

Supplementary Table S1. Summary of demographics and characteristics of the subjects analyzed in this study

| | PSC | UC | HC | <i>p</i> -value |
|---|-----------|------------|-----------|-----------------|
| No. of patients | 27 | 16 | 23 | |
| Male, n (%) | 19 (70) | 7 (44) | 10 (43) | 0.099 |
| Present age, yrs, median (min–max) | 12 (3–24) | 13 (10–22) | 12 (3–23) | 0.491 |
| Age at onset, yrs, median (min–max) | 6 (2–15) | 11 (4–14) | – | 0.009 |
| Age at diagnosis, yrs, median (min–max) | 9 (2–16) | 12 (6–15) | – | 0.126 |
| IBD n (%) | 27 (100) | 16 (100) | – | |
| UC n (%) | 10 (41) | 16 (100) | – | |
| IBD-U n (%) | 17 (59) | 0 (0) | – | |
| PUCAI score in UC patients, n (%) | | | | |
| Remission (0–9) | 7 (70) | 8 (50) | – | 0.428 |
| Mild disease activity (10–30) | 3 (30) | 5 (31) | – | 1.000 |
| Moderate disease activity (35–60) | 0 (0) | 2 (13) | – | 0.508 |
| Severe disease activity (65–) | 0 (0) | 1 (6) | – | 1.000 |
| Medication n (%) | | | | |
| UDCA | 21 (78) | 0 (0) | – | <0.001 |
| SASP | 14 (52) | 1 (6) | – | 0.003 |
| Mesalazine | 5 (19) | 13 (81) | – | <0.001 |
| Thiopurine | 10 (37) | 9 (56) | – | 0.341 |
| Steroids | 7 (26) | 2 (12) | – | 0.446 |
| Infliximab | 0 (0) | 1 (6) | – | 0.372 |
| Probiotics | 6 (22) | 5 (31) | – | 0.719 |

HC, healthy control; IBD, inflammatory bowel disease; IBD-U, inflammatory bowel disease unclassified; PSC, primary sclerosing cholangitis; PUCAI, pediatric ulcerative colitis activity index; SASP, salazosulfapyridine; UC, ulcerative colitis; UDCA, ursodeoxycholic acid. Statistical analyses were by Mann-Whitney's U-test, Kruskal-Wallis test, Chi-square test or Fisher's exact test where appropriate.

Supplementary Table S2. Demographics and characteristics of PSC and UC patients without SASP treatment and the HC subjects

| | PSC | UC | HC | <i>p</i> -value |
|---|-----------|------------|-----------|-----------------|
| No. of patients | 13 | 15 | 23 | |
| Male, n (%) | 11 (85) | 7 (44) | 10 (43) | 0.044 |
| Present age, yrs, median (min–max) | 15 (3–24) | 13 (10–18) | 12 (3–23) | 0.507 |
| Age at onset, yrs, median (min–max) | 8 (2–15) | 11 (4–14) | – | 0.150 |
| Age at diagnosis, yrs, median (min–max) | 9 (2–16) | 12 (6–15) | – | 0.459 |
| IBD n (%) | 13 (100) | 15 (100) | – | |
| UC n (%) | 6 (46) | 15 (100) | – | |
| IBD-U n (%) | 7 (53) | 0 (0) | – | |
| PUCAI score in UC patients, n (%) | | | | |
| Remission (0–9) | 5 (83) | 7 (47) | – | 0.178 |
| Mild disease activity (10–30) | 1 (17) | 5 (33) | – | 0.623 |
| Moderate disease activity (35–60) | 0 (0) | 2 (13) | – | 1.000 |
| Severe disease activity (65–) | 0 (0) | 1 (7) | – | 1.000 |
| Medication n (%) | | | | |
| UDCA | 7 (53) | 0 (0) | – | 0.001 |
| Mesalazine | 5 (38) | 13 (87) | – | 0.016 |
| Thiopurine | 2 (15) | 8 (53) | – | 0.055 |
| Steroids | 1 (8) | 2 (13) | – | 1.000 |
| Infliximab | 0 (0) | 1 (7) | – | 1.000 |
| Probiotics | 3 (23) | 5 (33) | – | 0.686 |

HC, healthy control; IBD, inflammatory bowel disease; IBD-U, inflammatory bowel disease unclassified; PSC, primary sclerosing cholangitis; PUCAI, pediatric ulcerative colitis activity index; SASP, salazosulfapyridine; UC, ulcerative colitis; UDCA, ursodeoxycholic acid. Statistical analyses were by Mann-Whitney's U-test, Kruskal-Wallis test, Chi-square test or Fisher's exact test where appropriate.