

# Life Sciences Index 2024

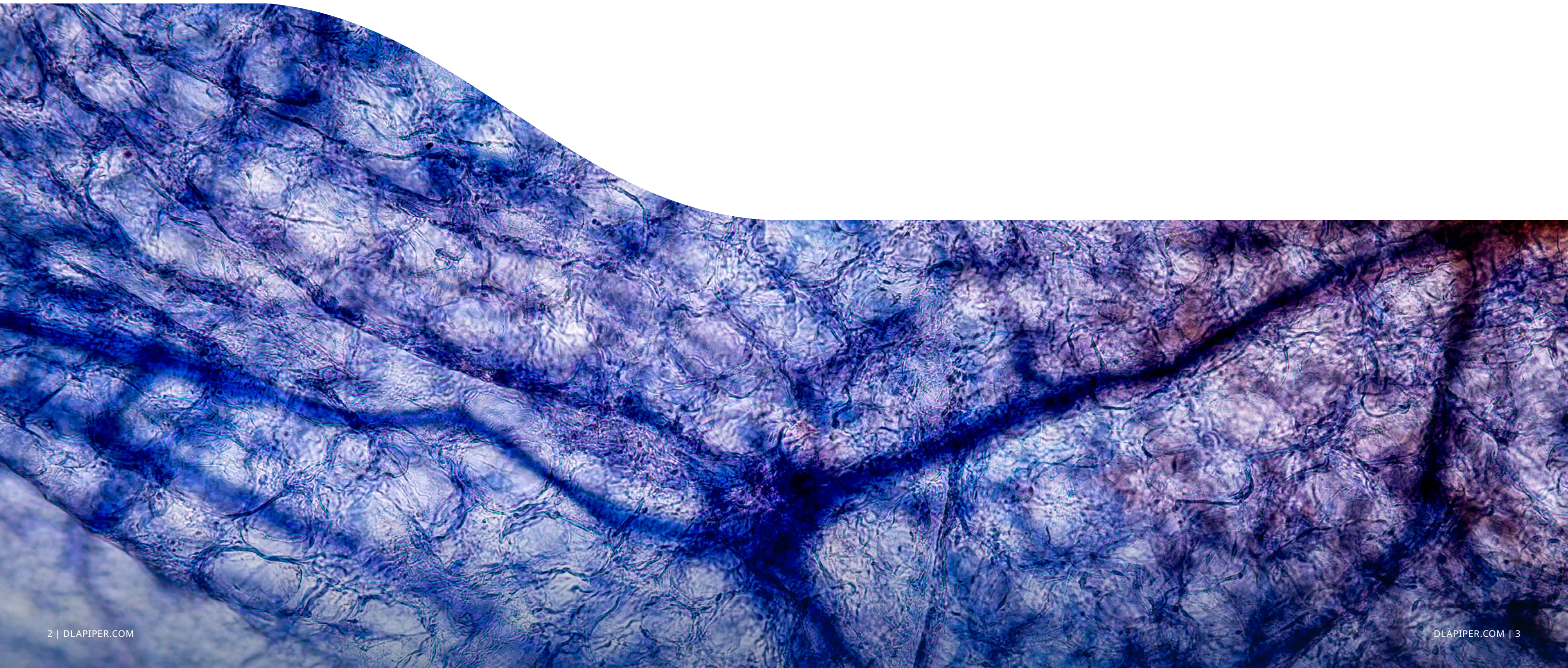
INNOVATION AND GROWTH



*The Life Sciences Index is a reference point for industry stakeholders to understand how their peers perceive innovation and growth in the life sciences sector, now and historically.*

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# 1. Introduction and key findings

Welcome to the first edition of the Life Sciences Index, a survey and study series about perceptions of innovation and growth in the life sciences industry. The survey explores the current drivers of – and barriers to – innovation and growth for the world’s largest biopharma and medtech companies.

We’ll conduct this survey regularly to track how perceptions change over time.

The Index tracks four specific themes: dealmaking; sustainability and ESG; intelligent technology; and the future of care delivery. These themes help us understand at a high level how businesses are approaching innovation and growth in the life sciences industry.

## Methodology and respondent profile

We surveyed 200 respondents from the top 100 innovative biopharma and top 100 innovative medtech companies according to 2021 global revenues. Respondents ranged from senior management to C-suite with roles across business functions.

See the Appendix for more on sampling, methodology and respondent profiles.

“The DLA Piper Life Sciences Index 2024 is designed to contribute to a better understanding of the sector by key decisionmakers and other stakeholders who are committed to fostering innovation and growth within the industry, and in turn helping those innovations get to the people and communities who need them the most. It is also intended to enable the legal teams supporting key business decisionmakers to provide more contextualised and sound legal advice within their organisations. More broadly, we hope that the report will spark discussion and debate amongst the global life sciences community.”

Marco de Morpurgo  
Global Co-Chair, Life Sciences

## Key findings



**Life sciences businesses have a positive outlook for 2024, with most survey respondents predicting revenue growth.**

Business functions are generally in growth and investment mode, but many are equally focusing on cost-cutting measures. Organic portfolio expansion is considered the best path towards innovation and growth in the near term.



**The overall Life Sciences Index Score for 2024 is 5.3.** This means respondents view the global life sciences industry as somewhat attractive for incentivising innovation and growth. The most attractive markets are the US, the EU and China.



**Pricing and reimbursement processes are having the biggest impact – both positive and negative – on innovation and growth**

in the industry, followed by economic and access environments. The only factors considered more of a barrier than a driver of innovation and growth were regulations on clinical trials, data privacy and cybersecurity. These factors are often the foundation for public trust and confidence in innovative products, treatments and devices.



**Just under half of respondents think life sciences deal activity will increase in 2024.** For larger innovators this will

be due to access to capital and pipelines that need filling. Respondents rated strategic alliances and partnerships for R&D purposes as the most important deal type for their businesses’ growth.



**Only 13% of respondents said sustainability and ESG are a priority for their business.** When asked how ESG-ready

their boards are, most said it’s a work in progress. Safety, quality and access to innovations are the most important ESG-related themes for life sciences business growth. Environmental-focused themes ranked least important overall.



**Just over a third of respondents say using AI and machine learning is a strategic priority for their business.** Given levels

of innovation in this space from those significantly engaging with AI and ML, we’re particularly interested in seeing how interest in these areas changes in future index surveys. The biggest barrier to wider adoption of intelligent tech is a lack of appropriate infrastructure to maximise its benefits. Respondents were also concerned about safety and accuracy when using intelligent tech in a clinical setting. The top three applications of AI in life sciences businesses are in marketing and customer engagement, business insights and clinical trial optimisation. When turning to AI’s application to life sciences products and services (healthtech), respondents said the biggest growth opportunities are in patient screening and diagnosis, followed by R&D.



We asked about the future of care delivery. **Most respondents agreed that in ten years, pharmaceutical and medtech innovators will be key stakeholders in delivering care to patients throughout their journey.** This

is being driven by closer collaboration between patients, innovators, providers, payers and non-traditional players across the care continuum. But respondents disagreed about care fundamentally shifting from treatment to prevention and wellness. Overall, most respondents said their businesses’ growth strategies are only partly prepared for expected future changes in care delivery.

# 2. Business modes

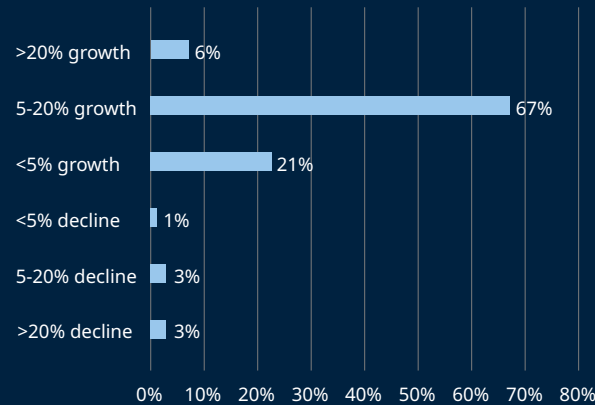
Almost all respondents (95%) expected their annual business revenue to increase compared to the previous FY. And the majority (67%) predicted 5-20% growth (Figure 1), a pattern that held true when broken down by company type. The life sciences industry seems to be more positive about its outlook, with macroeconomic conditions set to improve throughout 2024.

Overall, the industry expects significant innovation and investment across the sector and believes greater AI adoption across business value chains will help drive digital transformation and contribute to sector growth.

Respondents from medical device companies had a more positive outlook than those in pharma and biotech, with none predicting a revenue decline (compared to 7% of respondents each from pharma and biotech). This could be because of increasing confidence in medtech supply chain stability, as the subsector recovers from pandemic-related disruption and future-proofs its supply chains from potential large-scale disruptions.

Increased investment in manufacturing capacity means many medtech companies are better positioned to meet increasing demand for medical devices. This is partly driven by a recovery in surgical procedures off the back of the pandemic. But it's also because of the aging population and devices becoming smaller, smarter and faster.

Figure 1: How much do you anticipate your business' revenue to change in this financial year (FY) versus last FY?



The continually expanding world of connected devices is growing addressable markets and fuelling demand. Medtech is more immediately benefitting from AI by using it in end products and services.

Pharma and biotech respondents might be feeling the revenue squeeze more than medtech. We believe this is because of the cost of capital, concerns about R&D productivity and upcoming patent cliffs.

Among the 12% of respondents who said their business function was in cost-cutting mode (Figure 2), more biotech (14%) and pharma (12%) functions were in this mode than medical device functions (9%).

Overall, 43% of respondents said they were mostly in revenue growth mode. And 46% said their business function is focused on growth and cost reduction in equal measure.

In terms of what respondents' businesses currently consider to be the best path towards innovation and growth, 79% said portfolio expansion through organic (41%) or inorganic (38%) means (Figure 3). Expanding geographic footprint was the best path for 13% of respondents.

Larger life sciences businesses are shedding noncore assets, becoming less diversified and more targeted in terms of the therapeutic areas they address and the novel mechanisms of action they pursue. This requires a sharper eye on pipelines and portfolios to ensure growth.

For pharma, lead products losing exclusivity means their portfolios need to be continually plugged with innovation that will adequately offset related loss in revenue. Pharma innovation is increasingly left to smaller biotech players, with larger players licensing, partnering and acquiring to feed pipelines and portfolios with the latest advancements.

Figure 2: Thinking about your business function specifically, what mode is it in?

