Pharmaceuticals & Medical Products Practice

Biopharma 2020: A landmark year and a reset for the future

The biopharma industry has shown what it can achieve when it works at its best. How can the industry build on this renewed sense of purpose in the years ahead?

by Gaurav Agrawal, Hemant Ahlawat, and Martin Dewhurst
More than any year in living memory, 2020 has tested the tenacity and ingenuity of the human spirit. The most devastating pandemic in memory has cost more than 1.5 million lives to date and produced the most profound economic shock since World War II. After almost a year, the COVID-19 pandemic is still raging across the globe, claiming more than a million new cases every other day. The search for vaccines and therapies has been the most urgent and widespread the world has ever seen.

With the biopharma industry finding itself at the center of global attention from the pandemic’s outset, it has had a remarkable year. The far-reaching changes that the COVID-19 crisis has brought will outlast the pandemic. How companies adapt to those shifts will determine their future success.

The recent news on COVID-19 vaccines has signaled a historic moment, but the aftermath of the pandemic will shape almost every aspect of peoples’ lives for years to come. Everyday interactions and social norms will change. So will expectations of governments and institutions. Livelihoods will need to be rebuilt. Lost lives will need to be honored.

Amid all the uncertainties, the biopharma industry has faced disruptions of its own. As in many sectors, it has prioritized keeping employees safe, made shifts to remote working, and minimized disruptions in global supply chains. At the same time, it has kept its innovation engines humming to find new treatments and cures and has taken steps to prevent drug shortages, secure supply chains, offer virtual support to physicians and clinical trials, repurpose existing drug therapies, and develop highly efficacious vaccines. And it has done all that within unprecedented time frames, under enormous scrutiny, and with intense external engagement.

The cumulative effect of those actions has been extraordinary. Over the course of the past year, the biopharma industry has effectively rewritten many of the implicit rules by which it operates. Now is the time for companies to step back and reflect on how much has changed—and on what new factors will shape their decisions and actions in the years ahead.

Three overarching trends
We believe that all biopharma organizations are likely to be affected by three overarching trends:

— Operating under a spotlight. The pandemic has shone a bright light on the biopharma industry, with the press and public avidly discussing the details of clinical trials, the specifics of vaccine supply chains, and the minutiae of regulatory approval. Public expectations of innovation, access to therapies, and responsiveness to medical needs have risen sharply—a change that may well be permanent. How the industry responds to such scrutiny will determine its license to operate in the coming years.

— Navigating protracted economic uncertainty. The global economic recovery from the COVID-19 crisis may be K shaped, with China and a few other markets recovering rapidly, while others are likely to continue to struggle for some time. Companies experiencing multiple dips as well as uplifts may be confronted with difficult decisions about resource allocation. As governments and payers count the economic cost of the crisis, healthcare providers of all kinds are likely to come under pressure to reduce costs while broadening access to their products and services.

— Embracing the flexibility and convenience of the digital world. Most facets of everyday life—from interacting with colleagues, going shopping, and seeing friends to watching a play or film—have moved online during 2020. Despite strong needs for a return to the satisfaction of connecting in person, socializing, and traveling, many changes will prove structural and permanent. Digital is now truly at the core of peoples’ lives as consumers, service users, patients, and clinicians.

The pandemic has spurred digital transformation to such an extent that some experts believe the biopharma industry has moved further in the last ten months than it did in the previous ten years.

Ten critical themes for CEOs to consider
The COVID-19 pandemic has accelerated and disrupted changes already underway in the biopharma industry—changes that all companies must now embrace in one form or another. Those that do so quickly and comprehensively will be best positioned for future success. Ten critical areas hold the greatest scope for differentiation:

1. **Harnessing the power of science.** The scale and pace of the global mobilization to develop vaccines and therapeutics to combat the pandemic serves as a demonstration of what the biopharma industry can achieve at its best, as well as a potent reminder of its core purpose. Unprecedented levels of collaboration, motivated by a sense of mission, are delivering extraordinary results. At present, 70 percent of Americans have a more positive view of the industry because of its response to the pandemic, but such perceptions often prove short lived. The lesson for leaders is to strengthen the sense of purpose and mission both within their organizations and through thoughtful external engagement.

