

Medical Therapy for Inflammatory Bowel Disease in 2026

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Lecture Objectives

- Review brief history of IBD medication advancements
- Outline currently available medications for Crohn's disease and ulcerative colitis based on disease activity and severity
- Discuss medication mechanisms of action, dosing, and side effect profile with focus on novel biologics and small molecule therapy
- Understand strategies to optimize currently available therapy
- Learn how to answer common medication management questions regarding immune suppression and IBD medication

Disclosures

- Takeda- Advisory board, speakers bureau
- Bristol Myers Squibb- Speakers bureau
- Abbvie-Advisory board
- Eli Lilly-Advisory board, speakers bureau
- Johnson and Johnson- Advisory board, speakers bureau
- Crohn's and Colitis Foundation- Board Member, HPEC Chair

Brief History of IBD Medications

Brief History of IBD Medical Therapies

- 1859: Samuel Wilks coins the name “ulcerative colitis”
- 1932: Crohn, Ginzberg, and Oppenheimer describe “Crohn’s disease”
- Treatments in the early 1900s:
 - Bed rest
 - Colon irrigation (including through surgical openings, such as appendicostomy):
 - Glycerin thymol
 - Sodium bicarbonate
 - Hydrogen peroxide
 - Potassium permanganate
- Until the 1950s, **30-40%** of those diagnosed with ulcerative colitis were expected to die of the disease



J. Clin. Med. **2019**, *8*, 1970; doi:10.3390/jcm8111970

Release of “Conventional” IBD Therapies

Sulfasalazine 1950
Hydrocortisone 1952
Methotrexate 1953
Mercaptopurine 1954

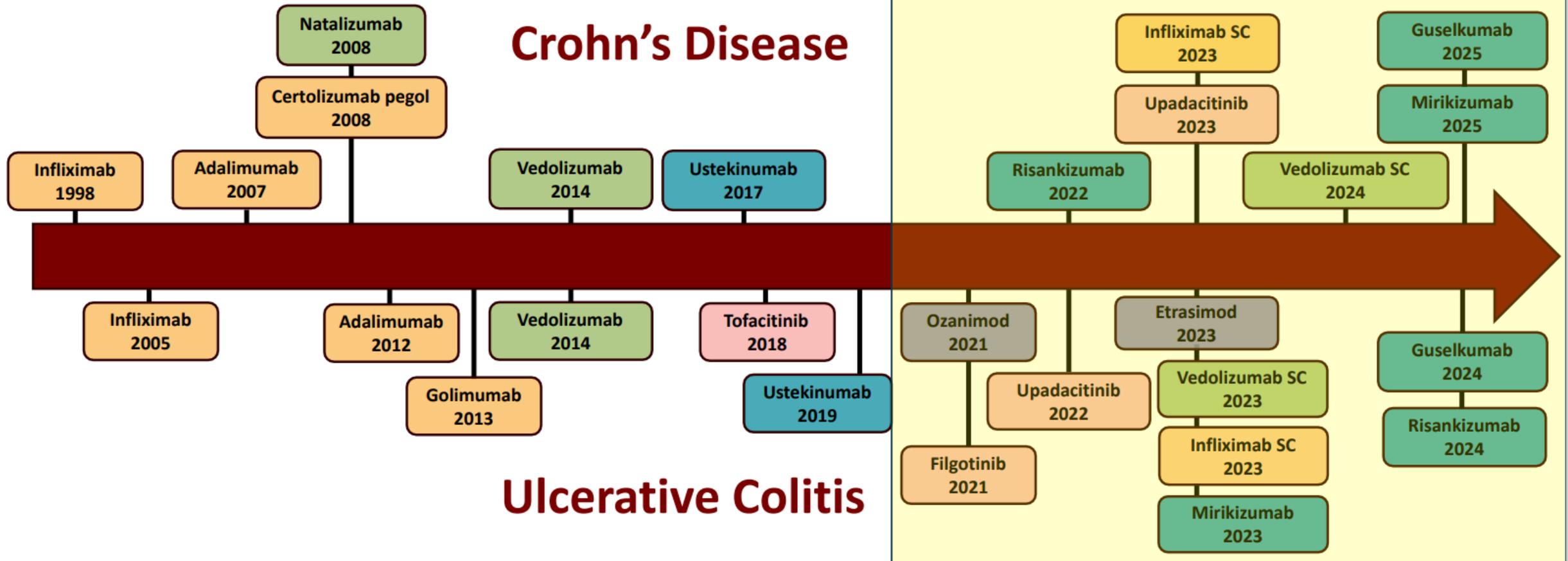
Prednisone 1972

Budesonide 1997



Proliferation of “Advanced” Therapies

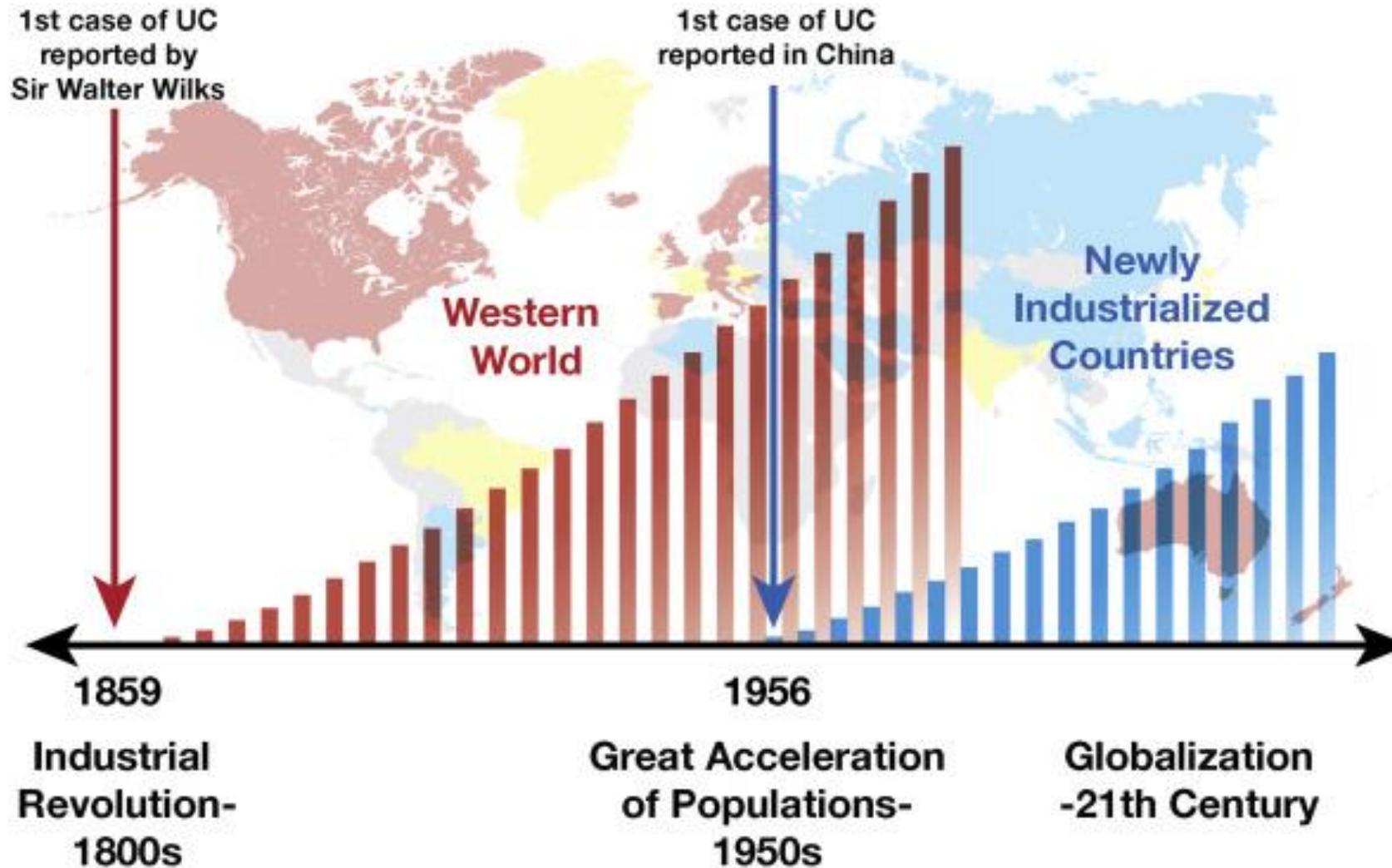
Plus: Biosimilar versions of infliximab, adalimumab, and ustekinumab



Why So Many Medications?

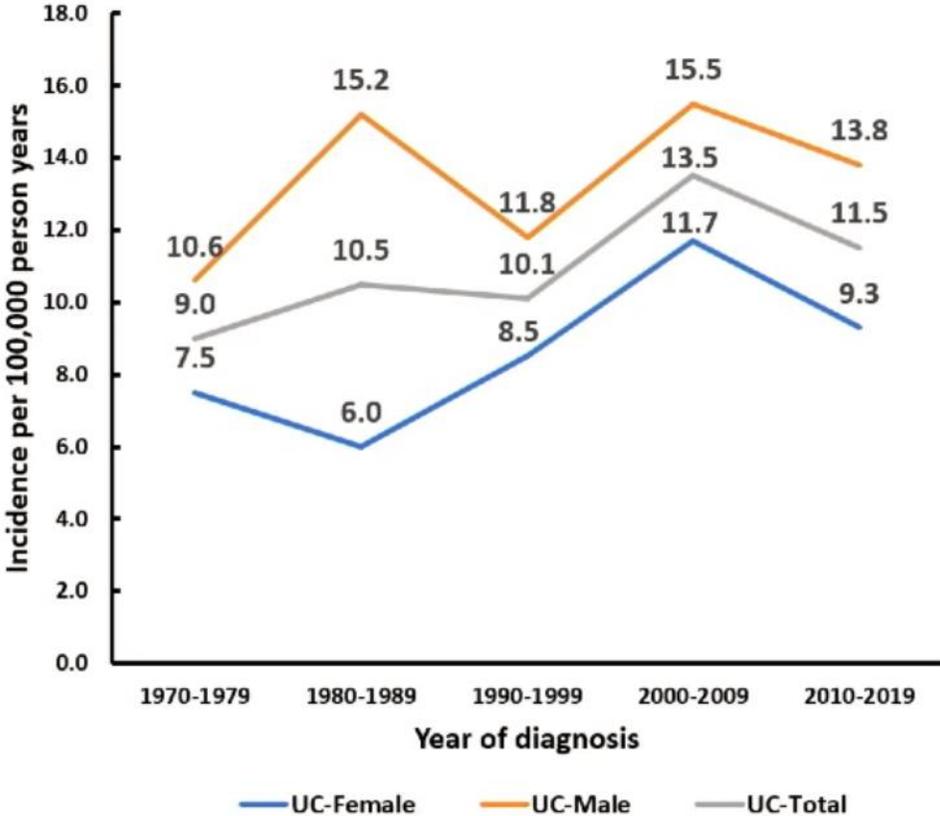
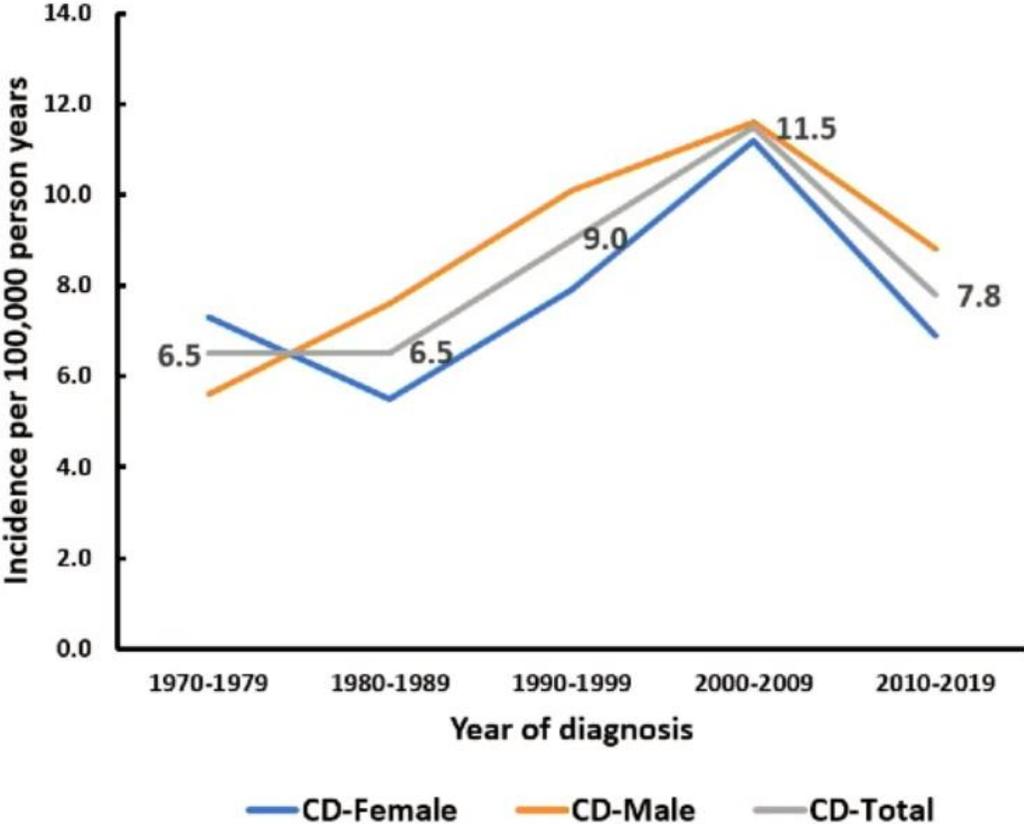
- No cure for inflammatory bowel disease
- Therapeutic ceiling
 - ~30% will have primary non-response to treatments
 - ~50% will have secondary loss of response to therapy
- Side effects and contraindications
- Cost of therapy
 - Infusion versus injections
 - Small molecule versus biologic
- Comorbid IMIDs needing treatment
- Increasing prevalence of inflammatory bowel disease

IBD Epidemiology



Gastroenterology Volume 152, Issue 2, January 2017, Pages 313-321.e2

IBD Epidemiology



Bakhshi, Z. et al. Mayo Clinic DDW 2022

IBD Epidemiology

- Prevalence in Olmstead County has increased from 0.53% in 2010 to 0.63% in 2019 (20% rise)

The prevalence of IBD per 100,000 persons as of December 31, 2019

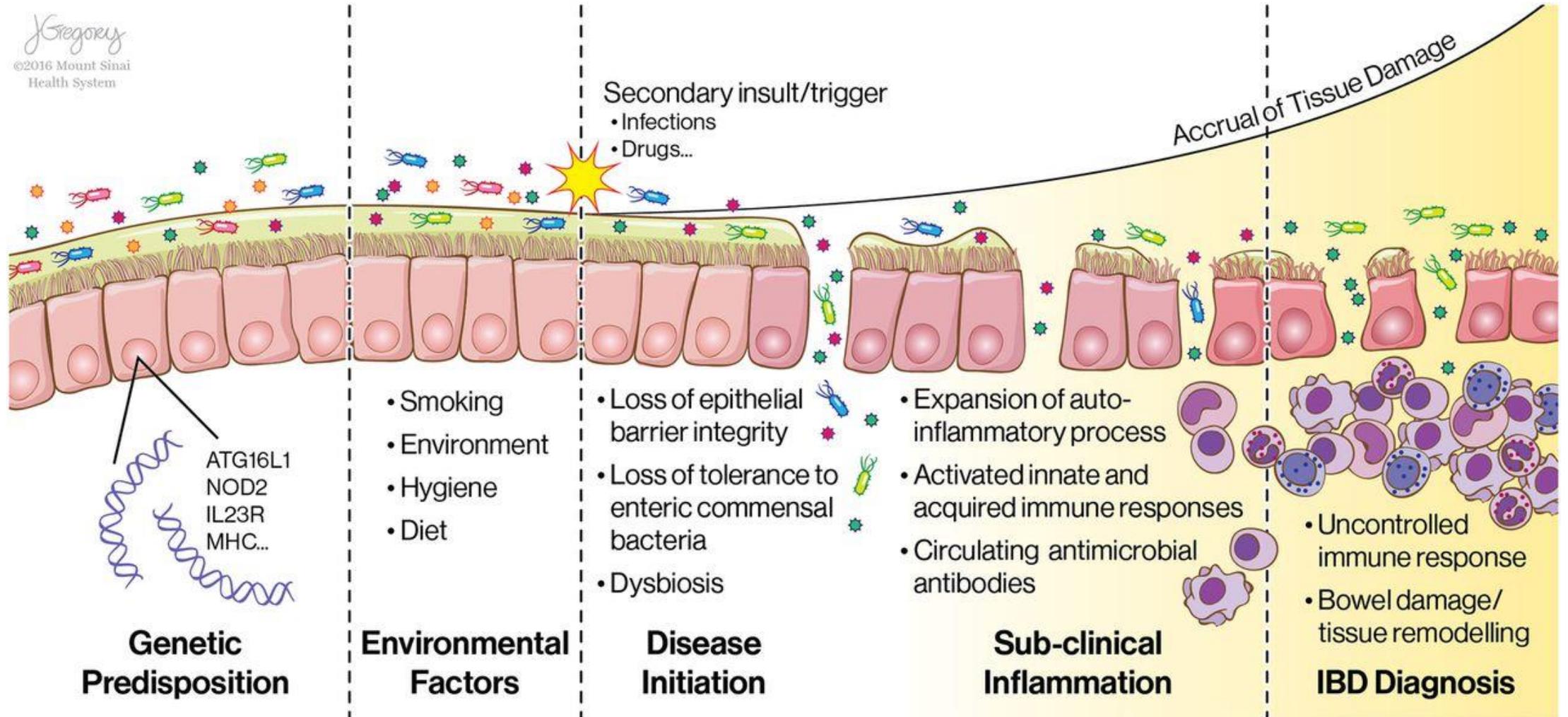
- In CD: 284.9 per 100,000 (95%CI: 259.3 - 310.5)
- In UC: 350.0 per 100,000 (95% CI, 321.4-378.6)
- Overall, 0.63% of the population (634.9 cases per 100,000 persons)
- If the prevalence of IBD is extrapolated to the entire US, then approximately 2.1 million US residents have IBD (1.2 million UC and 947,000 CD)

