Corticosteroid-Sparing Effects of Treatment with Guselkumab in Patients with Moderate to Severely Active Ulcerative Colitis: Phase 3 QUASAR Maintenance Study Results Through Week 44

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Background

An important goal in the treatment of ulcerative colitis (UC) is for patients to achieve and maintain clinical remission while minimizing corticosteroid use

Guselkumab (GUS) is a dual-acting IL-23p19 subunit inhibitor that blocks IL-23 and binds to CD64, a receptor on cells that produce IL-23

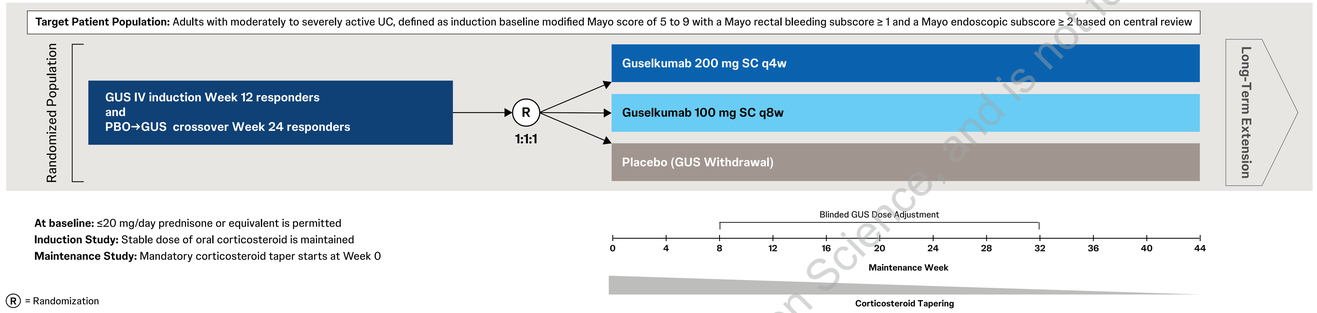
The Phase 3 QUASAR Maintenance Study was a randomized-withdrawal, double-blind, placebo-controlled design that evaluated the efficacy and safety of GUS SC maintenance treatment in patients with moderately to severely active UC who achieved clinical response to GUS IV induction[1]

Objective

Here, we report the corticosteroid-sparing effects of maintenance treatment with GUS through Week 44 of the QUASAR Maintenance Study

Methods

QUASAR Maintenance Study Design



Conclusions

- **Among patients with moderately to severely active UC who were receiving concomitant oral corticosteroids at maintenance baseline, the majority of GUS-treated patients eliminated corticosteroids within 8 weeks**
- **Patients receiving maintenance treatment with GUS who achieved clinical remission at Week 44 did so without concomitant use of oral corticosteroids**

Results

Demographics and Disease Characteristics at Induction Baseline

	Placebo (GUS Withdrawal)	GUS 100 mg q8w	GUS 200 mg q4w
Randomized full analysis set, N	190	188	190
Age in years, mean (SD)	41.2 (13.58)	40.3 (13.00)	40.6 (14.66)
Male, n (%)	109 (57.4%)	102 (54.3%)	100 (52.6%)
UC disease duration in years, mean (SD)	7.29 (6.338)	7.78 (8.463)	8.35 (8.397)
Modified Mayo score (0-9), mean (SD)[a]	7.0 (1.09)	6.8 (1.15)	6.9 (1.10)
Modified Mayo score of 7-9 (severe), n (%)	125 (65.8%)	114 (60.6%)	124 (65.3%)
Mayo endoscopic subscore of 3 (severe), n (%)	129 (67.9%)	125 (66.5%)	123 (64.7%)
Extensive UC, n (%)	95 (50.0%)	79 (42.0%)	83 (43.7%)
C-reactive protein, median in mg/L (IQR)[b]	4.2 (1.6; 8.4)	3.9 (1.4; 10.4)	3.6 (1.4; 9.1)
Fecal calprotectin, median in mg/kg (IQR)[c]	1642.0 (663.0; 3498.0)	1675.0 (806.0; 3543.5)	1487.0 (603.0; 3019.0)
Oral corticosteroid use at baseline, n (%)	77 (40.5%)	74 (39.4%)	76 (40.0%)
Corticosteroid use excluding budesonide and beclomethasone dipropionate	63 (33.2%)	58 (30.9%)	71 (37.4%)
Immunosuppressant use at baseline, n (%)[d]	43 (22.6%)	41 (21.8%)	42 (22.1%)
History of inadequate response or intolerance to biologic and/or JAK inhibitor therapy, n (%)[e,f]	75 (39.5%)	77 (41.0%)	88 (46.3%)

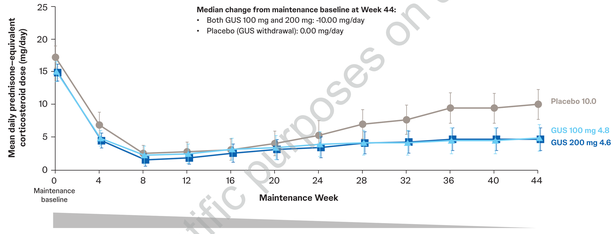
[a]Modified Mayo score; 3-component (stool frequency, rectal bleeding, and endoscopic subscores) Mayo score without the physician's global assessment. [b]Based on PBO, N=190; GUS 100 mg, N=185; GUS 200 mg, N=187. Total, N=562. [c]Based on PBO, N=175; GUS 100 mg, N=160; GUS 200 mg, N=171. Total, N=506. [d]Immunosuppressants included azathioprine, 6-mercaptopurine, and methotrexate. [e]Biologic therapy included tumor necrosis factor-α antagonists and vedolizumab. [f]JAK inhibitor therapy included tofacitinib.Randomized Full Analysis Set: Randomized patients in maintenance with modified Mayo score 5-9 at induction baseline who received at least 1 maintenance study treatment dose.

