

# Efficacy and Safety of Guselkumab in Participants With Moderately to Severely Active Crohn's Disease Who Had Maintenance Dose Adjustment: Results From the Phase 3 GALAXI 2 & 3 Long-Term Extension



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## Background

Guselkumab is a selective, dual-acting interleukin 23 (IL-23) p19 subunit inhibitor that potently neutralizes IL-23 and binds to CD64, a receptor on cells that produce IL-23

Guselkumab demonstrated efficacy and safety through Week 48 in moderately to severely active Crohn's disease in the identically designed, randomised, double-blind GALAXI 2 & 3 phase 3 trials<sup>1</sup>

Because of the remitting and relapsing nature of Crohn's disease, patients may experience flares after successful long-term maintenance therapy

## Objective

To assess the efficacy and safety through Week 96 of guselkumab in participants who dose adjusted after an inadequate response to their randomised guselkumab maintenance regimen during Weeks 52–80 in the long-term extension (LTE) of the GALAXI 2 & 3 studies

## Methods

- Two randomised guselkumab maintenance regimens were evaluated in GALAXI 2 & 3: 100 mg SC q8w (100 q8w) and 200 mg SC q4w (200 q4w)
- Guselkumab participants who completed treatment through Week 48, and would benefit from continued study treatment as assessed by the investigator, were allowed to continue into the LTE on the same dose regimen they received during maintenance (100 q8w or 200 q4w)
- From Weeks 52–80 of the GALAXI 2 & 3 LTE, participants who met inadequate response criteria (not in clinical response AND CDAI  $\geq$ 220) received a one-time dose adjustment or sham dose adjustment (if already receiving 200 q4w) to guselkumab 200 mg q4w
- Treatment allocation in the LTE remained blinded until all participants had completed treatment through Week 48, the Week 48 database was locked, and the Week 48 analysis was finalised

- Per the prespecified analysis plan, participants undergoing dose adjustment in the LTE were evaluated as follows:
  - Clinical response and clinical remission were assessed 16 weeks after dose adjustment and at Week 96
  - Endoscopic response and endoscopic remission were assessed at Weeks 48 and 96
  - Safety was assessed through Week 96
- Nonresponder imputation and handling of missing data:** participants who experienced events indicative of lack of efficacy were considered nonresponders at all analysis timepoints after experiencing the event. Participants who discontinued study agent due to COVID-19 related reasons (excluding COVID-19 infection) or regional crisis had their observed data used, if available, to determine responder and nonresponder status at the analysis timepoint. Participants who were missing endpoint scoring data at the analysis timepoint were considered not having achieved the endpoint at the analysis timepoint.

<b>Clinical response:</b>	$\geq$ 100-point reduction in CDAI score from the time of dose adjustment or CDAI score $<$ 150
<b>Clinical remission:</b>	CDAI score $<$ 150

<b>Endoscopic response:</b>	$\geq$ 50% improvement from Week 0 in SES-CD or SES-CD $\leq$ 2
<b>Endoscopic remission:</b>	SES-CD $\leq$ 4 and at least a 2-point reduction from Week 0 and no subscore $>$ 1 in any individual component

