

US Biopharmaceuticals

BofA Insights into GLP-1 Market Trends: Week of 3/8

Industry Overview

US GLP-1 scripts up +14% y/y, obesity share now 16%

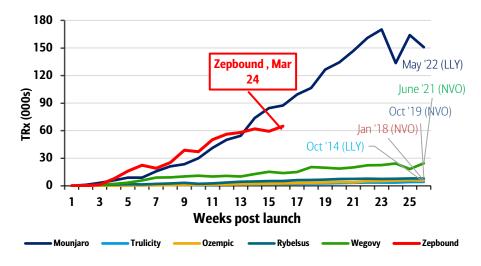
With IQVIA script data including Lilly's (Buy, \$1000 PO) Zepbound now available, we're providing insight into market share and demand trends for GLP-1s and diabetes drugs (DPP4, SGLT2, Insulin). Data from the week of 3/8 shows continued strong growth, as GLP-1 scripts are up 14% y/y and projected to hold 30% share in the diabetes market for 1Q24E, up from +6% in 1Q23. Our data suggests that 16% of GLP-1 TRx are for Obesity, while 84% are for diabetes. We continue to expect above consensus growth in the space, as we are bullish on adoption from payers and broader obesity uptake.

Zepound gives Lilly 37% of obesity market

According to IMS, Lilly's GLP-1 TRX are up +26% y/y for the week of 3/8 following the approval of Zepbound, their obesity focused GLP-1 (see our note on the approval here). Lilly has 46% share of the overall GLP-1 market, behind competitor Novo's (Covered by Graham Parry and Sachin Jane) 54% share. Moving to Obesity, the fasting growing GLP-1 market, Lilly has 44% share while Novo has 56%. We expect Lilly to see share gains in the coming weeks as Zepbound supply constraints ease and DTC campaigns rollout (see our note on the importance of online platforms for anti-obesity medications).

Exhibit 1: GLP-1 Launch Curves

Zepbound remains strong 16 weeks after launch



Source: IQVIA, Bloomberg

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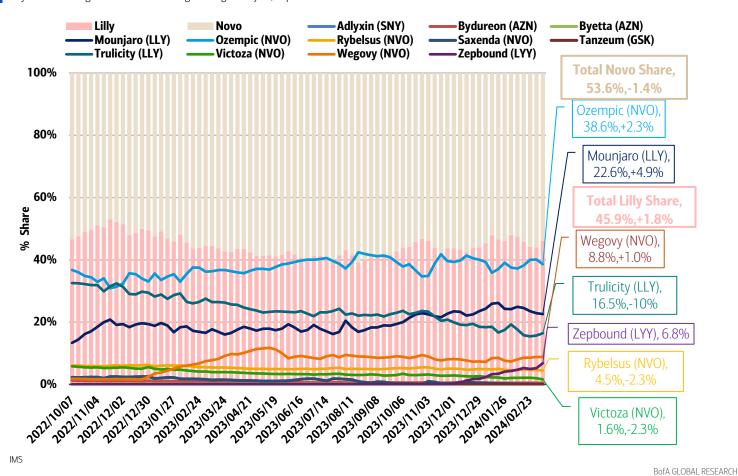
Refer to important disclosures on page 10 to 13. Analyst Certification on page 7. Price Objective Basis/Risk on page 7.

GLP-1 Market share

The GLP-1 market is largely a duoply, with Lilly and Novo representing 99.5% of TRx across all indications. Novo is the largest player by TRx (53.6% share) due to the diversity of its GLP-1 portfolio (Ozempic in Diabetes, Wegovy in Obesity, and their oral GLP-1 Rybelsus) over Lilly, who prior to December's Zepbound launch only offered T2D GLP-1s. However, the company's obesity drug Zepbound has proven to be a tailwind for Lilly as they've gained 2.4% market share (45.9%) since the drug's launch. Indeed, we see Lilly continuing to gain share following upcoming promising readouts for Tirzepatide in HFpEF/OSA (Mid-2024), NASH (June 5-8 at EASL) and oral data for orforglipron in 2025.

