



Biopharmaceuticals deal trends

**Competition for
innovation overcomes
economic headwinds**

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Introduction

In 2020, deal making surged in pharmaceuticals. Despite the impact of COVID-19 on the economy, major pharma companies closed 1,138 deals. A record deal count. What drove so many deals? The biggest factor: Competition to build innovative pipelines and acquire new capabilities in transformative technologies such as mRNA, cell therapies, gene therapies, and bispecifics. Underlying this highly competitive and active deal market was the combined effect of the perpetual need of the pharmaceutical industry to find assets that can provide future revenue and the maturity of technologies developed in an era of innovation unlike the industry has ever seen. Although the Biden administration's comments about anticompetitive behavior in the pharmaceutical industry may create a headwind for mega-mergers and larger acquisitions, we expect small and mid-size deals to continue to thrive in 2021.

In this paper, we take an in-depth look at how biopharmaceutical companies are deploying their capital. We analyze what types of targets they focused on in 2020 and present our expectations for 2021. The message: For the foreseeable future, biopharma executives will continue to use a wide range of deal strategies from M&A to creative partnerships to strategic R&D collaborations to balance opportunities and risks in pursuing innovation and building their pipelines. As in the recent past, the challenge will be to select the best opportunities amid rising valuations and still-unproven targets.

Key Insights

- 2020 was a banner year—more deals than **EVER!**
- The total value of company acquisitions was down in 2020 compared to 2019
- The number of strategic R&D deals were up over **2X** compared to prior years
- Asset licensing deals were up 233 transactions
- The number of corporate acquisitions were up in 2020 versus 2019
- Only one deal was north of \$30 billion in 2020 compared to 2019 which involved two deals over \$60 billion

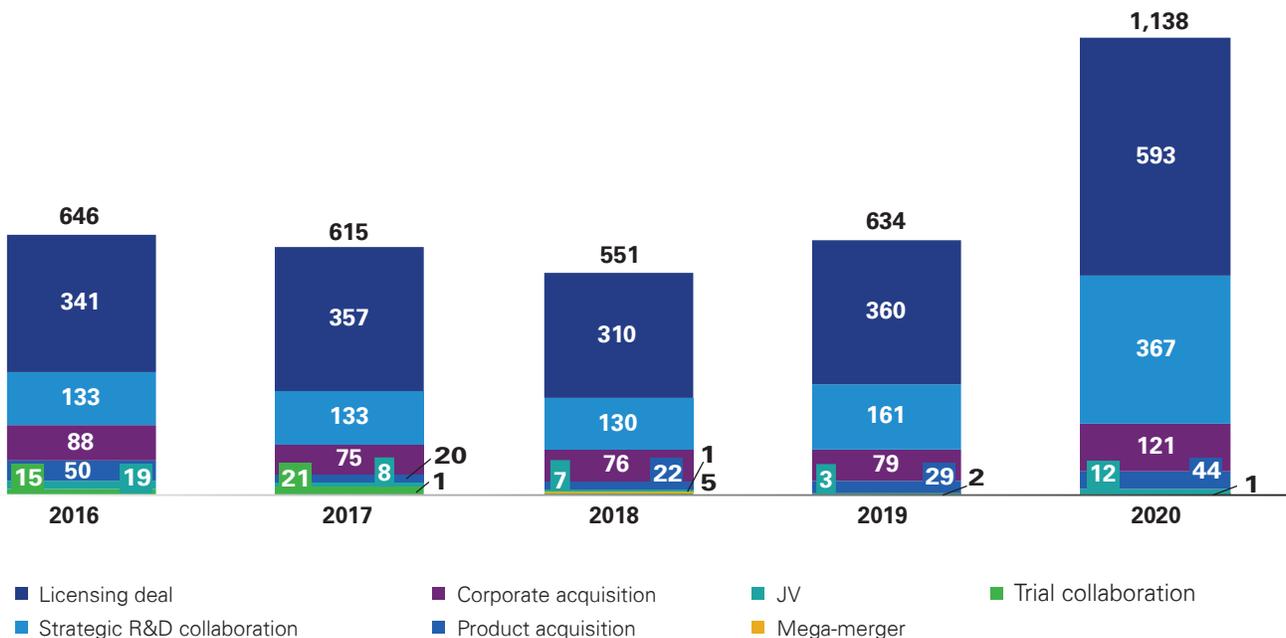


The quest for innovation

When the COVID-19 outbreak slammed the economy, it seemed like deals in the biopharmaceutical industry and other sectors would also slow down. Many observers predicted that transaction volume would be down in 2020.¹

However, a deeper analysis of the industry shows that the volume of deals hit an all-time high (Exhibit 1). The total number of deals in 2020 was 1,138 compared with 634 for 2019.

