MILLIMAN WHITE PAPER

Biosimilars in the Medicare Part B market

Commissioned by the Biosimilars Forum

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Summary

This paper provides an overview of current and expected future use of biosimilars in Medicare Part B.

- As of April 2021, there are 20 Part B-covered biosimilars on the market. We expect an additional 20 to launch through 2029 based on various industry information.
- Biosimilar market share varies significantly by product in both Medicare Advantage and Medicare fee-for-service (FFS), with Zarxio (filgrastim) currently maintaining the largest market share. Biosimilar market share for individual products tends to grow with time and overall biosimilar market share has shown a modest upward trend in recent years.
- Biosimilar competition puts pressure on the reference product's cost, average sales price (ASP), and both biosimilar and reference product ASPs tend to fall over time.
- We project overall Part B biosimilar market share to grow from approximately 20% in 2020 to 31% by the end of 2029.

Background

WHAT IS A BIOSIMILAR?

A large portion of medications covered by Medicare Part B are biologics, which are products grown from biological (natural) sources, rather than chemically processed. A biosimilar is a biologic product proven to be highly similar, or "biosimilar," to an existing biologic product (reference product). There are no clinically meaningful differences between the biosimilar and the reference product in terms of safety, purity, and potency (safety and effectiveness) as evaluated by the U.S. Food and Drug Administration (FDA). Historically, there were limited regulatory means available for creating biosimilars, even after the reference product's patent had expired. The Biologics Price Competition and Innovation Act of 2009 (BPCIA) created an abbreviated approval pathway for biosimilars in order to "provide more treatment options, increase access to lifesaving medications, and potentially lower health care costs through competition."[1] While the intent of BPCIA was to expand options and reduce costs, the growth of biosimilars in the United States has remained modest.

Of the 29 approved biosimilars in the United States, 20 have launched as of April 2021.[2] The first to be approved under the new pathway created by BPCIA was Zarxio, the biosimilar to Neupogen. As of early 2021, there are also biosimilars available for Remicade, Epogen/Procrit, Neulasta, Herceptin, Avastin, and Rituxan. In our experience, biosimilar utilization in the United States has been low for a number of reasons, including greater familiarity with the "brand-name" or reference product, hesitancy to switch patients already stable on the reference product, and financial considerations (described below). Additionally, formularies are not common in Medicare Part B, so reference products are not excluded from coverage, leading to the utilization being shared between the reference product and biosimilar.

Physician reimbursement for Medicare Part B medications is typically based on ASP and includes a percentage-based add-on payment to the physician. The reimbursement payment rate is published quarterly by the Centers for Medicare and Medicaid Services (CMS) in the ASP Drug Pricing Files and the payment limits provided within these files include a 6% add-on payment. When sequestration is applicable, the 6% add-on payment is reduced to 4.3%. Biosimilars are reimbursed under a different methodology—the add-on payment is based on the cost of the *reference product*, not the ASP price of the biosimilar. Assuming a provider acquires a drug at ASP, the Medicare reimbursement approach results in a neutral provider add-on payment across the reference product and biosimilar. This dynamic is unique to Medicare Part B. In the commercial market, reimbursement methods vary, but are more commonly based on a percentage of ASP or list price. In this case, the provider payment is generally greater when prescribing the reference product because its price is set as a percentage of a higher price. This dynamic likely influences provider prescribing patterns across all markets (including Medicare Part B, despite the reimbursement neutrality), as providers typically do not prescribe a different set of products based on a member's insurance coverage, encouraging prescription of reference products over biosimilars and negatively influencing biosimilar use today.

[1] FDA (February 3, 2020). Biosimilars. Retrieved June 29, 2021, from https://www.fda.gov/drugs/developmentapprovalprocess/howdrugsaredevelopedandapproved/approvalapplications/therapeuticbiologicapplications/biosimilars/default.htm.

[2] FDA (December 17, 2020). Biosimilar Product Information. Retrieved June 29, 2021, from https://www.fda.gov/drugs/biosimilars/biosimilar-product-information.

