



# **GoodRx Quarterly Report: Q3, 2019**

By Tori Marsh, MPH, Diane Li, and Jeroen van Meijgaard,  
PhD

**GoodRx Research**  
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Amidst the growing frustration over healthcare costs, there was a lot of talk about drug prices during the third quarter of 2019. Nancy Pelosi, the Speaker of the U.S. House of Representatives, introduced a [proposal](#) to lower prescription drug prices, and Illinois [announced](#) that it would require insurance companies to cover EpiPen for kids.

Yet patients still struggle to pay for their medications and their healthcare in general. This past quarter alone 125 drugs increased in price, GoodRx research [showed](#) that patients with certain conditions were exposed to more drug price increases than others, and Kaiser Family Foundation published research showing that families pay an average of \$20,000 per year for their insurance premiums.

So, what is going to move the mark? Here at GoodRx, we believe that price transparency is a powerful tool we can use to shed light on drug prices and healthcare costs overall. This is the true motivator behind our research, and we are excited to present our third quarterly report, which focuses on drug pricing and fill trends that occurred during Q3 of 2019.

The following report identifies the most expensive prescription drugs, noteworthy state-by-state and city-by-city trends, and drugs that have seen large price increases over the last quarter. It also includes analysis on the following key takeaways:

- Myalept, Ravicti, and Actimmune were the 3 most expensive prescription medications in the U.S. during Q3.
- The average list price for all prescription drugs dropped by 0.6%, but 125 drugs saw an increase in list price during Q3.
- Humalog went generic back in March, but since then, pickup for the new generic has been slow, and most patients are still filling for the expensive brand.
- Prescription drugs were the most expensive in San Francisco, Los Angeles, and New York during Q3.
- Fills for EpiPen (epinephrine) peaked during August of Q3 as kids went back to school, but the peak was a little different this year. We'll explain why.

It goes without saying, but we'll continue to monitor drug prices—both what's happening in D.C. and what's going on in your local pharmacy. And we'll always be looking for ways to help you save.

# Most popular prescription medications in the U.S.

The following were the most popular prescription medications in the U.S. during the third quarter of 2019, accounting for nearly 10% of all fills.

## Most Popular Prescription Medications

Percent of total fills. Q3, 2019

	Drug Name	Share
1	Atorvastatin (Lipitor)	1.5%
2	Lisinopril (Zestril, Prinivil)	1.4%
3	Levothyroxine (Synthroid)	1.2%
4	Amlodipine (Norvasc)	1.1%
5	Gabapentin (Neurontin)	1%
6	Hydrocodone/ Acetaminophen (Vicodin, Norco)	0.9%
7	Omeprazole (Prilosec)	0.9%
8	Sertraline (Zoloft)	0.8%
9	Losartan (Cozaar)	0.7%

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These drugs are a powerful indicator of the conditions that plague much of America, and it's no coincidence that drugs that treat heart disease (such as atorvastatin and lisinopril) show up multiple times on the list. According to the [CDC](#), heart disease, among others, is one of the most common chronic diseases in the U.S.

## Most expensive prescription medications in the U.S.

The following 20 drugs were the most expensive medications during Q3 based on their list price (the official price assigned by the manufacturer), and all have a monthly list price of over \$25,000.

In past quarters, new generics, rising prices, and newly approved expensive drugs resulted in some shuffling among the drugs on this list. However, we saw little movement this quarter, except for one change—Tibsovo increased in list price by 5%, bringing it up to the 17th most expensive drug.

All of these medications are available in pharmacies, and we've excluded drugs that can only be administered by a healthcare provider.

## Most Expensive Prescription Medications

Q3, 2019

	Drug name	Manufacturer	List price
1	Myalept	Aegerion	\$64,859
2	Ravicti	Horizon	\$52,756
3	Actimmune	Horizon	\$47,962
4	Oxervate	Dompé	\$47,200
5	Daraprim	Vyera	\$45,000
6	Cinryze	Shire	\$44,141
7	Takhzyro	Shire	\$44,140
8	Chenodal	Retrophin	\$42,570
9	Juxtapid	Aegerion	\$40,671
10	H.P. Acthar	Mallinckrodt	\$38,892
11	Tegsedi	Akcea	\$34,600
12	Firazyr	Shire	\$33,443
13	Vitrakvi	Bayer	\$32,800
14	Sovaldi	Gilead	\$28,000
15	Viekira Pak	Abbvie	\$27,773
16	Viekira XR	Abbvie	\$27,773
17	Tibsovo	Agios	\$27,421
18	Orfadin	Apotek	\$27,247
19	Sabril	Lundbeck	\$26,301
20	Cerdelga	Sanofi Genzyme	\$26,000

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While these drugs showcase how high drug prices can be, few people take these medications, and most are shielded from the high list price by their insurance. However, it is important to note that as insurance plans continue to provide less coverage, patients will be on the hook for higher out-of-pocket costs for these drugs.

