EXHIBIT C1

PRI CENTER FOR MEDICAL ECONOMICS AND INNOVATION

ISSUE BRIEF

The Biosimilar Savings Opportunity

Prioritizing biosimilars will generate significant savings for state employee health plans

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Executive Summary

Biosimilars are competitive medicines that create significant savings for patients who are prescribed biologic medicines. Biologics are high-valued medicines that are derived from biologic processes. These medicines have significantly helped patients living with diseases such as auto-immune disorders and cancer. Since the first biosimilar competitor was introduced, these medicines have generated $56.2 billion in savings.[1]

These savings are consistent with the average sales price data collected by the Centers for Medicare and Medicaid Services (CMS). Whether for immunology, oncology, supportive care, or ophthalmology, the lowest priced biosimilar can be up to 90 percent less expensive than the originator biologic. And these savings do not even account for the competitive process spurred by biosimilars that often drives down the costs of the originator biologic over time. It stands to reason, consequently, that prioritizing lower cost medicines on drug formularies will generate significant budgetary savings.

Despite these large savings, many state health plans do not prioritize the use of the lower cost biosimilars. Changing this policy can save state employee health plans millions of dollars.

Based on the National Health Expenditure data from CMS,[2] IQVIA's estimated spending on biologics,[3] and Altarum's estimate share of non-retail prescription drugs,[4] this study estimates that state private health insurance plans spent $20 billion on biologics in 2024.

Assuming that biosimilars' use in state employee insurance plans match the national average, then biosimilars account for approximately 24 percent of the biologic sales for those biologics where biosimilar competition is available. Since biologics with biosimilars account for less than one-third of overall volumes, biosimilars account for an estimated 7 percent of the total biologic volume for state employee health plans.

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Focusing on just the current biosimilar accessible markets, biosimilars typically obtain 52 percent of the market share within 5 years of launch.[5] Studies indicate that these market share gains can be accelerated and increased by implementing policies that prioritize biosimilars.

To provide perspective on the potential savings, this analysis assumes two different uptake scenarios. For conservative purposes, the first scenario assumes that, for the medicines currently facing competition, state employee health plan use of biosimilars will rapidly increase from its current 24 percent of volume to the longer-term average of 52 percent. Since the biosimilar accessible market currently accounts for around 30 percent of total biologic volume, this indicates that biosimilars would represent 15.6 percent of the total biologic sales for state employee health plans—an increase of 8.4 percentage points over the current share.

The second scenario assumes that, for the medicines currently facing competition, state employee health plan use of biosimilars will rapidly increase to match the experience documented in Cross et al. (2022).[6] This study found that the biosimilar prioritization strategies implemented in 2020 increased biosimilars share for three biologics—rituximab, bevacizumab, and trastuzumab—to an average of 81 percent of the volume. Since the biosimilar accessible market currently accounts for around 30 percent of total biologic volume, this indicates that biosimilars' share of total biologic volumes would increase by 17.0 percent to equal 24.2 percent for state employee health plans.

Under these assumptions, state employee health plans would save a significant amount of money. Based on the average biosimilar discount of 52 percent,[7] the total savings for state employee health plans would range between $871 million and $1.8 billion annually. Tables ES1 and ES2 summarize the state breakdown of these savings.

Table ES1
Potential Savings for State Employee Health Plans from Prioritizing Biosimilars 52 Percent Market Share Scenario (in millions)

STATE	ESTIMATED SAVINGS	STATE	ESTIMATED SAVINGS	STATE	ESTIMATED SAVINGS
United States	**$871.0**	Kentucky	$13.2	North Dakota	$1.8
Alabama	$16.8	Louisiana	$14.9	Ohio	$27.3
Alaska	$1.3	Maine	$3.9	Oklahoma	$10.3
Arizona	$15.7	Maryland	$15.8	Oregon	$7.3
Arkansas	$8.1	Massachusetts	$20.3	Pennsylvania	$39.9
California	$88.4	Michigan	$26.7	Rhode Island	$3.7
Colorado	$10.0	Minnesota	$11.1	South Carolina	$14.6
Connecticut	$13.1	Mississippi	$8.5	South Dakota	$1.9
Delaware	$3.5	Missouri	$17.6	Tennessee	$19.5
Florida	$64.2	Montana	$1.7	Texas	$77.4
Georgia	$26.9	Nebraska	$5.0	Utah	$6.8
Hawaii	$5.0	Nevada	$7.6	Vermont	$1.4
Idaho	$2.9	New Hampshire	$3.6	Virginia	$20.5
Illinois	$31.7	New Jersey	$29.9	Washington	$12.4
Indiana	$18.2	New Mexico	$3.8	West Virginia	$6.2
Iowa	$6.7	New York	$73.5	Wisconsin	$12.5
Kansas	$5.7	North Carolina	$31.0	Wyoming	$0.9

Source: Author calculations

Table ES2
Potential Savings for State Employee Health Plans from Prioritizing Biosimilars
81 Percent Market Share Scenario
(in millions)

STATE	ESTIMATED SAVINGS	STATE	ESTIMATED SAVINGS	STATE	ESTIMATED SAVINGS
United States	**$1,762.7**	Kentucky	$26.6	North Dakota	$3.7
Alabama	$34.1	Louisiana	$30.2	Ohio	$55.3
Alaska	$2.6	Maine	$7.9	Oklahoma	$20.9
Arizona	$31.9	Maryland	$32.0	Oregon	$14.8
Arkansas	$16.4	Massachusetts	$41.1	Pennsylvania	$80.9
California	$178.9	Michigan	$54.1	Rhode Island	$7.6
Colorado	$20.3	Minnesota	$22.6	South Carolina	$29.6
Connecticut	$26.4	Mississippi	$17.1	South Dakota	$3.7
Delaware	$7.0	Missouri	$35.7	Tennessee	$39.5
Florida	$129.9	Montana	$3.5	Texas	$156.6
Georgia	$54.4	Nebraska	$10.2	Utah	$13.8
Hawaii	$10.1	Nevada	$15.3	Vermont	$2.8
Idaho	$5.8	New Hampshire	$7.4	Virginia	$41.5
Illinois	$64.1	New Jersey	$60.5	Washington	$25.1
Indiana	$36.9	New Mexico	$7.6	West Virginia	$12.5
Iowa	$13.5	New York	$148.7	Wisconsin	$25.3
Kansas	$11.6	North Carolina	$62.8	Wyoming	$1.8

Source: Author calculations

The state breakdowns demonstrate that states should universally expect meaningful savings to the costs of their state employee health plans by prioritizing the use of lower-priced biosimilars. These savings do not include the potential additional savings that states will realize as more biosimilar competition is introduced in the markets that are not currently biosimilar accessible. And these potential savings are substantial. According to IQVIA, "over the next decade (2025–2034), 118 biologics are expected to lose patent protection, presenting a $234 billion opportunity for biosimilars."[8]

Due to the savings potential, prioritizing biosimilars in state employee health plans will enhance the fiscal soundness of the state budget while ensuring state employees have access to efficacious treatments. This is an easy win-win outcome that will benefit both taxpayers and state employees.