OVERVIEW OF MEDICARE PART B

Medicare Part B is the portion of Medicare that covers outpatient and physician services. This includes drugs administered by physicians, such as through infusion or injection. Medicare Part B generally does not cover self-administered drugs received through a retail or mail setting, as those drugs are covered under Part D. Part D drugs are outside the scope of this paper. There are three ways beneficiaries can receive Part B coverage:

1. **Medicare fee-for-service (FFS):** Medicare FFS is the traditional Part A and B medical coverage offered through the federal government. Under the FFS benefit, the member must fulfill a Part B annual deductible ($203 in 2021), followed by 20% coinsurance on almost all future Part B costs. The member does not have a maximum out-of-pocket (MOOP) limit, therefore there is no cap on member spend. There are about 38 million beneficiaries with traditional FFS benefits in 2021, though the majority of these beneficiaries receive supplemental coverage from Medigap, employers, or Medicaid (as of 2016, about 88% of Medicare beneficiaries had some form of supplemental coverage).[3]
2. **Medigap:** Medigap policies, also known as Medicare Supplement, are sold by private companies and provide coverage to supplement member cost sharing beyond traditional Medicare FFS coverage. We estimate about 16 million beneficiaries are enrolled in a Medigap plan in 2021.[4] There are several standard Medigap benefit designs, which generally cover nearly all FFS cost sharing.
3. **Medicare Advantage (MA):** MA plans are offered through a Medicare Advantage organization (MAO) as an alternative to traditional FFS. MA plans currently cover about 26 million enrollees and are growing each year as a percentage of the Medicare-eligible population.[5] MA Part C provides combined Part A and B coverage, and most plans also include Part D coverage of prescription drugs as well. MA plans typically offer enhanced benefits above and beyond traditional FFS through decreased cost sharing and supplemental benefits not covered under FFS. MA plans are also required to include a MOOP—this limit cannot exceed $7,550 in 2021. While MA plans typically offer several cost-sharing reductions relative to the traditional FFS benefit, few plans offer cost-sharing reductions on the Part B drug benefit, as it may cause anti-selection for the plan. Among plans that do provide reduced Part B drug cost sharing, it typically applies to a small subset of Part B drugs, with reference products and biosimilars most commonly still subject to 20% coinsurance.

The biosimilar landscape

CURRENT BIOSIMILARS ON THE MARKET

As of April 2021, there are 20 Part B-covered biosimilars on the market, as shown in Figure 1.

FIGURE 1: CURRENT BIOSIMILARS

Reference Product	Biologic Name	Biosimilar Product	Biosimilar Launch Date
Neupogen	filgrastim	Zarxio	9/2015
		Nivestym	9/2018
Remicade	infliximab	Inflectra	11/2016
		Renflexis	7/2017
		Avsola	5/2020
Epogen/Procrit	epoetin alfa	Retacrit	11/2018
Neulasta	pegfilgrastim	Fulphila	7/2018
		Udenyca	1/2019
		Ziextenzo	11/2019
		Nyvepria	12/2020
Herceptin	trastuzumab	Kanjinti	7/2019
		Ogivri	11/2019
		Trazimera	2/2020
		Ontruzant	4/2020
		Herzuma	3/2020
Avastin	bevacizumab	Mvasi	7/2019
		Zirabev	1/2020
Rituxan	rituximab	Truxima	11/2019
		Ruxience	2/2020
		Riabni	1/2021

Source: Medi-Span Price Rx database.

Generally speaking, biosimilars tend to build up market share over time in the years following launch. Therefore, biosimilars that have been available for longer tend to have higher market share than recent launches. We define market share as [biosimilar utilization per 1,000 members] / [biosimilar + reference product utilization per 1,000 members].

Figures 2 and 3 show the market shares of biosimilars in existence by the second half of 2019. Please note that Figure 2 is based on 2019 data, so current 2021 market share is likely higher for all molecules, as evidenced by the upward slope seen in Figure 3.

[3] Includes Medicare Advantage, Medigap, employer-sponsored insurance, Medicaid, and other public sector coverage. See Medicare Payment Advisory Commission (June 2019), "A Data Book: Health Care Spending and the Medicare Program" at http://medpac.gov/docs/default-source/data-book/jun19_databook_entirereport_sec.pdf?sfvrsn=0.