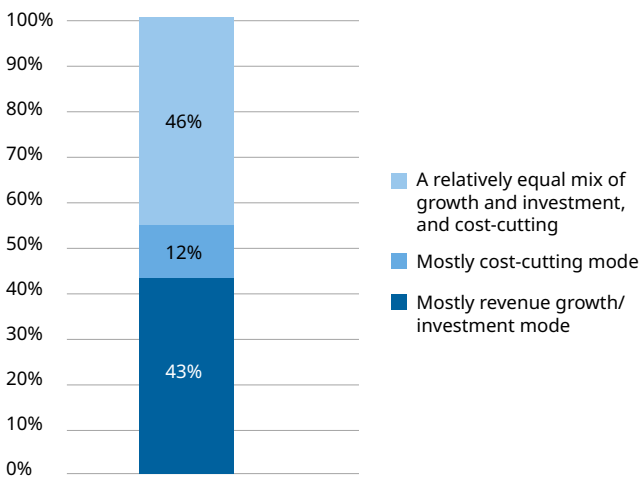
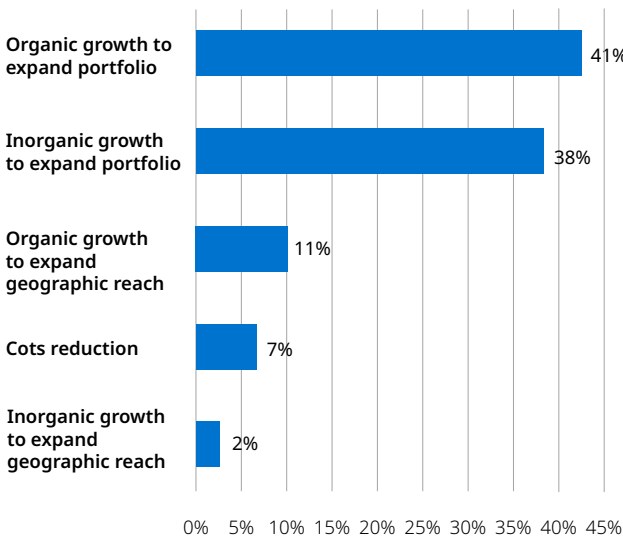


Figure 3: What does your business currently consider to be the biggest path towards innovation and growth in the near term?



“ At ResMed, we’re leaders in helping people sleep better, breathe better and get better care through our world-leading connected medical devices and digital health solutions that help improve quality of life, slow chronic disease progression, improve provider performance and reduce overall healthcare system costs. To fuel our long-term strategic goals, we continue to invest in market-shaping new product innovation and pursue complementary inorganic growth opportunities.”

ResMed



### 3. Fostering innovation and growth

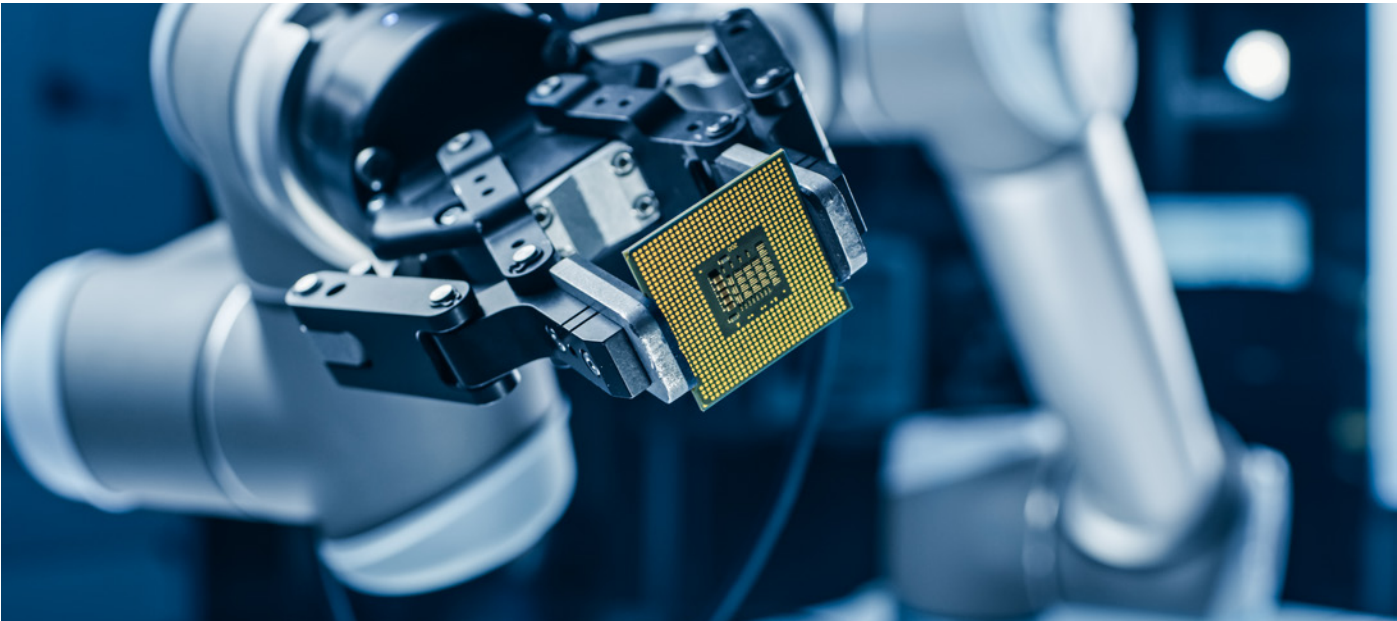
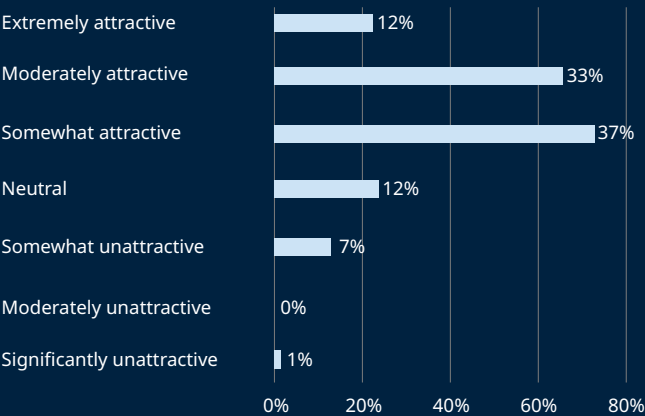
Most respondents – 7 in 10 – thought the current global life sciences ecosystem is either somewhat (37%) or moderately (33%) attractive for incentivising innovation and growth (Figure 4).

Based on the average of 200 responses to a 7-point Likert scale, the Life Sciences Index Score for 2024 was 5.3.



**Figure 4:** How attractive do you think the global life sciences ecosystem is right now for fostering innovation and growth?

Please rate on a scale of 1-7, where 1 is significantly unattractive, 4 is neutral, and 7 is extremely attractive.



We asked respondents to rate the attractiveness of specific life sciences markets and regions. Unsurprisingly they rated the US as the most attractive (6.1 on average; Figure 5). The US dominates the life sciences market, representing roughly half of global industry revenue. This is driven by a large and aging population, increasing prevalence of chronic diseases and a favourable prescription drug pricing environment. Many leading companies are based out of the US, the country invests heavily in R&D (as a percentage of GDP) and offers easy access to talent. It's home to world-leading innovation hubs in Boston, San Diego and San Francisco. And IP is often commercialised there thanks to its attractive funding environment, with many early-stage companies listed on Nasdaq.

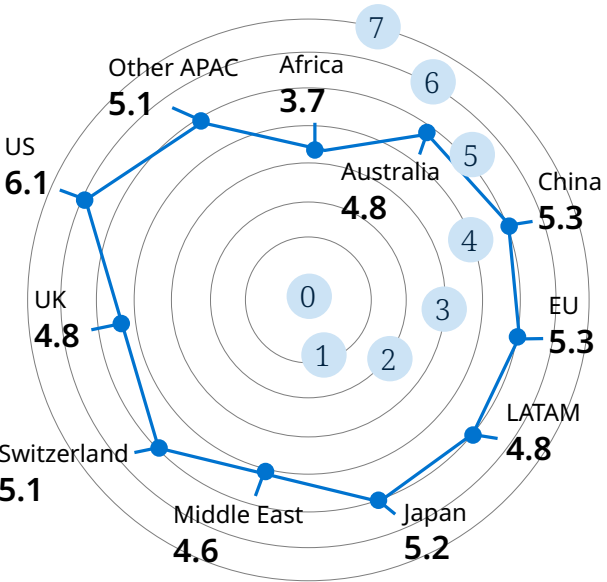
China and the EU were the next most attractive, scoring 5.3 each on average. China's life sciences market is fast-growing. It has increasing consumer demand, an enormous manufacturing capability and increasing investment in R&D, with three key innovation hubs in Shanghai, Suzhou and Shenzhen. It's the most attractive life sciences market in APAC thanks to strong policy support and huge untapped potential.

Ting Xiao, Life Sciences regional lead, Asia, says "the life sciences and healthcare sector is a strategic priority for China. Over the past decade, we've witnessed the shifting of Chinese industry players from traditional manufacturing/API suppliers to innovators. This evolution cannot be dissociated from the pivotal role played by globalisation in the regulatory environment, talent pool and sources of investment."

Regarding the EU, 56% of respondents said Germany (N=71) is the most attractive jurisdiction for life sciences. It's the fourth largest pharma market in the world and one of the most attractive for FDI, but like the UK, its attractiveness as an R&D hub has declined in recent years. Germany recently released a Strategy Paper 4.0 outlining how it intends to increase pharmaceutical investment in the country. It wants to improve clinical trial approval speeds, ensure faster access to medicines and reduce bureaucracy.

**Figure 5:** How attractive do you think the following regions or countries currently are, for fostering innovation and growth in the life sciences industry?

Please rate on a scale of 1-7, where 1 is significantly unattractive, 4 is neutral, and 7 is extremely attractive.





Kokularajah Paheenthararajah, Life Sciences lead, Germany, says “the country is still an internationally attractive base for clinical pharmaceutical research. But the German government’s new national pharmaceuticals strategy isn’t ambitious enough to restore the country as one of the world’s leaders in research, development, and production. We have to promote cutting-edge research, encourage young talent, and make Germany more attractive to experts from around the world.”

The UK lags behind the other major life sciences jurisdictions – the US, EU and Japan – at 4.8. FDI in life sciences is declining, the number of later-stage clinical trials initiated in the UK is falling (largely because of inefficient patient enrolment), and there’s limited government investment in developing its advanced therapy manufacturing capabilities for the long term. Despite this, the UK hosts world-leading life sciences academics and innovators and has strong healthcare data and AI capabilities. It also has areas with extremely diverse populations, which can be useful when running clinical trials.

