PFIZER, INC. (NYSE: PFE)

Biopharmaceuticals

Aleksi Reczek | Managing Director | aleksi.reczek@mail.utoronto.ca

Initiating Coverage of PFE at Market Perform and $39.85 Target Price

Bottom Line

We are initiating coverage of Pfizer, inc. with a market perform rating and a $39.85 price target. This rating is based on the belief that the company will successfully pivot to a primarily oncology-based portfolio, utilizing both in-house resources as well as growth drivers from the company's 2023 acquisition of Seagen, inc. to deliver strong growth in the future. We do, however, note that there are substantial risks to this shift. Potential generic competition and patent expiries for current revenue drivers Ibrance, Xtandi, and Prevnar limit the company's timeframe to successfully complete the pivot. Despite these risks, we are confident that Pfizer will accomplish their goal, driving share prices higher towards our price target.

Key Points

Specialists in Primary Care – Pfizer's primary care segment is robust, accounting for nearly $31 billion in revenues during 2023. The company demonstrated its ability to research and develop as well as manufacture drugs quickly and effectively during the COVID-19 crisis, which saw Pfizer release the first FDA-approved vaccine, as well as develop the manufacturing infrastructure for over 4 billion doses yearly in under three years. While revenues for this segment have decreased as the world recovers from the pandemic, Pfizer continues to demonstrate the potential for its blossoming primary care department by developing an RSV vaccine, Flu-COVID combined vaccines, and other similar products.

Global Impact and Outreach – Though the company is primarily based in the United States, Pfizer currently has manufacturing sites in over 35 countries worldwide, with their products being available in nearly every country in the world. Additionally, the company has several partnerships with leading pharmaceutical companies such as Takeda Pharmaceuticals in Japan, Novo Nordisk in Denmark, and Glaxo Smith Kline in the United Kingdom. This provides Pfizer with the platform to research and distribute more efficiently with some of the top researchers worldwide. With the company beginning to bring more attention to its budding oncology segment, these partnerships will be invaluable to driving revenue growth for the future.

Established Industry Leader – Pfizer's position as an industry leader sets the company apart from newer competitors such as Moderna, Novartis, and AbbVie. The company's prestige and extensive operations make it an attractive destination for many of the world's top pharmacologists, giving Pfizer a large talent pool. Additionally, the company has been able to leverage its prestige into receiving large government contracts in the past, giving it access to steady and strong streams of revenue. With the company also well known by the FDA and other regulatory bodies, their drugs are more likely to receive expedited approvals in times of need. Finally, the company's size allows for a larger marketing and sales department, giving physicians easy access to Pfizer products.

Strong Vision for the Future – As global populations change, so too do their needs. Pfizer's strategy of looking ahead always ensures that the company is able to adapt to these changes. One such example is the company's new focus on oncology, anticipating the rapidly aging global population's needs years in advance to be able to deliver effective and accessible products when these needs realize. This vision also has been evident in the past through the development of the company's pneumococcal vaccine, Prevnar, or RSV vaccine, Abrysvo.

Market Perform
Target Price $39.85

Suitability	Medium Risk/Income

MARKET DATA

Current Price	$28.45
52-Week Range	$25.20-$31.54
Market Cap	$164.0
Current Net Debt	$62.35
Enterprise Value	$220.1
Dividend Yield	5.91%
EPS	$0.38
Beta	0.62

KEY FINANCIAL METRICS

	2022A	2023A	2024E
Revenue	$100.3	$58.4	$60.6
% Growth	*23.4%*	*(41.7)%*	*3.7%*
Net Income	$31.3	$2.1	$13.5
% Growth	*42.7%*	*-93.3%*	*643%*
FCF	$29.9	$4.8	$11.2
% Growth	*-12.9%*	*-81.6%*	*233%*

KEY MULTIPLES

VALUATION	
P/DCF	10.6x
EV/EBITDA	19.7x
P/BV	1.43x
P/NTM CFPS	13.47x
LIQUIDITY	
Current Ratio	0.5x
Quick Ratio	0.4x
Cash from Ops. / Current Liabilities	0.2x
LEVERAGE	
LT Debt/Equity	88.8%
LT Debt/Capital	42.7%
Net Debt/EBITDA	9.7x
EFFICIENCY	
Return on Assets	0.8%
Return on Equity	0.5%

Source(s): FactSet, CapIQ, PFE Company Filings
All figures in billions of $USD except per share values.
Data as of October 30th, 2024.

Initiating at Market Perform With $39.85 Target Price

We initiate coverage of Pfizer, Inc. (PFE) at Market Perform; $39.85 target price. Our market perform rating is based on the belief that Pfizer's shift into the oncology market will be successful due to the potential of the ADC platform as well as the expertise of the company in marketing and manufacturing these new drugs. Additionally, primary care revenues are proving more resilient than expected, with COVID-19 products alone combining for over $2.8 billion dollars through the first half of 2024. We believe that despite the decrease in demand for these products, Pfizer's initiatives to maintain a market for these products through combining COVID-19 treatment with other antiviral vaccines will slow the revenue decrease more than expected. With Seagen legacy drugs also providing a significant source of income, our belief is that the oncology segment of the company is poised for a far greater increase than the revenue losses from the primary care segment, which has been reflected in both of the first two quarterly filings from the company this year. Ultimately, we believe that the movement of the share price will be determined by the performance of current portfolio drugs, as the company's pipeline will take time to develop the antibody drug conjugate technology acquired from Seagen. Catalysts to our rating include Adcetris and Padcev reaching $1.5 billion in revenues each by 2026, successful defenses of Ibrance and Xtandi from generic competition, and multiple ADC-based oncology drugs entering the company's pipeline by 2028.

RISK 1: GENERIC INTEREST IN KEY REVENUE DRIVERS

Generic competition for Pfizer's current blockbuster oncology drugs has largely been blocked so far. However, there have been instances of generics being approved, both in the European Union and the United States, which the company has been unable to fully litigate against. Currently, the generic version of Inlyta being sold in the European Union is not approved for use in the United States and has reached an agreement with the manufacturers of generic Ibrance to block their successfully filed generic until the drug's patent expiry in 2027. Nonetheless, the existence of these generics is concerning, as other companies may be able to circumvent the company's legal blocks and bring a competitor to market. This would understandably significantly dampen revenue outlooks for the affected drugs, bringing overall share price down.

RISK 2: HIGH LEVERAGE PREVENTS NEW ACQUISITIONS

Due to the Seagen acquisition, Pfizer's current capital structure is very heavily skewed towards debt. This presents headwinds towards future growth as the United States economy begins to bring down interest rates and create a more favorable acquisitions environment. In this new environment, Pfizer is at a disadvantage to their competitors, many of which have a far healthier capital structure and can complete acquisitions at a much cheaper price, potentially giving them access to new technologies, drugs, and synergies. At such a critical time, Pfizer needs to be ahead of its competitors in bringing new drugs to market, but the company's interest payments and efforts to de-leverage may divert crucial resources away from research, development, and capital necessary to achieve their goals. As such, any significant acquisitions made by competitors pose a significant risk to the company's share price and ability to capture their target markets.

RISK 3: PRIMARY CARE SEGMENT FACES DECREASED DEMAND AND INCREASED COMPETITION

While Pfizer has multiple strong primary care drugs, both their COVID-19 and Pneumococcal vaccines face stiff competition and are at risk of being phased out of the market entirely. The company's pneumococcal vaccine, Prevnar, has shown similar phase 3 results to Merck's new product Capvaxive. However, Merck's emphasis on the importance of the serotypes covered by their vaccine has concerned us about the longevity of Prevnar's market share upon Capvaxive's full release into markets. Prevnar still holds a key advantage in its approval for pediatric use, but the size of this market is unclear and will continue to shrink as the birth rate in the United States continues to fall. While Pfizer's COVID-19 products continue to generate solid revenues for the company, less resilient demand than expected would be potentially devastating to the primary care segment. In the first half of 2024, these products alone composed nearly 25% of segment revenues. A sudden loss of the revenue from these products would undoubtedly be disastrous, especially considering the company's current financial position. As such, monitoring these products is a top priority, with special interest being paid to the potential COVID and Flu combination vaccine mentioned previously.

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Analyst Summary: Pfizer

Pfizer is an American pharmaceutical corporation founded in 1849, headquartered in New York City. The company's business is structured into three major segments: Primary Care, Specialty Care, and Oncology. The Primary Care segment is responsible for the company's vaccine portfolio and other viral or bacterial disease immunization. The Specialty Care segment specializes in producing drugs to combat rare diseases and conditions. The Oncology segment researches and develops drugs to combat a variety of different cancers, and has seen significant growth over the past decade. Pfizer has long been a major player in the biopharmaceutical space, with significant advantages in both oncology and primary care markets over other major competitors, The company's $43 billion dollar acquisition of Seagen, inc. affords Pfizer multiple new growth pipelines in the oncology space through future utilization of Seagen's modular antibody drug conjugate (ADC) technology as well as the increased manufacturing and research capacity that the acquisition provides. Additionally, we predict that with Pfizer's marketing expertise, legacy drugs Padcev and Adcetris will continue strong growth trajectories set during the first half of 2024. Pfizer's current oncology portfolio is also poised to remain strong, with several best-in-class drugs such as Ibrance and Xtandi set to record strong revenues for the foreseeable future. Finally, despite a notable revenue decrease from the company's primary care segment, we believe that demand for the COVID-19 suite of products will remain strong. Potential challengers to the company's pneumococcal vaccine Prevnar-20 are still undergoing trials, giving the company time before any potential revenue decreases.

KEY POINTS - ONCOLOGY

We believe that Pfizer's current oncology profile is poised to continue strong revenues despite key patent expiries later in the decade. Both Ibrance and Xtandi are considered best-in-class medications for their respective cancers, and hold significant portions of market share, making them difficult for competitors to displace. Additionally, despite interest in generic forms of these drugs, Pfizer has shown both the willingness and the ability to block these compounds from entering the United States market. Inlyta, Pfizer's third largest in-house oncology revenue driver, is also set to continue growth due to the drug's close ties with two of the most influential oncology drugs of the decade, Merck's Keytruda and Bristol Myers Squibb's Opdivo. As Pfizer continues its shift towards the oncology market, we expect these three drugs to lead the way for the company and provide stability during the move.

KEY POINTS – SEAGEN ACQUISITION

Pfizer's $43 billion acquisition of Seagen gave the company access to the exciting antibody drug conjugate platform, an extremely modular drug that allows the company to take advantage of both existing legacy drugs, as well as build on that platform in the future. Both Padcev and Adcetris are projected to make well over $1 billion in 2024, with Pfizer's marketing and manufacturing capabilities being the main growth driver. However, with the significant amount of debt Pfizer had to take on to complete the acquisition, we predict that the company will be unable to take advantage of the more lucrative acquisitions environment resulting from the Federal Reserve's predicted policy easing through the end of 2024 and beginning of 2025. Additionally, with Pfizer's revenues beginning to decline following the COVID-19 pandemic, this debt represents a much larger portion of the company's earnings, providing a potential headwind to further growth. Ultimately, however, we believe that Pfizer's overall market position will benefit from this move, especially given the pivot toward a more oncology-focused drug portfolio.

KEY POINTS – PRIMARY CARE

Pfizer's primary care segment faces significant headwinds in the near future. Along with the company's move towards oncology, their COVID-19 suite of products has seen significant revenue decreases since the peak of the pandemic, and the company's attempts to bundle the vaccine with a seasonal flu shot have yet to hit the market. Additionally, the company's main revenue driver outside of the COVID-19 products, Prevnar-20, will likely be replaced by Merck's Capvaxive, although the pediatric market for the vaccine is still intact. Despite the current resiliency of COVID-19 products, we believe that the company's primary care segment will inevitably begin to falter towards the end of the decade. The potential of a COVID-Flu combination vaccine could offset this somewhat, but our opinion is that any expenditure on this segment is currently misplaced given the company's desired trajectory, and we believe that Pfizer realizes this as well.