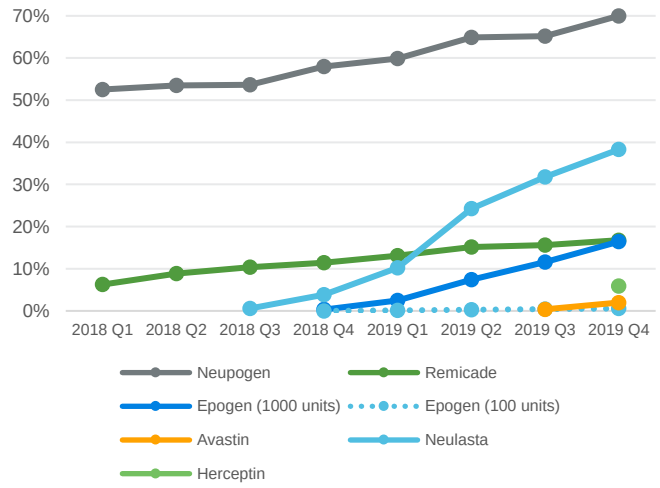
[4] Based on historical enrollment. See AHIP, "State of Medigap 2019" at https://www.ahip.org/wp-content/uploads/IB_StateofMedigap2019.pdf.

[5] https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MCRAdvPartDEnrolData

FIGURE 2: 2019 BIOSIMILAR MARKET SHARE BY DRUG

Biosimilar	Product Name	Launch Date	MA	FFS	Total
Zarxio	filgrastim	9/2015	58%	67%	66%
Inflectra	infliximab	11/2016	9%	11%	11%
Renflexis	infliximab	7/2017	6%	4%	4%
Nivestym	filgrastim	9/2018	6%	9%	8%
Fulphila	pegfilgrastim	7/2018	12%	8%	8%
Retacrit	epoetin alfa	11/2018	11%	19%	18%
Udenyca	pegfilgrastim	1/2019	19%	11%	12%
Kanjinti	trastuzumab	7/2019	1%	5%	3%
Mvasi	bevacizumab	7/2019	0%	1%	1%

FIGURE 3: BIOSIMILAR MARKET SHARE OVER TIME



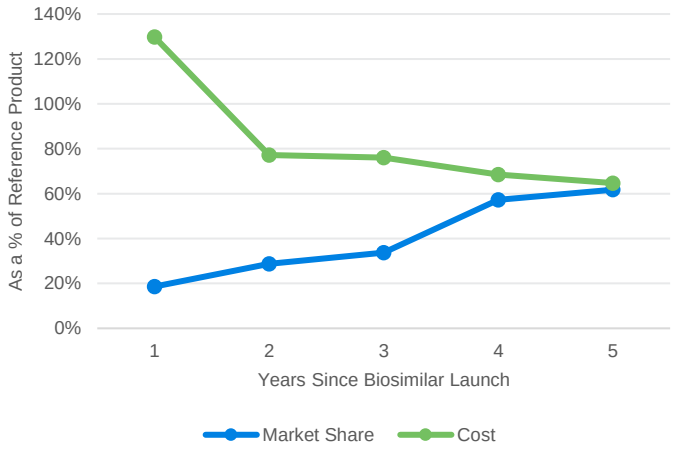
Note: Reflects average Medicare Advantage and FFS market share.

DIFFERENCES BETWEEN MARKETS

Biosimilar uptake is relatively similar between MA and FFS, with some variation by drug. Note that, beginning in 2019, MA plans were permitted to apply step therapies to Part B medications, which could be contributing to higher utilization in MA on certain products. For example, one of the largest MA carriers has several step therapies preferring one or more biosimilars over the reference product and other biosimilars.[6] Note, however, that it has such a step therapy in place for infliximab, yet infliximab market share is not in fact higher in the MA market. Also note that it currently has a step therapy preferring Neulasta (the reference product) over three of the four biosimilars, demonstrating that Part B step therapies may not always encourage increased biosimilar use.

Figure 4 shows the progression of biosimilar market share and cost (as a percentage of the reference product's cost) over time in the months following a biosimilar's launch.

