

The 20 Most Expensive Prescription Medications in the U.S.

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Another year, another round of expensive drugs.

This past November, we released a list of the top 20 most expensive outpatient drugs in the U.S., but since then, things have changed, and not for the better.

As it turns out, in just four months, three drugs moved up on the list after price hikes, and one recently approved drug made it onto our most expensive list. All 20 of these drugs are priced well over \$25,000 for a monthly supply, and while some are for rare genetic disorders, others have been around for years, and treat more common conditions.

Prices are the drug's list price, which is the price that the pharmaceutical company assigns as an official price to a drug. While few patients actually pay the list price, as they are typically shielded by their health insurance, the list price is a good proxy for the price of a drug.

Drug	Manufacturer	List price*
Actimmune	Horizon Therapeutics	\$52,322
<u>Myalept</u>	Aegerion Pharmaceuticals	\$46,328
Daraprim	Vyera Pharmaceuticals	\$45,000
<u>Cinryze</u>	Shire	\$44,141
Takhzyro	Shire	\$44,140
Chenodal	Retrophin, Inc	\$42,570
Juxtapid	Aegerion Pharmaceuticals	\$40,671
H.P. Acthar	Mallinckrodt Pharmaceuticals	\$38,892
<u>Tegsedi</u>	Akcea Therapeutics	\$34,600
<u>Ravicti</u>	Horizon Therapeutics	\$33,572
<u>Vitrakvi</u>	Bayer and Loxo Oncology, Inc	\$32,800
<u>Firazyr</u>	Shire	\$32,468
<u>Cuprimine</u>	Valeant Pharmaceuticals	\$31,426
<u>Sovaldi</u>	Gilead	\$28,000
<u>Viekira Pak</u>	Abbvie	\$27,773
Viekira XR	Abbvie	\$27,773

<u>Orfadin</u>	Apotek Produktion & Laboratorier AB	\$27,247
Tibsovo	Agios Pharmaceuticals	\$26,115
<u>Cerdelga</u>	Sanofi Genzyme	\$26,000
Remodulin	United Therapeutics	\$25,466

*Prices reflect list prices for each medication's most common 30-day prescription.

Like we mentioned above, some changes have happened since we released our 20 most expensive list in November.

Here's what's different:

- On Jan. 1, 2019, manufacturer Aegerion Pharmaceuticals increased the price of Myalept and Juxtapid by 9.945%, moving the drugs from positions 6 and 8 to 2 and 7 on the list, respectively.
- Horizon Therapeutics increased the price of Ravicti by 4.9% to a list price of \$33,572, and it is now the 10th most expensive drug in the U.S.
- United Therapeutics Corporation increased the price for Tyvaso by 4.9% on Jan. 1, 2019. A monthly supply now costs \$29,886, making Tyvaso the 14th most expensive drug in the U.S.
- Harvoni and Zavesca, which used to be the 12th and 18th most expensive drugs in the U.S., respectively, both went generic, and now patients can access these drugs at a lower price.
- Manufacturer Sanofi Genzyme increased the price of Cerdelga by 5% on Jan. 15, 2019, bringing it to number 19 on this list.
- Vitrakvi was approved on Nov. 26, 2019, and at \$546.67 per capsule, it is now the 11th most expensive drug in the U.S.

1) Actimmune – \$52,322

Approved for osteopetrosis and chronic granulomatous disease, a rare disorder that causes the immune system to malfunction, Actimmune is manufactured by Horizon Therapeutics. Patients typically take Actimmune three times a week, and on average, go through about 12 single-use vials a month.

The list price for Actimmune is \$4,360 per vial. Luckily, manufacturer Horizon Therapeutics offers a <u>patient assistance program</u> to help patients get Actimmune at no cost.

2) Myalept - \$46,328

Myalept is an orphan drug, a drug that is intended for the treatment of a rare disease, and is used to treat leptin deficiency in patients with generalized lipodystrophy, a condition of abnormal fat distribution in the body. Myalept is self-administered once a day, and patients typically use 10 vials per month at a list price of \$4,633 per vial. Since Myalept is the only option to control this rare condition, there are no other cost-saving options available.

