

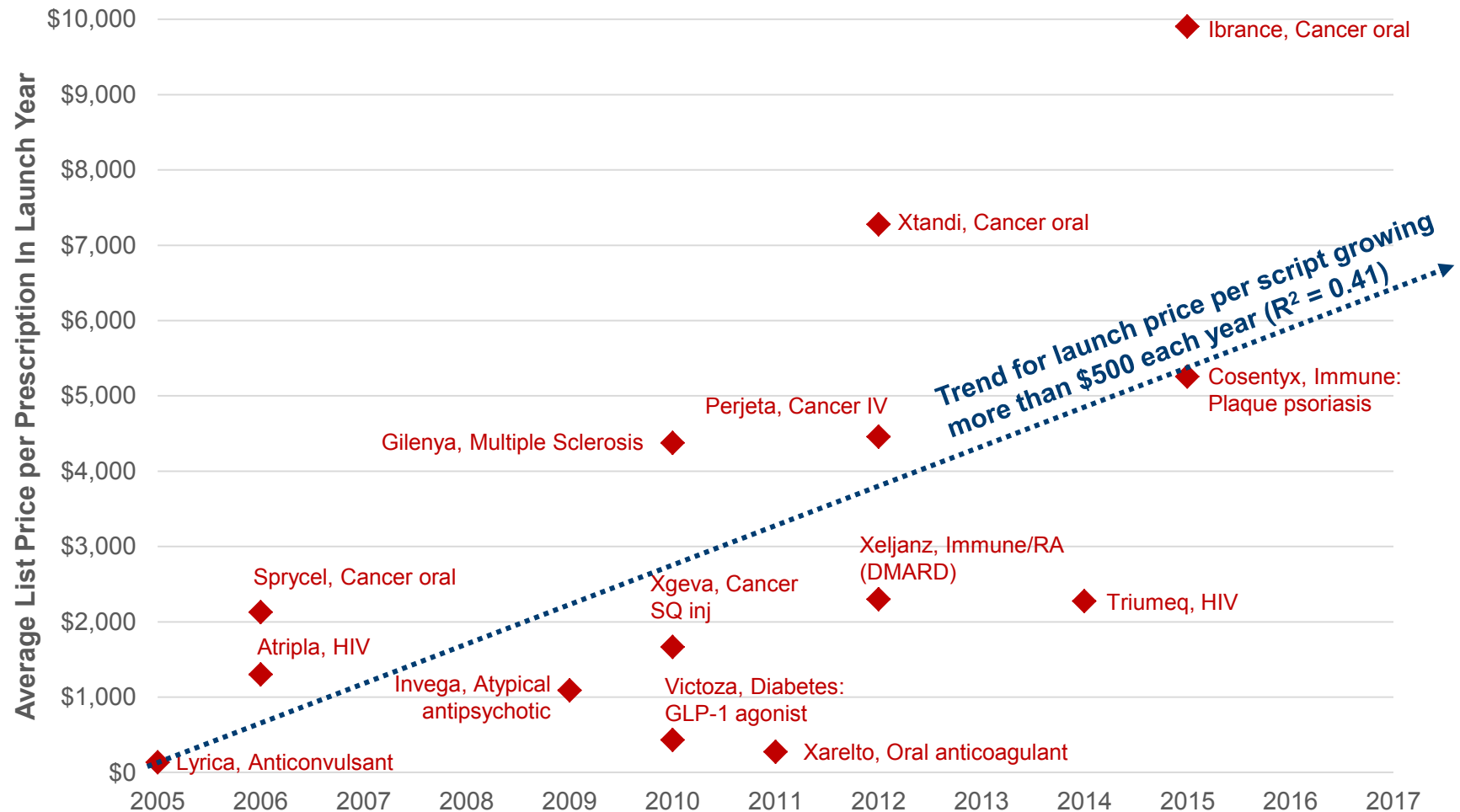


Reconsidering Drug Prices, Rebates, and PBMs

An analysis prepared by **Visante**[®]

August 2018

Higher Introductory Prices for New Drugs Launched with No PBM Rebates



Source: Visante analysis of data from CMS and SSR Health, 2018. Analysis included drugs with more than \$1 billion in sales in 2017, and no estimated rebates in initial launch year. Average list prices based on WAC/unit, multiplied by # of units per Rx based on 2016 Part D data from CMS.

No PBM Rebates in Part B, Yet Extraordinary Price Increases

Part B Drugs with Extraordinary Price Increases

Brand Name	2012 Price per Part B prescription	2017 Price per Part B prescription*	% Price Increase 2012–17
Miacalcin	\$461	\$16,375	3,449%
BICNU	\$391	\$8,530	2,084%
Krystexxa	\$2,717	\$19,163	605%
Rimso-50	\$85	\$540	535%
Teflaro	\$110	\$399	263%
Bicillin	\$41	\$106	159%
Vibativ	\$446	\$1,102	147%
Oncaspar	\$7,513	\$16,717	122%
Levulan	\$178	\$385	117%
DDAVP	\$120	\$211	76%

* Estimated inflation adjusted price = 2012 price * weighted average manufacturer increase in list price per unit. Not affected by changes in numbers of units per claim, or mix of doses/dosage forms. Analysis included drugs with Part B spending data for full period 2012-16. PBMs are currently not involved in Medicare Part B program, so no PBM rebates are involved.

