

The background features a dark blue gradient with a repeating geometric pattern of triangles and lines in a lighter shade. In the lower half, there is a blurred image of several glass beakers or test tubes on a laboratory stand, with a bright orange diagonal line cutting across the bottom right corner.

Unlocking Value Through Healthcare Royalties: Strategies and Opportunities

Heptagon Capital

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Key Takeaways

- **A yield generating strategy with the potential for producing equity-like returns**
- **Seek to generate stable, predictable cash flows supported by innovative Intellectual Property**
- **Low correlations with traditional equity and fixed income strategies**
- **A strategy with high barriers to entry that is benefiting from demographic tailwinds**
- **Self-liquidating asset**



I Healthcare Royalties: A history

The history of healthcare royalties can be traced back to the early patent laws, which granted inventors exclusive rights to their inventions. This in turn provided them with the opportunity to benefit financially from their creations, thereby motivating innovation and advancement. This evolved into the practice of licensing intellectual property (IP), which has been a fundamental aspect of the healthcare industry.

The concept of healthcare royalties has its roots in the broader practice of Intellectual Property (IP) licensing. IP in its modern form began to take shape in the 18th century but it was not until the 20th that it became widely recognised and commonplace across the world.

The late 20th century, especially with the biotechnology boom in the 1970s and 1980s, saw a significant increase in the complexity and number of licensing deals, including royalty agreements. Companies and research institutions began actively engaging in partnerships and licensing agreements to share the risks and rewards of drug development.

This practice allows the creators of intellectual property related to new drugs and therapies, often universities, research institutions, or biotech companies, to monetize their discoveries by licensing their patents and other IP rights to larger pharmaceutical companies. These larger entities are then responsible for the costly and complex process of developing, testing, commercializing, and marketing new drugs. In return for the rights to these innovations, the licensees agree to pay the licensors royalties, which are typically a percentage of the revenue generated by the sale of the drugs.

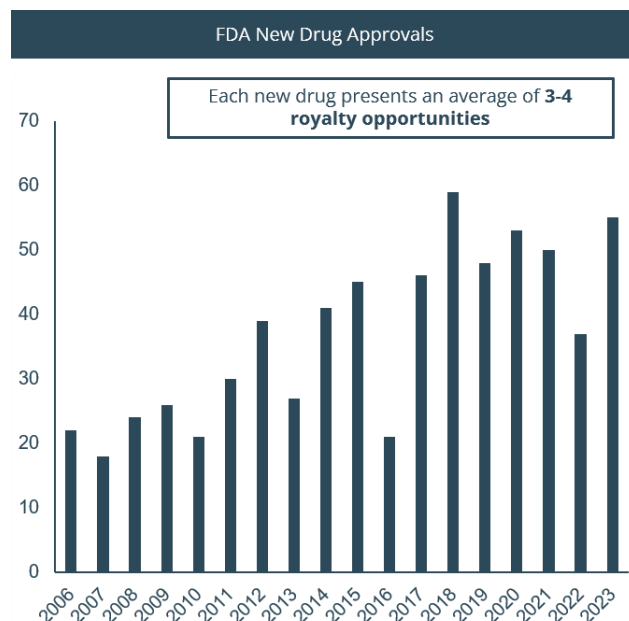
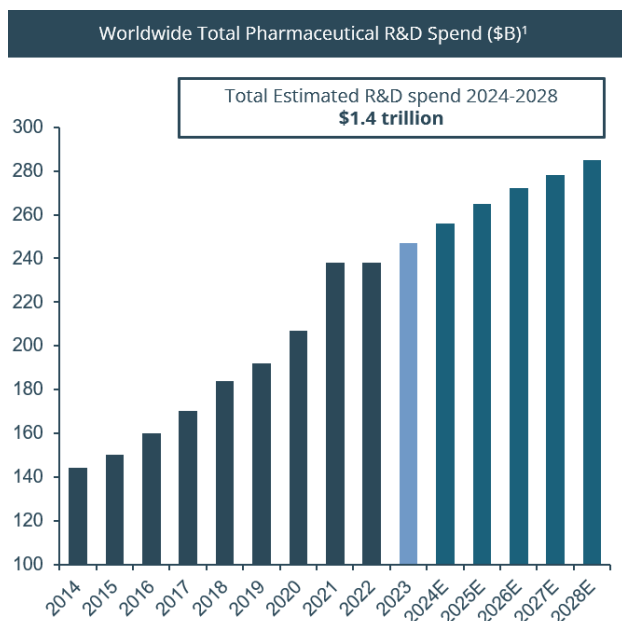
The Bayh-Dole Act of 1980 in the U.S. was a pivotal moment in the history of royalties. It allowed universities and other non-profit institutions to retain the IP rights to inventions developed through federally funded research. This led to a surge in university-industry partnerships, technology transfers, and, subsequently, royalty agreements, fundamentally changing the landscape of drug development and commercialization. A result of this was an increased incentivization for R&D in healthcare development. **The estimated R&D spend for the pharmaceutical industry is expected to total \$1.4tn for 2024 to 2028¹.**

