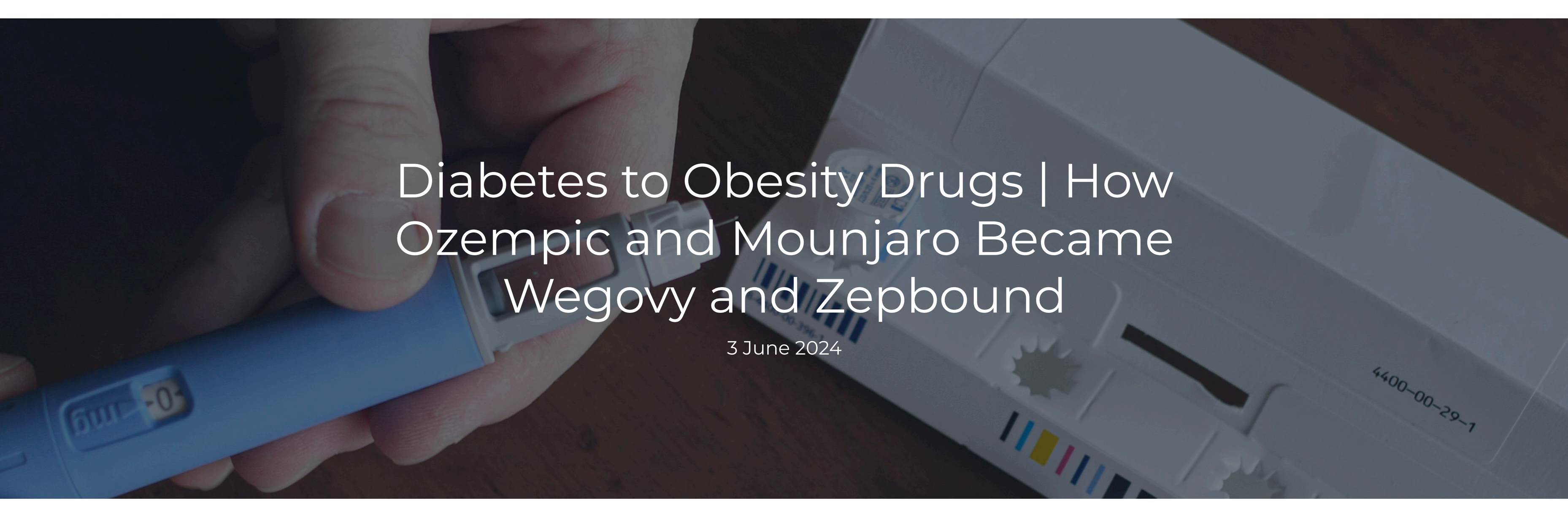


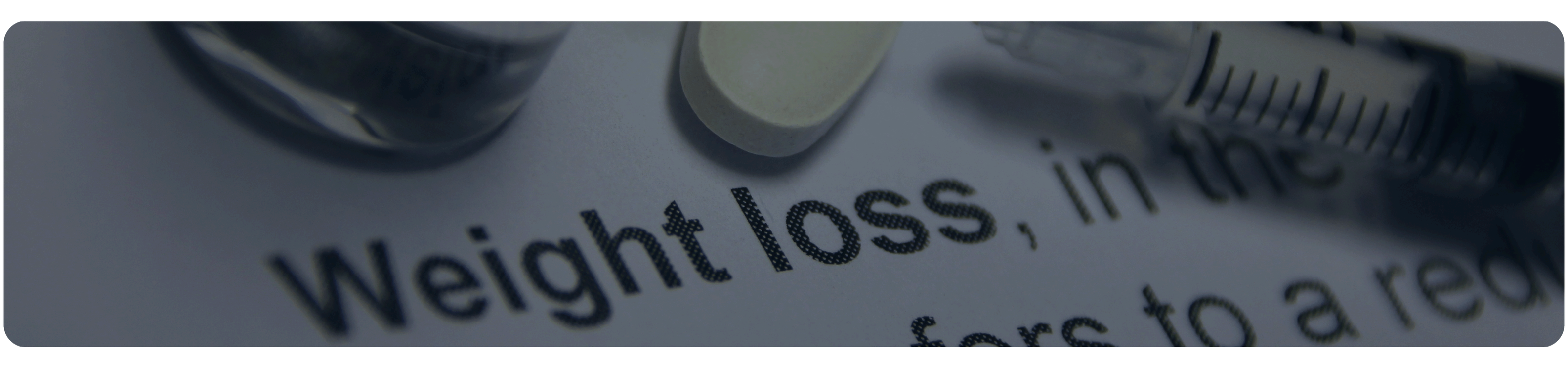
Diabetes to Obesity Drugs | How Ozempic and Mounjaro Became Wegovy and Zepbound

3 June 2024

Forget crash diets and fad workouts. The hottest trend in Hollywood isn't a new juice cleanse. It's a prescription medication originally developed for something entirely different: type 2 diabetes.