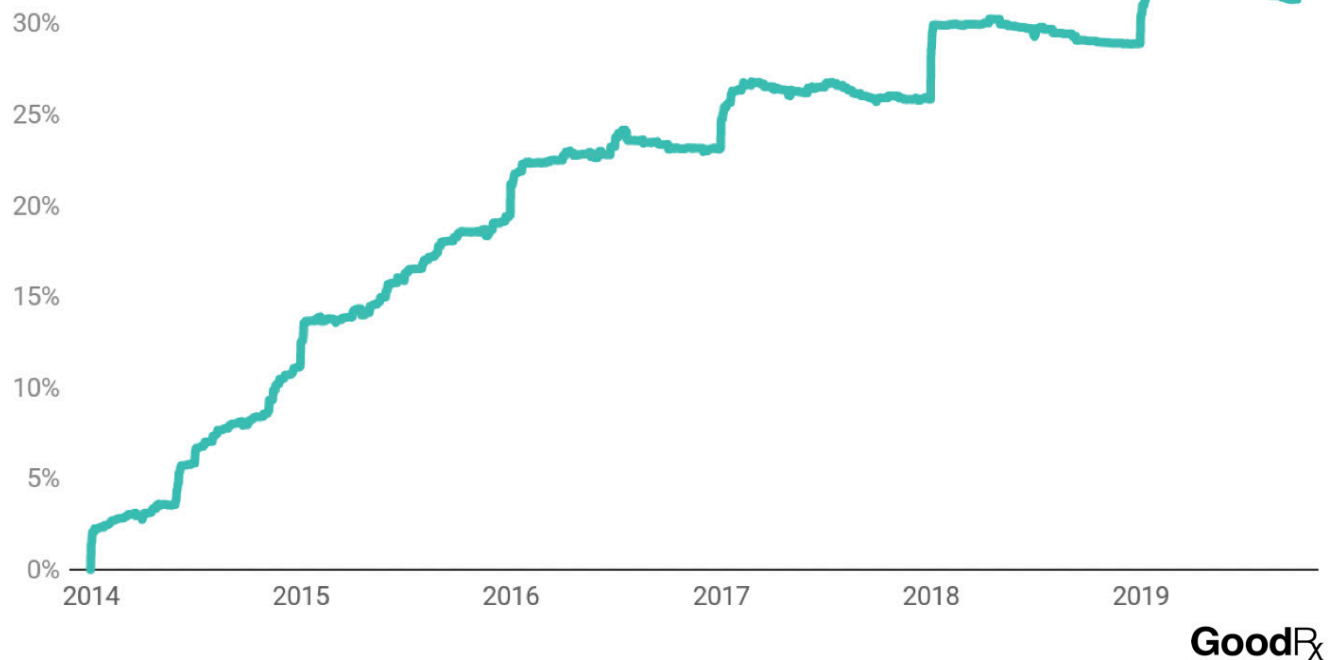
For more on the most expensive prescription medications in the country, read our in-depth analysis [here](#).

## Increases in list price

According to the GoodRx list price index, a model that tracks list price changes, the average list price for brand and generic medications dropped in Q3, by 0.6%. This is in line with past years' trends—typically most of the growth in list price occurs at the beginning of the year, when manufacturers raise prices for their medications.

### List Price Index

Q3, 2019



But while average list prices remained flat, 63 manufacturers increased the price of their drugs. In total, 125 drugs increased in price by an average of 6.7%, with the majority of the changes happening on July 1. While unfortunate, these price increases are expected. Every year, some manufacturers increase the price of their drugs at the beginning and middle of the year—around January 1 and July 1.

## List Price Increases

Q3, 2019

Drug	Manufacturer	Percent increase
Effer-K	Nomax	34.5%
Proleukin	Prometheus	20.0%
Oravig	Midatech	9.9%
Prenate DHA, Mini, Restore, Pixi, Elite, Enhance & Essential	Avion	9.9%
Farydak	Novartis	9.5%
Alinia	Romark	9.0%
Spritam	Aprecia	8.0%
Aptensio XR	Rhodes	6.0%
Clenpiq	Ferring	6.0%
Estrogel	Ascend	5.0%
Tibsovo	Ascend	5.0%
Gardasil 9	Merck	5.0%
Varivax	Merck	5.0%
Perforomist	Mylan	5.0%