Source: Visante analysis of data from CMS and SSR Health, 2018.

No PBM Rebates in Part B, Yet Prices Increasing for Top Drugs

Commonly Used Part B Drugs with Price Increases

Brand Name	2012 Price per Part B Prescription	2017 Price per Part B Prescription*	% Price Increase 2012–17
Rituxan	\$5,125	\$6,890	34%
Neulasta	\$2,904	\$4,436	53%
Remicade	\$2,937	\$4,561	55%
Avastin	\$1,301	\$1,618	24%
Prolia	\$1,864	\$2,640	33%
Herceptin	\$2,720	\$3,452	27%
Orencia	\$1,636	\$2,849	74%
Alimta	\$5,197	\$6,044	16%
Sandostatin LAR	\$3,580	\$5,042	41%
Xolair	\$1,547	\$2,294	48%

* Estimated inflation adjusted price = 2012 price * weighted average manufacturer increase in list price per unit. Not affected by changes in numbers of units per claim, or mix of doses/dosage forms. Analysis included drugs with SSR Health data and Part B spending data for full period 2012-16. PBMs are currently not involved in Medicare Part B program, so no PBM rebates are involved. Drugs are listed in decreasing order of Part B spending.

Source: Visante analysis of data from CMS and SSR Health, 2018.

Unrebatable Drugs in Part D Still Increasing Their Prices

Ten Drugs >\$50m in Part D Annual Spend, With Largest Price Inflation 2012–2017

Brand Name	2012 Price per Part D Prescription	2017 Price per Part D prescription*	% Price Increase 2012–17
Xeljanz	\$2,367	\$4,128	74%
Aubagio	\$3,978	\$6,840	72%
Ampyra	\$1,544	\$2,619	70%
Risperdal Consta	\$715	\$1,105	55%
Sprycel	\$7,350	\$11,178	52%
Noxafil	\$3,543	\$5,082	43%
Actemra	\$1,490	\$2,110	42%
Nuedexta	\$491	\$684	39%
Xgeva	\$1,766	\$2,267	28%
Acthar	\$37,130	\$47,540	28%

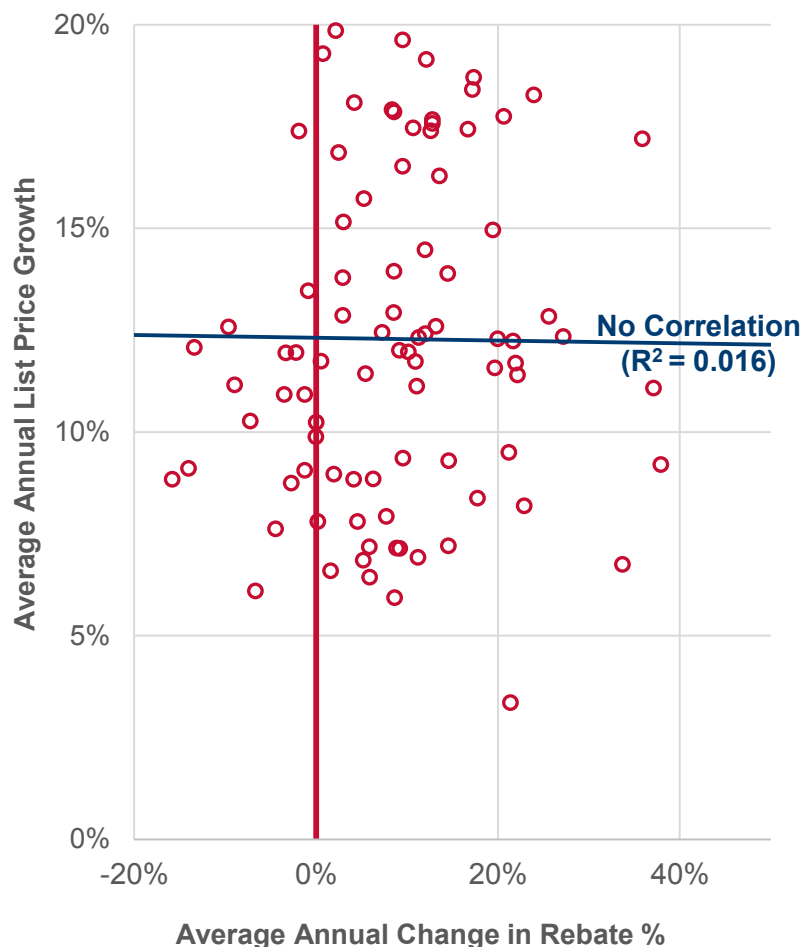
* Estimated inflation adjusted price = 2012 price * weighted average manufacturer increase in list price per unit. Not affected by changes in numbers of units per claim, or mix of doses/dosage forms.