Excluding Australia and China, which were rated separately, the rest of the Asia Pacific region was rated 5.1 on average, with India and South Korea the most attractive jurisdictions in this region (34% and 26% of respondents, respectively; N=77).

South Korea is an emerging leader in the industry and its government has designated life sciences as a priority area for growth. It has advanced R&D capabilities, strong IP protection and a robust regulatory framework. This has led to increasing domestic and foreign investment in life sciences in recent years, making it one of the top locations in the world for conducting clinical trials.

Ting Xiao said of the survey results, “I’m not surprised to see that Asia, especially China, is perceived as one of the most attractive life sciences markets globally. Asia is the most populated region in the world so there’s incentive for continuous growth and innovation in the sector.”

In Africa, the most attractive jurisdiction was South Africa (66%, N=59). And in Latin America, it was Brazil (78%, N=60). In the Middle East, it was the UAE, followed by Saudi Arabia (38% and 30%, respectively; N=56).

Governments in the Middle East are proactive in growing the life sciences industry through research grants, tax incentives and developing cutting-edge research and innovation hubs.

“A welcome product of the diversification strategies of the UAE and Saudi Arabian economies is that both have significantly increased their focus on innovation and R&D in the life sciences sector,” says Adam Vause, Life Sciences regional lead, Middle East and Africa.

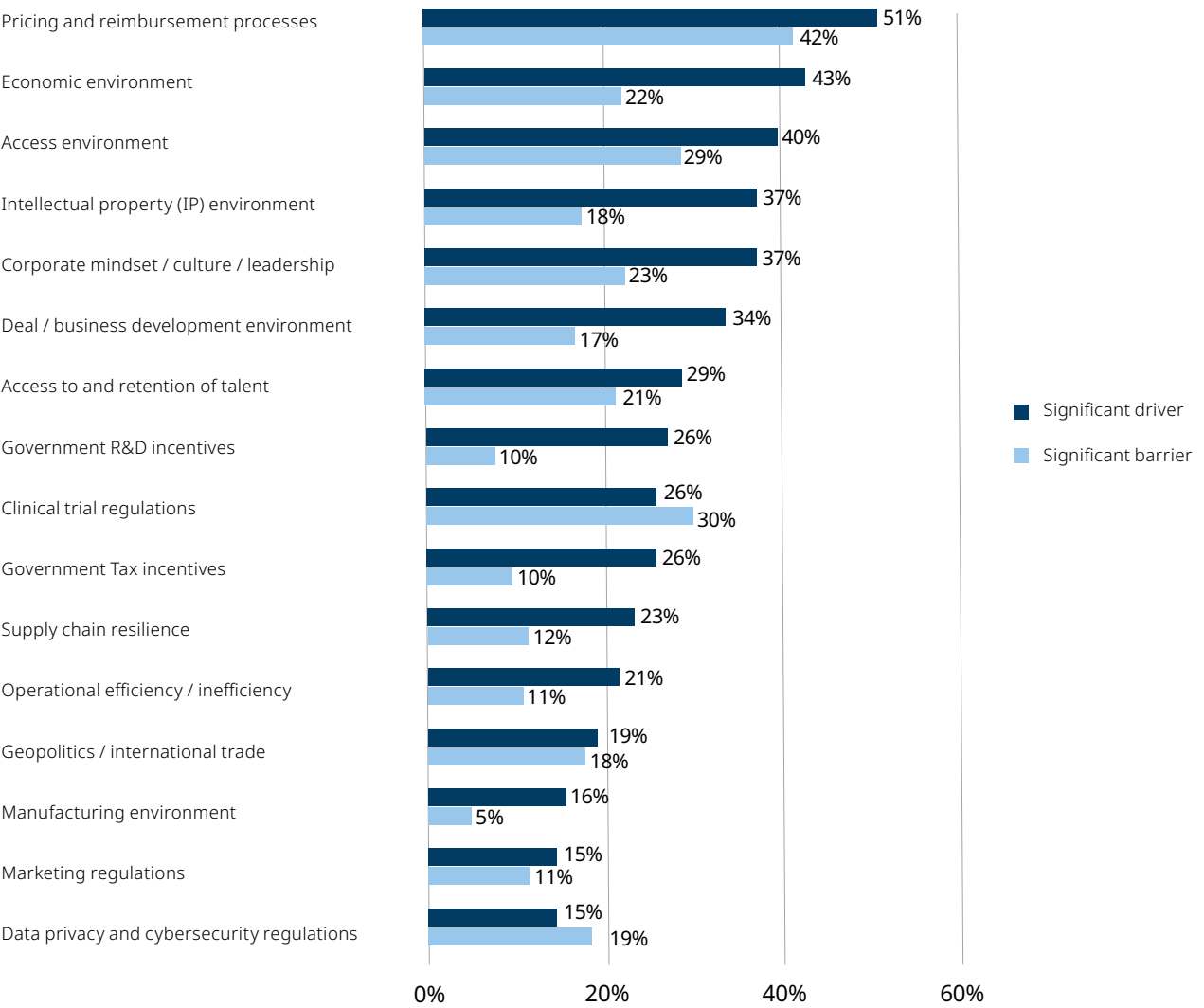
Respondents were asked if they wanted to mention and rate any other attractive jurisdictions for fostering life sciences innovation and growth, regardless of geographic region. Of 47 responses to this question, the most frequently mentioned market was Canada (32%) with an average rating of 5.1. Canada is currently the eighth largest pharma market in the world and is increasingly focused on novel medical devices and digital health to help drive growth. Canada is increasing its biomanufacturing capacity to better meet domestic demand for pharmaceutical innovations, and its pool of talent and low operational costs make it an attractive place

to invest. The Québec City – Windsor corridor is the second largest life sciences cluster in North America.

We asked respondents to assess various factors in terms of their ability to drive or impede innovation and growth in the life sciences industry (Figure 6). They identified pricing and reimbursement processes as the largest driver but also the largest barrier.

Pricing and reimbursement processes – and value dossier requirements – are a critical part of any innovation’s journey to market. But the process varies widely from market to market, making it a complex undertaking for innovators. Done right – by both the innovator and the payer – pricing and reimbursement can be a huge driver of an innovation’s success. But often these processes are a challenge for all stakeholders involved in ensuring an innovation is brought to market and made available to the patients who need it.

Figure 6: What do you think are the biggest drivers and barriers to innovation and growth currently?



“Innovation isn’t just identifying, researching and getting approval for breakthrough therapy. It’s also about the steps taken after approval to ensure that patients can access the innovation as soon as possible. This means completing the price and reimbursement process quickly and without unnecessary disruption, at a price that balances public health system sustainability with a reasonable return for the innovator. And ensuring safe and fast sharing of knowledge within the scientific community, so that the innovation is considered within the available treatments. Any effort by regulators to ensure an optimal approach to these principles, as well as a consistent one across different but similar markets and regions, will positively impact innovation and business growth. And business growth is critical to continuing the innovation mission of the pharmaceutical industry.”

Alfonso Gallego  
Regional Legal Lead, Southern EU  
Pfizer



Payers, innovators and policymakers are constantly looking for new ways to assess a medicine's value and paying an appropriate price for it, while minimising the administrative burden on the healthcare systems that use it. Innovative contracting approaches of recent years include success fees, annuities, and subscription models, but each comes with its unique set of benefits and challenges.

As of 2025, a pan-EU HTA (health technology assessment) process will be in place for oncologies and ATMPs (advanced therapy medicinal products). By 2030, it will expand to all patented drugs, IVDs (in-vitro diagnostics) and high-risk medical devices. The aims are to speed up access to new treatments, reduce duplication and harmonise clinical evaluation across Member States. Work is ongoing to finalise the exact assessment methodology for the JCA (joint clinical assessment). And innovators are watching this space closely, as there's a risk of a pan-EU HTA creating more challenges than it solves.

Respondents also said the access environment was a key factor for innovation and growth. Like pricing and reimbursement processes, regional and local access environments vary widely between markets and with varying degrees of success – particularly regarding health equity. In many markets, particularly across Europe, it's a postcode lottery – the quality of healthcare a person has access to varies depending on where they live.

Regional and local differences in procurement can be a challenge for innovators – often right down to an individual healthcare facility. This makes it hard for patients to get the right products quickly. And hard for innovators to get the right return on investment.

The US is a largely insurance-based market that doesn't provide universal healthcare. So a substantial proportion of the population can't access the latest life sciences innovations because of the high cost of coverage, though accessibility is expanding.

In lower- and middle-income countries in particular, many people still don't have access to essential medicines, and this is a core ESG focus for the industry.

In some major pharmaceutical markets, the access environment can be so unattractive that innovators leave voluntary schemes or agreements, withdraw products, or reconsider their presence entirely.

In 2023, AbbVie and Eli Lilly withdrew from the UK's Voluntary Scheme for Branded Medicines Pricing and Access (VPAS). And Bayer announced a reduction in UK investment because of VPAS, citing its negative impact on innovation and the company's ability to operate in the country.

VPAS was designed to maintain affordability for the NHS through a system of increasingly high clawback payments. It expired at the end of 2023. It's been replaced by the VPAG (Voluntary Scheme for Branded Medicines Pricing, Access and Growth), which will run from 2024 to 2028 and has been broadly welcomed by innovators.

In Germany, the 2022 GKV-FinStG Act reshaped pricing and reimbursement rules in the country. Several innovators – including J&J Innovative Medicine, Bluebird bio, BMS and Novartis – withdrew their drugs from the market, citing challenges posed by the new law.

Another driver respondents frequently mentioned was the economic environment. Given cost-constrained governments and inflationary pressures, it's surprising this didn't feature more highly as a significant barrier to innovation and growth.

