Supplemental Table 1. Plasma and Colonic Tissue GSK2982772 Concentrations (ng/mL) (GSK2982772/OL'772a group)

	Visit	Planned Time	n	Median (min, max)
Plasma	Part A	Pre-dose, day 43	22	58.4 (0.0, 792)
	Part B	Day 85	21	22.4 (1.45, 975.0)
Colonic Tissue	Part A	Pre-dose, day 43	24	88.0 (0.0, 862.7)
110000	Part B	Day 85	20	37.7 (0.0, 867.0)

^aGSK2982772/OL'772 patients received GSK2982772 60 mg TID until day 43 when all patients switched to open-label GSK2982772 at the same dose.

min, minimum; max, maximum; OL, open-label; SD, standard deviation.

Supplemental Table 2. Adjusted Mean of the Change from Baseline in Efficacy and Biomarker Measures (Safety Population)

Visit	Treatment	LS Mean (SE)	Treatment Difference (95% CI)	
Total Mayo Score				
Part A (day 43)	Placebo / OL'772	-1.42 (0.656)	-0.32 (-1.94, 1.30)	
Tart A (day 45)	GSK2982772 / OL'772	-1.75 (0.443)		
Down D (do., OE)	Placebo / OL'772	-3.20 (0.895)	0.04 / 0.14 0.00	
Part B (day 85)	GSK2982772 / OL'772	-3.16 (0.583)	0.04 (-2.14, 2.23)	
Partial Mayo Score				
Dort A (doy 42)	Placebo / OL'772	-1.30 (0.557)	0.24 (1.70 1.04)	
Part A (day 43)	GSK2982772 / OL'772	-1.64 (0.376)	-0.34 (-1.72, 1.04)	
Down D (do., OE)	Placebo / OL'772	-2.87 (0.728)	0.00 (4.07.4.75)	
Part B (day 85)	GSK2982772 / OL'772	-2.93 (0.502)	-0.06 (-1.87, 1.75)	
3-Domain Mayo Score				
D (A () (0)	Placebo / OL'772	-0.99 (0.527)	0.07 (4.07.0.00)	
Part A (day 43)	GSK2982772 / OL'772	-1.36 (0.356)	-0.37 (-1.67, 0.93)	
D# D (d: 05)	Placebo / OL'772	-2.32 (0.678)	0.12 / 1.50 1.70\	
Part B (day 85)	GSK2982772 / OL'772	-2.19 (0.440)	0.13 (-1.52, 1.79)	
UCEIS Total Scores				
D 14 1 40	Placebo / OL'772	-0.24 (0.428)	0.10 / 1.00 0.07	
Part A, day 43	GSK2982772 / OL'772	-0.42 (0.289)	-0.18 (-1.23, 0.87)	
	Placebo / OL'772	-0.84 (0.495)		
Part B, day 85	GSK2982772 / OL'772	-0.82 (0.318)	0.02 (-1.18, 1.22)	
C- Reactive Protein				
	Placebo / OL'772	1.06 (1.854)		
Part A, day 43	GSK2982772 / OL'772	-0.64 (1.251)	-1.69 (-6.26, 2.88) 64 (1.251)	
	Placebo / OL'772	-2.77 (1.616)		
Part B, day 85	GSK2982772 / OL'772	-1.66 (1.092)	1.12 (-2.87, 5.10)	

Fecal Calprotectin, Geometric LS Mean (%CVb)				
D 14 1 40	Placebo / OL'772 1.90 (40.7)		0.00 (0.00, 0.00)	
Part A, day 43	GSK2982772 / OL'772	0.44 (27.1)	0.23 (0.09, 0.62)	
Part B, day 85	Placebo / OL'772	0.48 (39.9)	0.00 (0.01, 0.10)	
	GSK2982772 / OL'772	0.40 (27.2)	0.82 (0.31, 2.18)	

Placebo/OL'772 patients received placebo until day 43 when all patients switched to open-label GSK2982772 60 mg TID. GSK2982772/ OL'772 patients received GSK2982772 60 mg TID until day 43 when all patients switched to open-label GSK2982772 at the same dose.

[%]CVb, between subject coefficient of variation; CI, confidence interval; LS, least squares; OL, open-label; SE, standard error.

Supplemental Table 3. Fecal Calprotectin Levels by Category (Safety Population)

Visit	Level ^a μg/g	Placebo / OL'772 ^b n/N (%)	GSK2982772 / OL'772° n/N (%)
	<250	4/11 (36)	2/24 (8)
Part A, day 1	≥250	4/11 (36)	8/24 (33)
	≥1000	3/11 (27)	14/24 (58)
	<250	2/11 (18)	7/22 (32)
Part A, day 43	≥250	2/11 (18)	12/22 (55)
	≥1000	7/11 (64)	3/22 (14)
	<250	3/11 (27)	11/22 (50)
Part B, day 85	≥250	5/11 (45)	6/22 (27)
	≥1000	3/11 (27)	5/22 (23)

^aDiurnal variation was not controlled for and sample was not required to be the first stool of the day. ^bPlacebo/OL'772 patients received placebo until day 43 when all patients switched to open-label GSK2982772 60 mg TID.

