MP586

Intravenous and Subcutaneous Guselkumab Induction Therapy Are Both Efficacious in Crohn's Disease Patients With High Baseline Disease Severity: Results at Week 12 From the Phase 3 GALAXI and GRAVITI Studies

Bruce E. Sands,[1] Tadakazu Hisamatsu,[2] Anita Afzali,[3] Natalie A. Terry,[4] Mobolaji Olurinde,[4] Rian Van Rampelbergh,[5] Jacqueline Yee,[6] Wilbert van Duijnhoven,[5] Ailsa Hart,[7] Silvio Danese,[8] Remo Panaccione[9] on behalf of the GALAXI and GRAVITI Investigators
[1]Icahn School of Medicine at Mount Sinai, New York, NY, USA; [2]Kyorin University, Tokyo, Japan; [3]Division of Digestive Diseases, University of Cincinnati, College of Medicine Ohio, USA; [4]Johnson & Johnson, Spring House, PA, USA; [5]Johnson & Johnson, Antwerp, Belgium; [6]Johnson & Johnson, Raritan, NJ, USA; [7]London North-West University Healthcare NHS Trust, London, UK; [8]IRCCS Ospedale San Raffaele and University Vita-Salute San Raffaele, Milano, Italy; [9]University of Calgary, Calgary, AB, Canada

Background

- Guselkumab is a dual-acting IL-23p19 subunit inhibitor that potently blocks IL-23 and binds to CD64, a receptor on immune cells that produce IL-23[1]
- The comparable efficacy and safety of both IV and SC induction with guselkumab in participants with moderately to severely active CD has been established in the phase 3 GALAXI and GRAVITI studies[2,3]

Objective

- Here, we present the efficacy of guselkumab IV and SC induction in subgroups based on baseline disease characteristics to determine whether participants with higher baseline disease severity respond differently to IV or SC induction

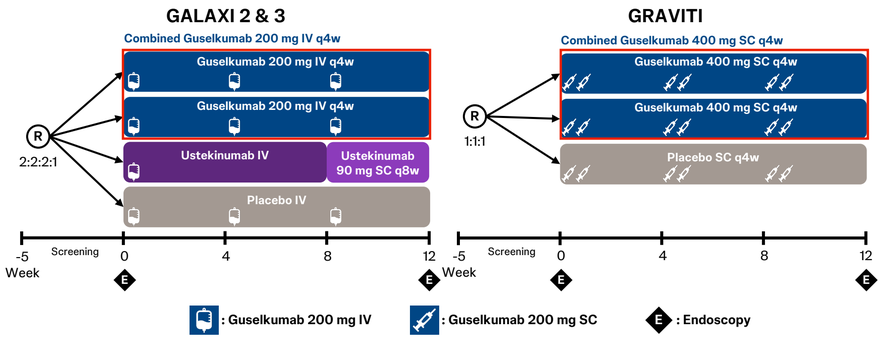
Methods

GALAXI 2 & 3 and GRAVITI Study Designs: Induction Phases

- Key eligibility criteria
  - Moderately to severely active CD (CDAI score 220–450 AND either mean daily SF OR AP above protocol thresholds[a]) and SES-CD score ≥6 (or ≥4 for isolated ileal disease)
  - Inadequate response/intolerance to oral corticosteroids, 6-MP/AZA/MTX, or biologic therapies[b]

Randomization stratified by:

- CDAI score (≤300 or >300)
- SES-CD (≤12 or >12)
- Prior BIO-failure status (Yes or No)
- CS use at baseline (GALAXI only)



AP=abdominal pain. BIO=biologic. CDAI=Crohn's disease activity index. SC=subcutaneous. SES-CD=simple endoscopic score for Crohn's disease. SF=stool frequency.
[a] GALAXI: Mean daily SF count >3 OR AP score >1; GRAVITI: Mean daily SF count ≥4 OR AP score ≥2. [b] Biologic therapies: TNF antagonists or vedolizumab. [c]Including budesonide and beclomethasone dipropionate.
Note: Only the induction phases of the study designs are shown. The full study designs can be found in primary trial publications (references 2 and 3 for GALAXI 2 & 3 and GRAVITI, respectively.)

