**Supplemental Table 1.** Factors associated with loss of response to tofacitinib during maintenance therapy

|  |  |  |
| --- | --- | --- |
| Covariable | Adjusted HR [95% CI] | p-value |
| Baseline disease activity at tofacitinib inductionSevere clinical activity (PMS ≥7)Severe endoscopic activity (MES=3) | 0.98 [0.50, 1.94]3.60 [1.70, 7.62] | 0.970.001 |
| Disease extentLeft-sided or proctitisPancolitis | Reference0.94 [0.52, 1.72] | 0.85 |
| Disease duration<2 years2 to ≤5 years>5 years | Reference1.61 [0.60, 4.37]1.64 [0.74, 3.67] | 0.340.22 |
| Prior treatmentBiologic naïvePrevious biologic failure | Reference3.89 [1.28, 11.86] | 0.02 |
| Clinical treatment responseAchievement of 3-month corticosteroid-free remission | 0.90 [0.48, 1.65] | 0.73 |
| Endoscopic treatment responseMES = 2 or 3MES = 1 (endoscopic improvement)MES = 0 (endoscopic remission) | Reference1.26 [0.61, 2.60]0.40 [0.20, 0.80] | 0.530.009 |

Abbreviations: CI confidence interval; MES Mayo Endoscopic Subscore; PMS Partial Mayo Score



**Supplemental Figure 1.** Follow-up of patients during the REMIT-UC study. Censored patients include those who continued treatment but did not have follow-up to the specified time point.



**Supplemental Figure 2.** Cumulative probability of C-reactive protein normalization (< 5 mg/L) (A) or fecal calprotectin (<250 µg/g) (B) in tofacitinib-treated patients with elevated biomarkers at baseline



**Supplemental Figure 3.** Probability of ulcerative colitis related hospitalization (A), colectomy (B) and treatment persistence (C) in patients treated with tofacitinib