



2023 & 2024 Life Science Market Outlook

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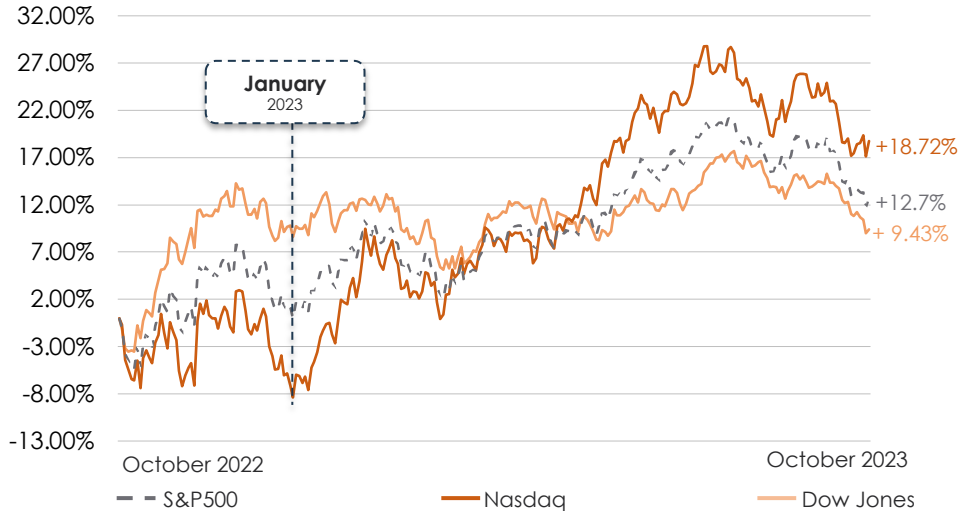


2023 | Year in Review

Economic Conditions Entering 2023

2023 | Year In Review

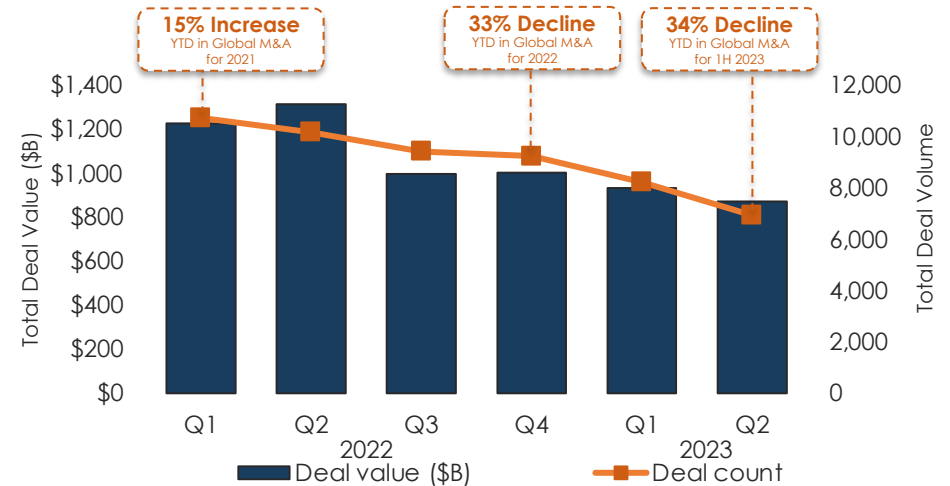
Public Markets Shifting for 2H 2023



Public Market Drivers

- **Stocks in recent decline** (Dow Jones Industrial Average fell 3.4%, the S&P slipped 4.8%, and NASDAQ ended 5.8% lower in September) after a rising stretch for 1H 2023
- Interest rate hikes and introduction of the Inflation Reduction Act to combat inflation **caused major market shift** for 2H 2022 (July 2023)
- Seven tech stocks (including Apple, Nvidia, Amazon, Microsoft, and Tesla) account for **almost 90%** of S&P 500 gains

