

Analysis of Pfizer's Acquisition of Biohaven

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Abstract. This study looks at the history and reasons for the deal between Pfizer and Biohaven, as well as the transaction model of Pfizer's acquisition of Biohaven. Analyzing the advantages and disadvantages of the two parties to the transaction as well as the result of the deal was the methodology. The findings imply that the deal was advantageous and win-win, but that there were problems due to the high purchase price.

Keywords: Pfizer, Biohaven, SpinCo, CGRP, NURTEC®ODT.

1. Introduction

Headaches and migraines are among the most common neurological diseases worldwide. More than 15% of persons in the US report suffering from a severe headache or migraine, with women being more than twice as likely to have these symptoms as men. Biohaven is currently leading research among international pharmaceutical companies for the treatment of migraines, despite the fact that the biotech industry has recently experienced very poor business development, including a lack of sufficient cash flow to support biological research and a very rapid decline in the stock market. Pfizer's purchase of Biohaven has surely contributed to the company's growth. Using the BATNA, ZOPA, and other models, this research will approach the deal from the perspectives of Pfizer and Biohaven, respectively. The commercial strategy of both parties, the deal strategy, the bargaining power, and the primary goals are discussed in commercial negotiations.

2. Main Body

2.1 Deal Background

2.1.1 Deal Introduction

On May 10, 2022, Pfizer Inc. (PFE) announced that it has signed a legally binding contract to buy Biohaven Company (BHVN) for a cash payment of \$11.6 billion. The dual-action migraine medicine, NURTEC ODT, is produced by Biohaven and is licensed for the acute treatment and incidental prevention of migraine in adults. Adults with migraines may use Biohaven's NURTEC ODT, which is approved for the acute treatment and incidental prevention of migraines.

2.2 Company Background

Pfizer, which ranked first in worldwide prescription medicine sales for four years in a row from 2016 to 2019, reached \$43.662 billion in 2019 and invested \$7.988 billion in R&D, is a leading global presence in pharmaceutical production. Pfizer is a darling of the capital markets due to its position and power in the industry, gaining recognition for all of its company expansions and operations, and joining the U.S. Dow Jones Industrial Average back in 2004. Pfizer aspires to provide patients who face hurdles to necessary medical treatment with more accessible, affordable, and sustainable means of getting high-quality medications [1]. Pharmaceuticals, including prescription drugs, over-the-counter medications, consumer healthcare items, and specialized oncology solutions, are the current sources of income for Pfizer. Pfizer uses a broadly differentiated business level strategy, which means they do not enter any segment of the market for the sake of partial benefits or a position in one area. Their ultimate goal is to target individuals who need the drug.

Biohaven, a biopharmaceutical company at the commercial stage, offers a cutting-edge, best-in-class therapeutic approach portfolio for the treatment of life-altering neurological and neuropsychiatric conditions, including unusual diseases. CGRP receptor antagonists for the acute and preventative treatment of migraine, glutamate modulation of OCD, Vascular dementia, and spinal cerebellar ataxia, MPO inhibition in amyotrophic lateral sclerosis, and MPO inhibition in multiple sclerosis are some examples of the numerous late-stage product candidates across three distinct mechanism of action platforms [2].

2.2.1 SpinCo & Bulldog

According to the terms of the distribution agreement, the firm would therefore restructure some business units before the merger goes into effect, with SpinCo managing the majority of Biohaven's assets and liabilities and Biohaven's stockholders receiving SpinCo's common stock.

Pfizer or one of its affiliates will give SpinCo \$275 million before the spin-off goes into force. These funds exclude costs associated with the spin-off and merging of the two businesses, securities received by SpinCo at the close of business the day before, and other items. Following the spin-off, Biohaven will be required to pay SpinCo royalties of at least \$5.25 billion on a portion of the combined annual net sales of rimegepant and zavegpant, up to an annual royalty maximum of \$400 million.

In order to carry out Pfizer's acquisition of the business, Biohaven entered into several agreements with Pfizer. The agreements foresee a number of activities, including the reallocation of SpinCo's common stock to shareholders, as well as the distribution of the assets of the new Biohaven upon completion of the transaction, the allocation of equity and the integration of the business.

The current agreement provides that, upon completion of the spinoff, Biohaven shareholders who own two shares of their company will receive one share of SpinCo after the transaction. When all the projects are completed, SpinCo will become an independent, publicly traded company.

Similarly, BVI is a wholly owned subsidiary of Pfizer, and its full name is Bulldog. It exists as a result of the transaction and BVI does not engage in any other unrelated business activities except in connection with the transaction contemplated in the Merger Agreement. Upon completion of the merger, the temporary wholly owned subsidiary will disappear and the company will continue as a viable entity under its original name.

