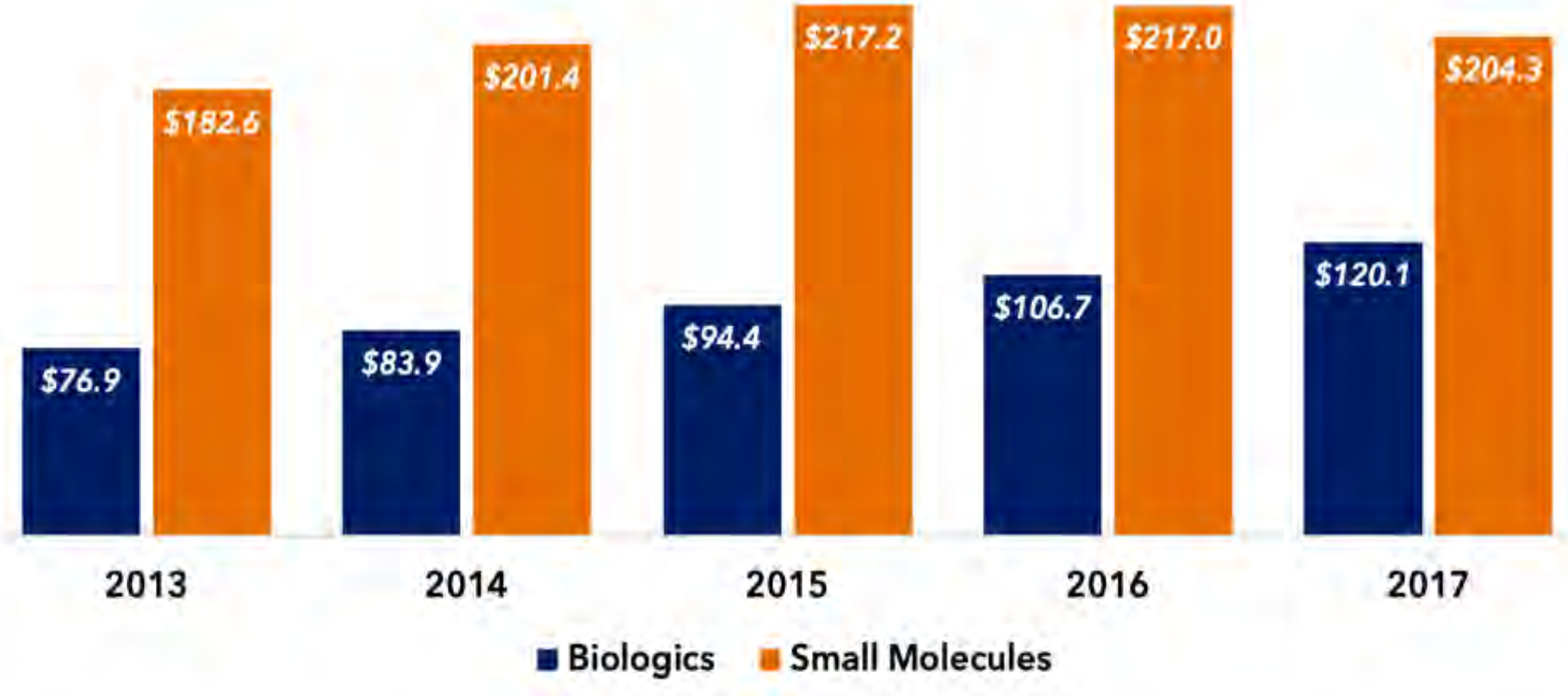
IV. Economic Considerations/Pricing

U.S. Net Drug Spending, Biologics vs. Small Molecules, 2013-2017 ($ Billions)



Source: https://www.forbes.com/sites/theapothecary/2019/03/08/biologic-medicines-the-biggest-driver-of-rising-drug-prices/#4eb0164b1860