ISSUE 1: Pfizer's Oncology Portfolio Will Remain Strong

IBRANCE MAINTAINS MARKET SHARE DESPITE STRONG COMPETITION

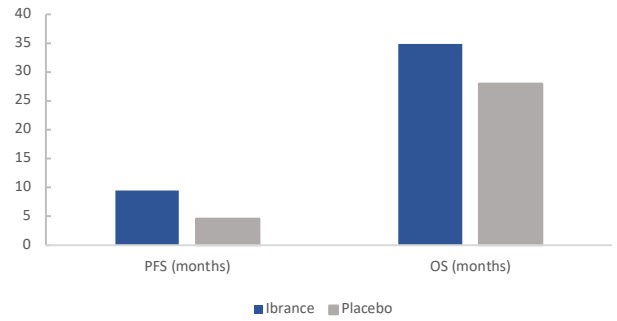
Pfizer's oncology portfolio is headlined by their metastatic breast cancer drug Ibrance, which has dominated the market since 2015. This dominance is evident in its outsized revenues, outperforming competitors Verzenio and Kisqali by 88% and 123% respectively. The drug has grown in popularity due to its first-to-market status, as well as its similar rates of progression-free survival to its competitors. In 2023, Ibrance generated over $4.7 billion in revenue, capturing 45% of its market. This makes Ibrance the seventh most successful oncology drug by revenue currently on the market, demonstrating Pfizer's ability to both create and market a successful blockbuster. The drug is a kinase inhibitor that blocks cyclin-dependent kinases (CDKs) 4 and 6 from stimulating growth in cancer cells. The result of blocking these kinases is slowed or stopped development of cancerous growths. The drug is often used in combination with some hormonal therapies such as letrozole to delay the progression of metastatic breast cancers. In the first six months of 2024, Ibrance generated $2.2 billion, which marked a $200 million decrease YoY. This has been due in part to the Inflation Reduction Act of 2022, which heavily regulated the price of drugs covered under Medicare. Additionally, some physicians have begun prescribing Verzenio due to the drug's wider efficacy profile. We believe that the revenues from Ibrance will slowly decline until patent expiry because of the increasing prominence of Verzenio, as well as the reduced pricing power resulting from the Inflation Reduction Act. Additionally, Ibrance's patent expires in 2027, with multiple companies already having filed applications for their generics.

In 2023, Pfizer engaged in several suits against generic Ibrance (palbociclib). The company was able to defend its patent rights against many of the companies aiming to create these generics. However, Pfizer was unable to block Synthon Pharmaceuticals' generic from being filed, and instead reached a settlement with Synthon. The ANDA application was approved on June 2, 2024, and while Synthon currently has not stated when their drugs will enter the market, we estimate that the generic will be readily available upon Ibrance's patent expiry, should Pfizer not appeal the verdict.

We do not expect any further generic competition to be filed prior to patent expiry in 2027, successful applications would present a significant change to future revenues

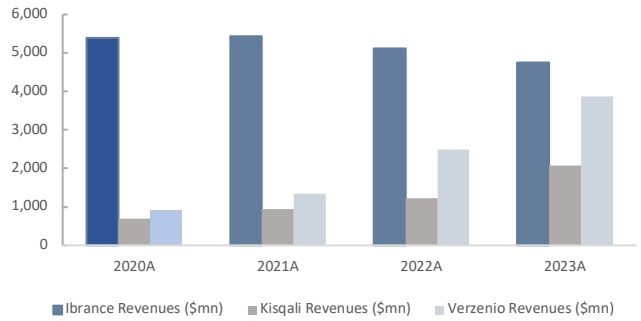
Ibrance's efficacy has been well-proven in clinical settings. The drug has been shown to have a significant impact on progression-free survival (PFS) compared to placebo when combined with other hormonal treatment. In the phase 3 trial PALOMA-3, Ibrance combined with the estrogen receptor antagonist fulvestrant was shown to increase PFS by 4.9 months. This represented a 200% increase in PFS time, highlighting the drug's effectiveness. Ibrance also produced a hazard ratio (HR) in this trial between 0.36-0.59 with 95% confidence level, meaning that Ibrance reduced the incidence of cancer progression by 41% to 64%. This study was then followed up by the PALOMA-4 trial, in which Ibrance combined with another hormonal treatment, letrozole, was proven to increase PFS by 10 months compared to letrozole combined with placebo, and had a hazard ratio between 0.39-0.61, to a 95% confidence level. Both trials demonstrated the efficacy of Ibrance in a clinical setting, however PALOMA-3 did not show a statistically significant overall survival (OS) benefit, potentially due to cross-over effects or issues with the availability of subsequent therapies. This, though, is thought to be minor, as the goal of CDK4/6 inhibitors is to inhibit the growth of the cancer, making PFS a much more effective metric.

Exhibit 1: Ibrance Dominates over Placebo…



Source(s): Pfizer, inc.

Exhibit 2: …Leading to Dominant Market Share



Source(s): Pfizer, inc., Johnson & Johnson, Novartis AG

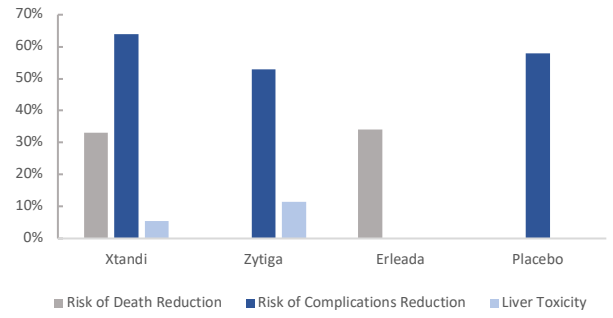
Currently, Ibrance's main non-generic competitors are Novartis's Kisqali (ribociclib) and Lilly's Verzenio (abemaciclib). Despite Ibrance's outsized market share, the drug has a lower OS benefit than both Kisqali and Verzenio, while displaying similar PFS benefits. However, when comparing the PALOMA trials to Kisqali's MONALEESA trials and Verzenio's MONARCH trials, patients had received significantly more prior metastatic therapies, potentially obscuring the true efficacy of the drug. Despite the somewhat poor comparisons to its competitors, Ibrance continues to outsell the competition, primarily due to its first-to-market status. The drug was released two years before both Kisqali and Verzenio, giving physicians significantly more time to gain experience with Ibrance and feel more comfortable recommending it to patients. Additionally, Ibrance's side effect profile is thought to be more manageable for certain patients than either of its competitors, giving the drug a strong hold in the market. As such, we do not predict a significant decline in Ibrance's market share until its patent expiry in 2027.

XTANDI CONTINUES MARKET-LEADER STATUS IN PROSTATE CANCER

Pfizer's second largest oncology drug by revenue is Xtandi. The drug has been on the market since 2012 and has taken 41% of the prostate cancer market during its lifespan. Xtandi's popularity has led to it outperforming its closest competitors Erleada and Zytiga by 130% and 500% respectively. The drug is a nonsteroidal antiandrogen used in the treatment of prostate cancer, which works by blocking androgen binding to androgen receptors and preventing these receptors from entering the nucleus or interacting with DNA. Xtandi's popularity comes from its superior performance in reducing complications, as well as its broader spectrum of use. The drug is administered orally once daily and can be taken with or without food, and is produced jointly with Astellas Pharma, who receives some revenues from US sales but is mainly responsible for sales abroad. Pfizer takes royalties from international sales, as well as most of the revenue from the US market. Xtandi made Pfizer $1.2 billion in 2023 and has already made nearly $1 billion for the company in the first six months of 2024 alone, marking a $150 million increase YoY. This increase is mainly due to the expansion of the oncology market over this period, which is projected to continue growing steadily into the future. Worldwide, the drug made over $5.3 billion for Pfizer and Astellas. Notably, in 2023, the United States government rejected applications to allow generic versions of Xtandi. This suggests that even with the drug's patent expiring in 2027, revenues may continue to be strong well after expiry, since generics will need time to establish their market share.

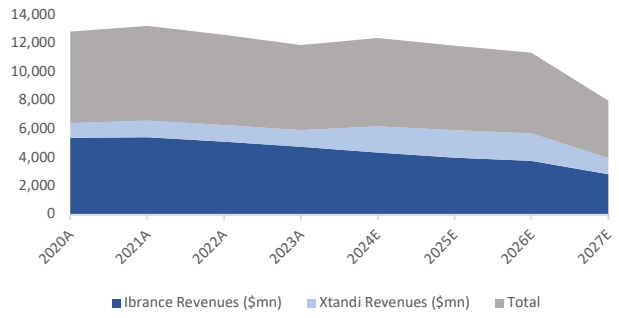
Phase 3 results from Xtandi's EMBARK and ARCHES trials support the drug's strong market position. In the EMBARK trial, Xtandi used in combination with the synthetic hormone leuprolide reduced risk of metastasis or death by 58% compared with a placebo in combination with leuprolide. These results were measured using metastasis-free survival (MFS) in men with prostate cancer. Additionally, the trial found that Xtandi taken alone reduced the risk of metastasis or death by 37%, and that the risk of prostate-specific antigen (PSA) progression was reduced by 93% when used with leuprolide and by 67% when used alone. The ARCHES trial showed that over a four-year period, Xtandi used in combination with an androgen deprivation therapy (ADT) reduced risk of death by 34% compared to ADT alone. Both trials clearly display Xtandi's outstanding efficacy in reducing the risk of death and complication. This efficacy in combination with the drug's manageable side effect profile and long time in the market show a clear reason for Xtandi's blockbuster status.

Exhibit 3: Xtandi's Efficacy Across All Fronts



Source(s): Pfizer, inc., Johnson & Johnson, Novartis AG, VIG Research

Exhibit 4: Xtandi and Ibrance Provide Pfizer a Revenue Backbone



Source(s): Pfizer, inc., Factset, VIG Research

Xtandi faces competition from Johnson & Johnson's Erleada (apalutamide) and Zytiga (abiraterone). Comparing trial results reveals that Xtandi's overall efficacy is significantly higher than either competitor. Erleada's TITAN trials showed that the drug, when used in combination with ADT, reduced risk of death by 33%, compared to Xtandi's 34% as found in the ARCHES trial. However, Xtandi can treat three types of prostate cancer and is currently being approved to treat another high-risk form, while Erleada is only able to treat two. Some real-world studies have concluded that Erleada may be more effective at reducing PSA in some forms of cancer, but despite this, Erleada's market share is significantly less than Xtandi's, only generating $2.4 billion. Zytiga has shown in their LATITUDE trials that the drug can reduce risk of progression or death by 53% when compared to placebo combined with ADT. In similar trials, Xtandi has been shown to reduce the risk of complications by 58-71%, depending on the study. Xtandi is also thought to be more versatile than Zytiga, with superior efficacy against one of the common prostate cancers and no significant difference in the others. Additionally, Xtandi patients have been recorded to have significantly less liver toxicity when compared to Zytiga patients (5.4% vs 11.5%). Comparing the studies, Xtandi is shown to be more effective across more situations with less harmful side effects, demonstrating a clear reason for its market-leader status. With the United States government repeatedly refusing generic applications and a significant advantage over the competition, we predict Xtandi will continue its strong trajectory until patent expiry in 2027, at which point generics will enter the market due to the strong demand for lower prices.

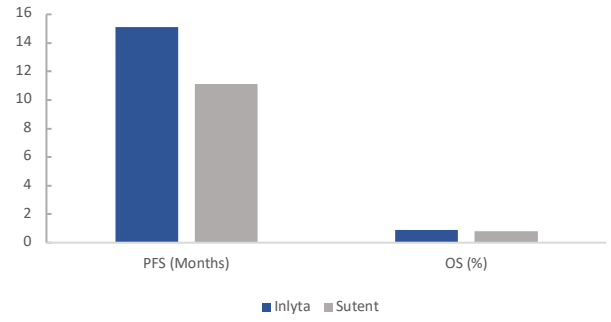
INLYTA DERIVES STRONG GROWTH FROM TIES TO OTHER BLOCKBUSTERS

Pfizer's strong oncology portfolio is further bolstered by Inlyta, which was approved by the FDA in 2012. The drug generated $1 billion in 2023 despite competing with other oncology blockbusters such as Merck's Keytruda and Bristol-Myers Squibb's Opdivo, which generated $25 billion and $9 billion respectively. This is largely due to Inlyta's effectiveness in combination with these drugs, which allows Inlyta to maintain market share regardless of the growth of these competitors. Inlyta is a tyrosine kinase inhibitor (TKI) that inhibits tyrosine kinases from acting on cells to stimulate cancer growth. This mechanism of action is complimentary to Keytruda and Opdivo, which function as immune checkpoint inhibitors that block PD-1. By blocking PD-1, cancer cells are less able to evade the immune system. Inlyta first helps to normalize the tumor's abnormal blood vessels, which allows immune cells into the tumor more effectively. This makes the tumor more vulnerable to the immune response activated by Keytruda or Opdivo, increasing their efficacy. In 2023, Inlyta's sales increased by 5%, compared to a 20% sales increase from Keytruda and a 10% sales increase from Opdivo. As Keytruda and Opdivo sales continue to increase, we expect increasing sales at a constant rate from Inlyta until patent expiry at the end of 2030.

