**The State of US Biosimilars Market Access:** Payer Perceptions of Past, Present, and Future Hurdles to Adoption

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### Summary

Biosimilars hold the promise of new, cost-saving competition in lucrative US biologics markets, but this promise remains largely unfulfilled. To date, adoption of biosimilars has been hindered by lack of market access due to complex contracting dynamics, regulatory and legal uncertainty, and a general lack of clinical comfort with biosimilars. Current biosimilar acceptance and access are a far cry from the traditional small molecule markets where automatic substitution and payer formularies strongly drive use of generics over branded products.

In this paper, we explore the many hurdles associated with the adoption of biosimilars and discuss payer perceptions of the past, present, and future state of biosimilar market access in the US.

This report is supported by findings from qualitative market research with N=10 medical directors at US payer organizations. This payer sample represents plans covering over 100 million commercial and Medicare lives in the U.S. In 60-minute telephone interviews, we explored historical biosimilar trends, current biosimilar market dynamics, and future market access expectations for biosimilars.

### History of Biosimilars in the US

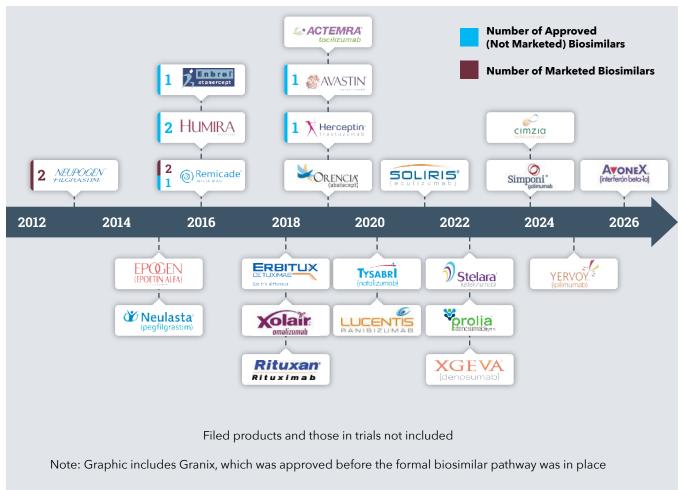
Biosimilars were once expected to disrupt the US biologics markets in a major way, with competition similar to that of small molecule generics and a two-sided value proposition that was to benefit both manufacturers and the US healthcare system at large. From the perspective of biopharma manufacturers, new access to hugely profitable US biologics markets, such as those for anti-tumor necrosis factor therapies, human growth hormone,

interferon, and insulin was attractive due to the relatively high manufacturing barriers, strong pricing potential, and lower biosimilar clinical trial costs.<sup>1,2</sup> A 2009 report in *The Economist* reported on these expectations amongst manufacturers: **"Within a decade, they hope, the market for biosimilars could be as big as the entire generics trade today."**<sup>3</sup> At the same time, biosimilars were expected to reduce system costs, with increased competition driving down prices for payers and patients.

The reality of the past decade of limited commercialization has put these early expectations for the US biosimilars market in question. As of December 1, 2017, there were just nine biosimilars approved by the FDA for use in the US and only four available on the market (Figure 1, next page). These products have had slow uptake, and cost savings in many cases are far below expectations.<sup>4</sup> "There was a lot of hope that biosimilars would have tremendous discounts compared to the innovator product – 30, 40, 50% – so most people in managed care were really looking forward to biosimilars development and implementation. When the first couple of biosimilars came to the market and there wasn't that kind of discount, there was a general disappointment in the whole system."

> - Medical Director, Large Regional Payer





### So what has blocked the biosimilar revolution from being the boon biopharma expected? In this paper we identify three primary explanations:

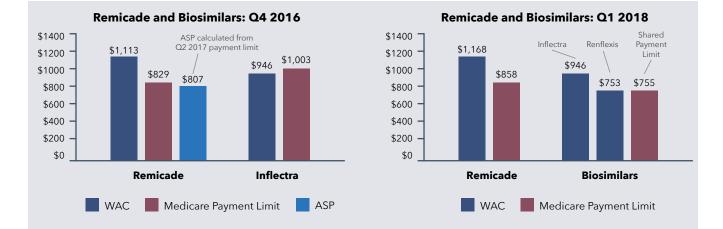
# A. BIOSIMILAR PRICING IS NOT ALWAYS WHAT IT SEEMS

Contracting between drug manufacturers and providers, wholesalers, payers, and PBMs is often complex and rarely transparent. Although a drug's "Cheaper is not as easy a concept as you would think because it comes down to not only list price; it comes down to net price, inclusive of rebates, contractual language, guaranteed price positioning, and formulary placement."