Exhibit 2: Lilly continues to make share gains over Novo

Lilly continues to gain GLP-1 share through strong Mounjaro, Zepbound sales



Recent management quotes on market share:

Novo: "Measured on total prescriptions, Novo Nordisk continues to be the market leader with around 54% GLP -1 market share" - Doug Langa (EVP NA operations) on US market share during Novo's FY 23 call

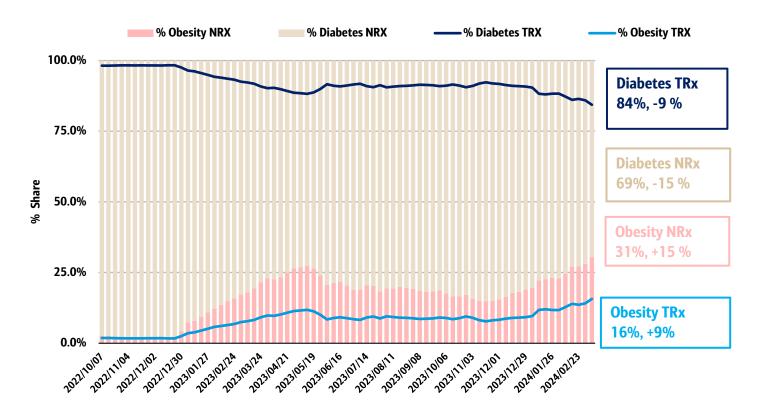
Novo: "Novo Nordisk is the market leader in international operations with a GLP-1 value market share over 70%. Ozempic continues its GLP-1 market leadership with 47.5% market share." – Camila Sylvest (EVP Strategy) on Global market share during Novo's FY 23 call

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Obesity vs Diabetes in GLP-1s

While adoption of GLP-1s in obesity represent a large amount of investors' interest the indication only accounts for 16% of TRx (up 9% y/y). With that said, Obesity has almost double the share in NRx, implying that there's significant room for TRx to grow going forward. We would say that limited access + reimbursement remains by far and away the biggest overhang in the obesity space currently. While the Treat and Reduce Obesity Act (TROA) was reintroduced to Congress to add coverage of anti-obesity medications for Medicare / Medicaid patients, we still don't have a line of sight into timing for an outcome. Regardless, we suspect Medicare/ Medicaid coverage is a "when" not "if", especially as legislative bodies receive increasing public pressure to provide coverage (see our note on reimbursement here). From a commercial perspective, our KOLs expect commercial insurance to follow Medicare/ Medicaid, but in the meantime, according to Novo, ~50M patients already have access to Wegovy, which is likely a good proxy for access to Zepbound.

Exhibit 3: NRx trends imply that Obesity will continue to take GLP-1 share from Diabetes Obesity drugs have almost 2x share in new prescriptions compared to total prescriptions



 $\textbf{Source:} \, \mathsf{IMS}$

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Recent management quotes on obesity reimbursement:

Lilly: "In 2023, we made tremendous strides in expanding access from Mounjaro, and we entered 2024 with 90% of commercial and Part D lives covered. Zepbound coverage is off to a good start since its early December launch, and we expect both tirzepatide to contribute substantially to Lilly's revenue growth in 2024." - Anat Ashkenazi (EVP & CFO) on Lilly's 4Q23 call

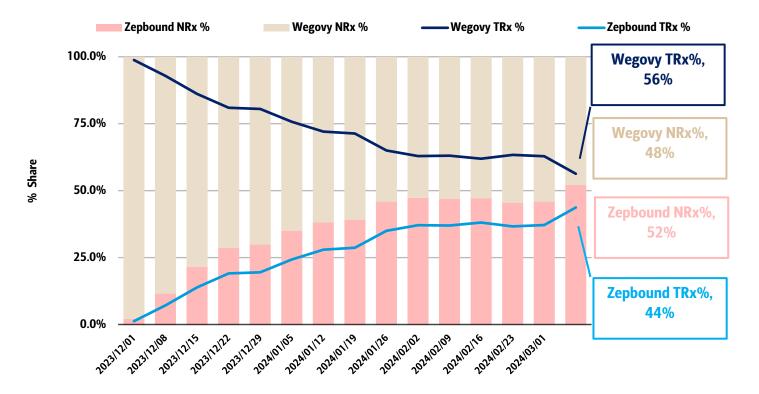


Obesity Market share

Zepbound has made strong early share gains in obesity, taking 44% market share through its first 16 weeks on the market. Additionally, Zepbound now represents the majority (52%) of NRx which implies it has more room to run, especially as Lilly frees capacity constraints with its new factories in Germany, North Carolina, and Indiana. Looking further ahead, there has been a slew of new entrants given investor interest in the space + the unprecedented total addressable market (TAM). That said, there has been a multitude of mixed results those new entrants have had mixed results as Pfizer's two assets and some smaller players (e.g., Structure therapeutics and Altimmune) that underscore the clinical challenges of the space. Regardless, we expect the number of entrants to continue to swell, especially we see progress on access + reimbursement.

