

From Policy to Practice:

Navigating the
Evolving Biosimilar
Landscape



Supported by an independent educational grant from Organon

Learning Objectives

- Describe the clinical and practical benefits of biosimilars in IBD management, with emphasis on affordability and improved treatment access
- Analyze current evidence on the safety and effectiveness of biosimilars for the treatment of IBD
- Assess the current biosimilar approval and regulatory landscape that impacts market access, adoption, and availability, including recent policy developments
- Evaluate ongoing challenges to biosimilar integration in IBD care and outline strategies to improve biosimilar access

IBD = inflammatory bowel disease.

This CME activity includes brand names for participant clarity purposes only. No product promotion or recommendation should be inferred.

**From Policy
to Practice**

From Policy to Practice:

Navigating the Evolving Biosimilar Landscape

A horizontal band with a dark blue background featuring a microscopic view of biological cells, possibly showing cell membranes and internal structures.

Definition and Development of Biosimilars

Christina Ha, MD, FACG

*Mayo Clinic Arizona
Scottsdale, AZ*

Disclosures

- **Christina Ha, MD FACG:** Consultant – AbbVie, Bausch Health, Johnson & Johnson, Eli Lilly, Takeda; advisory board – AbbVie, Bausch Health, Johnson & Johnson, Eli Lilly, Takeda; educational programming support – AbbVie, Celltrion, Johnson & Johnson, Eli Lilly, Takeda; DSMB – Takeda; steering committee – MILESTONE IBD; member – IBD Education Group

Costs of IBD Care

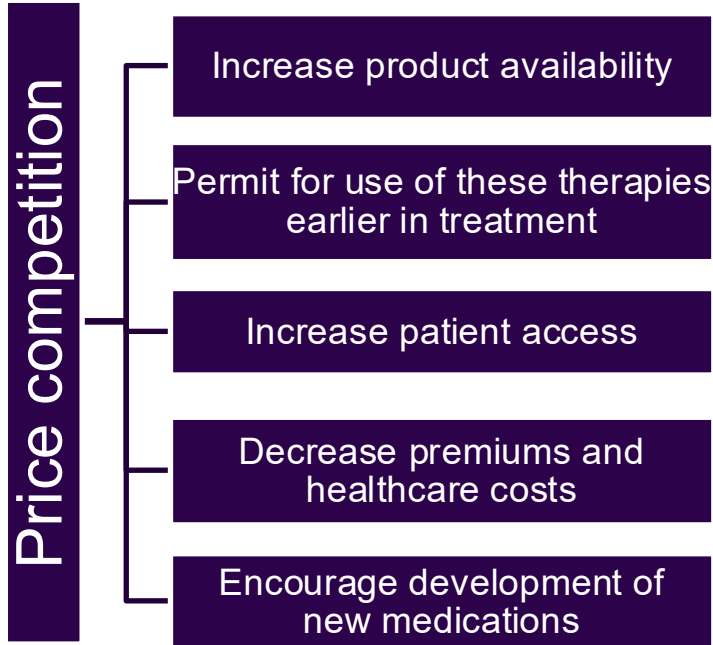
- Annual cost of IBD in US: \$50 billion, direct medical costs \$14.6-31.6 billion
- 2021 mean annual direct per person costs in US
 - Crohn's disease \$12,000
 - UC \$9000
- Challenges
 - Increased incidence/prevalence of IBD worldwide
 - Early implementation of advanced therapies is recommended by guidelines
- Advanced therapies increase direct costs... (initially)
 - Costs to develop biologic \approx \$390 million
 - Social determinants of health: Limit access to more higher cost agents \rightarrow delayed initiation of recommended therapies, greater healthcare utilization

UC = ulcerative colitis.

Burisch J, et al. *Clin Gastroenterol Hepatol.* 2025;23(3):386-395. Lexchin J. *JAMA Netw Open.* 2020;3(4):e204753.



The Case for Biosimilars: Costs Limit Access to Biologics



- 2021 – US spent \$260 billion on biologics across all disease states (46% of pharmaceutical drug spending)
- **Biosimilars – \$2.2 billion in total savings among patients with IBD**
- **Infliximab biosimilars → \$260-842 million** in savings to US health system during first 5 years of market availability
- **Infliximab biosimilars – decreased costs of originator infusion by 53%**

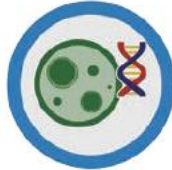


Biosimilars: FDA Definitions and Requirements

- A biological product that is **HIGHLY similar** to the reference product with only **MINOR** differences in **clinically inactive** components
- No **CLINICALLY MEANINGFUL DIFFERENCE** between the biological product and the reference product in terms of
 - Safety
 - Purity
 - Potency



Large and generally complex molecules



Produced from living organisms



Carefully monitored to ensure consistent quality



Purity



Molecular structure



Bioactivity

The data from these comparisons must show that the biosimilar is highly similar to the reference product.

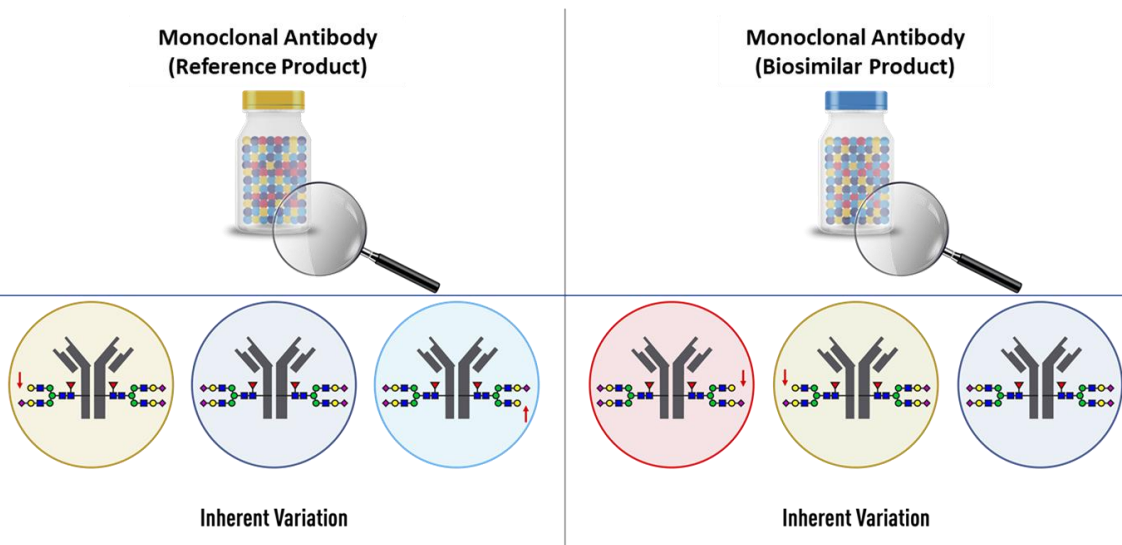
REFERENCE product = the “name brand” biologic

Biologics Have Inherent Variability

- As part of the manufacturing process, different lots of biological products contain millions of slightly different versions of the same protein or antibody, called **LOT-TO-LOT VARIATION**