Source: Visante analysis of data from CMS and SSR Health, 2018. Analysis included drugs with Part D spending data for full period 2012-16, and drugs with no estimated non-Medicaid rebates based on data from SSR Health, 2018. Drugs listed in order of decreasing price increases.

Top Part D Brand Drugs: Growing Drug Prices Show No Correlation With Change in Rebate Levels Over the 2012–2017 Period

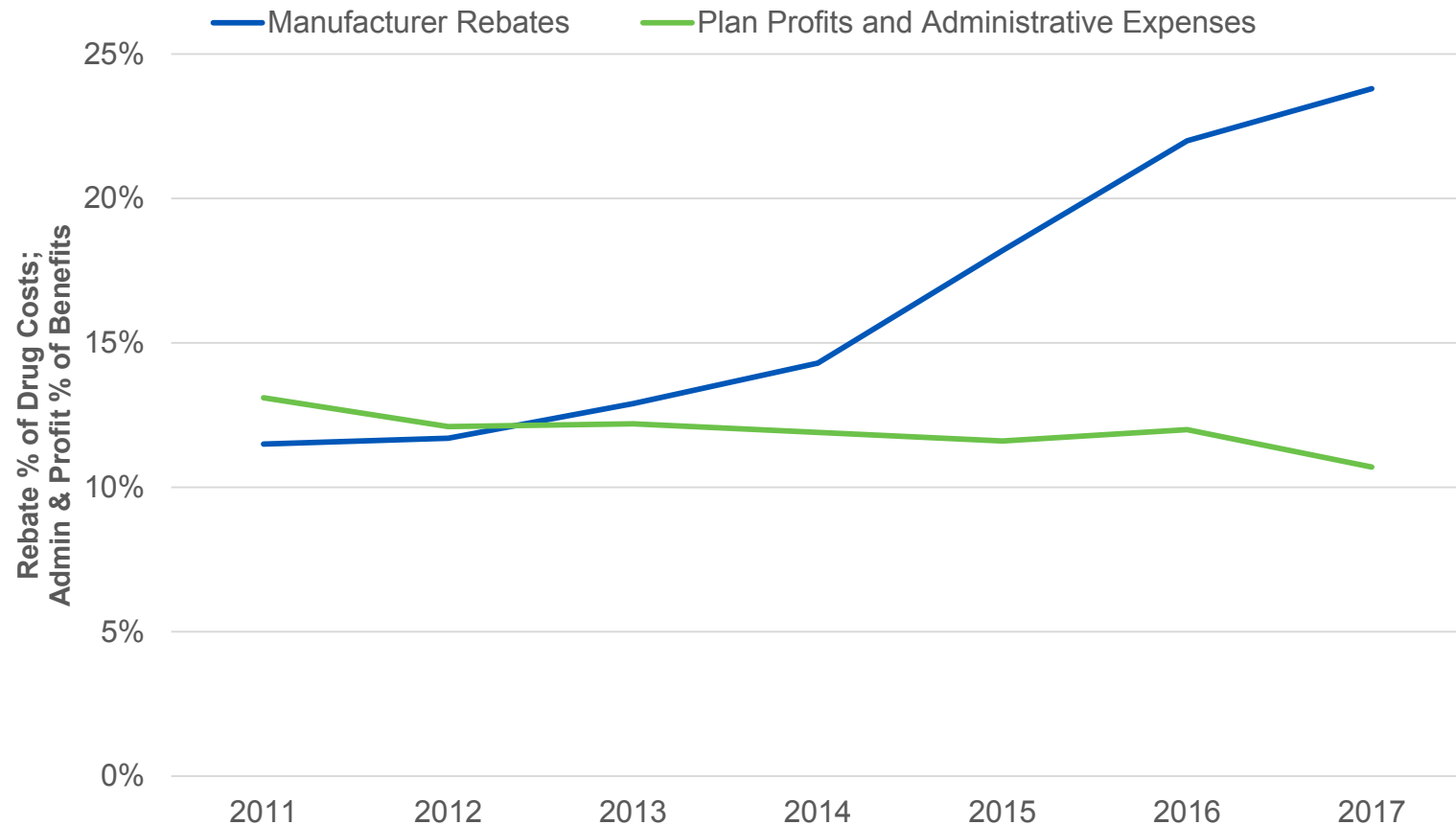
Statistical Analysis Shows No Correlation Between Price Growth and Rebate Growth

- Among the top brand drugs in Medicare Part D, there is no correlation between growing prices set by drugmakers and the CHANGE in rebate levels that they negotiate with PBMs.
- Rebates may go up or down, but manufacturer prices only go up.
- Drugs with decreasing rebates still increased their prices during the 2012–2017 period.
- For each of the top Part D brand drugs, the figure at right plots the compound annual growth rate (CAGR) in its list price against the change in average percent rebate (CAGR) over the 2012–2017 period.
- The flat trend line suggests that drug prices are increasing regardless of rebate levels across all top brand drugs.
- Statistical analysis shows the trend line's R2 value equals 0.016 on a zero to one scale, where zero equals no correlation and one equals perfect correlation.