“*Ultimately, clearer guidance from regulators and a better understanding of [data privacy] regulations by companies should help the industry find the right balance between innovation and the protection of fundamental rights in data.*”

**James Clark**  
International Life Sciences Data Privacy lead

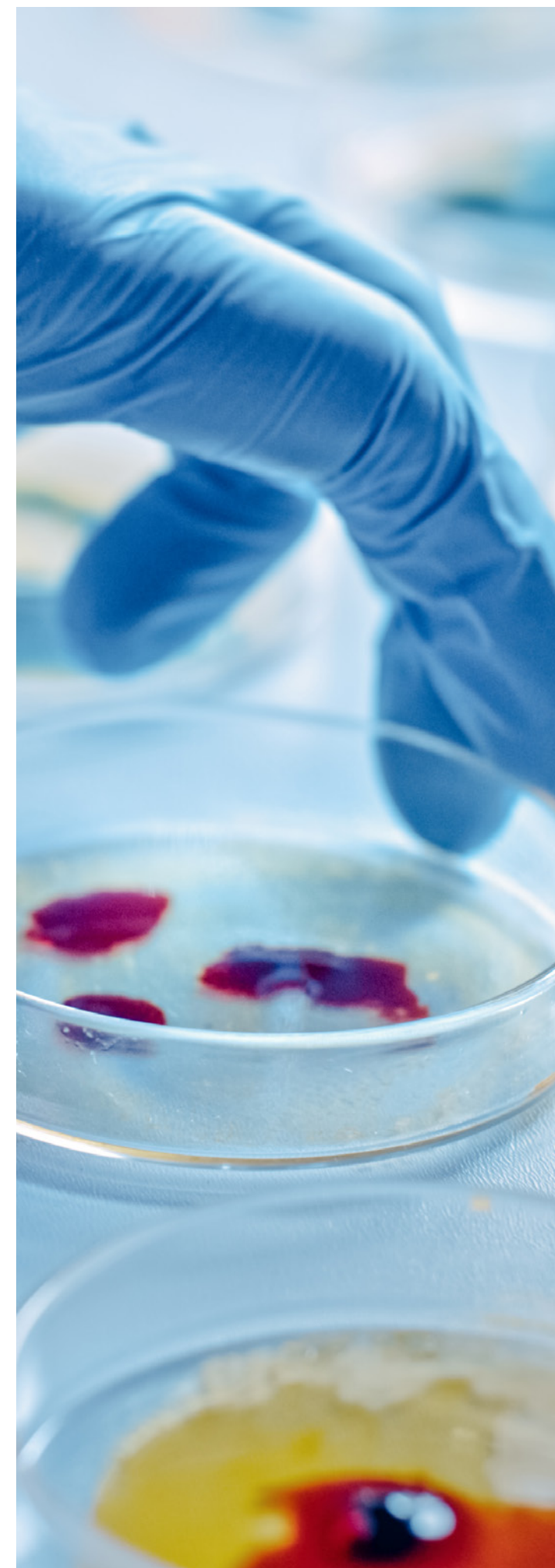
Many of the top biopharma and medtech companies' solid growth in recent years could be attributed to the pandemic and their critical role in fighting it. This is especially true for those involved in developing vaccines and therapeutics for COVID-19 prevention and treatment, and medical device companies who could easily increase production of ventilators. They find themselves in a cash-rich state, despite wider economic challenges, with money to spend on dealmaking. 34% of respondents identified dealmaking as a significant driver while half that number thought it was a significant barrier.

Given the current high costs of doing business, and pandemic- and geopolitical-related challenges of supplying goods, it was surprising supply chain resilience didn't feature higher up the list of drivers or barriers. It's increasingly viewed as critical to revenue generation, rather than something that simply drives business efficiency.

Only two factors were considered more of a barrier than a driver: clinical trial regulations and data privacy and cybersecurity regulations. As digitisation spreads and the accumulation of data continues, growing concerns about data privacy have led to a proliferation of data privacy regulations. And this isn't just in the traditional heartlands for such laws (eg Europe), but also in China, the Middle East and North America.

At the same time, concerns are increasingly being voiced that these laws – though often when improperly understood or overzealously executed – act as a blocker to the legitimate use of data for research and development in life sciences.

“In our view, there's no need for this to be the case,” says **James Clark**, “Ultimately, clearer guidance from regulators and a better understanding of these regulations by companies should help the industry find the right balance between innovation and the protection of fundamental rights in data.”





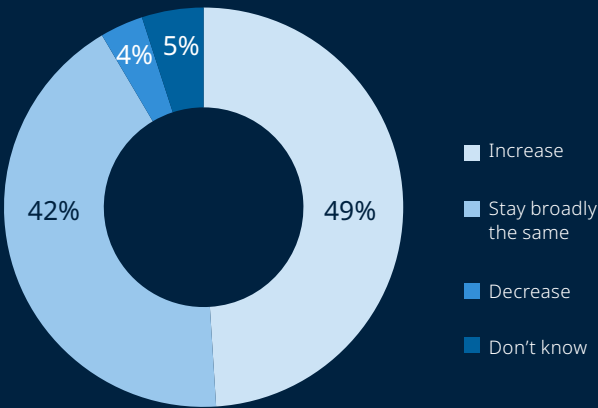
# 4. Dealmaking

“Dealmaking in life sciences has had a rollercoaster few years, with deal highs in 2019 followed by an unsurprisingly quiet 2020 due to the pandemic, then a big increase in deal value and volumes in 2021,” **says Victoria Rhodes, International Life Sciences Corporate co-lead.** “Both then fell in 2022 followed by some recovery on values in 2023, with volumes still down. But overall, despite the ups and downs of recent years, the market is largely optimistic for the next 12 months.”

Did our survey respondents agree? Just under half of respondents (49%) predict deal activity to increase. And 43% think activity levels will remain broadly the same as the previous 12 months (Figure 7). Respondents cite access to capital and pipelines that need filling as drivers for larger innovators. For smaller players, access to capital is still challenging, driving an opportunity for larger companies to acquire them at better prices.

Several respondents said business consolidation was a current trend in the industry, but activity will be tempered by an uncertain macroeconomic environment. Some respondents cited the US Inflation Reduction Act as increasing revenue pressure, driving deal activity.

**Figure 7: How do you think life sciences deal activity will change over the next 12 months?**



In terms of the division between biopharma and medtech, Victoria Rhodes says “biopharma continues to lead the deal tables on both volume and value with some large transactions in the biopharma space, including Pfizer’s USD43 billion acquisition of Seagen, the antibody-drug conjugate specialist, which was one of the largest deals in the industry since 2019. Oncology looks set to continue to top the priority list for buyers in 2024 alongside rare diseases and immunology.”

In terms of the types of deals life sciences businesses are currently prioritising, the highest priority deal type on average among our respondents was strategic partnerships or alliances for R&D purposes (Figure 8).

This is unsurprising given the overall industry trend towards greater collaboration. And it’s a way to partly outsource innovation without the higher commitments and risks of in-licensing – which was second place on average versus other deal types – and outright acquisition. It allows for greater flexibility in the way the pipeline is managed and allows the partners to benefit from different sets of capabilities without high acquisition costs or the challenges associated with post-deal integration.

Life sciences businesses are increasingly looking to streamline their portfolios and focus on specific therapeutic areas or mechanisms of action. Strategic partnerships allow the partners to more nimbly access components of other businesses than in a wholesale merger or acquisition. And they can de-risk their R&D by sharing the load.

Tuck-ins or smaller acquisitions of specific assets, platforms or business divisions of less than USD5 billion, complete the top four deal types that were highest priority for respondents’ businesses.

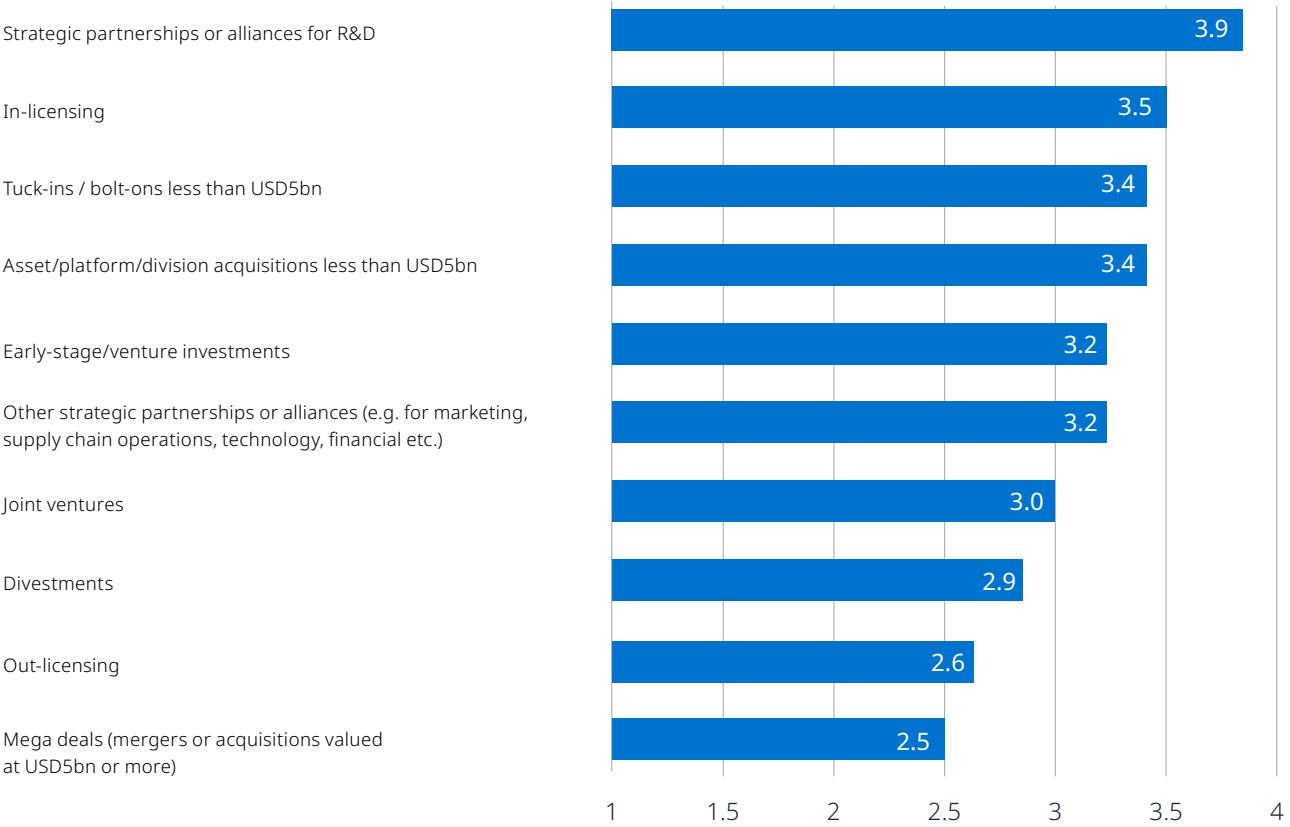
There’s been a lot of divestment activity over the past couple of years among the largest pharma and med device companies, for example consumer health divisions or disease-specific business units. But according to our respondents, divestments was one of the lower priority deal types. This suggests businesses might now be stabilising and looking for inorganic growth opportunities in line with their refreshed strategies.

