ASPE ASSISTANT SECRETARY FOR PLANNING AND EVALUATION | OFFICE OF HEALTH POLICY

ISSUE BRIEF

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HP-2023-25

Changes in the List Prices of Prescription Drugs, 2017-2023

Drug manufacturers may change the list prices of their drugs at any time after launch. Over the period from January 2022 to January 2023, more than 4,200 drug products had price increases, of which 46 percent were larger than the rate of inflation. The average drug price increase over the course of the period was 15.2 percent, which translates to $590 per drug product.

Arielle Bosworth, Steven Sheingold, Kenneth Finegold, Bisma A. Sayed, Nancy De Lew, Benjamin D. Sommers

KEY POINTS

- High prescription drug prices create affordability challenges for patients, health care payers, employers, and taxpayers. Increases over time in prices for existing drugs have added to these challenges.
- The Inflation Reduction Act (IRA) requires manufacturers to pay rebates to Medicare if they raise their prices for certain Medicare Part B and D drugs faster than the rate of inflation.
- Most drug manufacturers make changes to their prescription drug list prices in either January or July of each year, with the greatest number of changes taking place in January. From January 2022 to January 2023, price changes ranged from a decrease of 99 percent to increases of over 3,000 percent. Over this period, 4,264 drug products* had price increases. Of these increases, 1,982 (46 percent) were greater than the increase in the consumer price index for all urban consumers (CPI-U) for this period (which was 6.4 percent). During the same period, 1,599 drug products had price decreases.
- For those drugs with a price increase, the average increase over the January 2022 to January 2023 period was 15.2 percent. This is higher than the average price change between 2021 and 2022 of 11.5 percent. Because which drugs change price can vary considerably from year to year, the dollar values of the increases can be very different. The January 2022 to January 2023 increase of 15.2 percent translates to $590, while the previous year's increase of 11.5 percent translates to $172.
- Percentage price increases for multi-source drugs tend to be higher than for single source drugs, while the absolute dollar increases are much larger for the latter. From January 2022 to January

* A product is defined at the eleven-digit National Drug Code (NDC) level.

2023, the average price change for single source drugs was 7.4 percent ($958) while the average increase for multi-source drugs was 26.0 percent ($69).

- The *highest dollar* value increase in 2022 was for a drug approved to treat spinal muscular atrophy, whose price increased from $2.12 million per kit to $2.18 million, reflecting a $63,750 (3 percent) increase. The *highest percentage* increase was for a drug approved to treat high blood pressure whose price increased more than 35-fold, from a list price of $4.32 to a new price of $158.72.
- The list prices for drugs included in this brief are determined based on Wholesale Acquisition Cost (WAC).* While these results provide insights into the potential impacts of the IRA's inflation rebates, they are not direct estimates of which drugs will be subject to the IRA provisions, due to differences in price measures, time periods, and definition of drug products between our data source and the IRA provision.

INTRODUCTION

Making prescription drugs more affordable for Americans is a priority for the Biden-Harris Administration.[1] Americans regularly pay far more for prescription drugs than patients in other comparable countries. A recent study found that in 2018 U.S prescription drug prices were 2.56 times those in 32 comparable countries, and at least 1.90 times as high even when rebates and other discounts are taken into account.[2] The United States also spends more on prescription drugs on a per capita basis than other countries in the Organisation for Economic Co-operation and Development (OECD): the U.S. figure of $1,310 per person is more than twice the $646 per person in other OECD countries.[3] Overall, the United States accounts for less than 5 percent of the world's population (4.3 percent) and about a quarter (24.2 percent) of the world's Gross Domestic Product (GDP), but nearly one-third (32.2 percent) of the world's gross drug spending.[4]

The Inflation Reduction Act (IRA) included multiple provisions to address high and rising drug costs in the Medicare program. The new law requires the federal government to negotiate prices for selected high-expenditure drugs covered under Medicare, and provides enhanced financial protection against out-of-pocket drug costs for Medicare beneficiaries.[5] Other provisions require drug manufacturers to pay rebates to Medicare if they implement price increases for certain prescription drugs utilized by Medicare beneficiaries that exceed the rate of inflation.[6] Manufacturers must pay rebates to Medicare if the Annual Manufacturer Price (AnMP)† increases for certain covered Part D drugs and either the Average Sales Price (ASP)‡ or Wholesale Acquisition Cost (WAC) increases for certain covered Part B drugs exceed the rate of inflation. These provisions went into effect for Part D beginning October 1, 2022, and for Part B beginning January 1, 2023. The

* The Medicare Prescription Drug Inflation Rebate Program is required to use AnMP for Part D and ASP, WAC or maximum fair price for Part B.

† The AnMP is a multiple calendar quarter-weighted calculation based on the Average Manufacturer Price (AMP) for the Part D rebatable drug, and the units of the drug sold in those calendar quarters as reported by manufacturers under section 1927(b)(3). The AnMP is the average price that the manufacturer sold the Part D rebatable drug to retail community pharmacies over the 12-month applicable period, consistent with the definition at section 1927(k)(1)(A).

‡ The ASP or WAC must be reported by all manufacturers for drugs that are covered under Medicare Part B. The ASP is calculated as the volume weighted average of the manufacturers' average sales prices to purchasers. The ASP accounts for most discounts, reductions, and rebates.