Keytruda and Opdivo are much more general oncology drugs, explaining their higher growth rates

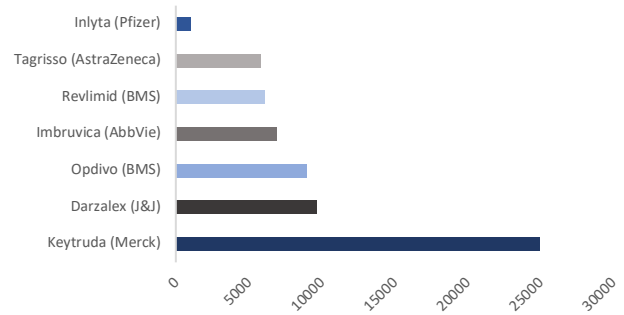
Pfizer has successfully blocked multiple generics from coming to market in the United States, most notably Glenmark Pharmaceuticals' generic in mid-2019. However, in the EU, a generic called Axitinib Accord has been authorized for use since 2012. This drug has yet to come to US markets, indicating that Inlyta is likely safe from that specific generic until patent expiry. With no filings currently pending for generic Inlyta in the US, we are comfortable predicting that Inlyta will have no generic competition for at least the next two years.

Exhibit 5: Inlyta Demonstrates Superior Efficacy to Competitors



Source(s): Pfizer, inc., VIG Research

Exhibit 6: Inlyta Revenues (in millions) Buoyed by Keytruda/Opdivo



Source(s): Pfizer, inc., Merck and Co., AstraZeneca, Inc., AbbVie, Johnson & Johnson, Bristol Myers Squibb, VIG Research

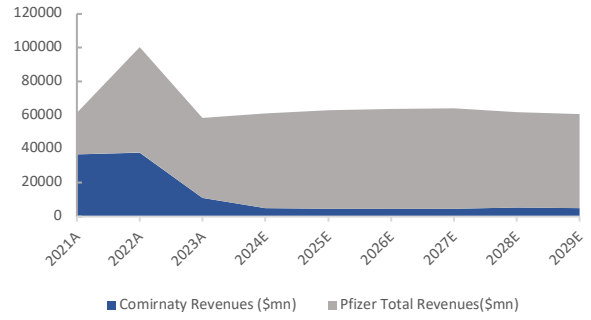
Inlyta's efficacy has been demonstrated by several clinical trial results. In the drug's phase 3 trials, known as AXIS, Inlyta showed a median PFS of 6.7 months compared with 4.7 months for Bayer Pharmaceuticals' Nexavar. This represents a 42% increase in PFS; however, OS was not shown to be significantly different between the two treatments. In the JAVELIN trials, Inlyta continued to demonstrate superior efficacy against Pfizer's Sutent, another renal cancer drug. Inlyta taken in combination with avelumab, a PD-L1 inhibitor like Keytruda and Opdivo was found to increase PFS by 64%, from 8.4 months to 13.8 months. This superior efficacy clearly justifies its space among top renal cancer drugs, and the potent combination with a PD-L1 inhibitor led to trials combining Keytruda and Inlyta, known as KEYNOTE-426. In this trial, researchers found that OS increased from 78% with Sutent to 90% when using Keytruda and Inlyta. PFS also increased from 11.1 months to 15.1 months. Both results further establish Inlyta's position as a top combination-therapy drug for renal cancer. Additionally, Inlyta's less serious side effect profile and short half life of only 6.1 hours gives it a distinct advantage over many other TKIs which take much longer to clear the body. These factors all ensure that Inlyta will continue to maintain its market share over the coming years, especially considering the growth of Keytruda and Opdivo as first-line oncology treatments.

ISSUE 2: Can Pfizer's Immunology Department Navigate Decreased Demand and Increased Competition?

COMIRNATY REMAINS STRONG DUE TO COVID SPIKES

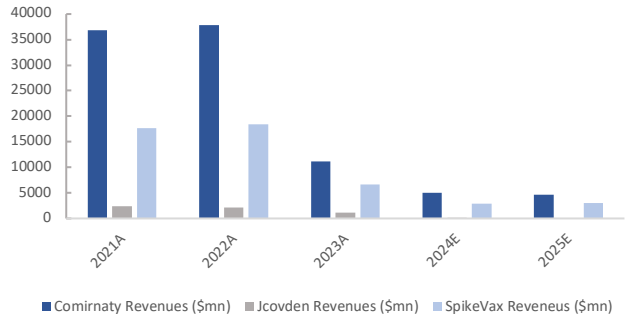
Comirnaty is Pfizer's COVID-19 vaccine which was approved by the FDA for emergency use in December 2020. In the time since the vaccine's release, Comirnaty has generated over $85 billion and captured over 60% of the market annually. This strong revenue generation is in part due to the vaccine being the first mRNA vaccine approved for widespread use. Comirnaty functions by introducing a lipid nanoparticle containing mRNA encoding for the spike protein found in COVID-19 into cells in the body. Cells then begin to produce this viral protein, causing the immune system to activate and fight both the new viral proteins as well as any COVID-19 viruses present in the body. The mRNA format has many advantages over traditional vaccines, namely much faster efficacy and greater potential for adaptation. Additionally, during trials for Pfizer and Moderna's mRNA vaccines, no serious side effects were described, although the FDA has now begun to list myocarditis and pericarditis as rare side effects of these vaccines. However, the main disadvantage of these mRNA vaccines is that they must be stored between -60 and -90 degrees Celsius, which presents issues during shipping and long-term storage. Comirnaty's primary competitors are Moderna's SpikeVax, which made $42 billion over its lifespan, and Johnson & Johnson's Jcovden vaccine, which made $5.7 billion in total. In 2023, a significant decline in the revenues of all three vaccines was observed, primarily due to the waning of the COVID-19 pandemic. Comirnaty made $11 billion, which marked a 71% revenue decrease YoY, while Jcovden and SpikeVax saw decreases of 49% and 64% respectively. However, with the spike in COVID-19 cases at the beginning of Q3 2024, we believe revenues will remain more resilient than previously thought. Throughout the first half of 2024, Comirnaty has made $548 million, and while this number represents a significant decline year over year, the projected $1 billion dollars in yearly revenue is still a large portion of the company's income.

Exhibit 7: Vaccine Sales Remain Decent Despite Decreases…



Source(s): Factset, Pfizer, inc., VIG Research

Exhibit 8: …And Continue to Dominate the Market



Source(s): Factset, Pfizer, inc., Johnson & Johnson, Moderna, inc., VIG Research

In 2020, Comirnaty was the first COVID-19 vaccine approved for emergency use by the FDA following solid trial results earlier that year. The trials, called the C4591001 Study, demonstrated that Comirnaty had a 95% efficacy rate at preventing symptomatic COVID-19. For comparison, the WHO sets its efficacy guidelines at 50% for approval, meaning that Comirnaty's effectiveness is far above industry standards. Additionally, the vaccine was shown to be highly effective in the prevention of severe COVID-19 cases. In the placebo group, 9 patients developed severe cases, however, among those vaccinated with Comirnaty, only 1 member developed a severe case. Finally, in a follow-up study six months later, efficacy levels were sustained at 91%, demonstrating the long-term potential of the vaccine. These trial results along with the first-to-market status of the vaccine instantly made Comirnaty the industry leader as politicians and physicians had time to familiarize themselves with the vaccine prior to the release of competition.

Pfizer's only true competitor in terms of both efficacy and revenue is Moderna's SpikeVax. Compared to Comirnaty, SpikeVax has been found to have an initial efficacy of 94%. However, due to the higher doses of mRNA in SpikeVax, which uses 100 micrograms of mRNA as opposed to Comirnaty's 30, the vaccine has a slightly higher long-term efficacy. Another advantage of SpikeVax is that it can be stored in much higher temperatures, only requiring -20 degrees Celsius. Despite the advantages, SpikeVax was unable to dominate the market due to Pfizer's first-to-market status as well as the company's higher manufacturing capacity. In 2021, Pfizer produced 3 billion doses compared to Moderna's 807 million. In 2022, the disparity worsened, with Pfizer increasing production to 4 billion doses while Moderna decreased their production to 600 million. Looking forward, we believe that COVID-19 will exhibit resilience for some time. The CDC's statistics department estimates that there is currently a 92% probability that the pandemic is currently growing, and with cases spiking seemingly randomly at the end of August, public health officials have expressed concern for the fall and winter seasons. During the beginning of August, the number of new cases reported was at its highest point since January 2022, prompting the FDA to approve Pfizer and Moderna's updated COVID vaccines. This surge and subsequent response illustrates this resilience in demand. Pfizer's mRNA platform ensures that they will be able to quickly adapt to new variants and meet demand for vaccines into the future and allows them to keep their market leader status into the future.

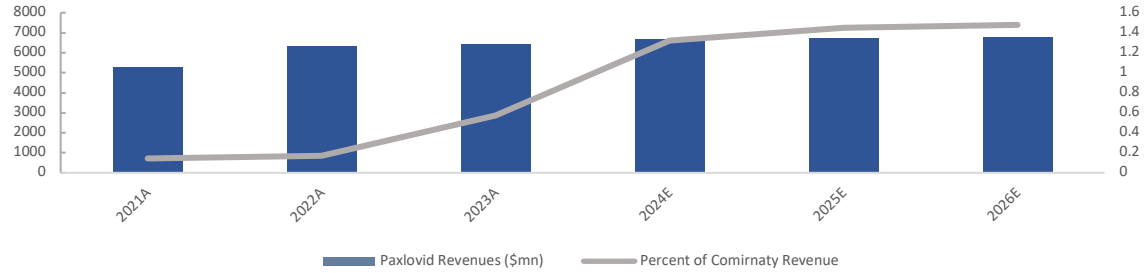
Pfizer is currently developing a Cominraty-based combined COVID-Flu vaccine, which we believe will further bolster demand for Comirnaty

PAXLOVID'S NOMINAL NUMBERS OBSCURE TRUE STRONG PERFORMANCE

Pfizer's other COVID-19 related product in their immunology category is Paxlovid, an oral drug aimed at easing or preventing the symptoms of COVID-19 which has been the leading drug in this market since its release in December 2021. The drug's market-leading status is evident in its outsized market share of nearly 60% in both 2022 and 2023, after accounting for a revenue reversal in 2023 associated with 2022 sales. The drug operates as a 3CL protease inhibitor, which prevents cells from producing viruses by stopping the breakdown of polyproteins into their functional parts. The drug's oral form gives it an advantage over many competitors, which often must be introduced intravenously to function properly. The largest competitor in this category is Gilead's Veklury, which made $3.9 billion in 2022 and $2.2 billion in 2023. Paxlovid's other main competitor is Merck's oral antiviral drug Lagevrio. The drug generated Merck nearly $6 billion in 2022 and $1.5 billion in 2023. In comparison, Paxlovid made nearly $19 billion in 2022, and $1.2 billion in 2023 after a revenue reversal primarily associated with 2022 sales. We estimate the true sales numbers when accounting for this reversal to be $16 billion and $4.2 billion in 2022 and 2023 respectively.

Paxlovid's trial results demonstrate clear efficacy in high-risk COVID-19 patients. In the EPIC-HR trial, the drug was found to reduce risk of hospitalization or death in high-risk patients by 88% when administered within five days of initial symptom onset. By day 28, only 0.8% of the high-risk patients participating in the trials that were given Paxlovid were hospitalized, compared to the 6.3% of patients hospitalized that were administered placebo. Additionally, there were zero deaths in the treatment group, whereas there were nine deaths in the placebo group. When administered to standard-risk patients in the EPIC-SR trial, the drug reduced risk of hospitalizations by 70% compared to placebo. However, the drug did not meet the primary endpoint of sustained symptom alleviation, leading to the drug's designation for primarily high-risk patients. Currently, trials for pediatric application of the drug are underway, potentially giving Paxlovid access to the 22% of Americans that are currently under the age of 18. The strength of the drug as well as its unique mechanism of action allowed Pfizer to overtake Lagevrio, which had released only weeks prior to Paxlovid, in revenues and market share.