Bakhshi, Z. et al. Mayo Clinic DDW 2022

Selecting Appropriate Therapy

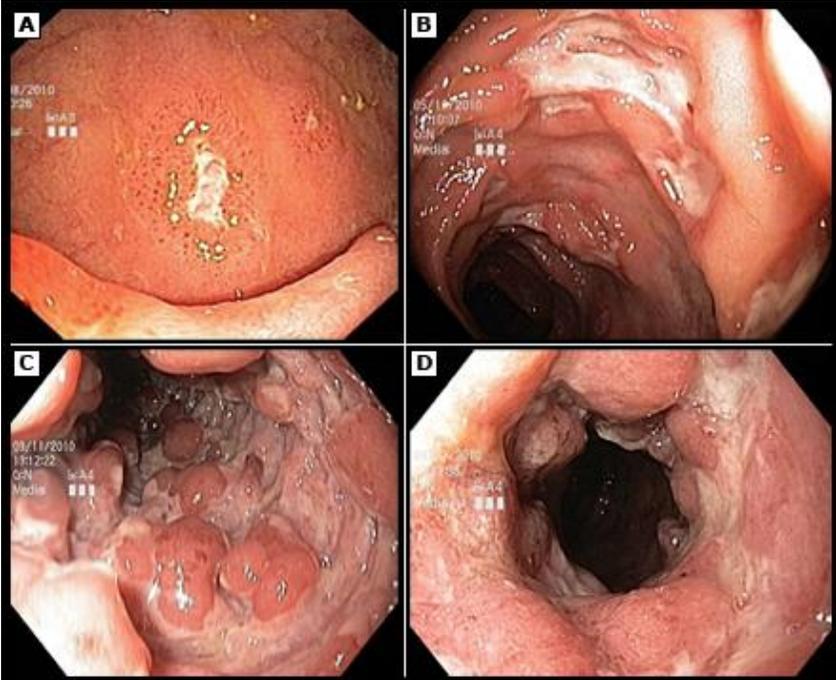
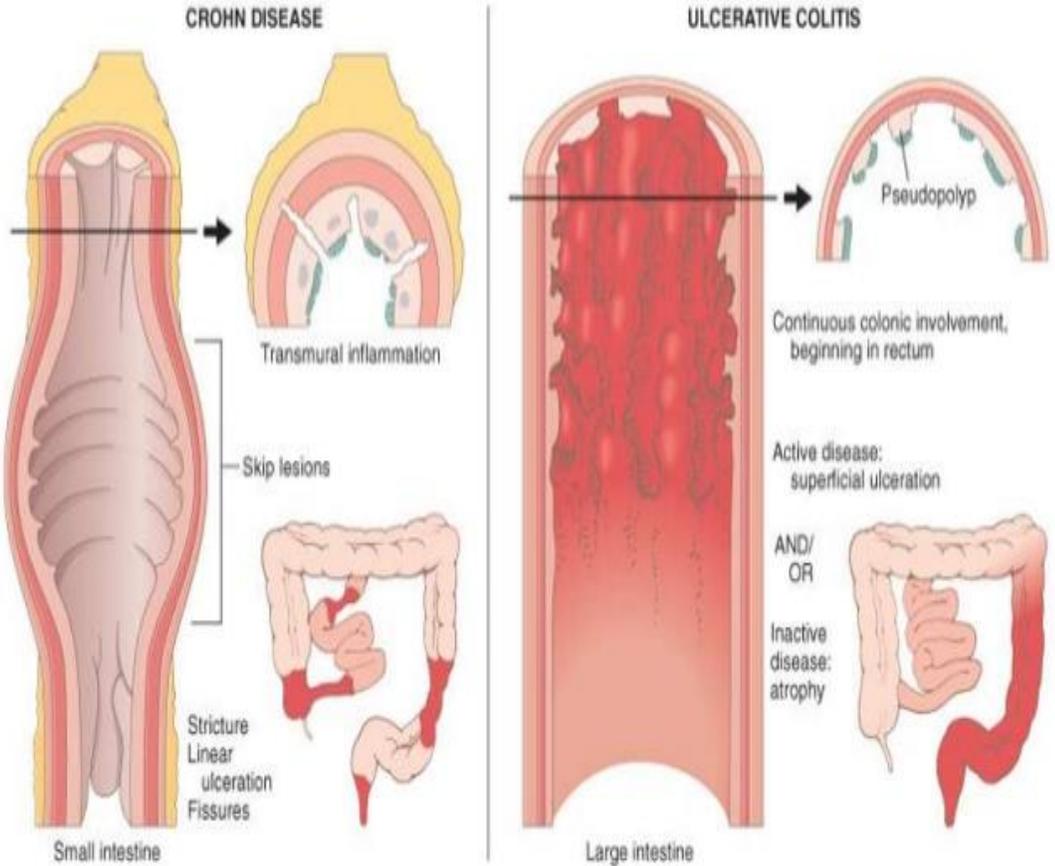
IBD Pathogenesis

Gregory
©2016 Mount Sinai
Health System



Bowel inflammation

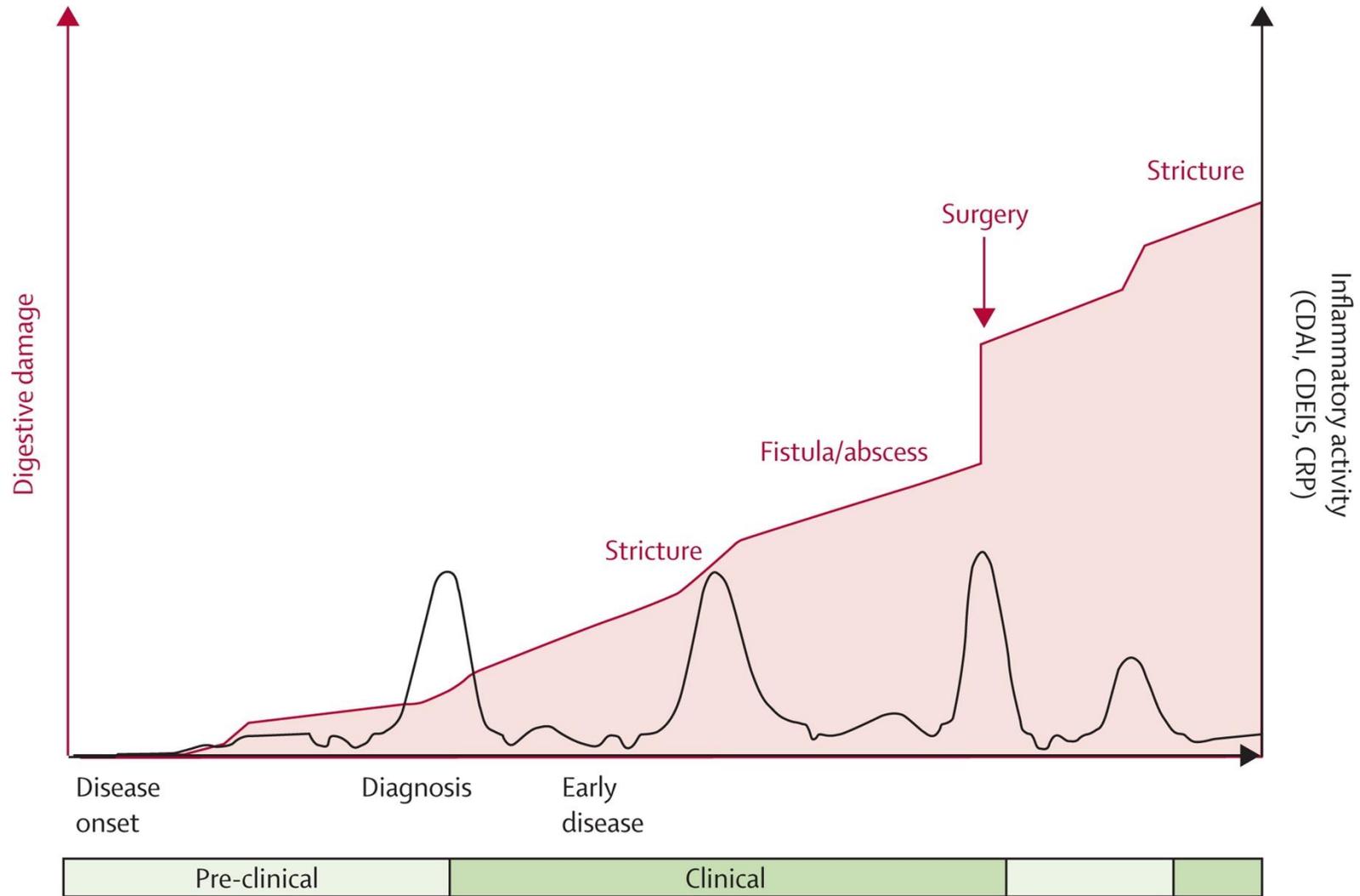
Comparison of the distribution patterns of Crohn's disease and ulcerative colitis, and the different conformations of the ulcers and wall thickenings



Mayo UC Endoscopic Score = 0 (normal or inactive disease)	Mayo UC Endoscopic Score = 1 (mild disease)	Mayo UC Endoscopic Score = 2 (moderate disease)	Mayo UC Endoscopic Score = 3 (severe disease)

<https://www.slideshare.net/mallappashalavadi/inflammatory-bowel-disease-44916998>

Cumulative Bowel Damage



Lancet Volume 380, Issue 9853 P1590-1605 November 03, 2012

How to Determine Activity: UC

Mayo Score

- Remission 0-2
- Mild 3-5
- Moderate 6-10
- Severe 11-12

Score	Stool frequency*	Rectal bleeding†	Findings on endoscopy	Physician's global assessment‡
0	Normal number of stools for this patient	No blood seen	Normal or inactive disease	Normal
1	1-2 stools more than normal	Streaks of blood with stool less than half the time	Mild disease (erythema, decreased vascular pattern, mild friability)	Mild disease
2	3-4 stools more than normal	Obvious blood with stool most the time	Moderate disease (marked erythema, absent vascular pattern, friability, erosions)	Moderate disease
3	5 or more stools more than normal	Blood alone passed	Severe disease (spontaneous bleeding, ulceration)	Severe disease

How to Determine Activity: CD

Harvey Bradshaw index



Variable	Variable description
General well being	0= very well, 1=slightly poor, 2 =poor, 3= very poor, 4= terrible
Abdominal pain	0=none 1=mild 2=moderate 3=severe
No. of liquid stools	Daily
Abdominal mass	0=none 1=dubious 2=definite 3=definite and tender)
Complications	Arthralgia, Uveitis, Erythema nodosum, aphthous ulcer, pyoderma gangrenosum, Anal fissure, New fistula

Inactive: <5, Mild 5-7, Moderate 8-16,
Severe >16

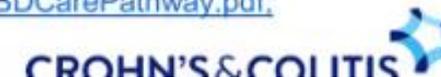
CDEIS					
	Ileum	Right colon	Transverse	Left and Sigmoid colon	Rectum
Deep ulceration (0 for none, 12 points if present)	0	0	0	0	0
Superficial ulceration (0 for none, 6 points if present)	0	0	0	0	0
Surface involved by disease (cm on a 10 cm VAS *)	10	0	0	0	0
Surface involved by ulceration (cm on a 10 cm VAS *)	0	0	0	0	0
					Total: A
					Number of segments explored
					Total A/ number of segments explored: B
					If ulcerated stenosis present: add 3: C
					If non ulcerated stenosis present: add 3: D
					Total CDEIS score = B + C + D

*: range 0 – 10 (as the VAS is 10 cm long)

Determining Disease Severity

Ulcerative Colitis	Crohn's Disease
Age < 40 at diagnosis	Age < 30 at diagnosis
Extensive colonic involvement	Extensive anatomic involvement
Severe endoscopic disease activity (i.e. Mayo score ≥ 3 , UCEIS ≥ 7)	Perianal and/or severe rectal disease
Requiring hospitalization for colitis	Deep ulcers
Elevated C-reactive protein	Prior surgical resection
Low serum albumin	Strictureing and/or penetrating behavior

1. Modified from Rubin DT et al. ACG Clinical Guideline: Ulcerative Colitis in Adults. Am J Gastro 2019;114:384-419
2. Modified from AGA Institute Guidelines for the Identification, Assessment and Initial Medical Treatment in Crohn's Disease Clinical Decision Support Tool available at: <https://s3.amazonaws.com/agaassets/pdf/guidelines/IBDCarePathway.pdf>; Gastroenterology 2014 147702-705DOI: (10.1053/j.gastro.2014.07.022) Copyright © 2014



Other Determining Factors for Treatment

Extraintestinal Manifestations of IBD



Figure 1. A, Oral aphthous ulcers, (B) Sweet's syndrome, (C) erythema nodosum, (D) pyoderma gangrenosum, (E) peristomal pyoderma gangrenosum, (F) episcleritis, (G) uveitis with hypopyon and dilated iris vessels, (H) conventional x-ray of the lateral spine demonstrating syndesmophytes (bamboo spine), (I) plane radiograph of the ileosacral joints with bilateral sacroiliitis, (J) plane radiography of the sacrum with bilateral ankylosis, (K) coronal magnetic resonance image of the sacroiliac joints with active inflammation mainly on the left side and chronic inflammatory changes on both sides.

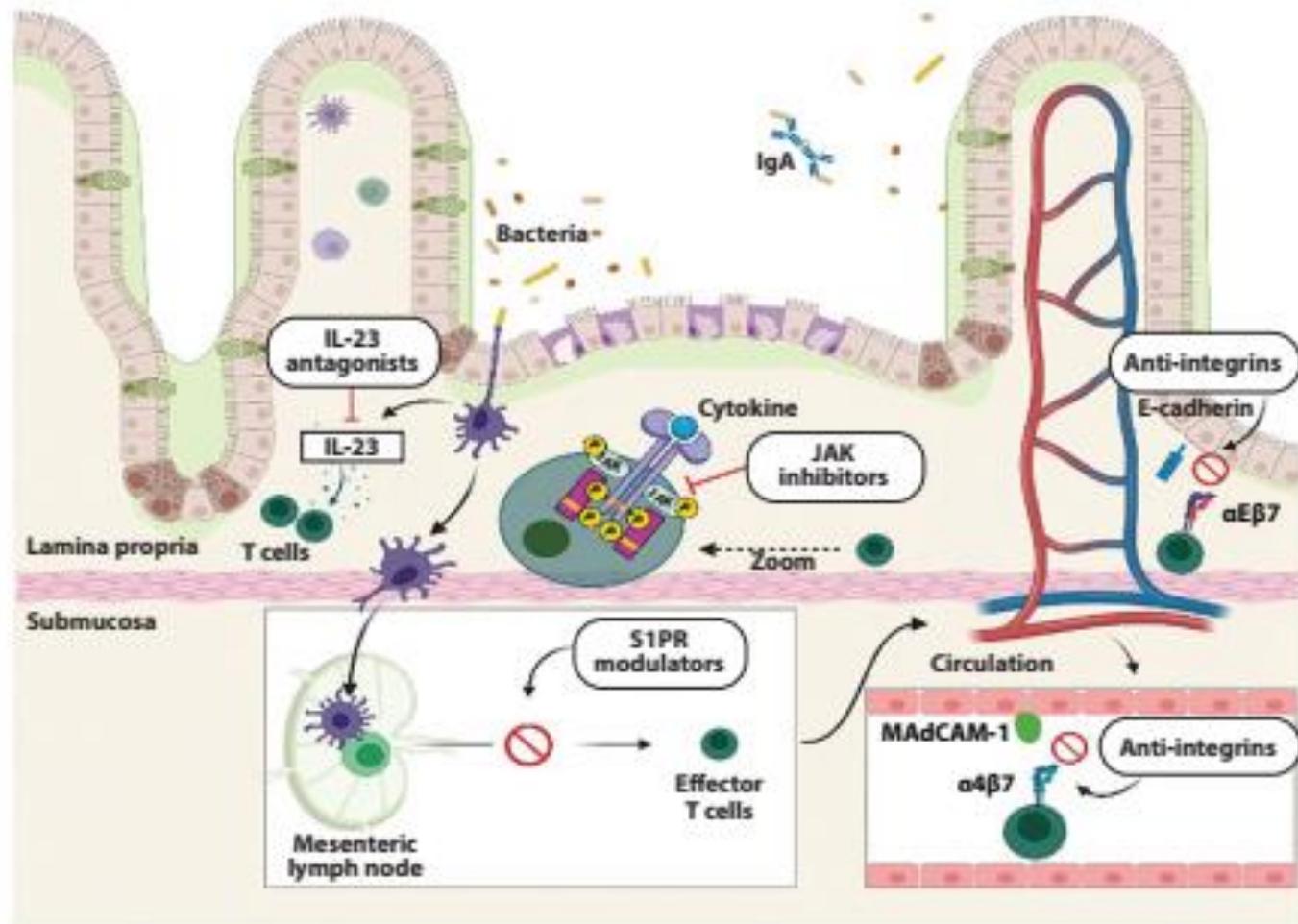
Adapted from: Vavricka R. et al *Inflamm Bowel Dis.* 2015; 21(8): 1982-1992