Global Decline in M&A Activity



2022-2023 Market Insights

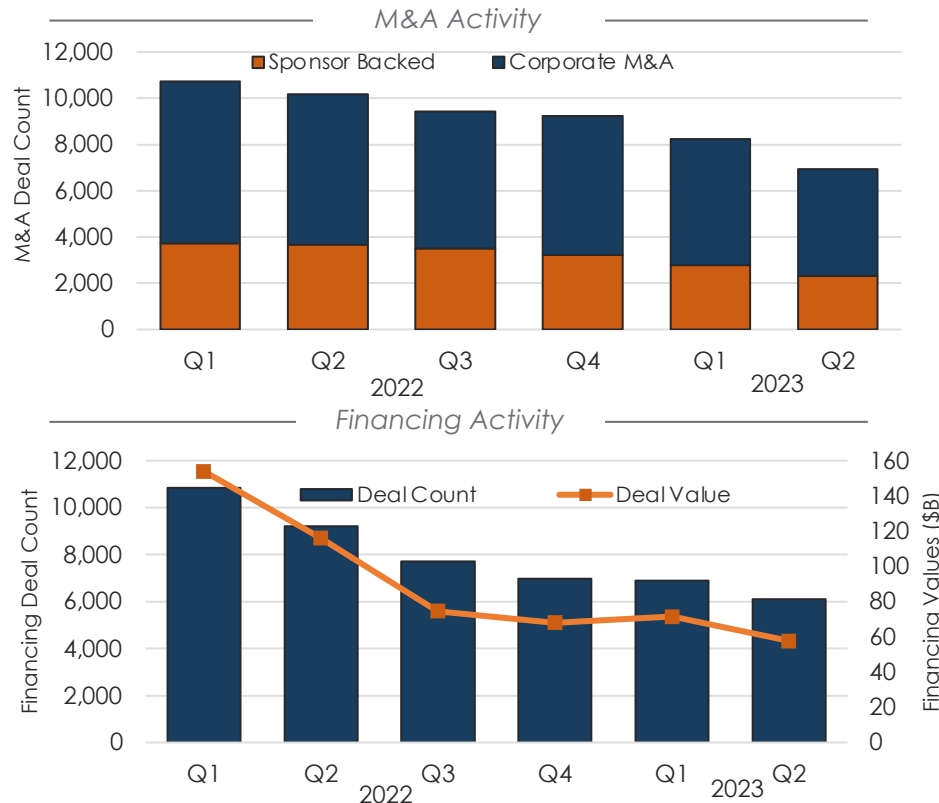
- **High economic uncertainty** driven by rising inflation and a lingering pandemic cooled global M&A activity in 2022 after record-shattering 2021
- 2023 opens with the **implosion of Silicon Valley Bank**, Signature Bank, and First Republic Bank due to misallocation of assets in long-term bonds
- 2023 1H resulted in a **34% decline** in YTD global M&A following a **33% YTD reduction** in global M&A in 2022

2023 Opened with a Lethargic Deal-Making Market and Heightened Economic Uncertainty

Strong Economic Headwinds Slow Global M&A and Financing

2023 | Year In Review

2022-2023 Global M&A and Financing Market



2022-2023 Global Market Dynamics



- Sponsor backed acquisitions fell the most with high cost of leverage limiting access to financing
- Strategics less effected by rising interest rates due to sources of lower-cost capital but still hesitant with current to macroeconomic conditions
- Fourth quarter of consistent financing decline ends with 36% decrease in venture deal volume (June 2022-2023)