Exhibit 9: Paxlovid's Projected Revenues Reveal Strong Growth Potential



Source(s): Pfizer Inc., Factset, VIG Research

Paxlovid has several advantages over its competitors, stemming both from its delivery as well as the drug's mechanism of action. Merck's Lagevrio differs from Paxlovid as it aims to create an "error catastrophe" by introducing a compound into COVID-19's viral RNA that causes the RNA-dependent RNA polymerase (RdRp) enzyme to make mistakes during replication. These mutations become so widespread in the viral RNA that the genome becomes no longer functional, making the virus unable to reproduce and limiting the progression of the disease. In trials, Lagevrio showed a risk reduction for hospitalization or death by 30% in high-risk COVID-19 patients. Because of this lower efficacy, Lagevrio has been relegated to a second-line antiviral, used primarily when Paxlovid is unavailable or contraindicated. Gilead's intravenous antiviral, Veklury, was first to market for COVID-specific antivirals, approved two months before either Lagevrio or Paxlovid. Veklury also acts on RdRp, but instead of causing mutations in the viral RNA, the drug stops RNA synthesis prematurely, effectively inhibiting viral replication. While trials for the drug were targeted at different endpoints than the trials for Paxlovid, a 14-day mortality rate found in the ACTT-1 trials suggests that Veklury only reduces mortality risk by 40%, nearly half of Paxlovid's risk of hospitalization or mortality. Paxlovid's trials are also more informative, as they more straightforwardly quantify the risk reduction for serious outcomes. We believe that Paxlovid's revenues will continue to follow overall COVID-19 trends, and that it will remain consistent with Comirnaty's changes in annual revenues. Through the first two quarters of 2024, the drug has generated $2.3 billion dollars in revenues, and with children returning to school in the fall following the large spike in COVID-contaminated waste water in the United States, we believe that there will be a substantial increase in COVID cases, increasing demand for Paxlovid.

PREVNAR TO BE PHASED OUT IN FAVOR OF MERCK'S CAPVAXIVE

Aside from the company's COVID-19 suite of products, Prevnar-20 headlines Pfizer's immunology department. The vaccine, which was approved as Prevnar-13 in 2010 and as Prevnar-20 in 2023, generated Pfizer $6.4 billion in 2023 and captured over 95% of the pneumococcal vaccine market by the end of 2023. The vaccine was the company's third largest revenue driver in 2023 and is set to continue this momentum in 2024, matching 2023 sales through the first two quarters. The drug is a conjugate vaccine that provides immunity by inducing IgG antibodies and OPA against the twenty serotypes targeted. While Prevnar is generally viewed by physicians as more effective than the current competition, namely Merck's Vaxneuvance and Pneumovax-23, one of the most important advantages that the vaccine has is the strong pediatric segment that it is able to reach. While specific revenue breakdowns by age group are not typically provided, we estimate that at least $400 million of Prevnar's revenue comes from people under the age of 18. However, Prevnar faces strong competition ahead from Merck's Capvaxive, a pneumococcal vaccine recently approved by the FDA after being granted priority review in late 2023. We believe that this competition will kill much of Prevnar's market share as it is able to protect effectively against more problematic serotypes than Prevnar.

Prevnar's dominance is owed largely due to the breadth of its coverage as well as the efficacy against the serotypes covered. Such efficacy was first demonstrated in the PNEU-ALL trials, where Prevnar-13 was found to reduce the incidence of invasive pneumococcal disease (IPD) by approximately 75% across various age groups. The pediatric trials were particularly successful, inducing an antibody response in 95% of children, translating to an estimated efficacy of over 85%. The pediatric application of the vaccine was further reinforced in the PNEU-PED trials, where Prevnar-20 demonstrated approximately 97% efficacy in reducing the incidence of IPD for serotypes present in Prevnar-13. In the additional seven serotypes, the vaccine continued to

where Prevnar-20 demonstrated approximately 97% efficacy in reducing the incidence of IPD for serotypes present in Prevnar-13. In the additional seven serotypes, the vaccine continued to perform well, demonstrating an 85% decrease in the risk of IPD. Prevnar-20 was also approved for those 60 and older following the PNEU-AGE trial, where the vaccine showed about 90% efficacy against IPD. These trials demonstrate the wide range of populations that Prevnar has been shown to safely treat, which has been one of the driving factors to its success.

Current competition for Prevnar is minimal, evident in the vaccine's 95% market share. Pneumovax-23 is Merck's polysaccharide vaccine, which works by exposing the immune system to a sugar from the coat of pathogenic bacteria, which aids the body in creating an immune response against the bacteria. Polysaccharide vaccines do not work in children under two years old, limiting potential pediatric market penetration for Pneumovax in the future. This method of action is also less effective at reducing the risk of IPD when compared to Prevnar-20. In the CAPITA study as well as CDC analysis, Pneumovax demonstrated a 50-60% decrease in the risk of IPD in the broader population, compared to Prevnar's 75%. Additionally, polysaccharide vaccines do not induce strong immune memory like conjugate vaccines, which requires patients to get booster vaccines to maintain protection. The most notable advantage of Pneumovax is the vaccine's broader immunity, covering 23 strains of invasive pneumococcal disease, however the lower efficacy and short immunity period hinders the market position of the vaccine. Vaxneuvance is Merck's other Prevnar alternative, which covers fifteen serotypes to Prevnar's twenty. In all trials, Vaxneuvance demonstrated non-inferiority to Prevnar, however due to the deficit in strains covered the vaccine is seen largely as a second line alternative to Prevnar. This led to Vaxneuvance only generating $665 billion in 2023 despite releasing alongside Prevnar-20.

Exhibit 10: Prevnar Against Capvaxive and Pneumovax-23

Drug	Serotypes	Immunity Period
Prevnar-20	**1, 3, 4, 5, 6A, 6B, 7F, 8, 9V, 10A, 11A, 12F, 14, 15B, 18C. 19A, 19F, 22F, 23F, 33F (20 Serotypes Total)**	**Lifetime**
Capvaxive	**3, 6A, 7F, 8, 9N, 10A, 11A, 12F, 15A, 15C, 16F, 17F, 19A, 20A, 22F, 23A, 23B, 23F, 24F, 31, 33F, 35B (21 Serotypes Total)**	**Unknown**
Pneumovax-23	**1, 2, 3, 4, 5, 6B, 7F, 8, 9N, 10A, 11A, 12F, 14, 15B, 17F, 18C, 19F, 19A, 20, 22F, 23F, 33F (23 Serotypes Total)**	**5-10 Years**

Source(s): Pfizer Inc., Merck and Co., VIG Research

Prevnar also faces significant competition in the future. Merck's pneumococcal vaccine Capvaxive has shown promise in some phase 3 studies to boost immunity against twenty-one strains of pneumococcal bacteria and elicited noninferior immune responses to serotypes present in both Prevnar-20 and itself. This was illustrated in testing where, for the 10 common serotypes, V116 was 75% or more as effective as Prevnar-20. The new vaccine was given priority review by the FDA in late December 2023. Results released in April 2024 were very positive, indicating a similar safety profile to Prevnar with superior immune response to the serotypes unique to it. Analysts believe that the eight unique serotypes in V116 represent a higher burden than those serotypes unique to Prevnar-20, with some estimating potential lifetime cost savings of more than $10 billion due to fewer healthcare costs for those vaccinated. These strong efficacy figures led to the FDA's approval of Capvaxive in June 2024. We believe that this will cause a significant decline in Prevnar's revenues throughout the second half of 2024 and beyond. While Prevnar is still dominant in the pediatric market, the broader coverage of important serotypes will inevitably lead to Prevnar's non-pediatric market being eroded and eventually taken nearly entirely, unless the CDC recommends using the vaccines together.

Upon Prevnar-20's release, Pneumovax revenues declined 50% in the first year of competition. We think that Capvaxive could do the same.

OUTLOOK

We feel as if the primary care segment of the company will falter heavily in the coming years. As the COVID-19 pandemic continues to wane, the segment will be more dependent on Prevnar revenues, which we feel are under heavy threat from Capvaxive. Ultimately, though, we feel that

the company's shift towards oncology will cover the losses of revenue associated with Prevnar and Comirnaty, especially as costs begin to fall as a result of major cost-cutting initiatives being undertaken by the company.

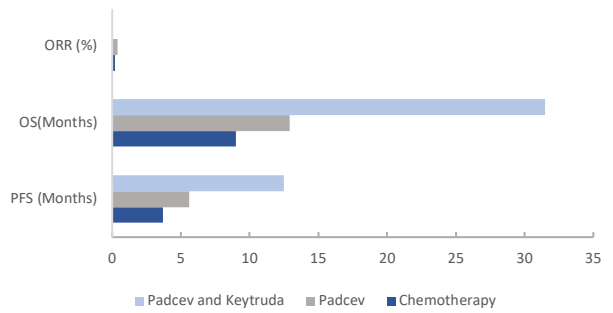
ISSUE 3: The Addition of Seagen's Oncology Portfolio Provides Strong Base for Pfizer's Pivot

PADCEV'S REVOLUTIONARY MECHANISM OF ACTION LEADS TO STRONG MARKET SHARE

In December 2023, Pfizer completed their acquisition of Seagen, Inc. for $43 billion dollars. Along with the expertise in oncology research and development, Pfizer also inherited the company's legacy drugs. The most successful drug among these legacy drugs is Padcev, a metastatic urothelial cancer drug which has generated $735 million for Pfizer in 2024. Padcev is an antibody-drug conjugate (ADC) that works by binding to Nectin-4 proteins on bladder cancer cells, which then releases a disrupting agent called MMAE that kills the cell. This is different from traditional cancer medications as the ADC can more precisely deliver MMAE to cancer cells. Additionally, the drugs are modular in nature and can be easily updated to improve their efficacy and toxicity profiles. Because of the benefits of ADCs, analysts predict that the market for these drugs will reach $16.4 billion by 2026, with Padcev predicted to have the second highest sales of $3.5 billion by this time. Currently, Padcev's key competitors include Merck's Keytruda and Johnson & Johnson's Balversa. So far in 2024, Keytruda has generated $14 billion dollars and continues to lead oncology in many spaces. Balversa, on the other hand, received FDA approval in January 2024 but has yet to translate their second-line status into significant revenues. We agree with analyst predictions about Padcev's future, as the ADC platform shows significant promise, especially in combination with Keytruda. In our opinion, Pfizer has the resources and marketing to push the drug into a full blockbuster.

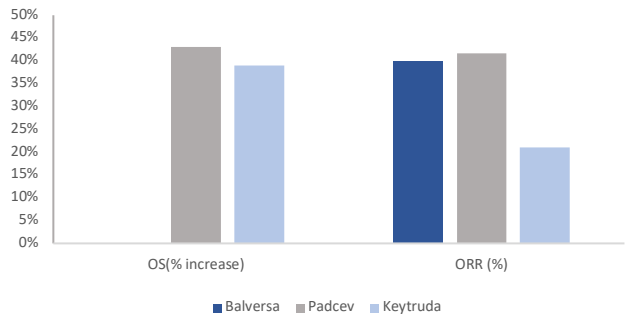
Trials show significant positive results for Padcev, especially when used in combination with a PD-1 drug such as Keytruda. Padcev's first phase 3 trial, called EV-301, demonstrated the drug's efficacy compared to traditional chemotherapy when used on patients with metastatic UC who had previously received another therapy. Padcev increased OS by 3.9 months, from 9.0 months to 12.9 months. This represents an increase in OS of 43% compared to traditional chemotherapy. The drug also showed solid increases in PFS, from 3.7 months to 5.6 months, and Objective Response Rate (ORR), 40.6% compared to 17.9%. These results showed that for previously treated patients, Padcev was a far better alternative to chemotherapy and significantly increased patient survival. The significant survival benefits were then tested on patients who had not previously been treated for metastatic UC and compared to chemotherapy once more. When used in combination with Keytruda, PFS increased by 6.2 months, from 6.3 months to 12.5 months. OS also increased from 16.1 months to 31.5 months, and treatment-related adverse events decreased from nearly 70% to only 56%. These impressive results have enabled Padcev and Keytruda to become the first-line UC drugs, and with bladder cancer being the sixth most common form of cancer, Padcev may control an important market for the coming years.