2. **Adopting a new model for drug development.** Patients have seen the biopharma industry go from mapping the COVID-19 genome to rolling out the first COVID-19 vaccine in the space of nine months. Will they ever allow the industry to return to eight- to nine-year time frames for developing a new drug? Many organizations are experimenting with ways to accelerate historical development timelines by 500 days or more. That will require extensive engagement with regulators, peers, patients, and payers, as well as thoughtful deployment of the many digital and analytical technologies whose use has soared during the pandemic. Patient-centricity will be a cornerstone of the new drug-development model. By using patient outcomes to help define the course of a disease and the efficacy of its treatment, as well as employing design thinking to develop protocols and clinical-trial experiences, companies will keep patient convenience and well-being at the core of their activities. A key question for leaders will be how bold to be in accelerating key assets and programs. We expect a concerted focus as they capture and build on lessons learned from the pandemic.

3. **Surging in digital, data, and analytics.** The pandemic has spurred digital transformation to such an extent that some experts believe the biopharma industry has moved further in the last ten months than it did in the previous ten years. Examples are the rapid development of digital ecosystems and the use of digital channels to engage with physicians and principal investigators. Although companies had embarked on their digital and analytics journeys long before the pandemic, many are now showing greater ambition and a keener sense of urgency. How do they move from experimenting with pilots to creating visible impact across the enterprise? Which aspects of the value chain will they prioritize? The disruptions of the past year have prompted many companies to revisit their go-to-market models, while others are looking

---

to predictive analytics to help them optimize their site footprints or scale up their use of real-world evidence as part of a broader reimagining of the drug-development model. The increased focus on resilience has also prompted more companies to apply Operations 4.0 across their supply chains and operations. Success will require bringing together many aspects of technology, capabilities, and change management. How can leaders best build on the disruptions accelerated by the pandemic to crack the code of driving visible, sustainable impact?

4. **Investing in enterprise technology.** IT has been a prime enabler of many of the changes seen in 2020: expanded data sets, flexible access to cloud computing capacity (projected to account for 46 percent of IT spending in 2021), and huge shifts to remote working, virtual engagement, and online collaboration. Questions concerning technology and infrastructure are claiming much more attention from CEOs and top teams than they did even three years ago. Successful companies will learn lessons from recent months as they shape an agile IT plan around their business priorities. Turning their focus away from sunk costs in legacy systems designed for the pre-2019 era, they will embrace a vision of the technologies needed to support a future in which ways of working will be fundamentally different.

5. **Scaling up the next wave of innovation.** The unprecedented speed at which new and previously unproven platforms have been used in developing COVID-19 vaccines stands in stark contrast to historical industry norms. As encouraging proof points emerge for mRNA, other platforms (such as cell and gene therapies and “omics”) are likely to have a role in conquering debilitating diseases with high unmet needs—the focus of 750 ongoing clinical trials. Some observers argue that cell and gene therapies have reached the stage of maturity and potential that biologics attained in the early 1980s and could follow a similarly exciting path. Companies will need to determine how quickly and aggressively to shift their portfolios toward building an arsenal of potentially game-changing opportunities in newer modalities. In many cases, new platforms will call for new approaches to organization and capabilities that challenge traditional structures and functional models.

6. **Recognizing China’s growing importance in opportunity and innovation.** Despite recent geopolitical tensions, corporate confidence in China remains strong. With projected economic growth of 3 percent in 2020 and 8 percent in 2021 (compared with a contraction of 11 to 12 percent in Europe), China is expected to be in the vanguard of global economic recovery. Its market fundamentals are robust (notwithstanding the challenge from volume-based procurement as companies transition to more innovation-led portfolios), and its innovation now plays on the global stage, with 19 assets from Chinese biotech companies submitted in the past 12 months for review by the US Food and Drug Administration, European and US companies in-licensing from Chinese biotech companies, and a number of leading Chinese companies establishing themselves in the United States. As an illustration of the pace and scale of change, the market cap of biotech companies listed on the Hong Kong and Shanghai stock exchanges reached $217 billion in December 2020, from $12 billion in 2017. Pharma companies from Europe, Japan, and the United States will need to decide quickly whether, how, and to what extent they should participate in China’s therapeutic and digital-innovation ecosystems.