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Introduction

Biologics create tremendous value for patients. Thanks to these innovative medicines, patients can access efficacious treatments for many chronic, autoimmune, and inflammatory diseases including rheumatoid arthritis, psoriasis, Crohn's disease, multiple sclerosis, and cancer. Biologics differ from traditional chemical-based medicines because they are derived from living organisms that are more complex to develop and often must be infused in a clinical setting.

Just as generic competition drives down the price of traditional chemical-based medicines once the patents on branded medicines expire, biosimilars are competitive products that drive down the price for biologics once originators' patents have expired. And the evidence shows that the costs of biosimilars are typically significantly lower than the originators. Not only are biosimilars priced lower, the competitive pressures created by biosimilars also encourage the originators to lower their prices. Because of these competitive pressures, prices for the originator biologics fall significantly following the introduction of biosimilar competition.

> "Due to the large potential cost savings, states have considered legislation that would prioritize biosimilars on state employee health insurance formularies."

Due to the large potential cost savings, states have considered legislation that would prioritize biosimilars on state employee health insurance formularies. Given the large potential savings biosimilars enable, this analysis reviews the cost studies that document the biosimilars' savings potential and then applies these estimates to develop potential state specific savings for states should state employee health plans prioritize biosimilars. The analysis demonstrates that state employee health plans can save millions of dollars from prioritizing biosimilars when these medicines have a lower price.

Biosimilars Have Large Savings Potential

Encouraging both innovation and competition is an essential component of a vibrant healthcare system. The value of innovation is clear. Thanks to remarkable drug innovations, there have been significant advancements in treating diseases such as diabetes, cancer, and autoimmune disorders. This progress would not have occurred without the enforcement of secure patent rights that provide innovators with the opportunity to cover the large cost of capital associated with developing new medicines.

And these costs are substantial. On average, it can take up to 15 years to develop a new therapy and cost upwards of $2.9 billion, including post-approval expenditures.[9] Discovering new efficacious drugs and treatments is also very risky. A 2024 analysis showed that the likelihood of approval "for new assets entering Phase I is now just 6.7%, down from 7.9% three years ago."[10] In other words, more than 93% of new drugs entering Phase I trials are not ultimately approved.

Despite the large financial investments that innovative firms have invested over many years, once an innovation has been created, copying that technology is relatively cheap. This is why secure patent rights are essential for incentivizing innovation. With the rights over their invention secure, innovative manufacturers have an opportunity to recoup their cost of capital.

This opportunity to recoup the costs of capital enabled by secure patent rights for a set period has helped incentivize the development of nearly 900 novel medicines between 2000 and 2024.[11] However, innovation isn't the only concern. Affordability matters too, which is why the exclusivity rights are temporary. When these rights for originator biologics have expired, and the opportunity to recoup the cost of capital has run its course, the market is then opened up to biosimilar competition.

Biosimilars have proven to be effective competitors that promote broad-based affordability. As of 2024, biosimilars account for approximately 24 percent of the total volume of medicines for those biologics where biosimilar competition is allowed.[12] The share varied significantly by market, however. Biosimilars have obtained the largest shares in the bevacizumab (89 percent share) and trastuzumab (86 percent share) markets.[13] Alternatively, biosimilars had the lowest share (less than 1 percent) in the tocilizumab market, which has only faced competition for less than a year.

Biosimilars have become effective competitors that are empirically driving down costs and promoting greater drug affordability. As IQVIA documented, "the impact of exclusivity losses reached $77.5 billion on a net revenue basis over the past five years including a large biosimilars impact."[14] IQVIA further notes that "most of the impact from losses of exclusivity (LOE) since 2020 has been from biologics facing biosimilars rather than small molecules facing generic competitors."[15] In other words, in the markets where biosimilar competition is introduced, the prices and total per patient expenditures on medicines decline.

Numerous other studies and analyses have also found that biosimilars enable tremendous savings and meaningfully improve drug affordability for patients. IQVIA examined the savings over a longer timeframe, estimating that biosimilars saved $25.5 billion in 2023.[16] The Association for Accessible Medicines (AAM) in the 2025 edition of their annual savings report noted that biosimilars have, since introduction, achieved "$56.2 billion in savings for patients and the healthcare system."[17] In 2024 alone, these savings were $20.2 billion—not so different than the IQVIA estimate.[18]

"In the markets where biosimilar competition is introduced, the prices and total per patient expenditures on medicines decline."

Further, these savings are expected to increase over time. The aforementioned IQVIA study estimates that between 2023 and 2027, the cumulative biosimilar savings will total $181 billion (under their base case analysis).[19]

Biosimilars generate savings for the simple reason that these medicines are just as efficacious as the originator biologic but cost much less. Jeremias (2026) noted that the launches of biosimilars "led to substantial price reductions over time; on average, the average sales price for biosimilars decreased by 52 percent within 5 years of the initial class launch."[20]

PRI has documented the large savings enabled by greater adoption of biosimilars in a series of papers. Our June 2018 analysis examined the savings that were being generated for one specific medicine—infliximab. Infliximab treats chronic inflammatory diseases such as Crohn's disease, ulcerative colitis, rheumatoid arthritis, and plaque psoriasis. Our analysis found that in the commercial market "on a per patient basis, the infliximab biosimilars can generate between $2,100 of savings and $4,400 of savings relative to the biologic version" depending on the condition being treated and price mark-ups imposed by the healthcare providers.[21] Potential per patient savings will be similarly large for the Medicare market (between $2,100 and $3,600).[22]

Systemically, for 2018, the study found that for just one originator biologic, "commercial payers and Medicare could save between $412 million and $465 million a year."[23]

The realized and potential savings have grown significantly since our 2018 analysis. Our most recent study found that for the biologics facing biosimilar competition, "relative to 2019, total sales in inflation adjusted dollars are 51 percent lower through 2023 even though total unit sales are over 1 percent higher." Further, "biosimilar competition has reduced the total inflation adjusted unit prices from $1,111 in 2019 to $489 as of the first quarter of 2024 (a 56 percent decline)."[24]

In contrast to these price declines, the study also found that inflation adjusted prices increased for those biologics that did not face effective biosimilar competition.[25] In other words, without biosimilar competition prices rose but with competition, prices declined. The stark differences between the originators facing biosimilar competition, which saw price and expenditure decline, and those not facing competition, which saw price and expenditure increases, provides evidence that competition from biosimilars drives down prices.