Potential Savings to U.S. Market: Cigna/Evernorth Estimate

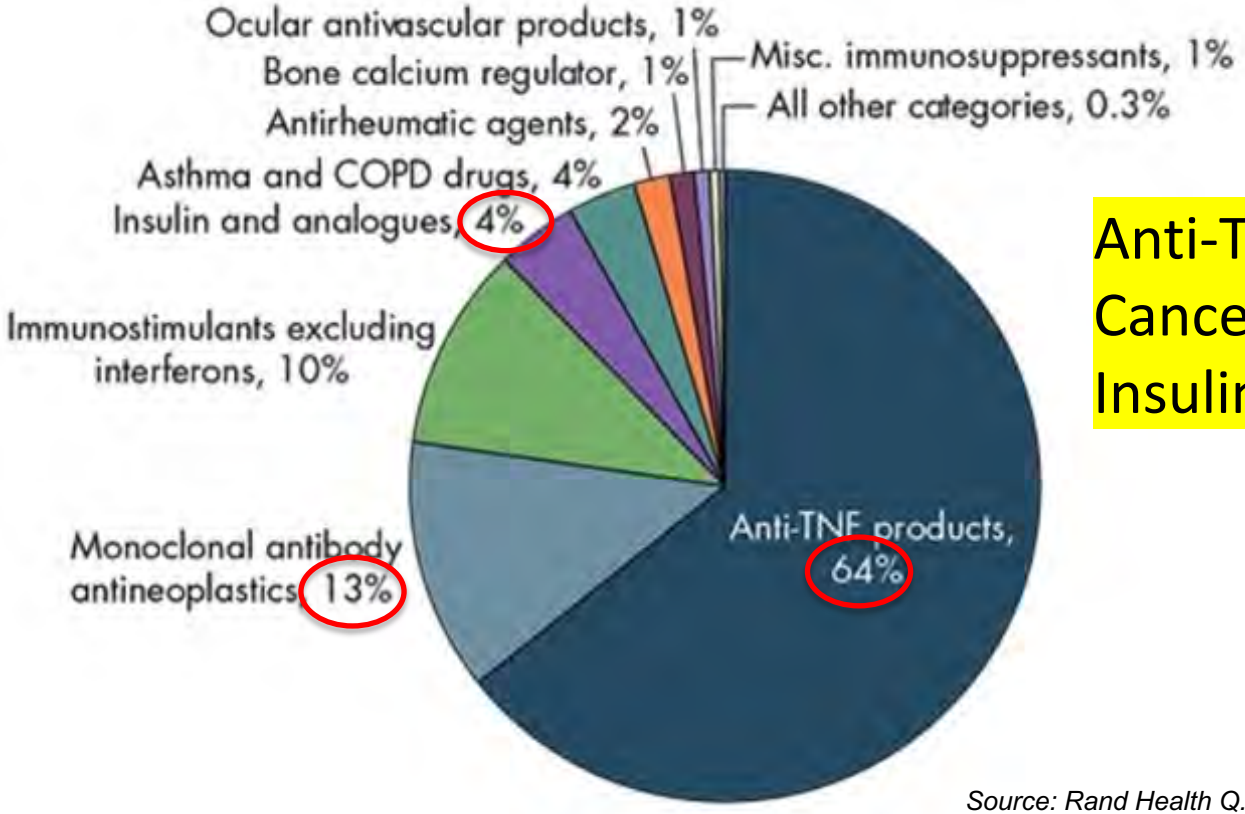
- Biologic drugs now represent ~2% of prescriptions, but ~43% of pharmacy spending in 2019. ($211 billion)
- Cigna subsidiary Evernorth expects growing biosimilar competition **to save $225 - $375 billion in pharmacy** spending by 2031.

However, Biosimilar Discounts are Lower than Generic Discounts

- Typically biosimilars in the U.S. have a discount of 15-35% off the price of the reference product.
- By contrast, generic versions of small molecule drugs typically launch with an 80%-90% discount over the originator.
- In Europe, biosimilar discounts can be somewhat higher (30-50%) after **availability of multiple products** drive prices down.

Note: In the case of a sole tender, however, this price competition can favor the originator manufacturer at the expense of biosimilar market (Norway example)

RAND Savings Estimates Vary Widely by Product Category:



Anti-TNF: 64% savings

Cancer MAbs: 13% savings

Insulins: 4%

Source: Rand Health Q. 2018 Mar; 7(4): 3; Published online 2018 Mar 30.