 $^{^{\}circ}$ GSK2982772/OL'772 patients received GSK2982772 60 mg TID until day 43 when all patients switched to open-label GSK2982772 at the same dose.

OL, open-label; TID, 3 times daily.

Supplemental Table 4. Mayo Endoscopic Subscore (Safety Population)

Visit	Score	Placebo / OL'772ª n/N (%)	GSK2982772 / OL'772 ^b n/N (%)
Caraaning	2	3/12 (25)	7/24 (29)
Screening	3	9/12 (75)	17/24 (71)
	0	0°	1/24 (4)
Dowt A. How 40	1	0°	2/24 (8)
Part A, day 43	2	4/11 (36)	3/24 (13)
	3	7/11 (64)	18/24 (75)
	0	O _q	1/22 (5)
Dort D. doy 95	1	1/9 (11)	2/22 (9)
Part B, day 85	2	4/9 (44)	6/22 (27)
	3	4/9 (44)	13/22 (59)

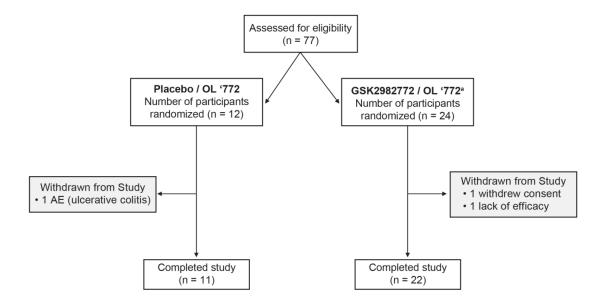
^aPlacebo/OL'772 patients received placebo until day 43 when all patients switched to open-label GSK2982772 60 mg TID.

bGSK2982772/OL'772 patients received GSK2982772 60 mg TID until day 43 when all patients switched to open-label GSK2982772 at the same dose. cN=11.

^dN=9.

CI, confidence interval; LS, least squares; OL, open-label; SE, standard error.

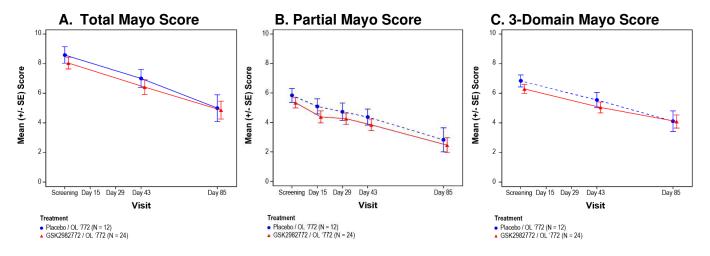
Supplemental Figure 1. Patient Disposition



 $^{\rm a}$ One patient was dosed GSK2982772 60 mg BID prior to the protocol amendment that changed the dose to 60 mg TID.

AE, adverse event; BID, twice daily; OL, open-label; TID, 3 times daily.

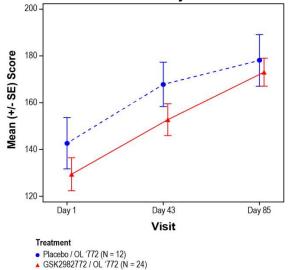
Supplemental Figure 2. Mean Total Mayo, Partial Mayo, and 3-Domain Mayo Scores Over Time by Treatment Group (Safety Population)



Placebo/OL'772 patients received placebo until day 43 when all patients switched to open-label GSK2982772 60 mg TID. GSK2982772/OL'772 patients received GSK2982772 60 mg TID until day 43 when all patients switched to open-label GSK2982772 at the same dose.

Total Mayo score includes stool frequency, rectal bleeding, physicians global assessment and endoscopic score; partial Mayo score includes stool frequency, rectal bleeding, and physicians global assessment; 3-domain Mayo score includes stool frequency, rectal bleeding, and endoscopic score. SE, standard error.

Supplemental Figure 3. Mean Inflammatory Bowel Disease Questionnaire (IBDQ) Total Scores Over Time by Treatment Group



Placebo/OL'772 patients received placebo until day 43 when all patients switched to open-label GSK2982772 60 mg TID. GSK2982772/OL'772 patients received GSK2982772 60 mg TID until day 43 when all patients switched to open-label GSK2982772 at the same dose. IBDQ, inflammatory bowel disease questionnaire; OL, open-label; SE, standard error.