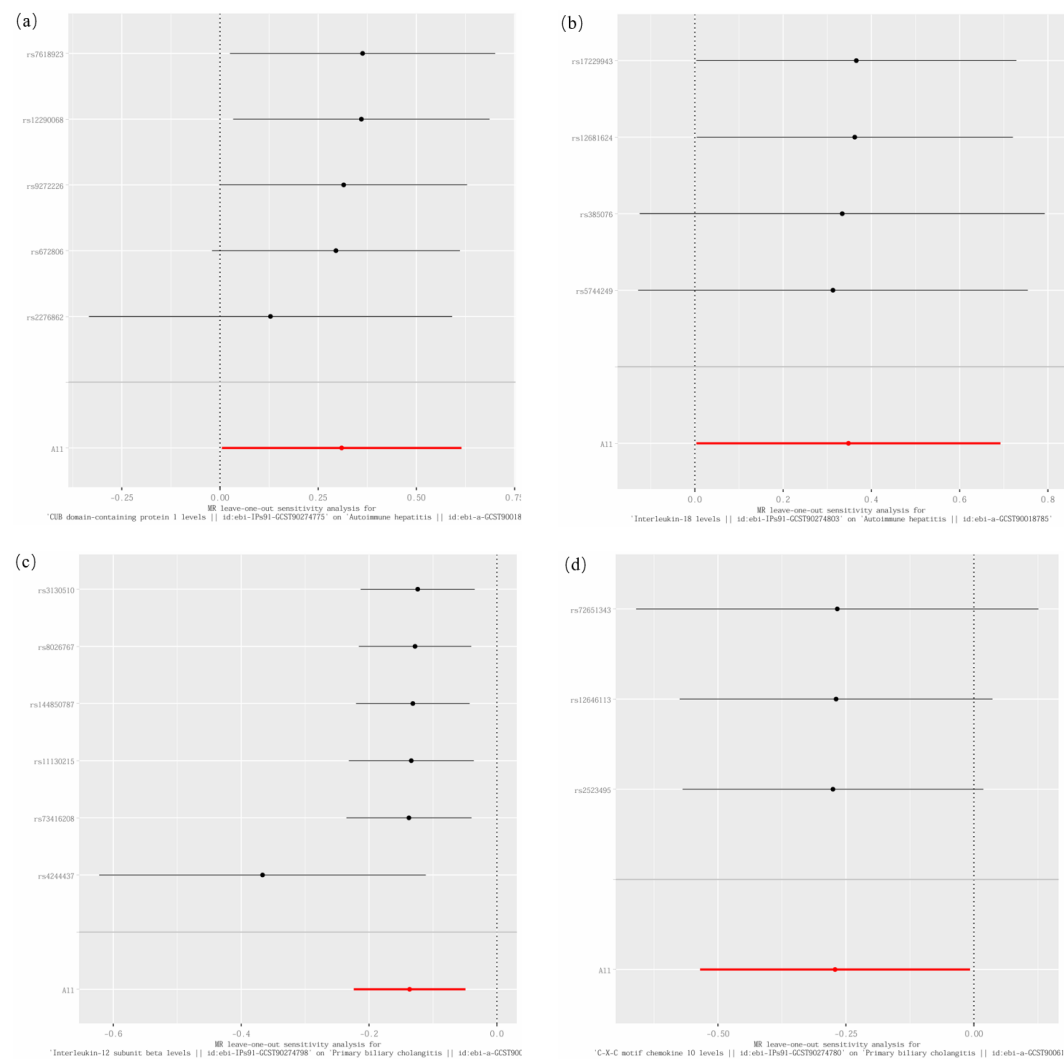
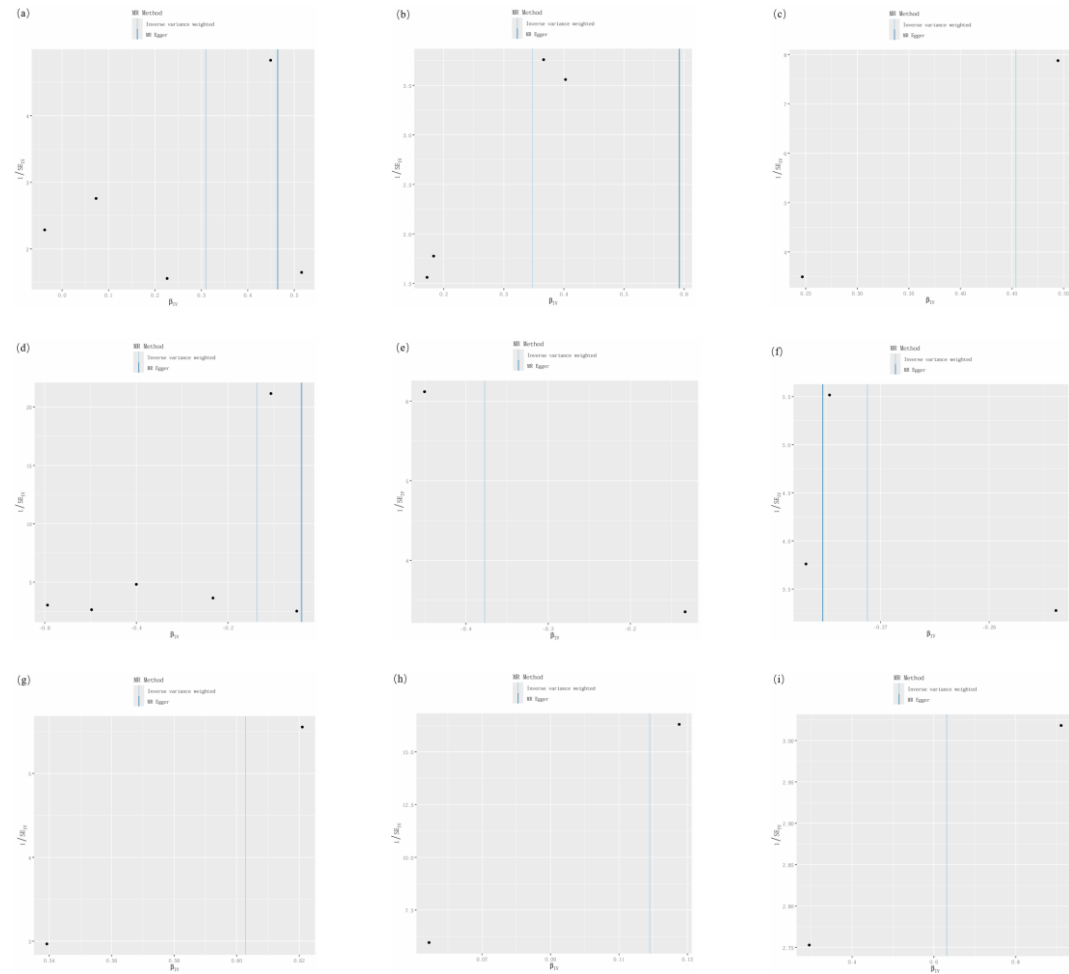