Exhibit 11: Padcev against Traditional Chemotherapy



Source(s): Factset, Pfizer, inc., VIG Research

Exhibit 12: Padcev Against Other Competitors



Source(s): Factset, Pfizer, inc., Johnson & Johnson, Merck and Co. , VIG Research

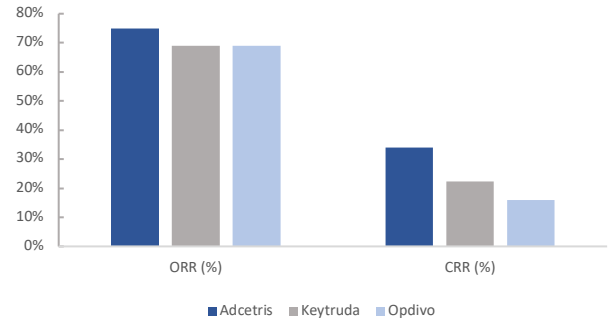
Both Keytruda and Balversa have shown significant efficacy as well. In Keytruda's KEYNOTE-045 trial, the drug was found to increase OS by 39%, from 7.4 months to 10.3 months. This is clearly lower than Padcev's 43% OS benefit, Compared to Balversa's 11.3-month median OS found in the BLC2001 trial, Padcev's 12.9-month median also has a clear advantage. Other endpoints also demonstrate Padcev's superiority. Padcev's 5.6-month median PFS was nearly equivalent to Balversa, and far better than Keytruda, which notably decreased PFS by 1.2 months. Similarly, Padcev displays best-in-class ORR, with the 40.6% ORR observed significantly better than Keytruda's 21.1% and Balversa's 40%. Notably, the patients in the KEYNOTE-045 trial were far less pre-treated than those in the EV-301 trial, potentially explaining some of the large discrepancies between the results or the two trials. Padcev's safety profile is seen as less favorable in comparison to both Keytruda and Balversa, however side effects from all three therapies are manageable with close monitoring and dose adjustments. As Padcev in combination with Keytruda begins to be more explored as a first-line option, Balversa has been relegated to second-line status. The result of this is a large market for Padcev that we believe will be realized due to Pfizer's strong manufacturing capacity and advertising proficiency. Already, Pfizer is on track to beat Padcev's 2023 sales of $1.1 billion and with the strength of the results of the EV-302 trial released in March 2024, the company could continue to expand revenues to the $3.5 billion target.

ADCETRIS OUTSHINES COMPETITORS AND DOMINATES THE LYMPHOMA MARKET

The other notable legacy drug involved in the Seagen acquisition is Adcetris. Adcetris, which saw 2023 revenues of $750 million, is based upon the same ADC platform as Padcev but is used to treat Hodgkin and systemic anaplastic large cell lymphoma. Through the first two quarters of 2024, Adcetris has made over $530 million, up $30 million YoY. These strong revenues are owed to the ADC platform that Adcetris is based on. Adcetris differs from Padcev in its selective targeting of CD30 proteins, which are typically expressed on the surface of lymphoma cells. With Pfizer's expertise in marketing oncology drugs and expanded manufacturing capacity, analysts project that Adcetris could top $1.8 billion in revenue by 2026, which would entail 13% of the overall lymphoma market and a significantly larger portion of the Hodgkin lymphoma market. However, the drug faces competition from Opdivo and Keytruda, the two most successful PD-1 inhibitors on the market currently. The relatively mild side effect profile of these drugs offers them a crucial advantage over the ADC platform, especially when physicians are more experienced and comfortable with prescribing them. We believe that the more specialized nature of Adcetris presents enough promise to deliver on the hefty revenue expectations placed on it and agree with the $1.8 billion prediction for revenues in 2026. This would mark a nearly 100% revenue increase over the next two years, which is consistent with the strength of the drug and considers the growth of the global lymphoma market during this period.

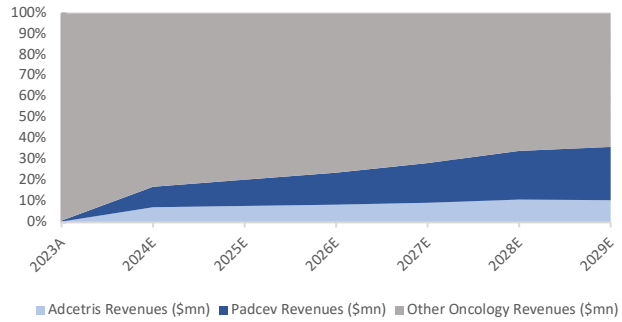
Adcetris's phase 3 trials can be split into Hodgkin lymphoma (HL) trials and non-Hodgkin lymphoma (nHL) trials. The drug's HL efficacy has been proven in clinical settings by the ECHELON-1 and AETHERA trials. In the ECHELON-1 trial, despite no OS benefit, Adcetris taken in combination with a chemotherapy regimen increased 2-year PFS from 77.2% to 82.1% when compared to another more intense chemotherapy plan. In the AETHERA trials, patients at high risk of relapse or progression were given Adcetris, which increased 5-year PFS from 41% for the placebo group to 59%. OS, however, was once again unchanged. Both trials led to Adcetris's approval for many different HL settings and led to the drug's first-line status in advanced HL settings. The nHL trials ECHELON-2 and ALCANZA further reinforced the strong HL trial data, leading to the drug's popularity outside of the HL setting. When compared to chemotherapy in the ECHELON-2 trial, Adcetris increased median PFS of nHL patients by 27.4 months, from 20.8 months to 48.2 months. OS also significantly increased from 69.1% to 76.8%. These extremely strong results were further fortified by the excellent results of the ALCANZA trial. Adcetris increased ORR from 12.5% to 56.3% and PFS from 3.5 to 16.7 months. In both ALCANZA trial endpoints, Adcetris performed over four times better than traditional chemotherapy, establishing itself as a new standard of care in the industry. Overall, these results in both HL and nHL moved Adcetris from a drug used primarily for relapsed or otherwise contraindicated settings to a first-line treatment option.

Exhibit 13: Adcetris Against Leading Second-Line Treatments



Source(s): Pfizer, inc., Merck and Co., Bristol Myers Squibb, VIG Research

Exhibit 14: Legacy Drugs Provide Long-Term Stability to Oncology



Source(s): Factset, Pfizer, inc., VIG Research

Opdivo and Keytruda are primarily second-line drugs in the context of lymphoma. However, even in a second-line setting, Adcetris's ADC platform continues to prove its dominance over PD-1 competitors. In relapsed or refractory patients, Adcetris produced an ORR of 75%. This compares very favorably to Keytruda and Opdivo, which both produce an ORR of 69%. The Complete Response Rate (CRR) results are more impressive; Adcetris generates a CRR of 34% compared to the 16% of Opdivo and the 22.4% of Keytruda. This means that Adcetris eliminates cancer cells in the body far more often and far more extensively than either Keytruda or Opdivo in the second-line setting. The main advantage that Keytruda and Opdivo offer is a more favorable side effect profile, with less effects that can be impactful in the long-term. Adcetris's method of action makes patients likely to develop peripheral neuropathy, which is a debilitating condition that can affect the patient's ability to perform daily tasks. This is an incurable condition that develops in some form in nearly 40% of patients that take Adcetris. However, the immune related adverse effects generated by Opdivo and Keytruda pose life-threatening risk in the near-term for patients, and the breath of organs that can be affected by these side effects is concerning. Stronger efficacy, however, has ultimately been the main driver of Adcetris's sales. We believe that this strong efficacy will remain unchallenged in the short to mid-term, leading to our predictions of $1.8 billion by 2026.

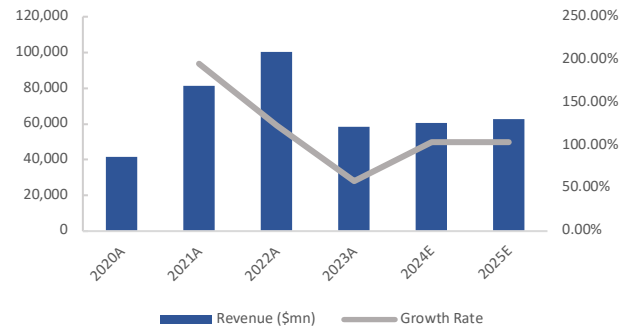
ISSUE 4: Seagen's Financial Synergies Could Struggle to Outweigh Debt Burden

SYNERGIES PROPEL PFIZER'S EFFICIENCY TO NEW LEVELS

Following the COVID-19 pandemic, Pfizer embarked on a cost savings program that they estimated would save $4 billion dollars annually by the end of 2024. In May 2024, the company announced further cost savings goals of $1.5 billion annually by 2027, some of which is expected to be realized by 2025. Pfizer plans to restructure company divisions and increase operational efficiency by streamlining the research and development process. Seagen is instrumental to the success of this process, as their expertise in both creating and marketing their drugs efficiently has been important to their previous growth. With Pfizer planning a pivot towards oncology, the acquisition will bolster their efforts and drive the company forward towards their goal of having eight new oncology blockbusters by 2030. Additionally, Pfizer, which has one of the lowest returns to equity and total asset turnover among their competitors, needs to increase their overall efficiency if the company is to recover from their poor 5-year EBITDA growth performance. We believe that the Seagen acquisition will be a major catalyst to these cost savings throughout the next two years, with a large part of the $1.5 billion cost savings being directly attributable to Seagen. Additionally, Seagen's contributions to top-line revenues through their ADC platform will further increase Pfizer's margins, with analysts expecting over $5 billion in legacy drug revenues by 2026.

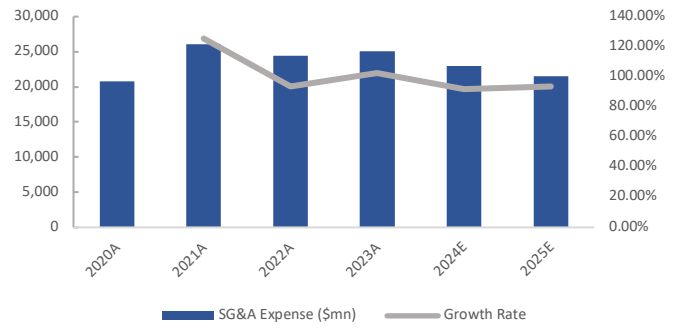
Among the most concerning metrics regarding Pfizer's efficiency is the company's total asset turnover. With the company only being able to produce a ratio of 0.26 compared to the competitor average of 0.48, there is a clear issue regarding the company's leveraging of its resources. As expected, during the pandemic, Pfizer's higher sales numbers temporarily obscured the problem, however over a five-year period, the ratio has decreased substantially. However, with increasing sales from Seagen legacy drugs as well as restructuring of the company's divisions, Pfizer may be able to shed excess assets and begin increasing their efficiency to industry standard levels. In the two quarters since the acquisition, Pfizer has already decreased assets by $5 million, approaching their lowest level since October 2023 and reversing the trend of significant asset investment present since the beginning of the pandemic. Notably, prior to the acquisition, Seagen was able to maintain a total asset turnover ratio of 0.61. If Pfizer can leverage the company's efficiency properly, they may be able to continue increasing their total asset turnover towards industry average.

Exhibit 15: Pfizer's Revenues Set to Recover…



Source(s): Factset, Pfizer, inc., VIG Research

Exhibit 16: …As SG&A Falls



Source(s): Factset, Pfizer, inc., VIG Research

This will also improve the company's relatively poor returns to equity. With the increased income stemming from Seagen's legacy drugs as well as the modular nature of the ADC platform, Pfizer's revenue generation potential will be strong. Reducing the company's assets will not pose a major problem, as the increased production capacity the company required to supply the necessary quantities of COVID-19 vaccine during the pandemic is no longer needed. By repurposing some of these manufacturing labs to create the company's other drugs and selling the excess, Pfizer can further increase the company's efficiency. Seagen serves as a catalyst to these changes, giving Pfizer valuable insight into how to best repurpose their labs to more efficiently manufacture Seagen's drugs.