Current FDA-approved Therapeutic Options

Disease activity	Ulcerative Colitis	CD
Mild	<ul style="list-style-type: none"> -Mesalamine -Sulfasalazine -Balsalazide -Hydrocortisone -Budesonide MMX 	<ul style="list-style-type: none"> -Hydrocortisone -Budesonide -Metronidazole/Antibiotics -Sulfasalazine (?)
Moderate-Severe	<ul style="list-style-type: none"> -Azathioprine /6-mercaptopurine -Prednisone -Infliximab, adalimumab, golimumab -Vedolizumab -Ustekinumab -Tofacitinib, upadacitinib -Ozanimod, etrasimod -Mirikizumab, risankizumab, guselkumab 	<ul style="list-style-type: none"> -Azathioprine/6-mercaptopurine -Methotrexate -Prednisone -Infliximab, adalimumab, certolizumab -Natalizumab/vedolizumab -Ustekinumab -Upadacitinib -Mirikizumab, risankizumab, guselkumab

New Advanced Therapies for IBD

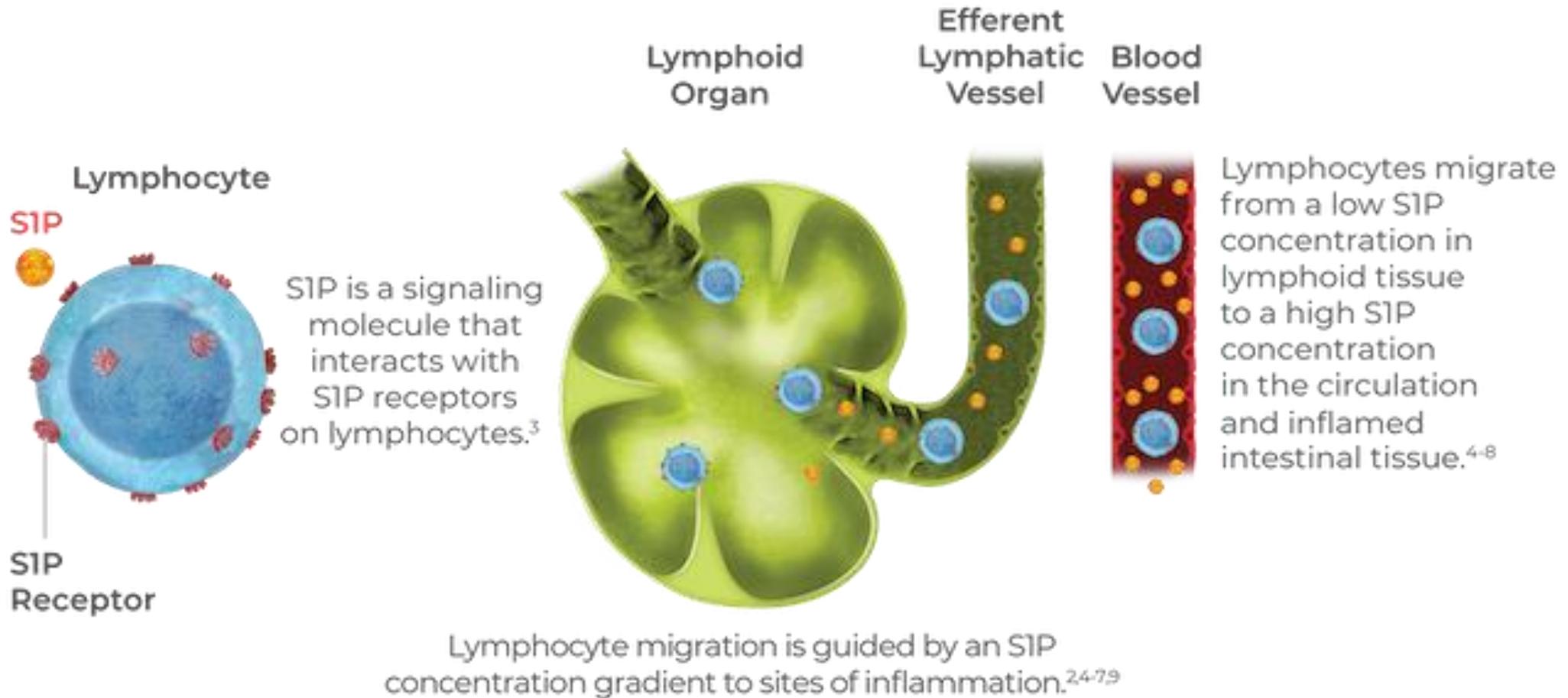
Mechanisms of Action of Novel Therapeutics



Gastroenterology & Hepatology Volume 18, Issue 8 August 2022 453-465

S1P Receptor Modulators

Sphingosine-1 Phosphate Receptor Modulators



www.zeposiahcp.com/ulcerative-colitis/moahcp.com Accessed 1/22/2023

Ozanimod

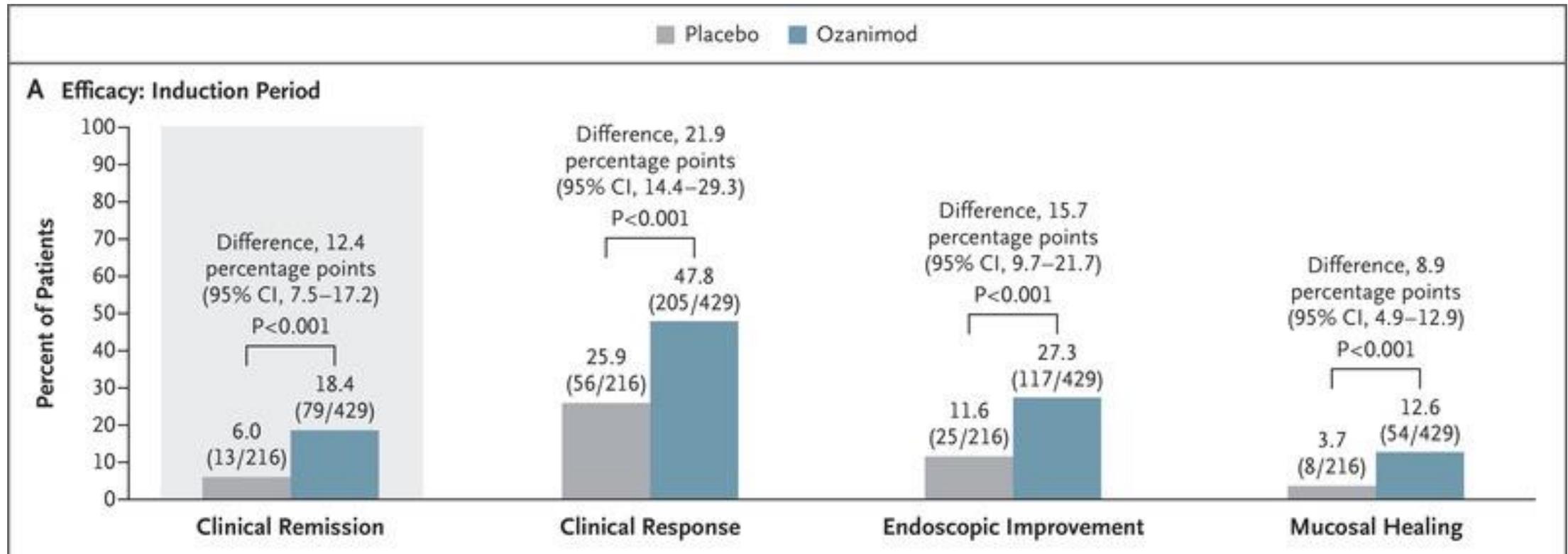
- Indications:
 - Ulcerative colitis
 - Multiple sclerosis (relapsing-remitting)
- Dose
 - 0.23mg po days 1-4, 0.46mg po days 5-7
 - 0.92mg po once daily
- Contraindications
 - Uncorrected cardiac conduction abnormalities
 - Stroke, TIA, heart attack, unstable angina, unstable heart failure in the last 6 months
 - Severe, untreated sleep apnea
 - Use of monoamine oxidase inhibitors
 - Pregnancy (current or planned in near future)

Ozanimod

- Pre-treatment testing
 - Blood counts and liver function tests
 - EKG and vital signs
 - Varicella immunity if no documented infection or vaccine series
 - Eye exam in select patients (history of uveitis, diabetes, prior macular edema)
 - Tuberculosis screening
 - Hepatitis B and C screening
- Monitoring
 - Not required, consider LFT and CBC
- Medication interactions
 - Medications that cause low heart rate or changes in the EKG
 - Medications for depression and anxiety (SSRI, SNRI, TCA class) could lead to high blood pressure
 - High tyramine foods should be limited or avoided

Ozanimod: How Well Does it Work for Induction?

- First 10 weeks of treatment

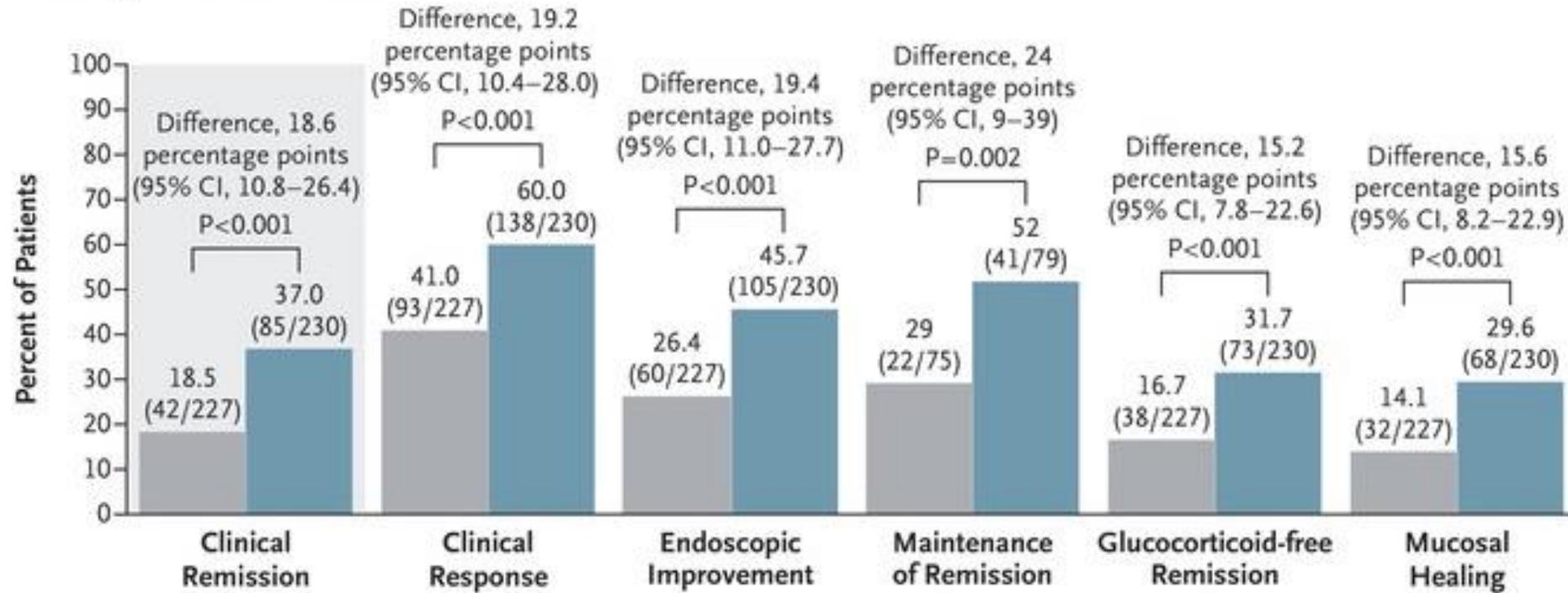


N Engl J Med 2021; 385:1280-1291

Ozanimod: How Well Does it Work for Maintenance?

- 52 weeks of treatment

B Efficacy: Maintenance Period



N Engl J Med 2021; 385:1280-1291

Ozanimod Safety

- Adverse events (above placebo)
 - Nasopharyngitis (2.7-3.5%)
 - Headache (2.7-3.5%)
 - LFT elevation (1.6-4.8%)
 - Arthralgia (1.4-3%)
 - Serious infection (0.9-1.6%)
 - Herpes zoster (0.3-2.2%)
 - Bradycardia (0.5-0.8%)
 - Hypertension (1.4-1.9%)
 - Macular edema (0.2-0.4%)
 - No signal for increased malignancy risk in registrational trials
 - Possible skin cancer risk in post-marketing

N Engl J Med 2021; 385:1280-1291

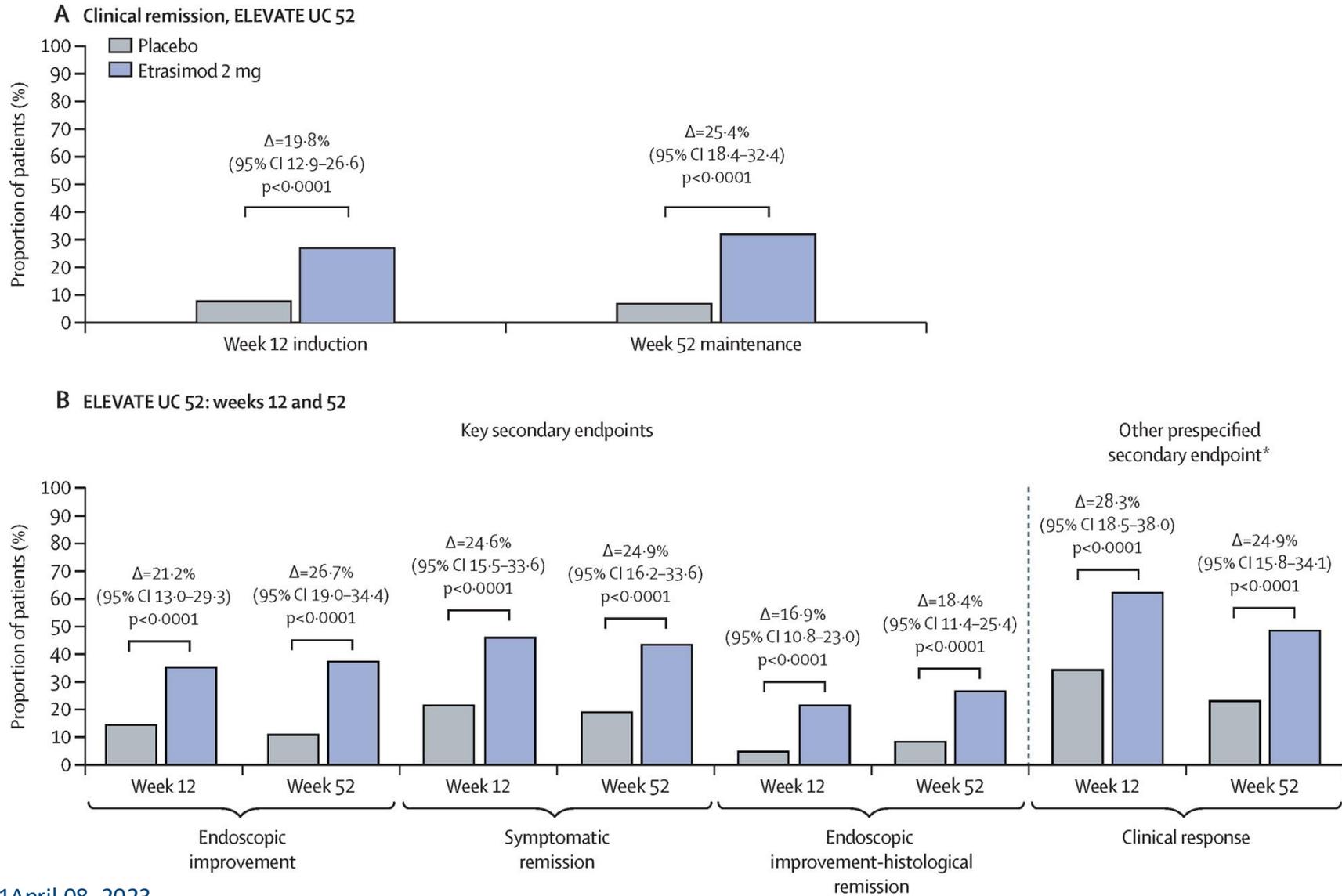
Etrasimod

- Indications:
 - Ulcerative colitis
- Dose:
 - 2mg po daily
- Contraindications
 - Uncorrected cardiac conduction abnormalities
 - Stroke, TIA, heart attack, unstable angina, unstable heart failure in the last 6 months
 - Severe, untreated sleep apnea
 - Pregnancy (current or planned in near future)

Etrasimod

- Pre-treatment testing
 - Blood counts and liver function tests
 - EKG and vital signs
 - Varicella immunity if no documented infection or vaccine series
 - Eye exam in select patients (history of uveitis, diabetes, prior macular edema)
 - Tuberculosis screening
 - Hepatitis B and C screening
- Monitoring
 - Not required, consider LFT and CBC
- Medication interactions
 - Medications that cause low heart rate or changes in the EKG
 - Concomitant immune suppression

Etrasimod: Efficacy



Lancet Volume 401, Issue 10383P1159-1171 April 08, 2023

Etrasimod Safety

- Adverse events (above placebo)
 - Headache (5-8%)
 - Nausea (3-4%)
 - Dizziness (1-5%)
 - Pyrexia (3-5%)
 - Arthralgia (2-4%)
 - Hypertension (1-3%)
 - Bradycardia (1-2%)
 - AV Block (<1%)
 - Macular edema (<1%)
- Serious infections, herpes zoster, and opportunistic infections were no higher than placebo