Endpoints

- **Clinical remission:** CDAI score <150
- **Endoscopic response:** ≥50% improvement from baseline in SES-CD

Disease Characteristic Subgroups

- **Involved disease location** (ie, ileum, colon, or both)
- **CDAI score** (ie, ≤300 or > 300)
- **SES-CD score** (ie, ≤12 or >12)
- **C-reactive protein in mg/L** (CRP; ie, low [≤3 in GALAXI and ≤5 in GRAVITI] or high [>3 in GALAXI and >5 in GRAVITI])
- **Fecal calprotectin in µg/g** (FeCal; ie, ≤250 or >250)
- **Receiving oral corticosteroids**[c] (ie, Yes or No)

Key Takeaways

- **Both IV and SC induction with guselkumab were similarly effective in participants with moderately to severely active CD across predefined subgroups of disease location and baseline clinical, endoscopic, and inflammatory biomarker disease activity**
- **The treatment effects were particularly consistent between IV and SC induction in the subgroups that represent high disease severity**
- **Both routes of guselkumab administration can be considered for a wide range of patients with moderately to severely active CD, including those with high disease activity**

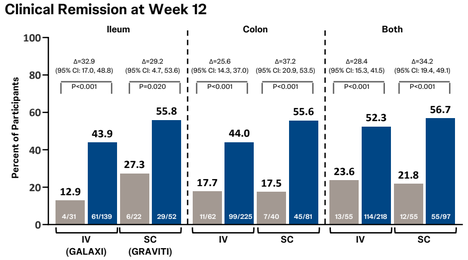
Results

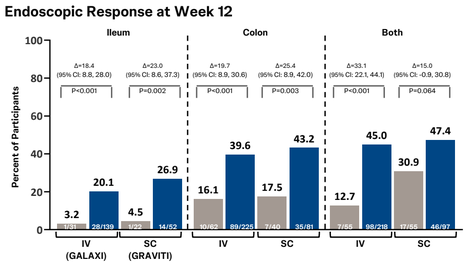
Table 1. Baseline Demographics, Disease Characteristics and Concomitant Medications

Full analysis set	GALAXI 2 & 3 PBO IV (N=148)	GALAXI 2 & 3 GUS 200 mg IV q4w (N=582)	GRAVITI PBO SC (N=117)	GRAVITI GUS 400 mg SC q4w (N=230)
Demographics				
Age in years, mean (SD)	34.8 (12.15)	36.5 (12.77)	36.0 (12.71)	38.2 (12.95)
Male, n (%)	88 (59.5%)	332 (57.0%)	67 (57.3%)	136 (59.1%)
Characteristics				
CD duration in years, mean (SD)	7.15 (7.53)	7.09 (6.98)	6.96 (7.75)	8.53 (8.17)
CDAI score, mean (SD)	293.4 (52.72)	296.1 (53.45)	293.0 (49.09)	298.8 (54.41)
SES-CD score, mean (SD)	13.3 (7.55)	12.8 (7.34)	12.0 (6.89)	12.0 (6.97)
Endoscopic disease severity (SES-CD score), n (%)				
Moderate (7–16)	77 (52.0%)	311 (53.4%)	61 (52.1%)	113 (49.1%)
Severe (>16)	43 (29.1%)	160 (27.5%)	25 (21.4%)	53 (23.0%)
Involved disease location by central reader, n (%)				
Colon only	62 (41.9%)	225 (38.7%)	40 (34.2%)	81 (35.2%)
Ileum only	31 (20.9%)	139 (23.9%)	22 (18.8%)	52 (22.6%)
Ileum and Colon	55 (37.2%)	218 (37.5%)	55 (47.0%)	97 (42.2%)
Biomarkers				
CRP in mg/L, median (IQR)	5.1 (1.5; 15.8)	6.7 (2.6; 21.8)	7.9 (2.1; 14.7)	5.5 (1.7; 14.9)
Fecal calprotectin in µg/g,[a] median (IQR)	962.0 (255.0; 2595.0)	1010.0 (372.0; 2054.0)	712.0 (243.0; 1724.0)	610.0 (228.0; 1608.0)
Biologic medication history				
Biologic naïve, n (%)	61 (41.2%)	244 (41.9%)	56 (47.9%)	105 (45.7%)
History of inadequate response/intolerance to biologic therapy,[b] n (%)	78 (52.7%)	300 (51.5%)	53 (45.3%)	108 (47.0%)
Concomitant CD-related medications				
Participants with ≥1 CD medication at baseline, n (%)	96 (64.9%)	424 (72.9%)	79 (67.5%)	158 (68.7%)
Oral aminosalicylates (5-ASA compounds)	44 (29.7%)	237 (40.7%)	50 (42.7%)	91 (39.6%)
Immunomodulatory drugs	40 (27.0%)	184 (31.6%)	33 (28.2%)	66 (28.7%)
Oral corticosteroids	51 (34.5%)	215 (36.9%)	33 (28.2%)	70 (30.4%)

