

Supplementary Table S7. ICU-COV(+) across time (Rectal swabs) (MaAsLin2 test)

feature	metadata	value	coef	stderr	N	N.not.0	pval	qval
k_Bacteria.p_Firmicutes.c_Bacilli.o_Lactobacillales.f_Enterococcaceae.g_Enterococcus.---	TimePoint	Baseline	-4.0682916	0.81981409	67	37	5.44E-06	0.00011779
k_Bacteria.p_Firmicutes.c_Clostridia.o_Clostridiales.f_Tissierellaceae.g_Finegoldia.---	TimePoint	4 weeks	-3.9855358	1.23756143	67	55	0.00201234	0.01937806
k_Bacteria.p_Firmicutes.c_Clostridia.o_Clostridiales.f_Tissierellaceae.g_Anaerococcus.---	TimePoint	4 weeks	-3.6898698	1.30299564	67	54	0.00618001	0.04228431
k_Bacteria.p_Bacteroidetes.c_Bacteroidia.o_Bacteroidales.f_Prevotellaceae.g_Prevotella.---	TimePoint	4 weeks	-3.0580385	1.06422779	67	61	0.00550303	0.03866996
k_Bacteria.p_Firmicutes.c_Bacilli.o_Bacillales.f_Staphylococcaceae.g_Staphylococcus.---	TimePoint	Baseline	-2.698634	0.85682916	67	39	0.00248544	0.02154048
k_Bacteria.p_Firmicutes.c_Erysipelotrichi.o_Erysipelotrichales.f_Erysipelotrichaceae.g_Eubacterium.s_dolichum.	TimePoint	Baseline	-2.6769117	0.78995653	67	41	0.00120631	0.0130684
k_Archaea.p_Euryarchaeota.c_Methanobacteria.o_Methanobacteriales.f_Methanobacteriaceae.g_Methanobrevibacter.---	TimePoint	Baseline	-2.4102395	0.80485575	67	41	0.0039038	0.02985259
k_Bacteria.p_Firmicutes.c_Clostridia.o_Clostridiales.f_Ruminococcaceae.g_Anaerotruncus.---	TimePoint	Baseline	-2.1440161	0.42110164	67	20	3.36E-06	9.70E-05
k_Bacteria.p_Actinobacteria.c_Coriobacteria.o_Coriobacteriales.f_Coriobacteriaceae.g_Eggerthella.s_lenta.---	TimePoint	Baseline	-1.9839949	0.65108851	67	32	0.00335442	0.02642873
k_Bacteria.p_Firmicutes.c_Clostridia.o_Clostridiales.f_Eubacteriaceae.g_Pseudoramibacter_Eubacterium.---	TimePoint	Baseline	-1.6161737	0.44795594	67	17	0.00060574	0.00715879
k_Bacteria.p_Actinobacteria.c_Actinobacteria.o_Bifidobacteriales.f_Bifidobacteriaceae.g_Bifidobacterium.---	TimePoint	Baseline	1.1433934	0.41123967	67	16	0.00712271	0.04629761
k_Bacteria.p_Actinobacteria.c_Coriobacteria.o_Coriobacteriales.f_Coriobacteriaceae.g_Slackia.---	TimePoint	Baseline	1.26368497	0.4519016	67	18	0.00681616	0.04544107
k_Bacteria.p_Firmicutes.c_Clostridia.o_Clostridiales.f_Peptococcaceae.g_Peptococcus.---	TimePoint	Baseline	1.63471502	0.53361342	67	31	0.00319944	0.02617972
k_Bacteria.p_Proteobacteria.c_Gammaproteobacteria.o_Pasteurellales.f_Pasteurellaceae.g_Haemophilus.s_parainfluenzae.	TimePoint	Baseline	2.01374957	0.62875358	67	22	0.00212185	0.01970293
k_Bacteria.p_Actinobacteria.c_Actinobacteria.o_Actinomycetales.f_Actinomycetaceae.g_Arcanobacterium.---	TimePoint	Baseline	2.08618801	0.70052673	67	18	0.00409389	0.03041174
k_Bacteria.p_Proteobacteria.c_Deltaproteobacteria.o_Desulfovibrionales.f_Desulfovibrionaceae.g_Bilophila.---	TimePoint	Baseline	2.18579979	0.56256599	67	46	0.00024493	0.00335165
k_Bacteria.p_Bacteroidetes.c_Bacteroidia.o_Bacteroidales.f_Porphyromonadaceae.g_Porphyromonas.s_endodontalis.---	TimePoint	Baseline	2.21424245	0.55269325	67	26	0.00016332	0.00235912
k_Bacteria.p_Firmicutes.c_Clostridia.o_Clostridiales.f_Ruminococcaceae.g_Faecalibacterium.s_prausnitzii.	TimePoint	Baseline	2.31573234	0.70958951	67	42	0.0017681	0.01768095
k_Bacteria.p_Firmicutes.c_Clostridia.o_Clostridiales.f_Lachnospiraceae.g_Lachnospira.---	TimePoint	Baseline	2.44730545	0.77339321	67	23	0.00237873	0.02132656