IRA also establishes that beginning on April 1, 2023, beneficiary coinsurance for Part B rebatable drugs is to be based on the inflation-adjusted payment amount if the Medicare payment amount for a calendar quarter exceeds the inflation-adjusted payment amount.

This Issue Brief updates an earlier paper, released in September of 2022, that analyzed drug list price changes from 2016 to 2022. That study found that between July 2021 and July 2022 (immediately before the enactment of the IRA), 1,216 prescription drug products had list price increases that exceeded the rate of inflation over that period (8.5 percent), with an average change (among drugs with price increases) of 31.6 percent.[7]

In this Issue Brief, we examine data on drug list price[*] changes that took effect in January 2023 relative to January 2022 and compare them with the overall rate of inflation for the same period; we also compare January 2023 price changes to those of earlier years, starting with 2017. The extent to which these list price changes are reflected in what consumers pay at the pharmacy counter or via mail order for their prescriptions are mediated by whether or not they have insurance coverage, the specifics of their insurance plan, and sometimes by manufacturer coupons and patient assistance programs.

This Issue Brief does not directly evaluate the IRA rebate provisions or predict which drugs may be subject to rebates under the Medicare Prescription Drug Inflation Rebate Program. The analysis is based on a different time period than will be relevant for the rebates, on different measures of prices. It is also based on a broader scope of drugs; for example, the analysis includes Part D drugs with average annual total costs less than $100, which are not subject to the IRA rebates. The rebate determinations will be based on AnMP for Part D drugs and ASP or WAC for certain Medicare Part B drugs, while this Issue Brief uses WAC as the price measure for all prescription drugs analyzed. In addition, this analysis uses a more granular drug product definition based on the NDC code than what will be used in the rebate determinations. This report aims to describe broader trends in price increases for all pharmaceutical products over time, rather than the narrower universe of products the IRA provisions address. As the IRA provisions take effect over the coming months and years, it will be important to monitor impacts of the law on the broader prescription drug market.

DATA AND METHODS

The primary data source for this report is AnalySource. Manufacturers report their drug price changes at the 11-digit National Drug Code (NDC 11) level to independent databases known as pricing compendia. This level of granularity differs from that used by Medicare Part D (NDC 9 level)[†] and Part B (HCPCS)[‡]. The pricing compendia vendors aggregate this information for purchasers such as wholesalers, pharmacies, and hospitals. The databases are available for purchase under subscription licenses allowing for daily updates. AnalySource is one such pricing compendia database, which reports price changes at the NDC 11 level with sufficient data fields available to aggregate to the product and labeler levels.[§] We define a product at the full eleven-digit NDC

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[*] The drug list price, or wholesale acquisition cost (WAC)does not include discounts, reductions, or rebates.

[†] NDC 9 Level identifies a drug by its labeler and product code, including dosage form, formulation, and strength. NDC 11 includes 2 additional digits to denote package code.

[‡] Healthcare Common Procedure Coding System (HCPCS) codes are standardized codes to represent medical procedures, supplies, products and services

[§] Labeler name is a unique identifier for the product labeler, which could be the manufacturer, distributor, or repackager of a product.

level unless otherwise noted. AnalySource data provide daily updates on list price changes for millions of products (including drugs that would be covered under Medicare Part B and Part D) and also include information on product type, marketing status, drug class, and drug indication. This combination of information gives us the flexibility to rapidly analyze general market trends or to isolate and examine individual markets. For context, an NDC identifies an individual drug product specific to the medication, dosing, formulation, package size, and manufacturer/labeler; thus, any given medication may have a single NDC or many NDCs.

For this analysis, we used the WAC as the price for a given product at the package size level. Package size is the number of billing units in the labeled quantity from which the pharmacist typically dispenses (which may be a 100-day supply for a chronic medication, or a shorter course for an acute medication such as an antibiotic regimen).[*] WAC, as published by First Databank and available through AnalySource, represents the manufacturer's published catalog or list price for a drug product to wholesalers as reported to First Databank by the manufacturer. The term "manufacturer" in this context includes repackagers, private labelers and other suppliers. *WAC does not represent actual transaction prices and does not include discounts, rebates, or other reductions in price.*

The retail price of a drug at the pharmacy counter is in part, determined by negotiations between pharmacies and insurers (or their pharmacy benefit managers (PBMs)) and reflects both wholesale and retail markups. Those markups compensate the wholesaler and pharmacy, respectively, for the services they provide and for their inventory costs. A recent analysis by the Congressional Budget Office suggests the retail price of a given drug is generally similar for most payers (public and private insurers and cash-pay patients).[8] Consumers with health coverage who have not yet satisfied their plan's annual deductible pay the full retail price. They might pay a lower price if the manufacturer has a discount program for that drug, such as a coupon or rebate program. As specified by their plan's copayment or coinsurance schedule, consumers who have met their deductible pay only a portion of the retail price (or nothing, if they have met their plan's annual out-of-pocket limit). The remainder is paid by their plan or its PBM.[†] Consumers without insurance may pay a pharmacy's "usual and customary" price — which tends to be higher than the net prices paid by other payers — or may pay a lower amount using a manufacturer discount program.

