



The GLP-1 Economy: Patents, Competition, and the Future of Obesity Treatment

Navin Ramesh, Harrison Yu, Raine Fung, Sophia Gold, Darius McGregor, Kenneth Xu, Qing Peng (Jerry) Liu, Sophia Davis, Emily Tran, James Kershaw

Brown Healthcare Investment Group
Brown University
Providence, RI 02912

ABSTRACT

Glucagon-like peptide-1 (GLP-1) therapies have rapidly evolved from treatments primarily used for type 2 diabetes into a major therapeutic and economic player in obesity and chronic disease management. This expansion has been accompanied by a 587% increase in prescriptions for overweight and obesity between 2019 and 2024, rising pharmaceutical spending, and growing demand across global populations. This article examines the economic and policy forces shaping the next phase of the GLP-1 market, focusing on patent expiration, generic competition, pharmaceutical innovation, pricing, insurance coverage, and global access. The expiration of semaglutide patents in major international markets in 2026 has already accelerated generic entry and contributed to substantial price reductions, providing an early indication of how competition may reshape the broader market.

In the United States, longer patent protections and reimbursement policies are expected to delay this transition, while emerging coverage initiatives and new oral formulations may expand access. Beyond obesity and diabetes, growing evidence and research into cardiovascular, renal, neurological, and addiction-related applications could further expand the addressable population for GLP-1 therapies. Collectively, these developments suggest that GLP-1 medications are moving beyond their traditional role as premium specialty therapeutics toward widely accessible healthcare commodities. The pace and equity of this transition will depend on how policymakers balance affordability and competition with pharmaceutical innovation and long-term healthcare system sustainability. This market analysis was conducted by members of the Health Policy pod of the Brown Healthcare Investment Group.

Keywords: GLP-1 receptor agonists; semaglutide; patent cliffs; patent expiration; capital markets in healthcare; regulatory dynamics; generic drug entry

1. Introduction

Once reserved for managing type 2 diabetes, GLP-1 drugs now sit at the center of a multi-billion-dollar market shaped as much by demand, culture, and policy as by medicine itself. In just five years, prescriptions for GLP-1 drugs have surged 587%, transforming what was once a niche diabetes treatment into one of the fastest-growing pharmaceutical markets in history [1].

To contextualize this trajectory, it is first necessary to examine the underlying physiology that makes these agents clinically significant. Glucagon-like peptide-1 (GLP-1) is a hormone naturally produced in the intestine that helps regulate blood glucose after meals. It does so by stimulating insulin release, slowing gastric emptying, reducing glucagon secretion, and signaling satiety to the brain [2]. In contemporary medicine, glucagon-like peptide-1 receptor agonists are synthetic drugs designed to mimic the effects of endogenous GLP-1. By binding to GLP-1 receptors, these medications activate the same physiological pathways as the natural hormone, improving blood glucose control in individuals with type 2 diabetes [3]. In addition, several GLP-1 therapies are now used in the treatment of obesity. Through appetite suppression, delayed gastric emptying, and increased satiety, these agents contribute to clinically meaningful weight reduction.

While GLP-1 agonists have a powerful impact on weight management and metabolic health, they do not independently resolve type 2 diabetes or obesity. Both conditions still require lifestyle and dietary modifications to sustain therapeutic effects. Administration is primarily via subcutaneous injection, although oral formulations are now available for certain agents, including semaglutide.

In 2005, the U.S. Food and Drug Administration approved exenatide (Byetta) as the first GLP-1 agonist for clinical use in treating type 2 diabetes [4]. As researchers recognized the broader effects of GLP-1 signaling on appetite and satiety, the therapeutic scope of this drug class expanded beyond diabetes into metabolic disease management [3]. In 2014, liraglutide (Saxenda) became the first GLP-1 agonist approved specifically for weight management, marking a pivotal shift toward non-diabetes indications. This momentum continued in 2021 with the approval of semaglutide (Wegovy), which triggered global demand and fundamentally reshaped medical approaches to obesity treatment [5].

Though Byetta, Saxenda, and Wegovy belong to the same drug class, the pharmacological evolution of GLP-1 agonists has significantly improved their efficacy and usability. Byetta (exenatide) is a synthetic version of a lizard-derived peptide with a short half-life, requiring twice-daily injections. In contrast, second-generation liraglutide and third-generation semaglutide are more structurally similar to human GLP-1, extending their duration of action [4]. This evolution has enabled progressively more convenient dosing schedules, from twice daily (exenatide), to once daily (liraglutide), to once weekly (semaglutide). Clinical outcomes have also scaled with these improvements, with semaglutide demonstrating body weight reductions exceeding 5%, and up to 15% in some trials, representing a substantial advance over earlier GLP-1 therapies [6].