- Medical Director, Large National Payer

wholesale acquisition cost (WAC) - its gross "list price" - is public, its net price to any individual purchasing entity is not. Net prices can include steep discounts off WAC and vary widely between customers.

Take the case of infliximab, a biologic with biosimilar competition already launched in the US market. In this example, Johnson & Johnson (JNJ) sold the innovator branded product, Remicade, at a WAC of \$1,113 in Q4 2016. When Pfizer launched the biosimilar Inflectra at a WAC of \$946 that quarter, many headlines read, "Pfizer to launch Remicade biosimilar... at a 15% discount" (Wall Street Journal, Oct. 2016).<sup>5</sup> However, to compare the true net costs of the two drugs for payers and providers, we must consider average selling price (ASP) instead of WAC. While ASP source information is not directly available to the public, CMS uses manufacturer-provided data to publish a value called the Medicare payment limit for each eligible product on a quarterly basis. This payment limit accounts for blended average discounts to commercial (non-government) customers and is therefore a good proxy for net price once we remove the statutory 6% mark-up and two-quarter delay (for a thorough explanation of reimbursement dynamics and ASP calculation, see our prior publication). Using this back-calculation from payment limit to ASP, the published CMS values reveal that Remicade's net prices were likely even lower than Inflectra's \$946 WAC at the time of Inflectra's launch: Remicade's ASP was \$807 in Q4 2016. In the year since launch, a second biosimilar (Renflexis) has launched and Inflectra's payment limit has dropped along with its ASP so that net costs today are likely more competitive with Remicade's (Figure 2).



#### Figure 2: Pricing Dynamics for Remicade and its Biosimilars, at Inflectra Launch and Today

Payment limits (published quarterly in the CMS ASP file) tend to be noticeably lower than WAC (list price) due to past concessions from the manufacturer. Note that both Remicade biosimilars today have the same payment limit (\$755); this is due to the shared J-code rule for biosimilars that was in place through the end of 2017. This dynamic resulted in Renflexis having a payment limit higher than its WAC.

Medicare payment limits are based on the product's ASP (average selling price) two quarters prior, plus 6%. After the first full quarter on the market, a product's quarterly ASP can be back-calculated from the payment limit published two quarters later. Remicade's ASP, a good proxy for net price, is shown for Q4 2016 (\$807).

As of January 2018

To complicate this comparison further, we must also consider **the so-called "rebate trap,"** an artifact of *performance-based contracting* between manufacturers and payers. Payers receive rebates that increase in magnitude with certain "performance" metrics, such as how much volume or market share a product achieves within a class, for the

contracted payer. In the case of Remicade, JNJ had contracts in place such that if payers encouraged switching away from Remicade to biosimilars, they could lose out on valuable rebates and therefore end up paying significantly more for infliximab in order to try the new biosimilar products.<sup>6</sup> Harkin & Ross (2017) first wrote of this phenomenon in depth,<sup>7</sup> and we have explored it further in prior work.

- "You don't want to poke the Humira or Enbrel bear, because they have such huge market shares. It's not going to be worth it if you lose the discount or the rebate for such a big market share."
- Medical Director, Large National Payer

#### B. INNOVATORS HAVE WAGED LEGAL & PROMOTIONAL WAR

Innovator manufacturers have spent the last decade building deep legal and promotional moats to deter competition from biosimilars. Whereas in traditional small molecule pharma markets innovators typically cease active promotion of their

branded products once generics enter and cede to the competition, **manufacturers have signaled that they are willing to fight to protect their biologic cash cows.** 

Take, for example, the case of Humira, the world's best-selling prescription drug. Innovator AbbVie recently reached a settlement with Amgen, whose biosimilar Amjevita was approved in September 2016 by the FDA, following a costly and prolonged "We don't know what biosimilar acceptance will be in the future: the FDA has not granted any biosimilars interchangeability yet, and ongoing DTC advertising pushes originator products."

- Medical Director, Large National Payer

patent battle. The settlement delayed the US launch of the biosimilar until 2023, extending the exclusivity period of AbbVie's blockbuster drug (which brought in \$10.4 billion in US sales in 2016)<sup>8</sup> and demonstrating the great lengths to which innovators will go to protect their biologic products.