“Many life sciences companies have prioritised their core focus areas over the past two-three years, divesting non-core assets and are now ready to move forward with growth plans. At the same time, many pharma companies are approaching the anticipated ‘patent cliff,’ meaning that investment in later stage products is likely to remain a focus. We also expect to see more discussions around AI, which doesn’t look likely to fall out of favour any time soon.”

Victoria Rhodes



**Figure 8:** Please rate the following types of deals on a scale of 1 to 5 in terms of how important they currently are for your business’ growth (where 1 is not being considered and 5 is a strategic priority). Average rating per deal type.



“ At argenx, co-creation is a fundamental pillar of our success in bringing new treatments to patients. We know that collaboration is the lifeblood of innovation, and we actively engage in collaborative work with the scientific and academic community through our Immunology Innovation Program, as well as with corporate partners through our business development platform”

Geoffrey Levitt  
Head of Global Regulatory Law  
argenx



# 5. Sustainability and ESG

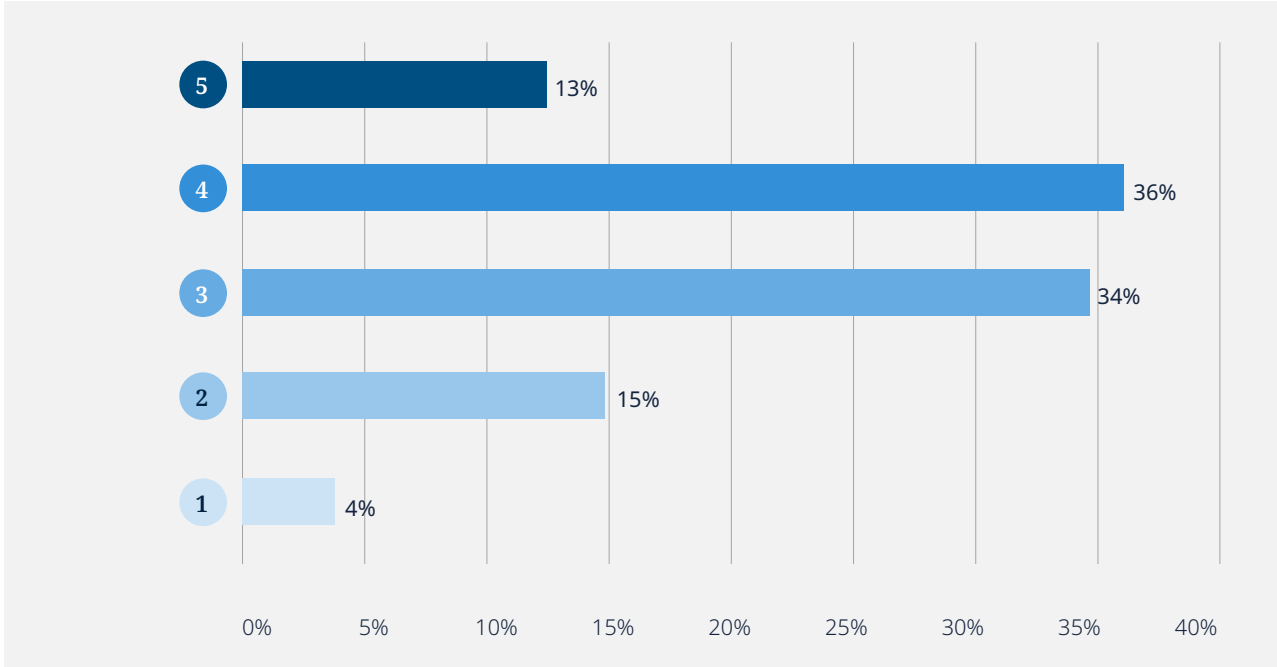
Life sciences companies are under increasing pressure to integrate ESG into their corporate strategy, operations and reporting.

Life Sciences CEOs frequently cite sustainability concerns as the top critical risk factor for their growth strategies. And investors, employees, patients and other key stakeholders are strongly considering ESG factors when choosing which companies to engage with. Holistically embedding ESG into their business models is crucial for life sciences companies to retain their licence to operate in the mid- and long-term.

So it's surprising that only 13% of respondents said sustainability and ESG are a significant priority for their business, forming a clear part of the business's strategy and with significant resource or capital allocated to it (Figure 9). We'll see if and how this proportion changes in later editions of the Life Sciences Index, as more and more businesses develop their approach to ESG and embed it into their business as usual.

**Figure 9: How much of a strategic priority are ESG issues for your business?**

Please rate on a scale of 1 to 5, where 1 is not a priority at all (no resource or capital allocated to ESG) and 5 is a significant priority that forms a clear part of the overall business strategy (significant resource and capital allocated to ESG).



We asked respondents to rank several ESG-related themes in terms of how important they are for business growth. Unsurprisingly, access to innovations and their affordability, safety and quality, topped the ranking (Figure 10).

Product access, safety and quality are core to the success of all life sciences businesses. So their ESG focus has been primarily on social considerations. ESG ratings providers assign social factors a much higher weight than environmental ones in their company-specific ratings. And access to medicines is increasingly used as a general benchmark for ESG investments.

Regardless of the wider discussion on the relevance of ESG for life sciences businesses, in our opinion these themes will continue to be key to their growth.

Business ethics was ranked third out of the seven ESG themes in terms of importance to life sciences business growth. Stakeholders – including regulators, policymakers and providers of capital – are increasingly focusing on business transparency and ethics, particularly in how businesses interact with healthcare professionals throughout their value chain. How life sciences companies respond to this increasing pressure from stakeholders can directly affect their reputation, their cost of capital and ultimately their license to operate.



**Figure 10:** Please rank the following ESG-related themes in terms of how important they are for your business growth, where 1 is the highest rank and 7 is the lowest.

Weighted averages per ESG theme. N=114.

Overall ranking	ESG theme	Weighted average
1	Product safety and quality	5.96
2	Access to and affordability of innovations	4.62
3	Business ethics	4.49
4	Supply chain compliance and resilience	4.34
5	Access to and diversity in clinical trials	3.39
6	Sustainable sourcing, product lifecycles and a circular economy	3.20
7	Net zero decarbonisation and optimisation of processes	1.98

Supply chain compliance and resilience ranked fourth overall. Across sectors, the majority of businesses’ ESG impacts occur in the supply chain. The COVID-19 pandemic and current mix of geopolitical, macroeconomic and environmental dynamics has shone the spotlight on the sustainability and resilience of life sciences supply chains. This is particularly true in the medtech world, which tends to have much more complex supply chains than pharma and where companies rely heavily on semiconductor chips. We’ve seen several instances in the past couple of years of medical device supply not meeting demand, largely driven by the pandemic-driven chip shortage but also volatile component costs. This affects patient access to medicines and devices. And supply chain compliance and resilience is likely to remain a critical strategic issue for life sciences companies going forward.

**Gareth Stokes, Co-chair, Global AI Group** says “stricter rules on the supply of high-end semiconductors and increasing economic tensions between the US and China are likely to affect supplies. The dual-use nature of many semiconductor and biotech products means supply chains will be affected by any ramping up in export control regulations.”

Access to and diversity in clinical trials came in fifth place. Clinical researchers, policymakers and businesses are becoming increasingly aware of the importance of enrolling trial participants that most closely represent the real-world populations that innovations are ultimately used in. Access to and diversity in clinical trials is all about increasing health equity. And this links closely to access to, and quality and safety of, medicines and devices. Innovators are increasingly using digital transformation and AI and ML to improve clinical trial access and diversity.

Environmental themes featured at the bottom of the rankings overall but are by no means a non-priority. It perhaps simply reflects the less direct link to business growth compared to product access, quality and safety.

In striving to decarbonise the economy, life sciences businesses are increasingly implementing commitments to science-based targets (SBTs). They’re also increasing energy efficiency and reducing waste, water consumption, carbon output, decreasing dependency on fossil fuels and increasing the use of renewables. Life sciences businesses hope these changes will lead to greater operational efficiency and ultimately reduced costs.

Markets are demanding greater visibility across product lifecycles. This drives change in how raw materials are sourced, and how products are designed, manufactured and packaged. It also affects how waste and hazardous material is treated. Businesses also have to look at how they manage wider environmental and social impacts relating to issues like emissions, plastics, water use, biodiversity loss, labour conditions and community impacts.

While life sciences companies have historically embraced the social pillar of ESG, data shows many have the potential to reap significant benefits by focusing more on environmental and governance pillars as part of their overall corporate strategy.

“ *Beyond resilience, supply chains of life sciences companies are increasingly expected to be sustainable, embracing principles relating to all three pillars of ESG.*”