IL-23 Inhibitors

Interleukin-23 Inhibitors

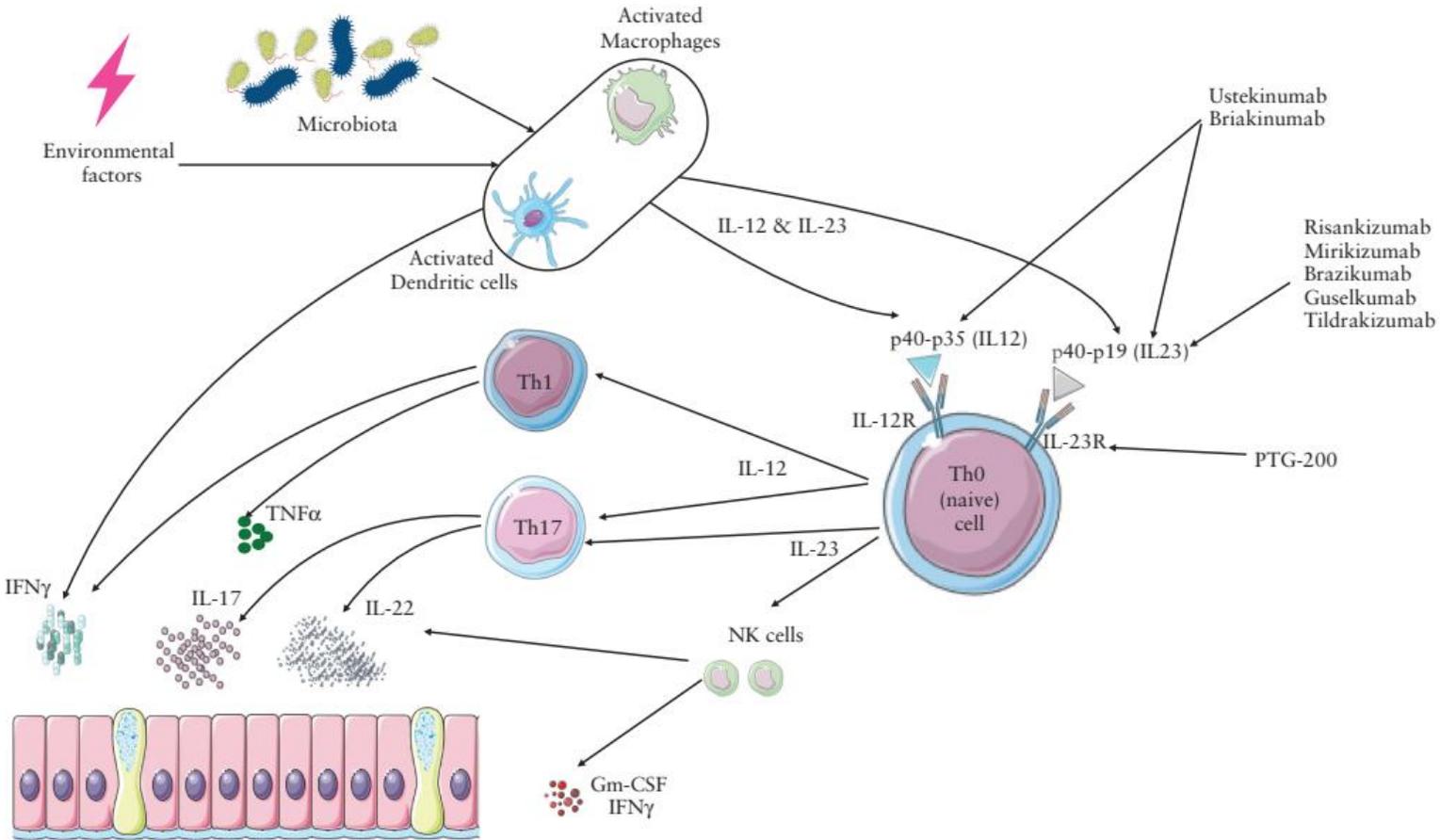


Figure 1. Overview of IL12 and IL23's pathways in the pathogenesis of inflammatory bowel disease.

Journal of Crohn's and Colitis, 2022, **16**, ii64–ii72

Risankizumab

- Indications:
 - Crohn's disease
 - Ulcerative colitis
 - Plaque psoriasis
 - Psoriatic arthritis
- Dose:
 - Intravenous infusion 300mg over at least 1 hour at weeks 0, 4, 8
 - 180 or 360mg on body injector (subcutaneous) at week 12 then every 8 weeks
- Contraindications
 - History of allergic reaction to risankizumab

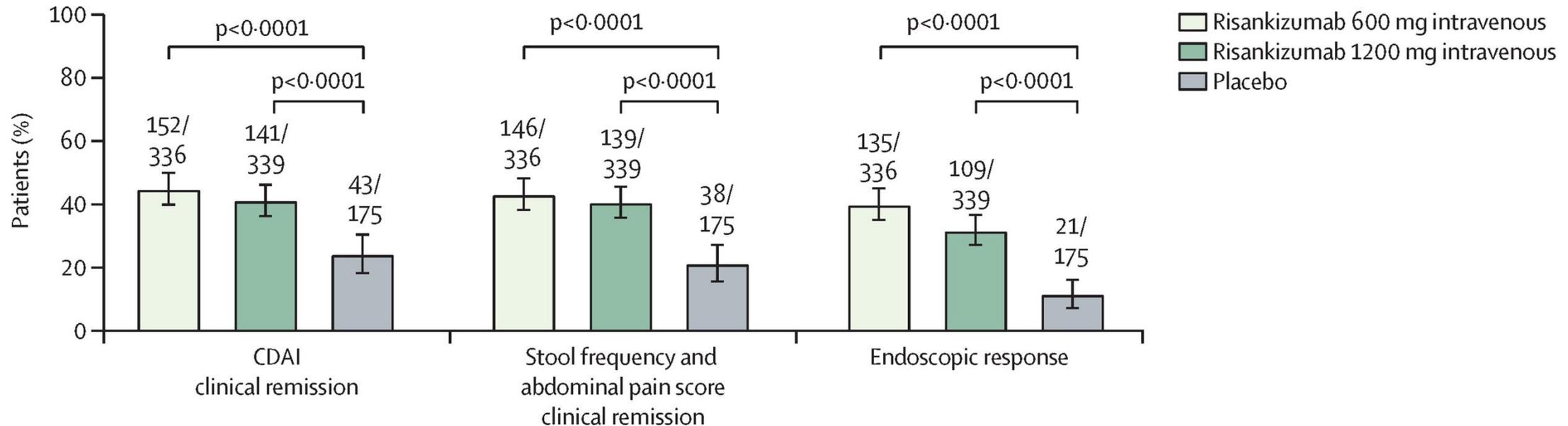


IL-23 pre-treatment testing

- Pre-treatment tests
 - Blood counts
 - Liver function tests
 - Metabolic panel
 - Tuberculosis screening
 - Hepatitis B and C screening
- Monitoring tests
 - Liver function tests
 - Blood count

Risankizumab: How Well Does it Work for CD Induction?

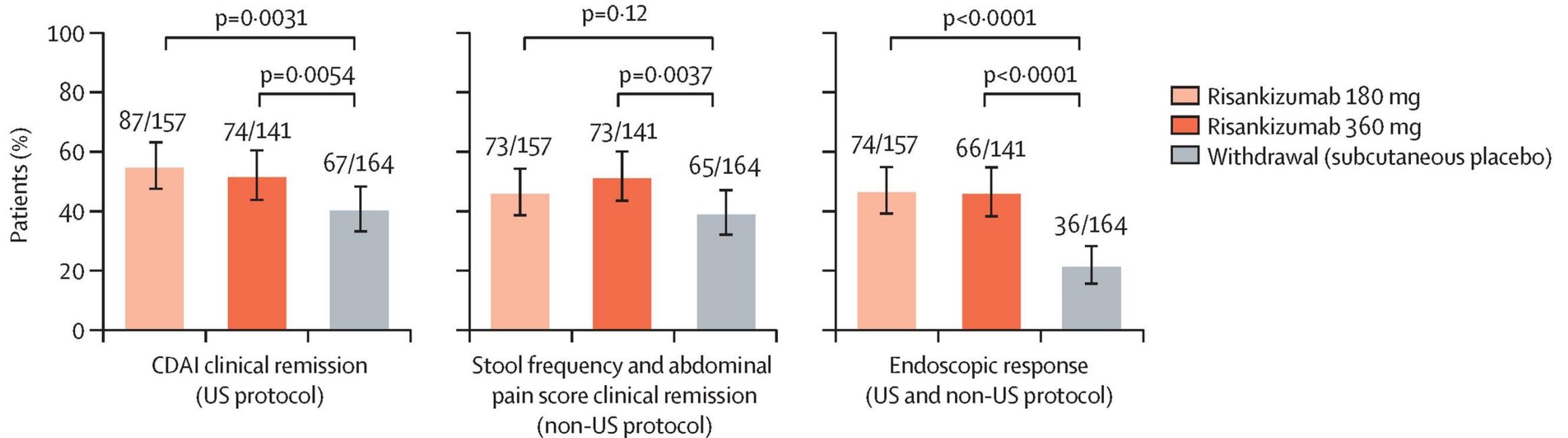
-First 12 weeks of treatment



LANCET VOLUME 399, ISSUE 10340, P2031-2046, MAY 28, 2022

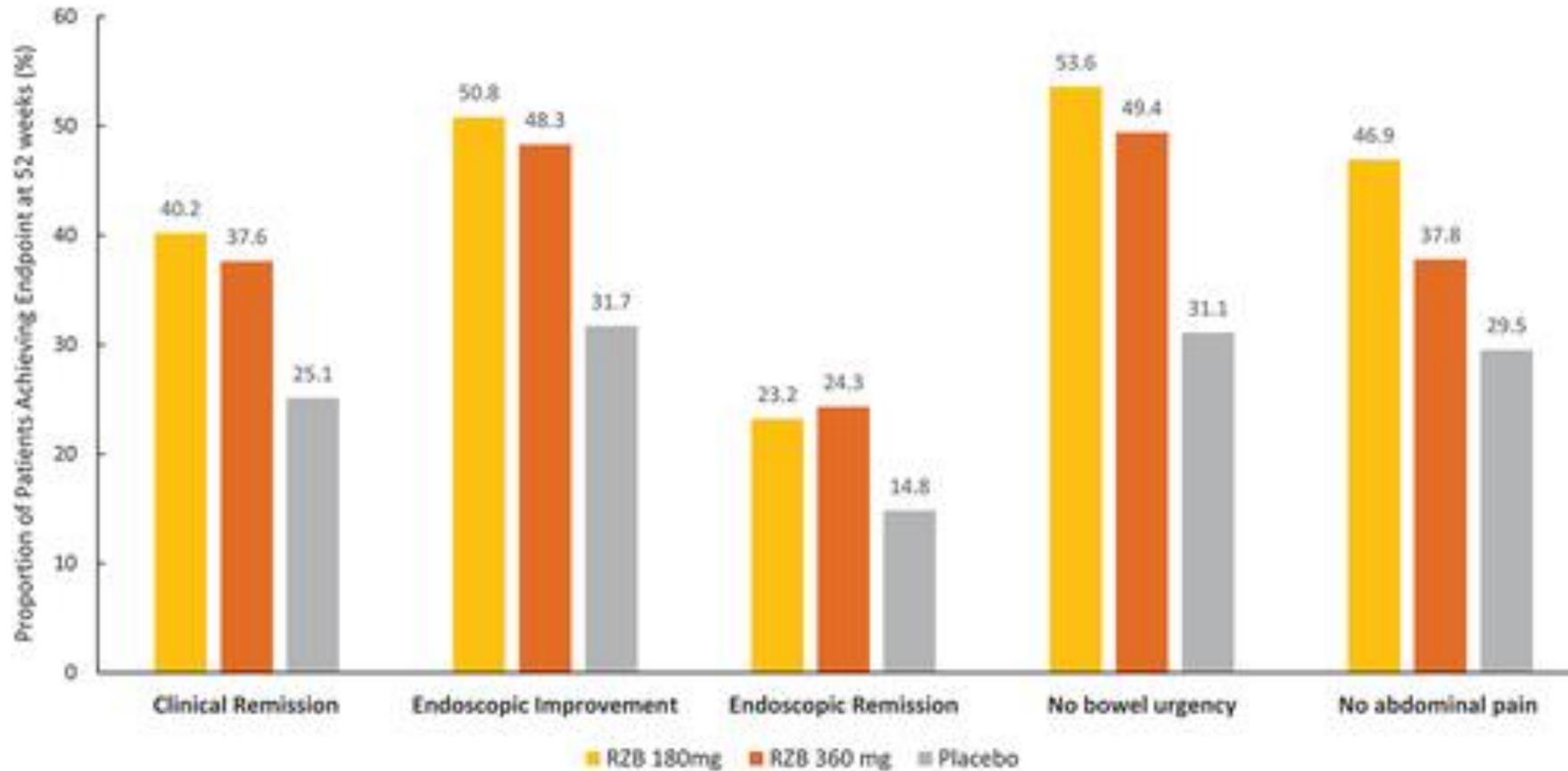
Risankizumab: How Well Does it Work for CD Maintenance?

-52 weeks of treatment



LANCET VOLUME 399, ISSUE 10340, P2031-2046, MAY 28, 2022

Risankizumab in UC Maintenance

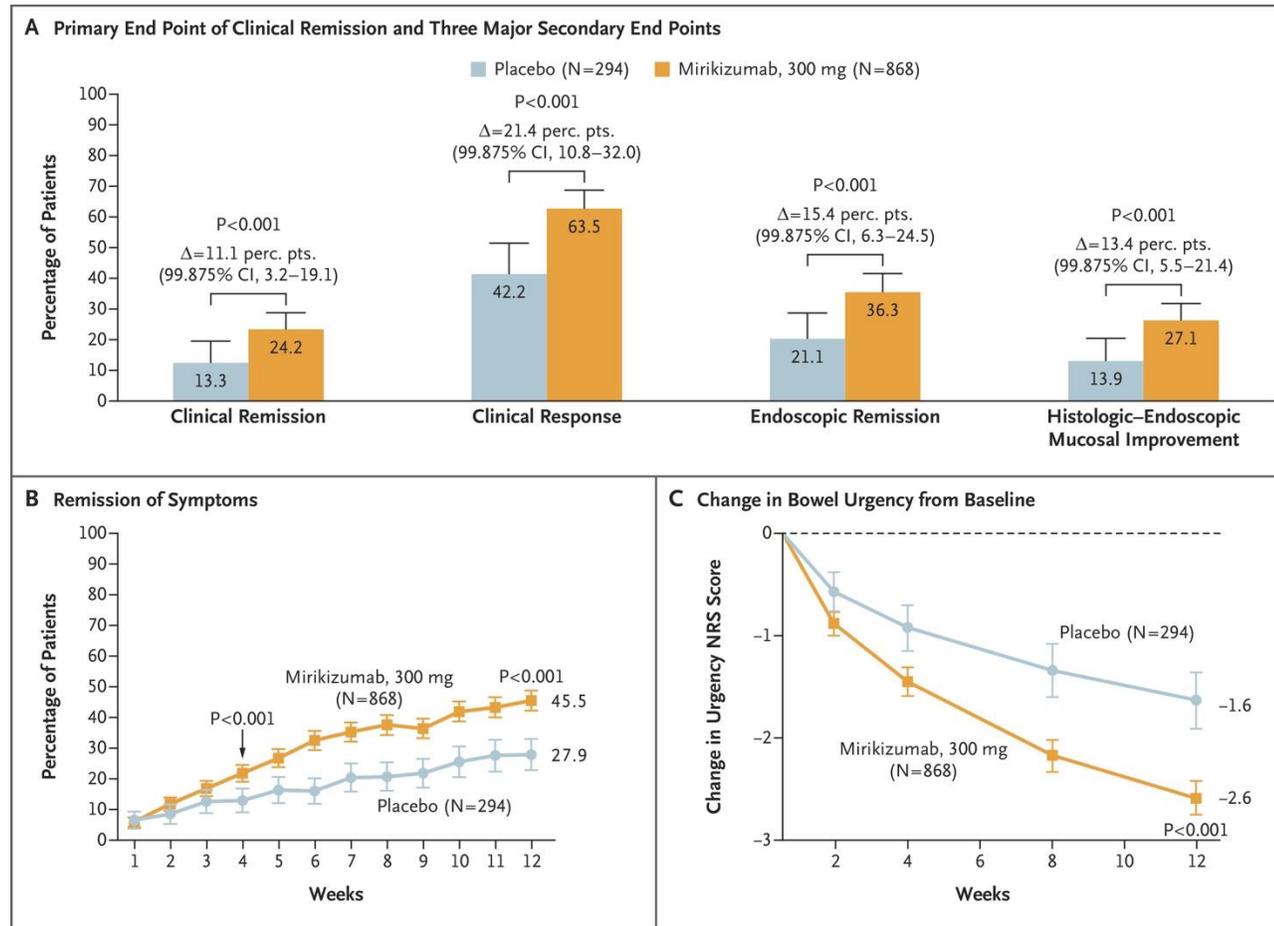


Expert Opinion on Biological Therapy, 24(12), 1317–1327.