FIGURE 4: AVERAGE BIOSIMILAR MARKET SHARE AND DISCOUNT RELATIVE TO REFERENCE PRODUCT OVER TIME



Note: Market share defined as [biosimilar util per 1,000] / [biosimilar + reference product util per 1,000], cost defined as [biosimilar allowed cost] / [reference product allowed cost].

The biosimilar market share and cost are inversely related. That is, as market share increases, cost generally decreases. As time progresses, biosimilar market share tends to grow, and cost tends to shrink.

Although overall biosimilar market share has increased, there is room for market share growth for biosimilars especially when compared to small-molecule generic market share, for which the generic substitution rates often reach as high as 99%. We do not anticipate biosimilars to match such high market shares, as there are numerous differences between small-molecule generics compared to biosimilars. Such differences include differences in the manufacturing process, the cost to develop the biosimilar, the FDA approval process, and the number of manufacturers engaging in competition to drive down prices, all of which may limit biosimilar uptake. However, interchangeability, increased education on biosimilars, or changes in physician reimbursement incentives could lead to increased biosimilar market share.

As shown in Figure 4, the cost of the biosimilars continues to decrease over time. Figure 5 illustrates the ASP of each biosimilar at the time of launch and the current ASP as of April 2021.

[6] UnitedHealthcare (January 1, 2021). Medicare Part B Step Therapy Programs. Retrieved June 29, 2021, from https://www.uhcprovider.com/content/dam/provider/docs/public/policies/medadv-coverage-sum/medicare-part-b-step-therapy-programs.pdf.

FIGURE 5: BIOSIMILAR ASP AT LAUNCH COMPARED TO CURRENT ASP

Reference Product	Biosimilar	Biosimilar Launch Date	Biosimilar ASP at Time of Launch	Current Biosimilar ASP*	% Change
Avastin	Mvasi	7/2019	$69.77	$52.89	-24%
	Zirabev	1/2020	$63.18	$57.34	-9%
Epogen / Procrit	Retacrit	11/2018	$11.69	$9.19	-21%
Herceptin	Kanjinti	7/2019	$90.67	$66.29	-27%
	Ogivri	11/2019	$90.67	$60.66	-33%
	Trazimera	2/2020	$83.16	$68.11	-18%
	Herzuma	3/2020	$96.31	$81.99	-15%
	Ontruzant	4/2020	$90.96	$80.16	-12%
Neulasta	Fulphila	7/2018	$368.79	$236.46	-36%
	Udenyca	1/2019	$358.35	$251.30	-30%
	Ziextenzo	11/2019	$317.28	$276.82	-13%
	Nyvepria	12/2020	$336.90	$336.90	0%
Neupogen	Zarxio	9/2015	$0.97	$0.38	-61%
	Nivestym	9/2018	$0.75	$0.45	-40%
Remicade	Inflectra	11/2016	$100.31	$40.61	-60%
	Renflexis	7/2017	$80.19	$40.88	-49%
	Avsola	5/2020	$51.50	$50.06	-3%
Rituxan	Truxima	11/2019	$87.09	$62.06	-29%
	Ruxience	2/2020	$73.83	$64.51	-13%
	Riabni	1/2021	N/A	N/A	N/A

* As of April 2021; N/A = no ASP currently available.

All biosimilar ASPs have decreased since the initial launch, with the exception of Nyvepria, which had only been on the market for five months and therefore had only a very limited amount of time was available to establish an ASP payment rate. Typically, the biosimilars that have launched and been on the market the longest have the greatest ASP decreases, with ASP unit cost reductions directly resulting in drug cost reductions. The utilization of biosimilars has the potential to lead to future cost reductions as the ASPs decrease over time. Furthermore, biosimilar competition also results in reduction of the reference brand products, as depicted in Figure 6.

FIGURE 6: THE IMPACT OF COMPETITION ON REFERENCE PRODUCT ASP

Reference Product	Number of Biosimilars*	Date of First Biosimilar Launch	Reference Product ASP at Time of Biosimilar Launch	Current Reference Product ASP*	% Change
Avastin	2	07/2019	$81.18	$72.51	-11%
Epogen / Procrit	1	11/2018	$13.09	$8.54	-35%
Herceptin	5	07/2019	$106.62	$93.68	-12%
Neulasta	4	07/2018	$390.64	$234.01	-40%
Neupogen	2	09/2015	$1.00	$0.95	-5%
Remicade	3	11/2016	$82.22	$41.95	-49%
Rituxan	3	11/2019	$94.41	$89.14	-6%

* As of April 2021. Source: Medi-Span Price Rx database.