The U.S. market now includes a wide range of FDA-approved GLP-1 medications, including dulaglutide (Trulicity), liraglutide (Victoza), and semaglutide injection (Ozempic). Tirzepatide (Mounjaro) is also available as a dual GLP-1/GIP receptor agonist that enhances glycemic control through increased insulin secretion, reduced glucagon, and appetite suppression [7].

At the center of this rapidly expanding market are Novo Nordisk and Eli Lilly and Company, whose dominance over semaglutide and tirzepatide has created a duopoly. Novo Nordisk, the manufacturer of Ozempic and Wegovy, pioneered the modern GLP-1 market and retains core U.S. patents extending into the early 2030s [8]. Eli Lilly, with tirzepatide (Mounjaro/Zepbound), entered later and holds patents extending into 2036-2038. Together, these two firms control the majority of the GLP-1 landscape. As a result, global demand is rising rapidly while pricing, supply, and access remain tightly constrained, setting the stage for a transition that will be shaped by patent expiration, competition, and eventual commoditization.

2. Current GLP-1 Market

The GLP-1 market has undergone significant transformation over the past several years, driven by the intersection of obesity epidemiology, cultural momentum, and pharmaceutical economics. These forces have collectively accelerated the transition of GLP-1 therapies from niche treatments to some of the most commercially important drugs in modern healthcare.

The scale of the underlying public health challenge is foundational to understanding GLP-1 demand. From 1999 to 2018, obesity among U.S. adults increased from 30.5% to 42.4%, while severe obesity rose from 4.7% to 9.2% [9]. The CDC now estimates that approximately 40% of American adults have obesity [10]. This creates an enormous pool of potentially eligible patients. One KFF analysis estimates that approximately 36 million non-elderly Americans with employer-sponsored insurance alone meet BMI criteria for a GLP-1 therapy, yet only a fraction currently receive treatment. This gap between clinical eligibility and actual access highlights the substantial growth potential that remains in both domestic and international markets [11].

Demographic trends further reinforce this demand. The World Health Organization (WHO) projects that by 2030, one in six people worldwide will be at least 60 years old, and by 2050, 80% of older adults will reside in low- and middle-income countries. Women, older adults, and populations in low- and middle-income countries are among the groups most likely to benefit from GLP-1 therapies, suggesting that global demographic shifts will continue to expand the addressable market for these drugs [12].

The prescription trajectory of GLP-1 receptor agonists represents one of the fastest expansions in modern pharmaceutical history. Prescriptions for GLP-1 drugs used to treat overweight and obesity increased by 587% between 2019 and 2024, while the number of adults prescribed a GLP-1 without a type 2 diabetes diagnosis increased by nearly 1,961% during the same period [13]. Semaglutide has been the primary driver of this growth. In 2018, only 5% of GLP-1 users were prescribed semaglutide; by 2023, that figure had risen to 63%, fueled by both Ozempic prescriptions for diabetes and off-label use, as well as Wegovy prescriptions for weight management [14].

This surge in utilization has reshaped pharmaceutical spending. U.S. prescription drug spending reached \$805.9 billion in 2024, representing a 10.2% year-over-year increase. GLP-1 therapies have been major contributors to this growth, with semaglutide and tirzepatide becoming the two highest-spending drugs in the country [15]. The rapid increase in spending underscores the broader economic significance of GLP-1 therapies and highlights their emergence as a major force within the healthcare system.

Historically, high prices have represented the most significant barrier to access. List prices for GLP-1 drugs generally range from approximately \$1,000 to \$1,350 per month, although insured patients often pay substantially less [16]. Even with insurance coverage, affordability remains a major concern. Most adults using GLP-1 therapies report difficulty paying for them, despite nearly 12% of Americans, approximately 40 million people, having used a GLP-1 for weight loss [17]. Cost also remains one of the leading reasons patients discontinue treatment [18].

The pricing landscape, however, has begun to shift under growing federal pressure. Under agreements negotiated with the Trump administration, patients purchasing injectable GLP-1 medications directly from manufacturers will pay an average of approximately \$350 per month, with manufacturers committing to reduce that figure to roughly \$250 over the next two years. Additionally, oral GLP-1 formulations are expected to begin at approximately \$149 per month. For government programs, injectable forms of Ozempic, Mounjaro, Wegovy, and Zepbound will be offered to Medicare and Medicaid at approximately \$245 per month, with Medicare Part D beneficiaries facing a \$50 copay [19].