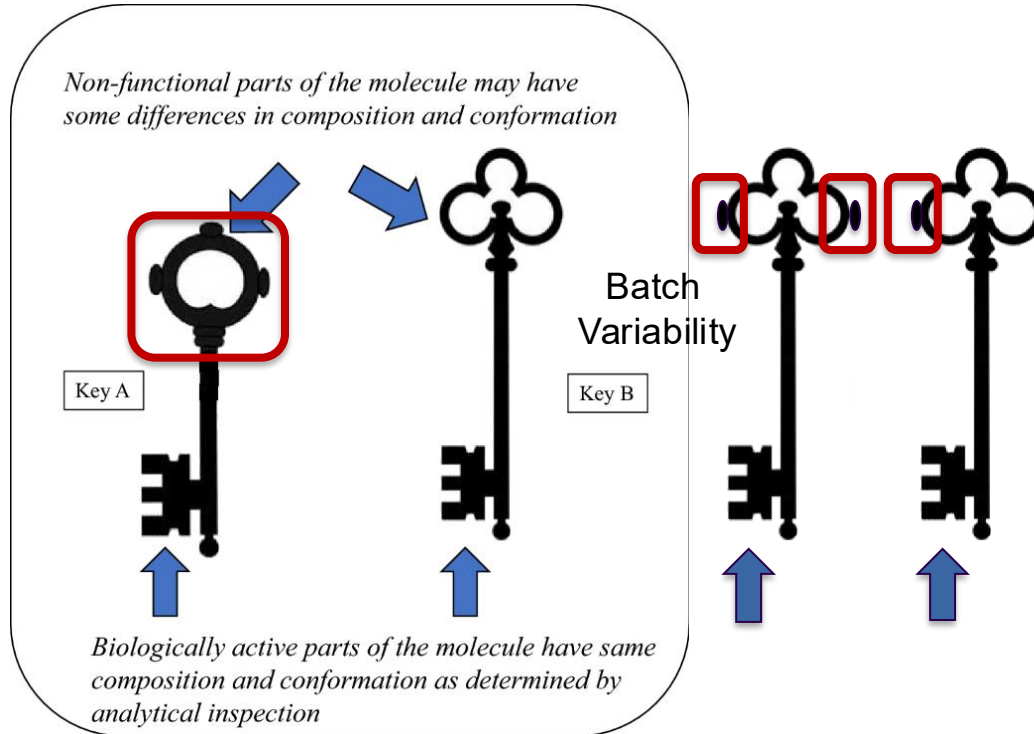
Expanded view: Biosimilars are highly similar to the reference product.

Close-up view: Inherent variations exist in both reference products and biosimilars, but studies are conducted to confirm that they do not lead to clinically meaningful differences.



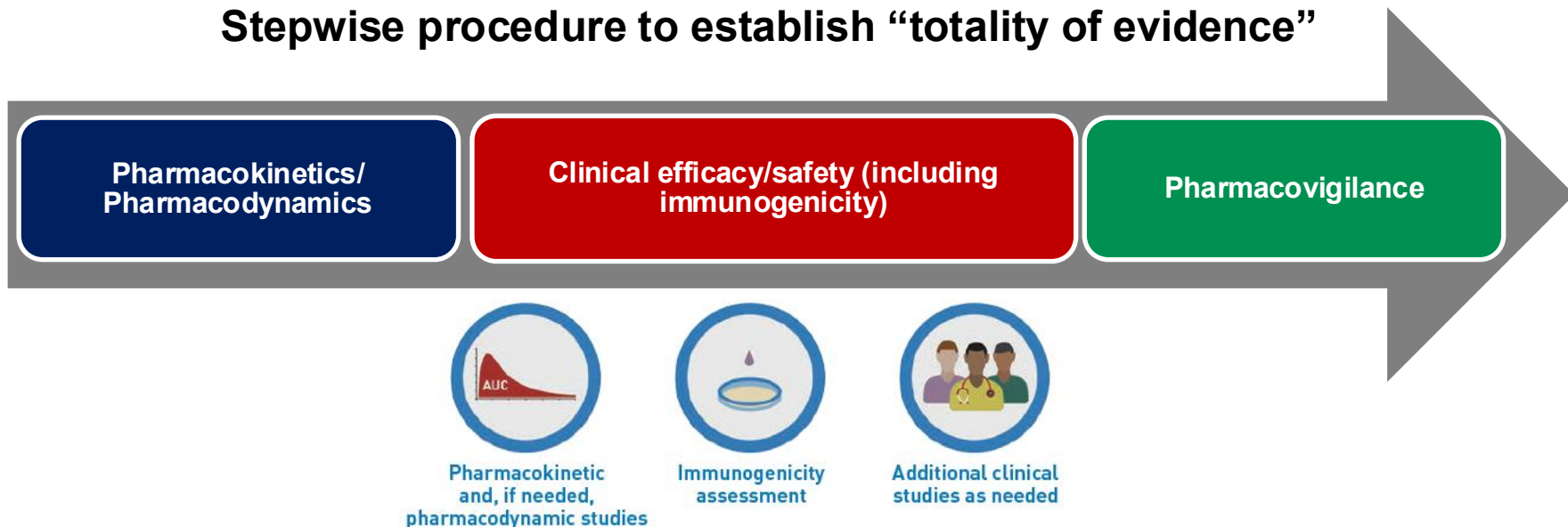
No evidence that these changes lead to differences in clinical practice

Basics of Biosimilars: Common Misconceptions



General Principles to Demonstrate Biosimilarity for Indication Extrapolation: “Totality of Evidence” Is Evaluated

Stepwise procedure to establish “totality of evidence”



FDA. Accessed Nov 17, 2025. <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/scientific-considerations-demonstrating-biosimilarity-reference-product>. European Medicines Agency (EMA). Accessed Nov 17, 2025. https://www.ema.europa.eu/en/documents/scientific-guideline/guideline-similar-biological-medicinal-products-containing-biotechnology-derived-proteins-active-substance-non-clinical-and-clinical-issues-revision-1_en.pdf.

Key Learning Points



- All biologic agents have variability from "batch to batch"
- Biosimilars are an inherent part of the IBD treatment landscape
- Biosimilars do not represent a new mechanism of action
- Unlike generics, biosimilars undergo a rigorous process mandated by the FDA to confer highly similar effectiveness, safety, immunogenicity and required longitudinal monitoring

From Policy to Practice:

Navigating the Evolving Biosimilar Landscape

A microscopic view of biological cells, showing various structures and membranes in shades of blue and teal, serving as a background for the title.

Barriers to Market Entry and Patient Access

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Associate Director

University of Chicago Medicine Inflammatory Bowel Disease Center

Disclosures

- **David Choi, PharmD, BCACP:** Speaker's bureau – Janssen, Abbvie, Eli Lilly; consultant – Bristol Myers Squibb, Boehringer Ingelheim, Abbvie, Eli Lilly, Janssen, Pfizer

US Biosimilar Approval Process

- Abbreviated Approval Pathway (The Biologics Price Competition and Innovation Act of 2009) – totality of evidence
 - Analytical studies
 - Provide data to support the structural and functional similarity
 - Nonclinical
 - Animal studies
 - Provide toxicology or pharmacology information
 - Clinic studies
 - Comparative pharmacology studies demonstrates similar pharmacokinetics and effects
 - Comparative clinical studies (does not have to be done for every disease state)



UK Biosimilar Approval Process

- Committee for Medicinal Products for Human Use Guidelines
 - Comprehensive physiochemical and biologic characterization
 - Pivotal comparative pharmacokinetic study
 - Confirmatory efficacy trial (not always necessary)
 - Justification should be provided that comparable efficacy/safety can be derived from comparable binding properties and functional characteristics
 - The dose, frequency, and route of administration must be the same but deviations are possible (strength), pharmaceutical form, formulation, excipients, or presentation with additional data
 - Once approved a biosimilar is considered interchangeable