Transaction Dynamics

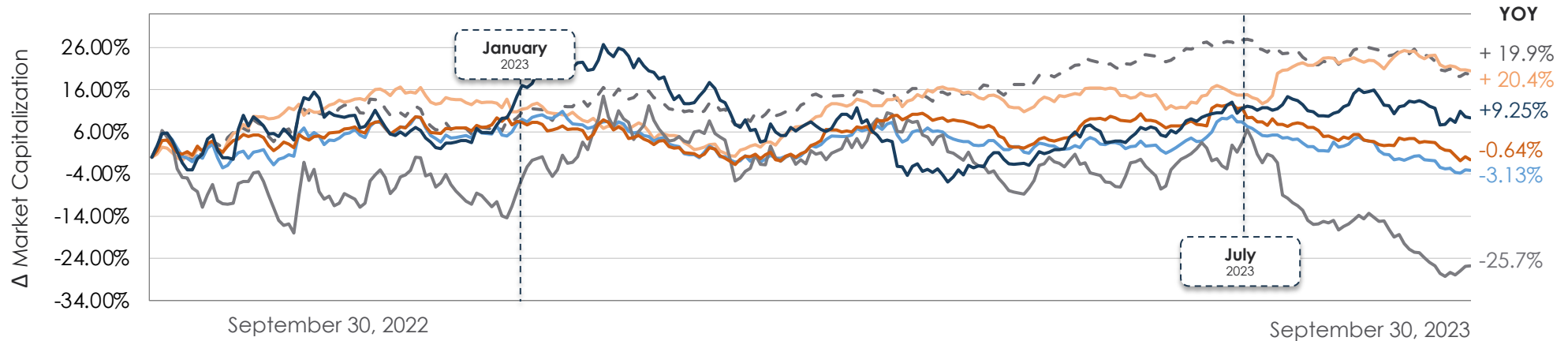
- Public buyers began to express concerns that **valuations were inflated**
- **EBITDA multiples fell** from an average of 15.4x to 12x as acquirers became more valuation-sensitive due to diminished growth outlook
- **Recession fears, rising interest rates, high inflation** extending from 2022 continued to weigh down VC financings
- **Early-stage funding** most impacted during the financing downturn

Declining Global M&A and Financing Market in 2023

Biotech/Pharma Index Maintains Momentum with S&P500

2023 | Year In Review

2022-2023 Life Science Market Overview



Legend	-- S&P500	— Outcome Capital MedTech Index	— Outcome Capital Biotech/Pharma Index	— Outcome Capital HealthTech Index	— Outcome Capital Dx Index	— Outcome Capital Services Index
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Outcome Capital MedTech Index



Outcome Capital Biotech/Pharma Index



Outcome Capital HealthTech Index



Outcome Capital Diagnostics Index



Outcome Capital Services Index

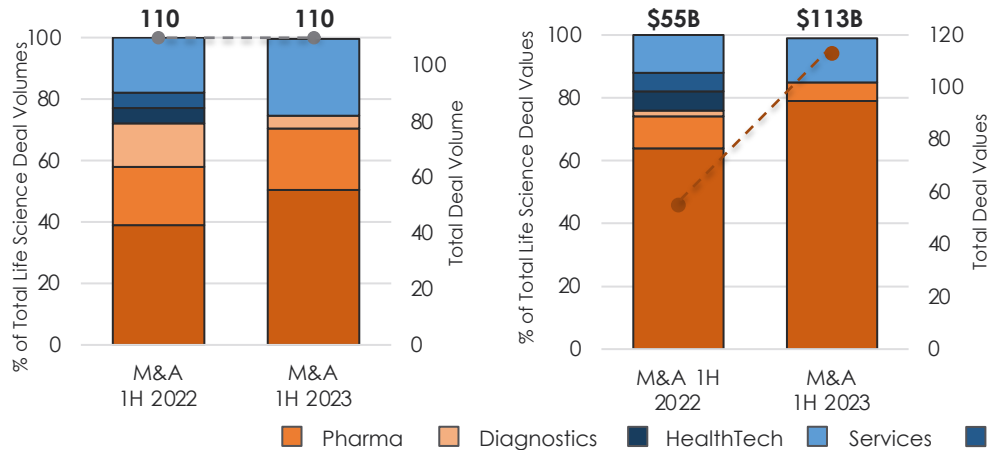


All Life Science Market Sectors Except Biotech/Pharma Began to Decline after Interest Rate Hikes in 1H 2023