"US Biosimilars Market on Pace With Europe"

- **Generics and Biosimilars Initiative Journal (GaBI Journal). Published in: Volume 9 / Year 2020 / Issue 4**
- **Authors: Madelaine Feldman, MD FACR; Michael S Reilly, Esq,**
- **Analyzed the U.S. Biosimilar market 10 years into its biosimilars pathway.**
- **FDA 28 approved in first 5 years, vs. 11 approved by EMA in its first 5 years.**

COMMENTARY

Biosimilars for Healthcare Professionals

GaBiJournal
Generics and Biosimilars Initiative Journal

A white paper: US biosimilars market on pace with Europe

Madelaine Feldman, MD, FACR; Michael S Reilly, Esq

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Keywords: Biosimilars, competition, FDA, market share, sustainability, US

While many sources claim that Europe is winning the race when it comes to biosimilars, a broader assessment of the landscape reveals a more encouraging story for the United States (US). Although the European Medicines Agency (EMA) pioneered the framework for biosimilar regulation, the US Food and Drug Administration (FDA) is moving at approximately the same pace as EMA based on the number of approvals at the same time after implementation of its regulatory pathway [1].

The biosimilar regulatory framework in Europe was implemented in 2004. With this framework

been approved by FDA, with 18 of those approvals granted in the last 2 years [4]. In the 10-year time period following the creation of Europe's biosimilar regulatory pathway, EMA approved 13 biosimilar products (some of which were marketed under several different brands) [5]. From this perspective, the US appears to be on a faster pace than the EU in terms of biosimilar approvals. Currently, there are 46 biosimilars approved in Europe; however, these estimates fall to 35 when products approved in the US as followon biologicals via the 505(b)(2) pathway, e.g. somatropin, insulin, teriparatide, or abbreviated new drug application (ANDA)

There are currently 9 biosimilar applications under CHMP evaluation, including biosimilar candidates for adalimumab (2), bevacizumab (5), pegfilgrastim (1), and trastuzumab (1) [6]. Unlike the transparency on biosimilar filings in Europe, FDA does not provide information on biosimilar candidates under review until they are approved.

Since the creation of a regulatory approval pathway, numerous guidance documents have been developed by both EMA and FDA to guide manufacturers in their development of biosimilar candidates. At least 10 documents have been released by FDA that provide guidance on scientific and quality considerations in the demonstration of biosimilarity and interchangeability [7]. EMA has published three overarching guidelines and nine product-specific guidelines for biosimilars manufacturers that address both nonclinical and clinical issues as well as quality-related issues [8].

Because EMA pioneered biosimilar regulations, the question has commonly been raised: *To what extent does the European biosimilar experience translate to the US?* Although the US and the EU are on a similar trajectory in terms of the number of biosimilar products approved, these markets differ in several respects. A critical point of divergence between the US and EU biosimilars terrain is the concept of interchangeability. Unique to the US

U.S. Biosimilar Market: A Snapshot

- 29 Approved, 20 on the market.
- In the US, biosimilars have gained significant share in the majority of therapeutic areas in which they have been introduced:
- Average 20% to 25% within the first year of launch, with some projected to reach <50% within the first two years.
- First-to-market biosimilars tend to capture a greater portion of the segment compared to later entrants.
- Filgrastim biosimilars have been on the market the longest at five years and have achieved a 72% share.
- Bevacizumab and trastuzumab biosimilars have approximately 40% share.
- Rituximab and infliximab have had the most limited adoption, with approximately 20% market share.

Price: A Key Factor in Boosting Biosimilar Uptake

As in Europe, as more and more biosimilars launch in a given product class, competition drives prices downward, discounts increase, and biosimilar market share goes up:

- First U.S. filgrastim biosimilar launched with 15% discount over its reference product. Today, with increased competition, its discount has increased to 35% and it has now attained a majority market share (55%).
- First U.S. rituximab biosimilar launched at a 10% discount over its reference product. A few months later the second launched at a larger, 24% discount to compete.
- As it becomes routine to have 3, 4, or 5 biosimilars approved for a reference product we expect this trend- and savings- to continue.

https://www.pacificresearch.org/wp-content/uploads/2019/07/BiosimilarsCompetition_F.pdf
https://pharmaintelligence.informa.com/resources/product-content/teva-debuts-us-rituximab-at-a-10-discount
https://generics.pharmaintelligence.informa.com/GB149550/Pfizers-US-Rituximab-Launched-At-A-24-Discount

Competition Drives Down Prices Overall

Pharmaceutical Strategies Group 2021 Report
August 12, 2021

Analyzed integrated pharmacy and medical claims data for 2020.