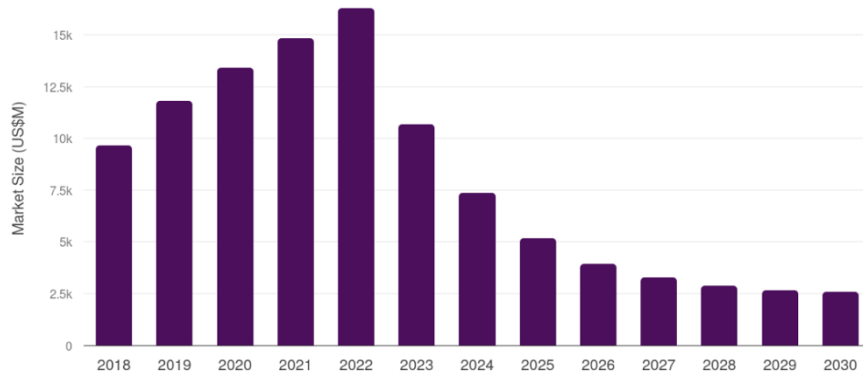
Comprehensive
physiochemical and
biologic characterization

Pivotal comparative
pharmacokinetic
study

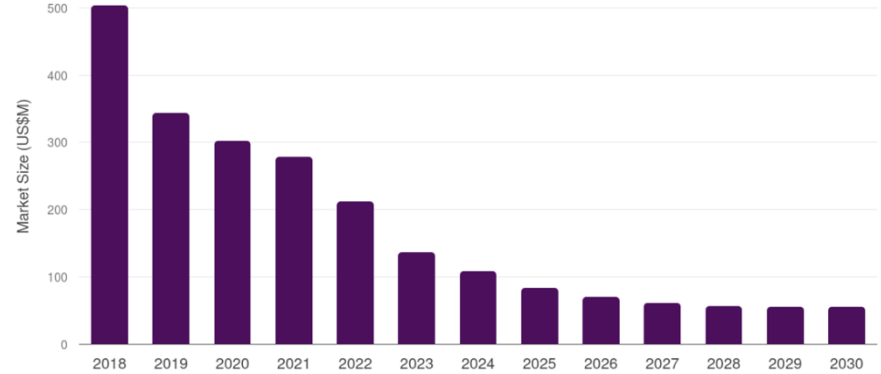
Confirmatory
efficacy trial
(optional)

Market Access to Biosimilars (Patent Litigation)

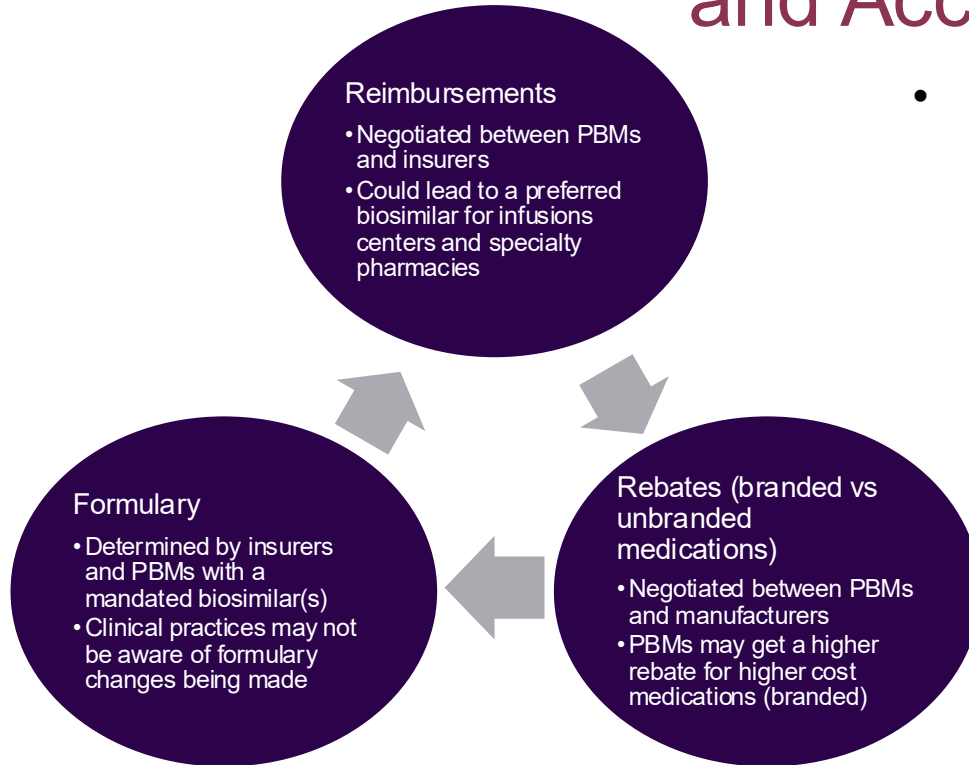
US Type: Adalimumab Market, 2018-2030



UK Type: Adalimumab Market, 2018-2030



The PBM Story: How PBM Decisions Impact Cost and Access



- Unknown
 - Safety of multiple biosimilars switches
 - Follow the money: Cost savings to employers and patients vs profit for insurance companies... who is saving money?

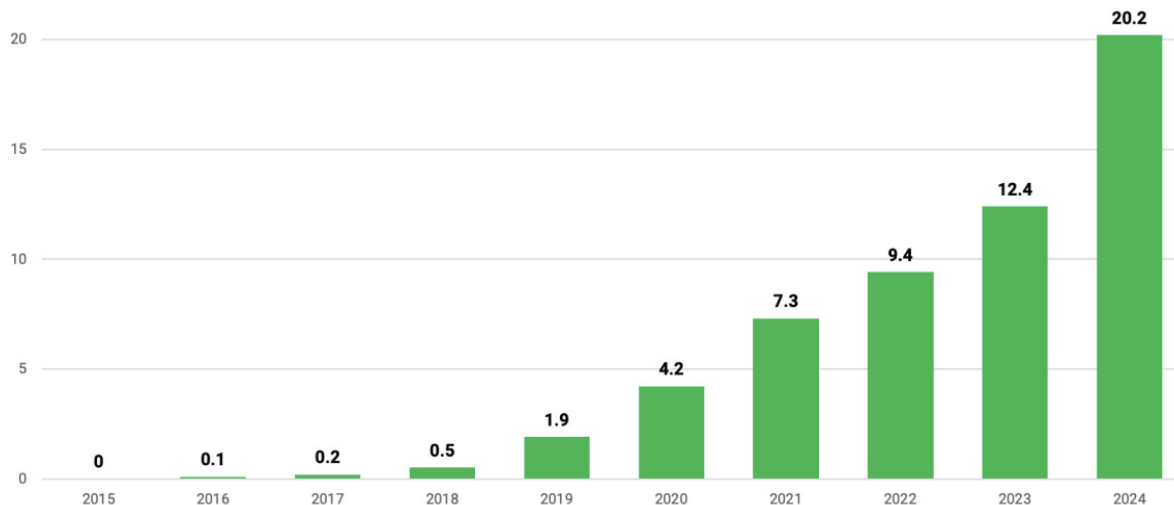
PBM = payer and pharmacy benefit manager.

Jeremias S. Accessed Nov 17, 2025. <https://www.centerforbiosimilars.com/view/breaking-down-biosimilar-barriers-payer-and-pbm-policies>.