Exhibit 1. Volume of all biopharma deals hit a record in 2020



Source: KPMG analysis; Informa: Strategic Deals 2020.

¹See for example, Pharma Intelligence, "A Decade of Biopharma M&A and Outlook for 2020," March 2020.

The growth was particularly dramatic for transactions using creative deal structures. Strategic R&D collaborations more than doubled from 161 in 2019 to 367 in 2020. Asset licensing deals jumped from 360 to 593. In contrast, there was only one headline-grabbing mega-merger (an acquisition we define as \$30 billion or more). This deal was significantly smaller than two mega-deals in 2019, both of which were for more than \$60 billion.

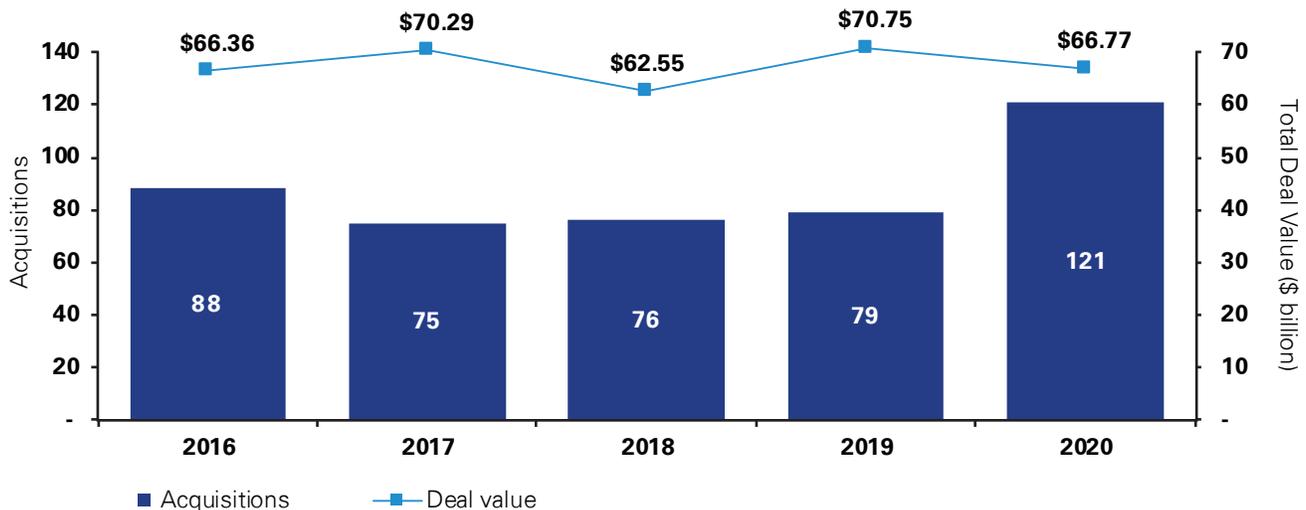
However, there were more acquisitions under \$30 billion in 2020 (121 acquisitions) versus 2019 (79 acquisitions). The total value of these was \$66.8 billion (when controlling for mega-mergers), down from \$70.8 billion in 2019 (Exhibit 2).

This means either that deal valuations fell or the acquisitions made were on average smaller than prior years. Analyzing the deal data, we concluded that it was smaller deal size.

In the annual KPMG survey of executives across healthcare and life sciences,² more than 80 percent of 31 biopharma executives surveyed said valuations had increased in 2020, and nearly a quarter estimated that values jumped by 20 percent or more (Exhibit 3).

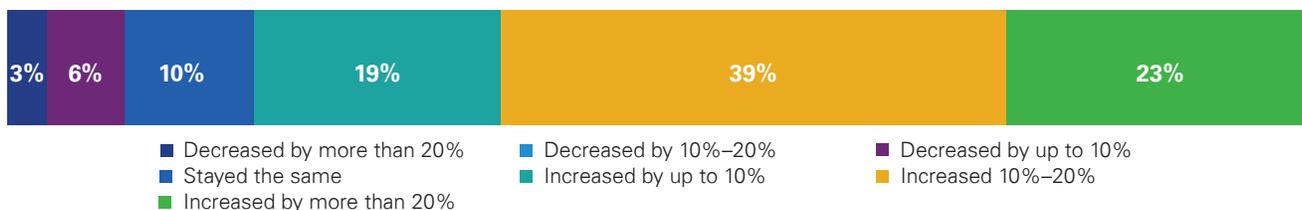
Exhibit 2. Total deal value of full company acquisitions (excluding mega-mergers) remained in-line in 2020

Full company acquisitions vs total deal value* (2016–2019 billions of dollars)



* Mega-mergers (greater than \$30bn) were excluded in order to control for more accurately assessing the typical deal values. Source: KPMG analysis; Informa: Strategic Deals 2020.