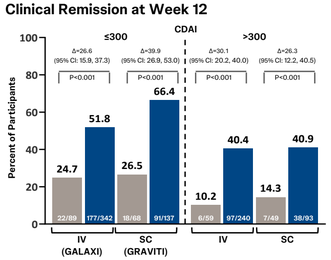
CD= Crohn's disease; CDAI= Crohn's disease activity index; CRP= C-reactive protein; GUS= guselkumab; IQR= interquartile range; IV= intravenous; PBO= placebo; SC= subcutaneous; SD= standard deviation; SES-CD= simple endoscopic score for Crohn's disease.
[a] Based on N=147 for placebo and N=577 for guselkumab 200 mg IV q4w in GALAXI, and N=117 for placebo and N=229 for guselkumab 400 mg SC q4w in GRAVITI.
[b] Primary nonresponse, secondary nonresponse, or intolerance.

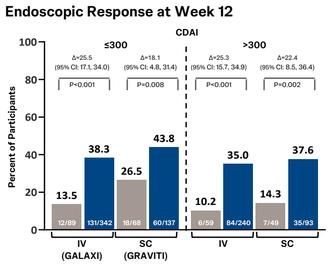
Disease Location



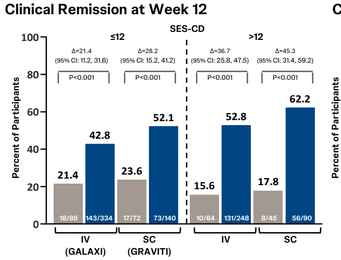


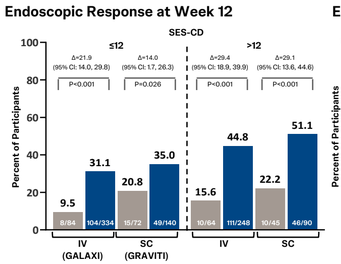
Clinical Disease Activity



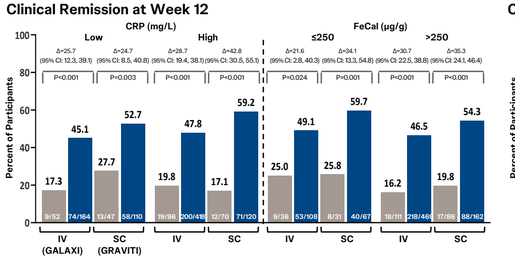


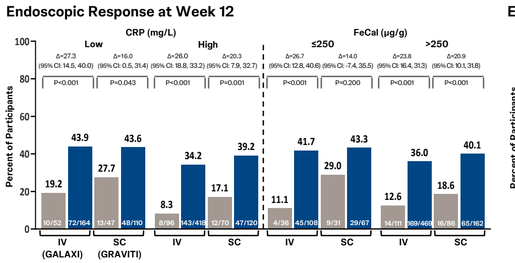
Endoscopic Disease Activity



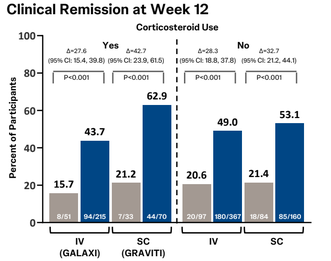


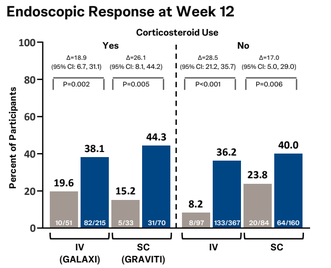
Inflammatory Biomarker Disease Activity





Corticosteroid Use at Baseline





Placebo (IV or SC) | Guselkumab Induction (200 mg IV or 400 mg SC)