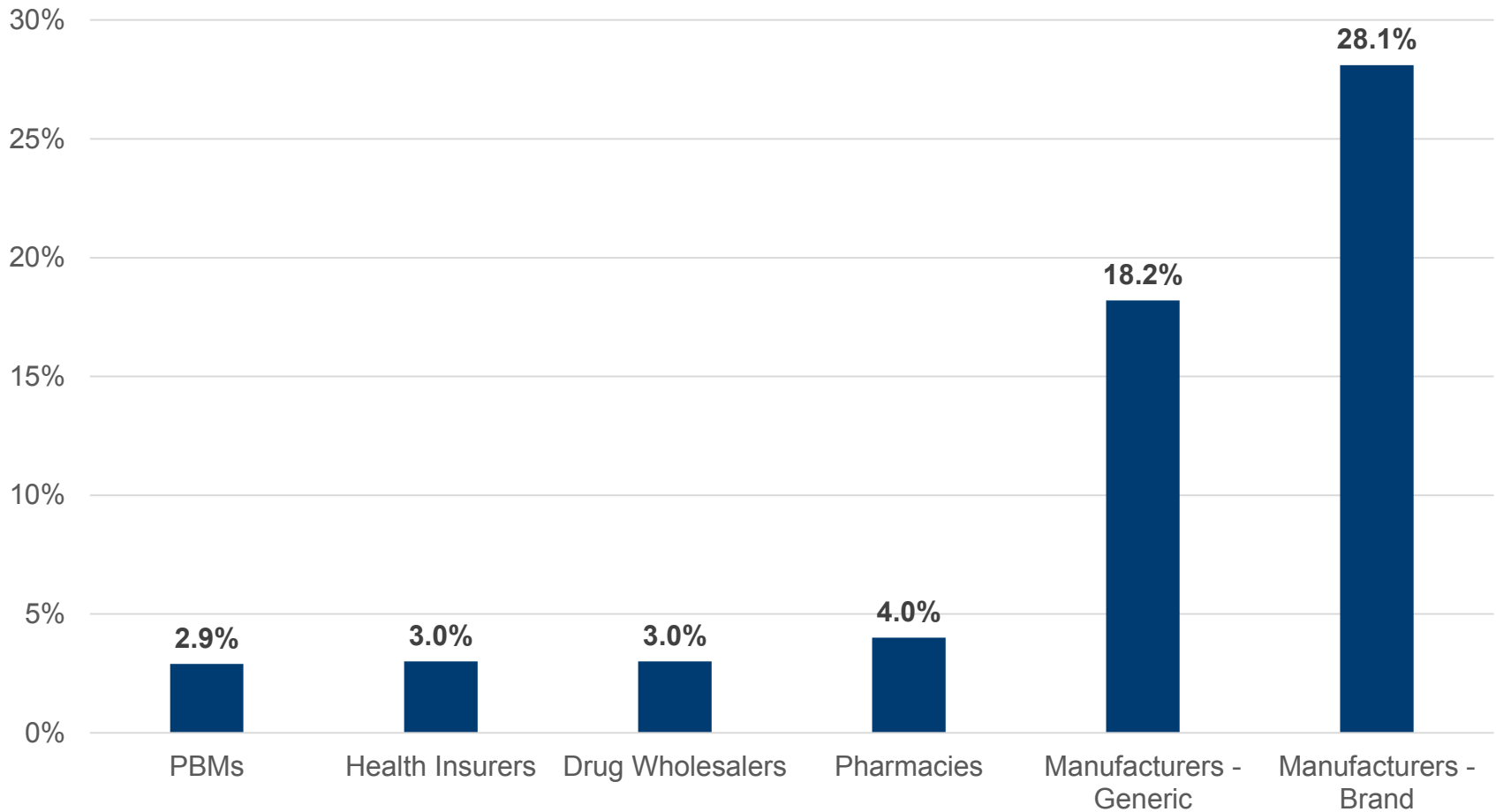
Source: Visante analysis of data from CMS and SSR Health, 2018. Examined the top 250 brand drugs by 2016 spend in Part D, 144 had valid rebate estimates from SSR Health, 109 were on the market the full time period 2012–17.

Trend in Part D Manufacturer Rebate Levels NOT Associated With Trend in Part D Profits and Administrative Expenses



Source: Medicare Trustees Report to Congress, March 2018.

