

**Fig. S2**. Principal component (PC) analysis of tissue microRNA (miRNA) and mRNA datasets discriminates between hepatobiliary tumor types. (A) The axes of two PC2s with a negative correlation between the expression patterns of mRNAs and miRNAs in a two-dimensional model. CC, cholangiocarcinoma; YCC, cholangiocarcinoma of young individuals (younger than 50 years old); HCC, hepatocellular carcinoma; Be, benign hepatobiliary tumor; T, tumor; NT, non-tumor; (B) Red circles indicate significant miRNAs (n = 24) and (C) mRNAs (n = 141), using an adjusted P < 0.01, according to comparisons among tumor groups in a two-dimensional PC plot.