Topline Findings

**Generic Savings**
- The average generic copay: $6.16\(^1\)
- The average brand-name copay: $56.12\(^1\)
- 93% of generics have a copay less than $20. Only 59% of brands have a copay less than $20

**Biosimilar Savings**
- Savings increased to $7 billion in 2021
- Biosimilars have been used in over 364 million days of patient therapy, and have been used in over 150 million additional days of therapy that otherwise would have not been provided
- Generated more than $13 billion in savings since 2015

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## Topline Findings

### Health Care System Savings

- **Total Generic and Biosimilar Savings for 2021:** $371 billion
- **Total Generic and Biosimilar Savings for past 10 years:** more than $2.6 trillion
- **Total Generic and Biosimilar Savings to Medicare for 2021:** $119 Billion ($2,447 per enrollee)
- **Total Generic and Biosimilar Savings in Commercial Plans for 2021:** $178 Billion
- **Nearly 6.4 billion generic and biosimilar prescriptions dispensed**
- **Generics represent 91% of prescriptions filled, yet account for only 18.2% of prescription drug spending**
- **Generics represent only 3% of all health care spending**

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2 Peterson-KFF Health System Tracker. "What drives health spending in the U.S. compared to other countries." September 25, 2020. Note: Generic and brand drug share of prescription drug spending was calculated using an analysis of the 2018 Medical Expenditures Panel Survey. Total drug spending was segmented into generics and brans. Those percentages were then applied to the Peterson-KFF Health System Tracker analysis of spending by type of expenditure in the U.S. health care system.
Overall Savings Generated by Generics and Biosimilars
Savings From Generics and Biosimilars Totaled $373 Billion in 2021

GENERIC AND BIOSIMILAR SAVINGS INCREASED BY $32 BILLION FROM 2020 TO 2021

Source: IQVIA, National Sales Perspectives, Dec 2021.
Generics and Biosimilars Account for 18.2% Of Total Medicine Spending

Generics and Biosimilars Are 91% Of All Prescriptions

Source: IQVIA, National Sales Perspectives, Dec 2021.
Biosimilars Deliver on Their Promise of Access and Savings

**39** APPROVED

**22** MARKETED

**BIOSIMILAR SAVINGS SINCE 2015**

$13.3 BILLION

**BIOSIMILARS HAVE BEEN USED IN MORE THAN 364 MILLION DAYS OF PATIENT THERAPY AND HAVE RESULTED IN MORE THAN 150 MILLION INCREMENTAL DAYS OF THERAPY**

**BIOSIMILAR COMPETITION IS DRIVING LOWER PRICES AMONG BIOSIMILARS AND THEIR REFERENCE PRODUCTS**

Approval / Marketing data as of September 2022.
Source: U.S. FDA and AAM Commercial Assessment. Savings and patient day data developed by Biosimilars Council with IQVIA.
Generics and Biosimilars Reduce Health Care Spending

Generics represent the smallest portion of overall spending on health

Generic drugs account for only 3% of total U.S. health care spending

Peterson-KFF Health System Tracker. “What drives health spending in the U.S. compared to other countries.” September 25, 2020. Note: Generic and brand drug share of prescription drug spending was calculated using an analysis of the 2018 Medical Expenditures Panel Survey. Total drug spending was segmented into generics and brands. Those percentages were then applied to the Peterson-KFF Health System Tracker analysis of spending by type of expenditure in the U.S. health care system.
The Top 10 Generics of 2021 Saved $110 Billion

The Top 10 Products of 2021 represent 26% of the overall savings in the past 10 years.