Biosimilars Have Generated \$56.2 Billion in Savings Since 2015

Savings Reflect Provider Confidence and Robust Price Competition

Biosimilars Generated \$20.2 Billion in Savings in 2024



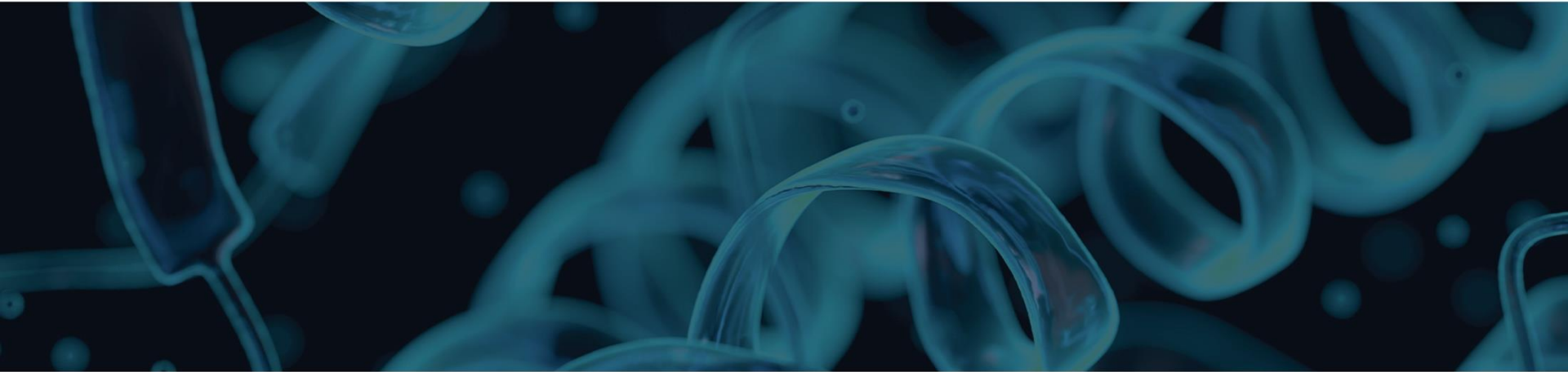
Source: IQVIA National Prescription Audit, December 2024; IQVIA Institute, June 2025.

US Dept of Health and Human Services. Accessed Nov 17, 2025. <https://www.hhs.gov/press-room/fact-sheet-bringing-lower-cost-biosimilar-drugs-to-american-patients.html>. AAM. Accessed Nov 17, 2025. <https://accessiblemeds.org/wp-content/uploads/2025/09/AAM-2025-Generic-Biosimilar-Medicines-Savings-Report-WEB.pdf>.



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Melissa L Posner Institute for Digestive Health & Liver Disease at Mercy Medical Center

Disclosures

- **Raymond K. Cross, MD, MS:** Advisory board/consulting – AbbVie, Bristol Myers Squibb, Genentech, Magellan Health, Option Care, Pfizer, Samsung Bioepis, Sandoz; speaker's bureau – AbbVie, Celltrion, Bristol Myers Squibb, Janssen, Pfizer; Executive Committee Member – IBD Education Group; scientific co-director – CorEvitas Registry; DSMB – Gilead; Research Grants – Janssen, Takeda

Case 1

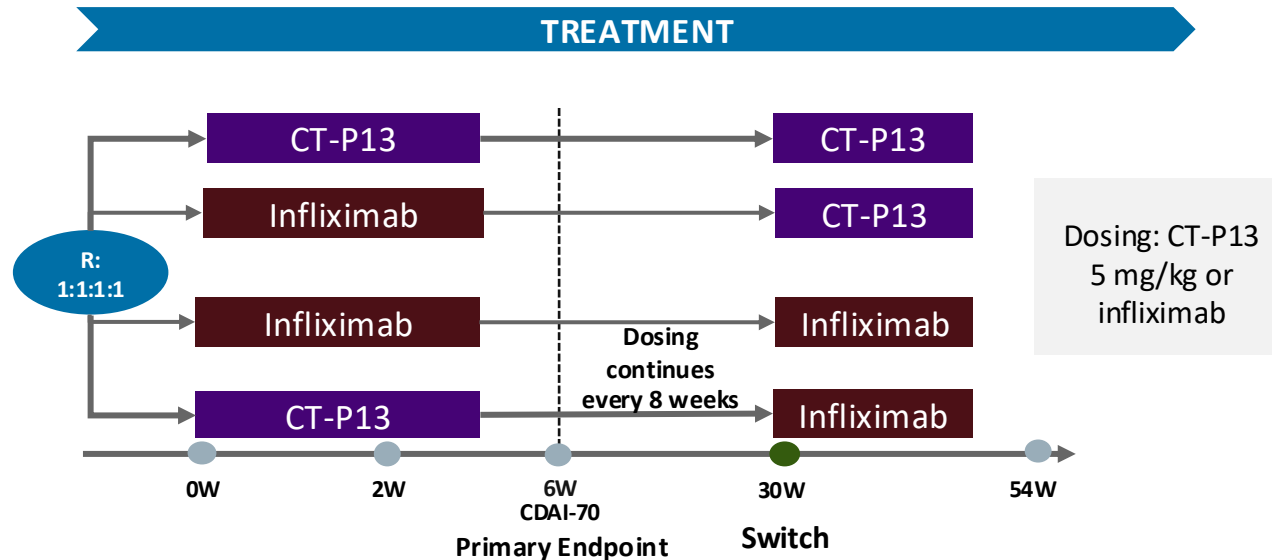
- 28-year-old woman with ulcerative colitis doing well on infliximab (reference product) with no changes needed during routine follow up. However, she recently called your office with concerns because of a letter from her insurance provider informing her that they will no longer cover the infliximab biologic and instead switch to a biosimilar

Discussion

- How do you and your staff explain the concept of biosimilars to patients?
- What areas do you focus on in the transition from reference product or biosimilar to a biosimilar or different biosimilar?
- Do you obtain any specific diagnostic testing after the change from one product to another?

CT-P13 in Biologic-Naive Patients with Active CD: Randomized, Double-Blind, Phase 3 Non-Inferiority Study

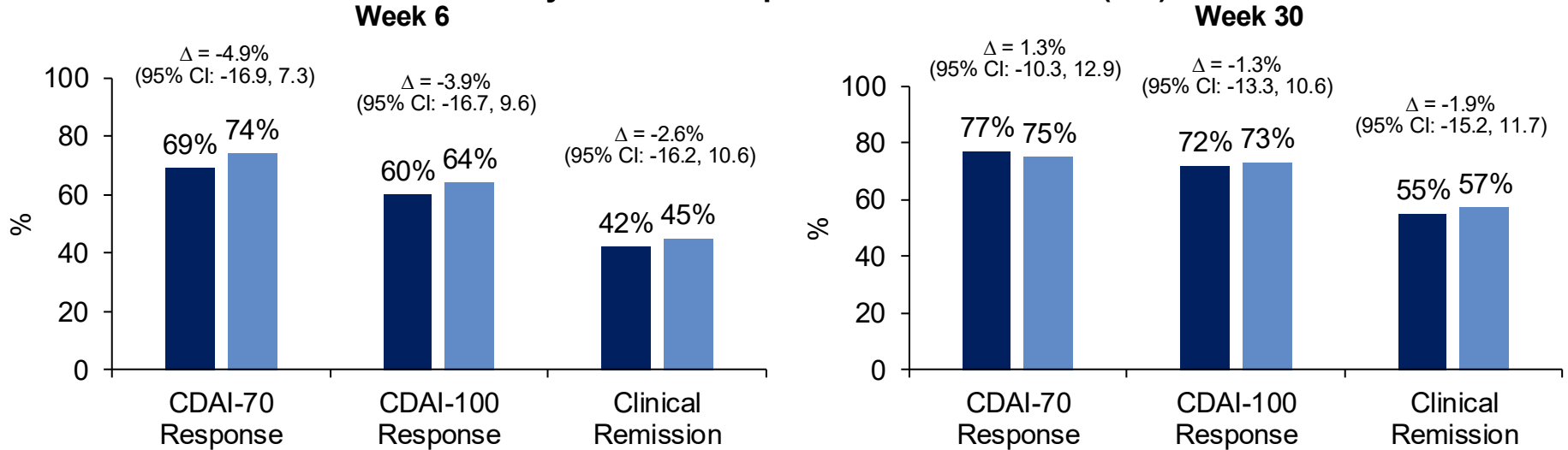
- Double-blind RCT to assess non-inferiority of infliximab biosimilar CT-P13 compared with infliximab (N = 220)
- All patients were bio-naive with symptomatic CD



CD = Crohn's disease; RCT = randomized controlled trial; W = weeks.
Ye BD, et al. *Lancet*. 2019;393(10182):1699-1707.