7. **Leveraging partnership as a competitive strength.** The COVID-19 pandemic brought proof, if proof were needed, of the value of operating through partnerships in activities across sourcing innovation, capturing precompetitive opportunities, building digital ecosystems, and shaping geographic footprints and portfolios. The world’s pharma industry has already acknowledged that the best innovation does not necessarily reside within its walls. Now

---

3 Across industries, 87 percent of companies are not planning to revisit their focus on China, according to surveys carried out by the U.S. Chamber of Commerce and EUROCHAMBRES.
is the time to think more broadly about the potential for collaboration. Biopharma companies should reflect on the lessons of 2020 and consider how boldly they could shape their partnerships in the future. Recent experiences testify to the power of holding closer dialogues with regulators, adopting new models for peer-to-peer collaboration, and participating in ecosystems, such as the burgeoning healthtech market.

8. **Shaping a compelling environmental, social, and governance (ESG) agenda.** Even before the COVID-19 crisis, boards were sharpening their focus on ESG topics. More than 40 percent of global assets are now managed through sustainable strategies, for instance. However, the crisis has shone a harsh light on the inequities that exist in modern society. Evidence that people with low incomes and members of minority ethnic groups have more limited access to medical care and are more likely to get infected with or die from COVID-19 has prompted the emergence of health equity as a topic in C-suite discussions and boardrooms. Inspired by pioneers (notably Unilever) in other industries, companies will need to make more fundamental commitments to tackling ESG issues. From energy and resource use to access to medicines to clinical-trial diversity to transparency, a focus on the ESG agenda will become mainstream. Industry leaders will need to embed ESG imperatives in every aspect of their strategies, operations, and day-to-day decisions.

9. **Playing a part in preventing future healthcare crises.** The pandemic has acted as a reminder that healthcare emergencies can quickly turn into economic and social crises. In the past 20 years, the world has seen outbreaks of five infectious diseases, including three coronaviruses, with pandemic risk. Looking forward, organizations around the world need to shape a model to address both potential new outbreaks and well-documented endemic diseases. Antimicrobial resistance, for example, is already claiming around 700,000 lives a year—a figure projected to increase to around ten million by 2050. Evidence that people with low incomes and members of minority ethnic groups are more likely to get infected with or die from COVID-19 has prompted the emergence of health equity as a topic in C-suite discussions.

Evidence that people with low incomes and members of minority ethnic groups are more likely to get infected with or die from COVID-19 has prompted the emergence of health equity as a topic in C-suite discussions.

---

business units that scale their participation in vaccines or other preventive-health arenas, and creating or contributing to partnerships and coalitions, such as the AMR Action Fund.

10. Rethinking talent and leadership. The pandemic has placed huge demands on companies, and many aspects of their responses—such as rapidly moving to remote working, organizing for speed, driving agility in decision making, embracing flexible forms of working, and finding new ways to nurture a sense of belonging—will continue to serve them well as they plot their future courses. The role of chief HR officers has never been broader—helping enterprises embed new ways of working, scale up new capabilities, build digital organizations, reskill workforces, and advance diversity and inclusion. Recent McKinsey Global Institute research found that more than 60 percent of management, technical, and scientific roles could be performed remotely.5 That prospect presents leaders with a host of questions to resolve. How do they offer cohorts of colleagues the best balance between remote working and time in the office? In a distributed world, which activities should they own, and which should they access from their ecosystems? How do they embed agile processes and real-time digital technology to support intensive collaboration at a distance? And how do they protect their organizations’ social fabric when physical presence is no longer a given?

Biopharma innovation has progressed at an astonishing rate in 2020. The lessons that companies learn and act upon from this extraordinary year may well determine their success for years to come.