2.3 Deal process and results

Shareholders of Biohaven will additionally get 0.5 shares from New Biohaven for each share they own as part of Pfizer's acquisition of the company for \$148.50 per share. The newly listed business, New Biohaven, will carry on Biohaven's ongoing research and production of non-calcitonin gene-related peptide (CGRP) and other substances that are in development. Pfizer will also settle Biohaven's third-party liabilities and redeem the preferred shares when the deal closes [3].

In comparison to Biohaven's 3-month volume-weighted average share price of \$111.70, which was before the purchase was announced, the \$148.50 act was a tax offers a 33 percent of overall premium. Shares of Biohaven rose 74% in the pre-market immediately after the news of the agreement; the stock ended Monday at \$83.14. Pfizer's shares experienced premarket losses of 1.3 percent, extending their year-to-date losses to 17 percent, compared to the Dow's decline of 11 percent [4].

Following the transaction, Pfizer's pipeline will also include a number of Biohaven's initial products. Rimegepant, a tiny oral calcitonin gene-related peptide opioid receptor, is the company's signature product and the first oral medicine to get FDA approval for the therapeutic management of headache and migraine attack prevention.

In this agreement, Biohaven will continue to be principally in charge of the advancement of rimegepant's clinical development, and the two businesses will work together to gain the product's regulatory approval. Nurtec ODT will continue to be exclusively sold by biohaven in the US, and upon approval, Pfizer will begin selling rimegepant in all other countries. A third-generation, high-affinity, preferential, and structurally distinct small molecule CGRP receptor antagonist was also

acquired by Pfizer in accordance with the terms of the agreement. This compound is currently being tested for intranasal delivery and soft gel formulation in Phase 3 clinical trials for migraine indications.

3. Deal Analysis

3.1 Biohaven's charm

Compared to Pfizer, the world's leading pharmaceutical company, Biohaven may seem like a small, unknown pharmaceutical company. But in fact, it is a very strong player in one of the pharmaceutical industry's segments - migraine.

Acrophobia and photophobia are likely to develop as a result of migraines, which are characterized by incapacitating headache threats lasting 4 to 24 hours, even prolong to 3 days, and a variety of symptoms, such as throbbing headaches of moderate to severe pain intensity that may be accompanied by nausea and light sensitivity. Since a major portion of migraineurs are dissatisfied with the current standard of therapy owing to lack of effectiveness, safety, or tolerability burden, there is a significant need for innovative acute and preventive therapies. It wasn't until the identification of CGRP, a crucial target, that migraine prophylaxis gained headway [5].

NURTEC®ODT, a flagship product from Biohaven, combines prevention and treatment (Rimegepant). It is the first and only CGRP receptor antagonist available in the world in a fast dissolving, orally disintegrating tablet form, and it is the only oral medicine that is currently approved for migraines therapy and prevention. This product is doing well in sales, even though the two "uniquenesses" speak for themselves. Rimegepant has produced cumulative sales of \$526 million as of December 31, 2021, including \$462 million in 2021 since its commercial release in March 2020.

According to Aamir Malik, chief commercial innovation office at Pfizer, the transaction "adds a breakthrough migraine brand to Pfizer's portfolio that can leverage to expand our commercial capabilities and deliver more patients to more patients." [6]. Oral CGRP-targeted therapies are the fastest-growing class of migraine medications in the U.S. alone, with projected net sales of \$1 billion in 2021, while only making up 5–6% of prescriptions for migraine treatment. Rimegepant undoubtedly has a substantial market potential because oral CGRP-targeted medications are growing rapidly when compared to tritans, topiramate, CGRP monoclonal injections, and botulinum toxin.

Zavegepant, a novel medication being developed by Biohaven, is both an oral soft gel for chronic migraine and an intranasal spray for acute migraine that is anticipated to get FDA approval in the second quarter of this year.

These figures demonstrate Pfizer's high hopes for Biohaven.

3.2.1 Pfizer's expansion

Pfizer sells prescription medications for which there are hardly any equivalents or alternatives. Only generic medications are an option in this situation, although they are frequently viewed as less efficient than branded medications [7]. Additionally, Pfizer has significantly increased its cash flow by its active involvement in the medical distribution of COVID-19. The fact that Biohaven is a medical pioneer in the treatment of migraines and has an exclusive technique of supplying the raw materials, devices, and select machine makers needed for the production process gives it significant negotiating strength.

The purchase is consistent with Pfizer's long-standing mission to "deliver breakthrough innovations to patients that change their lives." It will not only increase Pfizer's pipeline of cutting-edge internal medicine treatments to address a critical clinical need, but it will also fuel the company's expansion through 2030 and beyond.

The acquisition of Biohaven by Pfizer, according to Pfizer CEO Vlad Coric, was made possible by NURTEC®ODT's market dominance, the development in migraine treatment, and the unrealized potential of the CGRP franchise [8]. The new Biohaven will concentrate on an innovative pipeline of neurological and other ailments, while Pfizer's platform strength will speed up Biohaven's objective

to expand access to their migraine medications. It is anticipated that this transaction will significantly increase future value for both patients and stockholders.