While biosimilars are priced at a discount to the reference product, increased competition also results in ASP decreases of the reference product itself. The ASP is the weighted average net price of all manufacturer sales, including any price concessions, such as volume, prompt pay, and cash discounts. As shown in Figure 6, the ASPs of all reference products have decreased significantly since the launch of the biosimilars. A lower ASP ultimately decreases physician revenue for both reference products and biosimilars because the add-on payment is based on the ASP of the reference product. Appendix A shows Figures 5 and 6 combined for easier reference.

Future of biosimilars

EXPECTED PIPELINE

While it is certain that biosimilars will continue to be developed, the timing of future launches is difficult to predict. We anticipate the Part B biosimilars shown in Figure 7 to become available between now and 2029, though we note these expectations are subject to significant uncertainty.

FIGURE 7: EXPECTED FUTURE PART B BIOSIMILAR LAUNCHES

Proprietary Name	Chemical Name	Estimated Biosimilar Launch Date
Lucentis	ranibizumab	2022
Tysabri	natalizumab	2022
Actemra	tocilizumab	2022
Eylea	aflibercept	2023
Stelara	ustekinumab	2023
Orencia	abatacept	2024
Xolair	omalizumab	2024
Perjeta	pertuzumab	2024
Cimzia	certolizumab pegol	2024
Simponi Aria	golimumab	2024
Erbitux	cetuximab	2025
Prolia, Xgeva	denosumab	2025
Soliris	eculizumab	2025
Kadcyla	ado-trastuzumab emtansine	2026
Yervoy	ipilimumab	2026
Cyramza	ramucirumab	2026
Entyvio	vedolizumab	2026
Opdivo	nivolumab	2028
Keytruda	pembrolizumab	2028
Botox	onabotulinumtoxin A	2029

Source: General industry information, including the BioMedTracker database.

CONSIDERATIONS FOR FUTURE UPTAKE

There are several key reasons why biosimilar use is expected to grow in the future.

- **Availability:** Naturally, as more biosimilars launch, there is more opportunity for market share growth. Additionally, as existing biosimilars are on the market for longer periods of time, their uptake will be likely to grow, as shown in Figure 4 above. This may in turn lead manufacturers to develop additional biosimilars if market shares were significant, encouraging even further future growth.
- **Patent losses:** Patent losses create the opportunity for new biosimilars to launch. As more patents expire, there will be new opportunity for biosimilars to launch.
- **Cost considerations and plan economics:** Health plans have incentives to find ways to reduce healthcare costs. Under the MA benefit structure, shifting beneficiaries to biosimilars as the lower-cost alternative (relative to their reference products) will likely result in savings to a health plan. The same savings dynamic may exist for the government in Medicare FFS, though there is much less ability to steer FFS beneficiaries.
- **Physician and patient comfort:** One reason historical biosimilar uptake has been low is due to lack of physician comfort or familiarity with prescribing these drugs, which may lead to patients who may not be as comfortable with them as well. As biosimilars remain in the market longer and show positive health outcomes and dependable supply chain availability, physicians will likely become more comfortable in utilizing biosimilars for their patients. Physicians may educate their patients to improve understanding and acceptance of using a biosimilar.
- **Interchangeability:** If the FDA indicates certain (or all) biosimilars are to be considered clinically interchangeable with their reference products, that would likely lead to increased biosimilar use. There are currently no biosimilars approved by the FDA as interchangeable with the reference product. Although it may not be as impactful for physician-administered biosimilars as for self-administered products covered by Part D, interchangeability may create additional physician comfort and incentive for health plans to encourage biosimilar use.

