

Insulin Manufacturers in the United States*

A History of Pricing and Profit

Overview

The US insulin market is dominated by three manufacturers — often called the “Big Three” — who together control roughly 90% of the global insulin supply: Eli Lilly (Indianapolis), Novo Nordisk (Danish, with major US operations), and Sanofi (French, with US headquarters in New Jersey). Their parallel pricing behavior over the past two decades has been the subject of congressional investigations, multistate lawsuits, and class action litigation.

Eli Lilly

Eli Lilly has the longest history in insulin, having commercialized the first product in 1923 after purchasing rights from the University of Toronto discoverers, who famously sold the patent for \$1. Its modern analog insulin Humalog launched in 1996 at roughly \$21 per vial. By 2017 the list price had climbed to about \$275 per vial — a roughly 1,200% increase over a product whose formula had not meaningfully changed. Lilly also raised the price of Humulin, an older human insulin, by similar magnitudes during the same period.

Novo Nordisk

Novo Nordisk followed a nearly identical trajectory with NovoLog (insulin aspart), which launched in the early 2000s and rose from around \$40 per vial to roughly \$290 by 2018. Levemir, its long-acting product, saw comparable increases.

Sanofi

Sanofi’s Lantus, the long-acting blockbuster launched in 2000, went from about \$35 per vial at introduction to roughly \$270 by 2019. Its newer product Toujeo followed similar pricing patterns.

Congressional and Legal Scrutiny

A 2021 Senate Finance Committee bipartisan report (led by Senators Wyden and Grassley) concluded that the three manufacturers raised prices in lockstep, often within days or weeks of each other, and used the rebate structure of the pharmacy benefit manager (PBM) system to inflate list prices while paying larger rebates to PBMs (CVS Caremark, Express Scripts, OptumRx) in exchange for preferred formulary placement. The report described this as a “shadow pricing” pattern and noted internal

company documents showing executives discussing competitors' increases as a benchmark for their own. Several states, including Minnesota, Kansas, and Mississippi, have sued the manufacturers and PBMs alleging an anticompetitive scheme.

The 2023 Pricing Shift

The pricing dynamic shifted notably starting in 2022–2023. The Inflation Reduction Act capped insulin at \$35 per month for Medicare Part D beneficiaries beginning January 2023. Within weeks of that going into effect, all three manufacturers announced voluntary list price cuts and \$35/month out-of-pocket caps for many privately insured patients: Eli Lilly announced a 70% cut to Humalog and Humulin in March 2023, Novo Nordisk announced cuts of up to 75% on NovoLog and other products shortly after, and Sanofi announced a 78% cut to Lantus. Analysts have noted that another factor was a change in the Medicaid rebate program that, starting in 2024, would have required manufacturers to pay rebates exceeding the price of the drug itself if list prices remained as high as they were — effectively penalizing them for prior increases.

Profit Context and Market Dynamics

Insulin has long been highly profitable for these manufacturers despite being off-patent in its underlying form. The companies have used a strategy of incremental reformulation (slightly modified analogs, new delivery devices like prefilled pens) to obtain new patents and extend market exclusivity — sometimes called “evergreening.” Generic and biosimilar insulins have been slow to take meaningful market share, though Civica Rx (a nonprofit generic manufacturer) and biosimilars like Semglee have begun to enter.

***Note: This document was prepared by Claude AI. We believe that it is substantially correct, but AI is sometimes wrong. If you suspect something is wrong in the document, please do your own research.**