Impaired Gut-Liver-Brain Axis in Patients with Cirrhosis

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Supplementary figure legends

Figure S1: PiCRUST analysis of predicted bacterial functions.

S1A:Human stool analysis of controls vs. cirrhotics. Red=cirrhosis, Green=controls. This shows a significantly increased predicted bacterial functions related to endotoxin and endotoxin protein synthesis as well as aromatic amino acid metabolism in cirrhotic stool.

S1b: Human stool analysis of cirrhotic patients. Red=hepatic encephalopathy, Green=no hepatic encephalopathy. There was a significantly higher aromatic amino acid metabolism-related predicted function in stool microbiota of patients with hepatic encephalopathy

S1A

Cirrhosis ■ Control

| Sporulation |
| Porphyrin_and_chlorophyll_metabolism |
| Methane_metabolism |
| Lysine_biosynthesis |
| Fructose_and_mannose_metabolism |
| Phenylalanine__tyrosine_and_tryptophan_biosynthesis |
| Aminoacyl_tRNA_biosynthesis |
| Cytoskeleton_proteins |
| Photosynthesis |
| Photosynthesis_proteins |
| Tryptophan_metabolism |
| Bacterial_secretion_system |
| Citrate_cycle__TCA_cycle_ |
| Glycosyltransferases |
| Glutathione_metabolism |
| Lipopolysaccharide_biosynthesis |
| Ubiquinone_and_other_terpenoid_quinone_biosynthesis |
| Pores_ion_channels |
| Other_ion_coupled_transporters |
| Membrane_and_intracellular_structural_molecules |
| Lipopolysaccharide_biosynthesis_proteins |
| Function_unknown |

LDA SCORE (log 10)

S1B