Exhibit 3. Valuations increased significantly in 2020, according to biopharma executives



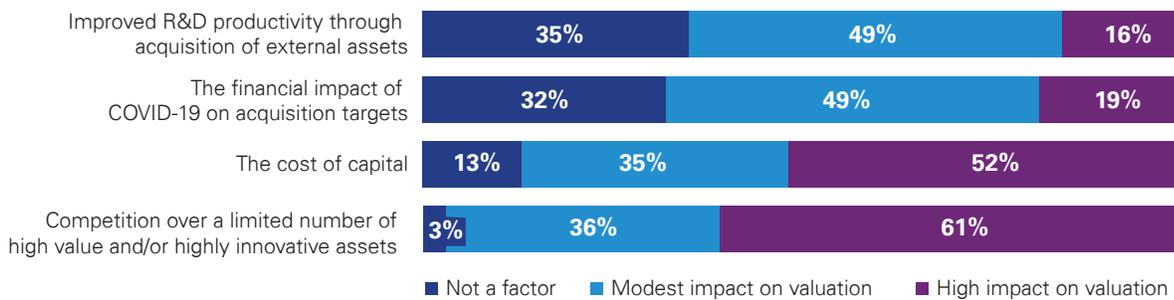
Source: KPMG, 2021 Healthcare and life sciences investment outlook; n=31.

²KPMG, “2021 Healthcare and life sciences investment outlook,” January 2021.

When we asked the executives what drove valuations in 2020, a large majority (61 percent) agreed that a primary driver was intense competition for high-value and innovative assets (Exhibit 4). This perspective from the pharmaceutical executives fits both our own advisory experience and our analysis of deal data, which shows growth in deals focused on innovation (e.g. cell and

gene therapies). Across the biopharmaceutical industry, companies must sustain innovation or risk significant revenue cliffs as patent protections expire. This inherent characteristic of the industry means that this acceleration of the competition for innovative assets, particularly first-in-class or second-in-class assets, will remain a major driver of the deal market.

Exhibit 4. Intense competition for innovation had the highest impact on valuations in 2020



Source: KPMG, 2021 Healthcare and life sciences investment outlook

As noted, pharma acquirers are relying more on creative deal structures to mitigate the risk associated with the acquisition of clinical-stage assets. In 2020, biopharmaceutical companies frequently used deal structures that defer deployment of capital into the future.

For example, all the strategic R&D collaborations we tracked involved smaller upfront payments with deferred, larger capital outlays contingent on the biotech target’s achieving specific development milestones.

Gilead invests \$300 million in cancer drug maker Tizona

In July 2020, Gilead Sciences acquired a 49.9 percent stake in Tizona Therapeutics for \$300 million. But the deal is potentially worth \$1.55 billion if Gilead exercises its exclusive option for a full acquisition (upon Tizona’s meeting certain milestones for TTX-080, it’s first-in-class cancer medicine).

