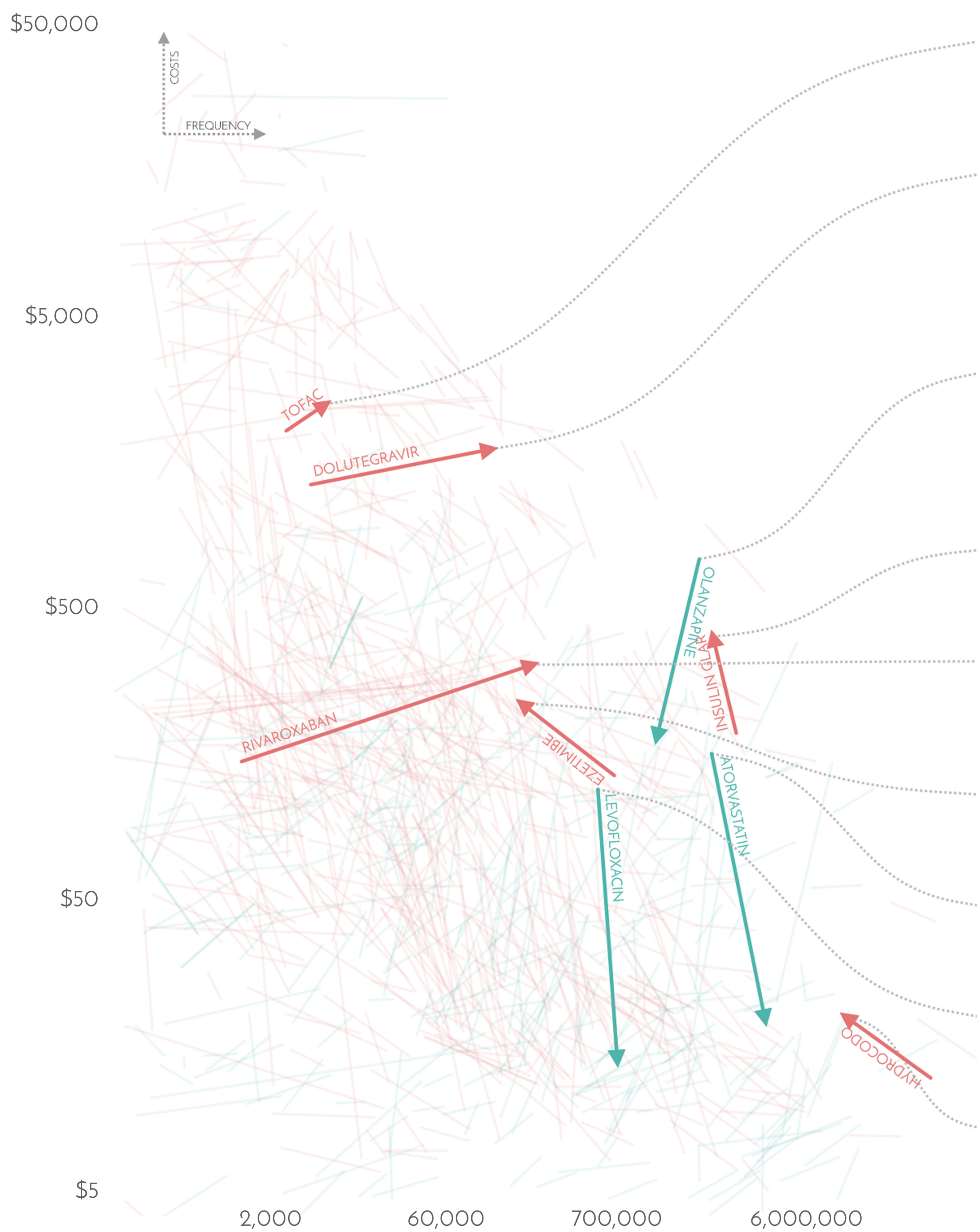


Prescription drug movements

5 years of popularity and cost shifts

ACTUAL GROWTH

Arcadia analyzed drug ingredients over a five-year timespan, tracking prices and frequency across a state. Every drug is represented as a line below. Movement in the **X-Axis represents frequency**, measured by total prescriptions in the dataset. Movement in the **Y-Axis represents average cost** of a single prescription. Red lines represent drugs that have, on average, increased in price over the past five years. View a fully interactive version at drugcosts.arcadiasolutions.com.



Tofacitinib (Arthritis) +16%

With over \$500 Million in sales, Xeljanz is a top seller for Pfizer. Recently, the FDA declined to expand the approved uses to include treating psoriasis, but is currently reviewing its effectiveness for ulcerative colitis, which could expand its market.

Dolutegravir (HIV) +28%

Tivicay, approved in 2013, is one of a new generation of HIV anti-viral combination drugs. This medication, marketed by a joint venture between GlaxoSmithKline and Pfizer, along with another new HIV medication from Gilead all cost between \$15,000 and \$20,000 per year. Of these drugs, the executive director of Médecins Sans Frontières said "A promising new drug will only translate into more lives saved if it is affordable, so that people who need it have access."