## Results

### Characteristics of GALAXI 2 & 3 participants who did and did not receive dose adjustment

	GUS 100 mg q8w <sup>a</sup>		GUS 200 mg q4w <sup>a</sup>	
	Did NOT receive dose adjustment	Received dose adjustment	Did NOT receive dose adjustment	Received sham dose adjustment
<b>N<sup>b</sup></b>	208	29	218	24
<b>CHARACTERISTICS AT BASELINE (WEEK 0)</b>				
<b>Crohn's disease duration (y), median (IQR)</b>	4.9 (1.8; 10.2)	8.2 (5.3; 14.5)	4.1 (1.6; 9.0)	6.3 (3.0; 14.3)
<b>History of BIO-IR, n (%)</b>	102 (49.0%)	17 (58.6%)	98 (45.0%)	14 (58.3%)
<b>CDAI score, median (IQR)</b>	280.0 (248.0; 329.0)	294.0 (263.0; 319.0)	283.5 (252.0; 334.0)	289.0 (264.0; 328.5)
<b>SES-CD, median (IQR)</b>	11.0 (7.0; 17.0)	13.0 (7.0; 19.0)	11.0 (7.0; 17.0)	13.0 (9.5; 18.0)
<b>Endoscopic disease severity (per SES-CD)</b>				
Moderate (7–16), n (%)	116 (55.8%)	14 (48.3%)	106 (48.6%)	11 (45.8%)
Severe ( $\geq$ 16), n (%)	55 (26.4%)	12 (41.4%)	61 (28.0%)	9 (37.5%)
<b>Involved GI areas by central reader</b>				
Ileum only, n (%)	41 (19.7%)	6 (20.7%)	56 (25.7%)	6 (25.0%)
Colon only, n (%)	80 (38.5%)	13 (44.8%)	87 (39.9%)	6 (25.0%)
Ileum and colon, n (%)	87 (41.8%)	10 (34.5%)	75 (34.4%)	12 (50.0%)
<b>C-reactive protein (mg/L), median (IQR)</b>	7.2 (2.1; 19.4)	8.5 (2.9; 36.2)	6.5 (2.8; 19.8)	6.1 (2.1; 31.1)
<b>Fecal calprotectin (<math>\mu</math>g/g), median (IQR)<sup>c</sup></b>	903.0 (390.0; 1892.0)	848.5 (403.5; 2116.5)	982.0 (319.0; 1936.5)	1354.5 (658.5; 1747.5)
<b>CHARACTERISTICS AT WEEK 48</b>				
<b>CDAI score, median (IQR)</b>	69.5 (30.0; 128.5)	155.0 (81.0; 232.0)	68.5 (32.0; 112.0)	138.5 (72.0; 206.5)
<b>SES-CD, median (IQR)<sup>d</sup></b>	4.0 (0.0; 7.0)	7.0 (4.0; 15.0)	3.0 (1.0; 6.0)	6.0 (3.5; 10.5)
<b>In endoscopic response, n (%)</b>	128 (61.5%)	9 (31.0%)	149 (68.3%)	8 (33.3%)
<b>In endoscopic remission, n (%)</b>	91 (43.8%)	4 (13.8%)	106 (48.6%)	5 (20.8%)
<b>Endoscopic disease severity (per SES-CD)<sup>d</sup></b>				
Moderate (7–16), n (%)	49 (24.0%)	10 (34.5%)	36 (16.7%)	8 (33.3%)
Severe ( $\geq$ 16), n (%)	5 (2.5%)	7 (24.1%)	6 (2.8%)	2 (8.3%)
<b>C-reactive protein (mg/L), median (IQR)<sup>e</sup></b>	1.8 (0.8; 5.8)	5.9 (0.8; 12.7)	2.2 (0.9; 4.6)	4.0 (0.6; 8.3)
<b>Fecal calprotectin (<math>\mu</math>g/g), median (IQR)<sup>f</sup></b>	173.5 (65.0; 555.0)	591.0 (115.0; 1739.0)	121.0 (47.0; 408.0)	160.0 (49.0; 336.0)

<sup>a</sup> Treatment group at the start of the long-term extension period. Participants who had a dose adjustment between Week 52 and Week 80 received guselkumab 200 mg SC q4w. Participants who were already receiving the guselkumab 200 mg SC q4w maintenance dose and met the inadequate response criteria received a "sham" dose adjustment.

<sup>b</sup> Participants with a Crohn's disease-related surgery (with the exception of minor procedures) prior to Week 48 or a prohibited change in Crohn's disease medications prior to Week 48 who remained on treatment and subsequently entered the LTE are excluded.