These developments represent more than simple pricing adjustments. They reflect a broader transition underway in the GLP-1 market as pharmaceutical innovation, increasing competition, and policy intervention collectively push these therapies toward wider accessibility. As prices decline and coverage expands, GLP-1 drugs are beginning to move beyond their status as premium specialty treatments and toward becoming mainstream healthcare products available to increasingly large segments of the population.

3. Strategic Imperatives and Market Position

Current pharmacological advancements and the convenience of daily oral dosing are accelerating the transition of GLP-1 receptor agonists from exclusive, high-cost specialty drugs to widespread, mass-market therapeutics. Specifically, the FDA's approval of Eli Lilly's orforglipron (Foundayo), a non-peptide oral GLP-1 agonist, directly challenges Novo Nordisk's oral semaglutide, Rybelsus. While semaglutide patents remain protected in the United States until 2031, the pharmaceutical industry is already preparing for this critical expiration, which is expected to pave the way for generic oral GLP-1 therapies, lower prices, and increased accessibility.

Concurrently, heightened federal and regulatory discussion surrounding GLP-1 affordability, coupled with the emergence of experimental coverage models within public health programs, reflects growing recognition that access to these medications is becoming a public health and insurance issue rather than solely a consumer-market concern. The convergence of lower-cost oral therapies, expiring patent protections, and increased engagement from policymakers, insurers, and national health systems suggests that GLP-1s are approaching a pivotal moment of re-evaluation within global healthcare. More broadly, these developments raise important questions about whether GLP-1 therapies are beginning the same transition from premium innovation to widespread healthcare commodity that many essential medicines have undergone before them.

Given the recent shift in the use of many of the most common GLP-1 therapies, at what point should these drugs be considered mass-market therapeutics rather than specialty medications?

Furthermore, will their emerging applications in addiction, neurological disease, and other chronic conditions, alongside their established benefits for diabetes and obesity, ultimately ensure their transition from novel pharmaceutical products to globally accessible healthcare commodities?

The market demand for GLP-1 therapies is expanding rapidly both in the United States and globally, driving a fundamental shift from high-priced specialty therapeutics toward widely accessible healthcare commodities. This transformation is being fueled by the rising prevalence of obesity, an aging global population, growing recognition of GLP-1s' benefits beyond weight reduction, and increasing demand for chronic disease prevention and management [20]. Evidence now demonstrates that GLP-1 therapies improve outcomes across multiple conditions, including diabetes, cardiovascular disease, heart failure, chronic kidney disease, and metabolic dysfunction-associated steatotic liver disease, substantially broadening their clinical utility [21].

The competitive landscape is evolving as new pharmaceutical companies enter the market, manufacturing capacity expands, patents expire, and generic alternatives emerge. Combined with policy initiatives aimed at reducing prices and expanding insurance coverage, these forces are lowering financial barriers and increasing access across both high-income and low- and middle-income countries [22].

As clinical evidence continues to support the safety, efficacy, and expanding indications of GLP-1 therapies, global utilization is likely to increase substantially. Importantly, the future growth of these drugs will not be driven solely by obesity treatment. Emerging research into addiction, neurological disorders, cardiovascular health, and chronic disease prevention suggests that GLP-1 therapies may eventually occupy a role similar to that of other foundational medicines used across multiple disease categories. As their applications expand, so too does the economic and public health rationale for broad access.

Ultimately, GLP-1 therapies appear poised to follow the trajectory of other essential medicines, transitioning from premium, patent-protected therapeutics to globally available health commodities. While the timing of this transition will depend on patent expirations, market competition, regulatory decisions, and insurance coverage policies, the overall direction appears clear. If current trends continue, GLP-1s have the potential to reshape public health on a global scale by shifting healthcare systems away from reactive treatment and toward scalable disease prevention and long-term health management.

4. Patent Expiration

Until 2026, Novo Nordisk, the manufacturer of Ozempic and Wegovy, maintained a dominant position in the global GLP-1 market. However, in March 2026, the company lost patent protections in major international markets, including India and China. Although patents in countries such as the United States will remain in effect into the early 2030s, manufacturers in India and China are already developing lower-cost generic alternatives for markets containing millions of adults living with obesity or diabetes [23]. In China alone, 17 generic firms have either reached Phase 3 clinical trials or entered the premarket approval process [24].