Mirikizumab

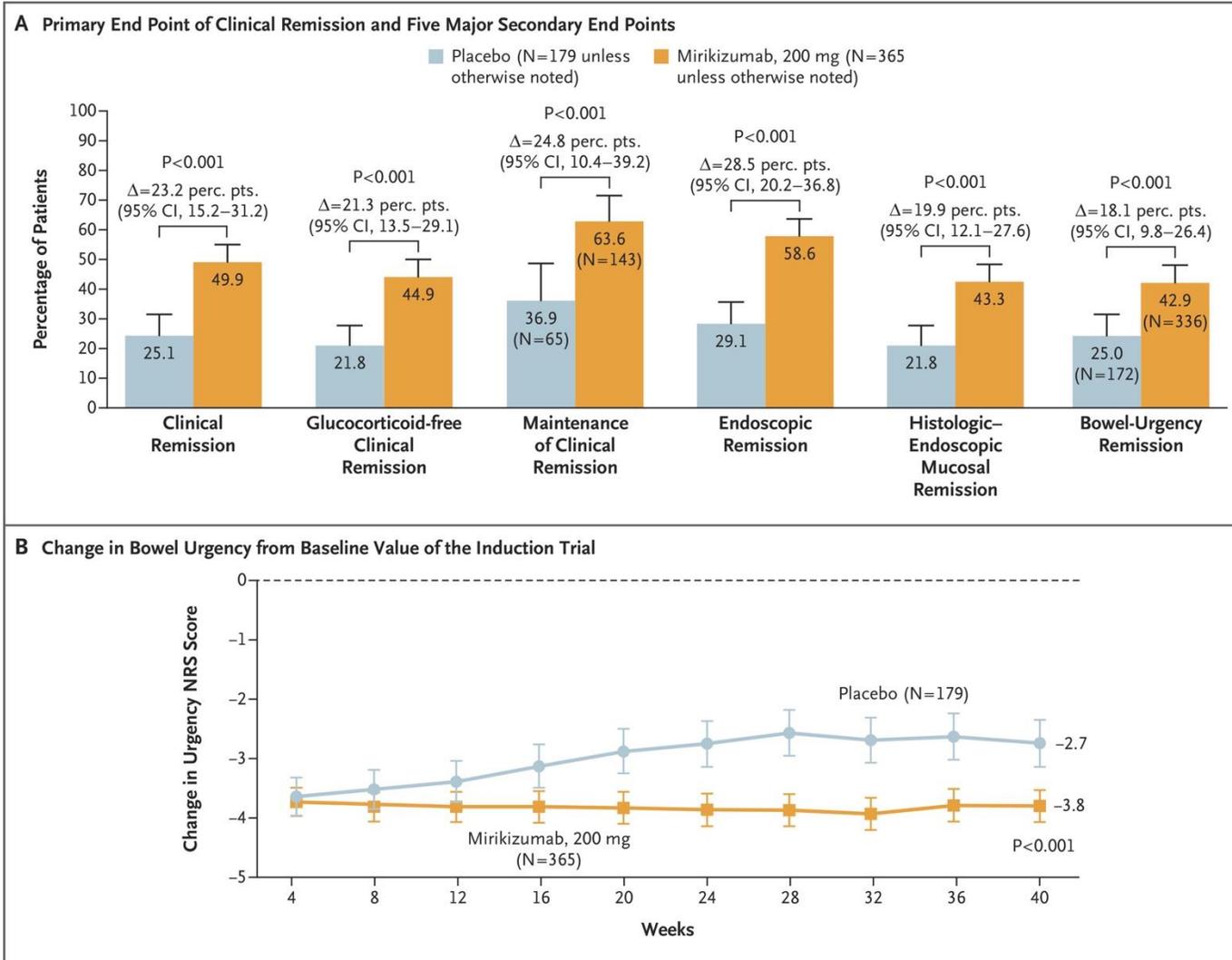
- Indications
 - Ulcerative colitis
 - Crohn's disease
- Dosing
 - Crohn's disease
 - 900mg IV weeks 0,4,8 then 300mg every 4 weeks
 - Ulcerative colitis
 - 300mg IV weeks 0,4,8 then 200mg every 4 weeks
- Contraindications
 - Allergy to mirikizumab

Mirikizumab for Induction in UC



N Engl J Med 2023;388:2444-2455

Mirikizumab for Maintenance in UC



N Engl J Med 2023;388:2444-2455

Mirikizumab for Induction and Maintenance in CD

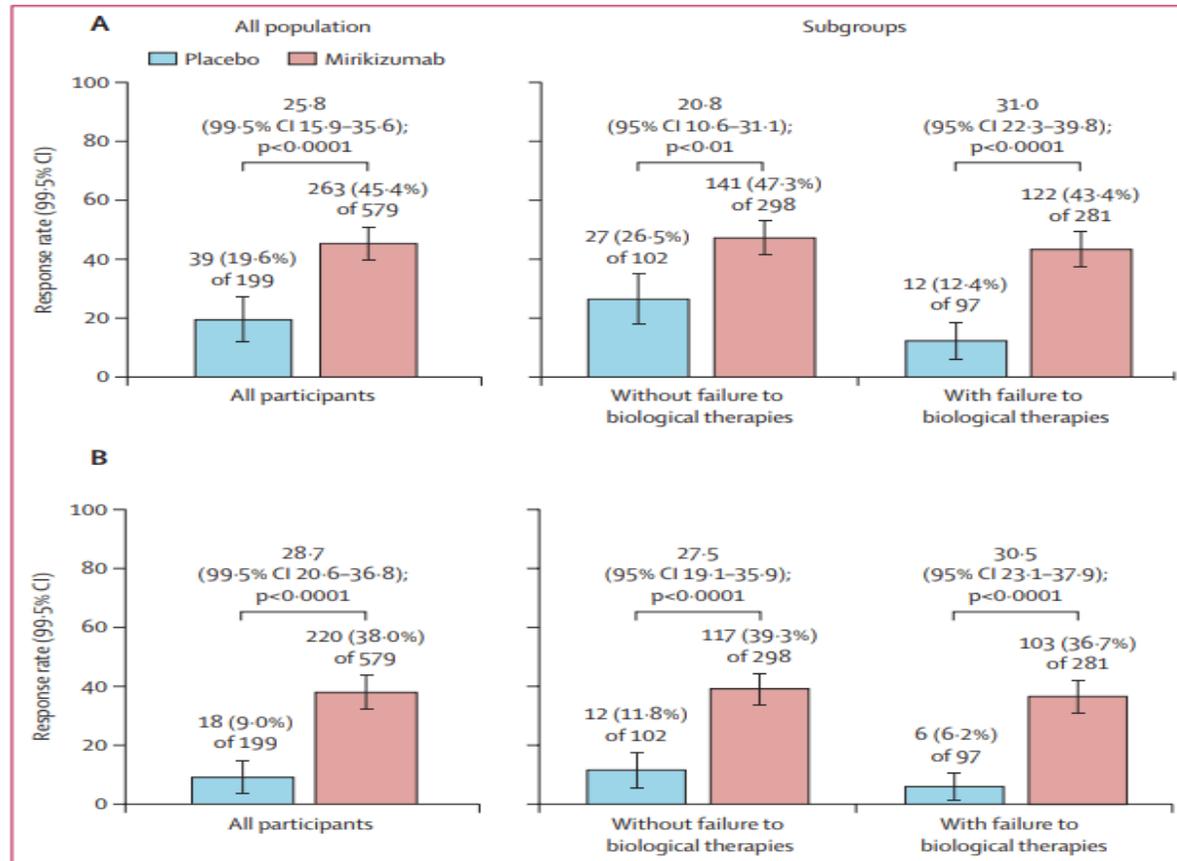


Figure 2: Coprimary endpoints: mirikizumab versus placebo for all participants, and patients with or without previous failure to biological therapies

(A) Clinical response by PRO at week 12 and clinical remission by CDAI at week 52 (NRI). (B) Clinical response by PRO at week 12 and endoscopic response at week 52 (NRI). All participants are from the primary analysis set.

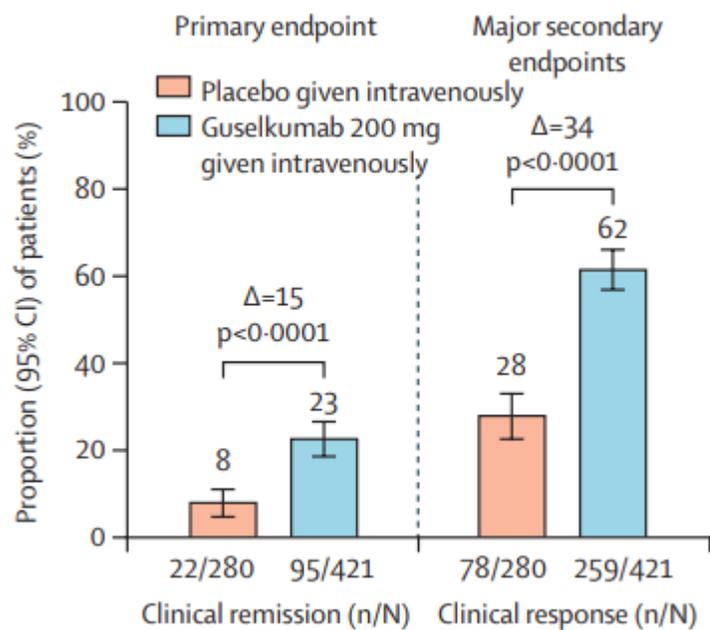
Guselkumab

- Indications
 - Crohn's disease
 - Ulcerative colitis
 - Plaque psoriasis
 - Psoriatic arthritis
- Dosing
 - Ulcerative colitis
 - 200mg IV or 400mg SQ weeks 0,4,8 then 100mg every 8 weeks or 200mg every 4 weeks SQ
 - Crohn's disease
 - 200mg IV or 400mg SQ weeks 0,4,8 then 100mg every 8 weeks or 200mg every 4 weeks SQ
- Contraindications
 - Allergy to guselkumab

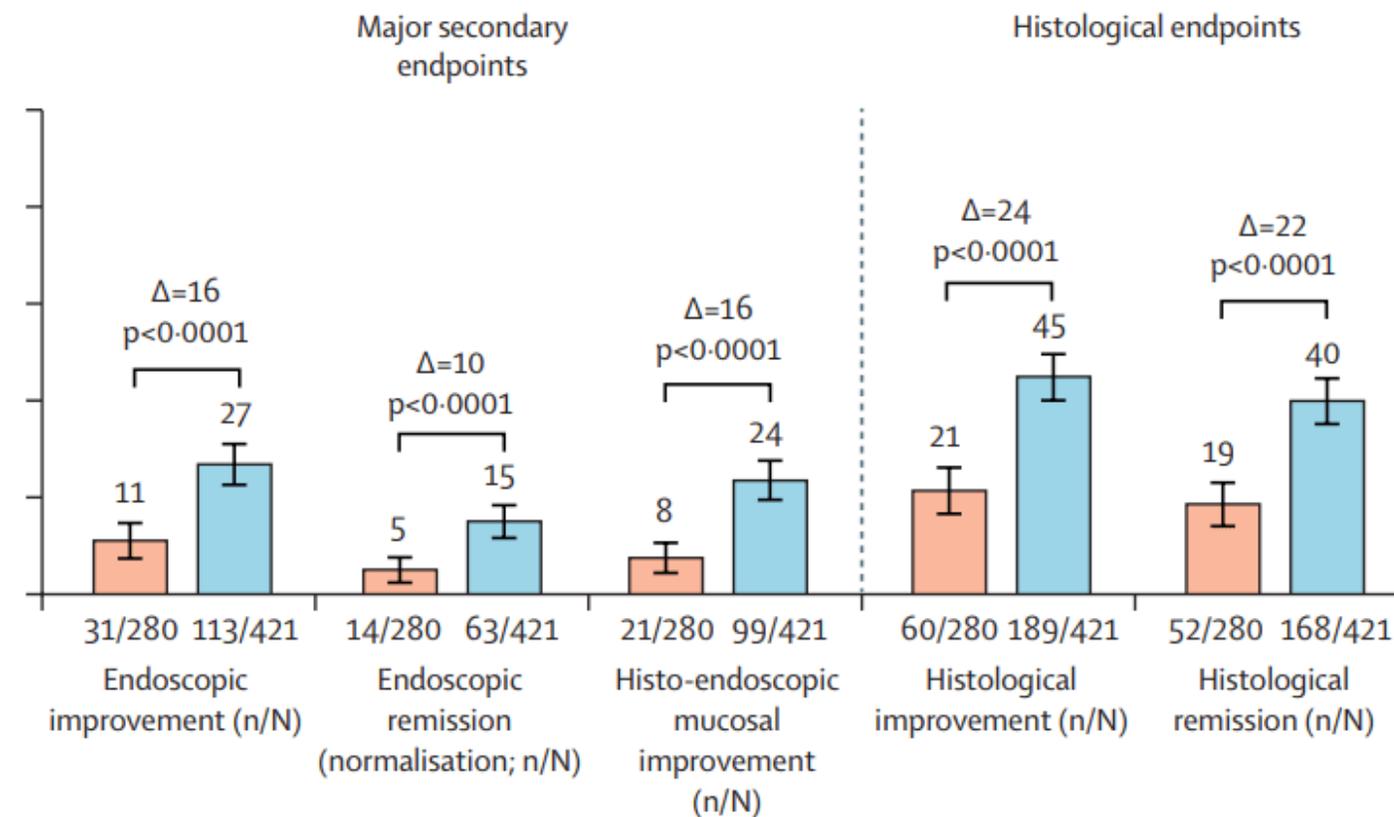
Guselkumab Induction in Ulcerative Colitis

B Endoscopic and histological endpoints

A Clinical endpoints



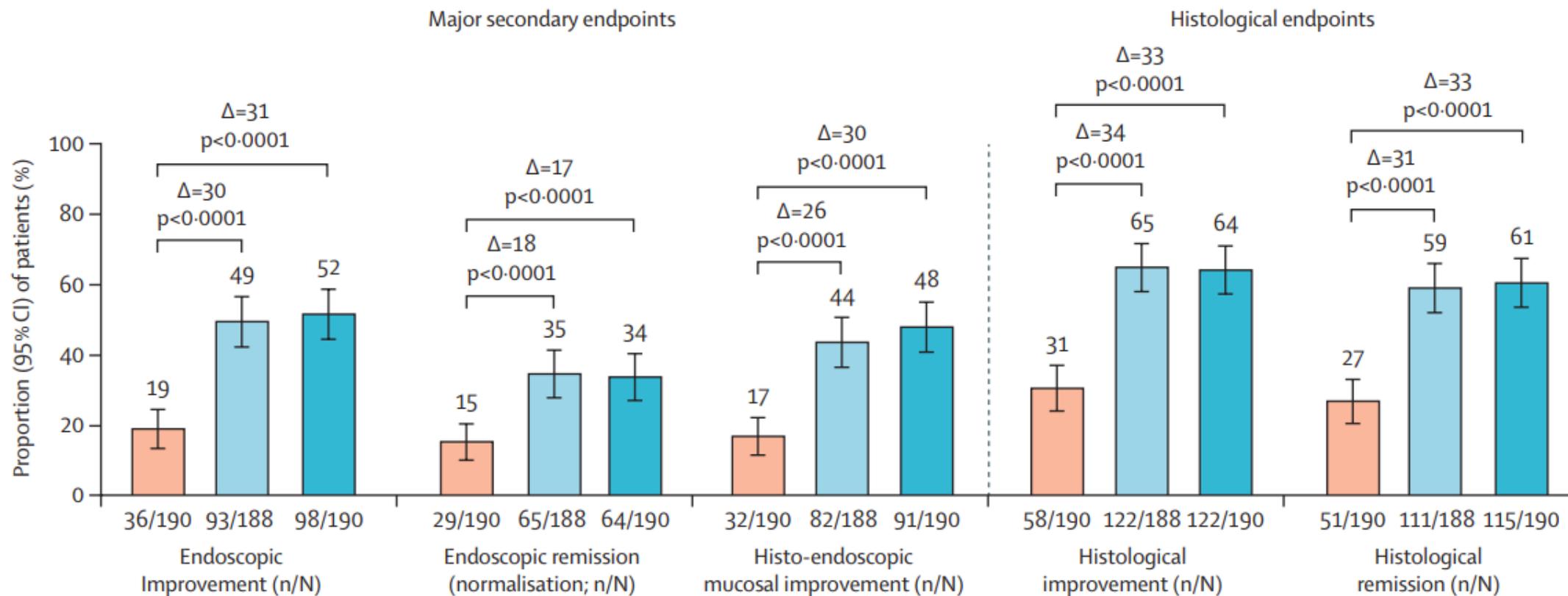
B Endoscopic and histological endpoints



DT Rubin et al. Lancet 2024; 405: 33-49

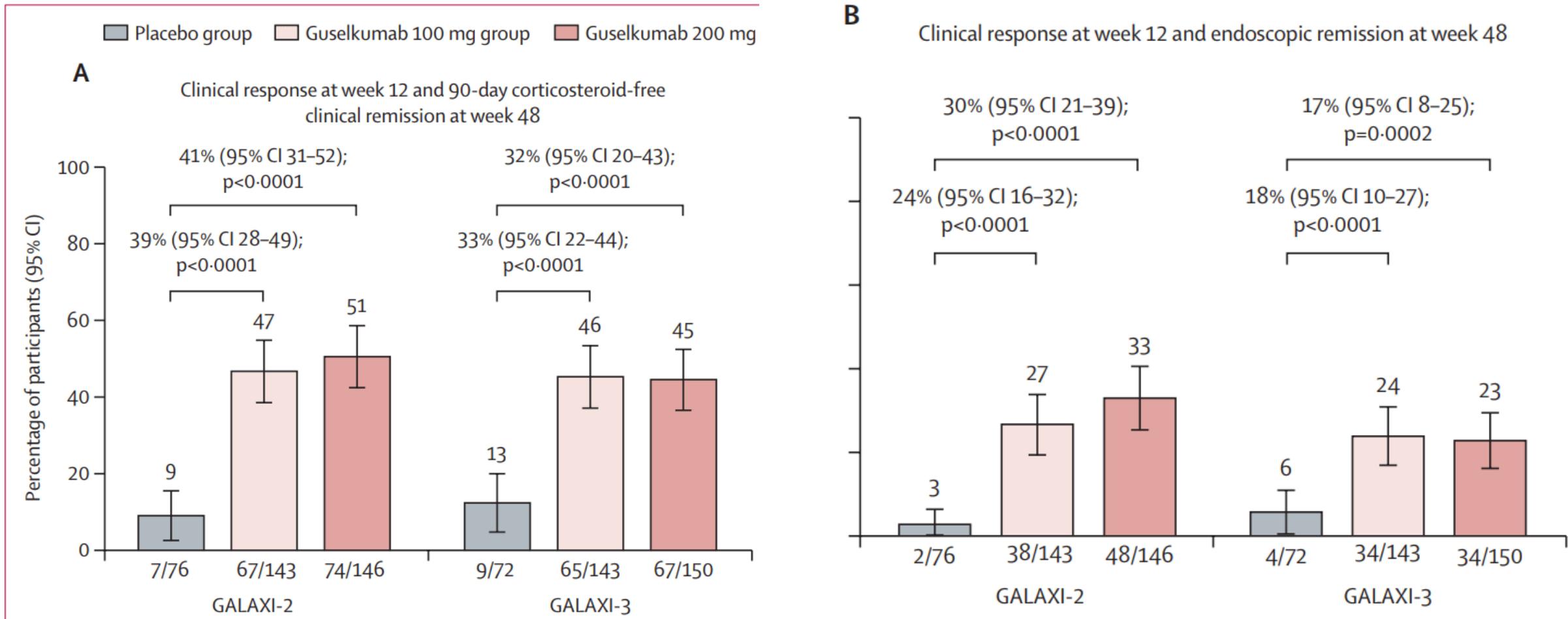
Guselkumab Maintenance in Ulcerative Colitis