Exhibit 4: Zepbound continues to take share from Wegovy

16 weeks in, Zepbound has gained over 1/3 obesity share and NRx trends show there's still room to run



Source: IMS

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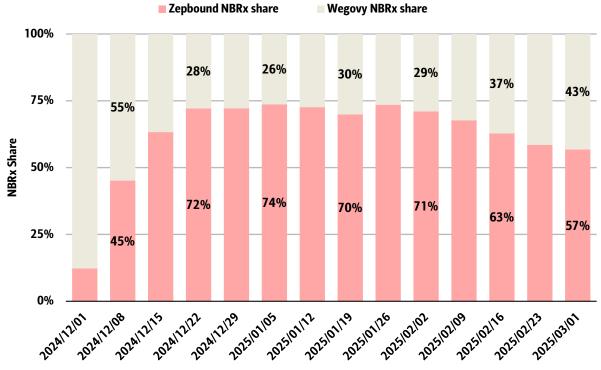


Obesity NBRx market share

Turning to NBRx (reported on a one-week delay), Zepbound has over 57% share in new to brand prescriptions (NBRx) showing strong continued prescriber interest. We view NBRx as a better metric to than NRx to frame new patient starts, as NRx represent first-time prescriptions as well as prescriptions that are written for a product when the number of authorized refill prescriptions have been filled. New to Brand RXs (NBRX), on the other hand, represent only first-time prescriptions, where there is no previous use of the brand within 12 months.

Exhibit 5: Zepbound continues to hold more than 50% NBRx share 16 weeks in

Zepbound's 57% NBRx share shows the drugs strength



Source: IMS

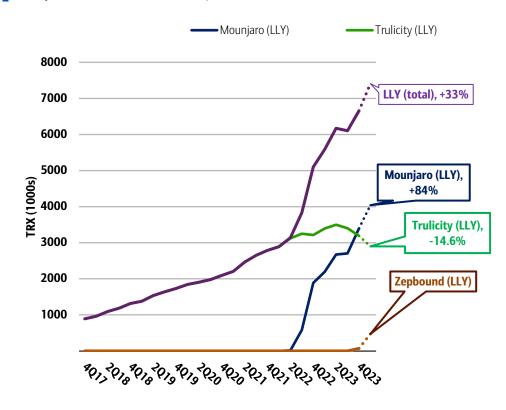
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Lilly GLP-1 TRx

Lilly's GLP-1TRx growth has been driven by Mounjaro (4Q23: +\$435 vs. cons) and Zepbound (4Q23: +\$51M vs. cons) (see our thoughts on 4Q23 earnings), with both showing positive mo/mo TRx growth (+7% and +166% respectively) in January. Indeed, we forecast Mounjaro (+84%) and Zepbound to grow TRx volumes in 1Q24E as well based their growth trends in 2023 y/y, offsetting TRx declines in Trulicity. We forecast Lilly's total 1Q24E TRx growth to be +33% y/y, supporting our view that the GLP-1franchise will continue to experience exponential growth as barriers to access and label expansion to new indications will meaningfully expand TAM.

Exhibit 6: Mounjaro and Zepbound continue to grow while Trulicity falls out of favor Trulicity TRx are down on effectiveness and production issues



Source: IMS

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Recent Lilly management quotes on GLP-1 outlook

"While we expect Mounjaro and Zepbound to be drivers of revenue growth, this will be partially offset by an expected continuation of the softer Trulicity sales trends that we saw in the second half of 2023. Recent revenue declines for Trulicity in the U.S. have been driven by supply tightness. Volume has also been impacted by our actions outside the U.S"

"As for supply outlook for incretin, our manufacturing organization continues to execute well on the most ambitious expansion agenda in our company's long history. Given strong demand and time required to bring capacity fully online, we continue to expect demand to outpace supply in 2024."