2022-2023 Life Science Deal Activity & Valuations by Sector

2023 | Year In Review

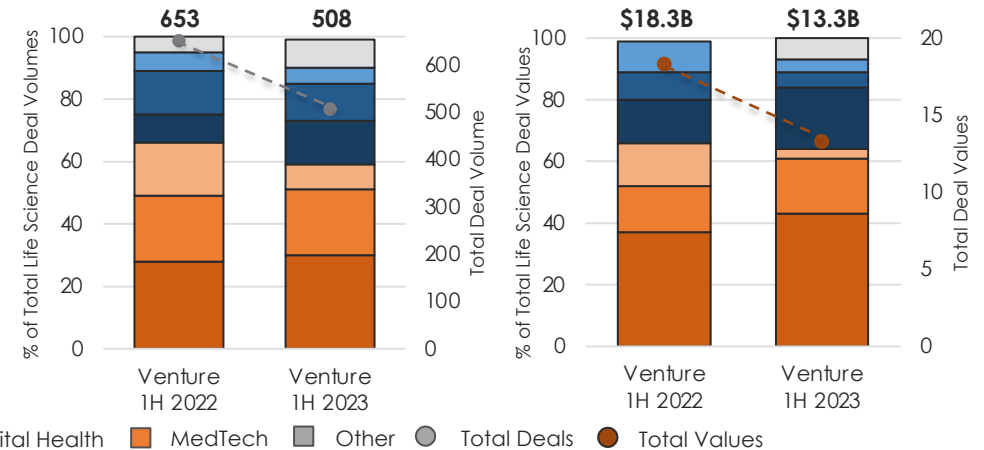
Global Life Science M&A Deal Volumes & Values



Market Insights

- Life sciences M&A volumes **held steady** at 110 total transactions between 2022 and 2023, but total deal value in 2023 (\$113B) **more than doubled** 2022 values (\$55B)
- Pharmaceutical M&A **dominated 49%** of total deal volume and **holds 75%** of total deal value in 2023
- Private equity scooped up CDMO/CRO in 2023 **making up 25%** of all life science deals
- Average Life Science M&A **deal value doubled** from \$500M to \$1030M in 2023

Global Life Science Financing Volumes & Values



Market Insights

- Total life science venture volumes **declined by ~20%** (653 to 508) while total deal values **fell by ~30%** (\$18.3 to 13.3B) between 2022-2023
- Digital health and health tech **remained resilient capturing 25%** of total financing volumes and values in venture market despite severely lacking M&A activity in 2023
- Portion of life science VC funding volumes and values dedicated to diagnostics **declined by ~50% and 80%**, respectively, from 2022-2023

Life Science Maintains Resistance Against Global M&A Decline but Follows in Suit With Failing Funding Markets

2023 Life Science Industry-Defining Divestures




2023 | Year In Review

Target	Divesture	Market Cap	Target Description
		\$305M <small>July 3, 2023</small>	A CRO providing Phase I-IV clinical trial management, patient access and technology solutions to pharma and biotech organizations
		\$4.25B* <small>May 5, 2023</small>	An end-to-end CDMO providing a range of services for clients, from clinical research to commercial deployment *sold to Advent and Warburg Pincus
		\$68B <small>May 5, 2023</small>	J&J's split-off at least 80.1% of the shares of Kenvue Inc (NYSE: KVUE), formerly the company's Consumer Health Business, through an exchange offer
		\$220B <small>October 4, 2023</small>	Novartis divested the Generics and Biosimilars business through a dividend-in-kind distribution
		\$737M <small>June 27, 2023</small>	BD's former Diabetes Care business and now one of the largest pure-play diabetes management companies in the world
		\$36.4B <small>July 18, 2022</small>	GSK PLC completed the spinoff of its consumer-healthcare business to focus on innovative drugs and vaccines that will help accelerate growth
		\$30.75B <small>January 4, 2023</small>	GE finished the separation of its healthcare business by launching GE HealthCare Technologies Inc, a global leader in Precision Care

Industry Divesture Insights

- After taking a severe nosedive in 2022, divestures are bouncing back to near-record highs in 2023
- Economic headwinds and uncertainties are prompting companies to reassess strategic business assets
- Larger market players are undergoing optimization of portfolio by redefining core strategies and placing non-core assets in other hands
- Divesture trend hints at continuing into 2024