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Biosimilars generate savings for the obvious reason that they are typically priced significantly below the originator biologic. Benfeld et al. (2025) noted that "overall, market prices declined substantially following biosimilar entry. Across all originator-biosimilar families, the mean market-weighted ASP fell to 64.9% of its pre-entry level three years after the first biosimilar and to 45.9% after five years."[26]

Perhaps the case study of Humira best exemplifies biosimilars' savings potential. While still on patent, Humira was the bestselling drug in the world. Sales peaked in 2022 at $21.2 billion.[27] Revenues started to decline significantly and, for full-year 2025, total Humira revenues fell to $4.5 billion.[28] The decline in Humira revenues started when biosimilar competition was introduced in the U.S. beginning in January 2023. As Drug Channels noted,

> *Humira now faces more than 20 biosimilar competitors, some of which have list prices that are more than 85% lower. According to SSR Health, the Humira reference product's net price has dropped by more than 70% over the past three years.*[29]

The Humira case study demonstrates that biosimilar competition promotes greater affordability by both introducing lower-cost medicines into the market and, because of this competition, by incentivizing originator biologics to reduce their prices.

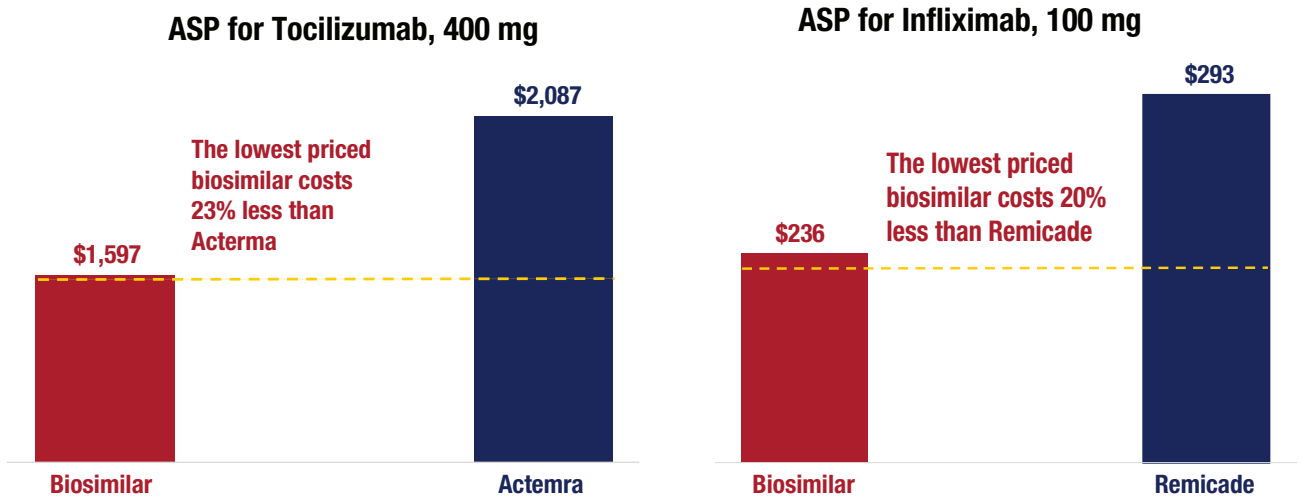
Biosimilars Cost Less Than Originator Biologics

The most recent average sales price data maintained by the Centers for Medicare and Medicaid Services (CMS) confirm these findings. Manufacturers of Part B-covered drugs—drugs that are administered in a hospital or clinical setting—must submit pricing data to CMS quarterly. CMS then reports the Average Sales Price (ASP) for these drugs, which is the volume-weighted average sales price of the medicine net of all discounts, rebates, and concessions. Consequently, the ASP provides an accurate estimate of the price of Medicare Part B drugs.

The ASP data for April 2026, which are presented below in Figures 1 through 5, show that for most biologics, the lowest-priced biosimilar is significantly cheaper than the originator biologic (also referred to as reference product).[30]

Figure 1 presents the comparison between the originators and the lowest-priced biosimilars for immunology medicines including tocilizumab and infliximab. The lowest-priced biosimilar is used for comparison to provide context regarding the maximum potential savings that can be obtained by prioritizing biosimilar drugs relative to the originator biologic. As Figure 1 illustrates, prioritizing biosimilars could save up to 20 percent for infliximab and 23 percent for tocilizumab.

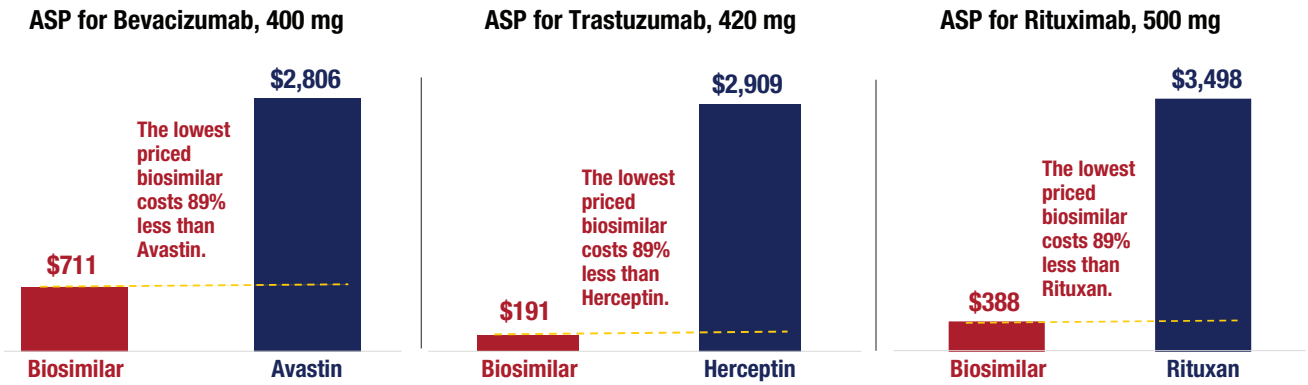
Figure 1
Immunology Drug ASP
Originator compared to Lowest-priced Biosimilar



Source: CMS

Figure 2 provides the same comparison for the oncology biologics that include bevacizumab, trastuzumab, and rituximab. Oncology biosimilars sell at an even greater discount relative to the originator product than the discount for immunology biosimilars. For bevacizumab, the biosimilar costs 75 percent less; for trastuzumab the biosimilar costs 93 percent less, and for rituximab the biosimilar costs 89 percent less.