INDUSTRY ESTIMATES

Industry experts tend to agree the biosimilar market will continue growing in the future, though estimates of the magnitude of growth vary depending on numerous factors, such as biosimilar pricing, availability of additional incentives, and other factors. According to public research, annual growth rate estimates for biosimilars range from 24%[7] to 46%.[8] In contrast, Medicare Part B-covered reference products have historically showed an annual trend of 11.5%, a portion of which is driven by unit cost increases.[9]

It is worth noting that many industry estimates consider the biosimilar market as a whole, which includes the commercial market and retail biosimilars. The Medicare Part B biosimilar market growth rate is likely lower than or near the low end of the growth range for the overall biosimilars market, given the limited number of drugs that fit into the physician-administered category, differing incentives between payers and physicians, and the general lack of formularies.

Figure 8 shows how biosimilar market share would increase for a hypothetical biosimilar assuming a 24% biosimilar trend and an 11.5% biologic trend. Assuming a starting market share of 20%, the biosimilar market share increases to 39.4% by 2029, which represents a 10-year increase of 19.4%.

FIGURE 8: ILLUSTRATIVE PROJECTED BIOSIMILAR MARKET SHARE

Year	Biosimilar Utilization	Reference Product Utilization	Biosimilar Market Share %
2020	20	80	20.0%
2021	25	89	21.8%
2022	31	99	23.6%
2023	38	111	25.6%
2024	47	124	27.7%
2025	59	138	29.8%
2026	73	154	32.1%
2027	90	171	34.5%
2028	112	191	36.9%
2029	139	213	39.4%

Note: Assumes cost per script trend is the same for biosimilars and *reference products.*

MILLIMAN ESTIMATES

Based on input from the Biosimilars Forum, we projected biosimilar use for future launches would be 20% initially, and increase by an additive 1% to 3% each year, such that the market share would grow to 30% to 50% over 10 years, or a midpoint of 40%. We modeled a range of projected shifts due to the uncertainty surrounding the magnitude of biosimilar growth through 2029. However, all scenarios assume the status quo environment, without any changes to prescribing incentives or payment dynamics.

We modeled projected Medicare Part B utilization and spend of biosimilars and reference products between 2020 and 2029. The midpoint scenario results (i.e., biosimilar market share growing by 2% per year) are shown in Figure 9.

FIGURE 9: MODELED BIOSIMILAR UTILIZATION AND SPEND

	Utilization (thousands)		Spend ($ millions)	
Year	Biosimilar	Reference Product	Biosimilar	Reference Product
2020	4,963	39,774	$2,583	$42,852
2021	5,900	40,688	$3,142	$46,835
2022	7,162	41,907	$4,099	$50,934
2023	8,901	43,012	$5,833	$54,473
2024	10,829	44,109	$8,100	$57,830
2025	13,014	45,288	$10,772	$61,408
2026	15,319	46,510	$13,691	$65,332
2027	17,483	47,892	$16,271	$69,850
2028	20,255	49,803	$21,276	$75,148
2029	23,194	50,953	$27,082	$78,452

We estimate cumulative biosimilar market share will grow to about 31% by 2029. Biosimilar utilization is measured as a percentage of total biosimilar and reference product utilization, across the products expected to have biosimilars within the next 10 years (Figures 1 and 7 above combined). The 2029 biosimilar market share is projected to be less than the 40% noted above because several of the products in our study are launching in later years, and thus have less opportunity to grow by 2029.

[7] Mordor Intelligence. Biosimilars Market – Growth, Trends, COVID-19 Impact, and Forecasts (2021-2026). Retrieved June 29, 2021, from https://www.mordorintelligence.com/industry-reports/global-biosimilars-market-industry.

[8] Fortune Business Insights (August 2020). U.S. Biosimilar Market Size, Share, and COVID-19 Impact Analysis. Retrieved June 29, 2021, from https://www.fortunebusinessinsights.com/industry-reports/u-s-biosimilars-market-100990.

[9] ASPE (November 20, 2020). Medicare Part B Drugs: Trends in Spending and Utilization, 2006=2017. Issue Brief. Retrieved June 29, 2021, from https://aspe.hhs.gov/system/files/pdf/264416/Part-B-Drugs-Trends-Issue-Brief.pdf.

Conclusion

Biosimilars have become a growing piece of the Medicare Part B market, particularly over the most recent few years. As new biosimilars continue to launch and biologic prices continue to rise, the expectation is that biosimilar growth will continue over the coming years, though market share will remain much lower than that of traditional small-molecule generics.