We first examined all price increases at the NDC 11 level that occurred in the years 2017 to 2023. We examined all price changes over the course of the year and present the results for calendar years; we note that most price changes take effect on January 1 each year.[‡] We then focused on drugs with the highest percentage point and dollar amount increases. We measured the cumulative change in prices over the course of a year including any increases or decreases. We also compared price changes to the twelve-month increase in the Consumer Price Index for all Urban Consumers (CPI-U).[§]

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[*] As noted on the tables below, there are some drugs for which the package price is based on a large quantity such as 1,000 tablets.

[†] A copayment is a specified dollar amount that an enrollee pays at the time a drug is purchased. Coinsurance is cost sharing paid at the point of purchase that is based on a set percentage of the drug's cost.

[‡] Based on our analysis, in each of year from 2016 -2022, the largest number of price increases occurred in January and the second largest number of increases occurred in July.

[§] For Part B inflation rebates, CMS is using a quarterly measure. For Part D inflation rebates, CMS is using a 12-month measure from October 1 to September 30 of the following year. For Part B drugs that are approved or licensed prior to December 1, 2020, the CPI-U

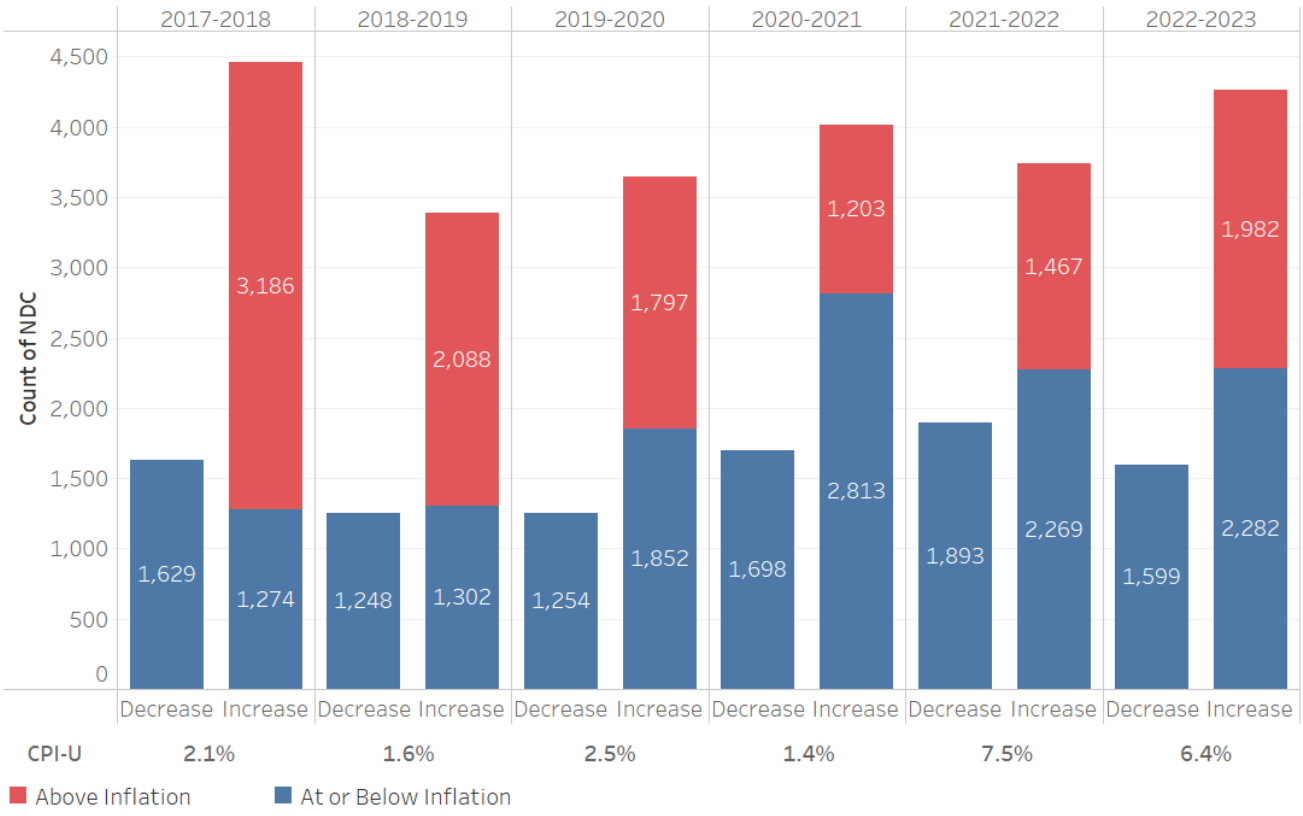
RESULTS

Figure 1 displays the count of prescription drug NDCs with any change in list price from January 1st of the starting year to January 1st of the end year, 2017 to 2023, and the share of those drugs with an increase greater than the 12-month increase in inflation (CPI-U) for the relevant year. We compared drug list price changes to the twelve-month increase in the CPI-U. From January 2022 to January 2023, the CPI-U increased by 6.4 percent.