**Moritz von Hesberg**  
International Life Sciences ESG co-lead

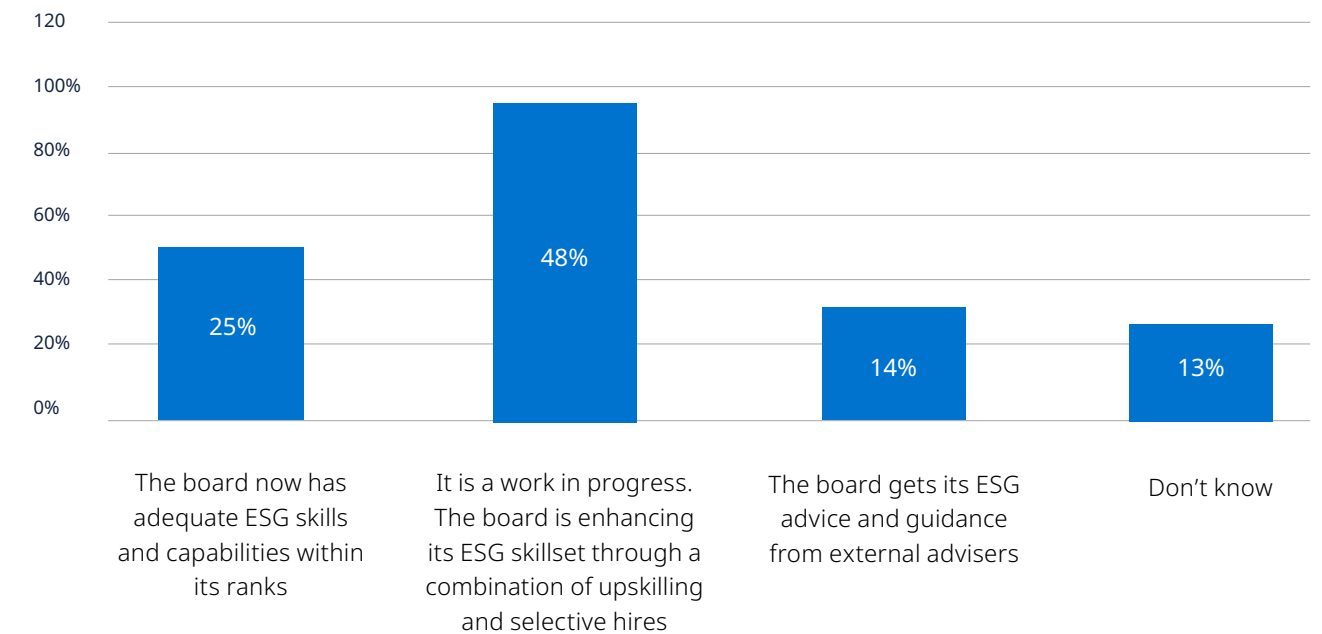




“ At Medtronic, we recognise the critical connection between climate and health. Climate change poses significant risks to public health, exacerbating issues such as air pollution, equitable water access and quality, oppressive heat and other extreme weather events, and the spread of infectious diseases. Conversely, addressing climate change presents an opportunity to improve health outcomes and create a more resilient and sustainable future. As the world’s largest medical device technology company, Medtronic has a vital role to play in protecting the planet, just as we protect the health of the people on it. Our innovations not only improve patient outcomes but also strive to minimise our environmental impact. Medtronic is committed to environmental sustainability through initiatives such as reducing energy consumption, minimising waste generation, increasing the use of renewable resources, integrating circularity and eco-design criteria into new products, and partnering with our suppliers and our customers to work towards a more sustainable future.”

Raman Venkatesh  
Chief Sustainability Officer  
Medtronic

**Figure 11: How ESG-ready is your board?**



We asked respondents how ESG-ready their boards are. Most (48%) said it’s a work in progress, with upskilling and selective hires being used to enhance boards’ ESG capabilities (Figure 11). One in four respondents said their board now has the ESG capabilities it needs.

“Given the scale of the ESG challenge, it’s unsurprising many respondents say they’re not there yet,” says Alex Tamlyn, International Life Sciences ESG co-lead and Chair, Boardroom Counsel, “but they’ve embarked on the journey and are properly underway.

“ To boards who believe that they’ve done what’s needed, we’d say: that’s admirable. But in a VUCA environment, is it credible? The necessary changes to address the regulatory and societal requirements and expectations alone are significant. To those who believe an ESG response can be outsourced, final responsibility for oversight and supervision of businesses sits with the directors: the board can delegate, but not abrogate.”

Alex Tamlyn





# 6. Intelligent tech


Incorporating AI into the healthcare and life sciences ecosystem will accelerate medical innovation, streamline research, enhance patient care and revolutionise drug development. The many use cases for AI in this sector include:

- 

**Accelerating and optimising discovery and development:**  
eg predicting molecule interactions, discovering new materials, optimising drug candidates, simulating clinical trial outcomes, *in silico* instead of *in vivo* testing
- 

**Clinical LLMs:**  
large language models that have been specifically trained or fine-tuned using medical or clinical data sets to create versions of AI chatbots that have deep and detailed medical knowledge and can exceed human doctors' performance on medical exams
- 

**Personalised medicine:**  
analysing vast biological datasets, AI algorithms can tailor medical treatment to individual patients, with this greater precision and personalisation improving efficacy and potentially side effects
- 

**Medical device innovation:**  
smarter, more effective and more targeted medical devices eg wearable technologies that monitor vital signs in real-time, to robotic surgical assistants that enhance precision
- 

**Diagnostic tools to support healthcare professionals:**  
greater accuracy and speed in detecting diseases in imaging, genetic tests, blood tests

These applications are just the tip of the iceberg. The integration of AI will herald a future where healthcare is more precise, targeted, rapid, effective and accessible. As AI continues to evolve, its potential to reshape the landscape of the life sciences sector is boundless, promising a new age of medical breakthroughs and innovation.

Just over a third of respondents (36%) said using AI and ML is a strategic priority for their business (Figure 12). It's quite surprising this isn't higher, but it might be because most businesses recognise the importance of using AI and ML, but many don't yet know how best to deploy it.

Gareth Stokes says "anecdotally, we know that those in the sector with well-developed AI programmes are already seeing significant productivity and efficiency gains from those initiatives, with a positive return on investment generally being realised. It will be interesting to see how results in this area trend in future index surveys."

We asked respondents about the biggest barriers to greater use of intelligent technology in the life sciences industry and broader healthcare ecosystem (Figure 13). Only 4% said there's a lack of capability, expertise or understanding, including a lack of capability in leadership to recognise its potential and understand how to invest in it, which often manifests

as a resistance to change. A biotech respondent added that there's broader lack of understanding in-house about "how AI can benefit the entire business end-to-end."

Respondents said the biggest barrier is a lack of appropriate infrastructure to maximise the benefits of using intelligent technology (55%). Life sciences businesses are sitting on huge amounts of proprietary data. They can pay to access mountains of third-party data. And they have a universe of web-based data to potentially scrape.

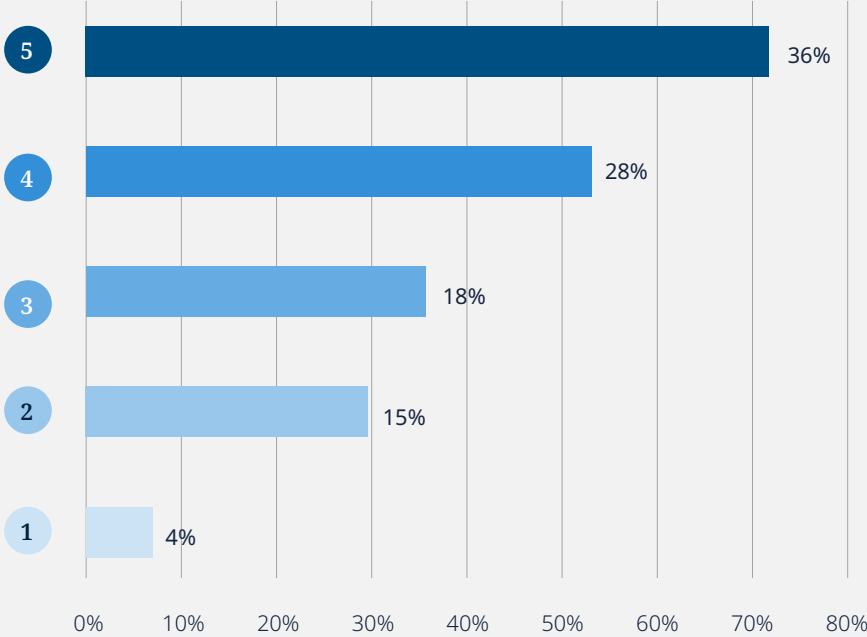
But the infrastructure needed to effectively bring it all together and analyse it in an effective way is not in place. IT systems used to store data are often highly fragmented.

The data is of many different types, both structured and unstructured. It's behind different paywalls and subject to different use restrictions. And organisations often don't have the intelligent tech necessary to meaningfully analyse it in appropriate timeframes.

"With an increase in cloud-based AI compute services on offer, and the big IT service providers rapidly expanding their offerings in this space, it seems likely these infrastructure and expertise challenges will be addressed by the market in short order," says Gareth Stokes.

**Figure 12: How much of a strategic priority is the application of intelligent technology (AI / ML) for your business?**

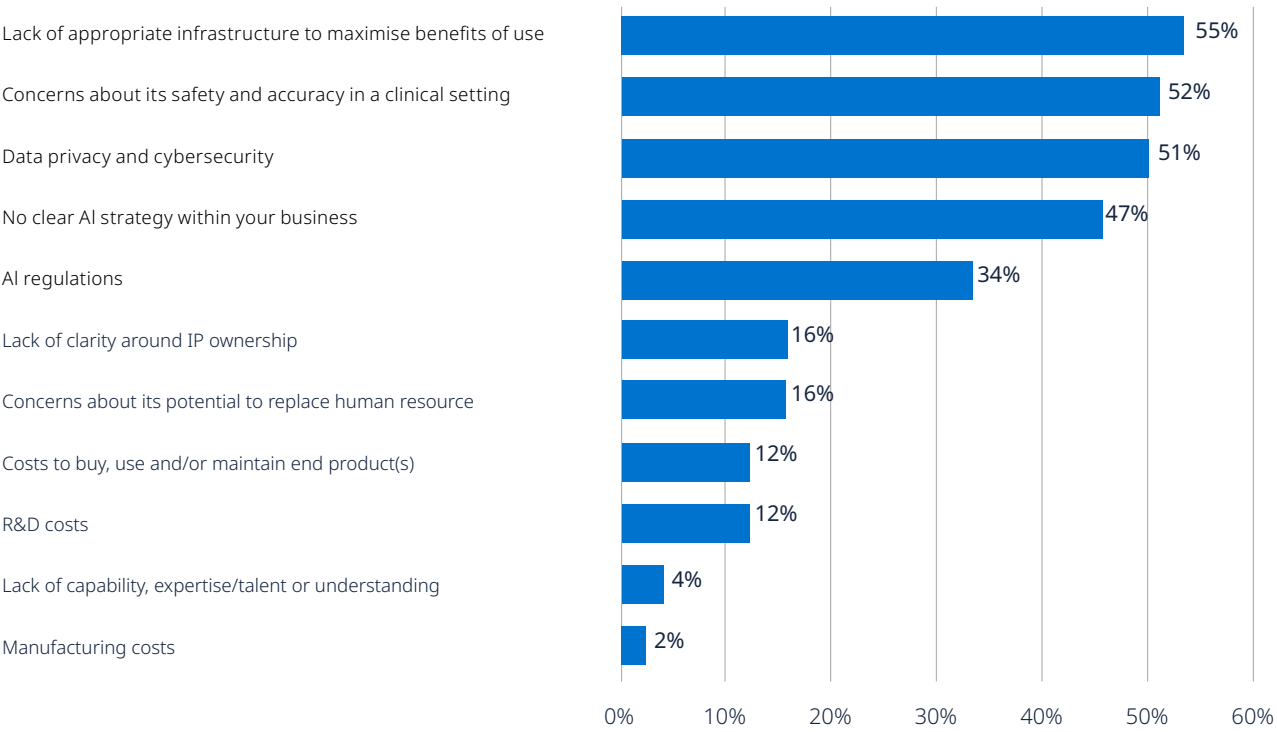
Please rate on a scale of 1 to 5, where 1 is not a priority at all and 5 is a significant priority that forms part of your overall business strategy





**Figure 13: What do you think are the biggest barriers to greater use of intelligent technology across the life sciences industry and healthcare ecosystem?**

% respondents who selected barrier as one of their top three



There's one key barrier to uptake that's highly specific to the healthcare and life sciences industry – concerns about safety and accuracy when used in a clinical setting (52% of respondents). How much can healthcare professionals rely on the recommendations made by intelligent technology and what is the risk to patient safety?