Aegerion Pharmaceuticals offers a <u>copay card</u> to help commercially insured patients afford Myalept.

3) Daraprim - \$45,000

You might recall that in 2015, Martin Shkreli sparked outrage for hiking the price of Daraprim from \$13.50 per pill to about \$750 per pill in a matter of days. While this caused a national conversation about drug prices and a class-action lawsuit, the price for Daraprim still remains high, with the list price for a one-month supply (60 tablets) coming out to \$45,000.

Daraprim is commonly given to AIDS and transplant patients to prevent infection, and is used to treat toxoplasmosis in otherwise healthy people. Unlike other drugs on this list, patients are rarely on Daraprim for more than a couple of months.

4) Cinryze - \$44,141

Manufactured by Shire, Cinryze has a list price of \$44,141 for a typical one-month supply (16 vials). Cinryze is used to treat hereditary angioedema, a rare life-threatening genetic condition that causes swelling in various parts of the body including the hands, face, and throat.

Fortunately, commercially insured patients can get Cinryze for as little as \$0 with the <u>Shire</u> <u>OnePath Co-Pay Assistance Program</u>.

5) Takhzyro - \$44,140

Just like Cinryze above, Takhzyro is manufactured by Shire and is used to treat hereditary angioedema. Approved just three months ago, patients typically need two vials per month. The list price for Takhyzyro comes out to \$22,070 per vial.

6) Chenodal - \$42,570

Chenodal, used to dissolve gallstones, is manufactured by Retrophin, which was founded by Martin Shkreli, the same person responsible for Daraprim's price hike. Back in 2014, while Shkreli was still CEO of Retrophin, prices for Chenodiol increased fivefold.

What's more, Chenodal is currently off patent, which usually means manufacturers can start making affordable generics of the brand-name drug. However, Chenodal is protected under what is referred to as a "closed distribution system," which prevents manufacturers from developing their own generic versions.

While many patients take 90 tablets per month, some can take as many as 210 at a whopping list price of \$473 per tablet.

7) Juxtapid - \$40,671

Juxtapid is manufactured by Aegerion Pharmaceuticals to treat people with homozygous familial hypercholesterolemia, a gene mutation that leads to cardiovascular disease. Patients typically take 28 capsules of Juxtapid per month, and each capsule has a list price of \$1,453.

8) H.P. Acthar - \$38,892

H.P. Acthar, also referred to as Acthar, is used to treat multiple conditions like lupus, rheumatoid arthritis, multiple sclerosis, infantile spasms, ophthalmic conditions, and psoriatic arthritis. It is manufactured by Mallinckrodt Pharmaceuticals and was approved back in 2010.

Just like many drugs on this list, Acthar has also seen its fair share of price hikes. Back in 2001, when the drug was still manufactured by Sanofi, the list price for one vial <u>ran at about \$40</u>. Seventeen years and one new manufacturer later, the list price for one vial of Acthar (a typical monthly supply) now runs at \$38,892.

9) Tegsedi - \$34,600

Tegsedi is used to treat nerve damage caused by hereditary transthyretin amyloidosis, a rare and slow-progressing disease caused by a buildup of proteins in organs and tissue. After patients are trained on the proper administration techniques, they typically use four syringes per month. Each syringe has a list price of \$8,650.

10) Ravicti - \$33,572

Ravicti is Horizon Therapeutics' second drug on this list after Actimmune, and is used to treat urea cycle disorders, genetic conditions that result in high levels of ammonia in the blood. If left untreated, urea cycle disorders can lead to confusion, coma, or even death. Ravicti can be used in children as young as 2 months of age, teens, and adults, and the typical patient uses 11 bottles in one month. The list price for one bottle of Ravicti is \$4,796.

Just like Actimmune, patients can get Ravicti for free through the <u>Horizon Cares Patient</u> <u>Assistance Program.</u>

11) Vitrakvi — \$32,800

Approved this past November, Vitrakvi is the newest medication on this list. It is a cancer drug used to treat patients with a specific gene mutation. Patients typically take 60 capsules a month; each capsule has a list price of \$547.

Patients with commercial insurance can get Vitrakvi for as little as \$0 with the <u>TRAK Assist \$0</u> <u>Copay Program</u>.

