



Supplementary Figure S1. Redundancy analysis (RDA) plots. PCA revealed the correlations between flora and IS (inflammation score), FS (fibrosis score), FA (proportion of fibrosis/ tissue area) (A) or the expression of the disease related proteins COL1 (collagen I), COL3 (collagen III), SP-A, SP-B, SP-C, SP-D, at genus level (B). Each dot indicates one sample; bacteria are indicated by red arrows (The name of the bacterium can be found in Supplementary Table S3), and phenotypic data are indicated by yellow arrows. The length of the arrow line represents the correlation between the bacterial distribution and the phenotypic data, the longer the arrow line, the higher the correlation. The angle between the arrow line and the ranking axis represents the correlation between them, the smaller the angle, the higher the correlation, and vice versa, the lower the correlation.