

Supplementary Table 2. Intestinal BA-modifying bacteria spectrum in patients with MASLD or CKD and animal models of MASLD or CKD

Author	Groups	Diagnosis	Gut Microbiome
MASLD			
Wang et al. ⁵⁸ (2016)	MASLD (n=43) vs. HC (n=83)	Liver ultrasound	Phylum: Bacteroidetes‡ Firmicutes‡ Family: Ruminococaceae‡ Lactobacillaceae‡ Peptostreptococaceae‡ Class: Bacteroidia‡ Clostridia‡ Family: Ruminococaceae‡ Genus: Lactobacillus‡ Phylum: Firmicutes‡ Class: Clostridia‡ Genus: Bacteroides‡ Phylum: Bacteroidetes‡ Proteobacteria‡
Raman et al. ⁶⁷ (2013)	MASLD (n=30) vs. HC (n=30)	Liver ultrasound	
Wong et al. ⁵⁹ (2013)	MASH (n=16) vs. HC (n=22)	Liver biopsy	
Boursier et al. ⁴⁹ (2016)	No MASH (n=22) vs. MASH (n=35)	Liver biopsy	
Schwimmer et al. ⁶⁰ (2019)	MASLD (n=87) vs. HC (n=37)	Liver biopsy	
Ponziani et al. ⁶¹ (2019)	Cirrhosis (n=41) vs. HC (n=20)	Liver biopsy or clinical findings	Phylum: Bacteroidetes‡ Proteobacteria‡ Family: Lactobacillaceae‡ Bacteroidaceae‡ Enterococaceae‡ Bifidobacteriaceae‡ Genus: Lactobacillus‡ Bacteroides † Ruminococcus‡ Enterococcus‡ Bifidobacterium‡ Phylum: Proteobacteria‡ Family: Ruminococaceae‡ Enterobacteriaceae‡ Genus: Escherichia-Shigella‡ Phylum: Bacteroidetes‡ Firmicutes‡ Family: Bacteroidaceae‡ Lactobacillaceae‡ Genus: Bacteroides‡ Ruminococcus‡ Lactobacillus‡ Genus: Escherichia‡ Lactobacillus‡ Phylum: Bacteroidetes‡ Firmicutes‡ Class: Clostridia‡ Bacteroidia‡ Genus: Lactobacillus‡ Clostridium‡ Phylum: Proteobacteria‡ Firmicutes‡ Bacteroidetes‡
Shen et al. ⁶⁸ (2017)	MASLD (n=25) vs. HC (n=20)	Liver biopsy	
Da Silva et al. ⁷³ (2018)	MASLD (n=39) vs. HC (n=28)	Liver biopsy	
Jiang et al. ⁷⁰ (2015)	MASLD (n=53) vs. HC (n=32)	Liver biopsy/ultrasound	
Carbajo-Pescador et al. ⁷⁴ (2019)	MASLD (n=12) vs. HC (n=12)	Liver Biopsy	
Rahman et al. ⁶⁵ (2016)	MASLD (n=5) vs. HC (n=5)	Liver Biopsy	
CKD			
Li et al. ⁷⁸ (2019)	CKD (n=50) vs. HC (n=22)	eGFR<60 mL/min/1.73m ²	Phylum: Actinobacteria‡ Genus: Lactobacillus‡ Family: Bacteroidaceae‡ Genus: Escherichia-Shigella‡ Bacteroides‡ Genus: Lactobacillus‡ Phylum: Firmicutes‡ Bacteroidetes‡ Genus: Bacteroides‡ Ruminococcus‡ Family: Lactobacillaceae‡ Class: Clostridia‡ Genus: Bifidobacterium‡ Clostridium‡
Pivari et al. ⁷⁷ (2022)	CKD (n=24) vs. HC (n=20)	15-eGFR<60 mL/min/1.73m ²	
Huang et al. ⁸¹ (2021)	CKD (n=9-11) vs. HC (n=9-11)	Kidney biopsy	
Hu et al. ⁷⁹ (2017)	Early RF (n=6-9) vs. HC (n=6-9)	Kidney biopsy	
Li et al. ⁸⁰ (2020)	DN (n=40) vs. NC (n=5)	Plasma glucose level >20 mmol/L	
Mishima et al. ⁸² (2015)	RF (n=6) vs. HC (n=6)	Kidney biopsy	

MASLD, metabolic dysfunction-associated steatotic liver disease; MASH, metabolic dysfunction-associated steatohepatitis; HC, healthy control; CKD, chronic kidney disease; RF, renal failure; DN, diabetic nephropathy; NC, normal chow.