Strategic R&D collaboration



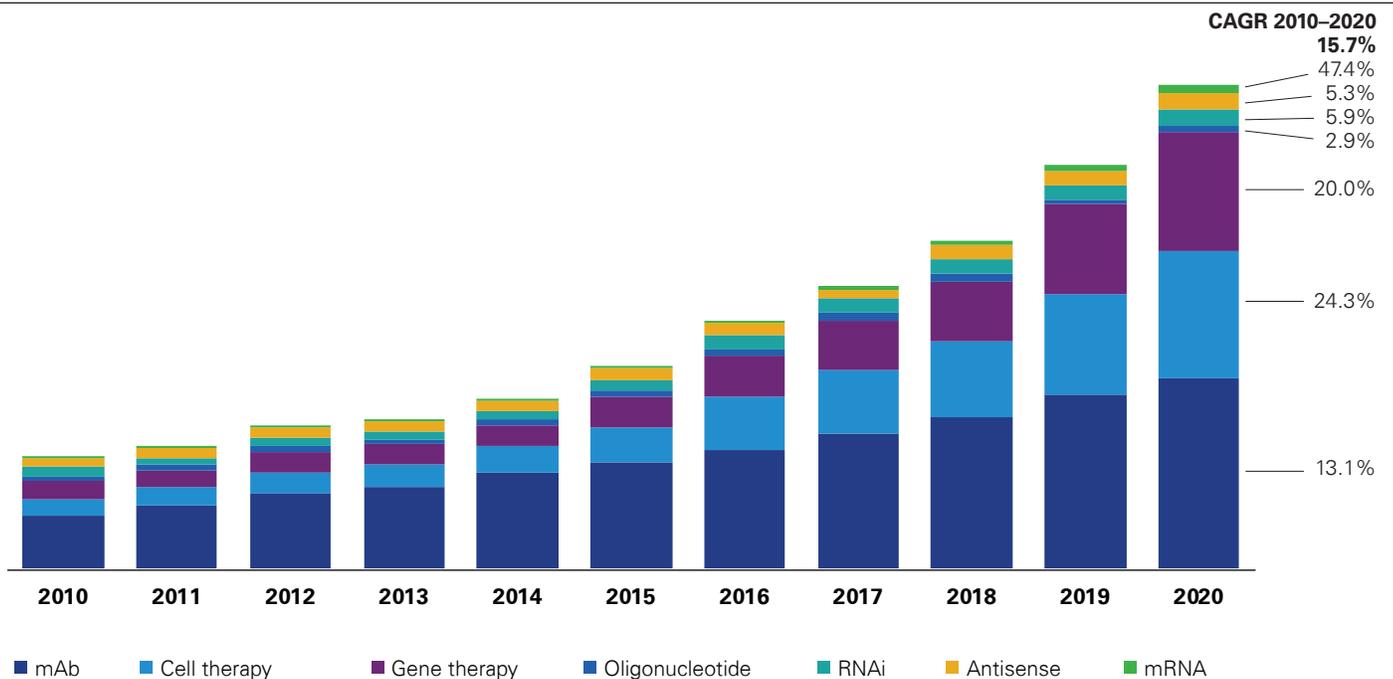
The Tizona cancer immunotherapy drug is investigational, and its efficacy and safety are unproven. But Gilead will fund Tizona’s R&D to accelerate development. Tizona expects to have sufficient data for Gilead to trigger its option for a full acquisition in the next two years.

Global R&D trends

Global deal trends mirror the trends in global R&D: The global pipeline is expanding rapidly in large-molecule and nucleic-acid-based therapeutics (Exhibit 5). Opportunities

across these areas continues to grow, creating a fertile ground for creative deals targeting early-stage assets and technology platforms that are still pre-proof of concept.

Exhibit 5. Large-molecule and nucleic-acid-based therapeutics are driving worldwide pre-commercial biopharma pipeline



Note: Includes registered, pre-registration, Phase III, Phase II, Phase I, and Preclinical assets.
Source: KPMG analysis; Informa: Strategic Deals 2020.