Caveats, Limitations, and Qualifications

This report was developed to help the Biosimilars Forum (the Forum) better understand the current and potential future market share of biosimilars in the Medicare Part B market. It is not intended, and should not be used, for any other purpose. This information was created solely for the Forum. The Forum may share this information with outside entities with Milliman's permission. Milliman does not intend to benefit, and assumes no duty or liability to, other parties that receive this work product. Any other parties should obtain their own professional advice appropriate to their specific needs. Any release of this report should be in its entirety. Milliman does not endorse any public policy or advocacy position on matters discussed in this report.

Milliman has developed certain models to estimate the values included in this report. The intent of the models was to estimate the value of changes to stakeholders as a result of the biosimilar shared savings program. We have reviewed the models, including their inputs, calculations, and outputs, for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP). The models, including all input, calculations, and output, may not be appropriate for any other purpose.

Note that, in preparing our estimates, we relied upon a Milliman proprietary database of 2018 and 2019 Medicare Advantage prescription drug (MAPD) claims, CMS's 5% Sample data, CMS's Part B Spend Dashboard, the BioMedTracker database, and Medi-Span Price Rx drug launch and pricing information. We accepted this information without audit but reviewed it for general reasonableness. Our results and conclusions may not be appropriate if this information is not accurate. Actual results will certainly vary for specific health plans and patient profiles due to differences in trends, discount arrangements, formulary, utilization patterns, and rebate arrangements, among other factors.

Katie Holcomb and Michelle Klein are actuaries for Milliman, members of the American Academy of Actuaries, and meet the qualification standards of the Academy to render the actuarial opinion contained herein. To the best of their knowledge and belief, this information is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices.

This report outlines the review and opinions of the authors of this report and not necessarily those of Milliman. The terms of Milliman's Master Services Agreement with the Biosimilars Forum, effective January 20, 2020, apply to this information and its use.

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Appendix

REFERENCE PRODUCT AND BIOSIMILAR ASP CHANGES

Reference Product				Biosimilar				
Reference Product	**Reference Product ASP at Time of Biosimilar Launch***	**Current Reference Product ASP***	**% Change From Biosimilar Launch Date**	**Biosimilar**	**Biosimilar Launch Date**	**Biosimilar ASP at Time of Launch***	**Current Biosimilar ASP***	**% Change From Biosimilar Launch Date**
Avastin	$81.18	$72.51	-11%	Mvasi	7/2019	$69.77	$52.89	-24%
				Zirabev	1/2020	$63.18	$57.34	-9%
Epogen / Procrit	$13.09	$8.54	-35%	Retacrit	11/2018	$11.69	$9.19	-21%
Herceptin	$106.62	$93.68	-12%	Kanjinti	7/2019	$90.67	$66.29	-27%
				Ogivri	11/2019	$90.67	$60.66	-33%
				Trazimera	2/2020	$83.16	$68.11	-18%
				Herzuma	3/2020	$96.31	$81.99	-15%
				Ontruzant	4/2020	$90.96	$80.16	-12%
Neulasta	$390.64	$234.01	-40%	Fulphila	7/2018	$368.79	$236.46	-36%
				Udenyca	1/2019	$358.35	$251.30	-30%
				Ziextenzo	11/2019	$317.28	$276.82	-13%
				Nyvepria	12/2020	$336.90	$336.90	0%
Neupogen	$1.00	$0.95	-5%	Zarxio	9/2015	$0.97	$0.38	-61%
				Nivestym	9/2018	$0.75	$0.45	-40%
Remicade	$82.22	$41.95	-49%	Inflectra	11/2016	$100.31	$40.61	-60%
				Renflexis	7/2017	$80.19	$40.88	-49%
				Avsola	5/2020	$51.50	$50.06	-3%
Rituxan	$94.41	$89.14	-6%	Truxima	11/2019	$87.09	$62.06	-29%
				Ruxience	2/2020	$73.83	$64.51	-13%
				Riabni	1/2021	N/A	N/A	N/A

* As of April 2021; N/A = no ASP currently available. Source: Medi-Span Price Rx database.