Healthcare royalties represent a method of earning income by receiving a fraction of the revenue generated from the sales of various healthcare-related products, including biopharmaceuticals, medical apparatuses, and diagnostic tools. These royalties are mainly categorised into two types: traditional and synthetic royalties.

Traditional healthcare royalties are income streams derived from pre-existing licensing agreements, typically originating from collaborations between institutions that develop healthcare products (like universities, research organizations, or biotech companies) and larger entities responsible for marketing and distributing these products globally. These agreements usually entail the inventors and or institutions that developed the product receiving regular royalty payments based on a predetermined percentage of the product's top-line sales. This is often described as passive income since it refers to a scenario where these institutions are not participating in the product's marketing, sales, or further development.

This passive income stream is attractive to research institutions and biotech companies as it provides them with financial returns without requiring them to bear the costs and risks associated with the commercialization of the product. It allows them to focus on core strengths – research and development

and discovering of new compounds and mechanisms of action – while leveraging the commercial capabilities of larger, established healthcare companies.



¹Source: Evaluate Pharma World Preview 2022, Outlook to 2028 15th edition, October 2022

²Source: FDA website; Novel Drug Approvals <https://www.fda.gov/> from 2006-2023

In recent decades, variants to the traditional model of royalties have become prevalent. Synthetic royalties are one of these, offering a more intricate alternative to traditional royalty agreements. In contrast to traditional royalties, which were available only to companies with previous out-licensing agreements, synthetic royalties can be contractually created with a company to provide top-line exposure on product sales, allowing these participants to pursue royalty-based financing. Here, healthcare companies involved in product commercialization may sell a portion of future revenue, bypassing licensing, to raise capital through tailored financial agreements. This solution can provide non-dilutive capital to the company at a lower cost of capital than equity, in a non-dilutive manner and without the restrictive covenants associated with debt financing.