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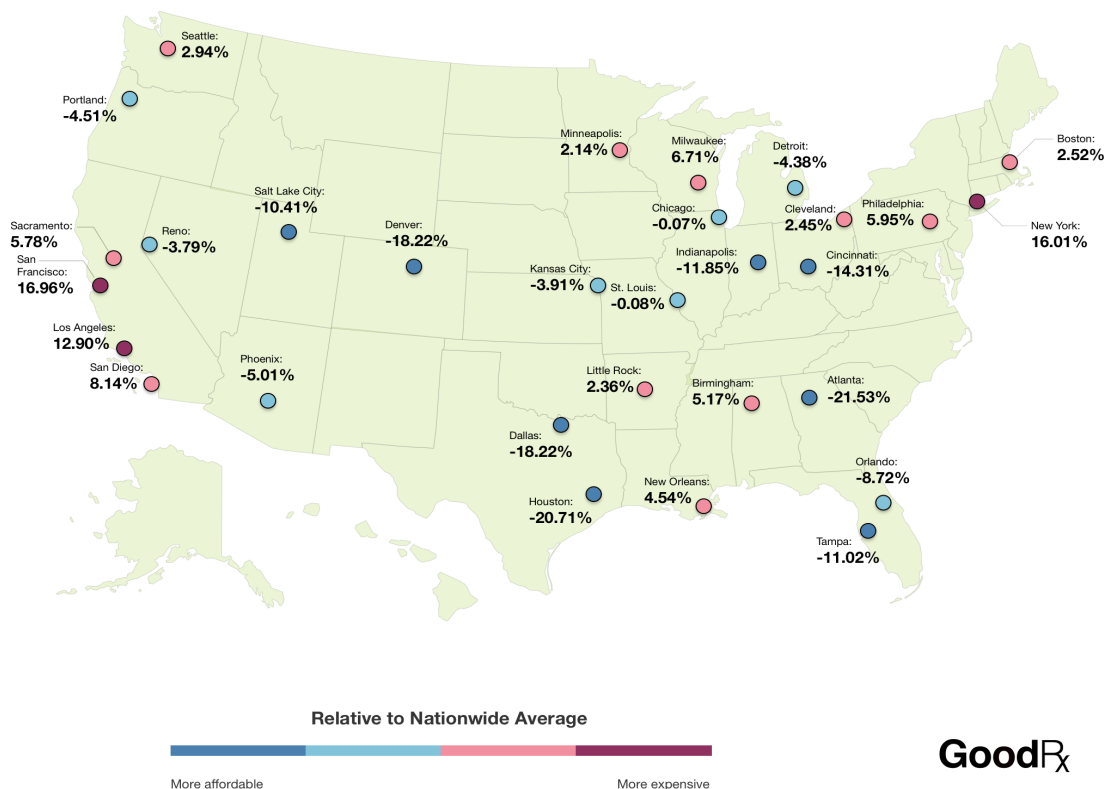
# Most and least expensive cities

Efforts to curb high drug prices have been focused on the U.S. as a whole. But drug prices may need to be evaluated on a state-by-state and even city-by-city level. Why? As it turns out, drug prices vary quite a bit by city.

In fact, during Q3, drugs cost as much as 16% more than the national average in San Francisco, New York, and Los Angeles. On the flip side, those living in Atlanta, Houston, and Denver are paying less for their medications; prices for drugs in those cities were as much as 20% lower than the national average during Q3.

## Most and Least Expensive Cities for Drugs

Cost of medication relative to the national average by American city (Q3, 2019)



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For better or worse, these rankings have been stagnant. Over the past year, San Francisco, New York, and Los Angeles have been the most expensive cities for prescription medications while Atlanta, Houston, and Denver have been more affordable for prescription medications, and Q3 was no exception.

Why do prices vary so much by city? It's likely that the cost of living and pharmacy retail markups are at play here. But one thing is for sure: This price variation showcases the nonsensical and variable nature of drug prices. In essence, drugs cost different amounts in different cities because drug pricing is just outright complex.

For more on the most and least expensive cities for prescriptions, read our in-depth analysis [here](#).

# Most prescribed medications, city by city

The most popular drugs nationwide provides a snapshot of the conditions that plague the U.S., but what do things look like on a city level? In general, atorvastatin (Lipitor), lisinopril (Zestril, Prinivil), amlodipine (Norvasc), and levothyroxine (Synthroid) are popular in most cities, a trend that is in line with nationwide prescription fills.

However, noteworthy differences in fill patterns highlight conditions that some cities may be grappling with more than others.

