



Biosimilar Savings Opportunities in the Medical Benefit: A Large-Employer Case Study

By Alex Brill and Christy Robinson

August 2019

EXECUTIVE SUMMARY

This paper estimates the savings opportunity from biosimilars in the medical benefit of a large employer-sponsored health plan, using real-world claims data. This analysis illustrates the savings potential of biosimilars in the commercial market and highlights the important role of employer-sponsored plans in promoting biosimilar utilization.

The mere existence of biosimilars in the U.S. marketplace does not guarantee robust competition or the savings that follow. Manufacturers of brand biologic drugs have strong incentives to protect their market share, and the use of higher-cost drugs has long been incentivized when drugs are administered by a physician. Stakeholders must make a concerted effort to maximize biosimilar utilization.

The data in this analysis, provided by a large manufacturing company with a high deductible plan comprising more than 80,000 members, comprise 2017 utilization of 17 biologics in the medical benefit that face or are likely to soon face biosimilar competition. The data report that 392 patients used these 17 biologics in 2017, with employer spending of more than \$9.3 million and patient out-of-pocket spending of more than \$500,000.

Because biosimilar savings depend on the level of utilization as well as the price discount relative to the reference product, we model three scenarios:

1. Base Case. This scenario assumes that a biosimilar will be used instead of a biologic 30 percent of the time and that a biosimilar will be priced 30 percent below the brand biologic price.

2. Optimistic Case. This scenario assumes that stakeholders make a concerted effort to encourage biosimilar utilization, resulting in a biosimilar substitution rate of 50 percent and a price discount of 40 percent.

3. Best Case. This scenario also assumes a 40 percent price discount for biosimilars but a substitution rate of 75 percent.

We estimate that the employer would save \$838,000–\$2.8 million and patients would save \$47,000–\$158,000, depending on the scenario modeled (see table below). Employer savings in the three scenarios represent 3.2 percent, 7.1 percent, and 10.7 percent, respectively, of the employer’s specialty drug spending in the medical benefit.

Consider the savings that accrued to employers when Lipitor® went generic – an event widely touted for its cost savings. We estimate employer biosimilar savings of \$10–\$34 per member per year (PMPY). Roughly a year after Lipitor® lost exclusivity, savings in the high blood cholesterol therapy class were approximately \$14 PMPY, according to Express Scripts Drug Trend Reports.

By itself, an employer has limited opportunities to shift behavior. But an employer could share a portion of their own savings from biosimilar use with members. And an informed employer could urge its health plan to encourage biosimilar utilization through plan design, as well as incentives and education for physicians and health plan members. Our savings estimates can serve as a guide for how much an employer may want to invest in promoting biosimilar utilization.

ANNUAL SAVINGS ESTIMATES FOR 17 BIOLOGICS ANALYZED

	EMPLOYER SAVINGS			PATIENT OUT-OF-POCKET SAVINGS		
	BASE CASE	OPTIMISTIC CASE	BEST CASE	BASE CASE	OPTIMISTIC CASE	BEST CASE
Total	\$837,866	\$1,861,925	\$2,792,888	\$47,380	\$105,289	\$157,933
Per patient (avg.)	\$2,137	\$4,750	\$7,125	\$121	\$269	\$403
Per member (avg.)	\$10	\$23	\$34	n/a	n/a	n/a

For more than a decade, hopes have been high that biosimilars — follow-on versions of expensive, complex biologic drugs — would lower U.S. drug spending. A number of biosimilars have recently obtained Food and Drug Administration (FDA) approval, and some have already entered the U.S. market. But it is still too early to see substantial cost savings. Moreover, it is not the mere existence of biosimilars in the marketplace that determines the savings they will generate, but rather their utilization. Stakeholders must make a concerted effort to maximize biosimilar utilization because incumbents — the manufacturers of brand biologic drugs with which biosimilars compete — have strong incentives to protect their market share.

Much has been written about the national and federal savings potential of biosimilars, but far less about the commercial market specifically. This paper focuses on the savings opportunity from biosimilars in the medical benefit of large employer-sponsored health plans, using real-world claims data provided by a large national employer. This analysis is intended not only to illustrate the savings potential of biosimilars in the commercial market, but also to highlight the important role of employer-sponsored plans in promoting biosimilar utilization.

A Slow Start for U.S. Biosimilars

Biologics are among the most expensive pharmaceuticals available. In 2017, biologics comprised 11 of the top 15 U.S. drugs by sales.¹ Because they are made from living cells, biologics cannot be precisely copied like traditional small-molecule drugs. Therefore, they are excluded from the robust generic competition that has characterized the U.S. small-molecule drug market for several decades. A separate regulatory pathway was created in 2010 for FDA approval of biosimilars

(versions of biologics that are highly similar to and do not differ in any clinically meaningful way from their reference products), but competition has been slow to develop. The first U.S. biosimilar was not approved until 2015, and while 17 biosimilars have now been approved, only 7 have come to market. In Europe, where biosimilars have been allowed since 2006, there are more than 40 biosimilars on the market.²

There are multiple reasons for the sluggish launch of U.S. biosimilars. In a recent paper, we offered a detailed analysis of the barriers biosimilars continue to face in the United States.³ In brief, even after a delay of several years in the FDA's issuing guidance for biosimilar manufacturers, there remain substantial hurdles for this nascent market. These include market uncertainty, the threat of patent litigation, development cost, reference product manufacturers' efforts to retain market share, and a lack of physician and patient education about biosimilar safety and savings. Overcoming these barriers, as we outline in our previous work, will require action on the part of a range of players, including employers and commercial payors.

