



**Figure S1:** Comparison of total ion chromatographic patterns of LC-ESI-MS/MS methodology. Typical chromatogram of the standard BA mixture **(A)**, and the representative chromatographic patterns of the healthy control **(B)**, early cirrhosis **(C)** and advanced cirrhosis **(D)**. The analytical conditions are detailed in the experiment section. The chromatogram in each condition (B-D) shown in this figure was obtained from same specimen in the Figure 1 and Figure S2.