"Now, I'll provide a bit more context on the timing and pace of our incretin supply plans in 2024. While we are continuing to expand supply every quarter, we expect the most significant production increases to come in the second half of the year. We expect our production of sellable doses in the second half of 2024 will be at least 1.5x the production in the second half of 2023." - Anat Ashkenazi (EVP & CFO) on Lilly's 4Q23 call

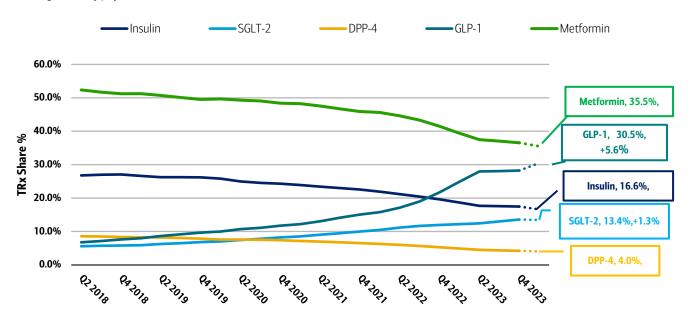


GLP-1 VS other MOAs in Diabetes

GLP-1s have continued to gain share and have established themselves as the second largest therapy in the T2D market, with 35% y/y TRx growth projected in 1Q24E. This makes sense to us as our KOLs have indicated that the use of GLP-1s has been increasing due to reduced supply constraints, and broader health benefits beyond blood glucose. Indeed, we expect GLP-1s to have 35.5% TRx share in 1Q24E, growing 5.6% y/y with share gains coming from reduced metformin (-3.9%), insulin (-2.1%), and DPP-4 (-0.9%) demand.

Exhibit 7: GLP-1s continue to separate from other Diabetes therapies.

GLP-1s have emerged as a key player in the diabetes market



Source: IMS, BofA Global Research

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Price objective basis & risk

Eli Lilly and Company (LLY, B-1-7, \$754.25)

Our \$1000 price objective is based on a probability-adjusted net present value (NPV) analysis of franchise verticals including Endocrinology (\$691/share), Oncology (\$135/share), Cardiovascular (\$4/share), Neuroscience (\$14/share), Immunology (\$46/share), other pharmaceutical products and early pipeline assets (\$128/share), as well as approximately -\$17/share in net cash. We use a WACC ranging from 5% for approved products to 8% for pipeline products, depending on the stage of development. We apply terminal values ranging from -12% (cardiology) to 1% (endocrinology) based on projected sales decline following loss of exclusivity within each business vertical.

Risks to our price objective are 1) better-than-expected launches of competing products, 2) emerging clinical data for pipeline assets that does not confirm prior observations, 3) failure to effectively commercialize approved products, 4) potential drug pricing system restructuring in the US.