¹ PharmaCompass, "Top Drugs by Sales in 2017: Who Sold the Blockbuster Drugs?" March 29, 2018.

² Generics and Biosimilars Initiative, "Biosimilars in Europe," June 1, 2018.

³ See Alex Brill and Christy Robinson, "Steps to Reducing Barriers to Biosimilars in the United States," September 2018, available at www.getmga.com/wp-content/uploads/2018/09/BarriersToBiosimilars_September2018.pdf.

Biosimilars in the Medical Benefit

Most biologics must be administered by a physician, which means that they are covered by the medical benefit of a health plan (rather than the pharmacy benefit). A longstanding Medicare reimbursement system for physician-administered drugs, known as ASP+6, incentivizes the use of higher-cost products even when drugs are covered by a commercial plan.

In addition to reimbursing a physician for the average sales price (ASP) of an administered drug, Medicare Part B pays an add-on payment (“handling fee”) equal to 6 percent of the drug’s ASP.⁴ As health policy experts have pointed out, the ASP+6 structure incentivizes physicians to use higher-cost products to receive a larger handling fee.⁵ Even if this incentive only existed in Medicare, physicians would still be predisposed to use the highest-cost product for patients with commercial insurance. But commercial payors have been shown to follow Medicare’s lead with this reimbursement policy.⁶

In Part B, all of the top 10 drugs by spending are biologics (and represented more than 40 percent of Part B drug spending in 2016).⁷ In recognition of the disincentive for biosimilar utilization in Part B created by ASP+6, the 2010 law creating a biosimilar pathway established that the add-on payment would be based on the reference product’s ASP even when a physician uses a biosimilar. Nevertheless, physicians have long been conditioned to the incentive for higher-cost drugs, and Medicare – and often, by extension, commercial insurance – offers no incentive for lower-cost drugs.

Adding to this dynamic is the fact that many doctors lack awareness of or experience with biosimilars or do not have an informed view about their comparability to reference products. A recent survey showed that a majority (55 percent) of clinicians were unfamiliar with biosimilars, while more than 40 percent were not fully confident in biosimilars’ safety and efficacy.⁸

Case Study of Biosimilar Savings

We model the annual savings that a large employer and its employees who use biologics could realize from using biosimilars in the medical benefit. The data in our analysis were provided by a large manufacturing company with a high deductible plan comprising more than 80,000 members. We focus on 17 biologics in the medical benefit that face or are likely to soon face biosimilar competition. Our analysis is based on 2017 utilization and spending.

Table 1 provides a summary of the data, as provided by the employer. In 2017, 392 patients used these 17 biologics, with employer spending totaling more than \$9.3 million, and patient out-of-pocket spending more than \$500,000.

Biosimilar savings depend on the level of utilization as well as the price discount relative to the reference product. In its analysis of biosimilar savings when the legislation that created the regulatory pathway was being considered, the Congressional Budget Office assumed that a biosimilar would have, on average, 35 percent market share and a 40 percent price discount.⁹

¹⁴ Since 2013, the add-on payment has been equal to 4.3 percent of the ASP because of the sequester cuts required by the Budget Control Act of 2011.

⁵ “Health Policy Brief: Medicare Part B,” Health Affairs, August 10, 2017.

⁶ Government Accountability Office, “Physician-Administered Drugs: Comparison of Payer Payment Methodologies,” August 1, 2016.

⁷ Medicare Payment Advisory Commission, A Data Book: Health Care Spending and the Medicare Program, chapter 10, June 2018.

⁸ Alexander Gaffney, “How Comfortable Are Physicians with Biosimilars? Not Very (Yet),” PwC Health Research Institute, October 24, 2018.

⁹ Congressional Budget Office, “Cost Estimate for S. 1695 Biologics Price Competition and Innovation Act of 2007,” June 25, 2008.