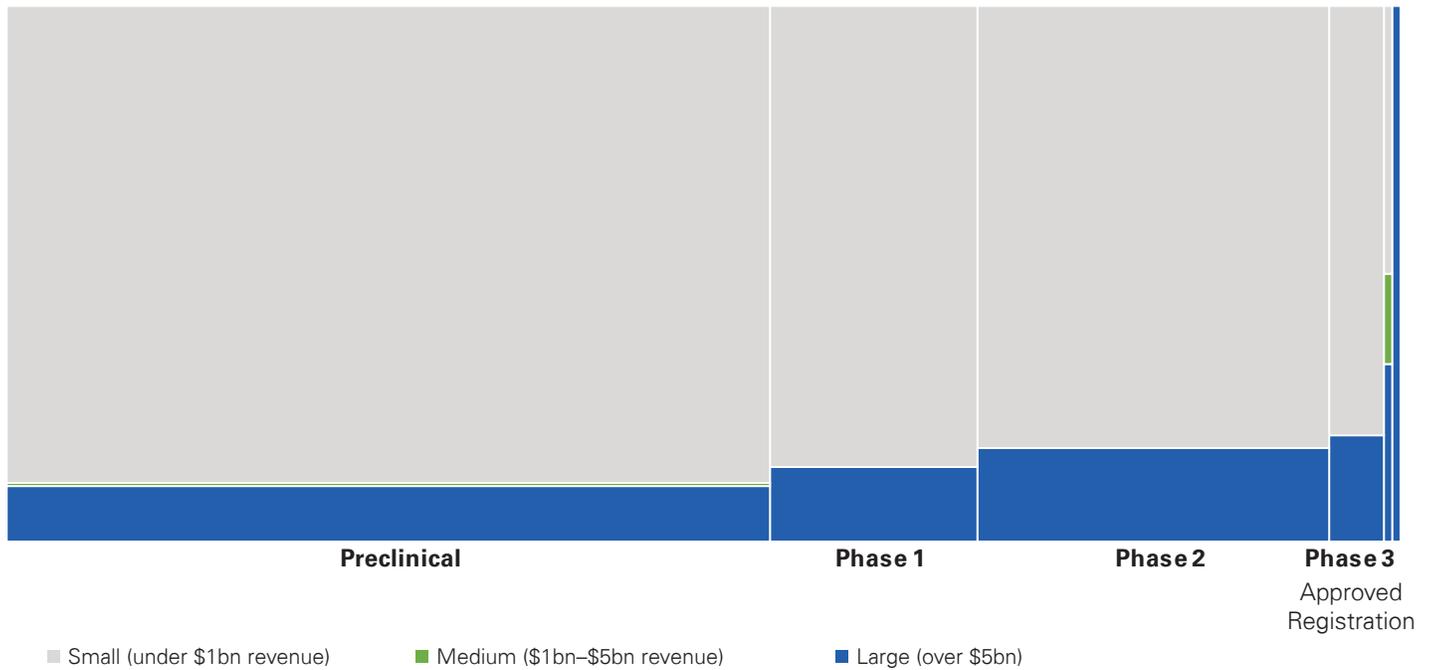


Over the past 10 years, growth across nucleic-acid-based therapeutics—e.g. RNA, oligonucleotide, and cell and gene therapies—has outpaced even the growth in large-

molecule mABs. A vast number of small biotechnology companies that are pre-revenue are powering this trend (Exhibit 6).

Exhibit 6. Small biotechnology companies are driving the cell and gene therapy pipeline

Cell and gene therapy pipeline by company size (2020)

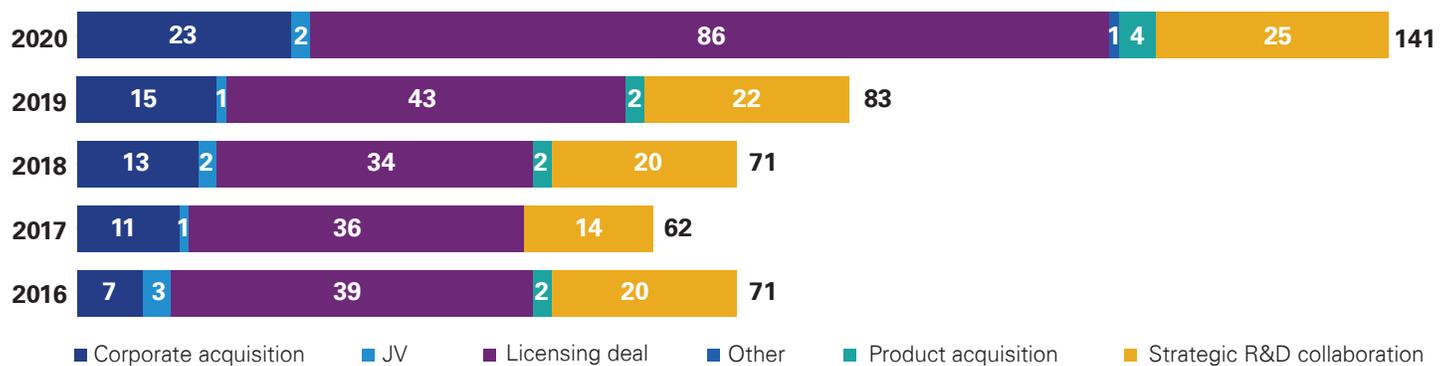


Source: BioMedTracker; KPMG analysis.

Deals in nucleic-acid technologies were an area of significant focus for the pharmaceutical industry in 2020 (Exhibit 7). The overall deal volume across cell and gene

therapies rose to 141 from 83 in 2019, largely driven by a significant growth in asset licensing deals.

Exhibit 7. Cell and gene therapy deals are growing rapidly



Source: KPMG analysis; Informa: Strategic Deals 2020.