In reality, Pfizer has stated that there is no cap on M&A acquisitions and that it will increase investment in small and mid-sized biotech startups as early as 2022. The outbreak is eventually a staged dividend, a non-recurring benefit, as the New Crown vaccine business generated considerable cash flow for Pfizer in 2021. Along with the New Crown business, Pfizer's traditional old medications have reached the end of their patent life, and its pneumonia vaccine sales are in decline.

In order to invest extensively in creating and acquiring new drugs amid the biotech slowdown, Pfizer must leverage its available capital. It must also identify the next big heavyweight product that will carry the bulk of the market. As stated by the company's CEO, M&A is a significant component of Pfizer's future ambitions, and there is no limit on it [9]. The addition of Biohaven to Pfizer's internal medicine pipeline will increase the likelihood that huge blockbusters will be produced from the M&A-acquired goods. In fact, Pfizer and Biohaven partnered back in November 2021 in exchange for a down payment of \$500 million and a total investment of \$1.24 billion. In return, Pfizer received a partial commercialization interest in two drugs, Rimegepant and Zavegepant. Less than a year after the last partnership, Pfizer has chosen to take Biohaven into its pocket.

3.2.2 Biohaven's dilemma

Even though Biohaven will generate \$463 million in revenue in 2021 with just one product, the biotech winter is still straining the company's finances. According to Biohaven's quarterly report, the business had \$602 million in cash, investment accounts, or other assets as of March 31. In the same time frame, Biohaven spent \$227 million on marketing and sales and \$119 million on research and development, for a combined net loss of \$209 million. The R&D and sales expenses cannot be stopped because Biohaven is still in the market testing phase. Because of how hostile the biotech market is right now for Biohaven, company cannot survive through conventional finance. After six months, Biohaven's predicament can get considerably worse if a major corporation doesn't buy it. With this purchase from Pfizer, Biohaven will have steady funding flow for future research and development. Additionally, a new firm, the new Biohaven, will be split out with Biohaven's medicine for advanced testing of amyotrophic lateral sclerosis and obsessive-compulsive disorder. The new business will still be run by Biohaven's CEO, Vlad Coric, under the Biohaven brand. The agreement is undoubtedly the greatest outcome for Biohaven because it will allow company to continue developing other medicines while also replenishing its blood supply.

3.2 The Trouble with premiums

Although some Biohaven employees and even executives may lose their jobs as a result, Pfizer has offered Biohaven some compensation: first, the company's top executives, including directors and managers, will be compensated, and they will negotiate a new compensation agreement with SpinCo. Pfizer has committed to keeping as many key employees as possible and retaining their jobs at New Biohaven even after the transaction between Biohaven and Pfizer is completed [10]. This will allow Biohaven's employees to adjust as quickly as possible after the ups and downs and return to a familiar workplace where they can better serve the company.

In addition, if the transaction is not completed, such as if Biohaven's shareholders do not approve the merger agreement, they will not receive any compensation for any of their shares, which means that Biohaven shareholders will not receive the corresponding number of shares in SpinCo. The New York Stock Exchange will continue to list and conduct trading of Biohaven's stock as an independent body business. The failure of the transaction will result in Biohaven having to pay Pfizer a breakup fee of \$450 million, regardless of whether Pfizer terminates the merger agreement for any reason or Biohaven cancels the alternative acquisition agreement as a result of events.

Investors and some stockholders expressed worry over Pfizer's expensive purchase price, and soon after the acquisition, Biohaven's Phase III trial of the spinal cerebellar ataxia (SCA) medication troriluzole was deemed unsuccessful due to failure to fulfill study endpoints. However, Pfizer and Biohaven reached a commercialization partnership agreement in November of the previous year.

Pfizer then purchased 2.6% of Biohaven's common shares for \$173 a share (a 30% premium over the stock's then-market price). Pfizer was able to save at least \$1 billion from the original purchase price.

Of course, the acquisition gives Pfizer a thicker pipeline, especially with a medicine that has been approved and might be a significant game-changer. The fact that Pfizer has acquired Biohaven is unquestionably good news for investors. By the end of trading on May 10, Biohaven shares had increased 68.39% to \$140 on the announcement of Pfizer's purchase of the company.

4. Conclusions

Overall, the deal is valid and representative. In terms of dollar value, it is the largest deal in biotech in recent years at \$11.6 billion; in terms of research significance, it represents the most powerful Pfizer company in the pharmaceutical world currently experiencing strong growth after COVID-19. For Biohaven, it is also a key turning point in the future, where the new Biohaven can not only focus on research in migraine, but also invest more money in the lab. The industry as a whole can also see the light after dark, as Pfizer's lead acquisition will bring more capable companies to the attention of the biotech industry. The limitation of this article is that there is no more research data, including Pfizer's BATANA, the specific negotiation strategies of both parties.

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