Upcoming 2024 Divestures

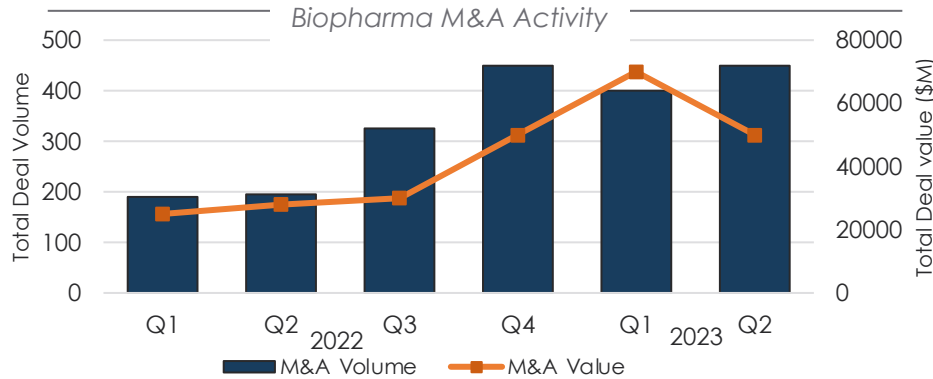
	Spin-out patient monitoring and respiratory interventions divisions in 2024
	Divestiture of the Over-the-Counter and Women's Healthcare business segment in 2024
	Intends to spin-out Health Care business in 2024

Divestures Free up Capital to Drive Inorganic Expansions of Core Pipelines

Uptick in Biopharma M&A As Strategics Pursue Inorganic Growth Strategy

2023 | Year In Review

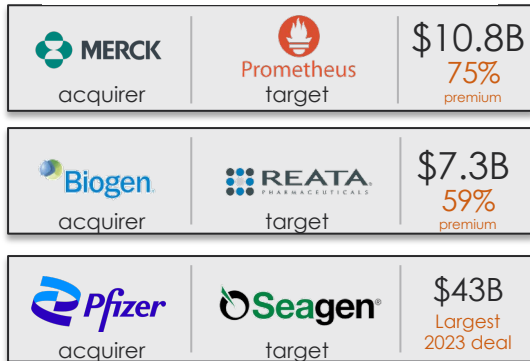
2022-2023 Global Biopharma M&A Market Overview



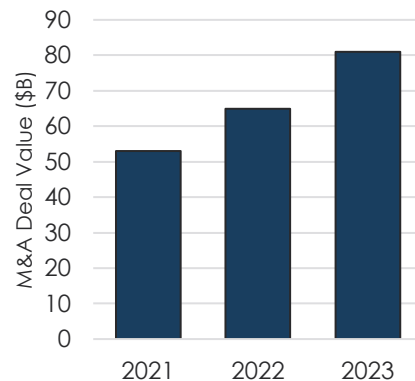
Divestures Drive Acquisitions in 2023



Top 2023 Biopharma Deals & Premiums



Top 10 Biopharma Deal Values



Market Insights

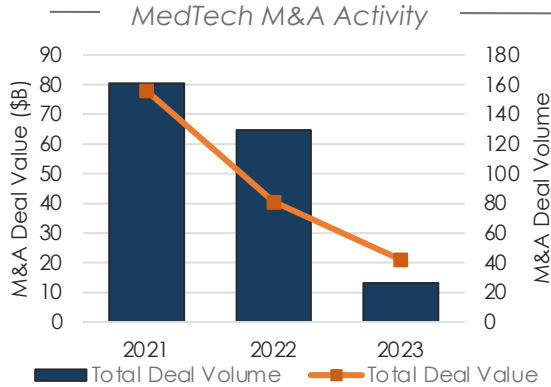
- Biopharma M&A resistance to global M&A decline supported by divestures freeing up cash for strategics to invest in new assets
- Strategics paying healthy premiums to acquire late-stage programs with high commercial potential
- 2023 presented an increase in phase 2 acquisitions likely due to maturation of COVID biotech companies and scarcity of startups after 2020-2021 IPO rush
- Competition heating up between cash rich, large-cap biopharma strategics to acquire innovative, complimentary portfolio assets

Biopharma Strategics Competing to Acquire Late-Stage Assets in Strong M&A Markets