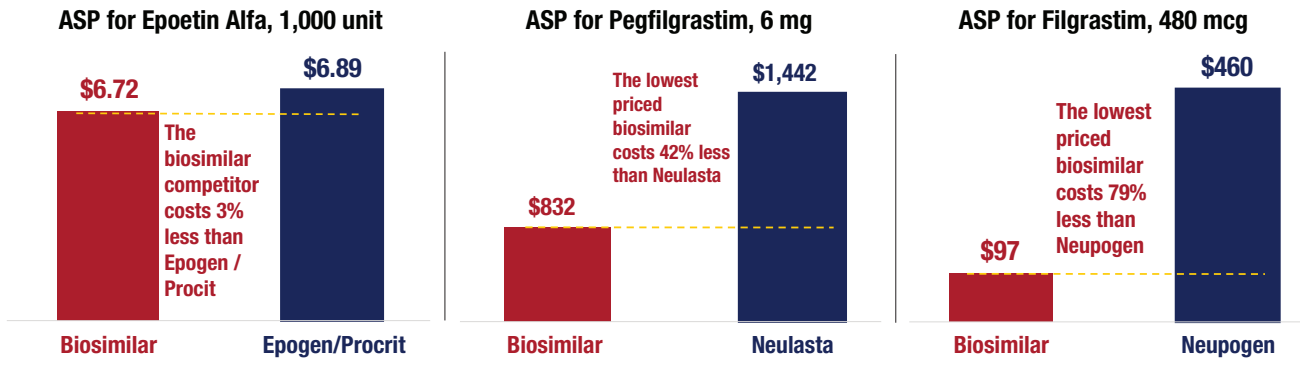
Figure 2
Oncology Drug ASP
Originator compared to Lowest-priced Biosimilar



Source: CMS

The prices of biosimilars for drugs that stimulate bone marrow, white blood cells, or red blood cells to help improve outcomes for patients with chronic kidney disease or patients being treated with chemotherapy (supportive drugs) are similarly lower. Figure 3 illustrates that epoetin alfa biosimilars are 3 percent less expensive, pegfilgrastim biosimilars are 42 percent less expensive, and filgrastim biosimilars are 79 percent less expensive.

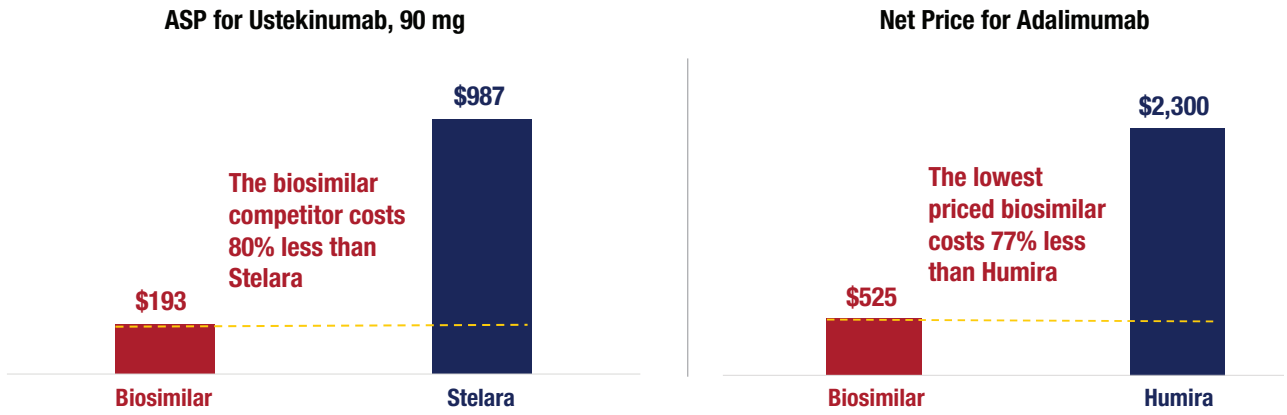
Figure 3
Supportive Drug ASP
Originator compared to Lowest-priced Biosimilar



Source: CMS

The same pattern holds for immunology and endocrinology biologics, see Figure 4. The lowest-priced biosimilar for ustekinumab sells at an 80 percent discount and the lowest-priced biosimilar for adalimumab sells at a 77 percent discount.

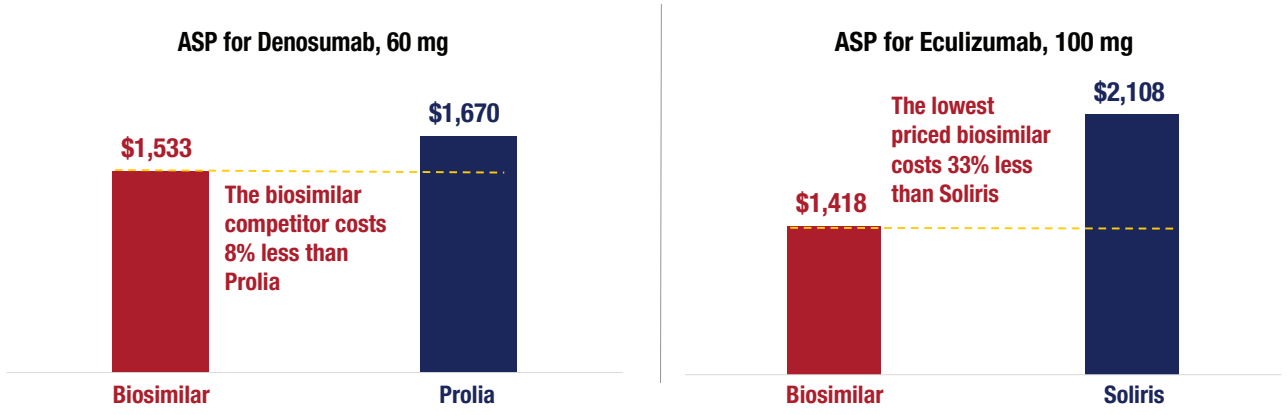
Figure 4
Immunology and Endocrinology Drug ASP Originator compared to Lowest-priced Biosimilar



Source: CMS

Finally, Figure 5 presents the lowest-priced biosimilar discounts for osteoporosis and rare immune-mediated biologics. These data indicate that the lowest-priced denosumab biosimilar sells at an 8 percent discount and the lowest-priced eculizumab biosimilar sells at a 33 percent discount.