“We’ve already seen tremendous strides, with highly performant clinical LLMs that outperform medical students in many tests being released as open source products,” says [Gareth Stokes](#).

One notable example is Med42, released by M42 and G42 Healthcare. Ready access to systems like this begs another question: what measures are in place to ensure AI and ML helps rather than hinders effective point of care delivery? The extremely broad range of potential and actual applications of intelligent technology for healthcare organisations and life sciences companies has grown rapidly. But the shift in technological development has outpaced legal regulation. Globally, there's limited specific regulation about how this technology can be implemented. Though the EU's new AI Act will see any AI system with a safety function, which would encompass medical devices, regulated as “high risk” AI in Europe.

Others have expressed concerns that AI could allow a far wider population to experiment outside the more rigorously controlled environments of large biotech labs using lower cost “benchtop” CRISPR genetic tools. Legislators and regulators are concerned about the potential for AI-assisted actors to – accidentally or deliberately – release pathogens. It even featured in the US Executive Order on AI Safety in October 2023.

There will need to be a reconciliation of the commercial and technological applications of AI and the legal and regulatory regimes that underpin therapeutic goods and healthcare. This has the potential to affect all areas of law – from the more obvious (data privacy and security) to more indirect (questions about liability where AI tools are used in diagnosing patients). And ultimately laws and regulations will need to change to reflect the new status quo.

Another concern that transcends sectors but is particularly prominent in the world of healthcare and life sciences is how increased use of AI and ML affects data privacy and increases cybersecurity risks.

AI systems rely on large amounts of data to be properly trained, to operate in a live setting, and to continuously learn and improve. In a healthcare context, that data is frequently sensitive and subject to strict privacy laws.

“Developers and users of AI systems continue to grapple with the challenge of lawful data collection and the practicalities around anonymisation,” says [James Clark](#). “Meanwhile, a proliferation in connected devices in the healthcare context, while bringing huge benefits for healthcare providers and patients, also leads to a markedly increased cybersecurity risk.”

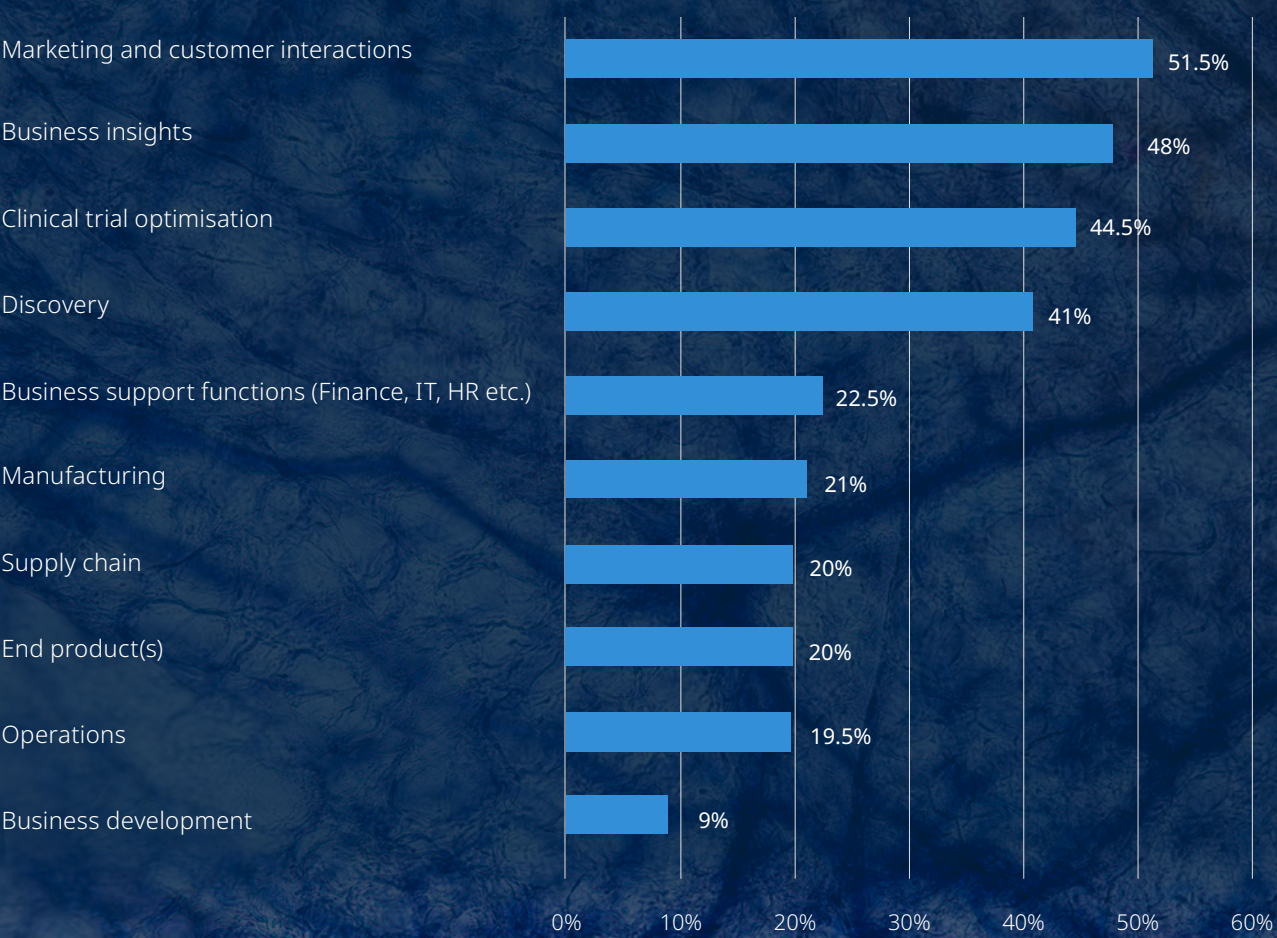
From the operating theatre to the wearable devices in a patient’s home, potential targets for hackers are now everywhere. And there's an increased imperative for businesses to be prepared for the operational, legal and reputational risks associated with an incident.

Despite these barriers to uptake in the broader healthcare and life sciences ecosystem, there are many parts of a life sciences business, if not all, that could benefit from using intelligent technology.

In which parts of a life sciences business is intelligent technology currently being applied the most? When asked to select their top three, just over half of respondents (51.5%) said marketing and customer engagement functions was the biggest application ([Figure 14](#)).

**Figure 14: In what parts of your business is intelligent technology being applied the most?**

% respondents who selected business area as one of their top three





Accessing customers at the best time, in the best way and armed with the most impactful messaging, data or other information, is critical to optimising customer experience, strengthening relationships, increasing brand integrity, and increasing business growth. Innovators are diversifying their marketing channels and investing in intelligent analytics to tailor how their marketing teams and field force interact with individual customers.

Making sense of the swathes of data collected by insights and intelligence teams, so they can support more effective decision-making across the business, was also one of the most common applications of AI and ML in respondents’ businesses (48%).

Taking the third spot was clinical trial optimisation. Clinical trials are hugely expensive and, for the most part, lengthy. There’s much to do to improve the efficiency of trial design, patient enrolment and trial implementation. AI can predict patients’ response to a candidate, helping to refine eligibility criteria, optimise the size of a trial, identify the best endpoints and discover subgroups.

It can help match the most suitable patients to trials and vice versa, and reduce recruitment bias which in turn improves participant diversity. It can create synthetic control arms; a digital twin of each patient based on historical control data, making trials more patient-centric, speeding up enrolment, and increasing the quality of the trial results. AI can also power adaptive clinical trials, ones that can be modified as they progress, based on the latest data – trial or otherwise – that emerge. Eisai used a phase II AI-driven adaptive trial to develop Leqembi (lecanemab-irmb), approved in 2023 for treatment of early Alzheimer’s disease.

Rather unsurprisingly, 41% of respondents said one of the largest applications for AI and ML in their business is in discovery. This ties in closely with clinical trial optimisation, highlighting the value AI and ML can bring to the R&D function, by helping to improve R&D productivity.

AI is applied to massive data sets, cross-referencing published scientific literature with clinical trial information, conference abstracts, public databases and unpublished data, to identify potential drug candidates in a matter of months, not the years it takes with more traditional discovery processes.

Insilico Medicine has an AI-discovered candidate with an AI-generated design, in phase II trials for idiopathic pulmonary fibrosis.

We’re seeing techbio companies emerge alongside biotechs; deep-tech, data-driven companies alongside those driven by biological processes.

At JPM Healthcare Conference 2024, NVIDIA, a global leader in AI computing, announced its generative AI platform for drug discovery and design, BioNeMo, is progressing to beta testing. Expect to see many more R&D partnerships between big pharma, medical device innovators, biotech and AI businesses, as the AI transformation in life sciences continues.

*“We are witnessing the transformative power of the collaboration between tech innovators and the healthcare industry. The emergence of health tech companies offering cutting-edge solutions, from digital trial platforms to AI-powered patient engagement tools, underscores the industry’s commitment to embracing technological advancements. These advancements hold the promise of not only enhancing patient outcomes but also streamlining processes and reducing inefficiencies within the healthcare ecosystem. By harnessing the collective expertise of both traditional and non-traditional players, we can unlock boundaries in healthcare delivery, ultimately improving access, efficacy, and sustainability for patients around the world.”*

**Lauren Haley**  
General Counsel  
Spring Health

Turning to the healthcare ecosystems many life sciences businesses innovate for, respondents were asked to highlight their top three use cases for AI-based healthtech products and services (Figure 15).