CT-P13 in Biologic-Naive Patients with Active CD: Randomized, Double-Blind, Phase 3 Non-Inferiority Study

Efficacy: Clinical Response and Remission (ITT)



- No difference in CRP at week 6 and later
- No difference in AEs
- No difference in PK/PD findings

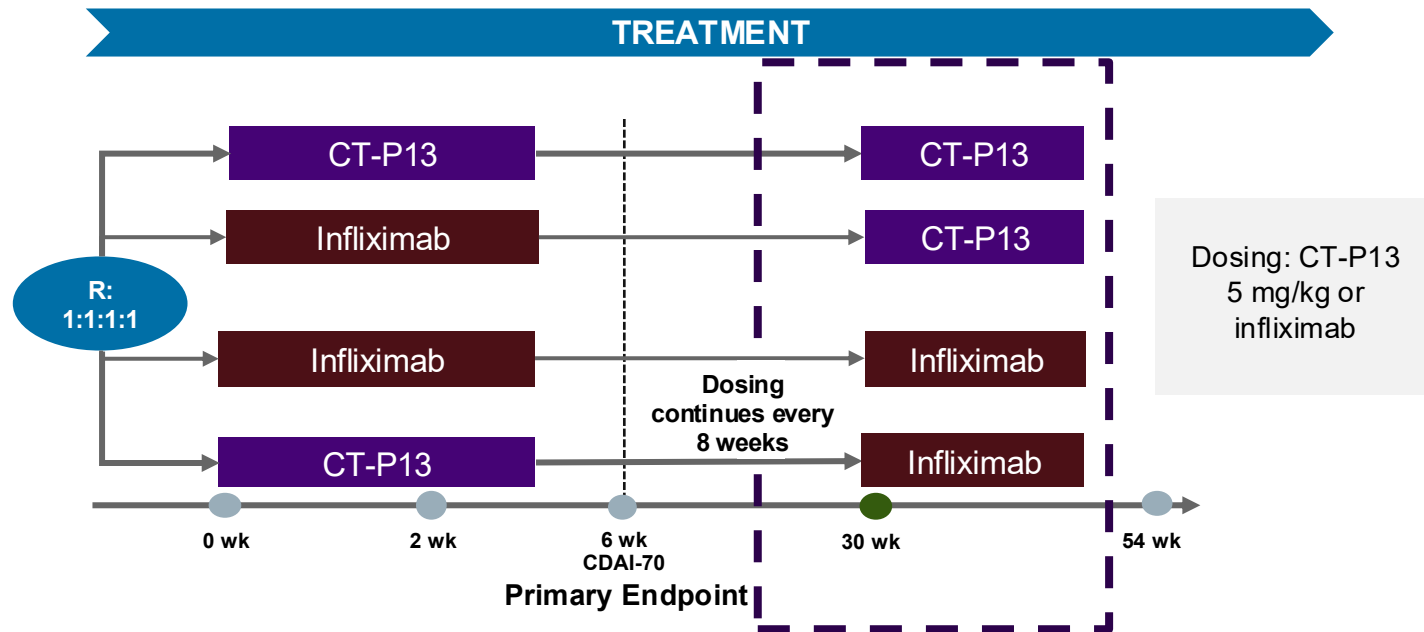
■ CT-P13 ■ Infliximab

CRP = c-reactive protein; AE = adverse event; PK = pharmacokinetics; PD = pharmacodynamics; ITT = intention to treat; CDAI = Crohn's Disease Activity Index.

Ye BD, et al. *Lancet*. 2019;393(10182):1699-1707.

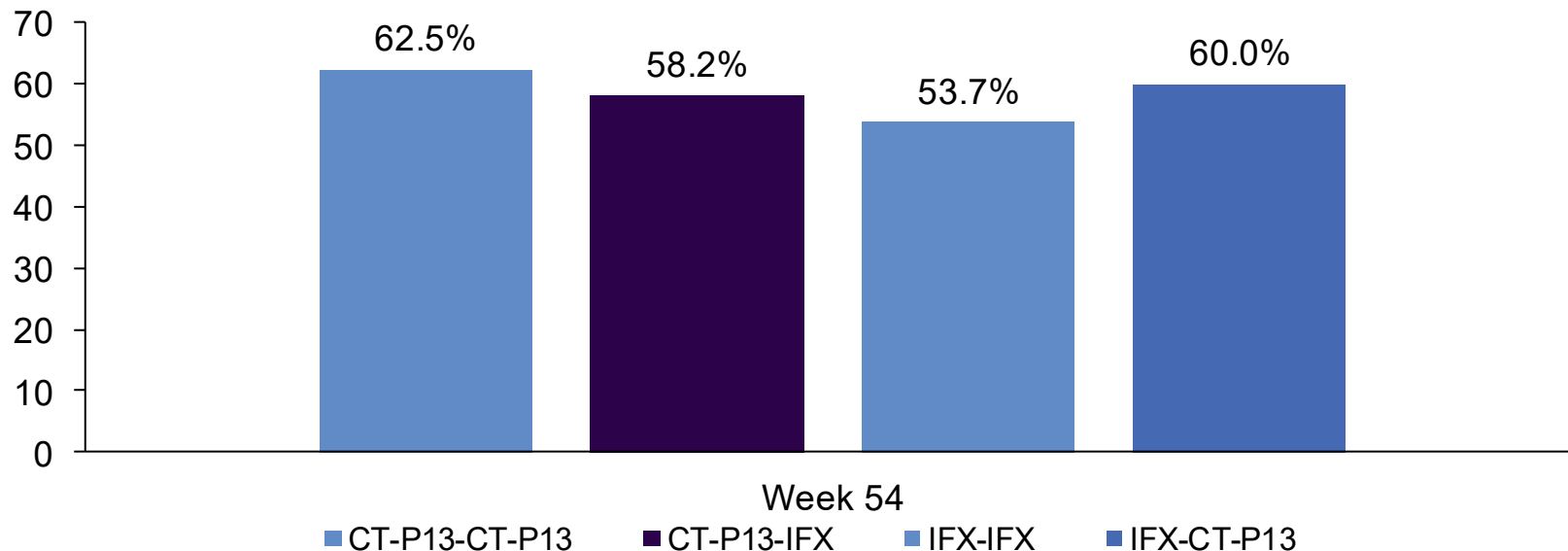


Infliximab and CT-P13 in Biologic-Naive Patients with Active CD: Switch at Week 30



Infliximab and CT-P13 in Biologic-Naive Patients with Active CD: Clinical Remission at 54 Weeks

Proportion of Patients in Clinical Remission (%)