Similar legal disputes have embroiled many other would-be US biosimilars, including Erelzi, Novartis's biosimilar for Amgen's blockbuster Enbrel. The biosimilar was approved in 2016, but launch has been delayed until at least 2018 due to legal action by Amgen.<sup>9</sup> Similarly, Roche settled with Mylan in March 2017 over Mylan's Herceptin biosimilar Ogivri, developed in partnership with Biocon.<sup>10</sup> Although Ogivri won FDA approval in December 2017, the product's actual launch date is dictated by the confidential terms of that settlement. Just before Ogivri's approval, Roche also filed suit against Pfizer over another Herceptin biosimilar.<sup>11</sup> JNJ attempted a similar feat against Remicade's biosimilar Renflexis, although the lawsuit did not prevent the product's launch, and JNJ dropped it within two months.<sup>12</sup>

In addition to waging legal war on biosimilars, innovators are also investing huge sums in direct-toconsumer (DTC) advertising to build patient loyalty for their biologic brands. In 2015 alone, AbbVie spent over \$350M on Humira's television, magazine, and other DTC advertising, making it the most heavily advertised prescription medicine in the US that year.<sup>13</sup> We believe this is a deliberate strategy designed to make it more difficult for physicians (and payers) to switch patients to new therapies, particularly biosimilars that will bear unique brand names.

#### C. CLINICAL CONFIDENCE IN BIOSIMILARS REMAINS UNCERTAIN

Patient and provider comfort is the last critical barrier to adoption of biosimilars. **Many current FDA-approved biosimilars treat chronic conditions, where a patient tends to stay on one drug and switch only when that treatment stops working or the patient experiences unwanted side effects.** Therefore, patients and providers are hesitant to switch to biosimilars, which are, by definition, not *identical* - only *"highly similar"* - to the originator products. For this reason, it will remain difficult for payers to force current patients to switch to biosimilars, even if costs are lower.

"The first thing providers want is effectiveness and safety, so when they still have a pretty wellknown name-brand medication out there, even if it is more expensive than the biosimilar, that's what they're used to using. That's what they trust, that's what they go with. And a lot of providers say they want a couple of years with the biosimilar on the market to see what it does."

- Medical Director, Large National Payer

This clinical barrier could be reduced if biosimilars were to achieve **interchangeability status**, a designation level above basic biosimilarity status, which would make it easier for payers and pharmacies to encourage switching and even implement automatic substitution. However, the path to achieving interchangeability had been unclear until recently. In Q1 2017, The FDA issued draft guidance for achieving interchangeability status. According to these draft guidelines, the manufacturer must conduct switching studies showing that "the risk in terms of safety or diminished efficacy of alternating or switching between the use of the biological product and the reference product is not greater than the risk of using the reference product *without such alternation or switch*."<sup>14</sup> Switching studies are costly and time-consuming for the biosimilar manufacturer. As a result, at the time of this paper's publication, no biosimilar manufacturer has yet initiated the requisite clinical trials for achieving interchangeability.

"Because the FDA has not granted any of [the biosimilars] interchangeability yet, you can't mandate the substitution, and if the physician pushes back we don't really have any leverage."

- Medical Director, Large National Payer

Without interchangeability, payers will likely default to **grandfathering currently treated patients** (allowing them to remain on the originator product), even if they do pursue formulary policies to prefer biosimilars for new start patients. This will be especially relevant for immunological and other chronic treatments. For these indications, grandfathering decisions will make or break the success of a biosimilar.

"We try to grandfather for 30-90 days, then switch. What we found is if you grandfather people currently on [the originator product], you don't see much savings."

- Medical Director, Large National Payer

### 2018 State of Market Access for Biosimilars

Given this fraught history of the US biosimilars market, we now enter 2018 far behind early initial expectations for biosimilars. In our research, nearly all payers felt that we "should be further ahead" than we are, in terms of capitalizing on loss of marketing exclusivity for branded biologics.

Still, some formularies are starting to reflect the newly open nature of biologics markets. In talking with payers and looking at the landscape of payer formularies, **we identified four broad buckets of payer approaches to handling biosimilars** (Figure 3, next page).

#### 1. "Protect the Status Quo"

In which payers prefer the branded originator product for putative cost or clinical reasons. Biosimilars may be actively excluded from these formularies, or restricted via step-edits or other controls that make it more difficult to access the biosimilar than the originator.