Olanzapine (Schizophrenia) -69%

One of several atypical antipsychotic medications, these drugs were subject of over billions of dollars in fines and settlements from 2009-2012 as these medications were marketed to nursing homes to treat dementia. Their use exploded in that time before the FDA, CMS and numerous class action lawsuits exposed widespread abuse of these medications in the nursing home setting.

Insulin Glargine (Diabetes) +101%

Sold under the name Lantus, this long-acting insulin approved in 2000 is typically injected once before bedtime. Prices for many kinds of insulin have exploded recently.

Rivaroxaban (Blood Thinner) +84%

First approved in 2011 for blood-thinning related to deep vein thrombosis, Xarelto sales hit \$1.5 billion recently. An alternative to the generic and more established drug Warfarin, Johnson & Johnson is seeking to expand the approved uses of this med.

Ezetimibe (Cholesterol) +70%

Also known as Vytorin, this is an alternative cholesterol-lowering medication. Large clinical trials of vytorin are starting to show that while LDL values are lowered, no reduction in cardiac events has followed.

Atorvastatin (Cholesterol) -84%

Lipitor is one of the most-prescribed cholesterol-lowering medications. It's available from your local Walmart for \$4 on their drug plan. Watch out for grapefruit juice.

Levofloxacin (Antibiotic) -81%

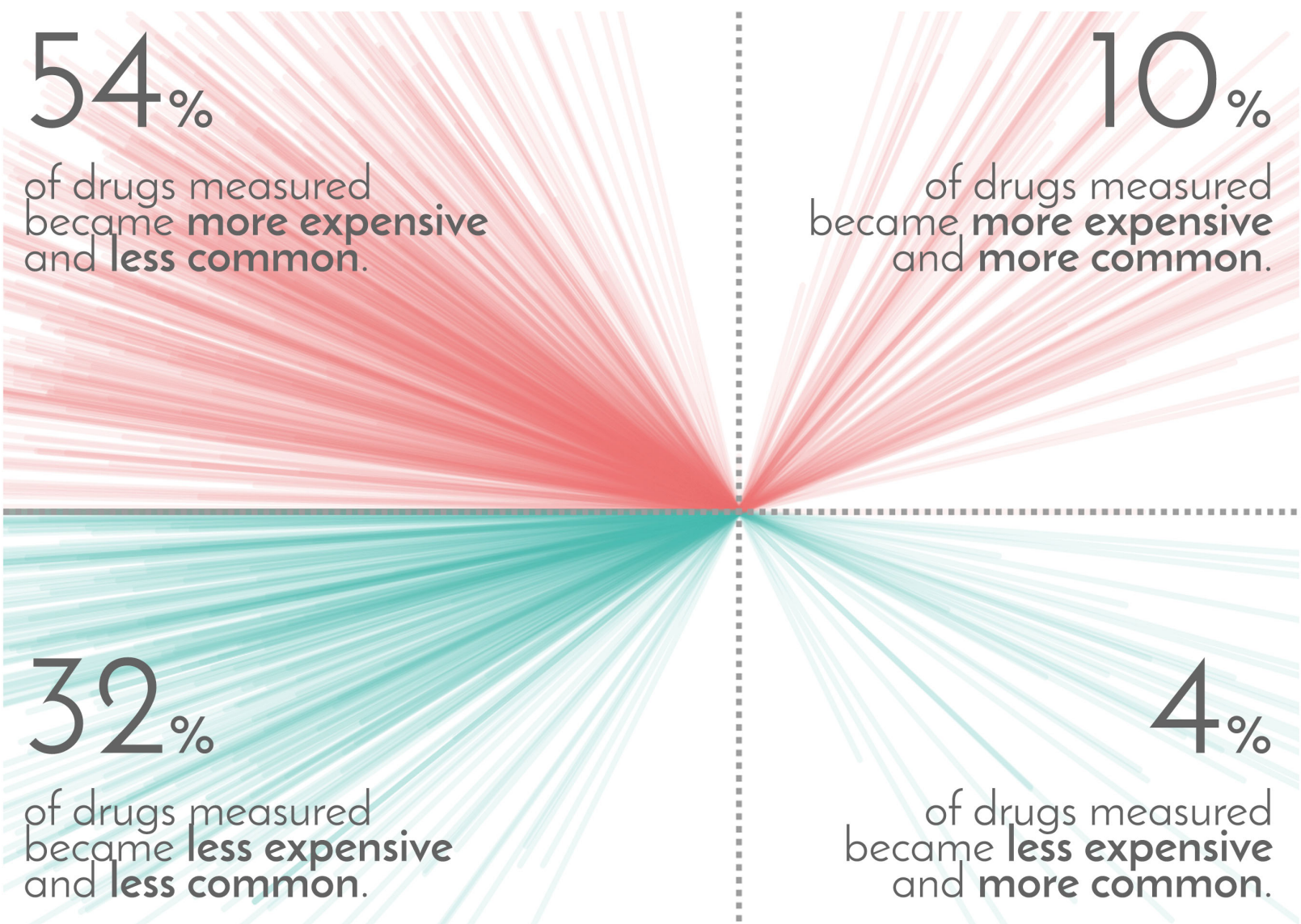
Levaquin is a popular antibiotic produced by Johnson & Johnson, earning the company \$1.6 billion in 2007. In 2011, a generic version was approved by the FDA, offering alternatives at a much lower cost.