DEBT FROM ACQUISITION MAY WEIGH THE COMPANY DOWN

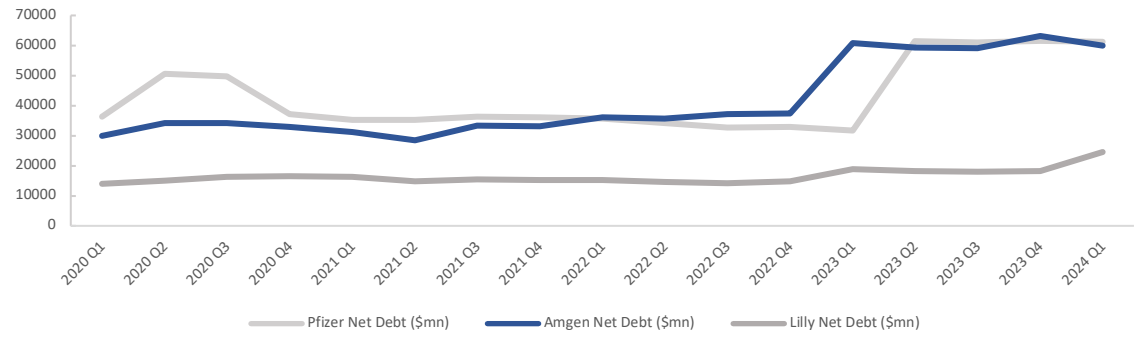
To complete the $43 billion acquisition of Seagen, Pfizer had to take on around $31 billion in debt. This, combined with the high interest rates at the time of the transaction and the company's previously leveraged state has led to questions surrounding the sustainability of Pfizer's debt levels. To add to the high net debt, the company is also undergoing significant revenue losses in the coming years due to revenues from their COVID-19 suite of products subsiding as well as key patent expiries and competition. This leaves the company with the highest Debt/EBIDTA ratio, nearly twice as high as the next most leveraged competitor, Amgen. This has left investors worried that Pfizer may begin cutting dividends, doubling back on the company's commitment to consistent dividend growth and payment. However, other leverage ratios such as Debt/Equity show that the company's debt is not nearly as problematic as the Debt/EBITDA ratios may seem. In comparison to competitors, Pfizer's Debt/Equity stands at 65.6%, well below the industry median of 137.5%.

Despite Seagen being a strong target for acquisition, the purchase comes at an inopportune time for the company. With rate cuts seemingly on the horizon, analysts are convinced that the significant M&A slowdown in healthcare is coming to an end. Now short on cash and very leveraged, Pfizer will be unable to take advantage of the more favorable environment for a large amount of time, leaving competitors to acquire promising companies at relatively cheap prices. These competitors such as Eli Lilly and Merck whose blockbuster drugs in weight loss and oncology have generated enormous revenues can now use the income as well as their inflated equity value to further reduce the amount of debt that they take on in acquisitions. Pfizer, in contrast, must pay down a large portion of their debt before engaging in any more purchases.

OUTLOOK

Ultimately, we feel that the Seagen acquisition will be accretive as the legacy drug revenues combined with the acquired talent and technologies will far outweigh the cost of the purchase. However, considerable risk still exists surrounding the deal. Should Pfizer miss out on major acquisitions in the future, sentiment around the deal will change.

Exhibit 17: Pfizer's Net Debt is Among Highest in Industry



Source(s): Pfizer Inc., Amgen, Inc., Eli Lilly and Co., VIG Research

The acquisition, however, gives Pfizer more money to pay off this debt through drug revenues and cost synergies. Should these realistic cost savings targets of $1.5 billion and revenues of $5 billion from the acquisition be realized, Pfizer would be able to pay down the debt far more quickly, leaving the company hamstrung for a shorter amount of time. Even without this increase in margin, Pfizer's current ratio of 0.86 indicates that the company has not overextended itself to an egregious level. The company's Debt/Assets ratio remains at a healthy level of 26.6%, further showing the financial health of the company. We believe that despite the high amount of debt that the company has taken on, Pfizer's revenue and margin outlook leads us to the conclusion that the company will see more positives from the acquisition than drawbacks.

ISSUE 5: Pfizer's Oncology Pipeline Shows Promise

VEPDEGESTRANT SHOWS POTENTIAL TO OVERTAKE IBRANCE AS PATENTS EXPIRE

One of Pfizer's most promising pipeline drugs is Vepdegestrant, a breast cancer drug that uses Selective Estrogen Receptor Degraders (SERD) called PROTACs in combination with CDK4/6 inhibitors to combat the disease. PROTACs provide many advantages to typical therapies, including the ability to target proteins once thought unreachable by pharmaceuticals, and the ability to target overexpressed proteins using scaffolding functions. The mechanism of action works by binding to the intracellular E3 ligase cereblon (CBRN) and the ligand binding domain (LBD) to direct the degradation of estrogen receptors via the cell's ubiquitin proteasome system (UPS). Estrogen receptor signaling is a key driver in approximately 75% of breast cancer cases, meaning that Vepdegestrant could dominate the market if phase 3 trial results are ideal. Another advantage of the drug is that this mechanism is novel in the pharmaceutical space, with Vepdegestrant being the furthest PROTAC drug along. Notably, the breast cancer market was estimated to be around $36 billion in 2024 with a CAGR of 6.8%. By creating a first in class therapy in combination with an existing drug in Pfizer's catalog, we believe Vepdegestrant will play a key role in Pfizer's oncology portfolio in the coming years. The drug has received fast-track designation from the FDA due to its promising outcomes, and with the drug entering Phase 3 trials in February 2024, Pfizer could see its release by as soon as 2026.

As previously mentioned, Ibrance makes up over $2 billion in revenues, which makes replacing it a top priority for Pfizer

Phase 2 trials showed significant promise for Vepdegestrant. When combined with Palbociclib, the drug showed a median duration of response of 14.6 months, with a clinical benefit rate of 63%. This, combined with the median progression-free survival of 11.2 months compared to Palbociclib's 9.2 months shows that the drug's revolutionary mechanism of action could have serious clinical advantages. Additionally, when compared to the combination of Fulvestrant and Palbociclib, Vepdegestrant produced significantly less tumor proliferation in patients. Like many other breast cancer drugs, Vepdegestrant can be taken orally, and although 93% of patients experienced grade 3 or higher adverse events, dose modifications can help to ensure the manageability of these symptoms. However, until the phase 3 trial results release, Pfizer's Ibrance remains the dominating force in the breast cancer market. This positions the company well for the future, as Vepdegestrant will likely release before the Ibrance patent expiry, barring any complications in the final round of trials.

BRAFTOVI SEEKS FIRST LINE STATUS IN A NICHE FORM OF CANCER

Braftovi is another oncology drug whose kinase-targeting mechanism of action is like many other oncology drugs on the market. The drug works to target the kinases BRAF and CRAF, two proto-oncogenes involved in various genetic mutations. The proteins produced by BRAF also play a role in regulating the MAP kinase, which impacts cell division, differentiation, and secretion. These mutations are among the most common cancerous mutations that cause melanoma, lymphoma, colorectal cancer, and lung cancer, among others. This broad mechanism of action allows for Braftovi to target several different diseases. While currently already being marketed, the drug is undergoing trials as a first-line treatment of metastatic colorectal cancer. The drug is also used to target certain lung cancers. In 2024, these two markets combined for over $50 billion and are expected to have a CAGR of 3.4% and 8.1% respectively, however Braftovi's designation as a BRAF-mutation drug leaves much of these markets out of reach.

Phase 3 trial results regarding the drug's applications for melanoma and non-metastatic colorectal cancer give the drug a solid foundation for seeking first-line applications elsewhere. In the drug's COLUMBUS trial, which investigated Braftovi's performance against melanoma, the drug excelled. When combined with Binimetinib, the combination resulted in OS benefits of 16.9 months, bringing the total OS up to 33.6 months. Additionally, after four years, the OS rate was a strong 39% compared to the baseline 26%. Median PFS increased from 41% to 64%. Each of these results represented over 30% increase in the measured parameter, indicating that the drug has solid application potential in the field of melanoma. The BEACON trial, which aimed to assess the drug's efficacy when dealing with colorectal cancer, measured an ORR of 20% compared to the 2% of the control group, and a 3.4-month median increase in OS, from 5.9 months to 9.3 months.

Competitive and Financial Analysis

INDUSTRY OUTLOOK - HEALTHCARE

M&A activities set to return: The COVID-19 pandemic has subsided, and the Federal Reserve has set its rates like those seen prior to the 2008 financial crisis. This has significantly slowed M&A activities, especially in the Healthcare industry, where the high investment into drug research and development diminishes the capital these companies have available to them. With rates at these high levels, Healthcare companies cannot afford to raise the levels of debt necessary to perform the M&A activities. However, with rate cuts on the horizons and many of the largest healthcare companies making healthy amounts of revenue through new blockbuster drugs for weight loss and diabetes, significant M&A activity is almost certainly ahead. While previous acquisitions such as the acquisition of Seagen by Pfizer and Karuna Therapeutics by Bristol-Myers have resulted in downgrades in their respective credit ratings, the lower cost of debt in the future will see other companies performing much less costly mergers.

EBITDA margins to improve substantially: As labor pressures and supply chain issues have begun to ease for many of the leading pharmaceutical companies, companies such as Pfizer and Amgen have undertaken significant cost-savings programs in late 2023 and early 2024. Additionally, inflationary pressures have been eased by price increases. In the first quarter of 2024 alone, Takeda increased the prices of 53 drugs, with many competitors following suit. These two factors have seen the EBITDA margins for the pharmaceutical industry improve YoY from 2022 to 2023 and have left analysts convinced it will happen again in 2024. However, should the labor market stop easing, we could see pressure on these margins to worsen considerably. The inflationary pressures on the labor market led to elevated default rates in 2023, which could continue well into 2024 despite rate cuts expected to come at the end of the year.

Increased regulation depressing revenues: With the introduction of the inflation reduction act in 2022, Medicare was finally allowed to negotiate with pharmaceutical companies over drug prices beginning in 2026. Additionally, raising the prices of these drugs by more than the rate of inflation now results in steep penalties for the offending company. Companies such as Eli Lilly and Co. have decreased insulin prices by as much as 70% in 2023 as a result. These regulations have decreased top-line revenues from blockbuster drugs significantly and seen a shift in focus from primary care drugs to more specialized treatments such as the weight loss market.

Demographic shifts increase near-term investment: Population pyramids for most Western countries show that the average citizen is growing considerably older. This influx of seniors in the future necessitates investment in the short-term from governments who must be prepared for the implications of this demographic shift. In 2023 alone, the US spent 4.3 trillion on healthcare, a 7.5% rise from 2022 and a 1.4% margin greater than GDP increase in that year. Pharmaceutical companies are well positioned to take advantage of the increased medical needs of the elderly, as well as the increasing amount of money the United States government must to spend to keep them healthy. Many of the most promising new drugs are aimed at conditions that arise with old age such as Alzheimer's and cancer. Despite imminent Medicare negotiations upon the release of these drugs, there will be a considerable market size upon release that will only grow over time.

PFIZER IS SIGNIFICANTLY MORE LEVERAGED THAN ITS PEERS

After Pfizer's $43 billion acquisition of oncology company Seagen in 2023, the company saw its credit rating drop from A+ to A. Currently, Pfizer has nearly $70 billion in net debt, and the company's 6.93x debt/EBITDA multiple is nearly three times as high as the median among its competitors. Amgen, another company which has engaged in considerable debt financing in the past, has a net debt of $64 billion and a much healthier debt/EBITDA multiple of 4.98x. An additional concern is Pfizer's cash ratio, which is only 0.29. This can be attributed again to the acquisition of Seagen, for which the company had to use a significant amount of its cash reserves to complete the purchase. Still, being significantly below most competitors in this metric indicates that Pfizer should be concerned about the ramifications of being short on cash.

However, Pfizer's current ratio of 1.05 implies that the company can sustain this level of debt. Compare this to similar companies such as Amgen, which has a ratio of 1.42, and Merck, which has a ratio of 1.25, and it's clear that Pfizer's debt is comparatively not as severe. Additionally, the company's long-term debt/total assets ratio sits at 27.7% and long-term debt/capital at

37.9%, putting them well below the median of their competitors in both categories. With an increased focus on cost-cutting over the next few years, Pfizer will be able to increase both cash and current ratios and should survive this period of high leverage.