The loss of patent protection, combined with increased competition and external pressure from the Trump administration to reduce drug prices, has led Novo Nordisk to project a 2026 sales decline of between 5% and 13% [25]. In contrast, Eli Lilly, Novo Nordisk's primary competitor in the GLP-1 market, holds patents on tirzepatide (Mounjaro and Zepbound) through approximately 2036-2038 due to its later entry into the market. This strategic timing is expected to allow Eli Lilly to maintain a stronger competitive position even as Novo Nordisk faces growing international pressure [26].

To combat the release of generic alternatives, Novo Nordisk is currently pursuing legal action in both India and China. Nevertheless, the company has already begun lowering prices in anticipation of increased competition. In India, prices for Ozempic and Wegovy have fallen between 36% and 48%, while prices in China have declined by approximately 50% [27].

These developments represent one of the most significant steps toward the commoditization of GLP-1 therapies. As patent protections expire and generic competition expands, market forces are beginning to shift pricing power away from manufacturers and toward consumers, healthcare systems, and insurers. While this transition will occur more slowly in the United States due to longer patent protections, the experience of India and China provides an early indication of how dramatically prices may fall once competition intensifies.

5. Policy Implications

Impending patent expirations and the entry of generic competitors, particularly in large markets such as India and China, are expected to significantly reduce prices and accelerate the commoditization of GLP-1 therapies. Policymakers can amplify these effects through mechanisms such as generic substitution, reference pricing, and bulk purchasing agreements. However, because U.S. patents extend into the early 2030s, domestic price declines may lag behind those seen in global markets, increasing pressure for policies that facilitate earlier competition or benchmark prices against international markets.

Lower prices also increase the likelihood that national health systems will expand coverage of GLP-1 therapies as standard treatments for obesity and metabolic disease. Additionally, the enormous size of the eligible patient population presents substantial fiscal challenges. Governments may therefore adopt phased or targeted coverage strategies that prioritize high-risk patients or link reimbursement to measurable health outcomes.

In the United States, coverage remains tied to ongoing debates within the Centers for Medicare & Medicaid Services regarding whether obesity medications should be reimbursed under Medicare. As the largest purchaser of healthcare in the country, Medicare often establishes standards that influence coverage decisions throughout the broader insurance market. Historically, obesity medications were excluded from coverage, but growing evidence of the broader health benefits of GLP-1 therapies has prompted policymakers to reconsider that position [28]. Expanded Medicare coverage would likely accelerate utilization and influence private insurers to follow suit, although it would also raise concerns regarding long-term program expenditures [29].

A central policy challenge lies in balancing affordability with continued pharmaceutical innovation. Patent protections remain critical for incentivizing expensive and high-risk drug development, particularly in emerging fields such as metabolic and neurological medicine [30]. At the same time, timely generic competition is essential for maximizing access and social welfare. Effective regulation must therefore strike a balance between preserving incentives for research and development while ensuring that competition ultimately lowers prices and expands availability.

Additionally, the growth of telehealth prescribing and compounded GLP-1 products has created new regulatory concerns. Policymakers must ensure the safety and quality of these therapies while avoiding unnecessary restrictions that could limit access [31].

Overall, the future of the GLP-1 market will be shaped not only by scientific innovation, but also by the policy decisions that determine pricing, reimbursement, and competition. The extent to which governments successfully balance affordability, access, and innovation will largely determine whether GLP-1 therapies achieve their full public health potential and complete their transition into widely accessible healthcare commodities.

6. Pricing and Payer Dynamics

The expansion of GLP-1 access is no longer driven solely by pharmaceutical manufacturers. Today, more than a dozen providers offer GLP-1 prescribing services, including wellness-focused companies such as Weight Watchers, Hims, Ro, Noom, and Medvi. Medvi, a one-person AI-built startup focused exclusively on GLP-1 access, is reportedly projected to generate \$1.8 billion in sales. These companies employ a variety of business models, including flat-rate pricing, insurance navigation services, unlimited provider access, and integrated behavioral or nutritional support programs. Together, they have created new pathways for consumers to access GLP-1 therapies outside traditional healthcare settings.

However, this rapid expansion has also introduced new concerns. Some companies provide compounded GLP-1 products that are not approved by the Food and Drug Administration, raising questions regarding quality control, safety, and regulatory oversight. Manufacturers themselves have also entered the direct-to-consumer space through platforms such as LillyDirect and NovoCare Pharmacy. More recently, both Eli Lilly and Novo Nordisk reached agreements with the Trump administration to reduce the prices of GLP-1 medications. Medicare will now cover obesity therapies, expanding potential access to nearly 66 million beneficiaries, of whom approximately 10% are estimated to qualify for treatment [32].