From January 2022 to January 2023, there were 1,599 list price decreases and 4,264 list price increases; 1,982 of the 4,264 list price increases (46 percent) exceeded general inflation. In all years, list price increases far outpaced list price decreases. Over the last three years, 2021-2023, the majority of list price increases were *at or below* the rate of inflation in that year. On average, 61 percent of price increases implemented in the past three years have been below the 12-month inflation rate for that year. This reverses the trend from 2018-2020, when the majority of list price increases (51-62 percent) were *above* the rate of inflation in that year.

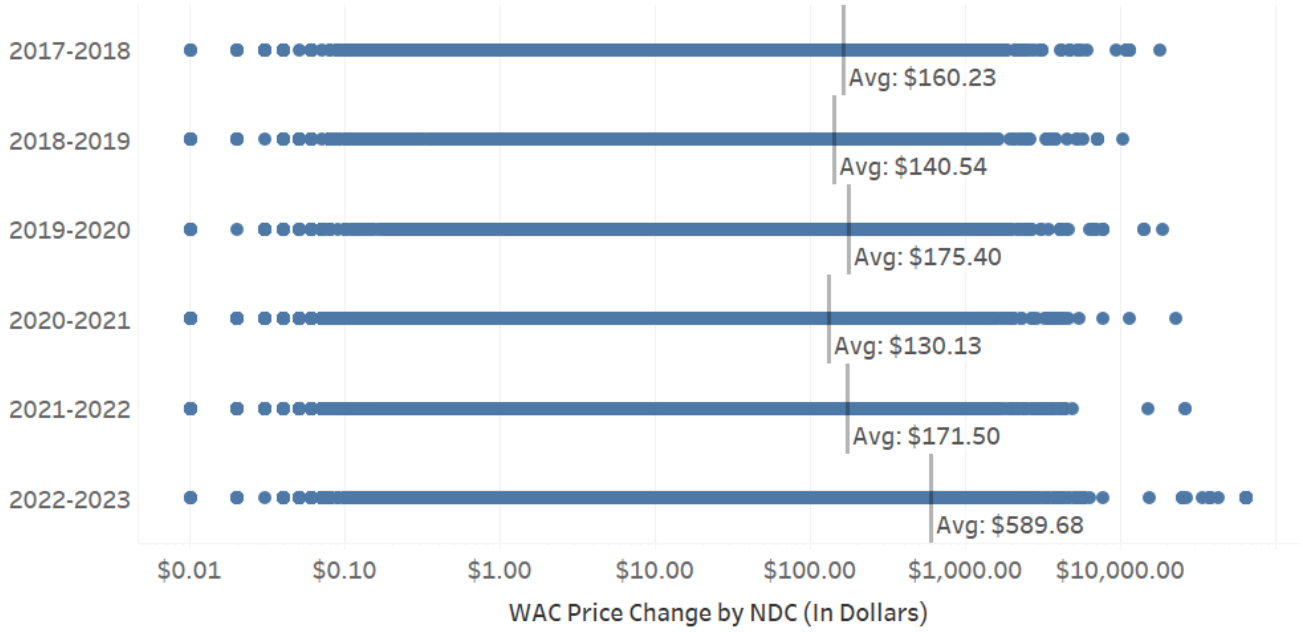
change from the benchmark to the rebate period is measured from January 2021 to July 2022 for the first quarter and then for the next quarter it is measured from January 2021 to October 2022. In Part D, for drugs approved or licensed prior to October 1, 2021, the CPI-U change for the first rebate period (October 1, 2022 to September 30, 2023) is measured over January 2021 to October 2022, the CPI-U change for the next rebate period is measured from January 2021 to October 2023, and so on. For visual summaries of these timelines, see Figure 1 in https://www.cms.gov/files/document/medicare-part-b-inflation-rebate-program-initial-guidance.pdf, for Part B, and Figure 1 in https://www.cms.gov/files/document/medicare-part-d-inflation-rebate-program-initial-guidance.pdf, for Part D.

Figure 1. Total Number of Price Changes and Share of Increases that Exceed Inflation, 2017 to 2023



Figures 2 and 3 display the distribution and relative magnitude of the list price increases that occurred in the years 2017 to 2023. Each of the dots represents an individual price change by NDC. The grey line indicates the average price change in each year. From January 1, 2022 to January 1, 2023, the average price increase (among NDCs with a price increase) was $589.68 per drug. This is nearly 3.5 times the average price change between 2021 and 2022 ($171.50), and several times larger than any other year during the observation period. However, the average price increase in 2023 of 15.2 percent was not an outlier, instead falling in the middle of the range for the years in the study. Taking these results together, this implies that the list price increases in 2023 were concentrated in more expensive drug products, meaning that even though the relative price change was not significantly higher than in prior years, the dollar value price increase was markedly higher than in prior years.