Figure 5
Osteoporosis and Rare Immune-Mediated Drug ASP Originator compared to Lowest-priced Biosimilar



Source: CMS

In those instances where the latest ASP data for the originator is less than the biosimilar, the originator's price has fallen significantly due to the introduction of biosimilar competition. For example, the latest ASP data for the biosimilar for ranibizumab (a biologic that treats various retinal conditions) is 5 percent more expensive than the originator Lucentis. However, the competitive market has caused extreme drops in Lucentis' ASP—prices for ranibizumab biologics dropped 50 percent in the second quarter of 2025 compared to the first quarter.[31]

These data confirm that biosimilars are typically much lower priced medicines and the competitive process spurred by biosimilars drives down costs over time. It stands to reason that prioritizing lower cost medicines on drug formularies will generate significant budgetary savings, consequently.

The Growth of Net Pricing Further Discredits the Higher Cost Myth

The CMS data reviewed above raises an important question: If biosimilars cost less than originator biologics, then how can analyses—such as the fiscal note for Senate Bill 140 in Arkansas in 2025[32]—find that prioritizing biosimilars will increase costs? It logically follows that greater use of lower-cost biosimilars should save states significant money on the drug costs for their employee administered health plans. After all, shouldn't prioritizing products that are of the same quality, but cost less, save money? Yet, despite the obvious arithmetic, legislation that promotes the use of biosimilars has been scored as increasing costs for states. One possible explanation for this anti-math result is the rebate wall problem.

"Despite the obvious arithmetic, legislation that promotes the use of biosimilars has been scored as increasing costs for states. One possible explanation for this anti-math result is the rebate wall problem."

Rebate walls occur when companies tie rebates to specified volume targets. When the dollar sales of a drug are large enough, which often occurs when a drug treats multiple indications, losing volume-dependent dollar rebates overwhelms the potential savings that lower-priced competitive drugs can initially offer insurers and PBMs. To avoid this penalty and maintain their current discounts, insurers will, essentially, block patient access to the lower-priced medicines.

The lack of competition between drugs causes prices to remain excessively high, which impose large unnecessary costs on patients who require expensive medicines and do not benefit from the rebates—while drug rebates reduce the costs for the state insurance plans, they increase costs on patients. This bizarre outcome occurs because rebates drive up the list price (also called gross price or the wholesale acquisition cost, or WAC) of medicines to ensure that the manufacturer can pay large discounts to the insurers and self-employed health plans. The patient share of the costs has typically been based on the list prices of the medicines, however, not the net prices—the prices that manufacturers receive net of all discounts paid.

Therefore, to accommodate the growing demand for rebates by PBMs and insurers, list prices have been growing excessively relative to net prices—a gross-to-net bubble has formed. The large gross-to-net bubble causes patients' out-of-pocket costs to increase even though the net prices of medicines (the prices for the medicines net of all the discounts paid to PBMs and insurers) have been decreasing.[33]

Where successful, rebate walls have several adverse consequences. They worsen the drug affordability problem by denying patients access to drugs that would be just as efficacious but cost them less. Where rebate walls exist, state employees are facing much higher out-of-pocket costs because the state formulary is prioritizing medicines that have higher list prices and therefore require higher payments from patients.

It's not just patients that suffer; even the savings the state receives from these circumstances are suspect over the longer-term. The existence of rebate walls makes it difficult for lower-priced biosimilars to gain traction because there is a threshold market share that these lower cost medicines must obtain to overcome the disincentives of the rebate wall. However, once this threshold is breached, the state employee health plans can generate significantly higher savings as well. Therefore, rebate walls prevent the state employee plan from realizing even greater potential savings that typically results once robust biosimilar competition is established.

"Rebate walls prevent the state employee plan from realizing even greater potential savings that typically results once robust biosimilar competition is established.

Perhaps more important for proposals to prioritize biosimilars for state employee health plans, the current inefficient drug pricing model that enables rebate walls to flourish is in flux. As Drug Channels noted,

> *the gross-to-net bubble is deflating due to the combined impacts of government actions and consumer behavior.*
>
> *For 2024 and 2025, manufacturers reduced the wholesale acquisition cost (WAC) list prices for more than 20 brand-name drugs. For 2026, manufacturers will cut prices on at least 15 more drugs, which will reduce gross brand-name revenues by $35 to $40 billion. List prices are dropping by –25% to –85%.*
>
> *The data leave no doubt: the bubble is finally leaking air. We are entering the Net Pricing Drug Channel (#NPDC)—a market environment in which net prices, not list prices, drive access, economics, and strategy.*
>
> *The NPDC will reward simplicity, punish rebate dependence, and force every channel participant to rethink how money actually moves.*[34]

With coverage decisions being based on a more transparent net pricing system, the opacity that allows rebate walls to exist will disappear. Along with their disappearance, the excuse that lower-cost medicines could increase costs will also vanish.

Potential Savings to State Employee Health Plans from Prioritizing Biosimilars

While directionally it is clear that prioritizing lower-cost biosimilars will save state employee health plans money, it is useful to quantify how much money state employee health plans could save by prioritizing biosimilars. To estimate these potential savings, it is first necessary to estimate how much state employee health plans are currently spending on biologic medicines. While there is no single source for this data, the values can be estimated based on the National Health Expenditure data from CMS,[35] IQVIA's estimated spending on biologics,[36] and Altarum's estimate share of non-retail prescription drugs.[37] Based on these sources, we estimate that state private health insurance plans spent $20 billion on biologics in 2024, see Table 1.

The estimated biologic spending is based on the total state expenditures on private health insurance in 2024 as reported by CMS, which was $246.8 billion. These expenditures were 15.0 percent of the total $1.6 trillion that was spent on private health insurance in 2024. Applying this 15.0 percent share to the total retail drug expenditures of private health insurance reported by CMS ($172.1 billion), state employee health plans spent an estimated $25.8 billion on retail drugs in 2024.

