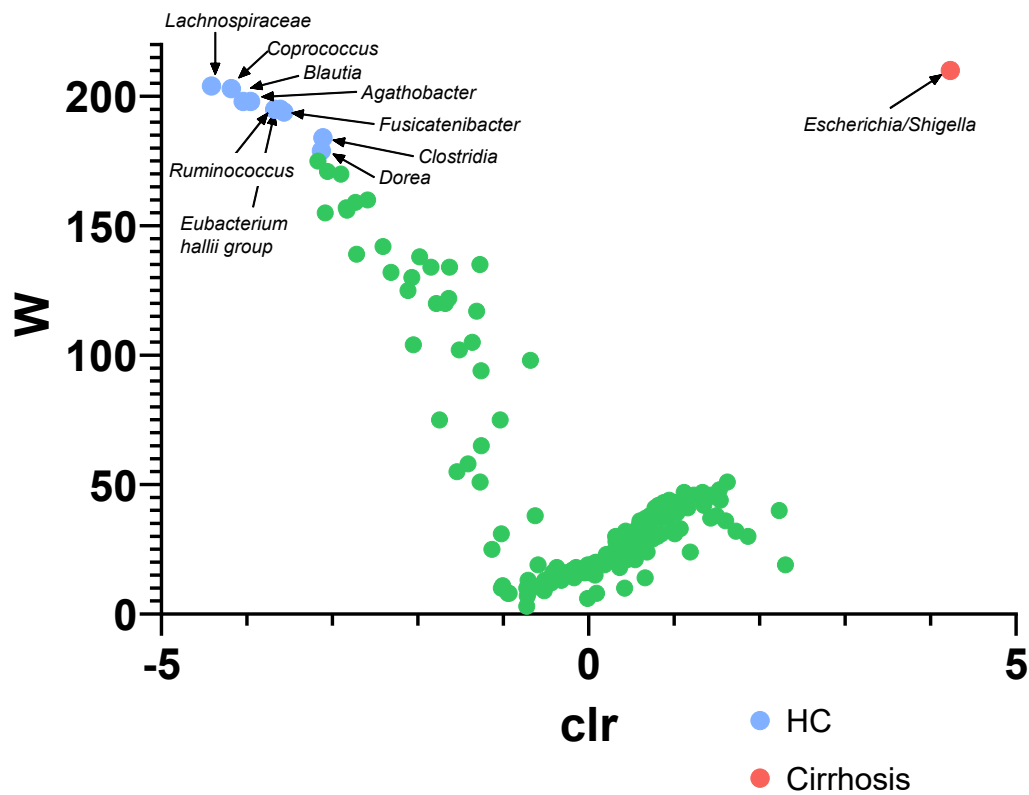


Supplemental Figure S1: Alpha diversity metrics between healthy controls (HC) and subgroups of cirrhotic patients. The figure shows alpha diversity indices for patients subgrouped by clinical settings: UGIB (upper gastrointestinal bleeding), AKI (acute kidney injury), PPI (proton pump inhibitors usage) or infection at admission. No significant differences were found among patients subgroups. Results are expressed as mean \pm SEM. Analyzed by Kruskal-Wallis test plus Benjamini, Krieger and Yekutieli method for multiple comparisons. ** $p < 0.01$, *** $p < 0.001$, ns: not significant.

Supplemental Table S1: Statistical significance in beta diversity metrics between healthy controls (HC) and subgroups of cirrhotic patients.

Pairwise PERMANOVA results with Benjamini-Hochberg multiple testing corrections				
Weighted UniFrac distance				
Group 1	Group 2	Pseudo-F	<i>p</i> -value	<i>q</i> -value
UGIB				
HC	No	4.00684379	0.001	0.0015
HC	Yes	8.16378484	0.001	0.0015
<u>No</u>	<u>Yes</u>	<u>0.53754516</u>	<u>0.789</u>	<u>0.789</u>
AKI				
HC	No	5.09231	0.001	0.0015
HC	Yes	10.925914	0.001	0.0015
<u>No</u>	<u>Yes</u>	<u>2.012356</u>	<u>0.083</u>	<u>0.083</u>
PPI usage				
HC	No	4.874918	0.001	0.0015
HC	Yes	5.53117	0.001	0.0015
<u>No</u>	<u>Yes</u>	<u>0.396942</u>	<u>0.919</u>	<u>0.919</u>
Infection				
HC	No	5.07362	0.001	0.0015
HC	Yes	5.397498	0.001	0.0015
<u>No</u>	<u>Yes</u>	<u>0.449855</u>	<u>0.879</u>	<u>0.879</u>
Unweighted UniFrac distance				
Group 1	Group 2	Pseudo-F	<i>p</i> -value	<i>q</i> -value
UGIB				
HC	No	5.51644845	0.001	0.0015
HC	Yes	3.88655291	0.001	0.0015
<u>No</u>	<u>Yes</u>	<u>0.64289723</u>	<u>0.891</u>	<u>0.891</u>
AKI				
HC	No	5.43499453	0.001	0.0015
HC	Yes	4.2303456	0.001	0.0015
<u>No</u>	<u>Yes</u>	<u>0.92991691</u>	<u>0.415</u>	<u>0.415</u>
PPI usage				
HC	No	5.57567668	0.001	0.0015
HC	Yes	4.25779142	0.001	0.0015
<u>No</u>	<u>Yes</u>	<u>0.91627568</u>	<u>0.447</u>	<u>0.447</u>
Infection				
HC	No	4.73186942	0.001	0.0015
HC	Yes	4.7676101	0.001	0.0015
<u>No</u>	<u>Yes</u>	<u>0.54556854</u>	<u>0.982</u>	<u>0.982</u>



Supplemental Figure S2: Volcano plot depiction of ANCOM analysis. The horizontal axis is the centered log ratio transformation (clr) representative of the difference in abundance of a significant taxonomical unit between healthy controls (HC, blue dots) and patients with cirrhotic (red dots). A green color indicates an overlap of ASVs between groups. The W statistic indicates the value of the statistical test corresponding to the number of times the null hypothesis was rejected for each taxonomical class.