B Endoscopic and histological endpoints



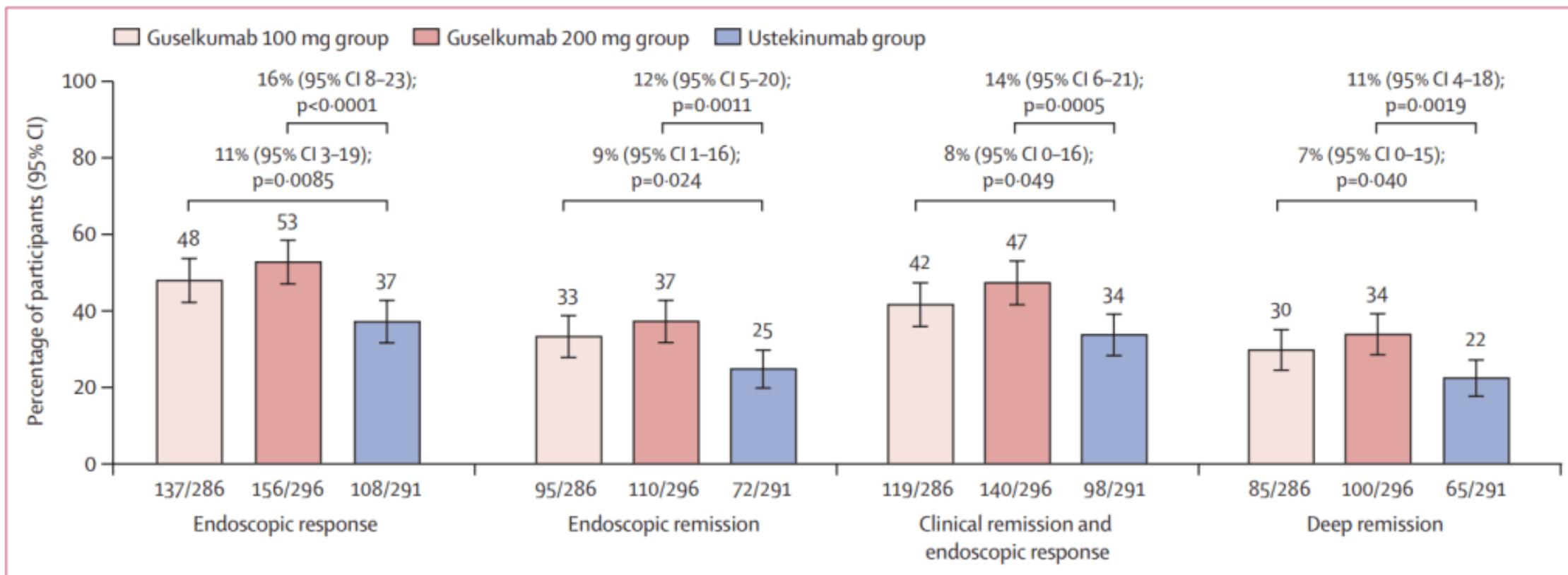
DT Rubin et al. Lancet 2024; 405: 33-49

Guselkumab in Crohn's Disease



Lancet Volume 406, Issue 10501P358-375

Guselkumab in Crohn's Disease



[Lancet Volume 406, Issue 10501 P358-375](#)

IL-23 Inhibitor Safety

- Adverse events (above placebo)
 - Opportunistic infection (1%)
 - Hepatic events (2-4%)
 - Injection site reactions (5-6%)
 - Arthralgia (2-6.7%)
 - Rash (3.6%)
 - Pyrexia (1.5-3.3%)

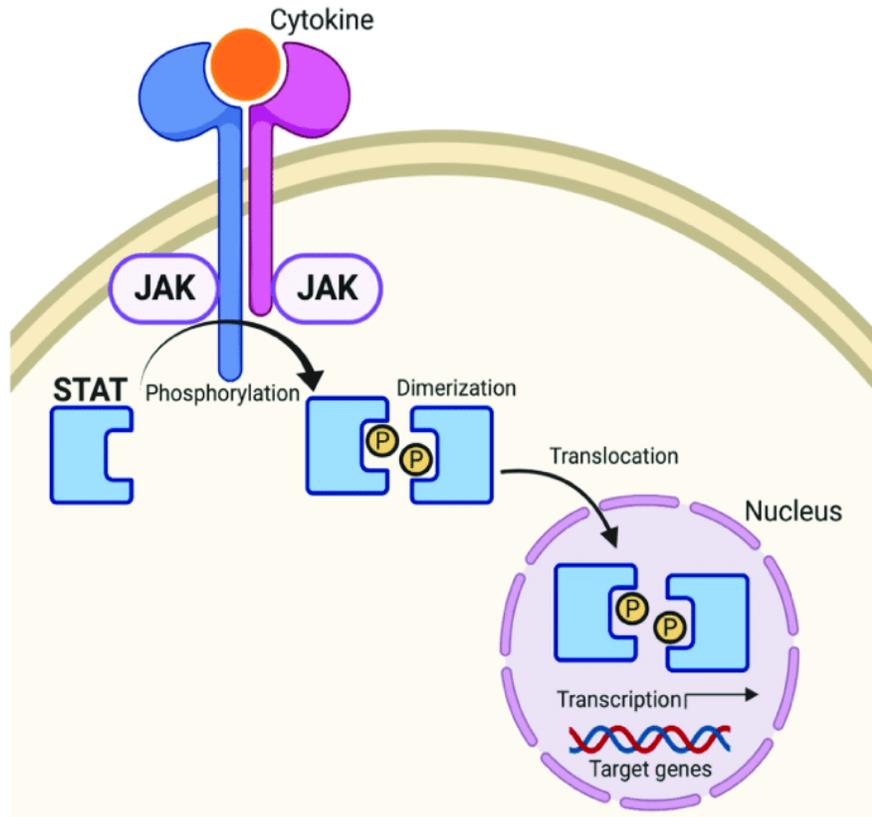
	ADVANCE: Risankizumab Induction (12 wks)		MOTIVATE: Risankizumab Induction (12 wks)		FORTIFY: Maintenance Study (52 wks)		
	600 mg IV (n=373)	Placebo (n=186)	600 mg IV (n=206)	Placebo (n=207)	180 mg SQ (n=179)	360 mg SQ (n=179)	SQ Placebo (n=184)
Overall Adverse events							
Adverse events (AE)	210 (56%)	105 (56%)	98 (48%)	137 (66%)	128 (72%)	129 (72%)	135 (73%)
Severe adverse events	22 (6%)	18 (10%)	7 (3%)	25 (12%)	12 (7%)	21 (12%)	23 (13%)
Serious adverse events	27 (7%)	28 (15%)	10 (5%)	16 (13%)	22 (12%)	24 (13%)	23 (13%)
AE leading to discontinuation of drug	9 (2%)	14 (8%)	2 (1%)	17 (8%)	3 (2%)	6 (3%)	6 (3%)
Adverse events of safety interest							
Serious infections	3 (1%)	7 (4%)	1 (<1%)	5 (2%)	5 (3%)	8 (4%)	7 (4%)
Opportunistic infections	0	0	0	3 (1%)	1 (1%)	1 (1%)	0
Herpes Zoster	2 (1%)	0	0	1 (<1%)	2 (1%)	0	1 (1%)
Active Tuberculosis	1 (<1%)	1 (1%)	0	0	0	0	0
COVID-19	1 (<1%)	1 (1%)	0	0	1 (1%)	4 (2%)	1 (1%)
Adjudicated MACE events	0	0	0	0	0	1 (1%)	1 (1%)
Malignancies (overall)	0	0	0	0	1 (1%)	1 (1%)	1 (1%)
Infusion-related reactions	4 (1%)	1 (1%)	1 (<1%)	3 (1%)			
Injection-site reactions					9 (5%)	11 (6%)	9 (5%)
Serious hypersensitivity reactions	1 (<1%)	0	0	0	0	0	0
Hepatic events†	9 (2%)	4 (2%)	1 (<1%)	2 (1%)	5 (3%)	7 (4%)	4 (2%)
Death	0	2 (1%)	0	0	0	0	0

Notes: †All hepatic events were identified with search criteria covering the standardised MedDRA (Medical Dictionary for Regulatory Activities) queries of “hepatic failure, fibrosis and cirrhosis and other liver damagerelated conditions”, “hepatitis, non-infectious”, “cholestasis and jaundice of hepatic origin”, “liver related investigations, signs and symptoms”, and “liver-related coagulation and bleeding disturbances.”

Abbreviations: SQ, Subcutaneous; IV, Intravenous; MACE, major adverse cardiovascular event.

JAK Inhibitors

Janus Kinase (JAK) Inhibitors



JAK1	JAK2	JAK3	TYK2
<ul style="list-style-type: none"> • IL-2 • IL-7 • IL-15 • IL-21 • IL-22 • IL-6 • IL-13 • IFN-γ 	<ul style="list-style-type: none"> • IL-6 • IL-13 • IL-12 • IL-23 • IL-5 • IFN-γ 	<ul style="list-style-type: none"> • IL-2 • IL-7 • IL-15 • IL-21 	<ul style="list-style-type: none"> • IL-6 • IL-12 • IL-13 • IL-22 • IL-23 • IFN-α • IFN-β

Gastroenterology & Hepatology Volume 18, Issue 8 August 2022 453-465
 ImmunoTargets and Therapy 2020:9 131-140

JAK Inhibitor Pre-Treatment and Monitoring

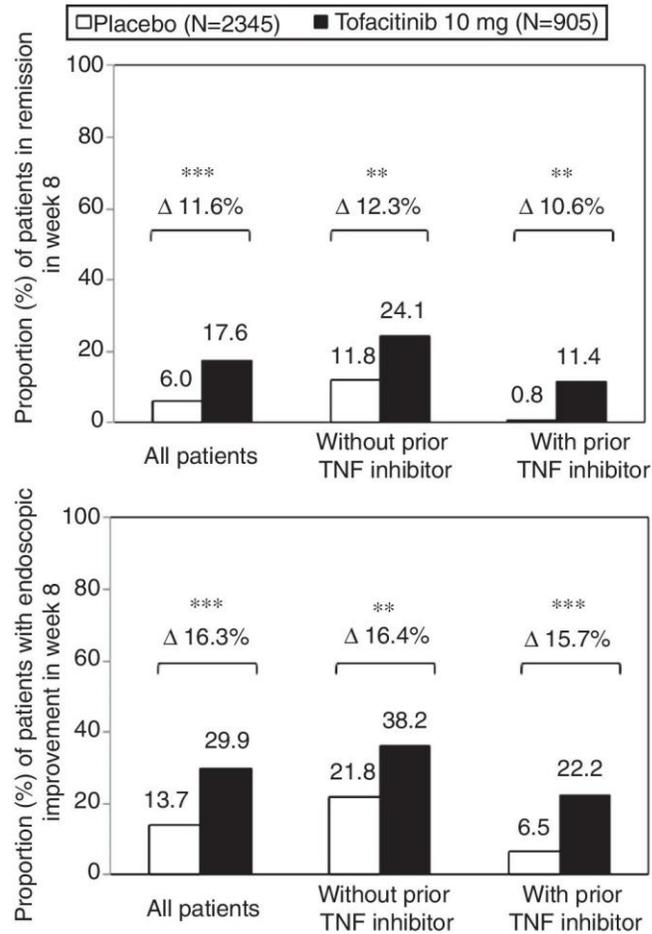
- Pre-treatment
 - CBC with differential
 - LFT
 - Hepatitis B and C
 - TB testing
 - Heart rate and blood pressure
- Monitoring
 - CBC with differential every 3 months
 - Lipids 4-8 weeks after therapy then periodically
 - LFTs periodically
 - Skin exam
 - Heart rate and blood pressure

Tofacitinib

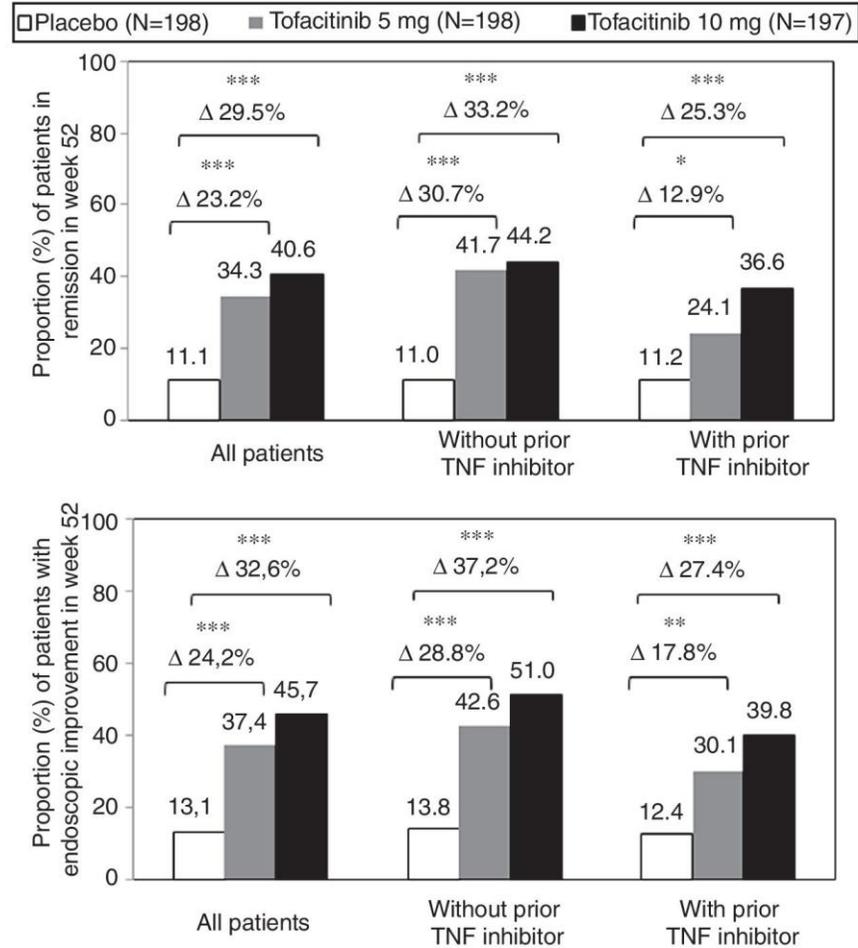
- Indications
 - Ulcerative colitis
 - Rheumatoid arthritis
 - Psoriatic arthritis
 - Ankylosing spondylitis
 - Juvenile idiopathic arthritis
- Dosing
 - Induction 10mg po BID (or 22mg ER daily)
 - Maintenance 5mg po BID (or 11mg ER daily)
- Contraindications
 - Hypersensitivity to the medication

Tofacitinib in UC

A Induction



B Maintenance



N Engl J Med, 376 (2017), pp. 36-1723

Tofacitinib

- Adverse events (above placebo)
 - Nasopharyngitis (4.9-13.8%)
 - Serious infection (0.5-1.3%)
 - Herpes zoster (1.5-5.1%)
 - MACE (0.5%)
 - Total cholesterol and LDL elevation (23-31%)
 - Only 4.1% in high dose group needed addition or change in lipid therapy
 - CK elevation (18.7-27.7%)

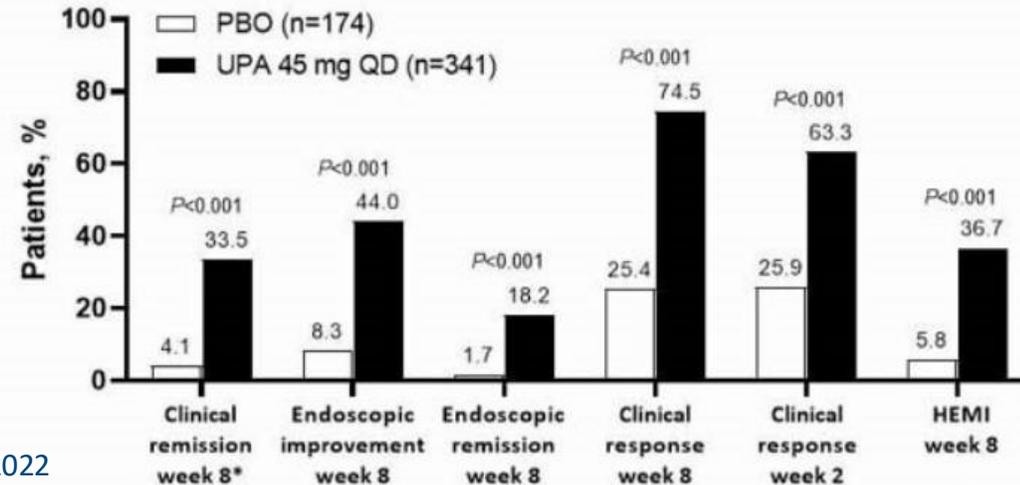
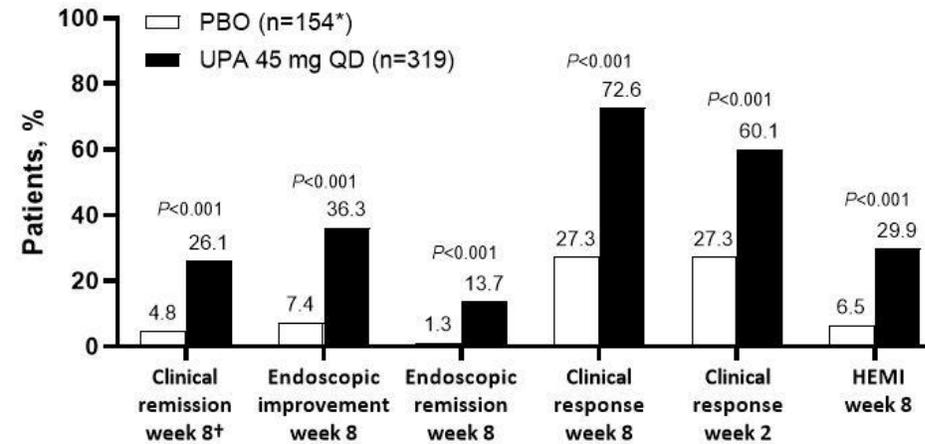
N Engl J Med, 376 (2017), pp. 36-1723

