

**Supplementary Table 7** PERMANOVA of gut microbiota composition of antibiotic-naive COVID-19 patients during active infection and after disease resolution compared with non-COVID-19 controls.

	D f	Sums OfSqs	MeanSqs	F.Model	R2	Pr(>F)	
Overall	3	3.082	1.02732	3.4156	0.05169	0.001	***
Baseline at admission vs 1-month follow-up	1	0.9425	0.94251	2.9379	0.03127	0.001	***
Baseline at admission vs 6-month follow-up	1	1.011	1.01085	3.1815	0.02941	0.001	***
1-month follow-up vs 6-month follow-up	1	0.2702	0.2702	0.90364	0.00973	0.555	
Non-COVID-19 controls vs 1-month follow-up	1	0.9457	0.94574	3.386	0.0392	0.001	***
Non-COVID-19 controls vs 6-month follow-up	1	0.936	0.93598	3.3195	0.03309	0.001	***
Baseline at admission vs Non-COVID-19 controls	1	2.015	2.01503	6.6624	0.0649	0.001	***