<table>
<thead>
<tr>
<th>Products</th>
<th>Generic Entry Year</th>
<th>Brand Pre-Expire Price (Per Unit)</th>
<th>Price of Generic Equivalent 2020 (Per Unit)</th>
<th>2021 Savings ($Bn)</th>
<th>Percent Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lipitor</td>
<td>2010</td>
<td>$3.29</td>
<td>$0.07</td>
<td>$21.4</td>
<td>98%</td>
</tr>
<tr>
<td>Zofran</td>
<td>2005</td>
<td>$8.47</td>
<td>$0.19</td>
<td>$16.1</td>
<td>222%</td>
</tr>
<tr>
<td>Crestor</td>
<td>2015</td>
<td>$5.78</td>
<td>$0.08</td>
<td>$12.6</td>
<td>99%</td>
</tr>
<tr>
<td>Prilosec</td>
<td>2001</td>
<td>$3.31</td>
<td>$0.06</td>
<td>$12.4</td>
<td>98%</td>
</tr>
<tr>
<td>Abilify</td>
<td>2014</td>
<td>$21.68</td>
<td>$0.29</td>
<td>$10.3</td>
<td>99%</td>
</tr>
<tr>
<td>Norvasc</td>
<td>2006</td>
<td>$1.54</td>
<td>$0.02</td>
<td>$9.1</td>
<td>99%</td>
</tr>
<tr>
<td>Neurontin</td>
<td>2003</td>
<td>$1.02</td>
<td>$0.07</td>
<td>$7.4</td>
<td>94%</td>
</tr>
<tr>
<td>Protonix</td>
<td>2006</td>
<td>$2.83</td>
<td>$0.07</td>
<td>$7.3</td>
<td>97%</td>
</tr>
<tr>
<td>Cymbalta</td>
<td>2012</td>
<td>$4.61</td>
<td>$0.16</td>
<td>$6.8</td>
<td>97%</td>
</tr>
<tr>
<td>Lyrica</td>
<td>2019</td>
<td>$6.93</td>
<td>$0.12</td>
<td>$6.7</td>
<td>99%</td>
</tr>
</tbody>
</table>

Source: IQVIA, National Sales Perspectives, Dec 2021.
Savings by Category
Savings by State

Source: IQVIA, National Sales Perspectives, Dec 2020.
MEDICARE AND COMMERCIALY INSURED PATIENTS GENERATE THE MAJORITY OF GENERIC SAVINGS
<table>
<thead>
<tr>
<th>CONDITION</th>
<th>TOTAL SAVINGS (PRIMARY CONDITION + COMORBIDITIES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>$96.7 Billion</td>
</tr>
<tr>
<td>Mental Illness</td>
<td>$59.7 Billion</td>
</tr>
<tr>
<td>Diabetes</td>
<td>$56.7 Billion</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>$37.4 Billion</td>
</tr>
<tr>
<td>Cancer</td>
<td>$17.9 Billion</td>
</tr>
<tr>
<td>Allergies and Asthma</td>
<td>$12.4 Billion</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>$5.8 Billion</td>
</tr>
<tr>
<td>Alzheimer's disease</td>
<td>$5.5 Billion</td>
</tr>
<tr>
<td>Chronic Obstructive Pulmonary Disease (COPD)</td>
<td>$5.3 Billion</td>
</tr>
<tr>
<td>Crohn's &amp; Colitis</td>
<td>$3.3 Billion</td>
</tr>
</tbody>
</table>

Source: IQVIA, National Sales Perspectives, Dec 2021.
New Generic Savings
New Generic and Biosimilar Competition Generated $93 Billion in Savings in 2021

GENERICS AND BIOSIMILARS LAUNCHED SINCE 2012 HAVE $312 BILLION IN CUMULATIVE SAVINGS

Source: IQVIA, National Sales Perspectives, Dec 2021.
**New Generics Face PBM Delays in Coverage**

Many PBMs and health plans delay coverage of new generics despite their lower cost.

### Percent of New Generics Covered by Medicare

<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td>M</td>
<td>C</td>
<td>M</td>
<td>C</td>
<td>M</td>
<td>C</td>
<td>M</td>
</tr>
<tr>
<td>2016</td>
<td>22%</td>
<td>46%</td>
<td>31%</td>
<td>68%</td>
<td>63%</td>
<td>72%</td>
<td>58%</td>
</tr>
<tr>
<td>2017</td>
<td>12%</td>
<td>58%</td>
<td>25%</td>
<td>73%</td>
<td>58%</td>
<td>73%</td>
<td>65%</td>
</tr>
<tr>
<td>2018</td>
<td>17%</td>
<td>39%</td>
<td>27%</td>
<td>49%</td>
<td>51%</td>
<td>59%</td>
<td>54%</td>
</tr>
<tr>
<td>2019</td>
<td>31%</td>
<td>44%</td>
<td>59%</td>
<td>60%</td>
<td>72%</td>
<td>61%</td>
<td>72%</td>
</tr>
<tr>
<td>2020</td>
<td>21%</td>
<td>55%</td>
<td>41%</td>
<td>66%</td>
<td>60%</td>
<td>90%</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>23%</td>
<td>86%</td>
<td>46%</td>
</tr>
</tbody>
</table>