Implications for 2021

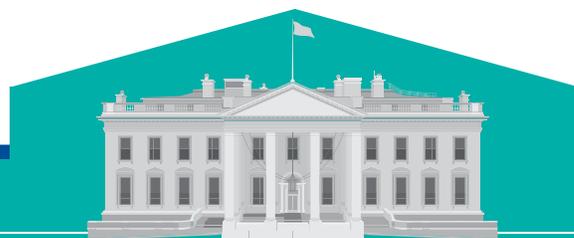
KPMG believes biopharmaceutical companies in 2021 will continue to vigorously compete for the most promising new technologies, especially in oncology, immunology, neurology and infectious diseases. Indeed, in our survey of biopharma executives, 52 percent indicated they would increase the number of M&A transactions by 10 percent or more in 2021. As in 2020, they cite the limited number of high-value or innovative targets as the biggest driver for their M&A plans. More than 20 percent of executives also expect valuations to increase by 10 percent or more in 2021 compared with 2020.

We believe that companies will continue to focus on creative deals for early-stage pipeline assets in 2021 and beyond, as companies seek to mitigate the risk of investing in early-stage assets. According to our survey, pharma leaders expect the top three types of investment deals will be:

- 1 Early-stage, pre-revenue biotech acquisitions;
- 2 Strategic partnerships; and
- 3 Creative equity or financing deals with milestones.

As Exhibit 6 shows, many of these opportunities exist in next-generation cell and gene therapies, where a significant proportion of innovation is coming from small biotech companies that have lead assets in either pre-clinical or phase 1 stages of development.

Another common theme in 2021 will be more divestments of non-core pipeline or lower-performing commercial products by large pharmaceutical companies looking to improve their capital positions. This emerging trend was seen in 2020 and early 2021 in a few transactions, such as Merck's decision to spin off its low growth assets to Organon;³ and AstraZeneca's divesting European rights to Crestor to Grünenthal for \$320 million, with future milestone payments of up to \$30 million. Larger companies will continue to assess the effects of the global economic downturn on non-core products and the implications for their aging assets.



Will there be a Biden effect?

Early signs from the Biden administration are pointing to a tougher regulatory stance on pharmaceutical deals. On March 16, the Federal Trade Commission launched a working group with competition authorities in Canada, the United Kingdom and the European Union to “update their approach” to pharmaceutical mergers.⁴ FTC Acting Chair Rebecca Kelly Slaughter explained that “given the high volume of pharmaceutical mergers in recent years, amid skyrocketing drug prices and ongoing concerns about anticompetitive conduct in the industry, it is imperative that we rethink our approach toward pharmaceutical merger review.” Her words could lead to a pullback in large acquisitions in the coming months—although companies will await the FTC's evidence for any anti-competitive behaviors in the industry.

Looking at the data on recent pharmaceutical deals, the initial view of KPMG is that the vast majority of them are focused on acquiring new capabilities and enabling innovation rather than impacting drug pricing. But this trend could be a factor in driving drug prices higher, because the industry is moving away from medicine for large populations in favor of smaller-population, specialty areas like cancer and other rare diseases. For pharmaceutical companies to pursue the development of these lifesaving, small-population therapies, they have to price drugs at high prices given the massive investment required in innovative R&D, new manufacturing capacity and supply-chain requirements. So policy makers will need to balance the goal of checking drug price rises for consumers with their interest in encouraging the pharmaceutical industry to keep developing innovative drugs.

³Merck press release, “Merck Announces Organon & Co. as New Company Name for Planned Spinoff,” March 11, 2020.

⁴Federal Trade Commission, “FTC Announces Multilateral Working Group to Build a New Approach to Pharmaceutical Mergers,” March 16, 2021.