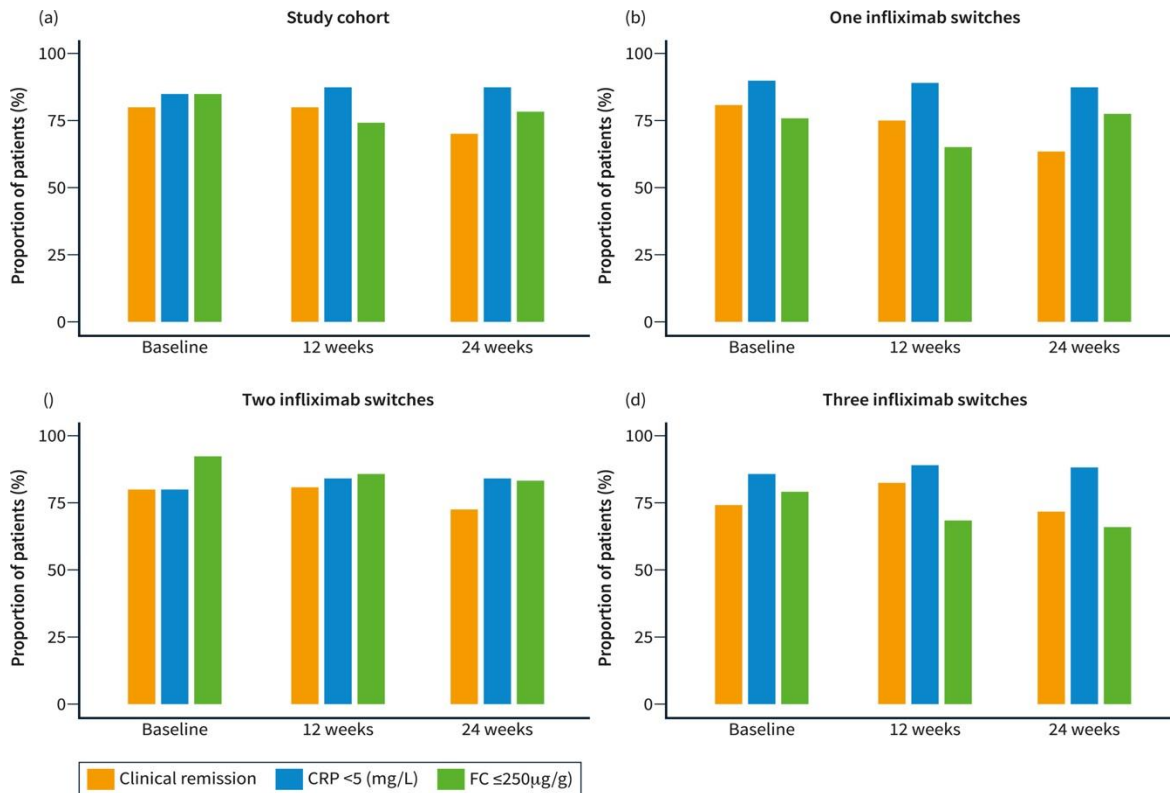


After switching, no new or unexpected treatment-emergent serious AEs were identified

IFX = infliximab.

Ye BD, et al. *Lancet*. 2019;393(10182):1699-1707.

What's the Evidence for Multiple Switches?



- 297 pts (196 CD, 101 UC) switched to CT-P13
 - 3rd switch – 22.5%
 - 2nd switch – 46.5%
 - 1st switch – 31.0%

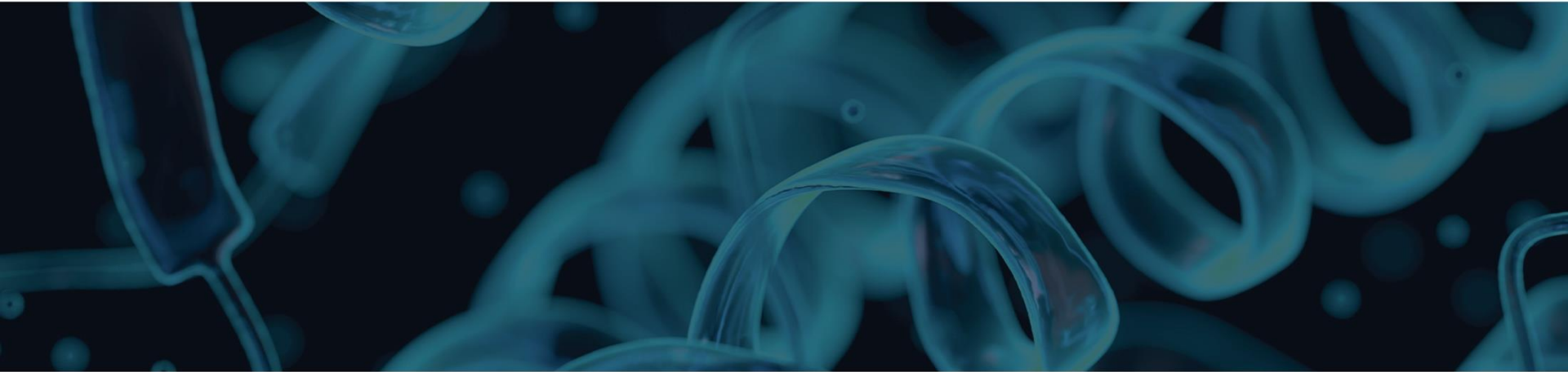
Key Learning Points



- High quality evidence exists that switching from a reference product to a biosimilar is **safe without loss of efficacy**
 - Also appears that multiple switches are well tolerated
- Important to develop a dialogue or script for discussions with patients
 - Biosimilars are not generics
 - Reference products are biosimilars of themselves
 - Educate colleagues, infusion nurses, and office staff
 - **Emphasize delays in transition can result in relapses of disease**
 - Remind patients to sign up for co-pay programs
- Appropriate and timely counseling can **prevent the nocebo effect**

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Case 2

- 45-year-old male with Crohn's disease is recommended to start advanced therapy. Following guideline-based treatment selection and shared decision-making, adalimumab is recommended. However, his insurance would prefer to start the patient on an adalimumab biosimilar

Discussion

- Is a biosimilar appropriate in this case scenario?
- What strategies can we utilize to educate the patient and care team about biosimilars?
- What is the current FDA guidance regarding interchangeability for biosimilars?

Positioning Biosimilars within IBD Treatment Paradigms

- Same positioning as reference products for treatment-naive patients
- If clinically significant antibodies present to reference product do not use the biosimilar
- If primary non-response to reference product, then would not use the biosimilar
- If drug holiday (+ history of response), could use biosimilar in re-challenge
- Combination therapy with thiopurine or MTX still recommended in the right clinical context

2025 FDA Guidance on Biosimilars Development → Comparative Analytical vs Comparative Effectiveness Studies

If **comparative analytical data PLUS demonstration of similar pharmacokinetics and immunogenicity in human clinical studies** → **comparative effectiveness studies in humans may not be necessary**

- "Eliminating unnecessary clinical trials – using improved analytical testing methods instead of requiring expensive human studies when the science shows they're not needed."
- "Facilitating pharmacy-level substitution – removing barriers by advancing interchangeability so pharmacists can substitute lower-cost biosimilars, just like they do with generic drugs."
- "Reducing red tape to lower the barriers to market entry – providing clearer guidance and more efficient processes to speed up approvals and reduce development uncertainty."