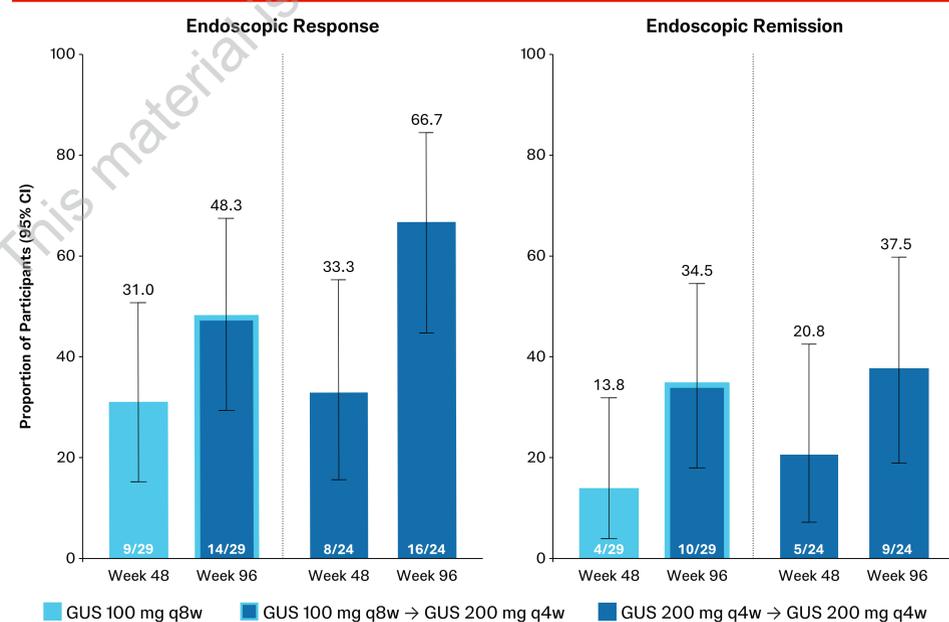
<sup>c</sup> N=208 (GUS 100 non adjusters), 28 (GUS 100→200), 216 (GUS 200 non adjusters), and 34 (GUS 200→200) participants with evaluable samples at baseline.

<sup>d</sup> N=208 (GUS 100 non adjusters), 29 (GUS 100→200), 216 (GUS 200 non adjusters), and 24 (GUS 200→200) participants with SES-CD data at Week 48.

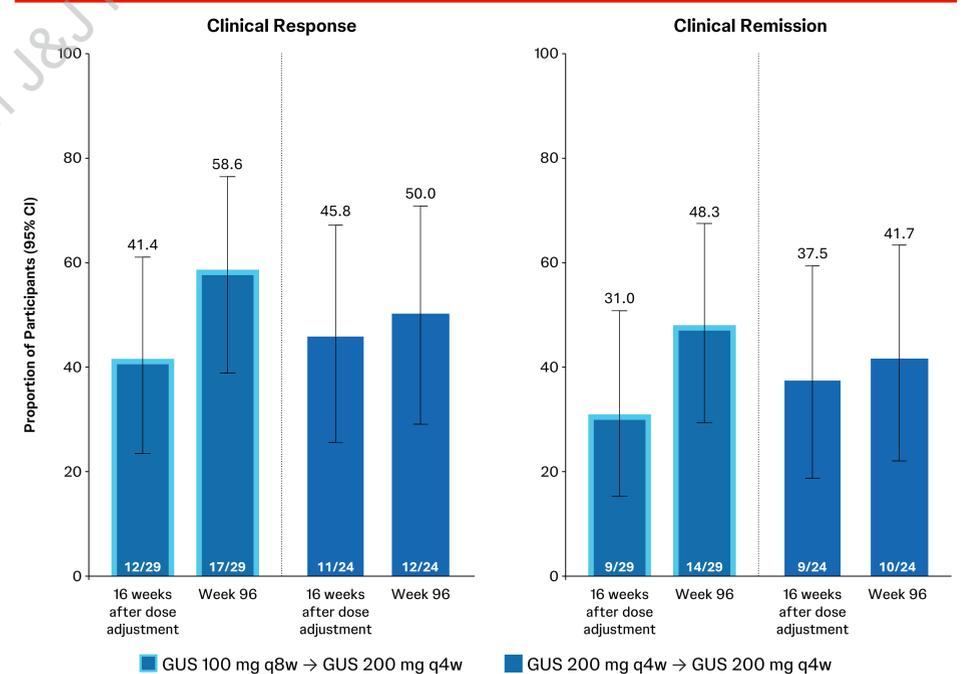
<sup>e</sup> N=205 (GUS 100 non adjusters), 27 (GUS 100→200), 213 (GUS 200 non adjusters), and 24 (GUS 200→200) participants with evaluable samples at Week 48.