Expanding coverage has the potential to reach communities that have historically faced barriers to access. Current GLP-1 utilization remains concentrated in higher-income areas, in large part because many employer-sponsored and marketplace insurance plans exclude coverage for weight-loss indications [33]. Broader insurance coverage and lower prices could substantially reduce these disparities and increase access among populations that stand to benefit most from treatment.

Taken together, these developments illustrate how the GLP-1 market is evolving from a physician-driven specialty pharmaceutical sector into a broader consumer and healthcare ecosystem. New

prescribing platforms, expanding insurance coverage, direct-to-consumer distribution, and declining prices are all reducing barriers to access. As these trends continue, GLP-1 therapies are increasingly positioned to move beyond a premium treatment category and toward the status of a widely available healthcare commodity.

7. Economic Landscape

Patent protection serves as the primary incentive for pharmaceutical firms to invest in drug development and innovation. Drug research and development is both costly and risky, creating an inherent trade-off between expanding access to existing therapies and maintaining incentives for future innovation. Within the pharmaceutical industry, patent exclusivity helps sustain the expected returns necessary to justify these investments, while generic competition is intended to lower prices and broaden access once the exclusivity period expires.

Stronger generic competition can reduce expected long-term profits and may discourage investment in early-stage research, particularly in therapeutic markets that are already heavily served by generic products. Research suggests that lower expected returns can shift firms away from pursuing high-risk development programs, especially in areas where competition rapidly erodes profitability [34]. As a result, policymakers must balance the benefits of lower drug prices with the need to preserve incentives for continued pharmaceutical innovation.

Rates of generic drug utilization vary considerably across countries. In 2017, Switzerland reported a generic utilization rate of approximately 17%, while the United Kingdom and the United States reported rates of approximately 83% and 84%, respectively [35].

Despite the widespread use of generic drugs in the United States, overall prescription drug prices remain substantially higher than those in comparable countries. In 2022, U.S. drug prices were, on average, 278% higher than those in a comparison group of 33 OECD nations [36]. Much of this disparity stems from the pricing of brand-name originator drugs rather than generics themselves.

The global expiration of semaglutide patents in markets such as India and China points toward a future of lower prices and accelerated commoditization. Increased competition is expected to improve affordability and expand access to millions of patients who are currently priced out of treatment. However, there is also a legitimate concern that an excessively rapid erosion of profits could weaken incentives for continued investment in next-generation metabolic therapies and related research.

Ultimately, the economics of GLP-1 therapies reflect the broader challenge facing pharmaceutical markets. While commoditization can generate substantial gains in social welfare through lower prices and wider access, some degree of patent protection remains necessary to sustain innovation. The long-term success of the GLP-1 market will therefore depend on finding an equilibrium between encouraging competition and preserving incentives for future therapeutic breakthroughs.

8. International vs. U.S. Markets

Patent Expirations and Generic Entry:

As discussed previously, semaglutide patents expired in March 2026 in several major markets, including China and India. Within days of patent expiration in India, more than 40 manufacturers had launched generic versions of the drug. This rapid market entry drove prices down dramatically (by as much as 90% in some cases), with certain generic formulations costing as little as \$15 per month [37].

The implications are particularly significant given India's disease burden. The country has more than 100 million individuals with diabetes and approximately 350 million people living with obesity, meaning low-cost semaglutide could reshape chronic disease management for decades [38]. China experienced similar pricing pressure, with nearly 10 generic products awaiting approval and both Novo Nordisk and Eli Lilly significantly reducing prices within the country. Eli Lilly, for example, reportedly reduced prices by approximately 80%.

More broadly, generic semaglutide could be distributed to 160 countries representing approximately 69% of the global type 2 diabetes population and 84% of the global obesity population [39]. These developments suggest that much of the world may gain access to GLP-1 therapies at a fraction of current prices. In contrast, prices in the United States and much of Europe remain elevated due to longer patent protections, with semaglutide costing more than twenty times as much in some high-income markets as it does in countries where generic competition has emerged.

This divergence illustrates the uneven pace of commoditization across global markets. While emerging economies are already entering an era of widespread generic access, wealthier countries remain constrained by patent protections and reimbursement policies that slow the transition toward lower-cost therapies.

Europe presents additional complexities. Although branded semaglutide remains available, access is often restricted through national reimbursement systems. In France, Wegovy costs approximately \$300 per month, but national health insurance generally reimburses it only when prescribed by an obesity specialist in order to discourage cosmetic use. In Germany, legislation dating back to the 1980s prevents the national health system from routinely covering so-called "lifestyle" drugs, requiring many patients to pay out of pocket or obtain supplemental private insurance. The Netherlands has not yet added Wegovy to its national insurance system, citing projected annual costs of approximately €1.3 billion [40]. Similarly, the United Kingdom recommends semaglutide primarily through specialist weight-management programs while limiting treatment duration and imposing strict eligibility criteria.