## Most Popular Prescription Medications, City by City

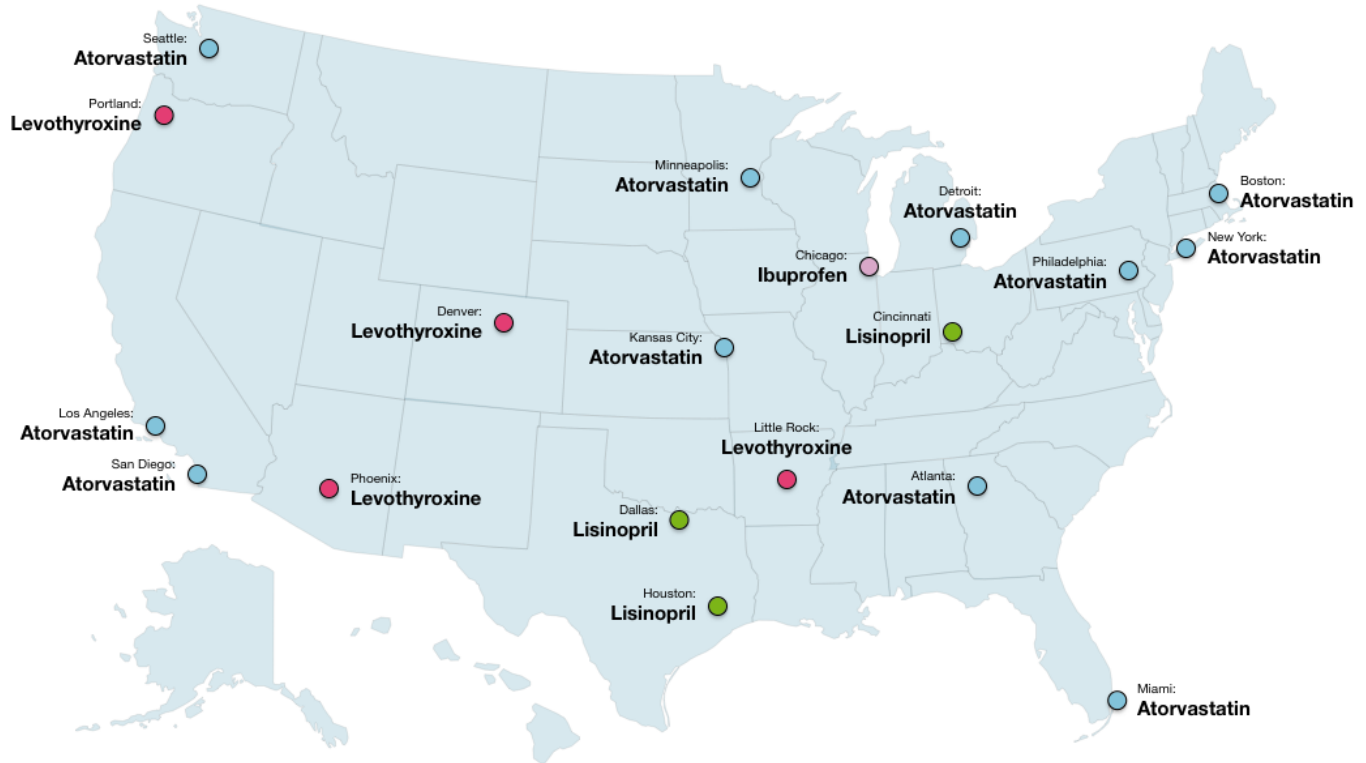
Q3, 2019

City	Drug #1	Drug #2	Drug #3	Drug #4	Drug #5
Atlanta, Georgia	Atorvastatin	Lisinopril	Hydrocodone/acetaminophen	Gabapentin	Amlodipine
Boston, Massachusetts	Atorvastatin	Lisinopril	Levothyroxine	Sertraline	Omeprazole
Chicago, Illinois	Ibuprofen	Atorvastatin	Amlodipine	Albuterol (Ventolin)	Lisinopril
Cincinnati, Ohio	Lisinopril	Atorvastatin	Levothyroxine	Amlodipine	Sertraline
Dallas, Texas	Lisinopril	Phentermine	Atorvastatin	Amphetamine salt combo	Gabapentin
Denver, Colorado	Levothyroxine	Lisinopril	Atorvastatin	Gabapentin	Sertraline
Detroit, Michigan	Atorvastatin	Lisinopril	Hydrocodone/acetaminophen	Levothyroxine	Ibuprofen
Houston, Texas	Lisinopril	Atorvastatin	Amlodipine	Amphetamine salt combo	Phentermine
Kansas City, Kansas	Atorvastatin	Hydrocodone/acetaminophen	Lisinopril	Gabapentin	Levothyroxine
Little Rock, Arkansas	Levothyroxine	Atorvastatin	Amlodipine	Lisinopril	Omeprazole
Los Angeles, California	Atorvastatin	Amlodipine	Metformin	Ibuprofen	Losartan
Miami, Florida	Atorvastatin	Alprazolam	Amphetamine salt combo	Lisinopril	Phentermine
Minneapolis, Minnesota	Atorvastatin	Lisinopril	Levothyroxine	Sertraline	Omeprazole
New York, New York	Atorvastatin	Amlodipine	Levothyroxine	Lisinopril	Gabapentin
Philadelphia, Pennsylvania	Atorvastatin	Lisinopril	Levothyroxine	Amlodipine	Gabapentin
Phoenix, Arizona	Levothyroxine	Lisinopril	Atorvastatin	Gabapentin	Amlodipine
Portland, Oregon	Levothyroxine	Atorvastatin	Lisinopril	Gabapentin	Hydrocodone/acetaminophen
San Francisco, California	Atorvastatin	Amlodipine	Ibuprofen	Abbott freestyle	Metformin
Seattle, Washington	Atorvastatin	Levothyroxine	Lisinopril	Amlodipine	Gabapentin
San Diego, California	Atorvastatin	Lisinopril	Metformin	Amlodipine	Gabapentin



# Most Popular Prescription Drugs by City

Most prescribed drugs in each American city by fills (Q3, 2019)



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While trends are relatively similar in each city, there are some telling differences. Albuterol (Proair, Proventil, Ventolin), used to treat bronchospasm and symptoms of allergies, was the most popular medication in Chicago during Q3, and it makes sense. According to some [news outlets](#), Chicago had an abnormally rough allergy season this summer, likely forcing patients to fill their albuterol inhaler. Metformin (Glucophage), used to treat type 2 diabetes, was only popular in San Diego, San Francisco, and Los Angeles. While there doesn't seem to be a good explanation for this trend, it's interesting to note that metformin does seem to be more popular on the West Coast.