#### 2. "Wait and See"

In which payers have no stated policy on biosimilars and/or allow equal access to both the originator product and any biosimilars.

#### 3. "Passive Push"

In which payers may not prefer biosimilars via direct restrictions, such as step-edits or prior authorizations, but do include biosimilars on a tier with lower copays or coinsurance to encourage adoption.

#### 4. "Prefer and Promote"

In which payers prefer biosimilars over innovator products via formulary tiering and restrictions in order to both encourage utilization in new patients and increase switching of existing patients to biosimilars.

#### Each payer may employ one or more approaches, varying by indication and/or drug

Protect the Status Quo	Wait & See	Passive Push	Prefer & Promote
Prefer originator over biosimilar, usually via tiering and/or step-edits	Cover biosimilar at parity to originator; no action yet	Cover biosimilar at lower copay than originator; no step-edits	Prefer biosimilar over originator, usually via PA with step-edit
We default to not covering at first because we don't want to be accused for a new product like this that we are jumping on the bandwagon for approval just based on cost. - Med. Director, Large Regional Payer	Until doctors can get out and try the biosimilar, we don't feel comfortbale forcing them to do it. - Med. Director, Mid-Sized Regional Payer	Patients are having an increasing amount of input on biosimilars. - Med. Director, Large National Payer	We wanted to mandate the substitution, and we're going forward with that-but if the physician pushes back, we have to reverse it. - Med. Director, Large Regional Payer
We have very substantial discounts on [the existing brand], so if we started preferring the biosimilar, it would break our contract. - Med. Director, Large Regional Payer	The health plans are not going to lead on putting in the mandates and the step therapies it's not politically acceptable for them to do that. - Med. Director, Large National Payer	Biosimilars follow the same pattern [tiering] as originators, but there's a 50% higher coinsurance with the brands Let's not be too aggressive on these yet. - Med. Director,	We are endorsing biosimilars like promoting generics. - Med. Director, Mid-Sized Regional Payer

Payers reported a range of approaches to managing biosimilars. Many employ different philosophies depending on the disease area or whether the drug falls under the medical vs. pharmacy benefit. The most common approaches described by our payer respondents fell toward the middle of the spectrum. Even those who have implemented a step through the biosimilar noted that they are "not strict" about enforcing the policy and will allow coverage if prescribers push back.

In Figure 4, we provide examples of blinded sample coverage policies for biosimilars and their reference products that illustrate the broad spectrum of how payers are currently approaching management of these products, including both Remicade/infliximab and Neupogen/filgrastim.

#### Figure 4: Example Biosimilar Coverage Policies

# Example coverage policy excerpts for biosimilars and their reference products, as of January 2018

#### Example A) Payer favors Zarxio over Neupogen

Preferred Brand	Non-Preferred Brand	
<b>Granix</b> ® (tbo-filgrastim) <b>Zarxio</b> ® (filgrastim-sndz)	Neupogen® (filgrastim)	

[Payer] covers filgrastim (Neupogen) as medically necessary when ANY of the following is met:

• Documented failure or inadequate response, intolerance, inability to use (for example: dose less than 180 mcg), or not a candidate (for example: pediatric individual) for tbo-filgrastim (Granix) AND filgrastim-sndz (Zarxio)

#### Example B) Payer has parity coverage of Zarxio and Neupogen

Payer has separate policies for each product, with similar PA requirements and without any dependency of one product's coverage on prior use of the other.

#### Example C) Payer prefers Remicade, referring to it as a "least cost brand'

"Note: [...] Enbrel, Humira, Otezla, **Remicade**, Simponi Aria, or Stelara brands of targeted immune modulators ("least cost brands of targeted immune modulators") are less costly to [Payer]. Consequently, because other brands (e.g., Actemra (tocilizumab), Cimzia (certolizumab), Cosentyx (secukinumab), Entyvio (vedolizumab), **Inflectra** (inflixmab-dyyb), Kineret (anakinra), Orencia (abatacept), **Renflexis (infliximab-abda)**, Rituxan (rituximab), Siliq (broadalumab), Simponi (golimumab), Taltz (ixekizumab), Tremfya (guselkumab), and Xeljanz (tofacitinib) of targeted immune modulators are more costly [...] no other brands of targeted immune modulator will be considered medically necessary unless the member has a contraindication, intolerance or incomplete response to at least 2 of the least cost brands of targeted immune modulator."