Analyst Certification

I, Geoff Meacham, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also



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	Acumen Pharma	ABOS	ABOS US	Geoff Meacham
	Agios Pharmaceuticals	AGIO	AGIO US	Greg Harrison, CFA
	BioMarin	BMRN	BMRN US	Geoff Meacham
	BioXcel Therapeutics	BTAI	BTAIUS	Greg Harrison, CFA
	BridgeBio Pharma	BBIO	BBIO US	Greg Harrison, CFA
	Caribou	CRBU	CRBU US	Geoff Meacham
	CRISPR Therapeutics	CRSP	CRSP US	Geoff Meacham
	Eli Lilly and Company	LLY	LLYUS	Geoff Meacham
	Gilead Sciences Inc.	GILD	GILD US	Geoff Meacham
	HUTCHMED	HCM	HCM US	Alec W. Stranahan
	Immatics	IMTX	IMTX US	Alec W. Stranahan
	Insmed Incorporated	INSM	INSM US	Jason Zemansky
	Intellia Therapeutics	NTLA	NTLA US	Greg Harrison, CFA
	Janux Therapeutics	JANX	JANX US	Alec W. Stranahan
	Keros	KROS	KROS US	Greg Harrison, CFA
	Kiniksa Pharmaceuticals, Ltd.	KNSA	KNSA US	Geoff Meacham
	Krystal Biotech	KRYS	KRYS US	Alec W. Stranahan
	Kura Oncology	KURA	KURA US	
	Liquidia Corporation	LQDA	LODA US	Jason Zemansky Greg Harrison, CFA
	Lyell Immunopharma	LQDA LYEL	LYEL US	Geoff Meacham
	MeiraGTx	MGTX	MGTX US	Alec W. Stranahan
	Merck & Co.	MRK	MRK US	Geoff Meacham
	Mineralys Therapeutics	MLYS	MLYS US	Greg Harrison, CFA
	Neumora Therapeutics	NMRA	NMRA US	Geoff Meacham
	Rani Therapeutics	RANI	RANI US	Geoff Meacham
	Regenxbio, Inc.	RGNX	RGNX US	Alec W. Stranahan
	Revolution Medicines	RVMD	RVMD US	Alec W. Stranahan
	Rocket Pharmaceuticals, Inc.	RCKT	RCKT US	Greg Harrison, CFA
	Royalty Pharma	RPRX	RPRX US	Geoff Meacham
	Sana Biotechnology	SANA	SANA US	Geoff Meacham
	SpringWorks	SWTX	SWTX US	Alec W. Stranahan
	Syndax Pharmaceuticals	SNDX	SNDX US	Jason Zemansky
	Travere Therapeutics Inc	TVTX	TVTX US	Greg Harrison, CFA
	Turnstone Biologics	TSBX	TSBX US	Geoff Meacham
	Vertex Pharmaceuticals Inc.	VRTX	VRTX US	Geoff Meacham
	Werewolf Therapeutics	HOWL	HOWL US	Jason Zemansky
	Xencor	XNCR	XNCR US	Alec W. Stranahan
UTRAL				
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	Amgen Inc.	AMGN	AMGN US	Geoff Meacham
	Amylyx Pharmaceuticals	AMLX	AMLX US	Geoff Meacham
	Arcus Biosciences	RCUS	RCUS US	Jason Zemansky
	Beam Therapeutics	BEAM	BEAM US	Greg Harrison, CFA
	Biogen Inc.	BIIB	BIIB US	Geoff Meacham
	Bristol-Myers Squibb	BMY	BMY US	Geoff Meacham
	Cytokinetics, Incorporated	CYTK	CYTK US	Jason Zemansky
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	Erasca	ERAS	ERAS US	Alec W. Stranahan
	Esperion	ESPR	ESPR US	Jason Zemansky
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	Moderna	MRNA	MRNA US	Geoff Meacham
	Pfizer	PFE	PFE US	Geoff Meacham
	Recursion Pharmaceuticals, Inc.	RXRX	RXRX US	Alec W. Stranahan
	Tyra Biosciences	TYRA	TYRA US	Greg Harrison, CFA
	Vir	VIR	VIR US	Alec W. Stranahan
	Y-mAbs Therapeutics, Inc	YMAB	YMAB US	Alec W. Stranahan
INFRAFESSA:			:::= ==	
NDERPERFORM	AlloVir, Inc.	ALVR		
			ALVR US	Jason Zemansky



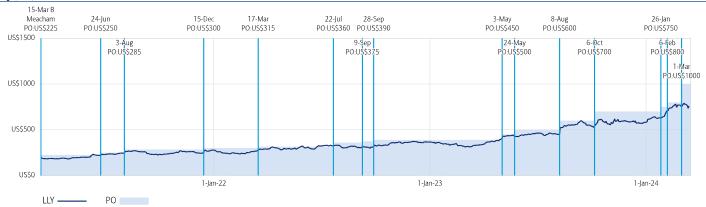
US - Biopharmaceuticals Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	CureVac	CVAC	CVAC US	Geoff Meacham
	Day One Biopharmaceuticals	DAWN	DAWN US	Alec W. Stranahan
	Novavax	NVAX	NVAX US	Alec W. Stranahan
	Regeneron Pharmaceuticals Inc.	REGN	REGN US	Geoff Meacham
	Reneo Pharmaceuticals	RPHM	RPHM US	Jason Zemansky
	TG Therapeutics	TGTX	TGTX US	Alec W. Stranahan
	United Therapeutics Corporation	UTHR	UTHR US	Greg Harrison, CFA

Disclosures

Important Disclosures

Eli Lilly (LLY) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading 'Fundamental Equity Opinion Key'. Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

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Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	234	60.94%	Buy	115	49.15%
Hold	80	20.83%	Hold	36	45.00%
Sell	70	18.23%	Sell	29	41.43%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

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Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R2}

 Buy
 ≥ 10%
 ≤ 70%

 Neutral
 ≥ 0%
 ≤ 30%

 Underperform
 N/A
 ≥ 20%

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