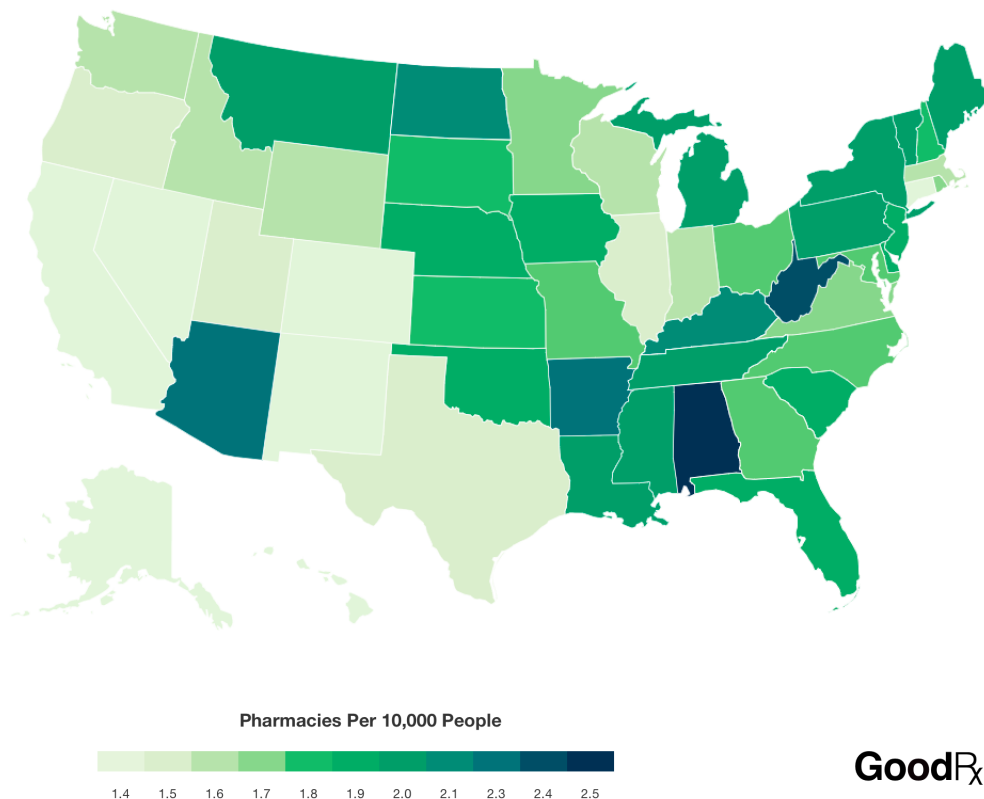
# States with the most (and least) pharmacies per capita

Nearly 60,000 community retail pharmacies are spread throughout the U.S., and 25% of these pharmacies are found in 3 of the most populous states—California, New York, and Texas. On the other hand, Wyoming, Alaska, and Washington, D.C. have the fewest number of pharmacies (96, 113, and 129 pharmacies, respectively). Despite this, ease of access to pharmacies varied state by state during Q3, as many states only have around 1.5 pharmacies per 10,000 people.

The following is a breakdown of the number of pharmacies per capita.

## Pharmacies Per Capita

Pharmacies per 10,000 people by state (Q3, 2019)



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Overall, Alabama, West Virginia, and Arkansas had the highest number of pharmacies per capita with about 2.5 pharmacies per 10,000 people. Hawaii, Colorado, and California on the other hand, have the lowest amount of pharmacies per capita, with about 1.5 pharmacies per 10,000 people.

However, these numbers do not take distance into account. While West Virginia and North Dakota may have more pharmacies per capita, they do have fewer pharmacies in total, and many patients may be forced to drive long distances to fill their prescriptions.