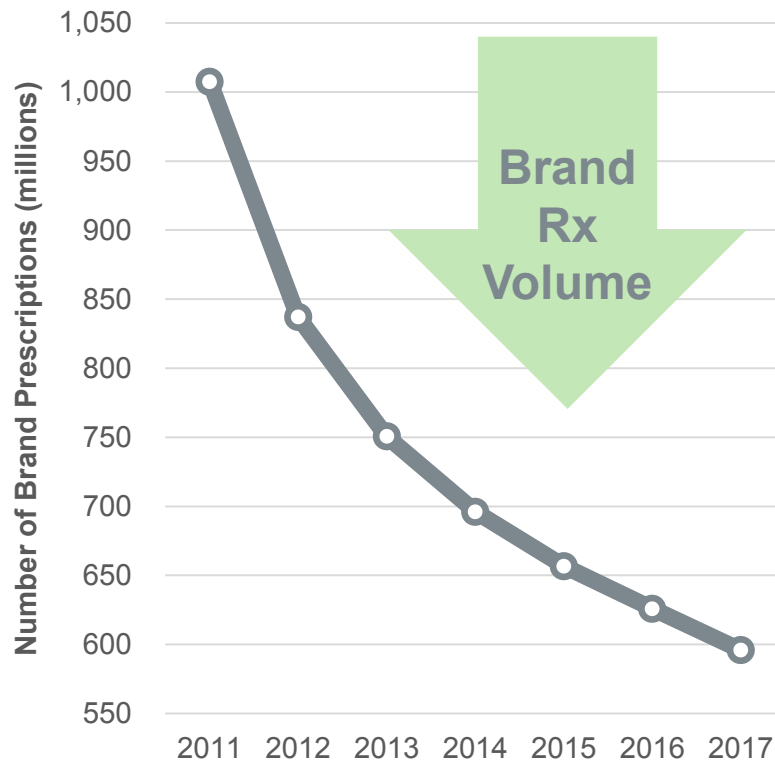
PBM Profit Margins Are the Smallest in Pharmaceutical Supply Chain



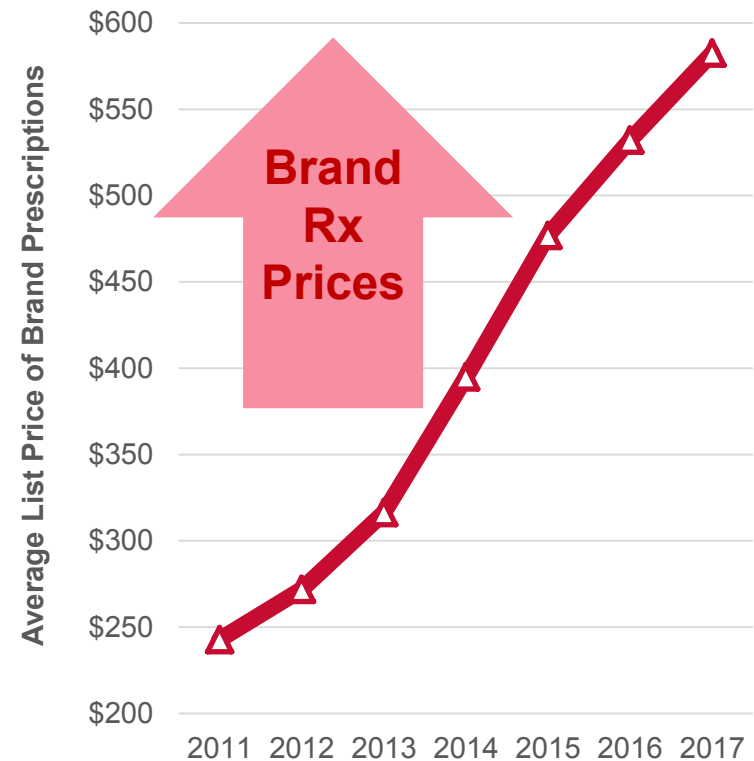
Source: *The Flow of Money Through the Pharmaceutical Distribution System*. Schaeffer Center for Health Policy & Economics, University of Southern California. June 2017

Why Are Manufacturers Increasing Prices? To Counter Shrinking Prescription Volume for Brand Drugs