Hydrocodone (Pain) +62%

One of the most popular drugs in our analysis, this opioid is often combined with acetaminophen or ibuprofen in hundreds of different formulations. In 2014, the FDA's approval of the first pure hydrocodone product, Zohydro, made news for concerns about the potential for abuse.

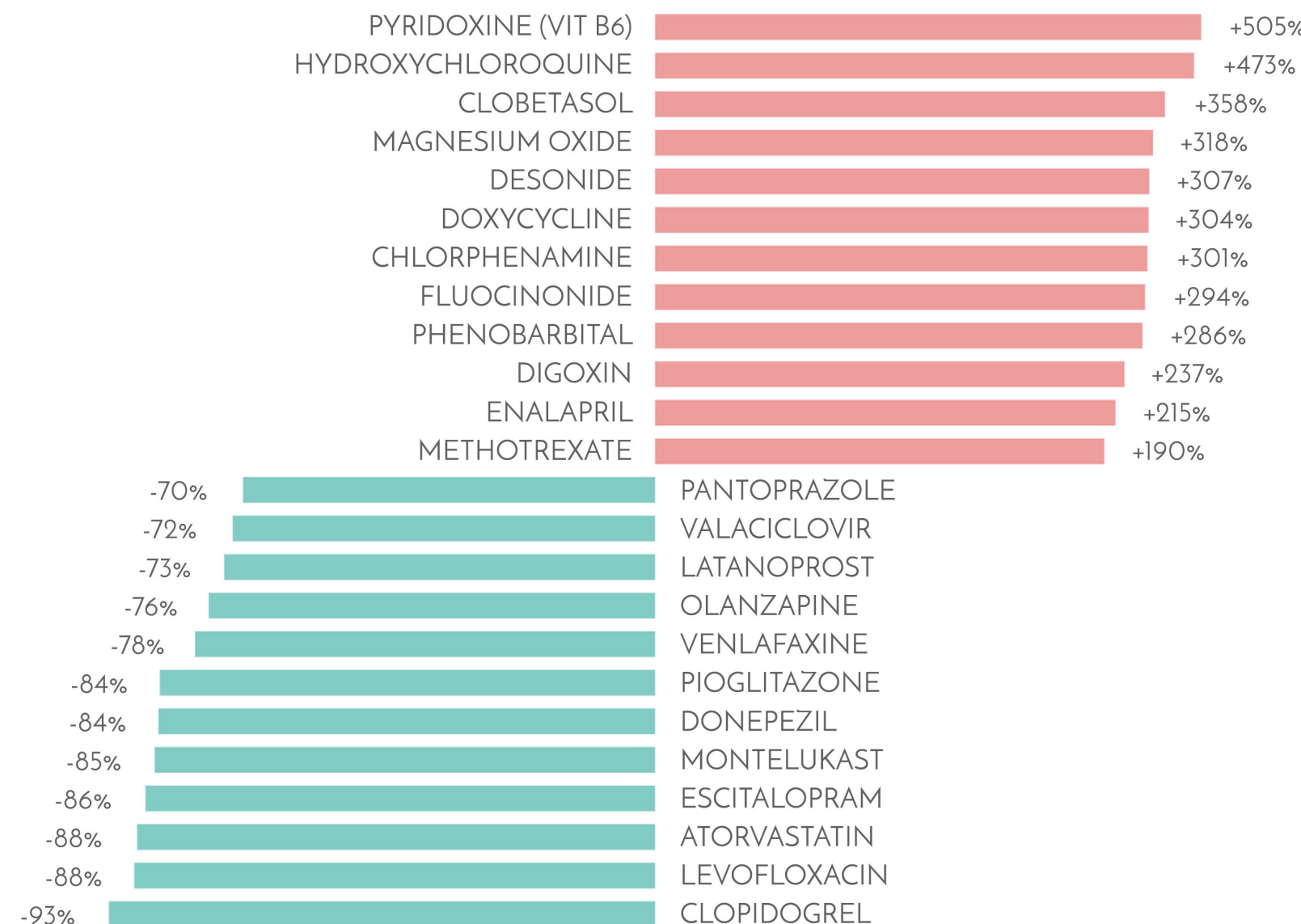
PERCENT GROWTH

Below each drug shares a normalized origin and grows outward based on relative changes in cost/frequency.



BIGGEST MOVERS

Among the most frequently prescribed drugs, those below saw the biggest price changes over the five-year period.



ARCADIA™