Retail drug spending does not include the expenditures on drugs administered in clinical settings, however. According to Altarum estimates "non-retail prescription drug spending accounted for an additional 4.3 percent of NHE [national health expenditures] in 2020 and will grow to 4.6 percent by 2030."[38] Attributing an additional 4.6 percentage points of total private health insurance expenditures toward drugs indicates that a total of $247.8 billion was spent on retail and in-patient drugs in 2024. Based on the 15.0 percent share of total expenditures, these figures indicate that state employee health plans spent $37.2 billion on retail and in-patient drugs in 2024.

Based on IQVIA's analysis that showed total net spending on biologics ($262 billion) equaling 53.8 percent of total net spending on drugs ($487 billion),[39] these figures imply that total private insurance expenditures on biologics were $133.3 billion, with state private health insurance plans spending $20.0 billion.

Table 1
Expenditures on Biologic Drugs by State Health Insurance Plan, 2024 (in billions)

	TOTAL PRIVATE HEALTH INSURANCE	STATE EXPENDITURES ON PRIVATE INSURANCE	STATE EXPENDITURES SHARE OF PRIVATE EXPENDITURES
Total Expenditures	$1,644.6	$246.8	15.0%
Total Retail Drug Expenditures	$172.1	$25.8	
Total Retail and In-Patient Drug Expenditures	$247.8	$37.2	
Biologic Share of Drug Expenditures	53.8%	53.8%	
Total Biologic Expenditures	**$133.3**	**$20.0**	

Source: Author calculations based on data from CMS, IQVIA, and Altarum

To estimate the total spending on biologics by each state's employee health plans in 2024, the $20.0 billion in expenditures are distributed based on each state's average share of total payer expenditures on drugs and other nondurable products over the most recent five years of data as reported by CMS, see Table 2.[40]

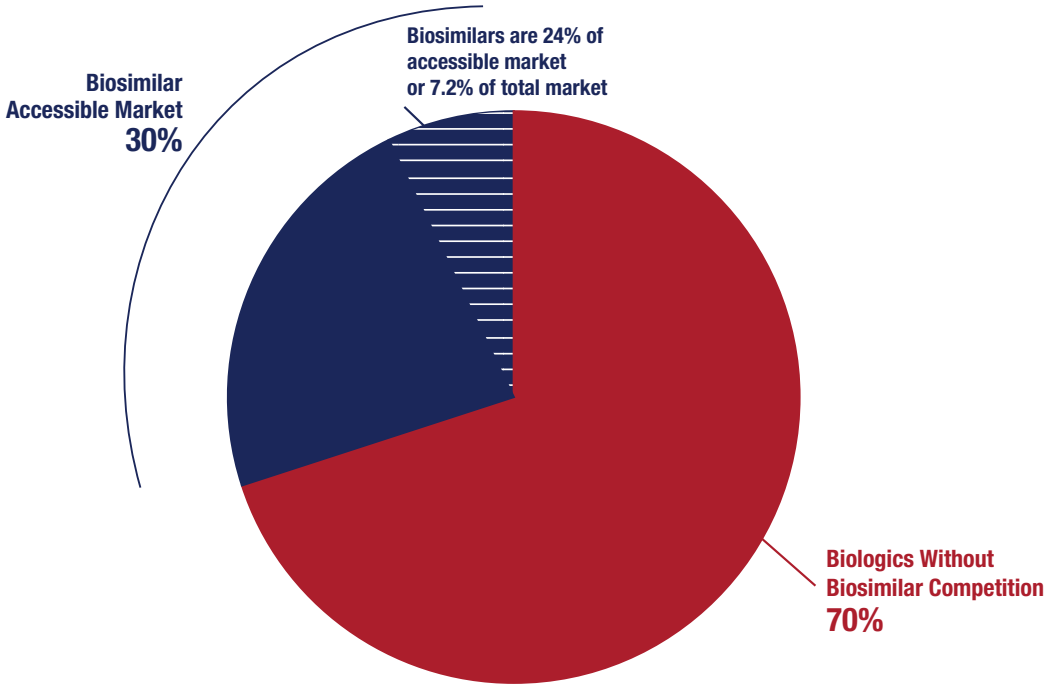
Table 2
Estimated 2024 Expenditures on Biologics by State Employee Health Plans (in millions)

STATE	ESTIMATED SPENDING	STATE	ESTIMATED SPENDING	STATE	ESTIMATED SPENDING
United States	**$20,002**	Kentucky	$301.4	North Dakota	$41.9
Alabama	$385.7	Louisiana	$341.6	Ohio	$625.5
Alaska	$29.9	Maine	$89.1	Oklahoma	$236.9
Arizona	$360.3	Maryland	$362.0	Oregon	$167.2
Arkansas	$185.7	Massachusetts	$465.0	Pennsylvania	$914.6
California	$2,024.0	Michigan	$612.2	Rhode Island	$85.5
Colorado	$229.4	Minnesota	$255.2	South Carolina	$334.6
Connecticut	$299.0	Mississippi	$193.7	South Dakota	$42.4
Delaware	$79.3	Missouri	$404.1	Tennessee	$446.9
Florida	$1,469.3	Montana	$39.5	Texas	$1,771.8
Georgia	$615.6	Nebraska	$115.1	Utah	$155.8
Hawaii	$114.2	Nevada	$173.3	Vermont	$32.2
Idaho	$65.7	New Hampshire	$83.4	Virginia	$469.7
Illinois	$725.1	New Jersey	$684.0	Washington	$284.3
Indiana	$417.3	New Mexico	$86.5	West Virginia	$140.9
Iowa	$152.8	New York	$1,682.5	Wisconsin	$286.1
Kansas	$130.8	North Carolina	$710.6	Wyoming	$20.8

Source: Author calculations based on data from CMS and Table 1

Like the rest of the market, biosimilars are currently saving state employee health insurance plans money; however, prioritizing biosimilars will increase those savings. According to IQVIA, "biosimilars have 24 percent of the volume in days of therapy for molecules where they compete" while "less than one-third of overall volume of biologics is for molecules which have biosimilars available."[41] Combining these values, measured by volume of sales, biosimilars account for about 7 percent of the total volume as reported by IQVIA, see Figure 6.

Figure 6
Biosimilar Share of Biologics Market by Volume
2024



Source: IQVIA

Assuming state employee health plans' use of biosimilars reflects the average for all insurers, the potential savings will depend on the growth in biosimilars market share over this 7 percent current value. Increased biosimilar use can occur in two ways. First, biosimilars competing in the market currently accessible to biosimilars can grow their share. Second, biosimilar competition can be introduced in the markets currently inaccessible to biosimilar competition.