Key Terms Associated with Prescribing Biosimilars

- **Medical switching** → Medication exchanged for another at a prescriber's discretion to optimize a patient's benefit
 - eg. → changing from citrate containing adalimumab to citrate free adalimumab
 - eg. → changing from certolizumab pegol self-injectable syringe to certolizumab lyophilized injection due to latex allergy
- **Non-medical switching** → clinically stable patient, on effective and well tolerated biologic agent is switched to another therapeutic alternative
 - Typically, under directive of healthcare plans or system
 - Biosimilar switches are typically non-medical switches

Key Terms Associated with Prescribing Biosimilars



Transition (Switching)

- **Physician prescribes a biosimilar** in place of the US FDA-approved reference biological product



Interchangeability

- **Same clinical result can be expected**
- Risks of use of the biosimilar are not greater
- Interchangeability is determined by **regulatory/legal authorities** based on totality of evidence presented



Automatic Substitution

- **Pharmacist dispenses interchangeable biosimilar** in place of reference biological product, unless prohibited by the prescriber

FDA-Approved Biosimilars

Anti-TNF		Anti-IL 12/23
Infliximab	Adalimumab	Ustekinumab
<i>Infliximab (unbranded)</i> Infliximab-dyyb (Inflectra [®]) Infliximab-abda (Renflexis [®]) Infliximab-axxq (Avsola [®]) Infliximab-qbtx (Ixifi [®]) Infliximab-dyyb (Zymfentra [®]) (SQ)	Adalimumab-atto (Amjevita [®]) Adalimumab-bwwd (Hadlima [®])* Adalimumab-adbm (Cyltezo [®])* Adalimumab-aqvh (Yusimry [®]) Adalimumab-fkjp (Hulio [®])* Adalimumab-adaz (Hyrimoz [®])* Adalimumab-afzb (Abrilada [®])* Adalimumab-aacf (Idacio [®]) Adalimumab-aaty (Yuflyma [®])* Adalimumab-ryvk (Simlandi [®])*	Ustekinumab-auub (Wezlana [®])* Ustekinumab-aekn (Selarsdi [®])* Ustekinumab-ttwe (Pyzchiva [®])* Ustekinumab-aauz (Otulfi [®])* Ustekinumab-srlf (Imuldosa [®]) Ustekinumab-hmny (Starjemza [®])* Ustekinumab-kfce (Yesintek [®])* Ustekinumab-stba (Steqeyma [®])*

*Indicates interchangeable status. Vedolizumab biosimilar anticipated timeline 2028-32 (Phase 3 studies underway); golimumab biosimilar anticipated 2025-27.

TNF = tumor necrosis factor; IL = interleukin; SQ = subcutaneous.

FDA. Accessed Nov 17, 2025. <https://www.fda.gov/drugs/biosimilars/biosimilar-product-information>.




2024 FDA Draft Guidance on Biosimilar Interchangeability

If **comparative analytical data plus clinical data** demonstrate the standards per the FDA → “Interchangeability is **NOT** greater risk than continuation of the reference product”, then an additional switch study is **not** required

- Switch studies between reference and biosimilars consistently show no meaningful differences in key outcomes of effectiveness, safety and pharmacokinetics
- Current analytical technologies can characterize the biologic proteins and model functional effects with high degrees of sensitivity and specificity using **in vitro assays**

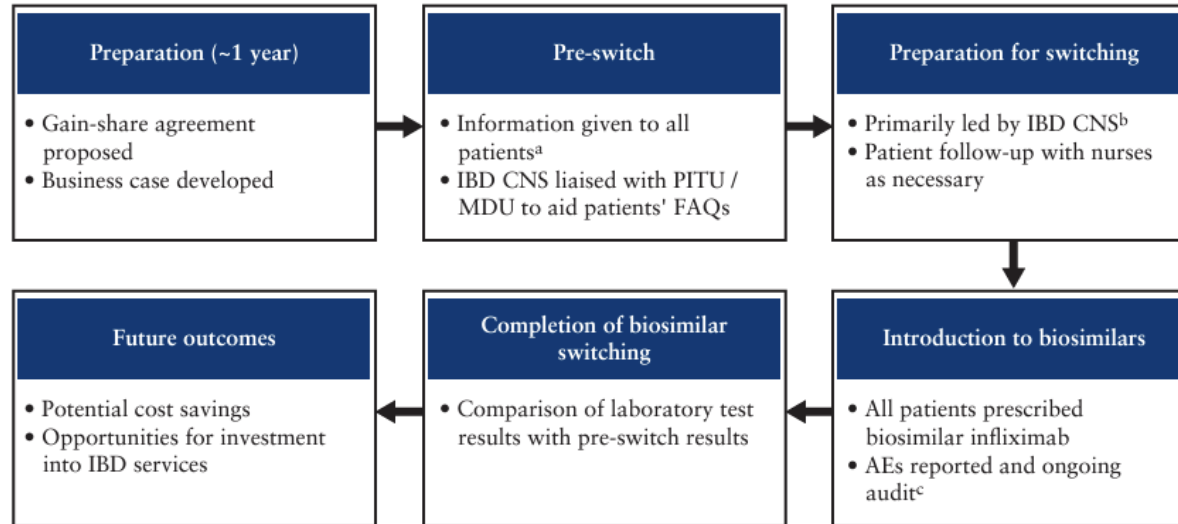
2025 Centers for Medicare Services Update for Biosimilars

- All biosimilars may be substituted as formulary maintenance changes without prior approval
 - New interchangeable biological products may be immediately substituted
- 
- Goal: To provide access to more affordable advanced therapy options earlier
 - Note: Part D automatic substitutions may occur immediately → patients may be notified after the change is made

Addressing Clinician Knowledge Gaps about Biosimilars

- Addressing these knowledge gaps requires
 - Continuing medical education programs
 - Providing clinicians with updated information on biosimilar development, regulatory frameworks, and clinical evidence
 - Collaboration with pharmacists
 - Utilizing the expertise of pharmacists who are often deeply knowledgeable about biosimilars and can provide guidance on appropriate selection and switching strategies
 - Access to reliable data sources
 - Encouraging clinicians to consult credible scientific literature and databases to stay informed about the latest research on biosimilars

Allied Health Teams Are Key When Starting or Transitioning Patients with IBD to Biosimilars



Nurses are integral at all points

- Developing patient letter / information pack
- Liaison with infusion day unit
- Prescribing biosimilar medication if qualified
- Acting as a patient liaison
- Constant point of contact / source of knowledge
- Responsibility for ongoing auditing

How to Approach Biosimilars with Patients

- **Education**

- Use the active ingredient name, not the brand name
- Define a biosimilar, clarify the reason for biosimilar use, review practical implications
- Resources
 - www.FDA.gov/biosimilars
 - www.crohnscolitisfoundation.org

- **Reassurance**

- Safe, effective
- No change in treatment targets
- Same drug assays

Biosimilars may provide patients with **more access** to important treatments and an opportunity to **save money**.

More options

Lower costs

Biosimilars are approved by FDA after a **careful review** of data, studies, and tests conducted by companies.

FDA monitors the **safety** and **effectiveness** of all medications after their approval.

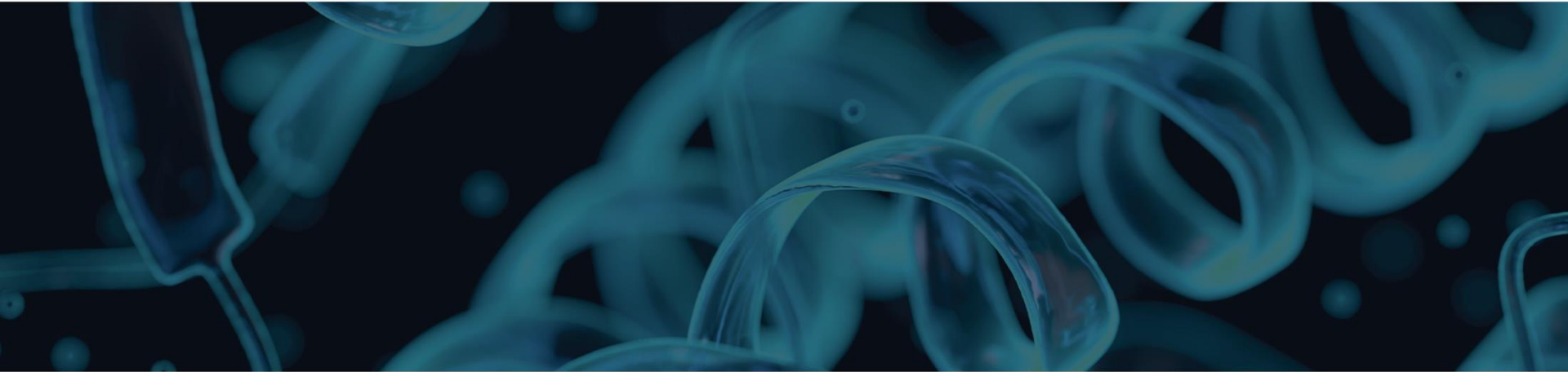
Check for medication quality during production

Review patient safety reports

The infographic features four circular icons: a medical drip chamber and syringe, a bar chart with a downward arrow, a magnifying glass over a pill bottle with a checkmark, and a pie chart on a monitor.