- Infliximab biosimilars (3) now 18% of claims
- Originator reduced price 40%

- Pegfilgrastim (4 biosimilars) now 34% of claims
- Originator reduced price 23%

"Biosimilars are putting price pressure on innovator brands and driving savings for payers and plan sponsors"

https://www.psgconsults.com/specialtyreport

But Price Competition Alone Does Not Ensure Access…

- 29 Biosimilars approved in US, but only around 2/3 are on market.
- Despite discounts of 15-33%, biosimilars remain unaffordable without insurance – not on the formulary.
- For 80% of Americans, the top three PBMs determine the formulary & the “preferred list”.
- Choosing a medicine becomes to an extent the question: *“What insurance do you have”?*

How does a PBM or insurer determine which medicine gets the “*preferred placement*” on the formulary?

Manufacturers Compete for the Preferred Formulary Spot…

BUILDING A HOUSE
WINNER= Lowest Bidder

COMPETITION DRIVES PRICES **DOWN**

COMPETITION DRIVES PRICES **UP**

SELLING A HOUSE
WINNER= Highest Bidder

THE US DRUG DISTRIBUTION SYSTEM

- PBMs receive rebates/fees based on a % of the list price of the medicine.
- These price concessions can be over 50% of the list price.
- **<u>This creates a perverse incentive for HIGHER PRICED MEDICINES, not lower, because the HIGHER PRICED MEDICINE can provide the larger rebate fee package.</u>**

Paying Physicians and Patients to Switch: Controversial Ideas to Increase Biosimilar Uptake in the U.S.

Congress: ASP +8% Legislation

Proposes to increase the reimbursement rate for biosimilars, effectively giving physicians a 33% bonus to prescribe biosimilars. Has received pushback from physicians and patient advocacy organizations who feel it undermines the physician-patient relationship and distorts the treatment-decision process.

CIGNA: $500 Debit Card

Health insurer pays patient $500 to switch to a biosimilar. OPPOSED by the American Medical Association and American College of Rheumatology, who support legislation to outlaw this practice.