Conclusion: Position to win

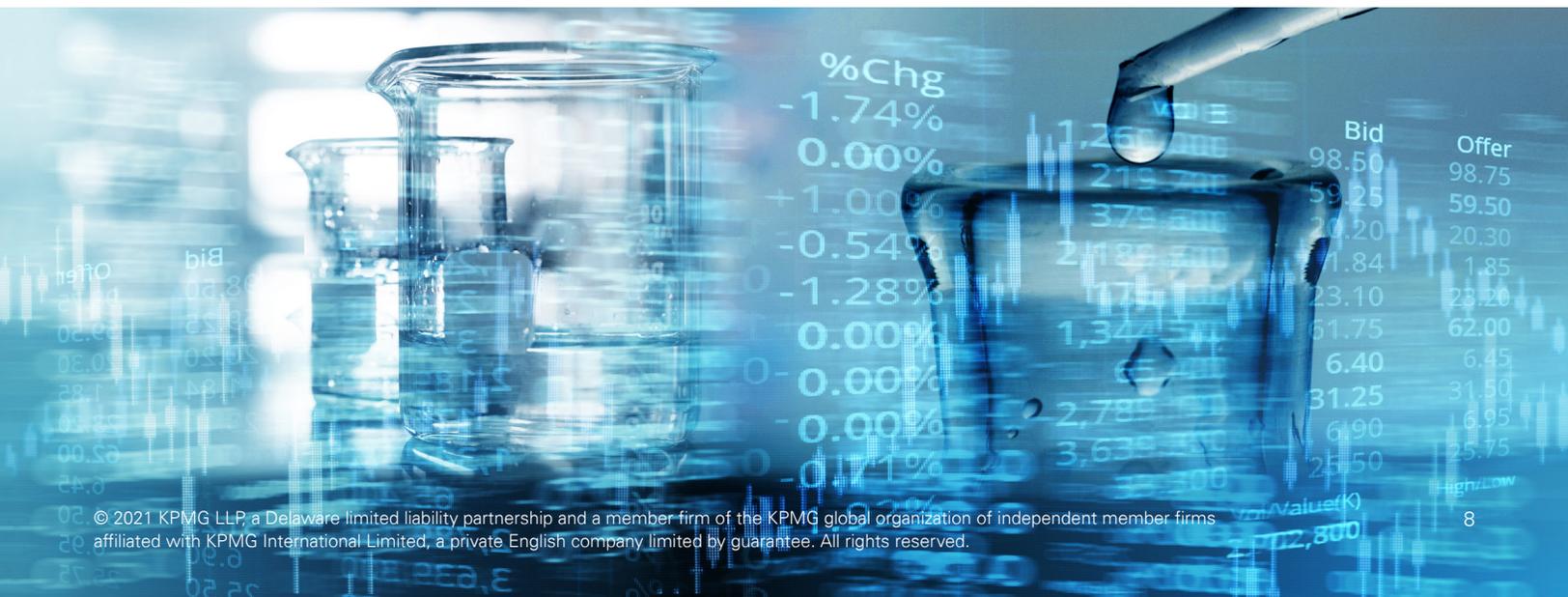
The competition for innovation pushes biopharmaceutical companies to pursue earlier-stage pipeline assets in order to tap into innovative options. The risks they face are compounded by the fact that these early-stage assets have lower probabilities of success, and many of the different emerging technologies are competing with each other for the same future commercial opportunities.

Predicting which technology will succeed or displace other emerging innovations is a gamble—the range of disruptive technologies in the global pharmaceutical pipeline is too diverse and it's too early to know which will succeed. This is driving many savvy pharmaceutical and biotech companies to spread their bets and invest across multiple modalities.

We also expect more deals using creative structures focused on milestone-based investments in clinical-stage assets and increasingly, on pre-clinical-stage ones. The fight for innovation is now a battle for rights to own a wider range of platforms and individual assets that are early in development.

Against this backdrop, here are the key takeaways for biopharmaceutical companies for deal making in 2021:

- **Adopt a diversified strategy focused on a wide range of technology types:** There is too much uncertainty about which modalities will be most successful, even as competition is driving the deal market to earlier-stage investments. To improve the likelihood of building a robust late-stage pipeline and future revenues, focus on deal strategies that de-risk investments with lower upfront payments and allow the company to make more, smaller bets.
- **Consider the possibility that another earlier-stage technology will win:** For a given disease, only one or two highly effective therapies under development in the global pharmaceutical pipeline may be commercially successful. Buyer beware.
- **Align the integration strategy with your growth strategy:** Integration has proven to be one of greatest challenges, especially for acquisitions of nucleic-acid technology assets. The wrong integration strategy can undo an expensive acquisition by losing the core technical talent necessary to realize the full value of the deal.
- **Be on the lookout for increased divestitures in 2021:** Larger pharmaceutical and biotech companies will seek to optimize their portfolios and may jettison non-core pipeline assets and aging products in non-core markets. In 2021, these divestitures may provide opportunities for creative private-equity firms and mid-market pharmaceutical companies.



How KPMG can help



The KPMG Healthcare and Life Sciences Strategy practice specializes in advising corporate, private-equity, and public organizations across all phases of the M&A lifecycle from deal strategy to diligence to post-close value creation. Our integrated, multidisciplinary approach provides clients with critical insights into value opportunities—and obstacles to value—at deal speed. Further, KPMG has a proprietary set of tools and methodologies to deliver data-driven insights.

We understand the regulatory, commercial, operational, and accounting complexities unique to the industry and provide a client-centric, integrated suite of services across the deal lifecycle to assist our clients in achieving business results.