Enter Ozempic, the unexpected superstar stealing the spotlight with its remarkable weight-loss effects, endorsed by A-listers and making waves in tabloids. But how did a treatment for diabetes become Tinseltown's newest darling? Join us on a journey as we unravel the fascinating tale of Ozempic, from its scientific origins to its unexpected detour into the world of celebrity weight loss and into the realm of the growing obesity crisis.

What We Cover In This Piece



Ozempic: The Origin Story

The story begins not on a red carpet but in a research lab. In the early 2000s, researchers at the Danish pharmaceutical giant Novo Nordisk, led by Dr. Patrick Basbøll, were on a mission. Novo Nordisk, along with other contenders, was developing a new class of drugs called glucagon-like peptide-1 (GLP-1) agonists to combat type 2 diabetes. Ozempic, known generically as ***semaglutide***, was one such contender. The focus was on regulating blood sugar, but an unexpected guest star emerged during clinical trials: weight loss.

And so Ozempic hit the shelves, the first of its kind, as a once-weekly injectable treatment for type two diabetes with the remarkable side effect of weight loss. Here's where things get interesting.

Ozempic: A Journey to Off-Label Stardom

It wasn't long before people seeking weight loss solutions started to pay attention to the medication as an off-label treatment. Ozempic's weight-loss potential also caught the eye of celebrities facing constant pressure to maintain a particular physique. With increased social media presence, before-and-after pictures featuring Ozempic use fueled the fire. Soon, Ozempic became synonymous with rapid weight loss.

However, the medication is not designed specifically for weight loss, and so several issues arose from its off-label use. For starters, there was a shortage of Ozempic for patients suffering from type 2 diabetes, which also contributed to the medication's soaring prices. Coupled with the limited safety data, dosage discrepancies, and regulatory parameters, Ozempic could simply not occupy the weight-loss space with any real traction.

So, researchers at Novo Nordisk began furiously testing ***semaglutide*** in higher doses under the name Wegovy for treating individuals living with obesity and other weight-related medical problems. In June 2021, they received FDA approval for the medication.

Novo Nordisk isn't the only player in the game for glucagon-like peptide-1 (GLP-1) receptor agonists. Eli Lilly is hot on their heels with their own versions of the medication known as ***tirzepatide*** with Mounjaro (type 2 diabetes) and Zepbound (weight-loss) as their competing brands. Both companies are vying for market share in the treatment of obesity and type 2 diabetes. This competition has driven other innovations and clinical trials, which will potentially lead to more affordable treatment options for patients. At the moment, there are several notable clinical trials in various phases as the competition heats up for a portion of the lucrative weight-loss drug market.

Other Weight Loss Drugs | The Race to Market

Learning from the astronomical success of COVID-19 vaccines, where early market entry secured massive profits, pharmaceutical companies recognized the potential of GLP-1 drugs for weight-loss.

> Novo Nordisk's success since the launch of Ozempic has been nothing short of phenomenal. Ozempic, along with its weight-loss counterpart Wegovy, have become blockbuster drugs. Sales figures are staggering, with shares having risen around 260% since Wegovy's launch in the United States in June 2021. The drugs' popularity has made Novo Nordisk the "most valuable company in Europe by market capitalization" and one of the world's most valuable firms

In the years since the launch of Ozempic and in response to the overwhelming demand for new weight-loss drugs – many pharmaceutical companies have begun clinical trials. This is in the pursuit of a piece of the lucrative weight-loss drug pie.

Various phases for differing forms of the drug are well underway, with many pharmaceutical companies vying for the next-to-market spot in the hopes of winning market share. This is particularly pertinent for trials developing monthly injectables and oral forms of these drugs.

Why the Focus on Weight-Loss Drugs? | The Obesity Crisis

The global health landscape is facing a growing crisis: obesity. Numbers are on a relentless upward trend, impacting millions of lives worldwide. This surge in weight-related issues has fueled a new wave of research and development – and given rise to new weight-loss drugs.

The obesity epidemic is a major global health concern, with numbers steadily rising. Here are some key statistics:

- **Global Impact:** It's estimated that over 1 billion people worldwide are living with obesity v, including nearly 880 million adults and 159 million children.
- **Dramatic Increase:** Since 1975, obesity rates in adults have nearly tripled for women and quadrupled for men v.
- **Overweight Included:** When including overweight individuals, the number jumps to 2.5 billion adults, with 43% of adults globally classified as overweight or obese. v

With obesity numbers reaching unprecedented levels, the need for effective solutions is more pressing than ever. Traditional methods like diet and exercise haven't always yielded the desired results for everyone. The pivot to weight-loss medications comes from the significant traction being offered by these drugs in the war against obesity.