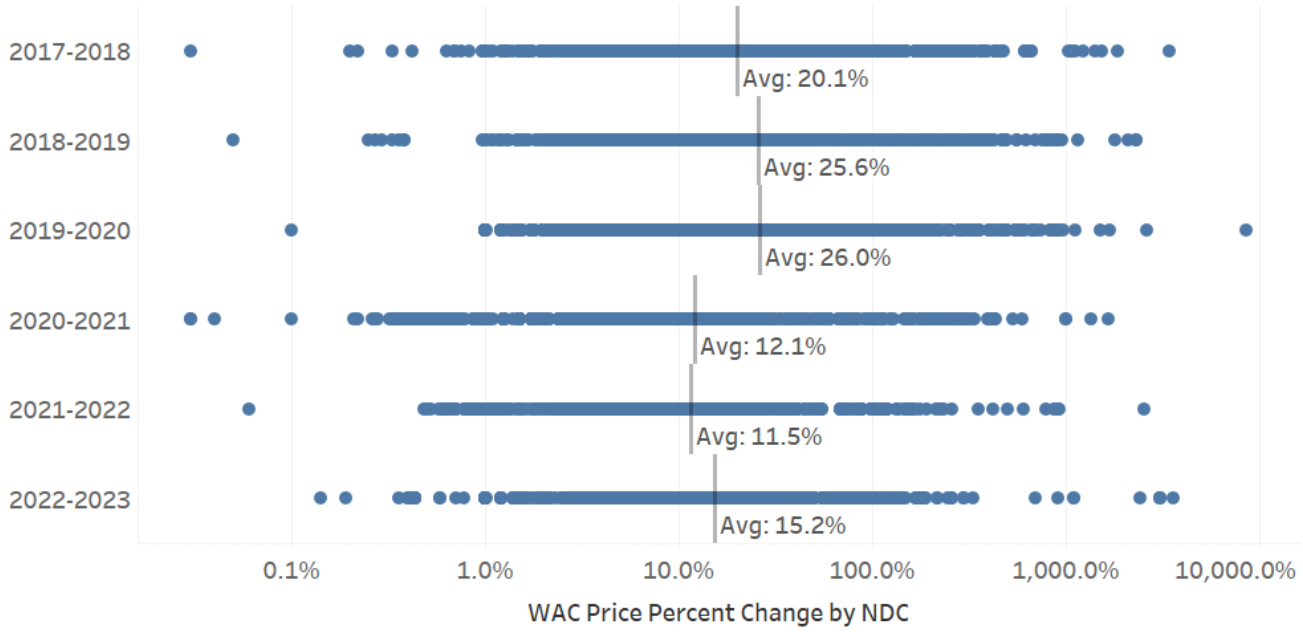
Figure 2. Average and Distribution of List Price Increases ($), 2017 to 2023



Note: WAC package price change axis uses a logarithmic scale.

Figure displays nominal price change and is not adjusted for inflation.

Figure 3. Average and Distribution of Relative List Price Increases (%), 2017 to 2023



Source: ASPE analysis of AnalySource Data

Note: WAC package price percent change axis uses a logarithmic scale.

Table 1 displays the top drugs by percentage list price increase from January 1, 2022 to January 1, 2023. The drug Vasopressin had the highest percentage price increase at 3,558%. All 16 of the drugs included in Table 1 are multiple source drugs and all but three of them had 2022 WAC package prices below $10. The drugs are approved to treat a wide range of indications including menopause, high blood pressure, and lung ailments (chronic obstructive pulmonary disease or COPD).

Table 1. Top Drugs by Percentage List Price Increase, January 1, 2022 to January 1, 2023

Drug Name	Labeler Name	Condition(s) Treated	Sole Source (Yes/No)	Previous WAC Package Price	New WAC Package Price	$ Change	% Change
VASOPRESSIN 20 UNIT/ML VIAL	American Regent	Low blood pressure due to shock	No	$4.32	$158.04	$153.72	3,558.33%
DIVIGEL 0.25 MG GEL PACKET	Vertical Pharmaceuticals LLC	Menopause	No	$5.40	$168.60	$163.20	3,022.22%
FLUDARABINE 50 MG/2 ML VIAL*	Areva Pharmaceuticals	Cancer (Leukemia)	No	$110.00	$2,736.00	$2,626.00	2,387.27%
FLUCONAZOLE 150 MG TABLET	Greenstone LLC.	Fungal Infections	No	$2.36	$28.34	$25.98	1,100.85%
FLUCONAZOLE 150 MG TABLET	Bluepoint Labor	Fungal Infections	No	$2.02	$24.19	$22.17	1,097.52%
AZATHIOPRINE 50 MG TABLET	Golden State Medical Supply Inc	Prevents Organ Transplant Rejection, & Treats Automimmune Conditions	No	$39.00	$390.00	$351.00	900.00%
CHLORDIAZEPOXIDE-CLIDINIUM CAP	Bryant Ranch Prepack	Intestinal inflammation	No	$81.90	$652.80	$570.90	697.07%
VALSARTAN-HYDROCHLOROTHIAZIDE 80-12.5 MG TAB	Solco Healthcare	high blood pressure	No	$10.00	$42.95	$32.95	329.50%

Drug Name	Labeler Name	Condition(s) Treated	Sole Source (Yes/No)	Previous WAC Package Price	New WAC Package Price	$ Change	% Change
SODIUM ACETATE 100 MEQ/50 ML*	Woodward Pharma	Low Sodium (hyponatremia)	No	$4.62	$18.17	$13.55	293.29%
SODIUM ACETATE 200 MEQ/100 ML*	Woodward Pharma	Low Sodium (hyponatremia)	No	$6.33	$24.89	$18.56	293.21%
INDOMETHACIN 25 MG CAPSULE	Bryant Ranch Prepack	NSAID	No	$5.83	$20.75	$14.92	255.92%
IPRATROPIUM-ALBUTEROL 0.5-3(2.5) MG/3 ML	Golden State Medical Supply Inc	chronic obstructive pulmonary disease (COPD)	No	$0.11	$0.39	$0.28	254.55%
INDOMETHACIN 25 MG CAPSULE	Bryant Ranch Prepack	NSAID	No	$3.25	$10.30	$7.05	216.92%