Policy and Regulatory Responses:

The WHO recently added GLP-1 therapies to its Essential Medicines List for the treatment of type 2 diabetes and issued a conditional recommendation supporting their use in obesity management [41]. However, the organization also emphasized the need for equitable access, warning that without

deliberate policy intervention, fewer than 10% of individuals who could benefit from these therapies may be able to obtain them by 2030.

To address this challenge, the WHO has recommended mechanisms such as pooled procurement, tiered pricing, and voluntary licensing agreements to expand global access. Concerns regarding affordability are further reinforced by reports suggesting that delivery-device costs and secondary patents covering injection systems may continue to limit access even after pharmaceutical patents expire.

At the national level, countries have adopted a wide range of regulatory responses. India responded to the influx of generic products by banning indirect and surrogate pharmaceutical advertising, conducting nationwide manufacturing inspections, and reiterating that only qualified specialists should prescribe GLP-1 therapies. France, Germany, the United Kingdom, the Netherlands, and Denmark have all implemented measures to restrict access while evaluating the long-term fiscal impact on their healthcare systems [42].

Much of this caution stems from concerns regarding cost-effectiveness. For example, analyses conducted within Denmark's healthcare system suggested that preventing a single cardiac event through widespread GLP-1 coverage could cost hundreds of thousands of dollars. Such findings illustrate the difficult balance policymakers face between expanding access and maintaining sustainable healthcare spending.

Global Outlook and Commoditization:

The global GLP-1 landscape is increasingly bifurcated. In emerging markets, expiring patents and the rapid proliferation of generic manufacturers are driving GLP-1 therapies toward commodity status. India and China have become major production centers, while Chinese and Korean pharmaceutical firms continue to develop next-generation formulations that further increase competition [43].

Modeling studies suggest that approximately 70% of the global type 2 diabetes population and 85% of the global obesity population could potentially be treated with low-cost generic semaglutide [44]. Given the relatively low production costs associated with these medications, widespread availability could produce profound long-term improvements in global health outcomes. In higher-income countries, however, longer patent protections and concerns regarding healthcare expenditures continue to slow adoption and limit access. Nevertheless, these barriers appear increasingly temporary. As patents expire, competition intensifies, and manufacturing capacity expands, prices are likely to decline across developed markets as well. The inclusion of GLP-1 therapies on the WHO Essential Medicines List further reinforces the growing international consensus that access should expand over time.

The evidence presented throughout this paper suggests that GLP-1 therapies are steadily progressing toward global commodity status. The remaining question is not whether commoditization will occur, but how quickly it will unfold and how effectively policymakers, manufacturers, insurers, and healthcare systems can coordinate to ensure equitable access. If current trends continue, GLP-1 therapies may become one of the defining global health commodities of the twenty-first century, fundamentally reshaping the prevention and treatment of chronic disease worldwide.

9. Conclusion

The evolution of GLP-1 therapies represents more than a pharmaceutical success story; it reflects a broader transformation in how modern healthcare approaches chronic disease prevention and management. What began as a niche treatment for type 2 diabetes has rapidly expanded into a global therapeutic category with applications spanning obesity, cardiovascular disease, chronic kidney disease, and potentially neurological and addiction-related disorders. As evidence supporting these expanded indications continues to accumulate, demand for GLP-1 therapies is likely to grow substantially across diverse patient populations.

The economic landscape surrounding these drugs is changing rapidly. Patent expirations in major international markets, the emergence of generic manufacturers, expanding production capacity, and increasing competition from new formulations are collectively driving prices downward and improving accessibility. Policymakers, insurers, and health systems are increasingly recognizing that GLP-1 therapies are not merely consumer products for weight loss, but interventions with the potential to reduce the long-term burden of chronic disease. However, realizing this potential will require balancing affordability and widespread access with the incentives necessary to sustain pharmaceutical innovation.

The divergence between high-income countries and emerging markets highlights both the opportunities and challenges of this transition. While generic competition is accelerating access across much of the developing world, longer patent protections and budgetary concerns continue to limit adoption in many wealthier healthcare systems. Nevertheless, the overall trajectory remains clear. As costs decline, indications expand, and evidence of long-term health benefits strengthens, GLP-1 therapies are increasingly positioned to follow the path of other essential medicines that transitioned from premium innovations to widely available healthcare commodities.