The statistical analyses are not multiplicity-controlled and hence all p-values are nominal.
CD=Crohn's disease; CDAI=Crohn's disease activity index; CI=confidence interval; CRP=C-reactive protein; FeCal=fecal calprotectin; IV=intravenous; SC= subcutaneous; SES-CD=simple endoscopic score for Crohn's disease.
Note: Participants receiving corticosteroids at baseline were required to maintain a stable dose from baseline through Week 12. Participants who had a CD-related surgery (with the exception of minor procedures such as drainage of a superficial abscess or seton placement, etc.), a prohibited change in CD medication, or discontinued study intervention for any reason (other than COVID-19 related reasons [excluding COVID-19 infection] or regional crisis) were considered not to have met the endpoint at the designated timepoint. Participants who discontinued study intervention due to COVID-19 related reasons (excluding COVID-19 infection) or regional crisis had their observed data used, if available. After accounting for the aforementioned data handling rules, participants who were missing data pertaining to an endpoint at a designated timepoint were considered not to have achieved the endpoint. The adjusted treatment difference(s), confidence interval(s), and p-value(s) were based on the common risk difference by use of Mantel-Haenszel stratum weights and the Sato variance estimator. The stratification factors are baseline CDAI score (≤300 or >300), baseline SES-CD score (≤12 or >12), BIO-failure status at baseline (yes or no), and baseline corticosteroid use (yes or no; GALAXI only).