#### Example D) Payer prefers Remicade; coverage for biosimilars "contingent"

This policy refers to the following infliximab products:

- Inflectra™ (infliximab-dyyb)
- Remicade<sup>®</sup> (infliximab)
- Renflexis™ (infliximab-abda)

#### **A. Preferred Product**

Remicade<sup>®</sup> (infliximab) is the preferred infliximab product. Coverage will be provided for Remicade<sup>®</sup> contingent on the coverage criteria in section B.

Coverage for Inflectra<sup>™</sup> (infliximab-dyyb) or Renflexis<sup>™</sup> (infliximab-abda) will be provided contingent on the criteria in this section and the coverage criteria in section B. In order to continue coverage, members already on Inflectra<sup>™</sup> or Renflexis<sup>™</sup> will be required to change therapy to Remicade<sup>®</sup> unless they meet the criteria in this section.

Importantly, a payer organization may have one blanket approach for all biosimilars, or employ different policies for each product. We spoke with payers who saw each biosimilar as representing a unique case to evaluate independently, as well as with some who felt it was important to put overarching policies in place to govern biosimilars at large. In cases where payers reviewed biosimilars separately, they often noted key differences with biosimilars in oncology as compared to other indications. In oncology, they viewed the clinical risk associated with restrictive policies as too great. If a biosimilar in oncology has clinical shortcomings, an overly restrictive coverage policy may have life-threatening implications for plan members (i.e., to a greater extent than in immunology).

"There's not going to be a broad biosimilar category; it will be [in] each speci ic indication we'll make a decision."

- Medical Director, Large Regional Payer

"If biosimilar discounts were high enough, then our goal would be to get new starts on biosimilars. Then depending on the indication, maybe we would require switches – not in oncology but maybe in in lammatory diseases."

- Medical Director, Large Regional Payer

"Oncology is tricky when we talk about biosimilars, unlike other areas like autoimmune. In oncology, it could be that the patient dies."

- Medical Director, Mid-Sized Regional Payer

## The Future of Access to Biosimilars in the US

In our research with US private payers, we discussed the future of biosimilar market access and formulary controls. Our goal was to understand the extent to which payers plan to support uptake of biosimilars moving forward and to illuminate the tools they have at their disposal to do so.

As discussed, most US payers in our sample are using either the "Wait and See" or the "Passive Push" approach. A few fell on the extremes, protecting brand contracts for certain drugs or actively encouraging biosimilar use via step-edits. However, nearly all respondents felt that biosimilars should and will deliver long-term cost savings for their plans and for the US healthcare system at large. Many described this impact as **"trend-bending,"** such that although the aggregate costs of biologics may continue to rise, biosimilars will slow the rate of that increase in a meaningful way. But payers also noted their important role in effecting this change.

Therefore, we expect more US payers to move to the "Prefer and Promote" category of biosimilar policy over the next decade. Key changes will include:

- More formularies will prefer biosimilars; some may exclude innovator products, unless they drop prices to remain cost-competitive with biosimilars.
- In the **near-term**, formularies may prefer biosimilars or mandate biosimilar use for new patients, but allow **grandfathering**, such that patients will not be required to switch from a product they have taken historically.
- In the longer term, payers will become more likely to force-switch patients to biosimilars; some policies in some states may call for automatic substitution.
- As products achieve interchangeability status and as clinical comfort with biosimilars increases, these shifts toward higher controls, closed formularies, non-grandfathering, and automatic substitution will accelerate.

Of course, these market shifts rely heavily on critical factors, such as the extent to which biosimilars pursue and achieve interchangeability, the degree to which discounting meets expectations, and the outcomes of litigation surrounding biosimilars. Regardless, change is inevitable and around the corner: as of the time of this publication, the majority of the payers we interviewed are actively reviewing their policies toward biosimilars and may make revisions as soon as this year (2018).

In summary, **US payers remain optimistic** that adoption of biosimilars will increase in the near future. They are **willing to leverage policy** to help speed this adoption, especially if biosimilar manufacturers offer **significant discounts** or pursue **interchangeability status**. **Eventually, biosimilars will undoubtedly become a core component of the competitive US biopharmaceuticals marketplace**.

"Biosimilars have a bright future if additional work is done to be attractive to prescribers and payers. I still expect they will get 50% [market share], but only if there is steep discounting, or interchangeability status."

- Medical Director, Large National Payer

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