**Supplementary Table 1.** Multivariable Cox Proportional Hazard Ratios for a Poor Outcome.

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **HR** | **95% CI** | ***p* value** |
| Disease duration | 0.91 | 0.84–0.98 | **0.011** |
| Disease extent |  |  |  |
| E1 | 1.00 |  |  |
| E2 | 1.80 | 0.67–4.86 | 0.248 |
| E3 | 3.06 | 1.05–8.89 | **0.040** |
| Total Mayo score\* | 1.08 | 0.96–1.22 | 0.219 |
| Hospitalization | 1.14 | 0.60–2.18 | 0.690 |
| Cytomegalovirus colitis | 2.27 | 1.12–4.60 | **0.023** |
| Concurrent treatments |  |  |  |
| 5-ASA | 1.00 |  |  |
| Systemic steroid | 1.36 | 0.66–2.79 | 0.401 |
| Anti-TNF agents | 3.27 | 1.55–6.86 | **0.002** |

\*Hazard ratio per point. HR, hazard ratio; CI, confidence interval; UC, ulcerative colitis; CMV, cytomegalovirus; AZA, azathioprine; 6-MP, 6-mercaptopurine; TNF, tumor necrosis factor. *p*-Values < 0.05 are shown in bold type.

|  |  |  |  |
| --- | --- | --- | --- |
|  | CMV inclusions | | |
| **Variable** | **Low (<5/section)**  **(*n* = 23)** | **High (≥5/section)**  **(*n* = 13)** | ***p* value** |
| Age, *y* (mean ± SD) | 56.2±14.3 | 49.0±10.4 | 0.143 |
| Male (*n*, %) | 13 (56.5) | 8 (61.5) | 0.769 |
| Age at UC diagnosis, y (mean ± SD) | 53.0±14.00 | 42.9±11.3 | **0.039** |
| History of CMV infection (*n*, %) | 0 (0.0) | 1 (7.7) | 0.361\* |
| Disease duration of UC, y (mean ± SD) | 4.3±5.5 | 6.4±6.0 | 0.156 |
| Smoking status (*n*, %) |  |  | 0.486\* |
| Never smoker | 12 (57.1) | 8 (72.7) |  |
| Ex-smoker | 8 (38.1) | 2 (18.2) |  |
| Current smoker | 1 (4.8) | 1 (9.1) |  |
| Disease extent at endoscopy (*n*, %) |  |  | 0.867\* |
| E1 | 4 (17.9) | 1 (7.7) |  |
| E2 | 15 (65.2) | 10 (76.9) |  |
| E3 | 4 (17.4) | 2 (15.4) |  |
| Disease activity(mean ± SD) |  |  |  |
| Total Mayo score | 9.3±2.5 | 10.3±2.0 | 0.276 |
| Endoscopic sub-score | 2.7±0.6 | 2.9±0.65 | 0.250 |
| Laboratory findings (mean ± SD) |  |  |  |
| CRP, mg/L | 2.5±3.6 | 3.2±3.1 | 0.394 |
| Albumin, g/dL | 3.8±0.8 | 3.8±0.4 | 0.622 |
| Hb, g/dL | 12.2±2.3 | 11.7±1.9 | 0.418 |
| WBC, 103/μL | 7.5±2.3 | 6.6±2.8 | 0.156 |
| pANCA (*n*, %) | 4 (19.1) | 2 (22.2) | 1.000\* |
| Concurrent treatments (*n*, %) |  |  |  |
| 5-ASA | 19 (82.6) | 11 (84.6) | 1.000\* |
| Corticosteroids | 11 (47.8) | 7 (53.9) | 0.729 |
| Thiopurines | 13 (56.5) | 9 (69.2) | 0.453 |
| Anti-TNF agents | 5 (21.7) | 4 (30.8) | 0.693\* |
| Antiviral treatment (*n*, %) | 9 (39.1 ) | 5 (38.5) | 0.969 |
| Hospitalization required at index (*n*, %) | 14 (60.9) | 8 (61.5) | 0.969 |

**Supplementary Table 2.** Subgroup Comparisons According to the Grade of Cytomegalovirus Inclusions

Data expressed by mean ± SD or number (%). \*Fisher’s exact test. UC, ulcerative colitis; CRP, C-reactive protein; ESR, erythrocyte sedimentation rate; Hb, hemoglobin; WBC, white blood cell; P-ANCA, perinuclear anti-neutrophil cytoplasmic antibodies; 5-ASA, 5-aminosalicylic acid; TNF, tumor necrosis factor. *p*-Values < 0.05 are shown in bold type.