Note: * indicates the drug is in shortage as of February 28, 2023.
Table excludes multiple entries for the same drug from the same labeler.
NSAID = Non-Steroidal Anti-Inflammatory Drug

Table 2 lists the top drugs by dollar list price increase from January 1, 2022, to January 1, 2023. Zolgensma, a gene therapy used to treat spinal muscular atrophy, had the greatest price change from $2,125,000 in 2022 to $2,188,750 in 2023, an increase of $63,750. All of the top drugs by dollar change were single source. Eight of the 11 drugs with the highest dollar price increases are approved to treat cancer.

Table 2. Top Drugs by Dollar List Price Increase, January 1, 2022-January 1, 2023

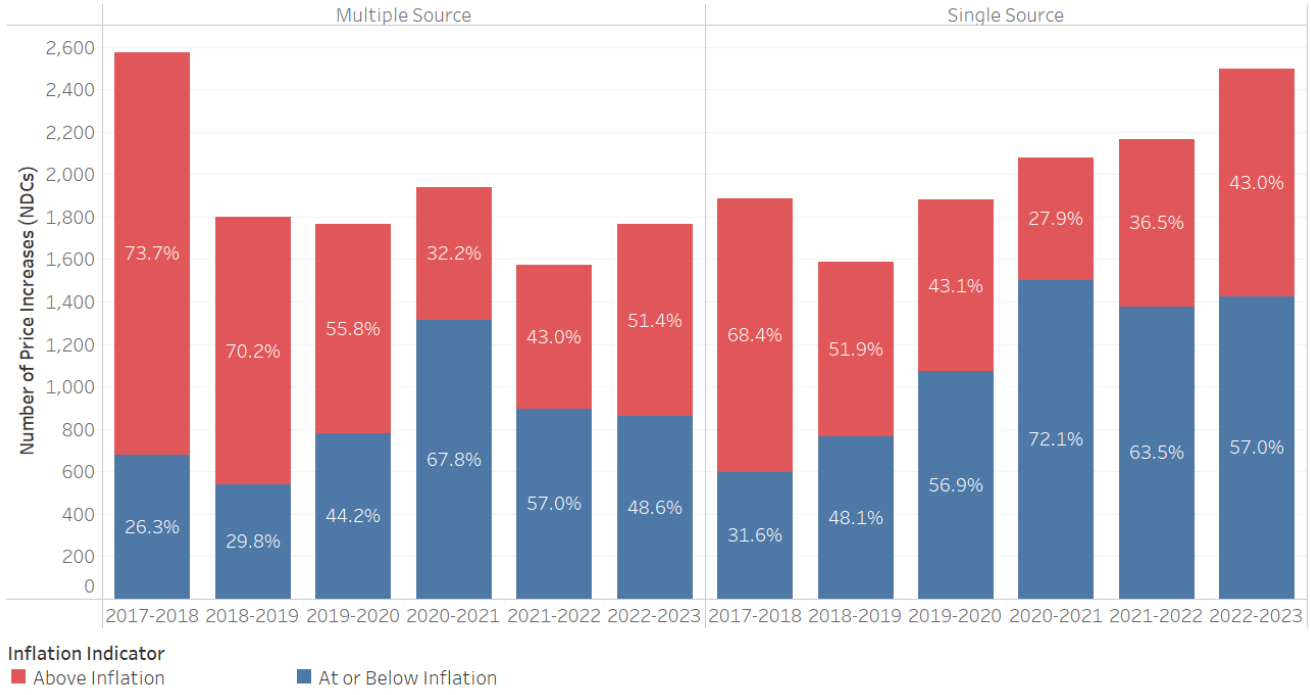
Drug Name	Labeler Name	Condition(s) Treated	Sole Source (Yes/No)	Previous WAC Package Price	New WAC Package Price	$ Change	% Change
ZOLGENSMA 13.1-13.5 KG (8.3 ML X 9 VIAL) KIT	Novartis Gene T	Spinal muscular atrophy	Yes	$2,125,000	$2,188,750	$63,750	3.00%
MACI 3CM X 5CM IMPLANT SHEET	Vericel Corpora	Knee Cartilage Defects	Yes	$62,548	$104,504	$41,956	67.08%
ABECMA INFUSION BAG 300 x 10exp6 to 460 x 10exp6 cell	Celgene/Bristol Myers Squibb	Cancer (Multiple myeloma)	Yes	$419,500	$457,255	$37,755	9.00%
BREYANZI VIAL 1.5 x 10exp6 to 70 x 10exp6 cell/mL	Juno/Bristol Myers Squibb	Cancer (Lymphoma)	Yes	$410,300	$447,227	$36,927	9.00%
KYMRIAH INFUSION BAG 0.2 x 10exp6 to 2.5 x 10exp8 cell	Novartis	Cancer (Leukemia/ Lymphoma	Yes	$475,000	$508,250	$33,250	7.00%
YESCARTA INFUSION BAG	Kite Pharma	Cancer (Leukemia/ Lymphoma)	Yes	$399,000	$424,000	$25,000	6.27%
TECARTUS INFUSION BAG 2 x 10exp6 to 2 x 10exp8 cell	Kite Pharma	Cancer (Lymphoma)	Yes	$399,000	$424,000	$25,000	6.27%
KORLYM 300 MG TABLET	Corcept Therapeutics	Leukemia)	Yes	$161,560	$176,890	$15,330	9.49%
COPIKTRA 15 MG CAPSULE	Verastem Inc.	Cancer (Lymphoma/	Yes	$16,446	$24,021	$7,575	46.06%