Above all, we are former scientists and business professionals trained as strategy consultants, with deep expertise in clinical and therapeutic areas and extensive experience translating strategy into actionable plans.

Our healthcare and life sciences M&A teams have a long history of enabling mergers, acquisitions, affiliations, JVs, and partnerships for pharmaceutical clients

Where is the growth opportunity and who to target?

- KPMG has a dedicated life science team for assessing the landscape of emerging technologies and companies in order to prioritize a short list of company and/or asset targets for business development.

What's the investment thesis and target valuation?

- KPMG has specialized teams who can build the forecast models, valuations and the overall strategic point of view to justify future transactions.

To what degree are the financial, commercial and operational assumptions supporting the investment rationale?

- KPMG has life sciences specialists highly experienced in providing the full range of due diligence services: Financial Due Diligence, Commercial Due Diligence, Operational Due Diligence, Tax Due Diligence and HR Due Diligence.

How to integrate?

- KPMG has specialized teams dedicated to helping pharmaceutical companies develop their integration strategies and then operationalize the integration across all back-office and front-office functions.

How to optimize value creation opportunities for the portfolio?

- KPMG has strategists to help clients run sophisticated analyses to identify the optimal capital creation options to ensure that the financial and strategic goals of the core portfolio are set for growth and sustainability.
- Once the divestment options are identified, KPMG has specialized teams to support the operational separation of the entities across all major functions.



Authors



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Jeff Stoll is a Principal with KPMG, LLP and is the national leader of Life Sciences Strategy within the KPMG Deal Advisory and Strategy organization. He has more than 15 years of experience providing strategy consulting services to the biopharmaceutical industry and equity clients interested in life sciences sector acquisitions. He provides inorganic growth strategies, deal strategies, target investment theses, commercial and strategic due diligence and pipeline optimization. Jeff and his team have averaged 30 deals per year between strategic and equity clients for the past six years.



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Kristin Pothier is a Principal at KPMG, LLP and the global and national leader of Healthcare & Life Sciences Strategy within the KPMG Deal Advisory and Strategy organization. Kristin has 25 years of experience in strategy consulting and scientific and clinical research in the healthcare and life sciences industries. Her areas of focus are commercial strategy, growth strategy, and M&A for pharmaceutical, diagnostics, medical device, and consumer health companies, as well as investors and medical institutions worldwide. She is a leader in precision medicine and clinical diagnostics laboratory innovation, developing product and service strategies and operations with on-the-ground experience in North America, Latin America, Europe, Asia, India, the Middle East, and the Caribbean.



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Steve Sapletal is a Principal at KPMG, LLP and leads our Integration & Divestiture core offering across all industry teams. He is a seasoned leader and engagement partner with more than 24 years of experience leading large-scale programs in transaction advisory, strategy and operations consulting. He has led engagement teams through all aspects of the M&A lifecycle in deal strategy, operations and synergy diligence, integration and separation readiness, planning and post-close execution, operational carve-out transactions and transformational business process implementations. In his career, he has been involved in over 300 deals.



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Alasdair Milton is a Managing Director at KPMG, LLP and leader of the Life Sciences Strategy practice. He has over 15 years of experience in strategy consulting and market research specializing in growth, pipeline and in-line strategy, as well as commercial due diligence for both strategics and private investors. He has also worked with clients in the advocacy and non-profit spaces.



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Jeff Katz is a Senior Manager in the Valuation and Business Modeling Services practice at KPMG, LLP and member of the National Business Modeling Services (BMS) Leadership Committee. He specializes in the development and use of financial models to enhance critical business decisions typically as part of transaction appraisal, strategic options assessment, business planning or financial restructurings. He also specializes in the valuation of businesses, business interests, equity and intangible assets for critical financial and economic events such as strategic planning, M&A, restructuring and reorganization, litigation, purchase price allocations, tax reporting and U.S. GAAP/ IFRS financial reporting. In addition, Jeff is a core member of the Capital Markets Readiness practice specializing in equity story and business plan development to help companies maximize value and make strategic decisions throughout the capital raising process.

We would like to thank our contributors

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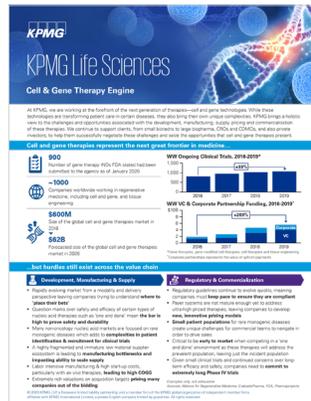
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