Domains of Selecting a Medicine

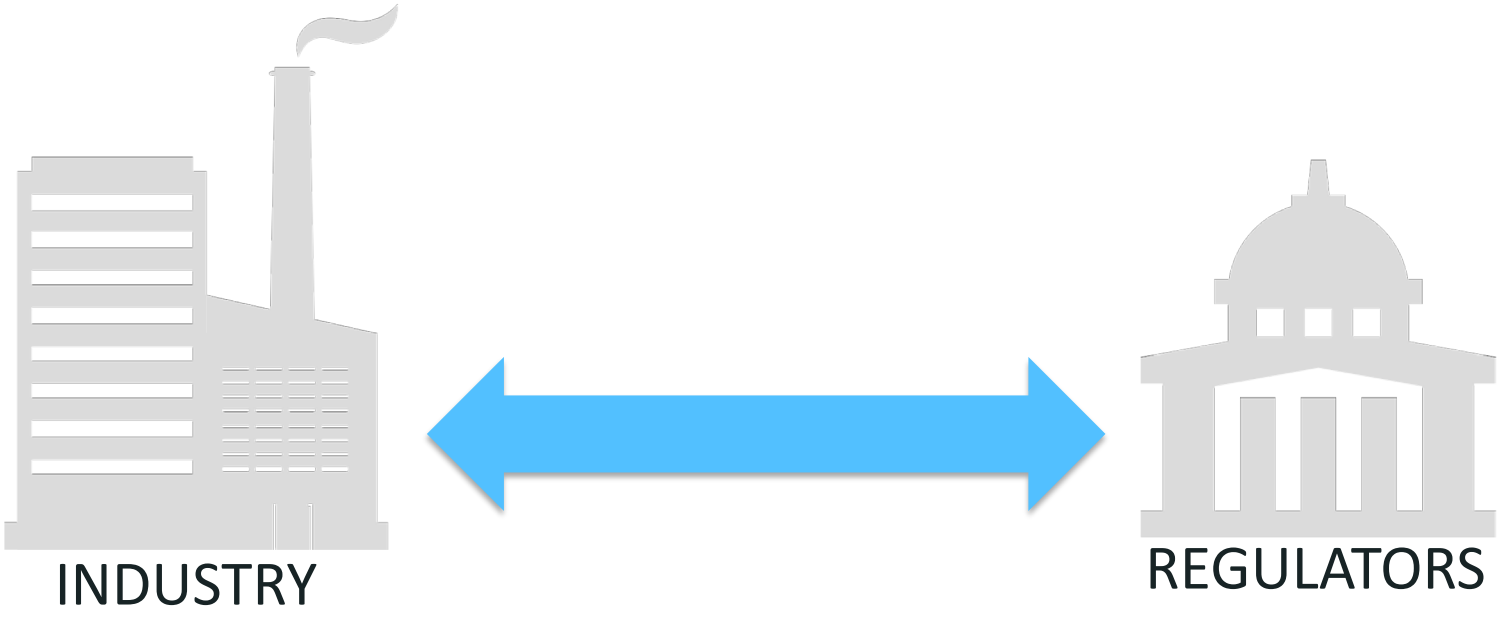
The Role of Health Care Professionals

- There are PATIENT- SPECIFIC SITUATIONS that cannot be competently made for large populations of patients, which is the only approach a REGULATOR can take.
- HEALTH CARE PROFESSIONALS (including prescriber and pharmacists) acting on behalf of their patient can more competently evaluate issues of effectiveness and safety, while duly considering the responsible use of limited resources (i.e., cost).

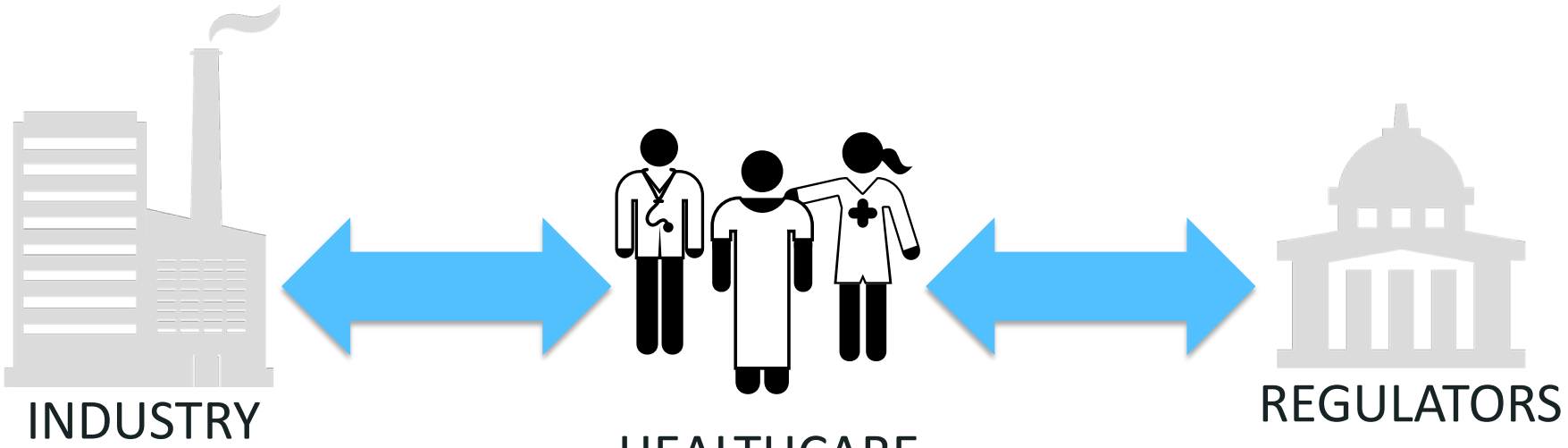
Creating Conditions for a Healthy Biologics and Biosimilars Market:

- **Cost control resulting from <u>competition in the marketplace.</u>**
- **Innovation that requires investment and a return on investment.**

As it stands now, it is a standoff between the industry and regulators, with the healthcare professionals and patients often being left out of the discussion.



A better model might be:



Summary

- Payers are under enormous cost pressures due to the high cost of biologic therapies. Biosimilars are an important tool to control these costs.
- However, it is a fallacy to assume that biosimilars will produce discounts as large as those generated by small molecule generics.
- Since the ultimate goal of uptake is savings, it is unsurprising that price (significant discount relative to reference) correlates with attaining significant market share.
- As more biosimilars appear for a given product, discount % (relative to reference product) tends to increase. This drives down prices overall.
- Nevertheless, price is not the only factor to promoting biosimilar uptake and thus, ensuring savings. These other factors include vary based on country.
- Healthcare providers must act as learned intermediaries and balance patient-specific factors against savings to the health system at large.

SafeBiologics

ALLIANCE *for* SAFE BIOLOGIC MEDICINES

Thank You For Your Attention