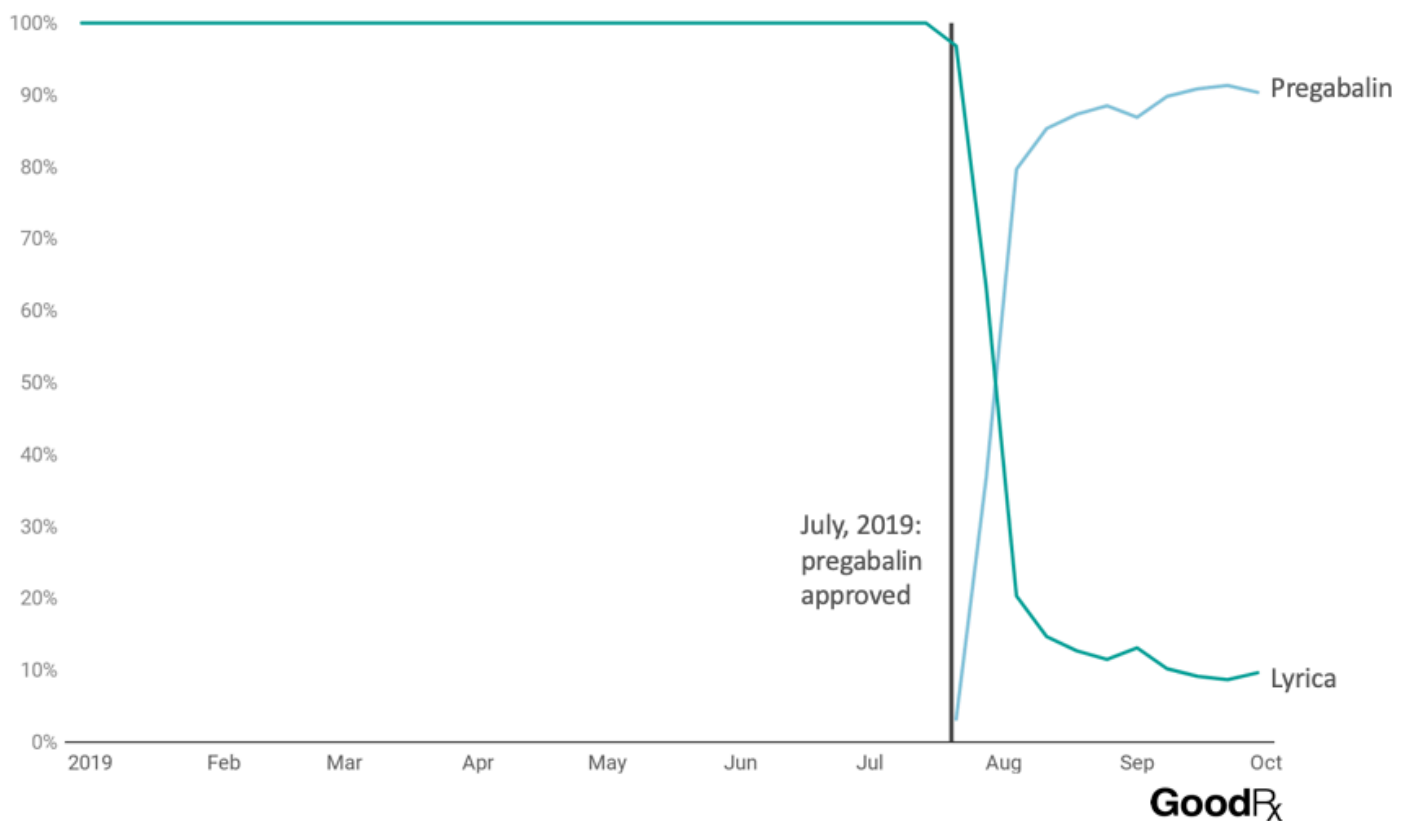
## Fills for new generics

In a world where drugs can cost upwards of \$50,000 per month, many rely on generics to afford their prescription medications. But what happens when a generic drug is approved, but not accessible to patients?

This past quarter, 2 popular brand drugs, Lyrica and Humalog, went generic, and many people were hopeful for drug savings. But things haven't turned out as expected, and these 2 new generics follow opposite trajectories in terms of fill patterns.

