

**Supplementary Table S3** Comparison of fungal alpha diversity indexes among four groups.

Estimator s	HCS-Mean± Sd	HIV-Mean± Sd	HCV- Mean ±Sd	HIVHCV -Mean± Sd	P <sub>HIV- HCS</sub>	P <sub>HCV -HCS</sub>	P <sub>HIV/HC V-HCS</sub>
Sobs	111.14±29.60	105.78± 29.624	115.6 5± 71.61	97.79± 38.09	1.00	0.59	0.05*
Shannon	2.07±0.63	2.07±0.82	2.11± 1.00	2.26± 0.78	0.92	0.82	0.20
Simpson	0.29±0.17	0.30±0.21	0.32± 0.26	0.25± 0.20	0.11	0.62	0.19
Ace	129.08±25.96	116.62±29.89	136.9 6± 76.71	112.59± 35.57	0.21	0.48	0.02*
Chao	124.57±28.76	115.47±30.25	131.9 1± 77.61 4	110.18± 37.84	0.10	0.60	0.04*

Data are expressed as mean ± standard deviation, and the Wilcoxon Rank-Sum test was used for comparison between groups, and the P value less than 0.05 were significant.