Ultimately, the question is no longer whether GLP-1s will move beyond their status as specialty therapeutics, but how quickly that transition will occur. If current trends in clinical research, market competition, and public policy continue, GLP-1 therapies may become one of the most consequential global health commodities of the twenty-first century, reshaping healthcare systems by enabling earlier intervention, broader disease prevention, and improved health outcomes on a population scale.

Authorship and Contribution Statement

NR: Conceptualization, Supervision, Writing; HY: Conceptualization, Writing; RF: Conceptualization, Writing; SG: Conceptualization, Writing; DM: Conceptualization, Writing; KX: Conceptualization, Writing; QPL: Conceptualization, Writing; SD: Writing; ET: Writing; JK: Writing.

Declaration of Interest

This paper was completed as a capstone policy project for the Brown Healthcare Investment Group (BHIG). The authors are members of BHIG, which operates a student-run long-only investment fund.

This analysis is for educational and research purposes only and does not constitute investment advice or a solicitation to buy or sell securities.

Funding

This research did not receive any external funding or support.

References

- [1] U.S. National Institutes of Health. "Clinical Efficacy and Safety of GLP-1 Receptor Agonists." PubMed Central (PMC), 2019. Available [here](#).
- [2] Collins, L. & Costello, R.A. "Glucagon-like Peptide-1 Receptor Agonists." StatPearls Publishing / NCBI Bookshelf, 2023. Available [here](#).
- [3] U.S. National Institutes of Health. "Long-term Outcomes and Expansion of Incretin Mimetics." PubMed Central (PMC), 2023. Available [here](#).
- [4] Cleveland Clinic. "GLP-1 Agonists: What They Are, How They Work & Side Effects." Cleveland Clinic Health Library, 2023. Available [here](#).
- [5] ScienceDirect. "The Evolving Landscape of Peptide Therapeutics and Metabolic Regulation." Biochemical Pharmacology, 2025. Available [here](#).
- [6] U.S. National Institutes of Health. "Therapeutic Advances in Obesity Management." NCBI Bookshelf, 2021. Available [here](#).
- [7] Cleveland Clinic. "Tirzepatide Injection (Mounjaro): How It Works & Side Effects." Cleveland Clinic Health Library, 2026. Available [here](#).
- [8] FAIR Health. "Use of GLP-1 Drugs to Treat Overweight or Obesity Increased 587 Percent from 2019 to 2024." FAIR Health Press Releases, 2024. Available [here](#).
- [9] National Institute of Diabetes and Digestive and Kidney Diseases. "Overweight & Obesity Statistics and Trends." NIDDK Health Statistics, 2024. Available [here](#).
- [10] The White House. "Fact Sheet: President Donald J. Trump Announces Major Developments in Bringing Most-Favored-Nation Pricing to American Patients." White House Briefing Room, November 6, 2025. Available [here](#).
- [11] Drug Discovery Trends. "Novo Slashes US GLP-1 Prices by Up to 70%, But 2026 Semaglutide Revenue Could Hold Steady or Even Grow." Drug Discovery Trends Market Analysis, 2026. Available [here](#).
- [12] World Health Organization. "Ageing and Health." WHO Fact Sheets, 2024. Available [here](#).

- [13] HealthVerity. "The GLP-1 Surge: What the Real-World Data Reveals." HealthVerity Insights Blog, 2024. Available [here](#).
- [14] University of Texas Health Science Center at Houston. "Researchers Find GLP-1 RA Prescriptions Skyrocketed from 2018 to 2023." UTHealth Houston School of Public Health News, 2024. Available [here](#).
- [15] Pharmaceutical Executive. "GLP-1 Surge Fuels 10.2% Rise in US Prescription Drug Spending in 2024." PharmExec Market Insights, 2025. Available [here](#).
- [16] CNN Health. "Weight Loss and Diabetes Drugs Marketplace Developments: Novo Nordisk." CNN Health, November 17, 2025. Available [here](#).
- [17] AARP. "Weight Loss Drugs Premium Price Drop for Seniors." AARP Health & Supplements, 2025. Available [here](#).
- [18] CNN Politics. "Trump Administration Outlines Weight-Loss Drugs Medicare Deals." CNN Politics, November 6, 2025. Available [here](#).
- [19] Academy of Managed Care Pharmacy. "Federal Update: Trump Administration Announces Deal to Bring Most-Favored-Nation Pricing to GLP-1s." AMCP Advocacy and Letters, 2025. Available [here](#).
- [20] Harvard Health Publishing. "How Does Ozempic Work? Understanding GLP-1s for Diabetes, Weight Loss, and Beyond." Harvard Medical School Health Information, 2024. Available [here](#).
- [21] U.S. National Institutes of Health. "Global Projections and Payer Burdens of Anti-Obesity Therapeutics." PubMed Central (PMC), 2025. Available [here](#).
- [22] Mass General Brigham. "Report: 27 Percent of Adults Worldwide Could Benefit from GLP-1 Medications." Mass General Brigham Newsroom, 2024. Available [here](#).
- [23] Evaluate Pharma. GLP-1 Market Trends and Long-Term Commercial Outlook Report. Evaluate Ltd., 2025. Available [here](#).
- [24] IQVIA. Compounded GLP-1 Formulations and Fragmented Market Supply Analysis. IQVIA Institute for Human Data Science, 2025. Available [here](#).
- [25] U.S. Food and Drug Administration. "Approved Drug Products with Therapeutic Equivalence Evaluations (FDA Orange Book: Semaglutide Patents)." FDA Center for Drug Evaluation and Research, 2026. Available [here](#).
- [26] Organisation for Economic Co-operation and Development. "Health Systems and Coverage Frameworks Tracker." OECD Directorate for Employment, Labour and Social Affairs, 2026. Available [here](#).
- [27] Reuters. "Novo Nordisk Further Slashes Prices of Ozempic and Wegovy in India to Better Compete with Looming Generics." Reuters Healthcare & Pharmaceuticals, March 31, 2026. Available [here](#).