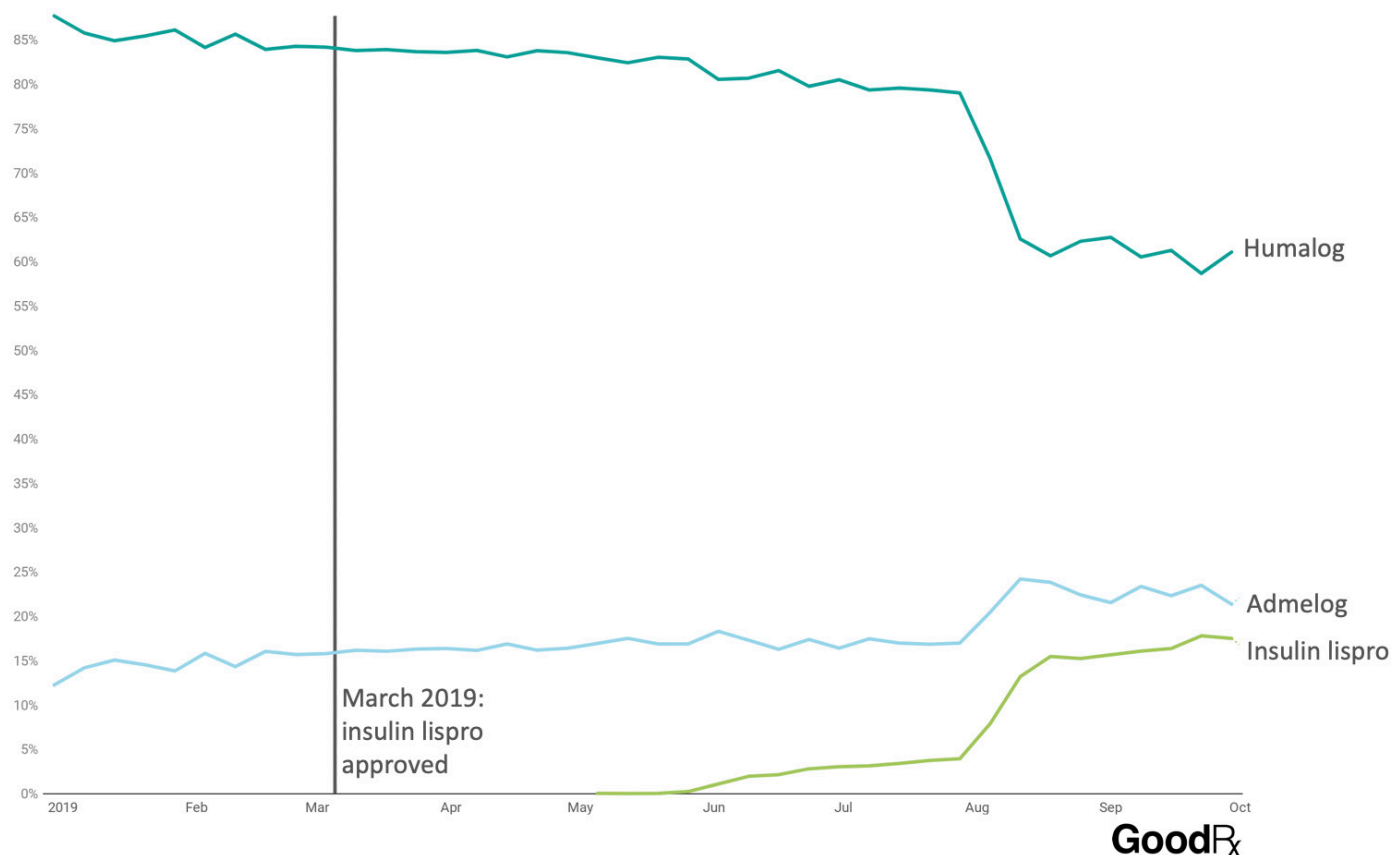
Take Lyrica, a brand drug used to control seizures and treat nerve pain. Lyrica went generic in July, and after only 2 weeks, nearly all patients had switched over to pregabalin, the more affordable generic. What's more, overall fills for both Lyrica and pregabalin together have increased by more than 5%, indicating that more patients are filling for the drug now that it is more affordable.

### Fills for Lyrica & Pregabalin



This is a typical fill pattern, and one we have seen for other blockbuster drugs like [Viagra](#). But the same can't be said for Humalog, a short-acting insulin used to help control blood sugar levels in people with diabetes. Back in March, insulin lispro (the generic counterpart to Humalog) was approved by the FDA, but more than 6 months later the majority of fills are still for the expensive brand drug.

**Percent of Fills for Humalog, Admelog & Insulin Lispro**



Notice that during Q3, fills for Admelog increased by around 7%, indicating that patients may be switching over to alternatives that are more affordable. What's more, total fills for insulin lispro and Admelog have also dropped, a concerning trend that may reveal that patients are abandoning their insulin prescriptions.