5 YEAR EBITDA GROWTH IS NEGATIVE

Perhaps more concerning for Pfizer is the company's negative 5-year EBITDA growth of -62%, the lowest among its competitors and much lower than the next lowest: Merck's -43% growth. This concern is amplified when considering that unlike many of Pfizer's short-term metrics, this metric is not affected by the COVID-19 pandemic or its subsequent waning. This is partially due to losing exclusivity to drugs such as Lyrica, which generated $3.5 billion in 2018. It can also be attributed to supply chain investments necessary to produce its COVID-19 vaccines in 2021 and 2022. Compounded with this EBITDA decrease is their below-average EBITDA margin for the next twelve months, which sits at 36.1%. This is 20% lower than their closest comparison, Amgen, and 5.5% lower than the industry average. However, with Pfizer setting its sights on 8 new blockbuster drugs as well as increased marketing for some of their newer products such as Abrysvo, the company's revenue generation will remain healthy for the foreseeable future.

ROE IS CONSIDERABLY LOWER THAN PEERS

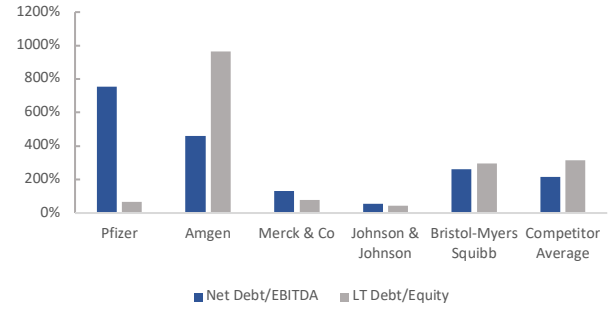
Pfizer's returns to equity also have a poor next twelve-month outlook. This is partially a result of the massive amount of debt that the company undertook to complete the Seagen acquisition, and partially due to the reduced income from their COVID-19 suite of products. However, other companies heavily involved in the COVID-19 market such as AstraZeneca and Johnson & Johnson are not experiencing poor performances of the same magnitude. Pfizer's 16.7% ROE is half of both AstraZeneca and J&J's and nearly a quarter of industry average. One explanation for this circles back to the Seagen acquisition: Pfizer's net debt is twice that of AstraZeneca and J&J. However, when compared to the industry average of 0.44x, Pfizer's total asset turnover of 0.26x implies that the company is not efficient enough with its assets. Combining this with the low returns to equity makes it clear that while Pfizer is certainly suffering because of its debt, it is also not efficient enough with the assets it currently utilizes.

LOWER PEG RATIO IMPLIES UPSIDE

Among its competitors, Pfizer's PEG ratio is the second lowest, beaten only by Merck. This ratio of 0.61x is far below the industry average of 1.6x, and while the company is certainly experiencing some decreases in revenue, we believe that this ratio does not properly characterize Pfizer's earnings growth in the near future. The company is set to lose four patents in the next two years, and three of them made $1 billion or more. However, the largest revenue driver of the four, Vyndaqel, has another more effective form under patent well into the next decade. Xeljanz, the next biggest revenue generator, is patented in the EU until 2028. This will mitigate much of the damage from the expiries, and with drugs such as Abrysvo and Eliquis continuing their growth into the future we are confident that Pfizer's revenues will remain near current levels.

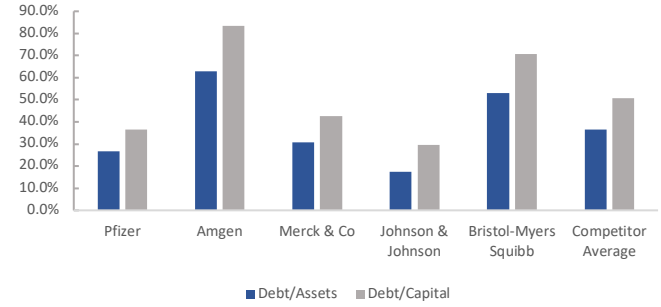
Equally important to revenue growth are the cost-cutting initiatives currently being undertaken at the company. With $5 billion in cost savings expected by 2027, expenses will drop significantly, leading to much higher earnings growth than in previous years. This, combined with the synergies the company may experience from the Seagen acquisition and revenues from legacy products, will further drive down costs and increase margins. These factors lead us to believe that Pfizer's future is much more positive than consensus currently predicts and that there is significant upside associated with the company.

Exhibit 18: Pfizer's Depressed EBITDA Leads to High Leverage



Source(s): Factset, Pfizer, inc., VIG Research

Exhibit 19: But Pfizer Can Easily Cover Debt Obligations



Source(s): Factset, Pfizer, inc., VIG Research

Conclusion

We believe that Pfizer's short-term revenue outlook is secure behind blockbusters in primary care and oncology that can continue to capture significant market share with their best-in-class status. Additionally, with multiple new drugs being introduced to the company's product portfolio, there exists significant growth potential for future revenues. However, the company faces risk, as debt from the otherwise accretive Seagen acquisition may weigh Pfizer down during a crucial period in which other competitors are able to make similar acquisitions for relatively cheaper due to the more friendly interest rate environment. Finally, should the company fail to execute on its pivot to an oncology-focused portfolio, revenues lost from patents expiring at the end of the decade may be irrecoverable. Our belief is that a market perform rating reflects the equal amounts of revenue potential and risk surrounding the company's future financial performance.

Valuation and Key Estimates

MODEL ASSUMPTIONS AND JUSTIFICATIONS

We derive our 24-month $39.85 price target based on a DCF analysis of 2024-2034 projected free cash flow, with a 2% terminal growth rate applied to our 2024 free cash flow estimate of $60.8 billion. Our use of a 6.34% discount rate, consistent with a 6.30% calculated WACC, reflects our belief in current revenue drivers to guide growth over this period. Our 2% terminal growth rate is below the level of growth reported by major pharmaceutical companies, which is a reflection of the number of significant patent expiries at the end of the decade. Our model assumes steady growth for the Padcev and Adcetris franchises coupled with a decrease in primary care revenues as a result of both competition from Merck's Capvaxive and fading demand for the COVID-19 suite of products.

Exhibit 20: Calculation of Our DCF Price Target

Discounted Cash Flow Valuation (Truncated)

	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E
Revenue	$100,330.00	$58,496.00	$60,835.84	$63,232.77	$65,686.20	$68,195.42	$70,759.56	$73,377.67	$76,048.62	$78,771.16	$81,543.90	$84,365.32	$87,233.74
YoY % Growth	*23.43%*	*-41.70%*	*4.00%*	*3.94%*	*3.88%*	*3.82%*	*3.76%*	*3.70%*	*3.64%*	*3.58%*	*3.52%*	*3.46%*	*3.40%*
OpEx	$ 62,781.00	$ 54,261.00	$ 45,936.07	$ 47,984.77	$ 49,846.58	$ 51,750.72	$ 53,696.55	$ 55,683.32	$ 57,710.19	$ 59,776.22	$ 61,880.34	$ 64,021.40	$ 66,198.13
YoY % Growth	4%	-14%	-15%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%
EBIT	$37,549.00	$4,235.00	$14,899.77	$15,248.00	$15,839.62	$16,444.70	$17,063.02	$17,694.35	$18,338.42	$18,994.94	$19,663.56	$20,343.92	$21,035.61
YoY % Growth	*80.58%*	*-88.72%*	*251.82%*	*2.34%*	*3.88%*	*3.82%*	*3.76%*	*3.70%*	*3.64%*	*3.58%*	*3.52%*	*3.46%*	*3.40%*
% of Revenue	*37.43%*	*7.24%*	*24.49%*	*24.11%*	*24.11%*	*24.11%*	*24.11%*	*24.11%*	*24.11%*	*24.11%*	*24.11%*	*24.11%*	*24.11%*
Taxes	$3,328.00	-$1,114.00	$1,657.56	$1,696.30	$1,762.11	$1,829.43	$1,898.21	$1,968.45	$2,040.10	$2,113.13	$2,187.52	$2,263.20	$2,340.15
YoY % Growth	*79.69%*	*-133.47%*	*-248.79%*	*2.34%*	*3.88%*	*3.82%*	*3.76%*	*3.70%*	*3.64%*	*3.58%*	*3.52%*	*3.46%*	*3.40%*
% of EBIT	*8.86%*	*-26.30%*	*11.12%*	*11.12%*	*11.12%*	*11.12%*	*11.12%*	*11.12%*	*11.12%*	*11.12%*	*11.12%*	*11.12%*	*11.12%*
EBIAT	$34,221.00	$5,349.00	$13,242.21	$13,551.70	$14,077.51	$14,615.27	$15,164.81	$15,725.90	$16,298.33	$16,881.81	$17,476.05	$18,080.72	$18,695.46
YoY % Growth	*80.67%*	*-84%*	*148%*	*2%*	*4%*	*4%*	*4%*	*4%*	*4%*	*4%*	*4%*	*3%*	*3%*
D&A	$5,064.00	$6,290.00	$5,274.07	$5,397.33	$5,606.75	$5,820.93	$6,039.79	$6,263.26	$6,491.25	$6,723.63	$6,960.31	$7,201.13	$7,445.97
% of EBIT	*13.49%*	*148.52%*	*35.40%*	*35.40%*	*35.40%*	*35.40%*	*35.40%*	*35.40%*	*35.40%*	*35.40%*	*35.40%*	*35.40%*	*35.40%*
CapEx	$3,236.00	$3,907.00	$3,702.22	$3,788.75	$3,935.75	$4,086.10	$4,239.74	$4,396.61	$4,556.64	$4,719.77	$4,885.91	$5,054.96	$5,226.83
% of EBIT	*8.62%*	*92.26%*	*24.85%*	*24.85%*	*24.85%*	*24.85%*	*24.85%*	*24.85%*	*24.85%*	*24.85%*	*24.85%*	*24.85%*	*24.85%*
Change in NWC	$ (4,456.00)	$ (2,172.00)	$ 3,945.03	$ 4,037.23	$ 4,193.88	$ 4,354.08	$ 4,517.80	$ 4,684.96	$ 4,855.49	$ 5,029.31	$ 5,206.35	$ 5,386.49	$ 5,569.63
% of EBIT	*-11.87%*	*-51.29%*	*26.48%*	*26.48%*	*26.48%*	*26.48%*	*26.48%*	*26.48%*	*26.48%*	*26.48%*	*26.48%*	*26.48%*	*26.48%*
Unlevered Free Cash Flow	**$40,505.00**	**$9,904.00**	**$10,869.03**	**$11,123.05**	**$11,554.63**	**$11,996.01**	**$12,447.06**	**$12,907.61**	**$13,377.44**	**$13,856.35**	**$14,344.10**	**$14,840.40**	**$15,344.98**

Discount Rate **6.34%**

Growth In Perpetuity		Exit Multiple Method	
Terminal Growth Rate	2.00%	Proj. EV/Revenue	4.20x
Terminal Value	$360,642.33	Terminal Value	$366,381.71
Discounted Terminal Value	$183,405.98	Discounted Terminal Value	$186,324.76
Implied Enterprise Value	$281,784.33	Implied Enterprise Value	$284,703.12
Implied Market Cap	$219,433.33	Implied Market Cap	$222,352.12
Implied Share Price	**$38.89**	**Implied Share Price**	**$39.40**

Source(s): Company Filings, VIG Research

Exhibit 21: DCF Sensitivity Analysis

Sensitivities

		WACC								
$ 39.14	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%	8.50%	9.00%
	2.00%	53.72477762	47.2040004	42.0742662	37.8893045	34.3801191	31.374498	28.7567615	26.4460824	24.38409317
	2.50%	59.28948021	50.9943766	44.7857657	39.9013029	35.916065	32.5739389	29.7109731	27.2170466	25.01522464
TGR	3.00%	67.63653411	56.3009033	48.4010983	42.488158	37.8359974	34.0399223	30.8560271	28.1281862	25.75154469
	3.50%	81.5482906	64.2606933	53.462564	45.9372981	40.3044818	35.8724016	32.2555375	29.2215536	26.62174111
	4.00%	109.3718036	77.52701	61.0547626	50.7660943	43.5957945	38.2284463	34.0049256	30.5578916	27.66597682

