Supplemental Materials

Supplemental Table 1. HRQoL outcome measures for induction and maintenance periods by treatment group.

LSM (SE) unless otherwise specified	Induction Treatment Groups			
	PBO IV Q4W (N=63)	**Miri 50 mg EB IV Q4W (N=62)**	**Miri 200 mg EB IV Q4W (N=61)**	**Miri 600 mg IV Q4W (N=59)**
	Induction Period, Study Week 12			
IBDQ total score	148.8 (4.4)	159.6 (4.5)	169.3 (4.4)	171.8 (4.5)
Difference vs PBO [95% CI]		10.7 (-1.0, 22.5)	20.5 **(8.7, 32.2)**	22.9 **(11.0, 34.9)**
IBDQ bowel symptoms score	47.3 (1.4)	51.8 (1.5)	55.9 (1.4)	53.9 (1.5)
Difference vs PBO [95% CI]		4.4 **(0.7, 8.2)**	8.6 **(4.8, 12.3)**	6.6 **(2.8, 10.4)**
IBDQ emotional function score	56.2 (1.7)	58.3 (1.8)	61.9 (1.7)	64.4 (1.8)
Difference vs PBO [95% CI]		2.2 (-2.5, 6.8)	5.7 **(1.0, 10.3)**	8.2 **(3.5, 12.9)**
IBDQ social function score	24.1 (0.9)	26.8 (1.0)	27.5 (0.9)	28.2 (1.0)
Difference vs PBO [95% CI]		2.7 **(0.2, 5.2)**	3.4 **(0.9, 5.9)**	4.1 **(1.6, 6.6)**
IBDQ systemic symptoms score	21.3 (0.7)	23.0 (0.7)	24.6 (0.7)	25.5 (0.7)
Difference vs PBO [95% CI]		1.8 (-0.2, 3.7)	3.3 **(1.4, 5.2)**	4.2 **(2.3, 6.2)**
SF-36 physical component score	45.4 (0.8)	48.2 (0.9)	48.0 (0.8)	49.0 (0.9)
Difference vs PBO [95% CI]		2.9 **(0.7, 5.0)**	2.6 **(0.4, 4.8)**	3.6 **(1.3, 5.8)**
SF-36 mental component score	42.5 (1.2)	43.8 (1.3)	46.1 (1.2)	48.1 (1.3)
Difference vs PBO [95% CI]		1.3 (-1.9, 4.5)	3.6 **(0.4, 6.8)**	5.6 **(2.4, 8.9)**

	Maintenance Treatment Groups - Induction Period Responders	
	Miri 200 mg SC Q4W (N=46)	**Miri 200 mg SC Q12W (N=46)**
	Maintenance Period, Study Week 52	
IBDQ total score	182.5 (4.0)	175.5 (4.0)
IBDQ bowel symptoms score	59.6 (1.3)	58.0 (1.3)
IBDQ emotional function score	66.1 (1.6)	63.4 (1.6)
IBDQ social function score	30.9 (0.9)	30.5 (0.9)
IBDQ systemic symptoms score	26.4 (0.7)	24.3 (0.8)
SF-36 PCS	52.0 (1.0)	51.3 (1.0)
SF-36 MCS	47.1 (1.5)	46.4 (1.5)

Abbreviations: CI = confidence interval; EB = exposure-based; IBDQ = Inflammatory Bowel Disease Questionnaire; IV = intravenous; LSM = least squares mean; MCS = SF-36 Mental Component Score; miri = mirikizumab; N = number of patients in treatment group; PBO = placebo; PCS = SF-36 Physical Component Score; Q4W = every 4 weeks; Q12W = every 12 weeks; SC = subcutaneous; SE = standard error; SF-36 = Medical Outcomes Study 26-Item Short Form Health Survey Version 2 Standard.

Bolded 95% CIs indicate significant differences vs PBO ($p<0.05$).

Supplemental Figure 1. AMAC study design.

Abbreviations: IV = intravenous; Miri = mirikizumab; N=number of patients in treatment group; PBO = placebo; Q4W = every 4 weeks; Q12W = every 12 weeks; SC = subcutaneous.

Supplemental Figure 2. Relative proportion of variation between HRQoL measures and clinical efficacy endpoints at Week 12.

Abbreviations: BU = bowel urgency; EN = endoscopic remission; HRQoL = health-related quality of life; IBDQ = Inflammatory Bowel Disease Questionnaire; MCS = SF-36 Mental Component Score; PCS = SF-36 Physcial Component Score; RB = rectal bleeding; SF = stool frequency; SF-36 = Medical Outcomes Study 26-Item Short Form Health Survey Version 2 Standard.

Multivariable linear models were fitted to assess the relative proportion of variation in HRQoL measures at Week 12. Each linear model included the Week 12 Mayo SF score, RB score, endoscopy score, absence of BU status, geographic region, prior biologic experience, age, gender, and baseline value of the HRQoL measure. The coefficient of partial determination, or the partial R^2, was compared between BU status, SF, RB, and endoscopy scores. mBOCF was used to impute missing Mayo score components and HRQL values.