Upadacitinib

- Indications
 - Ulcerative colitis
 - Crohn's disease
 - Ankylosing spondylitis
 - Atopic dermatitis
 - Giant cell arteritis
 - Axial spondyloarthritis
 - Rheumatoid arthritis
 - Juvenile idiopathic arthritis
 - Psoriatic arthritis
- Dosing
 - Crohn's disease: 45mg daily for 3 months then 15mg or 30mg daily
 - UC: 45mg daily for 2 months then 15mg or 30mg
- Contraindications
 - Hypersensitivity

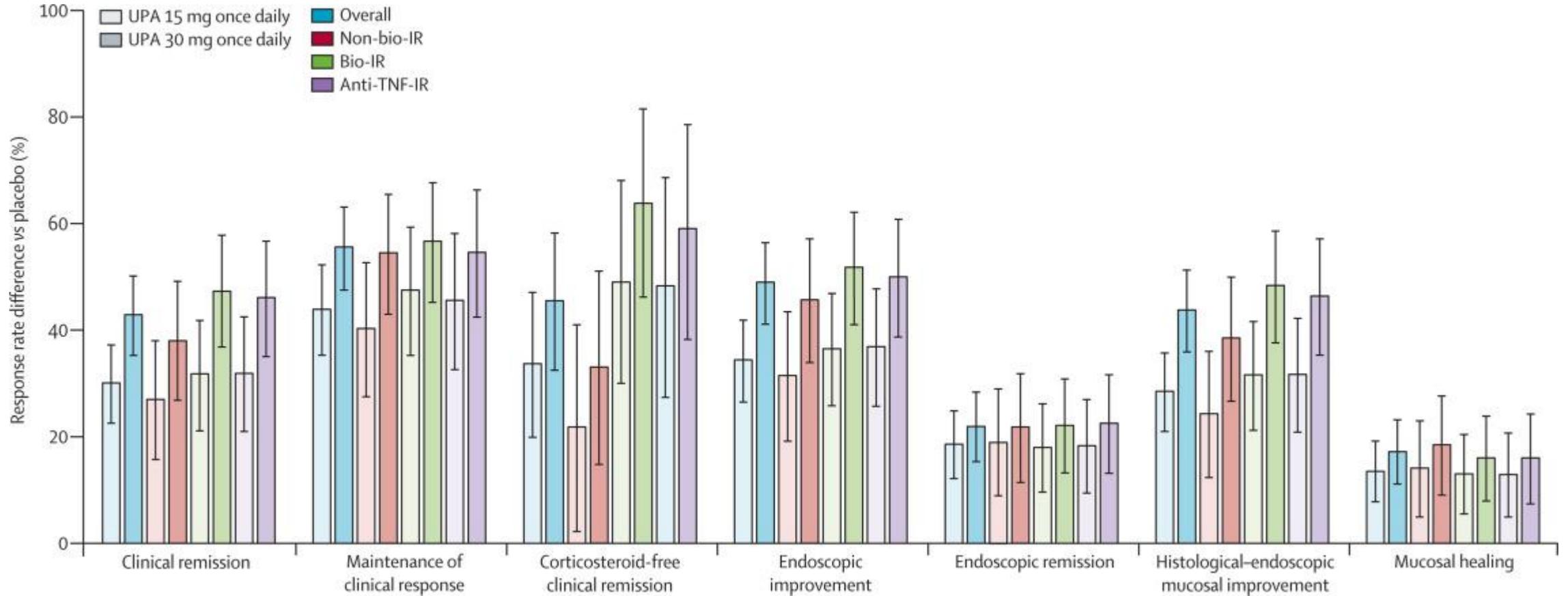
Upadacitinib: How Well Does it Work for Induction in UC?

Figure 1. Primary and ranked secondary endpoints



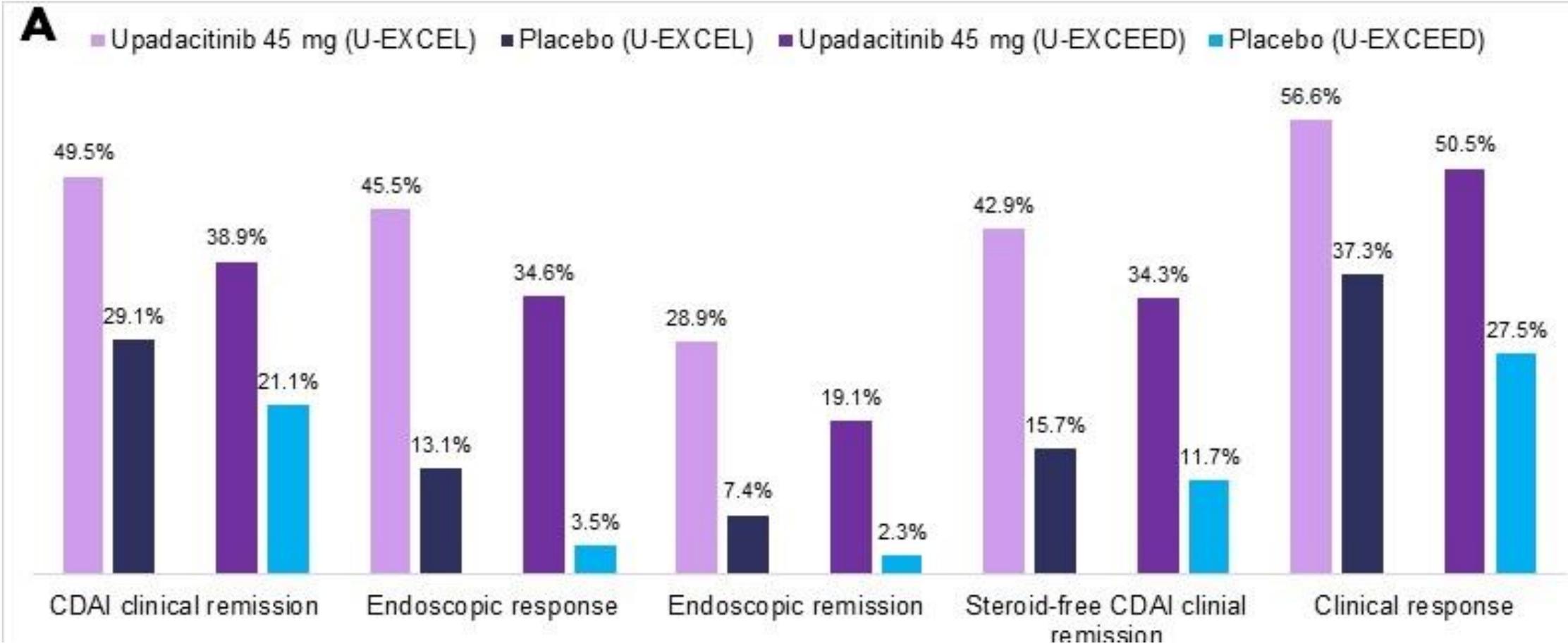
Lancet [VOLUME 399, ISSUE 10341, P2113-2128, JUNE 04, 2022](#)

Upadacitinib for UC Maintenance



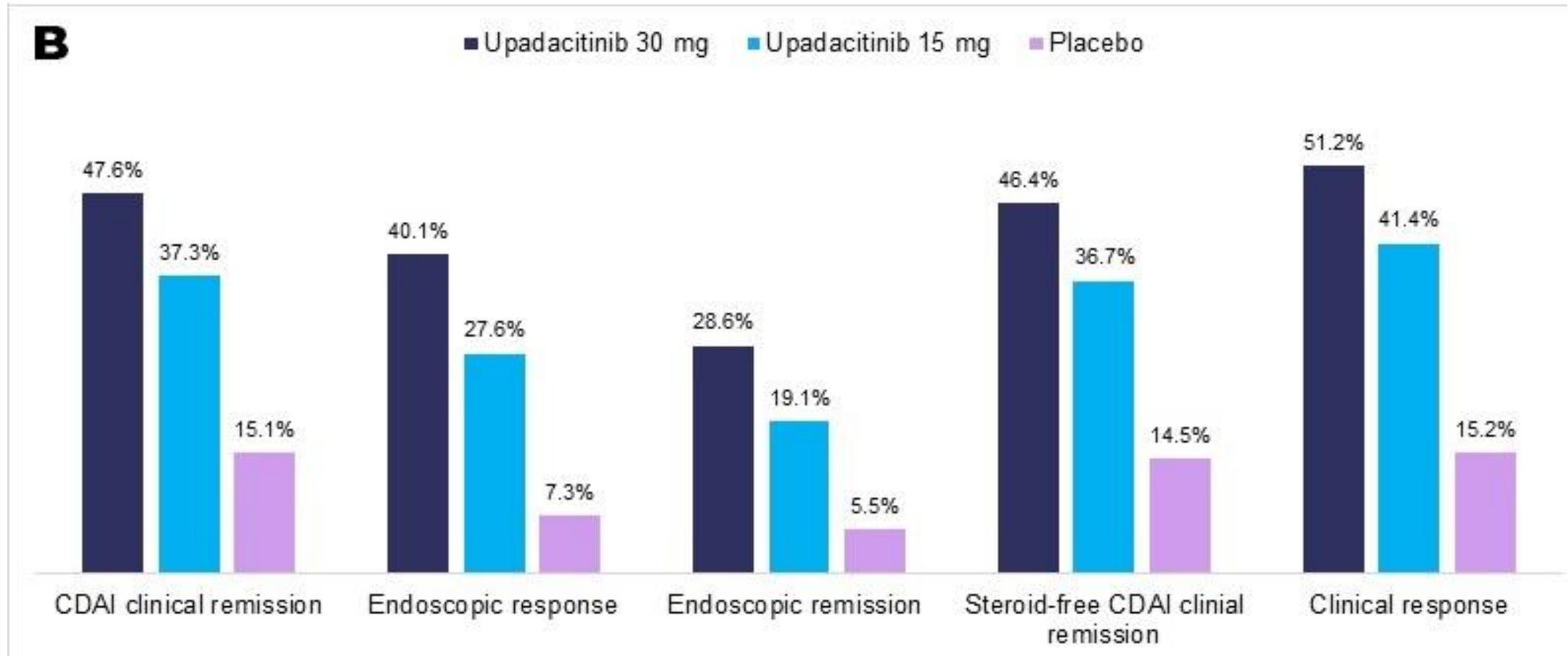
Lancet Volume 8, Issue 11P976-989 2023

Upadacitinib in Crohn's Disease Induction



N Engl J Med 2023 May 25;388(21):1966-1980

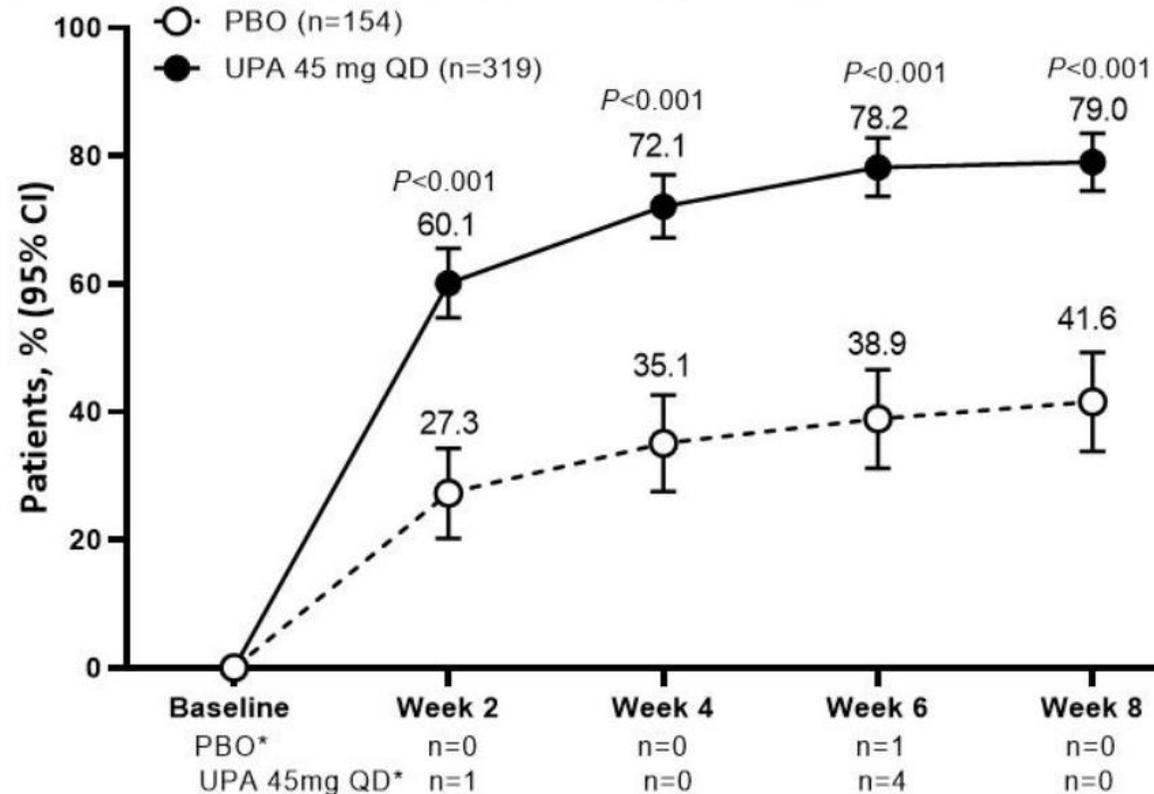
Upadacitinib in Crohn's Disease Maintenance



N Engl J Med 2023 May 25;388(21):1966-1980

Upadacitinib: How Quickly Does it Work?

Figure 2. Clinical response per partial adapted Mayo score



PBO, placebo; QD, once daily; UPA, upadacitinib. *Missing because of COVID-19

Lancet [VOLUME 399, ISSUE 10341, P2113-2128, JUNE 04, 2022](#)

Upadacitinib safety

- Adverse Events (above placebo)
 - Acne (4.7%)
 - CK elevation (4.7%)
 - Headache (4.1%)
 - Nasopharyngitis (4.7%)
 - Serious infection (1.6%→lower than placebo in maintenance)
 - Opportunistic infection (0.3%)
 - Herpes zoster (5.1-6%)
 - Low WBC (3.1-5%)
 - Venous thromboembolism (1%)

JAK Inhibitor Box Warnings

- **Increased risk of serious infections**
 - -Except for herpes zoster, these were lower than placebo in maintenance study
- **-Increased risk of blood clots (thrombosis)**
 - -1% in the maintenance study
- **-Increased risk of death from any cause and cardiovascular events (stroke, heart attack, death)**
 - -Based on data from tofacitinib in rheumatoid arthritis in patients with another risk factor for cardiovascular disease
 - -No difference from placebo in the maintenance study for UPA
- **-Increased risk of lymphoma and lung cancer**
 - -Based on data from tofacitinib in rheumatoid arthritis