Disease Characteristics at Maintenance Baseline

	Placebo (GUS Withdrawal)	GUS 100 mg q8w	GUS 200 mg q4w
Randomized full analysis set, N	190	188	190
Clinical remission, n (%)[a]	59 (31.1%)	66 (35.1%)	69 (36.3%)
Endoscopic improvement, n (%)[b]	68 (35.8%)	75 (39.9%)	79 (41.6%)
Endoscopic remission, n (%)[c]	39 (20.5%)	41 (21.8%)	47 (24.7%)
Modified Mayo score (0-9), mean (SD)	2.5 (1.57)	2.6 (1.51)	2.5 (1.50)
C-reactive protein, median in mg/L (IQR)	1.5 (0.6; 4.0)	1.4 (0.4; 4.0)	1.4 (0.6; 3.4)
Fecal calprotectin (mg/kg), median in mg/kg (IQR)[d]	306.5 (82.5; 1077.0)	308.0 (71.0; 1310.0)	281.0 (89.0; 1233.0)
Receiving oral corticosteroids (other than budesonide and beclomethasone dipropionate) at maintenance baseline	63 (33.2%)	59 (31.4%)	69 (36.3%)
Daily prednisone-equivalent corticosteroid dose (mg/day)			
Mean (SD)	17.3 (6.72)	15.0 (6.13)	14.9 (5.48)
Median (IQR)	20.0 (10.0; 20.0)	20.0 (10.0; 20.0)	15.0 (10.0; 20.0)

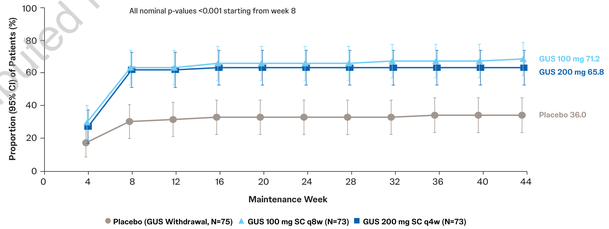
[a]Clinical remission: A Mayo stool frequency subscore of 0 or 1 and not increased from baseline, a Mayo rectal bleeding subscore of 0, and a Mayo endoscopic subscore of 0 or 1 with no friability. [b]Endoscopic improvement: A Mayo endoscopic subscore of 0 or 1 with no friability. [c]Endoscopic remission (normalization): A Mayo endoscopic subscore of 0. [d]Based on PBO, N=188; GUS 100 mg, N=185; GUS 200 mg, N=187. Total, N=560.

Corticosteroid Dose in Induction Responders Receiving Oral Corticosteroids at Maintenance Baseline



Includes patients who were receiving concomitant oral corticosteroids other than budesonide and beclomethasone at maintenance baseline. Randomized Full Analysis Set

Oral Corticosteroid Elimination in Patients Receiving Oral Corticosteroids at Maintenance Baseline

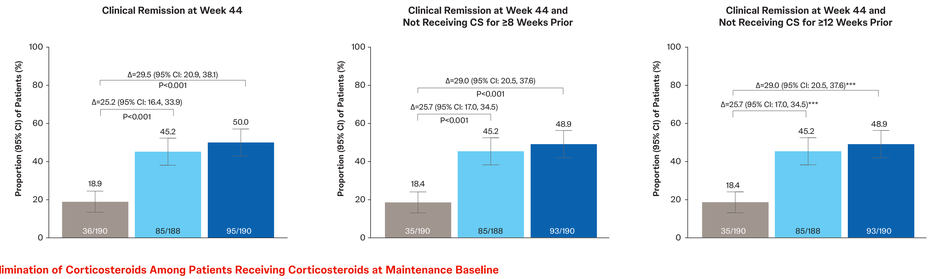


Elimination of oral corticosteroids: Not requiring any oral corticosteroid treatment from that time point until Week 44

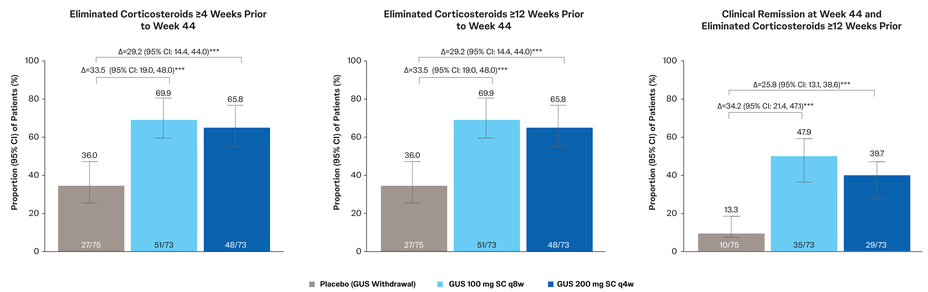
Randomized Full Analysis Set

Corticosteroid-Free Clinical Remission at Week 44

Among GUS-treated patients who achieved clinical remission at Week 44, 98.9% (178/180) were not receiving corticosteroids for at least 12 weeks prior to Week 44



Elimination of Corticosteroids Among Patients Receiving Corticosteroids at Maintenance Baseline



Clinical remission: A Mayo stool frequency subscore of 0 or 1 and not increased from baseline, a Mayo rectal bleeding subscore of 0, and a Mayo endoscopic subscore of 0 or 1 with no friability

Randomized Full Analysis Set. Δ=Adjusted treatment difference compared with placebo. ***Nominal P<0.001.

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