		2034 EV/Revenue								
$ 39.14	5.50x	6.00x	6.50x	7.00x	7.50x	8.00x	8.50x	9.00x	9.50x
	$ 85,000.00	43.24946982	45.1645443	47.0796188	48.9946932	50.9097677	52.8248422	54.7399167	56.6549912	58.57006564
	$ 90,000.00	45.49934883	47.5270747	49.5548007	51.5825266	53.6102525	55.6379784	57.6657043	59.6934302	61.72115616
	$ 95,000.00	47.74922783	49.8896052	52.0299825	54.1703599	56.3107373	58.4511146	60.591492	62.7318693	64.87224669
2034 Sales	$ 100,000.00	49.99910684	52.2521356	54.5051644	56.7581932	59.011222	61.2642508	63.5172796	65.7703084	68.02333721
	$ 105,000.00	52.24898585	54.6146661	56.9803463	59.3460266	61.7117068	64.077387	66.4430673	68.8087475	71.17442774
	$ 110,000.00	54.49886485	56.9771965	59.4555282	61.9338599	64.4121916	66.8905232	69.3688549	71.8471866	74.32551827
	$ 115,000.00	56.74874386	59.339727	61.9307101	64.5216932	67.1126763	69.7036594	72.2946426	74.8856257	77.47660879

Source(s): CapIQ, Company Filings, VIG Research

Exhibit 22: BEP Comparable Companies by Market Cap

PFE Comparable Companies

Company	Ticker	Price	Market Cap	Dividend Yield	EBITDA 2024E	EBITDA 2025E	EV/EBITDA 2024E	EV/EBITDA 2025E	EPS 2024E	EPS 2025E	P/E 2024E	P/E 2025E
Oncology												
AstraZeneca	AZN-GB	$ 156.56	$242,703.20	2.15%	$ 17,955.18	$ 20,336.34	15.05x	13.29x	$ 8.19	$ 9.46	19.11x	16.55x
Novartis	NOVN-CH	$ 110.36	$241,672.28	3.89%	$ 19,712.07	$ 21,016.86	12.27x	11.51x	$ 7.41	$ 8.09	14.90x	13.65x
Roche Holding	ROG-CH	$ 323.88	$265,240.38	3.93%	$ 25,859.58	$ 27,771.72	11.62x	10.82x	$ 20.22	$ 22.13	16.02x	14.64x
Merck & Co	MRK-US	$ 125.26	$317,259.30	2.72%	$ 28,715.88	$ 32,762.76	12.12x	10.62x	$ 8.16	$ 9.91	15.36x	12.64x
Oncology Mean	-	-	-	-	-	-	12.77x	11.56x	-	-	16.35x	14.37x
Oncology Median	-	-	-	-	-	-	12.20x	11.16x	-	-	15.69x	14.14x
General Biopharmaceuticals												
Amgen	AMGN-US	$ 334.85	$179,625.16	2.96%	$ 19,369.26	$ 18,609.87	12.04x	12.53x	$ 19.51	$ 20.72	17.17x	16.16x
Sanofi ADR	SNY-US	$ 52.40	$133,340.50	2.97%	$ 14,890.02	$ 16,716.45	10.19x	9.07x	$ 4.14	$ 4.73	12.67x	11.08x
Johnson & Johnson	JNJ-US	$ 160.64	$386,699.62	3.00%	$ 31,955.22	$ 33,777.77	12.75x	12.06x	$ 10.01	$ 10.69	16.06x	15.02x
General Biopharmaceuticals Mean	-	-	-	-	-	-	11.66x	11.22x	-	-	15.30x	14.09x
General Biopharmaceuticals Median	-	-	-	-	-	-	12.04x	12.06x	-	-	16.06x	15.02x
Vaccines and Immunology												
AbbVie	ABBV-US	$ 185.16	$326,968.09	3.87%	$ 25,952.78	$ 28,609.76	14.89x	13.51x	$ 10.85	$ 12.10	17.07x	15.30x
GSK Sp ADR	GSK-US	$ 39.86	$ 82,741.24	3.87%	$ 13,531.95	$ 14,807.76	7.40x	6.76x	$ 4.02	$ 4.50	9.92x	8.85x
Immunology Mean	-	-	-	-	-	-	11.14x	10.13x	-	-	13.50x	12.07x
Immunology Median	-	-	-	-	-	-	11.14x	10.13x	-	-	13.50x	12.07x
Pfizer	**PFE-US**	**$ 30.77**	**$174,361.06**	**5.73%**	**$ 21,269.10**	**$ 23,352.29**	**10.75x**	**9.79x**	**$ 2.36**	**$ 2.72**	**13.05x**	**11.31x**
Unweighted Mean	-	-	-	-	-	-	**12.04x**	**11.13x**			**15.36x**	**13.77x**
VIG Estimates							**11.64x**	**10.73x**			**14.53x**	**13.06x**

Source(s): CapIQ, FactSet, Company Filings, VIG Research

Management Team & Executive Compensation

Management

Albert Bourla, Chief Executive Officer – Albert Bourla (age 62) is the CEO of Pfizer, as well as the elected chairman of the Pharmaceutical Research and Manufacturers of America organization starting in 2024. He has been at the company for 31 years and has been the CEO since 2019. Mr. Bourla is responsible for overseeing the company's research and development, manufacturing, and commercial strategy for Pfizer and its products. Mr. Bourla received his doctorate in biotechnology from the Aristotle University of Thessaloniki in Greece in 1985 and won CEO of the year from CNN business in 2021 for his leadership during the COVID-19 pandemic.

David Denton, Chief Financial Officer – David Denton (age 59) is the CFO of Pfizer. He leads all corporate finance activity, including financial reporting, treasury, taxation and business analytics. Prior to joining Pfizer in 2022, Mr. Denton served as the CFO of Lowe's. He has also been the CFO of CVS health, leading the company's change from a retail pharmacy to a health services provider, and worked at Deloitte in management consulting. Mr. Denton holds a Bachelor's degree in business administration from Kansas State University and an MBA from the Babcock Graduate School of Management at Wake Forest, which he completed in 1989.

Mikael Dolsten, Chief Scientific Officer – Mikael Dolsten (age 65) is the CSO of Pfizer. Mr. Dolsten oversees the research and development of Pfizer's products on a global basis, including discovery and development for the Vaccines, Immunology, and Rare Disease departments of the company. Prior to joining Pfizer in 2009, Mr. Dolsten was president of Wyeth Research, where he directed operations across the US, Europe, and Asia. Mr. Dolsten received his PhD in tumor immunology from the University of Lund in Sweden, where he also serves as a visiting professor. Mr. Dolsten also advised the Obama administration on regulatory and drug development issues.

Aamir Malik, Chief Commercial Officer and Executive Vice President – Aamir Malik (age 48) is the CCO and executive VP of Pfizer's US branch, responsible for the marketing of Pfizer products in the United States. Additionally, he directs the Global Medical Affairs program and Global Chief Marketing Office organization. He previously held the role of Managing Partner at McKinsey & Co., where he worked for 24 years. Mr. Malik holds a Bachelor of Science in Finance degree from Indiana University and currently serves on the Dean's Council of the University's Kelly School of Business.

Douglas Lankler, Executive Vice President and General Counsel – Douglas Lankler (age 58) is an executive VP and General Counsel at Pfizer, where he has served since 1999. Before taking on the role of General Counsel, Mr. Lankler was Pfizer's chief compliance and risk officer. Prior to joining Pfizer, Mr. Lankler held the position of Assistant US attorney in the US Department of Justice in the southern district of New York. Mr. Lankler graduated from the State University of New York before pursuing law at Cornell Law School.

Compensation

Executive compensation at Pfizer consists of a base salary, an annual short-term incentive plan, and an annual long-term incentive plan. Base salaries deliver the only form of fixed compensation for the NEOs and are not intended to be the most significant component of their compensation. All of the following figures are in USD.

Base Salaries – Base salaries of the NEOs ("Named Executive Officers) are determined and approved by Pfizer's executive compensation committee. Base salaries tend to remain fairly constant from one year to another unless the scope and responsibility of a position has changed.

Short-Term & Long-Term Incentive Plans – Pfizer's incentive plans are also determined and approved by the company's executive compensation committee. These plans are designed to strengthen the link between compensation and performance by tying a significant amount of total pay to the achievement of certain performance metrics related to business goals and strategies. Additionally, the CEO is required to own Pfizer stock with a value equal to at least six times his base salary, with other NEOs required to own stock valued at least four times their base salary. This helps to maintain commitment to delivering shareholder value and prevents conflicts of interest among the executive team. These plans are designed to attract and retain high-level executives at the company, as well as further motivate achievement of company goals.

Key Accomplishments – Listed below are the key accomplishments that drove Pfizer's business plan and heavily influenced the short-term and long-term incentive plan awards received.

- Pfizer completed its acquisition of Seagen for $43 billion, paying $229 per share and receiving assets such as Adcetris, Padcev, Tivdak, and Tukysa.
- Despite a large decline in operational revenues overall, Pfizer met growth targets for non-COVID related products, achieving a 7% operational revenue growth.
- Pfizer received nine new molecular entity approvals from the FDA and many more approvals for new indications in already approved products.

Exhibit 23: PFE Executive Compensation Summary, 2023

Name	Position	Insider Holdings (%)	Salary	Total Comp.
Albert Bourla	Chairman & Chief Executive Officer	0.006%	$1,787,500	$21,562,064
David M. Denton	Chief Financial Officer & Executive Vice President	0.001%	$1,296,875	$5,279,536
Mikael Dolsten	Co-Chief Scientific Officer & President-Research	0.006%	$1,596,500	$8,858,700
Aamir Malik	Chief Commercial Officer-US & Executive VP	0.001%	$1,294,800	$5,420,734
Douglas M. Lankler	Executive Vice President & General Counsel	0.003%	$1,198,313	$5,477,798

Source(s): Company Filings, VIG Research

Please read disclosures/risk and liability information beginning on page 26, including Analyst information on page 27.

COMPANY DESCRIPTION

Pfizer, inc. is a biotechnology company based in New York which operates worldwide to research, develop, and produce pharmaceuticals. The company produces and distributes drugs in immunology, cardiology, oncology, and rare diseases worldwide, with the primary market being the United States. The company was founded in 1849 and has since operated independently. The company has recently reaffirmed its aim to eliminate cancer and other life-threatening illnesses, creating a specialized oncology division to wholly focus on combating the disease. Pfizer also collaborates with global partners such as Takeda Pharmaceuticals and Merck & Co. to research and distribute drugs to other markets such as Europe and Japan. The company also aims to deliver high shareholder value, committing to maintaining their unusually high dividends and setting ambitious goals for the future.

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(MP3): Expected to perform generally in line with the respective sector over the next 12 months. Underperform (MU4): Expected to underperform the respective sector over the next six to 12 months and should be sold. Suspended (S): The rating and price target have been temporarily suspended. This may be due to market events that have made coverage impractical, or to comply with applicable regulations or firm policies in certain circumstances. The previous rating and price target are no longer effective and should not be relied upon.

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Medium Risk/Income (M/INC): Equities with lower to average risk from companies that have sound financials, consistent earnings, and dividend yields exceeding that of the S&P 500. These securities are often designed to provide a reliable dividend or return of capital. Medium Risk/Growth (M/GRW): Equities with lower to average risk from companies boasting sound financials, consistent earnings growth, potential for long-term price appreciation, a possible dividend yield, and/or share repurchase programs. High Risk/Income (H/INC): Equities with medium to higher risk from companies that focus on delivering a significant dividend but may experience less predictable earnings (or losses), more leveraged balance sheets, volatile market conditions, financial and competitive challenges, and higher price volatility (beta), along with potential principal risk. Income streams from dividends or capital distributions in this category may be less predictable. High Risk/Growth (H/GRW): Equities with medium to higher risk from companies in fast-growing and competitive sectors, facing less predictable earnings (or losses), more leveraged balance sheets, fluctuating market dynamics, financial or legal challenges, higher price volatility (beta), and potential principal risk. High Risk/Speculation (H/SPEC): Equities with high risk from companies with short or unprofitable operating histories, limited or unpredictable revenues, very high success risks, significant financial or legal issues, or substantial risk of principal loss.

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Company-Specific Risk Factors

Pfizer: We view Pfizer as a risky investment based on the inherent volatility and risks associated with the biotechnology industry. These risks include fluctuations in market conditions, high competition, regulatory and tax changes, exposure to global economic shifts, and the complexity of financial instruments. Specific risks to Pfizer include regulatory compliance and cost, market competition, R&D uncertainty, supply chain vulnerabilities, intellectual property risks, and cybersecurity threats. Pfizer's commercial success is fundamentally linked to its ability to effectively manage these risks, maintain its competitive edge, and adapt to the ever-evolving regulatory and economic landscape