The Battle for Weight-Loss Supremacy | New Contenders Emerge

The success of Ozempic and Wegovy has ignited a firestorm in the world of weight-loss medications. Pharmaceutical companies are scrambling to develop the next big thing, with several promising contenders emerging from clinical trials.

Here are some key contenders in the race to market:

Retatrutide (Eli Lilly): The Triple Threat

- **Mechanism:** This drug goes beyond the standard GLP-1 approach. It's a triple agonist targeting GLP-1, GIP (glucose-dependent insulinotropic polypeptide), and glucagon receptors.
- **Results:** Phase 2 trials have been impressive, with participants experiencing significant weight loss.
- **Stage:** Currently in Phase 3 trials, expected to be completed by late 2025. This is a crucial stage that determines effectiveness and safety for wider use.

Cagrisema (Novo Nordisk): The GLP-1 & Amylin Duo

- **Mechanism:** Novo Nordisk, the maker of Ozempic and Wegovy, is back in the ring with Cagrisema. This drug combines a GLP-1 receptor agonist with amylin, a hormone that promotes satiety (feeling full).
- **Benefits:** Early data suggests promising weight-loss results alongside potential blood sugar control benefits, making it a possible option for individuals with both weight and blood sugar concerns.
- **Stage:** Currently in the early stages of Phase 3 trials, expected to be completed by late 2026.

> **Tired of the pressure to meet SIV dates and compliance requirements for your obesity drug trials?** Let TecEx take the weight off your shoulders. We'll be your dedicated IOR project manager, ensuring your global clinical trials run smoothly and efficiently, always meeting compliance standards and time pressures.

Mazdutide (Innovent Biologics): The Dual Agonist

- **Mechanism:** Similar to Retatrutide, Mazdutide is a dual agonist, targeting GLP-1 and glucagon receptors. This approach may offer a different mechanism for weight loss compared to traditional GLP-1 drugs.
- **Progress:** Mazdutide has completed a Phase 3 trial, a significant step toward potential FDA approval. Positive results for weight loss have been reported. Additional Phase 3 trials are still underway and are set to conclude late in 2025.
- **Next Steps:** We'll need to wait for official data and potential FDA approval to see if Mazdutide becomes commercially available.

AMG133 (Amgen): A Deep Dive

- **Mechanism:** AMG 133, also known as ***maridebart cafglutide***, takes a two-pronged attack on weight loss. GIPR Antagonist is a unique aspect of AMG 133. It blocks the effects of glucose-dependent insulinotropic polypeptide (GIP), a hormone that encourages the body to store excess calories as fat. By inhibiting GIP, AMG 133 may help prevent fat storage. Similar to established weight-loss drugs, AMG 133 mimics the effects of glucagon-like peptide-1 (GLP-1). This can lead to reduced calorie intake and potentially improved blood sugar control.
- **Progress:** The drug is still in the early stages of development, but preclinical and Phase 1 clinical trials have shown promising results.
- **Next Steps**: Encouraged by the early data, Amgen is conducting phase 3 clinical trials to gather more comprehensive data.

Unveiling the Future of Weight-Loss Drugs | Beyond Ozempic

These are just a few examples of the exciting developments happening in the weight-loss drug landscape. With more medications in the pipeline and continued research, we can expect to see a broader range of options available in the coming years. This increased competition could lead to more affordable and accessible weight-loss solutions for those struggling with obesity.

The weight-loss drug landscape is undergoing a paradigm shift. Ozempic and Wegovy's success has ignited fierce competition, with pharmaceutical giants vying for the coveted "first-mover" advantage. This race to market isn't just about bragging rights; it's about establishing dominance in a rapidly growing market. From brand recognition and market share to a financial edge, getting to market as early as possible is the key to success.

However, one thing's clear: the race for weight-loss dominance has begun, and the companies that reach the finish line first stand to revolutionize the way we manage obesity.

Getting to Market | The TecEx Solution

The weight-loss drug market is exploding, and the future belongs to those who get there first. This means leveraging off of service providers that can simplify your clinical trials. Aspects of trials such as VAT optimization, global compliance, and Importer of Record solutions are vital to clinical trial rollouts – ensuring smooth and efficient clinical trial distribution.

> With our IOR Project Management Solution TecEx Medical empowers biotech companies to:

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- How will the organization test and validate the effectiveness of the centralized procurement process?
- How will the organization integrate delivery and logistics considerations into the centralized procurement process?
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