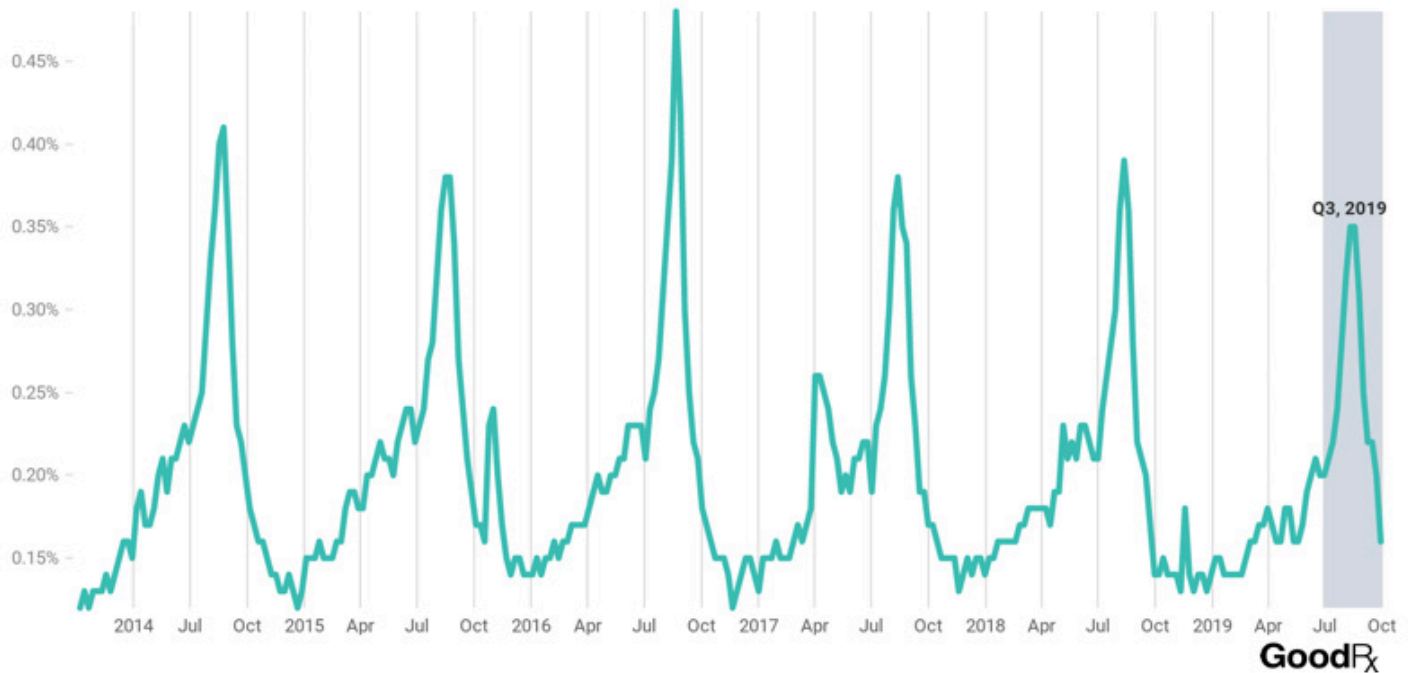
So why isn't insulin lispro being filled? Much of the low fill count is likely a result of shortages of the medication in certain areas and spotty insurance coverage. Even so, the lack of accessibility has caused a dip in overall fills for Humalog, possibly caused by patients abandoning their lispro prescription at the pharmacy, and an increase in insulin alternatives like Admelog.

# Epinephrine fills

This August, we saw the yearly peak for epinephrine (EpiPen, Adrenaclick) prescriptions, with 0.3% of all prescription fills going towards epinephrine autoinjectors. This isn't a surprise: Every year epinephrine fills skyrocket in August as kids head back to school.

## Epinephrine Autoinjector Fills by Year

Percent of total fills from 2014 - 2019



However, while we did see the peak for EpiPen during Q3, it's clear that fills were the lowest they have been in years. This is likely a product of the [EpiPen shortage](#) that has been going on since mid-2018. According to the FDA, manufacturing delays are the main culprit here, and the shortage has left many patients searching to fill the autoinjector.

## Methodology

**Most popular drugs.** This list of popular medications is based on a nationally representative sample of U.S. prescription fills from July 1, 2019 to September 30, 2019—not fills using GoodRx. The sample only includes data from retail community pharmacies (which include independent pharmacies, chain pharmacies, supermarket pharmacies, or mass merchandiser pharmacies) that have state licenses to distribute prescription medications to the general public.

**Most expensive medications.** Prices in this analysis are the list price, which is the price the pharmaceutical company assigns as an official price for a drug, as of September 30, 2019. To compile the list, we identified the most expensive drugs by list price, excluded drugs that were administered under the supervision of a healthcare provider, and obtained typical fill quantities using our data and information from drug manufacturer websites to compare the monthly price of these drugs. Using the official manufacturer list price, we calculated the total cost of a one-month supply given a typical dosing schedule. For drugs where there was a large effective dosing range, or where patient weight determined dosing, we selected a dosing quantity based on claim volume.

**List price changes.** Prices in this analysis are the list price, which is the price the pharmaceutical company assigns as an official price for a drug, as of September 30, 2019. This list excludes any generic medications, over-the-counter medications, and medications that are administered under the supervision of a healthcare provider.

**List price index.** This index is based on published list prices set by the manufacturers of prescription drugs, and the prescription drug mix as dispensed by community retail pharmacies. The earliest date for which the list price index is calculated is December 31, 2013, using the prescription drug mix dispensed in the fourth quarter of 2013 and published list prices from December 31, 2013. The base of the index is set equal to 100 on December 31, 2013. A price index value equal to 125 indicates an increase in drug prices of 25% since December 31, 2013.

**Most and least expensive cities.** This data represents the cash prices for the 500 most commonly prescribed medications in 30 of the most populated cities in the U.S. over the last 12 months (ending September 2019). These numbers are based on a representative sample of U.S. prescription fills (not fills using GoodRx) and come from several sources, including pharmacies and insurers.

**Pharmacies per capita.** This data is based on the pharmacy count in a state divided by the population of a state. Pharmacy data is based on the number of community retail pharmacies in a state, and population data comes from the 2012 to 2017 American Community Survey.

**Generic fills.** Fill percentage is based on a representative sample of U.S. claims from July 1, 2019 to September 30, 2019 and comes from several sources, including pharmacies and insurers.