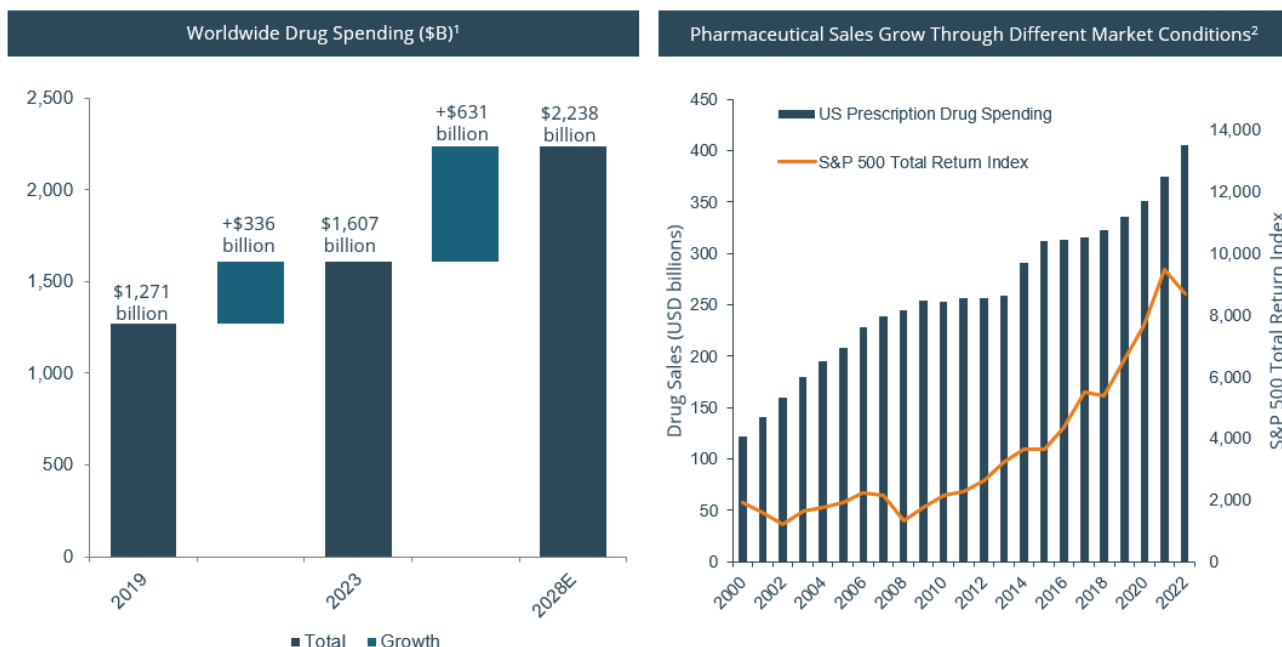
As the healthcare industry has grown, so has the complexity and value of licensing deals and royalty structures. Healthcare companies began to globalize, and the need to access new markets and technologies led to an increase in cross-border licensing and royalty agreements.

Over time, the concept of royalty financing evolved, with specialized companies emerging to provide upfront capital to drug developers and other licensees, in exchange for future royalty streams. This has become a significant method of financing in the biopharmaceutical industry, especially for smaller companies or those with limited access to traditional equity and debt markets.

In recent years, the healthcare royalties’ space has seen increased sophistication with the advent of royalty securitization, where future royalty streams are packaged and sold to investors as bonds. The industry has also witnessed a surge in the use of royalty monetization as a strategic finance tool, allowing companies to unlock the value of their royalties.

Why invest in healthcare royalties?

Royalty streams from healthcare products can **provide stable and predictable cash flows**, as they are often based on sales of approved and marketed drugs that treat chronic medical conditions. The demand for these drugs is relatively inelastic, meaning **it's not highly sensitive to economic downturns**, providing a steady income stream, regardless of macroeconomic conditions.



¹Source: IQVIA Global Use of Medicines 2024, Outlook to 2028, January 2024

²Source: US prescription drug spending is based on the Retail Prescription Drugs Expenditures data provided by Centers for Medicare & Medicaid Services (www.cms.gov) from 2000 – 2022; S&P 500 TR Index from Yahoo Finance. See "Additional Disclaimer" at the end of this presentation.

Healthcare royalties offer a form of investment generally **uncorrelated with traditional equity and fixed-income markets**, providing a valuable diversification tool for institutional investors. Research into the two listed healthcare royalty trusts over a 2-year period indicated support for this statement. DRI Healthcare Trust had a coefficient of determination (R^2 value)² of 0.08 to MSCI World (equities) and 0.01 to Bloomberg Global Aggregate (fixed-income)³. Whilst Royalty Pharma had a coefficient of determination of 0.45 to MSCI World and 0.15 to Bloomberg Global Aggregate. These uncorrelated returns can help reduce overall portfolio risk.

Investing in healthcare royalties requires a deep understanding of the healthcare market, drug development processes, regulatory environments, and patent laws. Institutional investors often need to rely on specialists or invest in firms with a proven track record and deep industry connections to navigate these complexities effectively. These barriers can lead to opportunities for stable and potentially lucrative returns for institutional investors, provided they have the necessary capital, expertise, and risk management strategies in place. This makes investing in healthcare royalties a distinctive proposition, balancing the complexities of the industry with the potential for high rewards. The healthcare industry is also known for its long product lifecycles. It can take a decade or more for a drug to move from concept to market, and **patents typically last for 20 years**. Investors in this space need to have a long-term outlook and patience for returns. The unique asset class, with its long-term investment horizon, fulfils many of the criteria that institutional investors often seek to attain.