TABLE 1. SUMMARY OF 2017 DATA

BIOLOGIC	# OF PATIENTS	EMPLOYER SPENDING	PATIENT OUT-OF-POCKET (OOP)	EMPLOYER SPENDING PER PATIENT	OOP PER PATIENT
Actemra®	8	\$260,994	\$4,791	\$32,624	\$599
Aranesp®	10	\$58,810	\$7,125	\$5,881	\$713
Avastin®	78	\$1,156,720	\$22,570	\$14,830	\$289
Epogen®/Procrit®	10	\$70,441	\$713	\$7,044	\$71
Erbix®	7	\$308,173	\$3,274	\$44,025	\$468
Eylea®	35	\$284,432	\$71,724	\$8,127	\$2,049
Herceptin®	22	\$1,104,073	\$25,774	\$50,185	\$1,172
Lucentis®	10	\$46,008	\$9,181	\$4,601	\$918
Neulasta®	76	\$1,854,939	\$37,970	\$24,407	\$500
Neupogen®	7	\$2,023	\$512	\$289	\$73
Orencia®	10	\$288,998	\$37,595	\$28,900	\$3,759
Remicade®	91	\$3,073,385	\$249,178	\$33,773	\$2,738
Simponi®	6	\$120,528	\$19,469	\$20,088	\$3,245
Soliris®	1	\$50,751	\$0	\$50,751	\$0
Stelara®	1	\$24,538	\$4,104	\$24,538	\$4,104
Tysabri®	10	\$500,181	\$25,722	\$50,018	\$2,572
Xolair®	10	\$104,632	\$6,741	\$10,463	\$674
TOTAL	392	\$9,309,625	\$526,443	\$23,749	\$1,343

In our analysis, we model three scenarios:

- 1. Base Case.** This scenario assumes that a biosimilar will be used instead of a biologic 30 percent of the time and that a biosimilar will be priced 30 percent below the brand biologic price.
- 2. Optimistic Case.** This scenario assumes that the employer makes a concerted effort to encourage biosimilar utilization, resulting in a biosimilar substitution rate of 50 percent and a price discount of 40 percent.
- 3. Best Case.** This scenario also assumes a 40 percent price discount for biosimilars but a substitution rate of 75 percent.

TABLE 2. ANNUAL SAVINGS ESTIMATES

	EMPLOYER SAVINGS			PATIENT OUT-OF-POCKET SAVINGS		
	BASE CASE	OPTIMISTIC CASE	BEST CASE	BASE CASE	OPTIMISTIC CASE	BEST CASE
Total	\$837,866	\$1,861,925	\$2,792,888	\$47,380	\$105,289	\$157,933
Per patient (avg.)	\$2,137	\$4,750	\$7,125	\$121	\$269	\$403
Per member (avg.)	\$10	\$23	\$34	n/a	n/a	n/a

We estimate that the employer would save approximately \$838,000–\$2.8 million and patients would save \$47,000–\$158,000, depending on the scenario modeled (see Table 2). Employer savings in the three scenarios represent 3.2 percent, 7.1 percent, and 10.7 percent, respectively, of the employer’s specialty drug spending in the medical benefit.

Discussion

To put these estimates in context, consider the savings that accrued to employers when Lipitor® went generic – an event widely touted for its cost savings. We estimate employer biosimilar savings at \$10–\$34 per member per year (PMPY). Roughly a year after Lipitor® lost exclusivity, when generics would have had time to saturate the market, Express Scripts reported PMPY savings of \$14.26 in the high blood cholesterol therapy class.¹⁰ While we include 17 biologics in our analysis, the savings potential at the top of our range is nearly \$20 PMPY greater than this.

So how does an employer realize the upper end of estimated biosimilar savings? By itself, an employer has limited opportunities to shift behavior. But an informed employer can urge its health plan to encourage biosimilar utilization through plan design, as well as incentives and education for physicians and health plan members.

For example, medical benefit design could encourage doctors and patients to choose biosimilars, savings from biosimilar use could be shared with members, and plans could incentivize physicians to use biosimilars where appropriate.¹¹ Thoroughly educating providers and patients about the safety and benefits of biosimilars is also key. Our employer savings estimates (roughly \$2,100–\$7,100 per patient) can serve as a guide for how much an employer may want to invest in promoting biosimilar utilization.

¹⁰ Lipitor® lost exclusivity and generics launched in December 2011. In 2012, PMPY spending in the high blood cholesterol therapy class was \$66.13 (Express Scripts 2012 Drug Trend Report). In 2013, PMPY spending in this category had fallen to \$51.87 (Express Scripts 2013 Drug Trend Report).

¹¹ See Alex Brill, “Payor Strategies to Promote Biosimilar Utilization,” April 2016, available at www.getmga.com/wp-content/uploads/2017/02/MGAPayorStrategiesfor-BiosimilarsWhitePaperApril2016.pdf.

Conclusion

Biosimilars represent an important opportunity for employers to realize health care savings while providing the same health insurance coverage to their members. The analysis presented here estimates that biosimilar savings can be significant. But employers will not see the upper end of the estimated savings without targeted efforts to improve education about biosimilars and provide incentives for physicians and patients to use these products.

ABOUT THE AUTHORS

Matrix Global Advisors (MGA) is an economic policy consulting firm in Washington, DC, specializing in fiscal, health care, and tax policy matters. Alex Brill is the founder and CEO of MGA. He previously served on the staff of the House Ways and Means Committee and the White House Council of Economic Advisers. Christy Robinson is a principal at MGA.

ABOUT THIS REPORT

This analysis was the result of a collaboration between MGA and the National Business Group on Health (NBGH) intended to highlight the meaningful savings to employers that biosimilars can help achieve. NBGH, with partnership from one of its members, provided real-world data on biologic spending in the medical benefit, and MGA used these data to construct the model used in this analysis. This report was sponsored by Boehringer Ingelheim. MGA is solely responsible for the analysis and content of the report. Any views expressed here represent only the views of the authors.

