Supplementary Table 1: Risk of adverse clinical events comparing patients who continue or discontinue 5-ASA therapy with at least 30 days of 5-ASA treatment before anti-TNF initiation

	Stop versus continue 5-ASA	
	aHR (95% CI)*	**P value**
United States Cohort		
New Steroid Use	1.03 (0.88 – 1.23)	0.4
Hospitalization	0.97 (0.76 – 1.23)	0.8
Surgery	0.72 (0.40 – 1.30)	0.3
Composite	1.04 (0.90 – 1.21)	0.6
Denmark Cohort		
New Steroid Use	0.84 (0.60 – 1.18)	0.3
Hospitalization	0.93 (0.64 - 1.37)	0.7
Surgery	1.15 (0.67 - 1.98)	0.6
Composite	0.82 (0.63 – 1.08)	0.2

Abbreviations: 5-ASA, 5-aminosalicylate; anti-TNF, anti-tumor necrosis factor alpha; aHR, adjusted hazard ratio; CI, confidence interval; IR, incidence rate.

*In the U.S. cohort, models adjusted for age, sex, duration of pre-biologic 5-aminosalicylate treatment, and baseline health care utilization (hospitalization, emergency department visits, corticosteroid use, gastrointestinal surgery). In the Danish cohort, models adjusted for age, sex, duration of ulcerative colitis at initiation of biologic therapy, duration of pre-biologic 5-aminosalicylate treatment, and baseline health care utilization (hospitalization, emergency department visits, corticosteroid use, gastrointestinal surgery)

Supplementary Table 2: Risk of adverse clinical events comparing patients who continue or discontinue 5-ASA therapy with at least 60 days of 5-ASA treatment before anti-TNF initiation

	Stop versus continue 5-ASA	
	aHR (95% CI)*	**P value**
United States Cohort		
New Steroid Use	1.04 (0.88 – 1.23)	0.7
Hospitalization	0.97 (0.76 – 1.23)	0.8
Surgery	0.72 (0.40 – 1.30)	0.3
Composite	1.04 (0.90 – 1.21)	0.6
Denmark Cohort		
New Steroid Use	0.94 (0.65 – 1.34)	0.7
Hospitalization	1.03 (0.69 - 1.56)	0.9
Surgery	1.19 (0.67 – 2.10)	0.6
Composite	0.92 (0.69 – 1.24)	0.6

Abbreviations: 5-ASA, 5-aminosalicylate; anti-TNF, anti-tumor necrosis factor alpha; aHR, adjusted hazard ratio; CI, confidence interval; IR, incidence rate.

*In the U.S. cohort, models adjusted for age, sex, duration of pre-biologic 5-aminosalicylate treatment, and baseline health care utilization (hospitalization, emergency department visits, corticosteroid use, gastrointestinal surgery). In the Danish cohort, models adjusted for age, sex, duration of ulcerative colitis at initiation of biologic therapy, duration of pre-biologic 5-aminosalicylate treatment, and baseline health care utilization (hospitalization, emergency department visits, corticosteroid use, gastrointestinal surgery)

Supplementary Table 3: Risk of adverse clinical events comparing patients who continue or discontinue 5-ASA therapy with at least 180 days of 5-ASA treatment before anti-TNF initiation

	Stop versus continue 5-ASA	
	aHR (95% CI)*	**P value**
United States Cohort		
New Steroid Use	1.02 (0.86 – 1.21)	0.8
Hospitalization	1.06 (0.83 – 1.36)	0.6
Surgery	0.88 (0.48 – 1.62)	0.7
Composite	1.08 (0.93 – 1.26)	0.3
Denmark Cohort		
New Steroid Use	1.17 (0.75 – 1.82)	0.5
Hospitalization	1.41 (0.84 – 2.37)	0.2
Surgery	1.06 (0.47 – 2.40)	0.9
Composite	1.27 (0.88 – 1.81)	0.2

Abbreviations: 5-ASA, 5-aminosalicylate; anti-TNF, anti-tumor necrosis factor alpha; aHR, adjusted hazard ratio; CI, confidence interval; IR, incidence rate.

*In the U.S. cohort, models adjusted for age, sex, duration of pre-biologic 5-aminosalicylate treatment, and baseline health care utilization (hospitalization, emergency department visits, corticosteroid use, gastrointestinal surgery). In the Danish cohort, models adjusted for age, sex, duration of ulcerative colitis at initiation of biologic therapy, duration of pre-biologic 5-aminosalicylate treatment, and baseline health care utilization (hospitalization, emergency department visits, corticosteroid use, gastrointestinal surgery)