MedTech M&A Slump Intensified in 2023

2023 | Year In Review

2022-2023 Global MedTech Market Overview



Transaction Insights

- 44%** Decrease in M&A June 2022-2023
- 21%** Decline in VC investments
- 4** MedTech IPOs in 2023
- 80%** Transactions involving Implants & Surgical Tools

Covid-19 Revenue Decline Drives Portfolio Reassessment

Strategic	Impact	2023 Acquisition	Strategy
	80% Drop in COVID-19 testing revenues	 ONCOLOGY \$300M	Shifting focus around cancer diagnostics
	85% Drop in COVID-19 testing revenues	 ADVANCING CARE. ENHANCING LIVES. undisclosed	Drive growth through healthcare acquisition
	60% Drop in COVID-19 related revenues	 EDFLOW \$800M	Refocused on core diabetes business

M&A Transaction Highlights

		\$3.1B
		\$917M
		\$1.3B

Select Market Leaders

Market Insights

- MedTech on track for lowest M&A volume in a decade with 44% YOY decline for 1H 2023
- Strategics assessing future of COVID diagnostics and how to maintain cash flows into permanent revenue streams
- Market leaders shifting to higher growth margins and divesting assets with lower multiples to compensate for industry downturn (Medtronic)
- Favoring transaction opportunities involving automation or robotics and solid financial performance

MedTech Companies Struggling Under Tough M&A Market Conditions and Post-Covid Deflation



2024 | Industry Outlook

Strategics & Financial Sponsors Are Primed For M&A Activity

2024 | Industry Outlook

Large Pharma and Financial Sponsors Sitting on Cash

Sources of Cash

Divestures Fund Future M&A

Johnson & Johnson | **Kenvue**

- Armed with \$13.2B in cash for potential M&A
- Expected 12.5% profit growth in YOY 1H 2022 to 2023

Baxter | **BioPharma Solutions**

- Divesture generated \$4.23B in cash
- Potentially spinning off kidney sector to focus on portfolio restructuring

Medtronic

Intent to separate combined Patient Monitoring and Respiratory Interventions businesses



- Medtronic focused on value creation with divestiture of NewCo
- Looking to shift to high growth market therapeutics over

Blockbuster Drugs Price Hike

abbvie | **HUMIRA**
adalimumab

- Current top-selling pharmaceutical drug in the world
- Humira has generated over \$208B globally since 2002, accounting for 36% of Abbvie's revenue
- Abbvie continues to increase prices for Humira adding to gradual rise in revenues for Abbvie

MERCK | **KEYTRUDA**
(pembrolizumab) injection 100mg

- Projected to be world's top selling drug in 2028 reaching \$30B in sales
- Merck's most important asset, accounting for >40% of revenues
- Risk of patent expiration in 2028 driving Merck's M&A activity

Growing Demand for GLP-1 Drugs

novo nordisk | **wegovy**
semaglutide injection 2.4 mg

OZEMPIC
semaglutide injection

- Surge in demand for weight loss drugs skyrocketed Novo Nordisk revenues in 2023
- Ozempic and Wegovy generated a 28% and 34% revenue increase, respectively, for Q2 2023 YOY

Lilly | **mounjaro**
(tirzepatide) injection

- Brought in nearly \$1B in Q2 2023 from US sales; 28% increase in YOY growth
- Lilly looking to take Novo Nordisk market share with Mounjaro's greater weight loss effects

Dry Powder Hits New Records

KKR | **\$41.8B**

Blackstone | **\$40.3B**

THE CARLYLE GROUP | **\$25.6B**

- Declining PE deal activity in 2022 and 2023 resulted in growing cash reserves
- Management teams and financial sponsors are beginning to recognize the new normal for lower valuations
- Prediction of heightened investment activity with \$350B of dry powder ready to be deployed

Rising Interest Rates will Push Strategics and Private Equity Firms to Spend Cash