Brand Prescription Volume Has Plummeted as Generics Have Replaced Brands



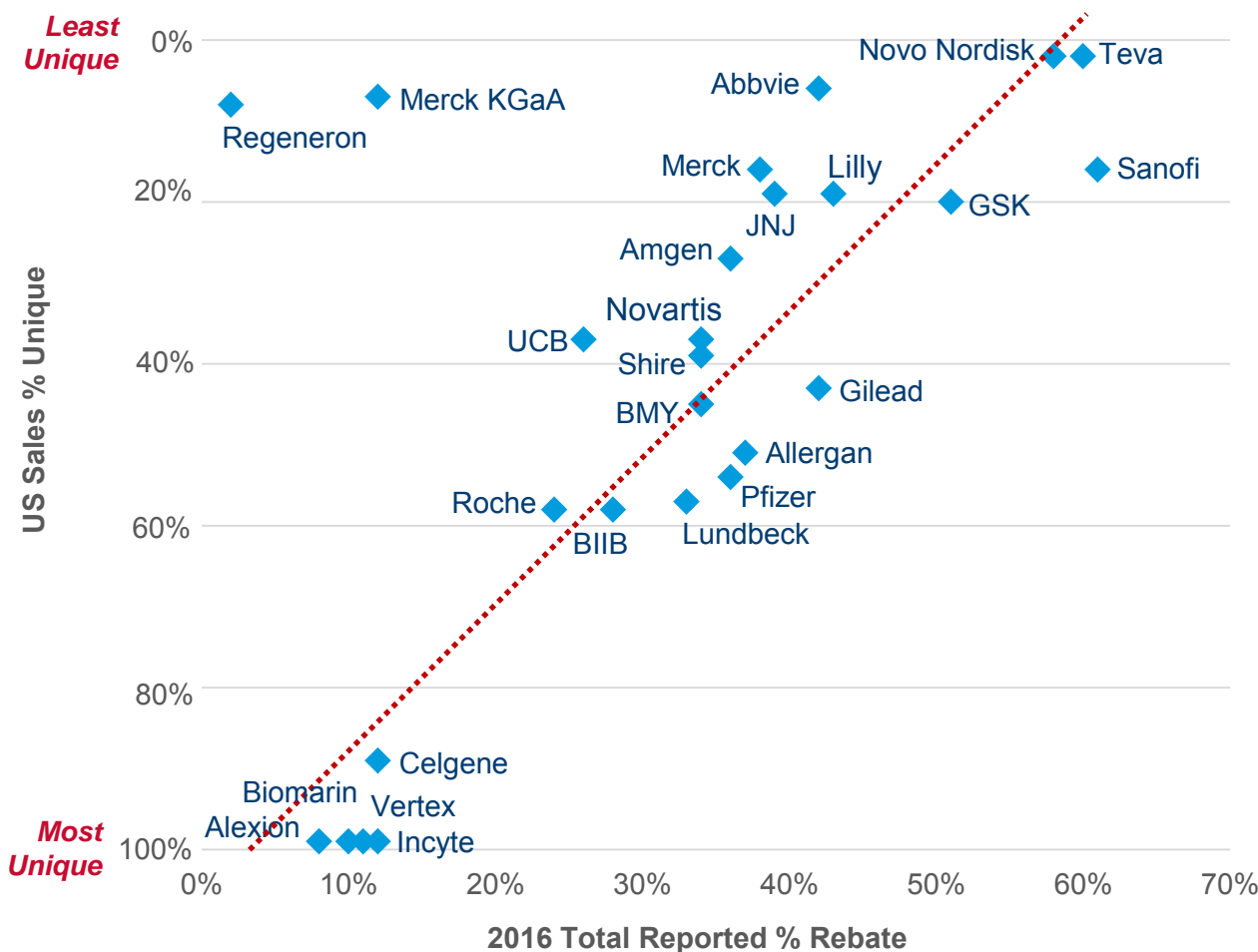
Meantime, Brand Drug Prices Have Skyrocketed to Maintain Revenues



Source: Visante analysis data published by the IQVIA Institute, 2018.