Leveraging Current Therapies

Treat To Target

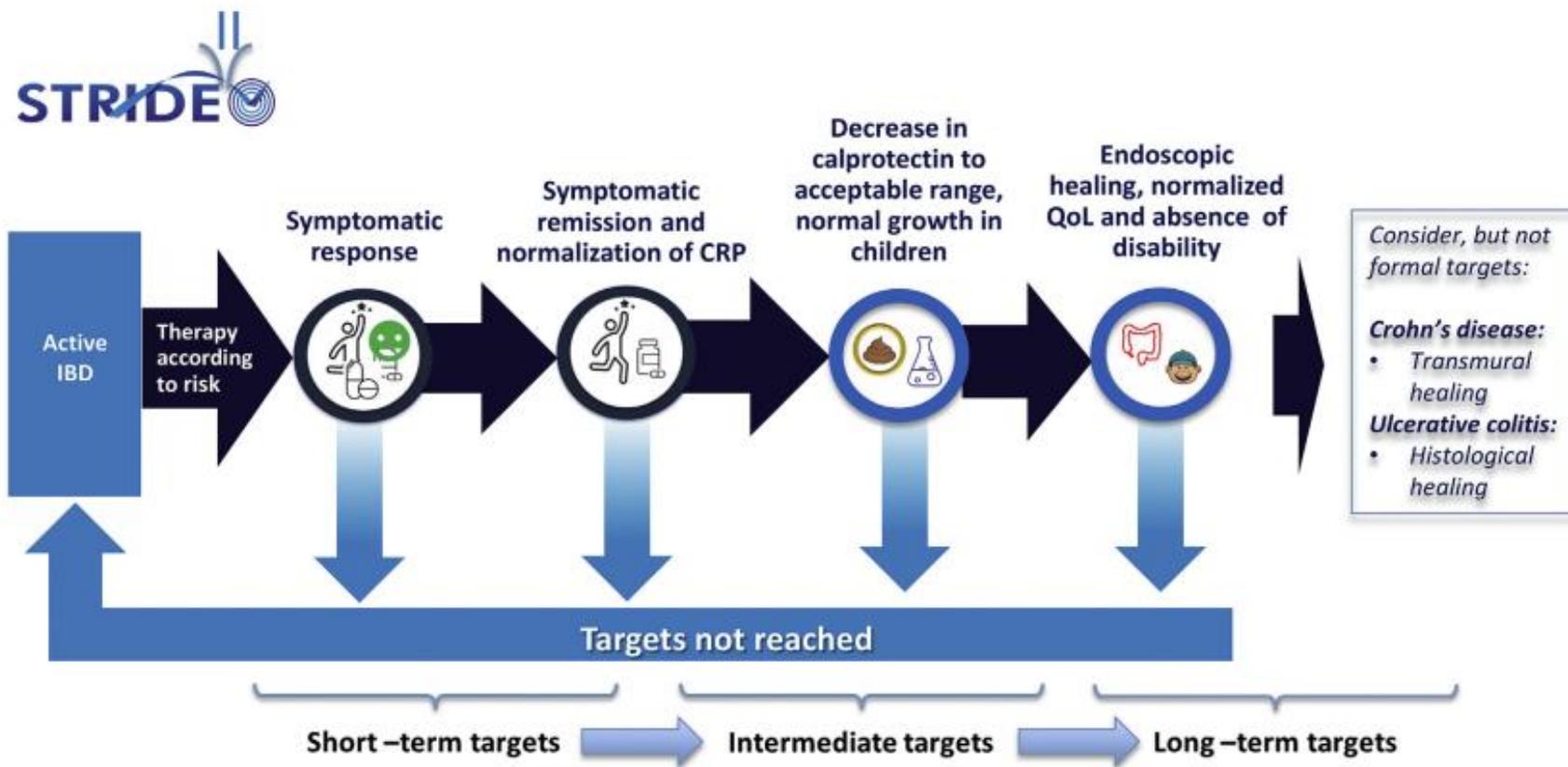
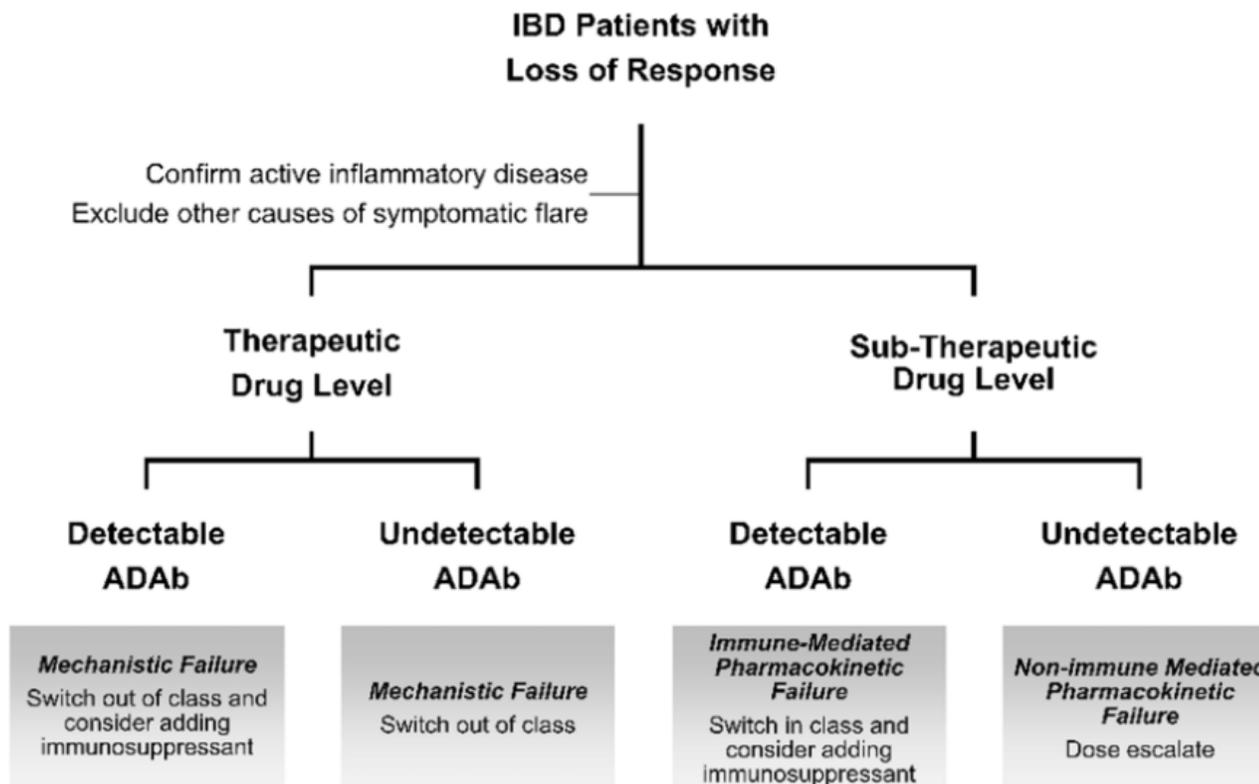


Figure 2. Treatment targets in CD and UC.

Gastroenterology 2021;160:1570–1583

Therapeutic Drug Monitoring

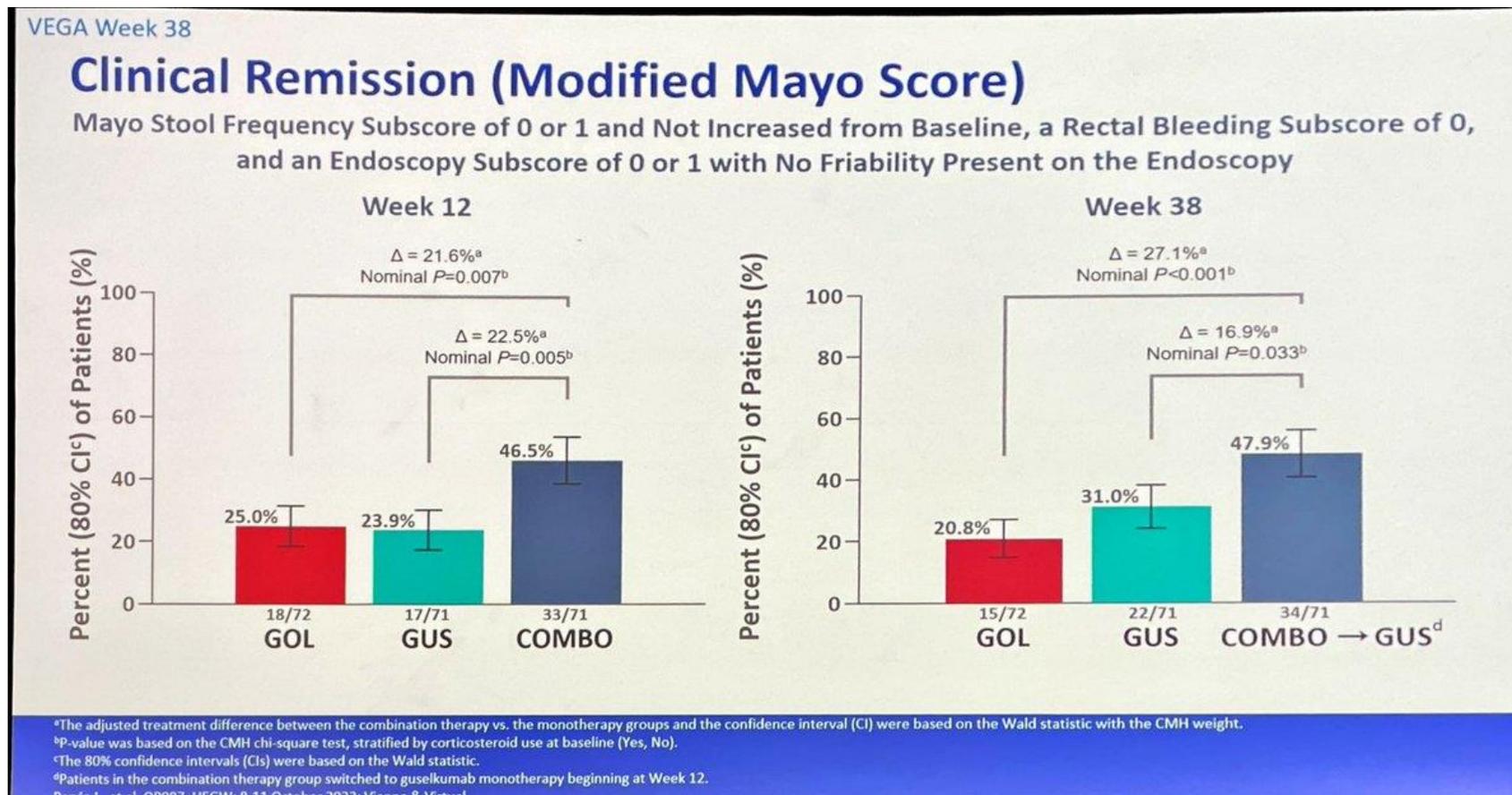
- Optimizing treatment outcomes
 - Proactive vs. reactive
- Possibility of monotherapy with anti-TNF
- De-escalation of therapy
- Detecting antibody formation as possible cause of treatment reaction



[Current Treatment Options in Gastroenterology](#) March 2019:17(1)

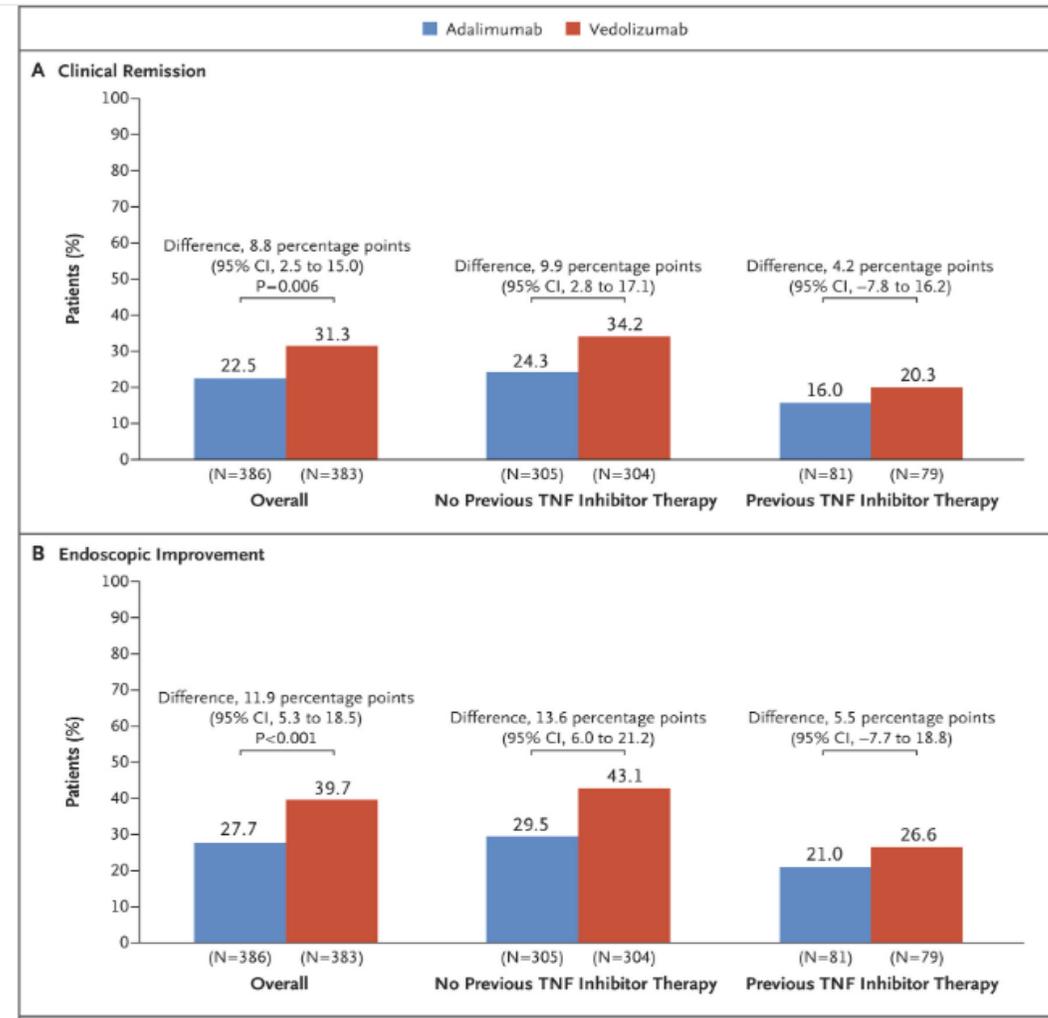
Combination Biologic Therapy

- Phase 2 VEGA Study in 214 patients with ulcerative colitis
- Induction with golimumab, guselkumab, or both



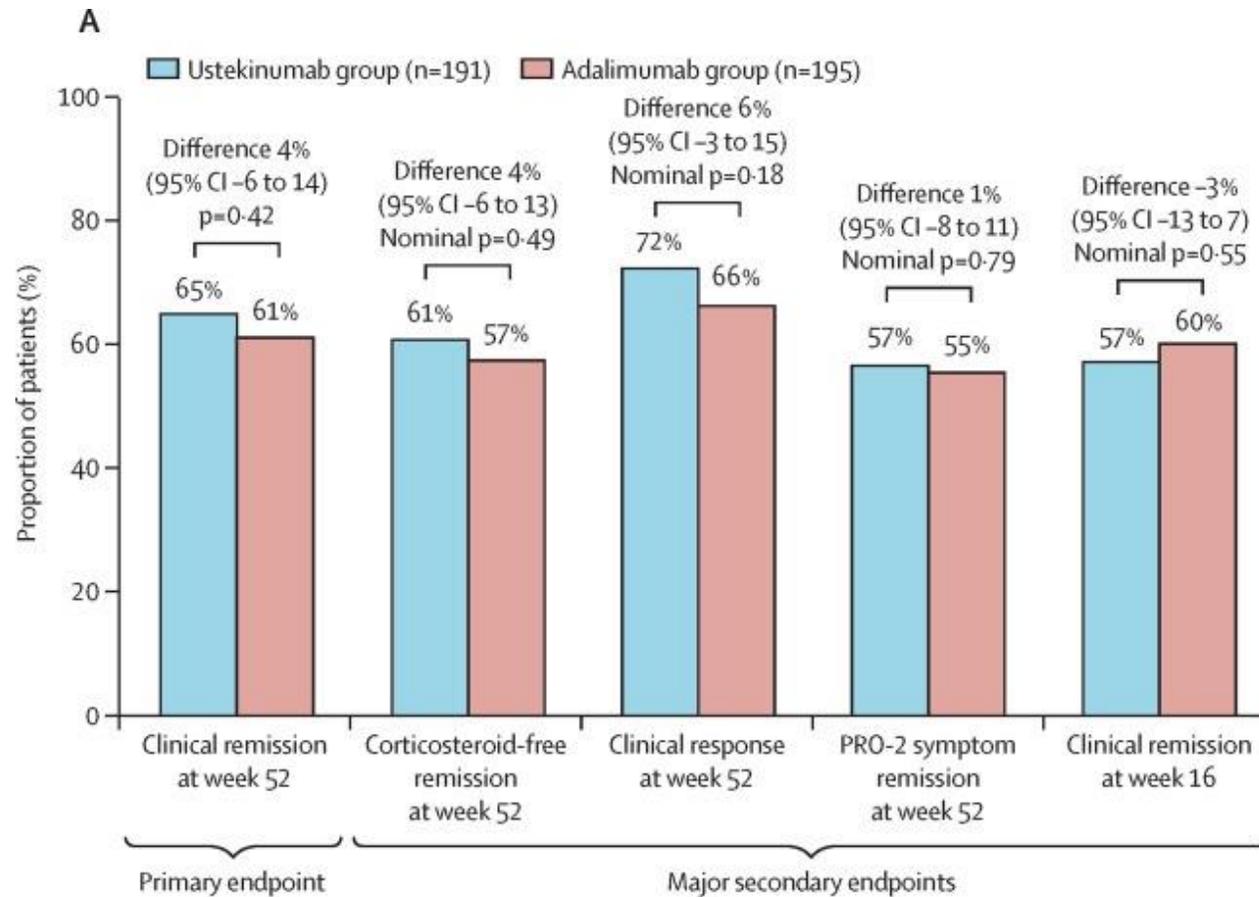
Lancet Gastroenterology and Hepatology. February 01, 2023, e-Pub ahead of print

Directly Comparing Biologic Agents: VARSITY Study: Adalimumab vs. vedolizumab in UC



New Engl J Med 2019; 381:1215-1226

SEAVUE Study: Adalimumab versus ustekinumab in Crohn's disease without a prior biologic



LANCET VOLUME 399, ISSUE 10342, P2200-2211

Common Medication Management Questions

Medication Management in Pregnancy

- Continue mesalamine, sulfasalazine (with 2mg folic acid), thiopurines
 - Monitor thiopurine metabolites and consider split dosing for intrahepatic cholestasis risk
- Avoid use of methotrexate, S1P modulators, JAK inhibitors
- Biologic therapies can be continued on schedule throughout pregnancy
- Aspirin 150-162mg daily recommended at week 12-16 for pre-eclampsia prevention

Gastroenterology Volume 23, Issue 11, Supplement S1-S60 October 2025

Vaccinations and IBD Medication

- Avoid live virus vaccinations in patients on immune suppression
 - MMR, varicella, yellow fever, dengue, intranasal influenza
- If possible, vaccinate prior to starting immune suppression
 - Blunted response to influenza, hepatitis B, and pneumococcal vaccines on anti-TNF therapy, especially combination therapy
 - Do not delay or hold IBD treatment to complete vaccination
- Vaccinate patients regardless of IBD medication schedule
- Use the ACIP recommendations for patients with additional risk (immune suppressed) in addition to standard recommendations
 - Age 19 and older: Recombinant zoster (Shingrix), PCV 20/21
- Safety of vaccines is similar to non-IBD population

American Journal of Gastroenterology [120\(7\):p 1447-1473, July 2025](#)

Thank you!

- Questions?
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