12) Firazyr - \$32,468

Just like Cinryze above, Firazyr is manufactured by Shire for hereditary angioedema. However, unlike Cinryze, which is used to prevent swelling before an attack, Firazyr is used after an attack. Since patients suffer an average of two to four attacks per month, most fill one carton (three syringes) of Firazyr every month. One carton of Firazyr has a list price of \$32,468.

13) Cuprimine - \$31,426

Cuprimine is the oldest drug on this list and has been around since the 1970s. Manufactured by Valeant, Cuprimine removes copper buildup caused by Wilson's disease. Patients take one capsule of Cuprimine after every meal. With a list price of \$2612 per tablet, the cost of treatment can quickly add up.

Cuprimine's price has been a hot-button issue and even sparked debate in Congress, which inspired an episode of the Netflix show, *Dirty Money*.

14) Sovaldi - \$28,000

Manufactured by Gilead, Sovaldi is a popular medication used to treat hepatitis C. Treatments for hepatitis C are notoriously expensive, and the cost for Sovaldi is no different. Patients take Sovaldi for 12 weeks; the list price for a one-month supply runs at \$28,000, or \$1,000 per tablet.

15) Viekira Pak - \$27,773

Viekira Pak is one of three drugs on this list used to treat hepatitis C. Approved in 2015, Viekira Pak is used to treat hepatitis C genotype 1, the most common hepatitis C genotype in the U.S.

Viekira Pak is a package of two different kinds of tablets. Patients are instructed to take two of the tablets containing ombitasvir, paritaprevir, and ritonavir once per day and one tablet containing dasabuvir twice per day.

Since its approval, multiple hepatitis drugs have been released that treat all hepatitis C genotypes and don't require as many pills per day, so Viekira is no longer a first-line treatment.

16) Viekira XR - \$27,773

Viekira XR is the extended-release version of Viekira Pak, and it is also used to treat patients with hepatitis C genotype 1. Just like Viekira Pak, Viekira XR contains the active ingredients dasabuvir, ombitasvir, paritaprevir, and ritonavir. Patients take three tablets once per day.

17) Orfadin - \$27,247

Orfadin is used to treat hereditary tyrosinemia type 1, a rare genetic disorder that prevents the body from breaking down the amino acid tyrosine, causing insufficient weight gain, jaundice, and liver and kidney failure. Type 1 is the most severe form of tyrosinemia, with symptoms generally beginning in the first few months of life. While the dosage depends on each patient, most take 30 capsules of 20 mg each month. The list price per capsule is \$908.

18) Tibsovo – \$26,115

Approved in July 2018, Tibsovo is the first treatment for acute myeloid leukemia in patients with a specific genetic mutation. While it is an orphan drug that fills an unmet need, Tibsovo has a list price of \$26,115 for a one-month supply, making it unaffordable for most.

19) Cerdelga — \$26,000

Cerdelga is an enzyme replacement therapy used for the long-term treatment of Gaucher disease type 1, a disease that can result in an enlarged spleen, low blood cell counts, and bone disease. Patients typically take 56 capsules a month; each capsule has a list price of \$464.

20) Remodulin - \$25,466

Last, but certainly not least, is Remodulin, used to treat pulmonary arterial hypertension. Patients typically need two vials of Remodulin per month, and each vial has a list price of \$12,733. Luckily, United Therapeutics has created a <u>patient assistance program</u> to help low-income patients get Remodulin at a discount.

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Methodology: We created a list of the most expensive drugs by list price, excluded drugs that are administered under the supervision of a healthcare provider, and obtained typical fill quantities using our data and information from the 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 of a typical fill quantity. For drugs where there is a large effective dosing range, or where patient weight determines dosing, we selected a dosing quantity based on claim volume.

Prices in this analysis are the list price, which is the price the pharmaceutical company assigns as an official price for a drug. While few people actually pay the full price of a drug out of pocket, as they are typically shielded by their health insurance, more and more people are on the hook for the price of their drugs every year due to high-deductible insurance plans and formulary changes. What's more, high-priced drugs end up raising insurance rates and overall healthcare spending, which trickles down to patients in the end.