0.0351) - post0-30: 0.0649(0.00533,0.125)* - post>90: 0.000829(-0.0461,0.0478)
high Bacteroides	**lme.formula, marg.R^2: NA, cond.R^2: NA** fixed~group.ref+poly(age,5), random~(1|ID.S), zi_fixed~FALSE, zi_random~(FALSE) Intrcpt: 0.688(0.674,0.702)*** - age^1: 0.246(0.0683,0.424)** - age^2: -0.415(-0.581,-0.249)*** - age^3: -0.452(-0.614,-0.29)*** - age^4: 0.56(0.399,0.72)*** - age^5: -0.393(-0.554,-0.233)*** - pre45-225: -0.00404(-0.0379,0.0299) - pre0-30: 0.0272(-0.0441,0.0984) - post0-30: 0.000211(-0.0539,0.0543) - post>90: 0.00903(-0.025,0.043)
low Blautia	**lme.formula, marg.R^2: NA, cond.R^2: NA** fixed~group.ref+poly(age,5), random~(1|ID.S), zi_fixed~FALSE, zi_random~(FALSE) Intrcpt: 0.661(0.647,0.675)*** - age^1: 0.531(0.349,0.712)*** - age^2: -0.283(-0.457,-0.109)** - age^3: -0.701(-0.872,-0.53)*** - age^4: 0.723(0.552,0.894)*** - age^5: -0.43(-0.601,-0.259)*** - pre45-225: -0.00241(-0.041,0.0362) - pre0-30: 0.0286(-0.0994,0.157) - post0-30: 0.0209(-0.0548,0.0967) - post>90: 0.0175(-0.0229,0.0579)
high Blautia	**lme.formula, marg.R^2: NA, cond.R^2: NA** fixed~group.ref+poly(age,5), random~(1|ID.S), zi_fixed~FALSE, zi_random~(FALSE) Intrcpt: 0.709(0.692,0.726)*** - age^1: 0.00503(-0.19,0.2) - age^2: -0.354(-0.533,-0.176)*** - age^3: -0.353(-0.525,-0.181)*** - age^4: 0.447(0.277,0.616)*** - age^5: -0.294(-0.464,-0.124)*** - pre45-225: -0.0191(-0.0552,0.0169) - pre0-30: 0.0197(-0.0721,0.111) - post0-30: 0.0339(-0.0133,0.0812) - post>90: -0.00443(-0.0421,0.0333)

marg. and conditional Rsqu could not be calculated since the immediate pretreatment phase was empty in some conditions