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David Choi, PharmD, BCACP, FCCF

Associate Director

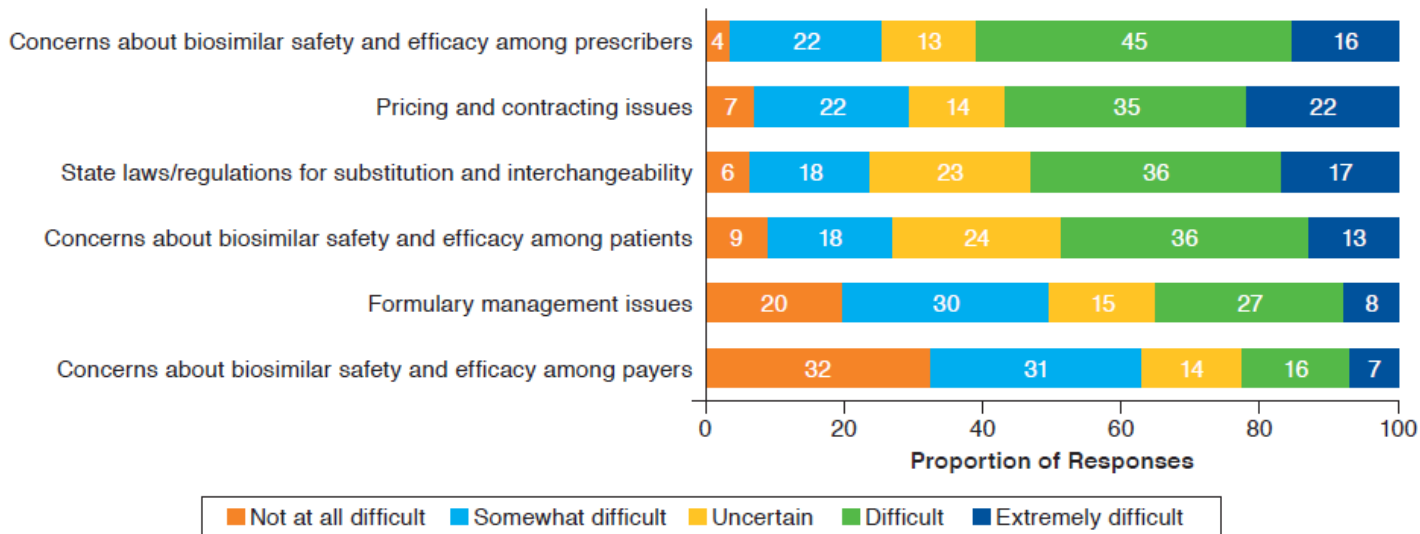
University of Chicago Medicine Inflammatory Bowel Disease Center

Case 3

- A 68-year-old Medicare beneficiary with well-controlled CD on originator adalimumab recently received notice of an upcoming switch to a biosimilar product mandated by her plan
- Current therapy: Adalimumab 40 mg every 7 days
- Labs: CRP <5 mg/dL, FCP 76 mcg/g
- Last colonoscopy 3 months ago: Endoscopic remission
- The pharmacy must navigate this transition carefully, addressing any patient concerns, coordinating with the prescriber, and ensuring timely access to the new therapy

Barriers to Adopting Biosimilars: Survey of Managed Care and Specialty Pharmacy Professionals

Ratings of Difficulty in Overcoming Designated Barriers to Biosimilar Adoption



Note: The barriers are ordered by the highest to lowest percentages of pooled ratings of difficult and extremely difficult.

Communication

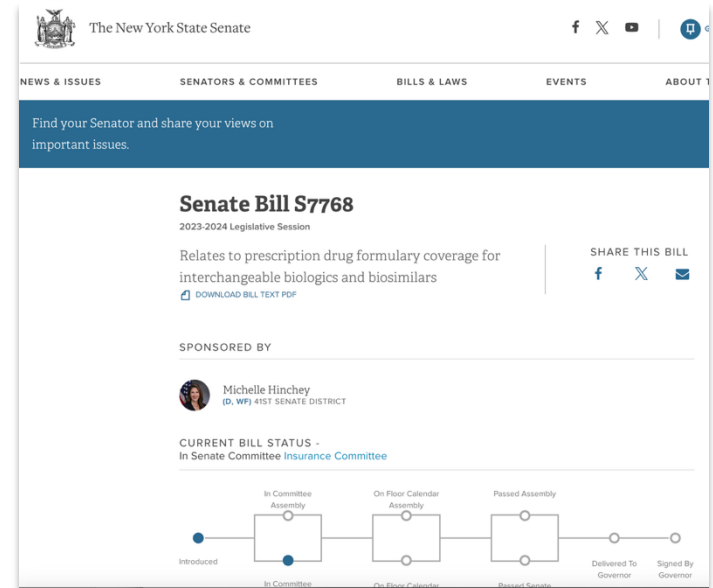


Medicare: Maintenance Changes

- Medicare Part D plans can switch patients from a reference biologic to a biosimilar
- Beneficiaries should be notified 30 day prior to switch
- Can affect all patients (new, continuation of therapy)

Resources to Stay Apprised of Healthcare Coverage Changes that Impact Patient Access

- Manufacturers' websites, sales reps, and medical science liaisons
- Patient organization websites (crohnscolitisfoundation.org, for example)
- State government websites
- FDA.gov



The screenshot displays the New York State Senate website for Senate Bill S7768. The page header includes the state seal and navigation links for NEWS & ISSUES, SENATORS & COMMITTEES, BILLS & LAWS, EVENTS, and ABOUT. A blue banner prompts users to find their Senator and share views. The main content area features the bill title "Senate Bill S7768" for the 2023-2024 Legislative Session, a description of its purpose regarding prescription drug formulary coverage, and social sharing options. It also lists the sponsor, Michelle Hinchey, and provides a current bill status diagram showing the process from introduction to being signed by the Governor.

Senate Bill S7768
2023-2024 Legislative Session

Relates to prescription drug formulary coverage for interchangeable biologics and biosimilars

SHARE THIS BILL

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SPONSORED BY

Michelle Hinchey
ID, WF, 41ST SENATE DISTRICT

CURRENT BILL STATUS -
In Senate Committee [Insurance Committee](#)

Introduced → In Committee → On Floor Calendar → Passed Assembly → Delivered To Governor → Signed By Governor

Key Learning Points



- Increasing number of biosimilars are part of the IBD treatment landscape
- Biosimilars have yielded substantial costs savings to the healthcare system (about \$2.2 billion for patients with IBD)
- Updated process for biosimilar approval may allow for earlier market entry
- Data consistently demonstrates similar effectiveness, pharmacokinetics, immunogenicity, and safety
- Without patient education by knowledgeable clinicians, biosimilar switching may lead to an undesirable nocebo effect, and poor patient acceptance
- Best practices in switching require clinicians to be knowledgeable about the science behind, and clinical evidence for, the safety and efficacy of biosimilars, as well as biosimilar regulations and policies