<sup>f</sup> N=199 (GUS 100 non adjusters), 27 (GUS 100→200), 206 (GUS 200 non adjusters), and 23 (GUS 200→200) participants with evaluable samples at Week 48.

### Participants showed improvement in endoscopic outcomes after receiving dose adjustment



### Nearly half of participants achieved clinical response 16 weeks after dose adjustment and the percentage increased further by Week 96



Note: No participant was in clinical response or clinical remission at the time of dose adjustment per criteria for dose adjustment (not in clinical response AND CDAI  $\geq$ 220).

### Adverse event rates during the LTE were similar before and after dose adjustment

	Randomised treatment and up to dose adjustment <sup>a</sup>	After dose adjustment <sup>b</sup>	Randomised treatment and up to dose adjustment <sup>a</sup>	After sham dose adjustment <sup>b</sup>
	GUS 100 mg q8w	GUS 100 mg q8w → 200 mg q4w	GUS 200 mg q4w	GUS 200 mg q4w → 200 mg q4w
<b>N<sup>c</sup></b>	36	36	28	28
<b>Average duration of follow-up, weeks</b>	12.1	33.6	12.9	33.1
<b>Participant-years (P-Y) of follow-up</b>	8.3	23.2	6.9	17.7
<b>Participants with <math>\geq</math>1 AE, n (%)</b>	19 (52.8%)	24 (66.7%)	14 (50.0%)	15 (53.6%)
<b>Events/100 P-Y (95% CI)<sup>d</sup></b>	360.7 (243.4, 514.9)	341.1 (270.0, 425.1)	519.1 (363.6, 718.7)	484.6 (387.6, 598.5)
<b>Participants with <math>\geq</math>1 SAE, n (%)</b>	0	3 (8.3%)	1 (3.6%)	1 (3.6%)
<b>Events/100 P-Y (95% CI)<sup>d</sup></b>	0.0 (0.0, 36.0)	13.0 (2.7, 37.9)	14.4 (0.4, 80.3)	5.6 (0.1, 31.4)
<b>Participants with <math>\geq</math>1 AE leading to discontinuation, n (%)</b>	0	2 (5.6%)	1 (3.6%)	0
<b>Events/100 P-Y (95% CI)<sup>d</sup></b>	0.0 (0.0, 36.0)	17.3 (4.7, 44.2)	14.4 (0.4, 80.3)	0.0 (0.0, 16.9)
<b>Participants with <math>\geq</math>1 infection, n (%)</b>	7 (19.4%)	12 (33.3%)	4 (14.3%)	9 (32.1%)
<b>Events/100 P-Y (95% CI)<sup>d</sup></b>	120.2 (57.7, 221.1)	77.7 (46.1, 122.8)	72.1 (23.4, 168.3)	84.5 (47.3, 139.4)
<b>Participants with <math>\geq</math>1 serious infection, n (%)</b>	0	1 (2.8%)	0	0
<b>Events/100 P-Y (95% CI)<sup>d</sup></b>	0.0 (0.0, 36.0)	4.3 (0.1, 24.1)	0.0 (0.0, 43.2)	0.0 (0.0, 16.9)
<b>Participants who died, n (%)</b>	0	0	0	0

<sup>a</sup> CI based on an exact method assuming that the observed number of events follows a Poisson distribution.

<sup>b</sup> Treatment group at the start of the long-term extension. Includes events for participants who received a dose adjustment from Week 48 up to the time point of dose adjustment.

<sup>c</sup> Only events after dose adjustment (including "sham") are included in this column. Participants receiving GUS 100 mg q8w who met inadequate response criteria between Week 52 and Week 80 had a dose adjustment to GUS 200 mg SC q4w. Participants receiving GUS 200 mg SC q4w who met the inadequate response criteria between Week 52 and Week 80 received "sham" dose adjustment.

<sup>d</sup> All participants who met criteria for dose adjustment are included.

Note: Participants are counted only once for any given events, regardless of the number of times they actually experienced the event. Adverse events are coded using MedDRA version 27.0.