PRESENTED AT: United European Gastroenterology (UEG) Week; October 4–7, 2025; Berlin, Germany. **REFERENCES: 1.** Sachen K, Hammaker D, Sarabia I, et al. *Frontiers in Immunology*. 2025. doi:10.3389/fimmu.2025.1532852. **2.** Panaccione R, Danese S, Feagan BG, et al. *Gastroenterology*. 2024; 166(5): S1057b. **3.** Hart A, Panaccione R, Steinwurz F, et al. *Gastroenterology*. 2025. doi:10.1053/j.gastro.2025.02.033. **ACKNOWLEDGMENTS: The authors thank the participants, investigators, and study personnel who made the GALAXI and GRAVITI studies possible. This work was supported by Johnson & Johnson.** Under the direction of the authors and in accordance with Good Publication Practices, Rick Mearhoff of Johnson & Johnson provided writing and editorial assistance. **DISCLOSURES: BES** reports consulting fees from Abbvie, Adiso Therapeutics, Agomab, Alimentiv , Amgen, AnaptysBio, Arena Pharmaceuticals, Artugen Therapeutics, Astra Zeneca, Biolojic Design, Biora Therapeutics, Boehringer Ingelheim, Boston Pharmaceuticals, Calibr, Celgene, Celltrion, ClostraBio, Equillium, Enthera, Enveda Biosciences, Evommune, Ferring, Fresenius Kabi, Fzatat, Galapagos, Genentech (Roche), Gilead Sciences, GlaxoSmithKline, Gossamer Bio, Imhotex, Index Pharmaceuticals, Innovation Pharmaceuticals, Inotrem, Kaleido, Kallyope, Merck, Microba, Mobius Care, Morphic Therapeutics, MRM Health, Nexus Therapeutics, Nimbus Discovery, Odyssey Therapeutics, Progenity, Prometheus Biosciences, Prometheus Laboratories, Protagonist Therapeutics, Q32 Bio, Rasayana Therapeutics, Reistone Biopharma, Sanofi, Spyre Therapeutics, Sun Pharma, Surrozen, Target RWE, Teva, TLL Pharmaceutical, TrYX, Union Therapeutics, Ventyx Biosciences; consulting and speaking fees from Abvxx; consulting and speaking fees and other support from Lilly; research grants, consulting and speaking fees and other support from Bristol Myers Squibb, Johnson & Johnson, Pfizer, Takeda; research grants and consulting fees from Theravance Biopharma; and stock/stock options from Ventyx Biopharma. **TH** received grant support from Mitsubishi Tanabe Pharma Corporation; EA pharma Co. Ltd., AbbVie GK, JIMRO Co. Ltd., Zeria Pharmaceutical Co. Ltd., Kyorin Pharmaceutical Co. Ltd., Nippon Kayaku Co. Ltd., Takeda Pharmaceutical Co. Ltd., Pfizer Inc., Mochida Pharmaceutical Co. Ltd., Boston Scientific Corporation, Kissei Pharmaceutical Co. Ltd., consulting fees from Mitsubishi Tanabe Pharma Corporation, AbbVie GK, Johnson & Johnson, Pfizer Inc., Nichi-iko Pharmaceutical Co. Ltd., Eli Lilly, Gilead Sciences, Bristol Myers Squibb, and lecture fee from Mitsubishi Tanabe Pharma Corporation, AbbVie GK, EA pharma Co. Ltd., Kyorin Pharmaceutical Co. Ltd., JIMRO Co., Johnson & Johnson, Mochida Pharmaceutical Co., Ltd., Takeda Pharmaceutical Co. Ltd., Pfizer Inc, Kissei Pharmaceutical Co. Ltd., **AA** reports potential conflicts of interest with AbbVie, Bristol Myers Squibb/Celgene, DiaSorin, Eli Lilly, Gilead, IBD Horizons, Johnson & Johnson, Pfizer, Takeda, and TLL Pharmaceuticals. **NAT, MO, RVR, JY, and WvD** are employees of Johnson & Johnson and own company stock/stock options. **AH** served as a clinical investigator and consultant for Johnson & Johnson. **SD** reports consultancy fees from AbbVie, Alimentiv, Allergan, Amgen, AstraZeneca, Athos, Biogen, Boehringer Ingelheim, Celgene, Celltrion, Eli Lilly, Enthera, Ferring, Gilead, Hospira, Inotrem, Johnson & Johnson, MSD, Mundipharma, Mylan, Pfizer, Roche, Sandoz, Sublimity, Takeda, TiGenix, UCB and Vifor; and reports lecture fees from AbbVie, Amgen, Ferring, Gilead, Johnson & Johnson, Mylan, Pfizer and Takeda. **RP** reports having received consulting fees from Abbvixx, Abbott, AbbVie, Alimentiv (formerly Robarts), Amgen, Arena Pharmaceuticals, AstraZeneca, Biogen, Boehringer Ingelheim, Bristol-Myers Squibb, Celgene, Celltrion, Cosmos Pharmaceuticals, Eisai, Etan, Eli Lilly, Ferring,Fresenius Kabi, Galapagos, Genentech, Gilead Sciences, Glaxo-Smith Kline, JAMP Bio, Johnson & Johnson, Merck, Mylan, Novartis, Opsilan Pharma, Organon, Pandion Pharma, Pendopharm, Pfizer, Progenity, Prometheus Biosciences, Protagonist Therapeutics, Roche, Sandoz, Satisfai Health, Shire, Sublimity Therapeutics, Takeda Pharmaceuticals, Theravance Biopharma, Trellius, Viatris, Ventyx, UCB; Speaker's Fees from AbbVie, Amgen, Arena Pharmaceuticals, Bristol-Myers Squibb, Celgene, Eli Lilly, Ferring, Fresenius Kabi, Gilead Sciences, Johnson & Johnson, Merck, Organon, Pfizer, Roche, Sandoz, Shire, Takeda Pharmaceuticals and served on Advisory Boards for: AbbVie, Alimentiv (formerly Robarts), Amgen, Arena Pharmaceuticals, AstraZeneca, Biogen, Boehringer Ingelheim, Bristol-Myers Squibb, Celgene, Eli Lilly, Ferring, Fresenius Kabi, Genentech, Gilead Sciences, Glaxo-Smith Kline, JAMP Bio, Johnson & Johnson, Merck, Mylan, Novartis, Opsilan Pharma, Organon, Pandion Pharma, Pfizer, Progenity, Protagonist Therapeutics, Roche, Sandoz, Shire, Sublimity Therapeutics, Takeda Pharmaceuticals, and Ventyx.