Note: Table excludes multiple entries for the same drug from the same labeler.
Table excludes multiple entries for the same drug from the same labeler.

Figure 4 displays the number of price increases for 2017-2023 for both single source and multiple source drugs. The figure also displays the share of those increases that exceeded inflation for the

relevant period. The single and multiple source designation is based on whether a product's clinical formulation (that is, its particular active ingredient, dosage form, route of administration and strength) is only available from a single labeler or from multiple labelers. Drugs indicated to be single source are often brand name drugs, but this is not always the case because some generic markets have only one remaining manufacturer. As displayed in Figure 4, in most years multi-source drugs had a greater percent of price increases above inflation than the single source drugs.

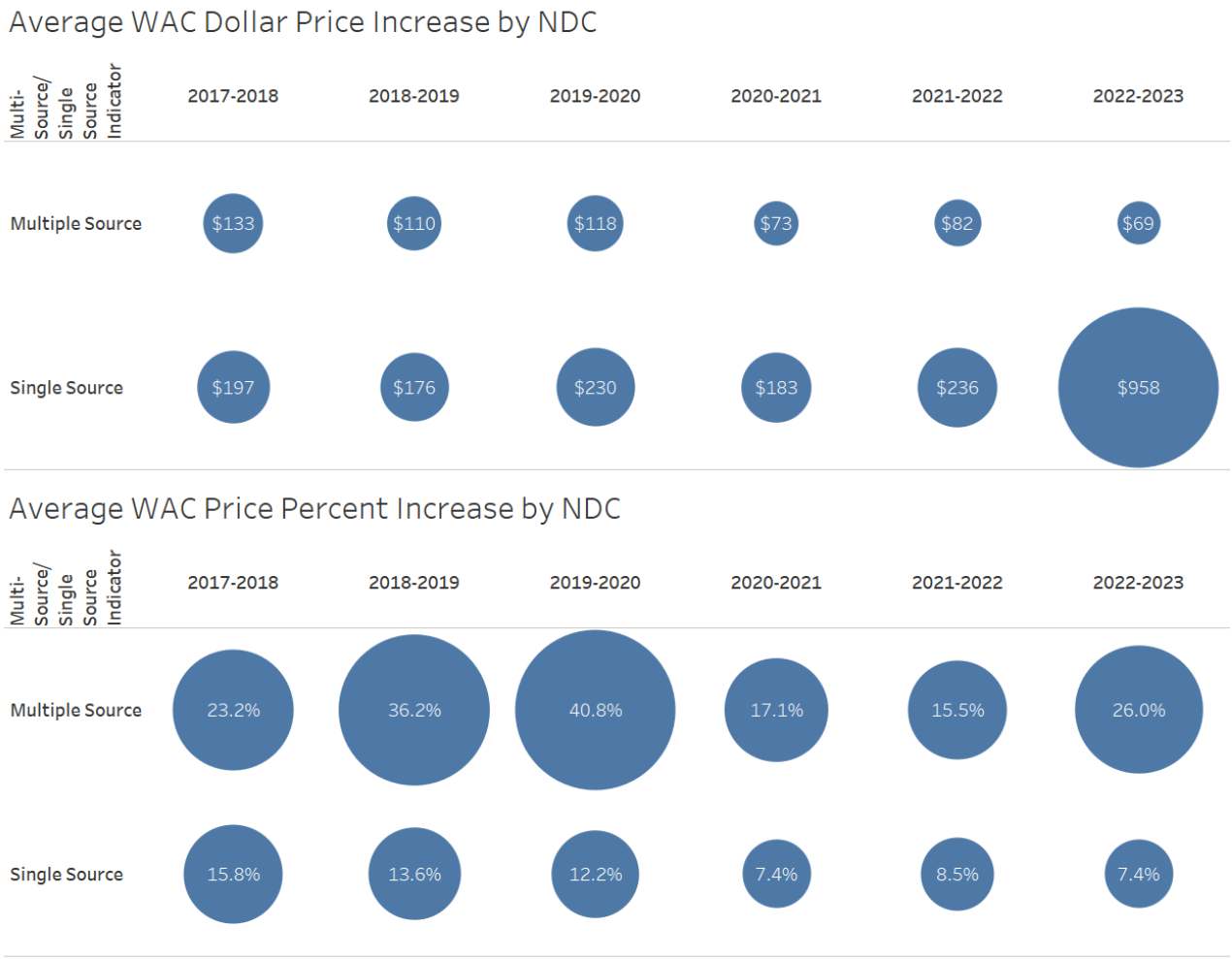
Figure 4. Total Number of List Price Increases and Share of Increases Above and Below Inflation, by Single/Multiple Source Status and Year



Note: this figure does not include price decreases.

