**Supplementary Table 1: Study inclusion and exclusion criteria**

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| **Inclusion criteria** | **Exclusion criteria** |
| * Men and women aged ≥18 to ≤75 years
* Cirrhosis documented in the medical record
* Mild to moderate hepatic impairment of any etiology (nonalcoholic steatohepatitis, viral, autoimmune, alcohol-induced)
* BMI <32 kg/m2
* Stable weight (within 5% of their usual body weight)
* Stable regimen(s) of medications for pre-existing chronic conditions such as hypertension, dyslipidemia, type 2 diabetes, and hypothyroidism for at least 3 months prior to screening
* Liver function tests within 2.5 times the normal range were acceptable (as consistent with hepatic insufficiency) as long as they were stable for 1 month before the study
* Anemia secondary to hepatic disease was acceptable if hemoglobin was ≥9.5 g/dL and anemia symptoms were not clinically significant
 | * Decompensated liver cirrhosis or severe hepatic insufficiency (eg, presence of HE, variceal bleeding, clinically significant ascites or history of paracentesis within 3 months before Day 1, or clinically significant portal hypertension)
* Prior use of (ie, within the last 90 days) and/or currently use of any antibiotics (including rifaximin) and/or lactulose/lactitol to treat elevated ammonia
* Significant alcohol consumption
* Plasma prothrombin index <0.4
* Platelet count <35,000/µL
* HIV infection
* Impaired renal function (eGFR <60 mL/min)
* Recent (within 6 months of screening) clinically significant cardiovascular events
* Acute gastrointestinal diseases and pulmonary diseases
* History of inborn errors of metabolism and/or genetic deficiencies that impact AA metabolism
* Food allergies to soy, lecithin, or lactose
* Concurrent consumption of systemic corticosteroids, anabolic supplements including testosterone, and other dietary supplements containing casein, whey, or AAs for the duration of the study inclusive of the washout period
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| AAs, amino acids; BMI, body mass index; eGFR, estimated glomerular filtration rate; HE, hepatic encephalopathy; HIV, human immunodeficiency virus. |