**Source:** Analysis of Medicare Part D formulary data from CMS and commercial market formulary data from Managed Markets Insight & Technology, LLC.
Biosimilars Overview
Biosimilars Deliver on Their Promise of Access & Savings

- **39 approved**
- **23 marketed**

Biosimilar Savings since 2015

$13 Billion

Biosimilars have been used in more than 364 million days of patient therapy and have resulted in more than 150 million incremental days of therapy.

Biosimilar competition is driving lower prices among biosimilars and their reference products.

Approval / Marketing data as of October 2022. Source: U.S. FDA.
Patient day & savings data developed by Biosimilars Council with IQVIA.
The Growing Biosimilars Market
AS OF SEPTEMBER 2022

Biosimilars Are Increasing Patient Access to Care

TOTAL PATIENT UTILIZATION HAS INCREASED IN EVERY MOLECULE WITH BIOSIMILAR COMPETITION

![Graph showing patient access to biosimilars since 2015](source)

Source: IQVIA analysis of defined daily dose information and product volume.
Biosimilar Savings Toted $7 Billion in 2021

SINCE 2015, BIOSIMILARS HAVE GENERATED $13.3 BILLION IN SAVINGS

Source: IQVIA, National Sales Perspectives, Dec 2021.
Biosimilar Competition Results in Lower Prices
BRAND BIOLOGIC AND BIOSIMILAR PRICES DECLINE FOLLOWING BIOSIMILAR LAUNCH

Source: Medicare Average Sales Price File, June 2022.
Biosimilar price includes an average of all marketed biosimilars.
Biosimilars Are Projected To Reduce Spending Growth on Medicines To Treat Autoimmune Diseases

PATIENTS WILL BENEFIT FROM NEW BIOSIMILAR COMPETITION AND LOWER PRICES

Source: The Use of Medicines in the U.S. 2022, IQVIA Institute for Human Data Science, April 2022.
Biosimilars Have Already Slowed Spending Growth for Cancer Treatments

BIOSIMILARS HAVE REDUCED ONCOLOGY SPENDING GROWTH BY ROUGHLY HALF

Source: IQVIA Institute Mar 2022.
Notes: Oncology includes therapeutics and not supportive care.
Spending is at estimated net manufacturer price level. Report: The Use of Medicines in the U.S. 2022. IQVIA Institute for Human Data Science, April 2022.
Patient Out-of-Pocket Costs
Patient Costs for Generics Do Not Reflect Generic Prices

Generics are only 16% of invoice-level spending but 65% of patient out-of-pocket costs.

**Patient out-of-pocket costs, 2017-2021**

<table>
<thead>
<tr>
<th>Year</th>
<th>Generics</th>
<th>Brands</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>59.5%</td>
<td>39.9%</td>
</tr>
<tr>
<td>2018</td>
<td>63.1%</td>
<td>36.9%</td>
</tr>
<tr>
<td>2019</td>
<td>66.5%</td>
<td>33.6%</td>
</tr>
<tr>
<td>2020</td>
<td>65.1%</td>
<td>34.9%</td>
</tr>
<tr>
<td>2021</td>
<td>64.8%</td>
<td>35.2%</td>
</tr>
</tbody>
</table>

Source: IQVIA National Sales Perspectives; IQVIA National Prescription Audit; IQVIA LAAD Sample Claims Data, Dec 2021.
92% of Generics Had a Copay of Less Than $20, Compared to Just 53% of Brands

THE AVERAGE BRAND PRESCRIPTION IS ABOUT 8.5X MORE THAN THE GENERIC

Note: *Includes commercial, Medicare Part D, and Medicaid channels; **limited to standard market baskets.
Plans Continue to Shift Generics Onto Brand Tiers With Higher Copay Requirements
MORE PATIENTS ARE BEING FORCED TO PAY THE FULL COST OF THEIR GENERIC