k_Bacteria.p_Bacteroidetes.c_Bacteroidia.o_Bacteroidales.f_Prevotellaceae.g_Prevotella.s_copri.	TimePoint	Baseline	2.46204793	0.80431405	67	21	0.00322212	0.02617972
k_Bacteria.p_Firmicutes.c_Bacilli.o_Lactobacillales.f_Streptococcaceae.g_Streptococcus.---	TimePoint	Baseline	2.54049193	0.87769216	67	43	0.0051878	0.03746743
k_Bacteria.p_Proteobacteria.c_Betaproteobacteria.o_Burkholderiales.f_Alcaligenaceae.g_Sutterella.---	TimePoint	Baseline	2.5667404	0.66895992	67	45	0.00028765	0.00373951
k_Bacteria.p_Firmicutes.c_Clostridia.o_Clostridiales.f_Tissierellaceae.g_ph2.---	TimePoint	Baseline	2.58825174	0.70019171	67	25	0.00045545	0.00563886
k_Bacteria.p_Firmicutes.c_Clostridia.o_Clostridiales.f_Tissierellaceae.g_Anaerococcus.---	TimePoint	Baseline	2.6198463	0.73813406	67	54	0.00072995	0.00825165
k_Bacteria.p_Bacteroidetes.c_Bacteroidia.o_Bacteroidales.f_S24.7.---	TimePoint	Baseline	3.10474318	0.93313838	67	32	0.00145695	0.01515226
k_Bacteria.p_Firmicutes.c_Clostridia.o_Clostridiales.f_Veillonellaceae.g_Dialister.---	TimePoint	Baseline	3.41246818	0.5635532	67	48	8.15E-08	3.53E-06
k_Bacteria.p_Actinobacteria.c_Actinobacteria.o_Actinomycetales.f_Actinomycetaceae.g_Actinomyces.---	TimePoint	Baseline	3.5370887	0.73480962	67	40	9.42E-06	0.00016331
k_Bacteria.p_Actinobacteria.c_Actinobacteria.o_Actinomycetales.f_Actinomycetaceae.g.---	TimePoint	Baseline	3.5965985	0.82542439	67	39	4.87E-05	0.00074415
k_Bacteria.p_Proteobacteria.c_Gammaproteobacteria.o_Enterobacteriales.f_Enterobacteriaceae.g.---	TimePoint	Baseline	3.71459195	0.75851527	67	40	6.92E-06	0.0001286
k_Bacteria.p_Firmicutes.c_Clostridia.o_Clostridiales.f_Mogilibacteriaceae.g_Mogilibacterium.---	TimePoint	Baseline	3.71807619	0.81919018	67	30	2.55E-05	0.0004151
k_Bacteria.p_Proteobacteria.c_Deltaproteobacteria.o_Desulfovibrionales.f_Desulfovibrionaceae.g_Desulfovibrio.---	TimePoint	Baseline	3.75151126	0.75002455	67	34	4.70E-06	0.00011098
k_Bacteria.p_Firmicutes.c_Clostridia.o_Clostridiales.f_Tissierellaceae.g_Peptoniphilus.---	TimePoint	Baseline	3.83553204	0.53313335	67	54	8.48E-10	5.51E-08
k_Bacteria.p_Firmicutes.c_Clostridia.o_Clostridiales.f_Tissierellaceae.g.---	TimePoint	Baseline	3.93676245	0.77818093	67	32	3.79E-06	9.86E-05
k_Bacteria.p_Actinobacteria.c_Actinobacteria.o_Actinomycetales.f_Corynebacteriaceae.g_Corynebacterium.---	TimePoint	Baseline	4.0121202	0.81585113	67	56	6.42E-06	0.00012836
k_Bacteria.p_Actinobacteria.c_Actinobacteria.o_Actinomycetales.f_Actinomycetaceae.g_Varibaculum.---	TimePoint	Baseline	4.29922977	0.65636022	67	47	1.14E-08	5.92E-07
k_Bacteria.p_Bacteroidetes.c_Bacteroidia.o_Bacteroidales.f_Porphyromonadaceae.g_Porphyromonas.---	TimePoint	Baseline	4.3830993	0.53482038	67	47	1.46E-11	1.26E-09
k_Bacteria.p_Fusobacteria.c_Fusobacteria.o_Fusobacteriales.f_Fusobacteriaceae.g_Fusobacterium.---	TimePoint	Baseline	4.72972013	0.80859637	67	35	1.83E-07	6.80E-06
k_Bacteria.p_Firmicutes.c_Clostridia.o_Clostridiales.f_Tissierellaceae.g_WAL_1855D.---	TimePoint	Baseline	4.98864521	0.93081724	67	37	1.22E-06	3.96E-05
k_Bacteria.p_Proteobacteria.c_Epsilonproteobacteria.o_Campylobacteriales.f_Campylobacteriaceae.g_Campylobacter.---	TimePoint	Baseline	5.22411648	0.59580821	67	48	1.44E-12	1.87E-10
k_Bacteria.p_Bacteroidetes.c_Bacteroidia.o_Bacteroidales.f_Prevotellaceae.g_Prevotella.---	TimePoint	Baseline	6.26793832	0.60287445	67	61	2.23E-15	5.79E-13