Drug Rebates Vary Based on Each Product's Uniqueness

Credit Suisse on the Relationship Between Product Uniqueness and Rebates

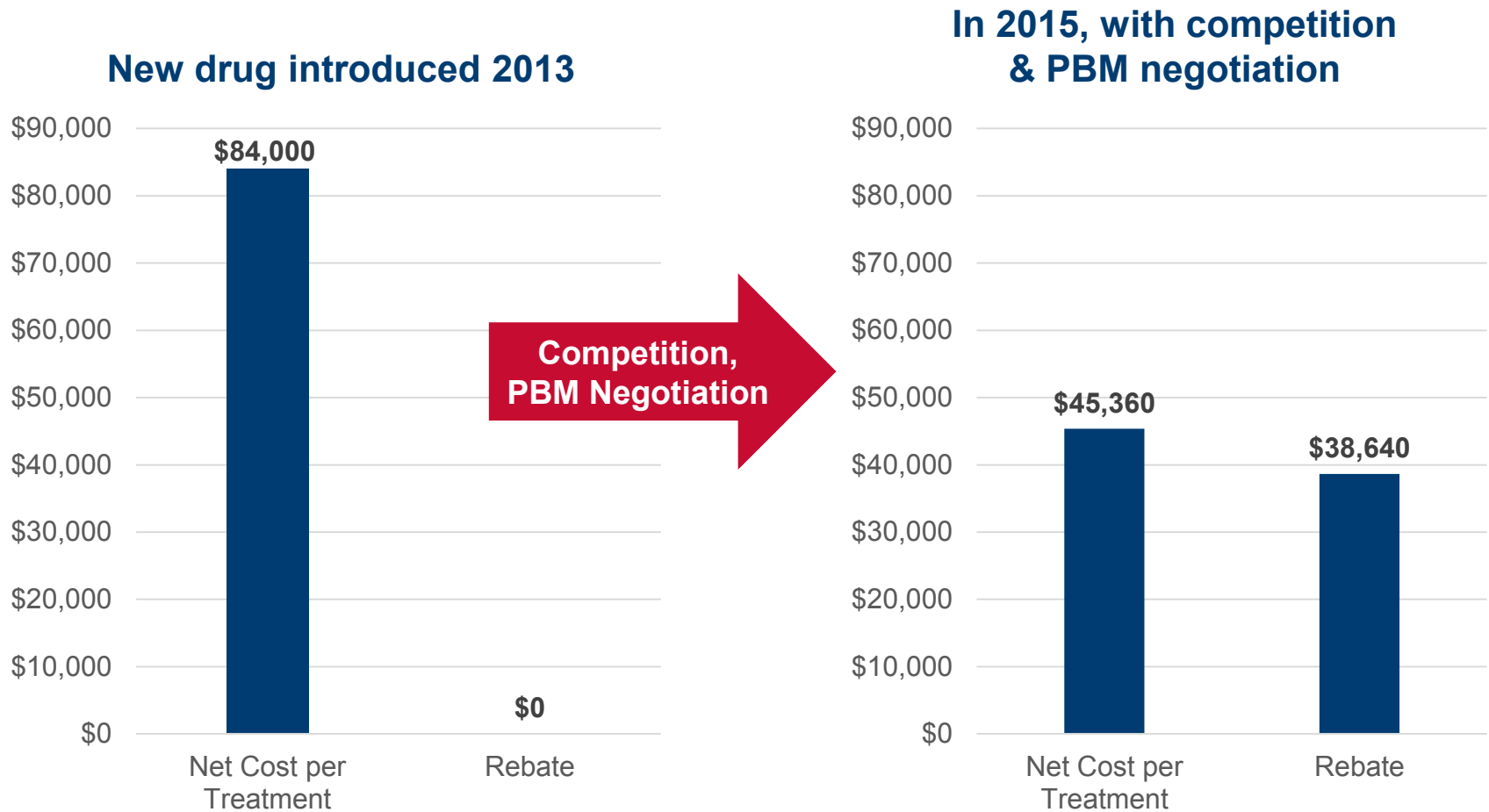


“We find a strong correlation between the level of rebates reported and the uniqueness of a company’s portfolio.”

“Companies with more unique products typically report lower levels of rebates.”

Source: Credit Suisse, “Global Pharma and Biotech Sector Review: Exploring Future U.S. Pricing Pressure, April 2017.

Hepatitis C Experience Shows How PBMs Harness Competition to Lower Costs

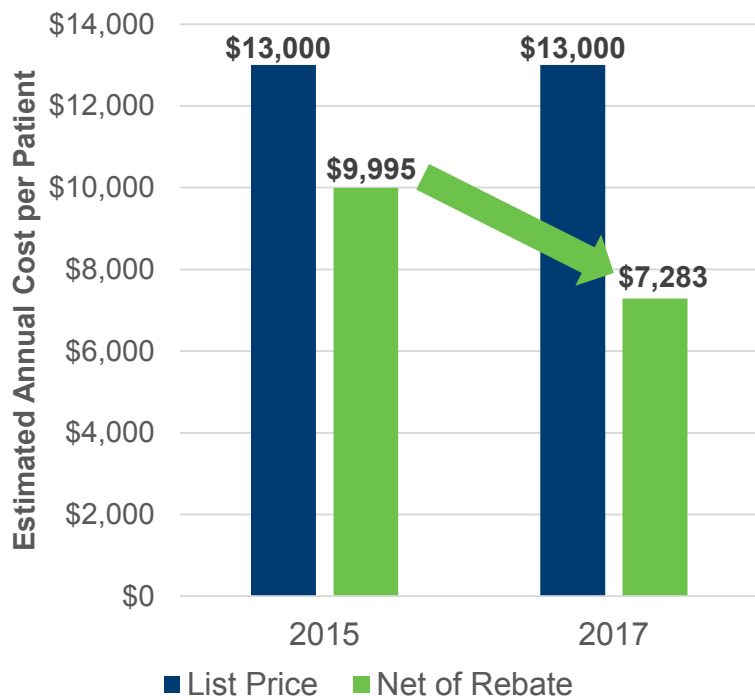


Sources: ["Express Scripts' Miller Says Hepatitis C Price War to Save Billions,"](#) Reuters, Jan. 22, 2015.
["What Gilead's Big Hepatitis C Discounts Mean for Biosimilar Pricing,"](#) Drug Channels, Feb. 5, 2015.

PCSK-9 Experience Demonstrates How PBMs Hold Down Costs for High Cost Drugs

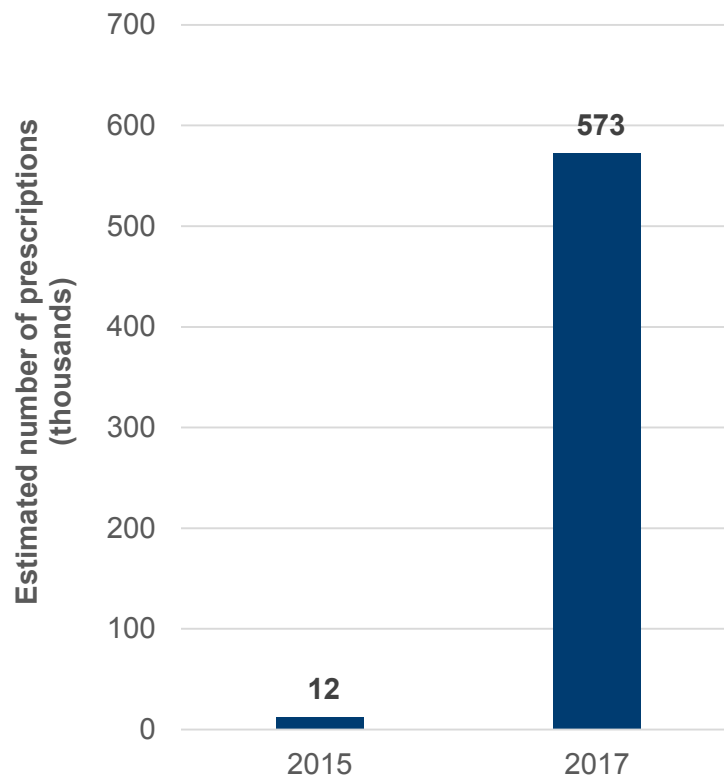
PBMs negotiated better rebates that lowered net cost