DISTRIBUTION OF GENERIC DRUGS ON MEDICARE DRUG FORMULARIES, 2016-2022

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCENT DISTRIBUTION</td>
<td>36%</td>
<td>42%</td>
<td>46%</td>
<td>46%</td>
<td>53%</td>
<td>55%</td>
<td>57%</td>
</tr>
<tr>
<td>DISTRIBUTION</td>
<td>64%</td>
<td>58%</td>
<td>54%</td>
<td>54%</td>
<td>47%</td>
<td>45%</td>
<td>43%</td>
</tr>
</tbody>
</table>

Improper Formulary Placement Increases Patient Out-of-Pocket Costs

In 2020, 63% of Medicare patients paid the full cost of a generic at least once.

PERCENT OF PATIENTS WHO PAID THE FULL COST OF A GENERIC AT LEAST ONCE

BY YEAR

2017: 45%
2020: 63%

BY THERAPEUTIC CLASS 2020

95% THYROID AGENTS
90% CONTRACEPTIVES
89% CARDIOTONICS
86% ANTIANXIETY AGENTS
82% MUSCULOSKELETAL THERAPY AGENTS
81% CALCIUM CHANNEL BLOCKERS
79% ANTIDEPRESSANTS
76% ULCER DRUGS / ANTISpasMODICS / ANtiCHOLINERGICS
75% MINERALS & ELECTROLYTES
75% HYPNOTICS/SEDATIVES/SLEEP DISORDER AGENTS


Note: All findings are based on a 20% sample of the Medicare Part D population. Findings represent the percent of patients in the initial coverage phase of their benefit taking a generic prescription drug on the preferred brand tier who paid the full cost of the prescription at least once in the benefit year.
Many Patients Save by Paying Cash for Their Generic
EVEN PATIENTS WITH INSURANCE SOMETIMES SAVE BY PAYING CASH

DISCOUNT CARD SAVINGS BY COVERAGE

CASH
- 35% >$20 CHEAPER
- 8% $10-20 CHEAPER
- 6% $5-10 CHEAPER
- 10% $0-5 CHEAPER
- 30% $0 SAME COST
- 7% $5-10 MORE EXPENSIVE

TOTAL SAVING: $8

COMMERCIAL
- 9% >$20 CHEAPER
- 8% $10-20 CHEAPER
- 12% $5-10 CHEAPER
- 25% $0-5 CHEAPER
- 10% $0 SAME COST
- 19% $5-10 MORE EXPENSIVE

TOTAL SAVING: $6

MEDICARE PART D
- 19% >$20 CHEAPER
- 9% $10-20 CHEAPER
- 9% $5-10 CHEAPER
- 18% $0-5 CHEAPER
- 8% $0 SAME COST
- 19% $5-10 MORE EXPENSIVE

TOTAL SAVING: $6

Figures represent top ten branded products and top ten generic products by volume across selected therapeutic areas (Hypertension, Breast Cancer, Depression, Upper Respiratory Infection, Arthritis).
Patient Costs for Common Generics Far Exceed the Manufacturer Price

PBM MARKUPS CAN INFLATE THE COST OF GENERICS FOR PATIENTS

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>DOLLARS</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>115</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMLODIPINE</td>
<td>$0.36</td>
<td>$4</td>
<td>$5</td>
<td>$19</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATORVASTATIN</td>
<td>$1.46</td>
<td>$2</td>
<td>$2</td>
<td>$5</td>
<td>$4</td>
<td>$11</td>
<td>$12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GABAPENTIN</td>
<td>$0.06</td>
<td>$2</td>
<td>$2</td>
<td>$4</td>
<td>$12</td>
<td>$112</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>LOSARTAN</td>
<td>$1.09</td>
<td>$2</td>
<td>$2</td>
<td>$5</td>
<td>$25</td>
<td>$74</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>OMEPRAZOLE</td>
<td>$0.90</td>
<td>$3</td>
<td>$3</td>
<td>$7</td>
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</tr>
</tbody>
</table>

*Estimated Average Manufacturer’s Price is per 30-day supply
Specialty Medicines
Savings From Specialty Generics and Biosimilars Continue To Increase

SPECIALTY GENERICS AND BIOSIMILARS GENERATE MUCH NEEDED SAVINGS AMID RAPIDLY GROWING SPENDING