Supplementary Figure 1 Scatter plots between circulating inflammatory proteins and AILD using univariable MR and bidirectional MR. (a) CUB domain-containing protein 1 levels and AIH; (b) Interleukin-18 and AIH; (c) C-X-C motif chemokine 11 and PBC; (d) Interleukin-12 subunit beta and PBC; (e) TNF-related activation-induced cytokine and PBC; (f) C-X-C motif chemokine 10 and PBC; (g) Tumor necrosis factor ligand superfamily member 12 and PSC; (h) T-cell surface glycoprotein CD6 isoform and PSC; (i) C-C motif chemokine 20 and PSC. Abbreviation AILD: autoimmune liver disease; MR: mendelian randomization; AIH: autoimmune hepatitis; PBC: primary biliary cholangitis; PSC: primary sclerosing cholangitis.



Supplementary Figure 2 Leave-one-out plots between circulating inflammatory proteins and AILD using univariable MR and bidirectional MR. (a) CUB domain-containing protein 1 levels and AIH; (b) Interleukin-18 and AIH; (c) Interleukin-12 subunit beta and PBC; (d) C-X-C motif chemokine 10 and PBC. Abbreviation AILD: autoimmune liver disease; MR: mendelian randomization; AIH: autoimmune hepatitis; PBC: primary biliary cholangitis; PSC: primary sclerosing cholangitis.



Supplementary Figure 3 Funnel plots between circulating inflammatory proteins and AILD using univariable MR and bidirectional MR. (a) CUB domain-containing protein 1 levels and AIH; (b) Interleukin-18 and AIH; (c) C-X-C motif chemokine 11 and PBC; (d) Interleukin-12 subunit beta and PBC; (e) TNF-related activation-induced cytokine and PBC; (f) C-X-C motif chemokine 10 and PBC; (g) Tumor necrosis factor ligand superfamily member 12 and PSC; (h) T-cell surface glycoprotein CD6 isoform and PSC; (i) C-C motif chemokine 20 and PSC. Abbreviation AILD: autoimmune liver disease; MR: mendelian randomization; AIH: autoimmune hepatitis; PBC: primary biliary cholangitis; PSC: primary sclerosing cholangitis.