Focusing on the current biosimilar accessible markets, biosimilars typically obtain 52 percent of the market share within 5 years of launch, according to Samsung Bioepis.[42] Studies indicate that these market share gains can be accelerated and increased by implementing policies that prioritize biosimilars.

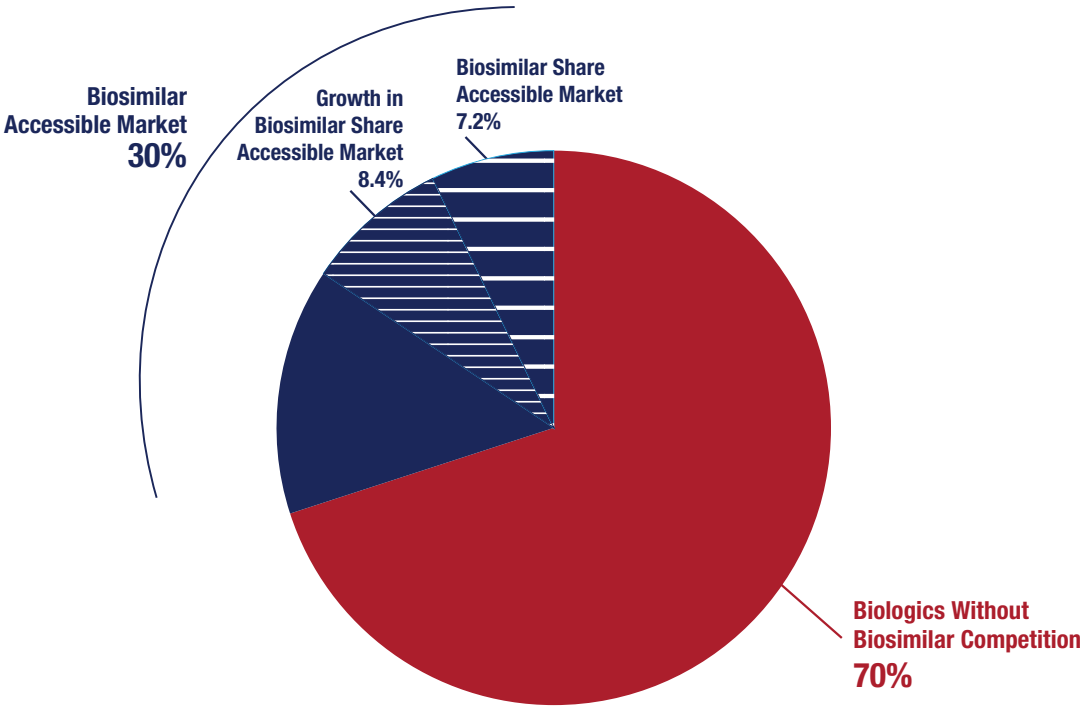
For example, a study by Cross et. al. (2022) examined the impact from biosimilar implementation strategies.[43] The authors note that biosimilar prioritization strategies implemented in 2020 increased biosimilars' share "from 5% to 80% for rituximab, from 9% to 88% for bevacizumab, and from 8% to 74% for trastuzumab." In a similar finding, Costin et al. (2023) found that health plan design has a meaningful impact on the uptake of biosimilars.[44] In another example, following CVS Caremark's removal of Humira from its national commercial template formularies in favor of biosimilars the company reported that patients rapidly gained "access to lower-cost, clinically appropriate medicines" that six months later resulted in clients realizing "$908 million in gross savings."[45]

These studies indicate that policies that prioritize lower cost biosimilars result in rapid uptake of these medicines. Consequently, state employee health plans should expect a significant acceleration in biosimilar uptake for the current biosimilar accessible market if these policies are adopted.

State Employee Health Plans Could Achieve Substantial Savings

To provide perspective on the potential savings, this analysis assumes two different uptake scenarios. For conservative purposes, the first scenario assumes that, for the medicines currently facing competition, state employee health plans use of biosimilar will rapidly increase from its current 24 percent of the volume to the longer-term average of 52 percent. Since the biosimilar accessible market currently accounts for around 30 percent of total biologic volume, this indicates that biosimilars would represent 15.6 percent of the total biologic sales for state employee health plans—an increase of 8.4 percentage points over the current share, see Figure 7.

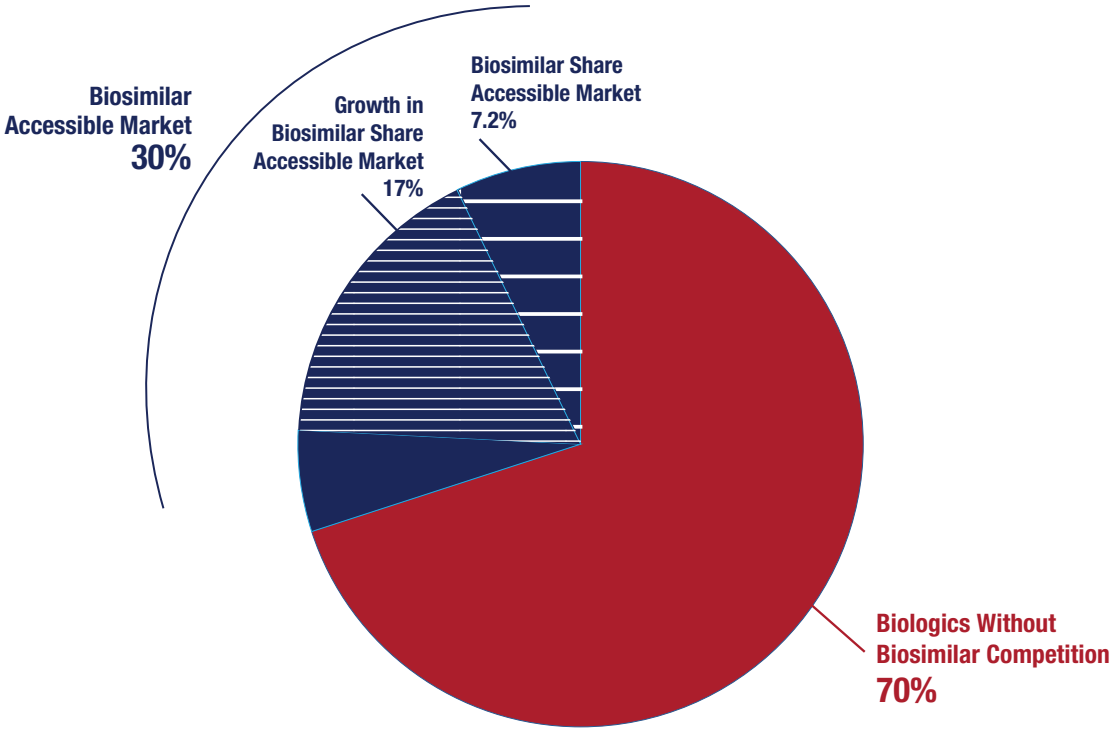
Figure 7
State Employee Health Plan Biosimilar Share With Prioritization Policy Rapidly Increasing Biosimilars Share to the 52 Percent Average