Severe Patent Cliffs Drive Necessity For Business Reinvention

2024 | Industry Outlook

Upcoming Patent Expiration for Industry's Blockbuster Drugs

 Johnson & Johnson <ul style="list-style-type: none"> Disease: Plaque psoriasis, psoriatic arthritis, Chron's disease, ulcerative colitis 2022 U.S. Sales: \$6.39B Expected biosimilar entry: Second half of 2023 	 AstraZeneca <ul style="list-style-type: none"> Disease: Asthma and chronic obstructive pulmonary disease 2022 U.S. Sales: \$973M Expected biosimilar entry: Second half of 2023 	 Takeda <ul style="list-style-type: none"> Disease: Urinary incontinence and overactive bladder 2022 U.S. Sales: \$2.52B Expected biosimilar entry: May 2024 	 astellas <ul style="list-style-type: none"> Disease: Urinary incontinence and overactive bladder 2022 U.S. Sales: \$1.35B Expected biosimilar entry: May 2024 	 novo nordisk <ul style="list-style-type: none"> Disease: Diabetes (in combination with Saxenda) 2022 U.S. Sales: \$1.8B Expected biosimilar entry: 2024
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Additional Impacted Market Leaders

- ✓ Strategics will need to mitigate patent expiration by "beefing-up" portfolios through M&A
- ✓ De-risking financial impact by launching new products with high demand (ex: GLP-1)
- ✓ Engaging in transformative transactions that completely restructure product line

Potentially \$200B in Revenue Loss as a Result of Patent Expirations Requires Biopharma to Pivot

Outcome Capital Insights & Summary

2024 | Industry Outlook

Market Dynamics

Transaction Environment

Continued Outlook

Rising Interest Rates Push Strategics & Financial Sponsors to Spend Cash

Biotech and MedTech Markets are Ripe for Tuck in Acquisitions with Cash Flows

- Greater number of smaller acquisitions until interest rates stabilize
- Biotech favoring later-stage programs in commercial stage or final clinical stage to de-risk asset purchase
- MedTech companies looking for accretive transactions due to net income level reducing likelihood of early-stage technology acquisitions
- Strategics undergoing portfolio realignment with divestures funding new M&A activities

Private Equity and VC Recognizing New Valuation Normality

Valuations Spread Exacerbated between Buyers and Sellers with Deflation of Covid Bubble

- Market looks for new valuation equilibrium as the covid tailwinds (previously driven by stimulus checks, elevated revenue streams and heightened premiums) diminish
- Increase in VC markets down rounds as Investor expectations are reduced but sellers remain
- Private equity backed by record high dry powder but limited deal making activity
- Strategics will need to refresh portfolio with upcoming patent expirations

Dynamic Macroeconomic Environment in 2024 Election Year

Darwinism Economics Reflected in 2024 Transaction Environment

- Lack of clarity on direction of currently elevated interest rates
- Introduction of IRA may cause deviation from historical acquisitions of small molecules to favoring biologics
- Treat and Reduce Obesity Act of 2021 will provide more treatment options for obesity and heighten GLP-1 demand
- Geopolitical volatility and U.S. Presidential election year may lead to conservatism on new transactions

Opportunity for Strong Life Science M&A and Financing Market in 2024

Outcome Capital

Life Sciences Team Led By Industry Veterans



Oded Ben-Joseph, PhD, MBA



- >20 years experience in life sciences; unique combination of executive, scientific and transactional expertise
- Specializes in aligning companies with sector dynamics and capital markets, capital-efficiency and value creation
- Previously Ester Neuroscience, Excel Medical, Oxford Bioscience Partners, XableCath



Paul Mieyal, PhD, CFA



- >20 years life sciences investment experience across both public & private companies
- Expansive leadership experience in both biotech & medical device companies as well as life sciences investment advisories
- Previously Nephros, Wechsler & Co., Wexford Capital



Nicholas Frame, PhD



- Extensive life sciences strategy & research experience
- Broad exposure/knowledge of novel and cutting-edge life sciences innovations
- Seasoned market expertise traversing financial/scientific dynamics underpinning product/market fit strategies



Boston University School of Medicine



Roisin O'Brien, PhD



- Deep experience in Biochemistry, molecular biology, & structural biology of various disease states
- Leadership experience designing go-to-market strategies for multiple biotech start ups
- Demonstrated expertise communicating complex value proposition messaging & strategic positioning for clients



Seasoned Life Science Executives and Transactional Experts Driving Clients to Successful Outcomes



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