As Figure 5 displays, percent price increases tend to be higher for multi-source drugs than for single source drugs (for example, 26.0 percent vs 7.4 percent in 2023). On the other hand, because single source drugs generally have much higher prices than multi-source drugs, the average WAC package dollar price increase is consistently higher for single-source drugs than for multiple source drugs (Figure 5). In 2023, the average price change for single source drugs ($957.91) was nearly fourteen times as high as the average increase for multiple source drugs over the same period ($69.31).

Figure 5. Distribution and Average List Price Increase by Single/Multiple Source Status and Year



CONCLUSION

This brief evaluates trends in list price increases across the prescription drug market. Drug price increases are quite common in the U.S., with significant implications for consumers, payers, and the health care system overall. From January 1, 2022, to January 1, 2023, drug companies raised their prices on more than 4,264 drug products, of which 1,982 (46%) exceeded the rate of inflation. The average list price increase among drugs whose manufacturers raised prices in January 2023 relative to January 2022 was 15.2 percent or $590. While the percent increase was comparable to previous years in our study, the associated dollar increase was much higher in 2022 than in previous years because the price changes were occurring among more expensive drugs.

The IRA provides tools to address high drug prices for certain drugs covered by Medicare. For a number of reasons cited above, the estimates presented here are not reflective of the impact of the Medicare Part B and Part D inflation rebate provisions in the IRA or predictive of the drugs that might be subject to rebates. Additional research will be needed to evaluate the extent to which changes in the prices of drugs for Medicare beneficiaries are also reflected in lower prices for other Americans over time.

REFERENCES

[1] Becerra, X. (2022). Comprehensive plan for addressing high drug prices: a report in response to the Executive Order on competition in the American economy. US Department of Health and Human Services. September 9, 2021.

[2] Mulcahy, Andrew W., Christopher M. Whaley, Mahlet Gizaw, Daniel Schwam, Nathaniel Edenfield, and Alejandro Uriel Becerra-Ornelas, International Prescription Drug Price Comparisons: Current Empirical Estimates and Comparisons with Previous Studies. Santa Monica, CA: RAND Corporation, 2021. https://www.rand.org/pubs/research_reports/RR2956.html.

[3] ASPE analysis of 2019 OECD retail prescription drug spending data (https://www.oecd-ilibrary.org/sites/2493ee95-en/index.html?itemId=/content/component/2493ee95-en) and 2021 OECD population data (https://data.oecd.org/pop/population.htm). See also https://www.commonwealthfund.org/publications/issue-briefs/2017/oct/paying-prescription-drugs-around-world-why-us-outlier, which suggests that differences in drug prices, rather than differences in utilization, account for higher per capita spending in the U.S. than in comparator countries, and Gerard F. Anderson, Peter Hussey, and Varduhi Petrosyan, "It's Still the Prices, Stupid: Why the U.S. Spends So Much on Health Care, and a Tribute to Uwe Reinhardt," *Health Affairs* 38, no. 1 (Jan. 2019): 87-95, which makes a similar argument about health spending more generally.

[4] ASPE analysis of population data from the CIA World Factbook (https://www.cia.gov/the-world-factbook/field/population/country-comparison, downloaded January 26, 2023); GDP data from the World Bank (https://data.worldbank.org/indicator/NY.GDP.MKTP.CD, downloaded February 28, 2023); and prescription drug spending data from IQVIA Institute for Human Data Science, The Global Use of Medicines 2022 (https://www.iqvia.com/insights/the-iqvia-institute/reports/the-global-use-of-medicines-2022), pp. 29, 40.

[5] https://www.congress.gov/117/plaws/publ169/PLAW-117publ169.pdf, Secs. 11001-11004.

[6] https://www.congress.gov/117/plaws/publ169/PLAW-117publ169.pdf, Secs. 11101 (Medicare Part B) and 11102 (Medicare Part D).

[7] Bosworth, A, Sheingold, S, Finegold K, De Lew, N, Sommers, B.D. (Issue Brief No. HP-2022-27). Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. September 30, 2022.

[8] Congressional Budget Office, A Comparison of Brand-Name Drug Prices Among Selected Federal Programs (February 2021), www.cbo.gov/publication/56978.

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Office of the Assistant Secretary for Planning and Evaluation
200 Independence Avenue SW, Mailstop 447D
Washington, D.C. 20201

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ABOUT THE AUTHORS

Arielle Bosworth is an Economist in the Office of Health Policy in the Office of the Assistant Secretary for Planning and Evaluation.
Steven Sheingold is Director of the Division of Health Financing Policy in the Office of Health Policy.
Kenneth Finegold is a Senior Social Science Analyst in the Office of Health Policy in the Office of the Assistant Secretary for Planning and Evaluation.
Bisma A. Sayed is an Economist in the Office of Health Policy in the Office of the Assistant Secretary for Planning and Evaluation.
Nancy De Lew is the Associate Deputy Assistant Secretary of the Office of Health Policy in the Office of Assistant Secretary for Planning and Evaluation.
Benjamin D. Sommers is a Senior Advisor in the Office of the Assistant Secretary for Planning and Evaluation.

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