Average Net Cost per Prescription



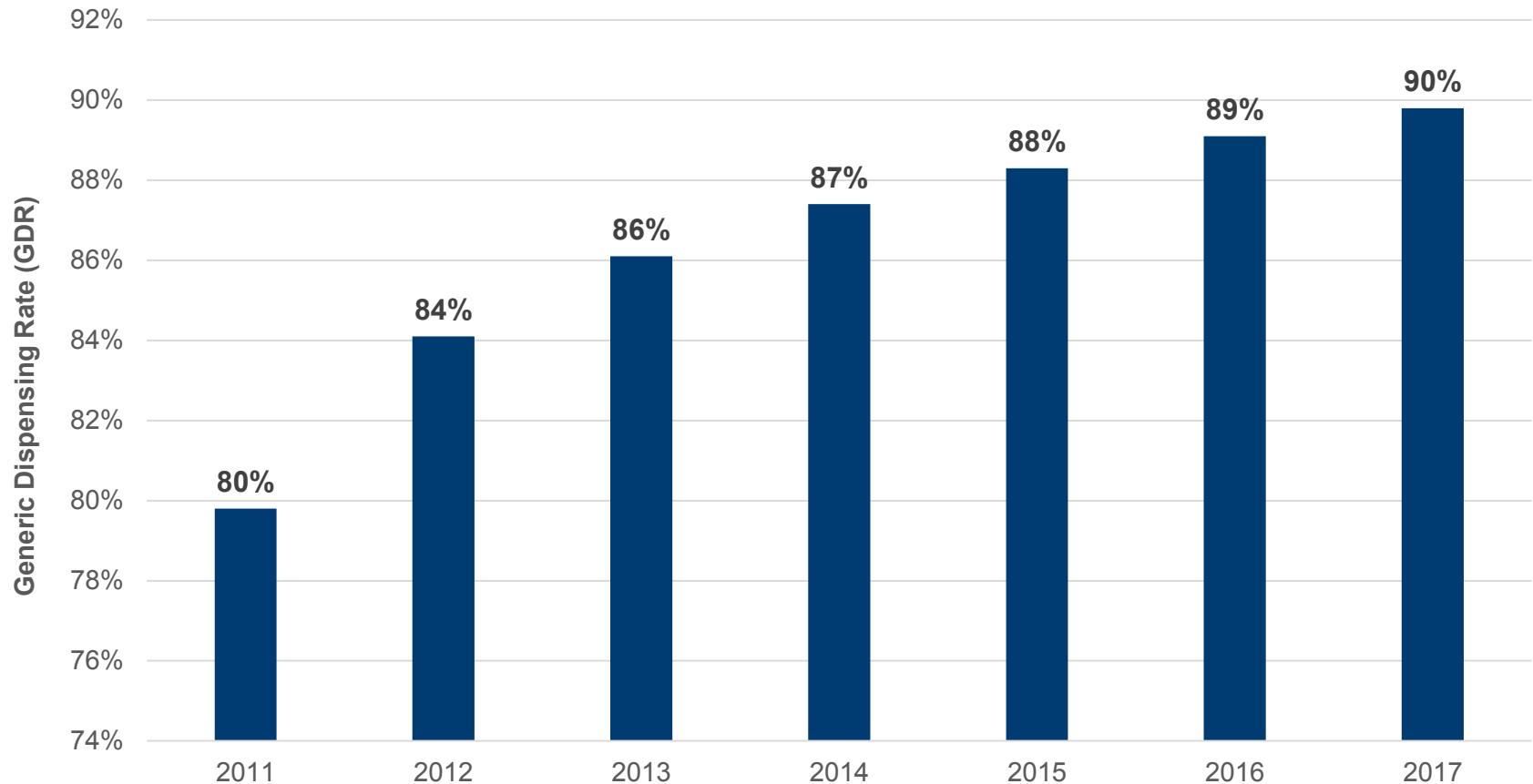
With lower net costs, PBMs increased access

Utilization (Number of prescriptions annually)



Source: Visante analysis of data from SSR Health for Praluent and Repatha. Estimated costs and utilization are for non-Medicaid market.

PBMs Aggressively Encourage Generic Drug Use; Generic Dispensing Increasing as a Result



Source: IQVIA