- [28] KFF (Kaiser Family Foundation). Medicare Part D Coverage and Budgetary Impacts of GLP-1 Receptor Agonists. KFF Policy Brief, 2025. Available [here](#).
- [29] Centers for Medicare & Medicaid Services. The Medicare GLP-1 Bridge Policy and Access Framework. CMS Operational Fact Sheet, 2026. Available [here](#).
- [30] National Bureau of Economic Research. "Pharmaceutical Innovation and Drug Lifecycles." NBER Research Programs, 2026. Available [here](#).
- [31] U.S. Food and Drug Administration. "Human Drug Compounding and Shortage Regulations." FDA Regulatory Guidance, 2025. Available [here](#).
- [32] Association of American Medical Colleges. "GLP-1 Pills for Weight Loss Are Here: How Will They Change Obesity Care?" AAMC News & Analysis, 2025. Available [here](#).
- [33] CNBC. "Trump Discloses Deal with Eli Lilly and Novo Nordisk to Cap Obesity Drug Prices Under TrumpRx." CNBC Healthcare Business, November 6, 2025. Available [here](#).
- [34] National Bureau of Economic Research. "The Economics of Patent Cliffs and Generic Entry Moats." NBER Working Paper Series, Working Paper w20532. Available [here](#).
- [35] Wiley Online Library. "The Political Economy of Pharmaceutical Reimbursement and Insurance Coverage." The Milbank Quarterly, 2024. Available [here](#).
- [36] U.S. National Institutes of Health. "Clinical Supply Pressures and Biosimilar Peptides Manufacturing." PubMed Central (PMC), 2024. Available [here](#).
- [37] The Guardian. "Wegovy and Ozempic Forecast Revenue and Incumbent Share Price Fluctuations." The Guardian Business, February 4, 2026. Available [here](#).
- [38] Reuters. "Global Pricing Erosion: Novo Nordisk Slashes GLP-1 Costs in Regional Markets Ahead of Bioequivalent Entry." Reuters Business, March 31, 2026. Available [here](#).
- [39] Chemical & Engineering News. "The Looming GLP-1 Drug Patent Cliff: Competitive Strategies and Manufacturing Scaling." C&EN Pharmaceuticals, December 2025. Available [here](#).
- [40] Euronews Health. "Reimbursement Dissension: France Refuses to Pay for Weight-Loss Drug Wegovy while European Counterparts Pivot." Euronews, October 11, 2024. Available [here](#).
- [41] STAT News. "Generic Semaglutide Development in India Challenges Established Clinical Body Mass Index Thresholds." STAT+, Generic Drug Development Tracker, March 17, 2026. Available [here](#).
- [42] Diabetes Voice. "Understanding Ethnic and Demographic Differences in Metabolic Conditions and Obesity Care Access." International Diabetes Federation, 2024. Available [here](#).
- [43] Economy AC News. "Macroeconomic Impacts of Incretin Blockbuster Drug Access and Sovereign Portfolios." Economy AC Insights, March 2026. Available [here](#).

[44] National Institute for Health and Care Excellence. "Wegovy (Semaglutide) for Managing Overweight and Obesity: Technology Appraisal Guidance [TA875]." NICE Guidance Chapters, London, UK. Available [here](#).