Healthcare royalties offer greater valuation predictability compared to their sister product music royalties. This is because they are a **self-liquidating asset with a terminal value of zero**, this in turn reduces the volatility and risk of the product.

Royalties compared to other alternative asset classes

	Healthcare Royalties ¹	Private Credit	Private Equity	Real Assets
Equity-Like returns potential	✓	✗	✓	✗
Exposure to top-line pharma sales revenue	✓	✗	✗	✗
Largely uncorrelated to capital markets	✓	✗	✗	✓
Self-liquidating asset	✓	✗	✗	✗
Current income/yield	✓	✓	✗	✗

¹Please note that there are certain risks associated with healthcare royalties including but not limited to, intellectual property risk, competition risk, regulatory risk, pricing risk.

What are the risks involved in healthcare royalties investing?

We believe there are five key risks investors should consider when investing in healthcare royalties:

Market Risk: Even if a drug is approved, its commercial success is not guaranteed. The drug might face stiff competition from existing treatment options as well as treatments in clinical development, encounter pricing pressure from healthcare payers, or not achieve the anticipated market penetration due to product manufacturer or commercialization problems or lack of market acceptance.

Intellectual Property (IP) Risk: The patents that protect a drug from generic competition and often serve as the underlying basis for a royalty entitlement can be subject to legal challenges. If a patent is successfully challenged or expires, generic manufacturers can produce the drug, significantly reducing the royalty income or negatively impacting the intellectual property that serves as the basis of the royalty obligation. There's also the risk of the innovator company failing to protect its IP in all key markets adequately.

Regulatory Changes: Changes in healthcare policies or drug pricing regulations can affect the profitability of a drug. For instance, new regulations on drug pricing or changes in the reimbursement policies of insurance companies and healthcare systems can impact sales revenue and, consequently, royalties.

Operational Risk of the Marketer: Product sales performance is contingent on the operational performance of a drug's marketer. Poor management, financial instability, or strategic shifts can affect the company's ability to commercialize the drug successfully.

I Why is the current environment beneficial for this unique asset class?

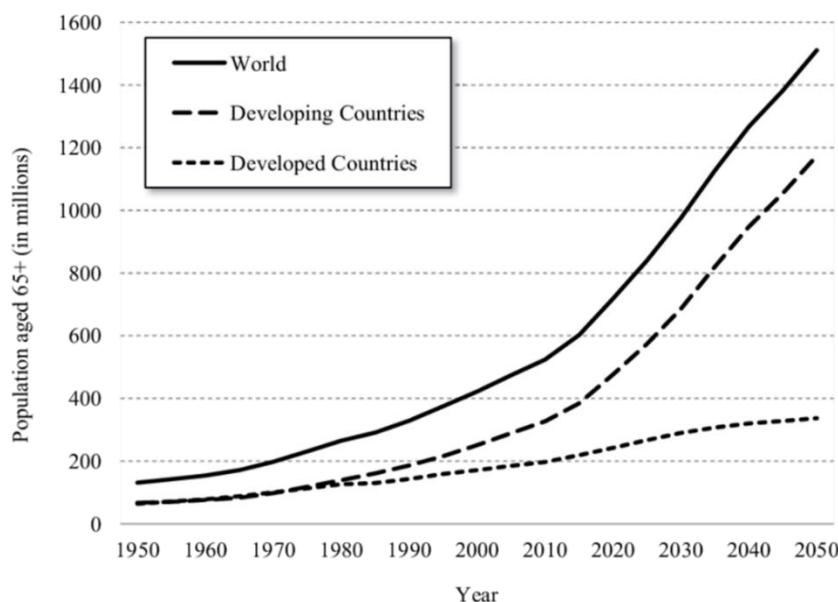
With a slower IPO climate in the healthcare sector and traditional equity valuations and financing becoming more challenging, biotech firms are increasingly looking towards alternative funding sources to advance their drug pipelines. This includes entering into royalty financing agreements, where they receive upfront capital in exchange for a share of future royalty earnings. For investors, this trend presents an opportunity to fund promising drugs at attractive valuations and secure a stream of future income.