Source: Author calculations based on IQVIA data

The second scenario assumes that, for the medicines currently facing competition, state employee health plans' use of biosimilars will rapidly increase to match the experience documented in Cross et al. (2022). Based on this experience, biosimilars market share would quickly increase from its current 24 percent share of volume to 81 percent of the share of volume. Since the biosimilar accessible market currently accounts for around 30 percent of total biologic volume, this indicates that biosimilars' share of total biologic volumes would increase by 17.0 percentage points to equal 24.2 percent for state employee health plans, see Figure 8.

Figure 8
State Employee Health Plan Biosimilar Share With Prioritization Policy Rapidly Increasing Biosimilars Share to the 81 Percent Average



Source: Author calculations based on IQVIA data

State employee health plans can expect significant budgetary savings should biosimilars' share of the current accessible market increase between 8.4 percentage points and 17.0 percentage points. Based on Jeremias (2026) estimate of an average 52 percent discount for biosimilars, the total savings for state employee health plans would range between $871 million and $1.8 billion annually. Tables 3 and 4 summarize the state breakdown of these savings.

Table 3
Potential Savings for State Employee Health Plans from Prioritizing Biosimilars
52 Percent Market Share Scenario
(in millions)

STATE	ESTIMATED SAVINGS	STATE	ESTIMATED SAVINGS	STATE	ESTIMATED SAVINGS
United States	**$871.0**	Kentucky	$13.2	North Dakota	$1.8
Alabama	$16.8	Louisiana	$14.9	Ohio	$27.3
Alaska	$1.3	Maine	$3.9	Oklahoma	$10.3
Arizona	$15.7	Maryland	$15.8	Oregon	$7.3
Arkansas	$8.1	Massachusetts	$20.3	Pennsylvania	$39.9
California	$88.4	Michigan	$26.7	Rhode Island	$3.7
Colorado	$10.0	Minnesota	$11.1	South Carolina	$14.6
Connecticut	$13.1	Mississippi	$8.5	South Dakota	$1.9
Delaware	$3.5	Missouri	$17.6	Tennessee	$19.5
Florida	$64.2	Montana	$1.7	Texas	$77.4
Georgia	$26.9	Nebraska	$5.0	Utah	$6.8
Hawaii	$5.0	Nevada	$7.6	Vermont	$1.4
Idaho	$2.9	New Hampshire	$3.6	Virginia	$20.5
Illinois	$31.7	New Jersey	$29.9	Washington	$12.4
Indiana	$18.2	New Mexico	$3.8	West Virginia	$6.2
Iowa	$6.7	New York	$73.5	Wisconsin	$12.5
Kansas	$5.7	North Carolina	$31.0	Wyoming	$0.9

Source: Author calculations

Table 4
Potential Savings for State Employee Health Plans from Prioritizing Biosimilars
81 Percent Market Share Scenario
(in millions)

STATE	ESTIMATED SAVINGS	STATE	ESTIMATED SAVINGS	STATE	ESTIMATED SAVINGS
United States	**$1,762.7**	Kentucky	$26.6	North Dakota	$3.7
Alabama	$34.1	Louisiana	$30.2	Ohio	$55.3
Alaska	$2.6	Maine	$7.9	Oklahoma	$20.9
Arizona	$31.9	Maryland	$32.0	Oregon	$14.8
Arkansas	$16.4	Massachusetts	$41.1	Pennsylvania	$80.9
California	$178.9	Michigan	$54.1	Rhode Island	$7.6
Colorado	$20.3	Minnesota	$22.6	South Carolina	$29.6
Connecticut	$26.4	Mississippi	$17.1	South Dakota	$3.7
Delaware	$7.0	Missouri	$35.7	Tennessee	$39.5
Florida	$129.9	Montana	$3.5	Texas	$156.6
Georgia	$54.4	Nebraska	$10.2	Utah	$13.8
Hawaii	$10.1	Nevada	$15.3	Vermont	$2.8
Idaho	$5.8	New Hampshire	$7.4	Virginia	$41.5
Illinois	$64.1	New Jersey	$60.5	Washington	$25.1
Indiana	$36.9	New Mexico	$7.6	West Virginia	$12.5
Iowa	$13.5	New York	$148.7	Wisconsin	$25.3
Kansas	$11.6	North Carolina	$62.8	Wyoming	$1.8

The state breakdowns demonstrate that states should universally expect meaningful savings to the costs of their state employee health plans by prioritizing the use of lower-priced biosimilars. These savings do not include the potential additional savings that states will realize as more biosimilar competition is introduced in the markets that are not currently biosimilar accessible. And these savings are substantial. According to IQVIA, "over the next decade (2025–2034), 118 biologics are expected to lose patent protection, presenting a $234 billion opportunity for biosimilars."[46]

These potential savings for the broader healthcare system will also benefit state employee health plans, and prioritizing biosimilars in the formularies will generate additional savings for states. However, the timing and size of the savings will depend on when the exclusivity for the reference biologic expires and whether there are biosimilar competitors currently under development for the specific reference product losing exclusivity. The current analysis has not accounted for these considerations; consequently, these potential savings are not included in the current assessment.

Conclusion

The broad-based savings opportunities enabled by biosimilars are well documented, and this outcome makes logical sense. After all, why wouldn't greater use of medicines that cost less and are just as efficacious save money?

In practice, states should expect significant savings on drug spending by prioritizing biosimilars in their formularies. Consequently, prioritizing biosimilars in state employee health plans will enhance the fiscal soundness of the state budget while ensuring state employees have access to efficacious treatments.

Based on the historical experience with programs that prioritize biosimilars coupled with the average biosimilar price discount, savings of up to $1.8 billion are realizable across all 50 states. Prioritizing biosimilars is the quintessential "low-hanging fruit" opportunity that will enable states to create budget savings without reducing benefits to employees and retirees.

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