The current scarcity of traditional funding sources puts royalty investors in a strong negotiating position. They can command better terms and pricing, potentially leading to more lucrative deals.

Companies may be compelled to finance their most promising assets to ensure funding, leading to a self-selection process where only the drugs with the best potential are brought to the royalty market. This increases the quality of investment opportunities for institutional investors focusing on healthcare royalties.

Long-term trends supporting healthcare royalties

The global demographic trend towards an older population strongly drives the healthcare industry. **By 2050, the world's population of people aged 60 years and older will double (2.1 billion). The number of persons aged 80 years or older is expected to triple between 2020 and 2050 to reach 426 million⁴.** This is particularly evident in Europe and the U.S. where 13,500 people turn 65 every day⁵. Older age groups typically have higher healthcare product consumption, driving demand for new and existing therapies and, by extension, supporting the market for healthcare royalties. **The percentage of over 65 in the United States with 5 or more prescriptions increased from 13.8% in 1994 to 41.9% in 2018⁶.**



Source: United Nations, 2014

The clinical pipeline is growing in quantity, quality, and diversity due to decades of scientific progress and innovation. These trends in innovation, along with increased life expectancy and improved access in emerging markets, are ultimately expected to drive growth in worldwide medicine spending from \$1.6 trillion in 2023 to \$2.2 trillion in 2028. The FDA approved 55 new drugs in 2023⁷, an increase on the historical average since 1993 of 34 per year⁸, indicating a healthy pipeline of medical innovations reaching the market. These figures underscore the sector's robustness and the continuous flow of opportunities for royalty financing.

Another medium-term tailwind is the increased awareness from biotech executives about royalty financing in order to fund their companies' strategic and operational needs. Increasingly, CFO's and CEO's are seeing the value of royalties as a third tool beyond traditional equity and fixed-income tools for raising capital.

This short-term dislocation of the capital markets, coupled with additional longer-term tailwinds, is driving the growth of the royalty market. We are in the early years of what is anticipated to be generational industry growth in healthcare driven by the development of therapeutics that will improve the lives of patients worldwide. For institutional investors, this presents a distinctive opportunity to capitalise on a high-quality investment product that offers the potential for stable, long-term returns.

I Conclusion

Healthcare royalties can offer institutional investors access to the life science sector while providing attractive investment characteristics. These cash flow generative investments are backed by some of the strongest intellectual property assets and benefit from long-term secular trends such as a rapidly ageing population in developed countries. As healthcare spending increases over time, regardless of economic growth considerations, this should provide plenty of new drug development opportunities in decades to come. Technology is also constantly improving and creating new research avenues and possibilities for smaller biotech companies. Given the complexities surrounding the science and patents associated with modern medicines, the barriers to entry for investing in royalties are high, which has led to a stable competitive dynamic with no new entrants into the market in recent years. Furthermore, given the unique profile of this strategy and its lack of correlations with traditional asset classes, it can enhance overall portfolio diversification for investors.

Endnotes

1. Evaluate Pharma World Preview 2022, Outlook to 2028 15th edition, October 2022²Source: *FDA website; Novel Drug Approvals* <https://www.fda.gov/> from 2006-2023
2. "R-Squared (R² or the coefficient of determination) is a statistical measure in a regression model that determines the proportion of variance in the dependent variable that can be explained by the independent variable", Corporate Finance Institute as of March 2024, <https://corporatefinanceinstitute.com/resources/data-science/r-squared/>
3. Risk Statistics, Alternative Soft as of January 2024
4. World Health Organisation as of October 2022, <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>
5. J.P Morgan Cazenove as of February 2024
6. Statista as of 2022, <https://www.statista.com/statistics/492292/us-population-with-5-or-more-prescriptions-within-one-month-by-age/>
7. U.S Food & Drug Administration as of January 2024, <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2023>
8. Nature Reviews as of January 2023, <https://www.nature.com/articles/d41573-023-00001-3#:~:text=The%20FDA%20approved%2037%20novel,pass%20regulatory%20scrutiny%20since%202016.&text=Last%20year%20the%20FDA's%20Center,to%2049%20drugs%20per%20year.>

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