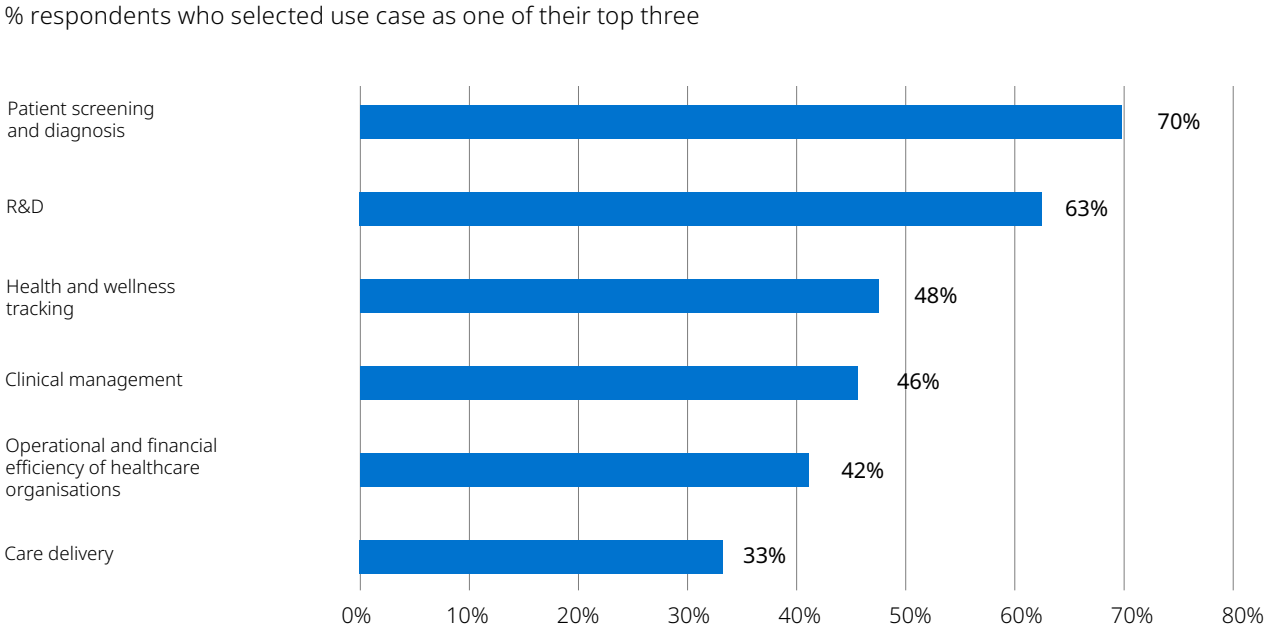
More than two thirds (70%) said patient screening and diagnosis is one of the largest opportunities for AI-based health technology. Healthcare systems burdened by the growing volume of patients with chronic diseases like diabetes, heart disease and cancer increasingly look to screening and diagnosis as a way to improve treatment outcomes and reduce the chance of developing a condition altogether.

For example, Galleri, by GRAIL, is a first-of-its-kind multi-cancer early detection (MCED) test that can screen for over 50 types of cancer from a blood sample, allowing asymptomatic detection of cancer and early-stage diagnosis. It uses next-gen DNA sequencing and machine learning to screen blood

for the presence of a cancer signal and predicts the likely cancer origin. If it shows a direct benefit in reducing cancer-specific mortality in clinical studies, it has the potential to transform the way we detect and treat cancer.

Just under two thirds (63%) of respondents also highlighted R&D as an area of big potential for intelligent healthtech, consistent with how respondents are using AI in their own businesses. As mentioned earlier, we’re seeing more collaboration between the life sciences and technology sectors as the latter develops AI- and ML-powered innovations to support academia and industry in their R&D efforts. These products and services include discovery platforms, digital-only trial solutions, protocol optimisation tools, AI-powered services for trial site operations and patient engagement solutions.

**Figure 15:** Which of the following categories of healthtech applications do you think represent the biggest opportunities for growth across the industry?





# 7. Future of care delivery

As we put the COVID-19 pandemic behind us, the life sciences industry has transitioned back to a mindset of future focus, from one of crisis management. But it's operating in a world of geopolitical tension, economic uncertainty and environmental pressure. We asked respondents how much they agreed with a set of statements about the future of care delivery – specifically, ten years from now. When they strongly agreed with statements, we asked how well-positioned their businesses are to capitalise on the opportunities they might bring (Figure 16).

“Manufacturers and other players operating in the life sciences sector are uniquely positioned to contribute to providing solutions in response to the unmet needs of patients, physicians, and the healthcare system. Patients’ needs are constantly evolving, and it has become imperative to approach patient care with a holistic approach in mind, supporting the life sciences ecosystem with innovative services that may help and ease the patient journey, especially in the case of complex and chronic diseases, which place the highest disease burden on populations globally.

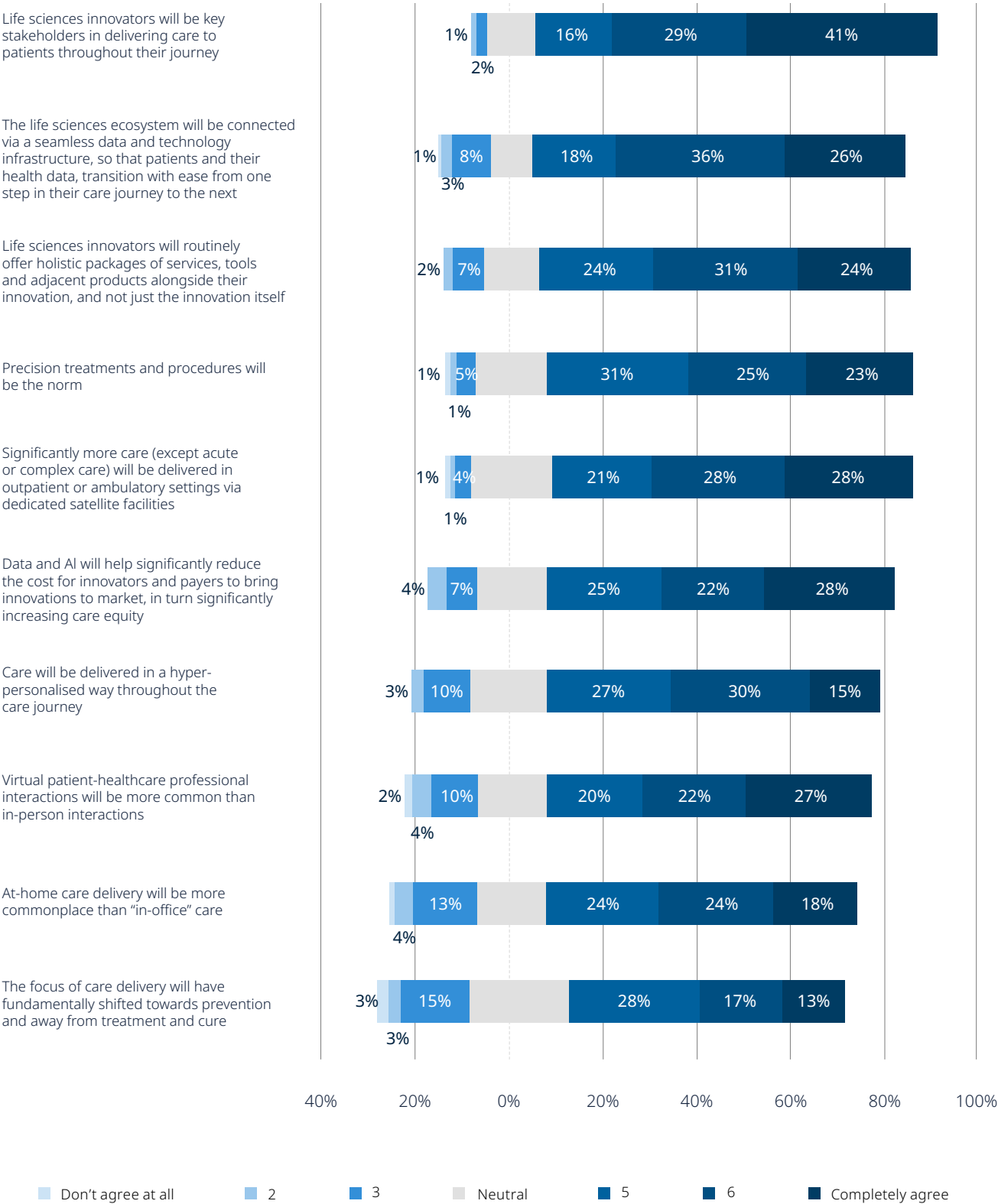
This additional support may consist of a variety of different tools and solutions: from the use of technology for the creation of apps and websites, to the creation of Patient Support Programs, to tailor-made programmes that support patients’ diagnostic and therapeutic pathways.

Technology is becoming increasingly important to elevate the standard level of care we are able to offer, and innovation-driven companies may offer a significant contribution to the evolution of the healthcare system, transitioning to digital tools and systems to monitor patients’ therapies, to the use of standardised and modern systems to engage with physicians and institutions. This may have the advantage of accelerating processes and potentially generating efficiencies and savings to be reinvested in services to patients and caregivers.

Ombretta Poli  
Associate Vice President, International Legal  
Eli Lilly

Figure 16: How much do you agree with each of the following statements about the future of care delivery?

Rate on a scale of 1 to 7, where 1 is don't agree at all, 4 is neutral, and 7 is completely agree. In 10 years:





Respondents agreed most (86%) with the statement that, in ten years, life sciences businesses will be key stakeholders in delivering care to patients throughout their journey. The industry is increasingly harnessing the power of the patient, their caregivers, and patient advocacy groups, to improve patient experience, clinical outcomes and ultimately business growth.

We're also seeing more partnerships with healthcare professionals and providers, and payers, to achieve the same. With these partnerships comes a deeper understanding of the challenges and needs of all stakeholders in the healthcare ecosystem, helping life sciences businesses identify opportunities where they can help fill those needs gaps in the best way possible.

But it's critical to form these partnerships early on and engage partners throughout the lifecycle of an innovation, not just at the point of market access and commercialisation. This greater collaboration in the ecosystem could mean that by 2034, pharmaceutical and medical device innovators are seen as true partners in care.

Linked closely to this notion of partners in care delivery is the increasing provision of holistic packages of support – additional products, services and tools – to help optimise the patient and healthcare professional journey from end to end. 79% percent of respondents agree that life sciences innovators will routinely offer such packages alongside their innovation, and not just the innovation itself.

To provide maximum value for money to healthcare systems and the patients they serve, it's now commonplace for innovators to look "beyond the pill." And with increasing use of and innovation in digital and intelligent technology, this trend will only accelerate.

Most (80%) respondents agreed that by 2034 the industry will be supported by a seamless data and tech infrastructure that will allow patients to move seamlessly from one step in their care journey to the next. Without the appropriate IT infrastructure, many goals of the healthcare and life sciences industry will be difficult to achieve.

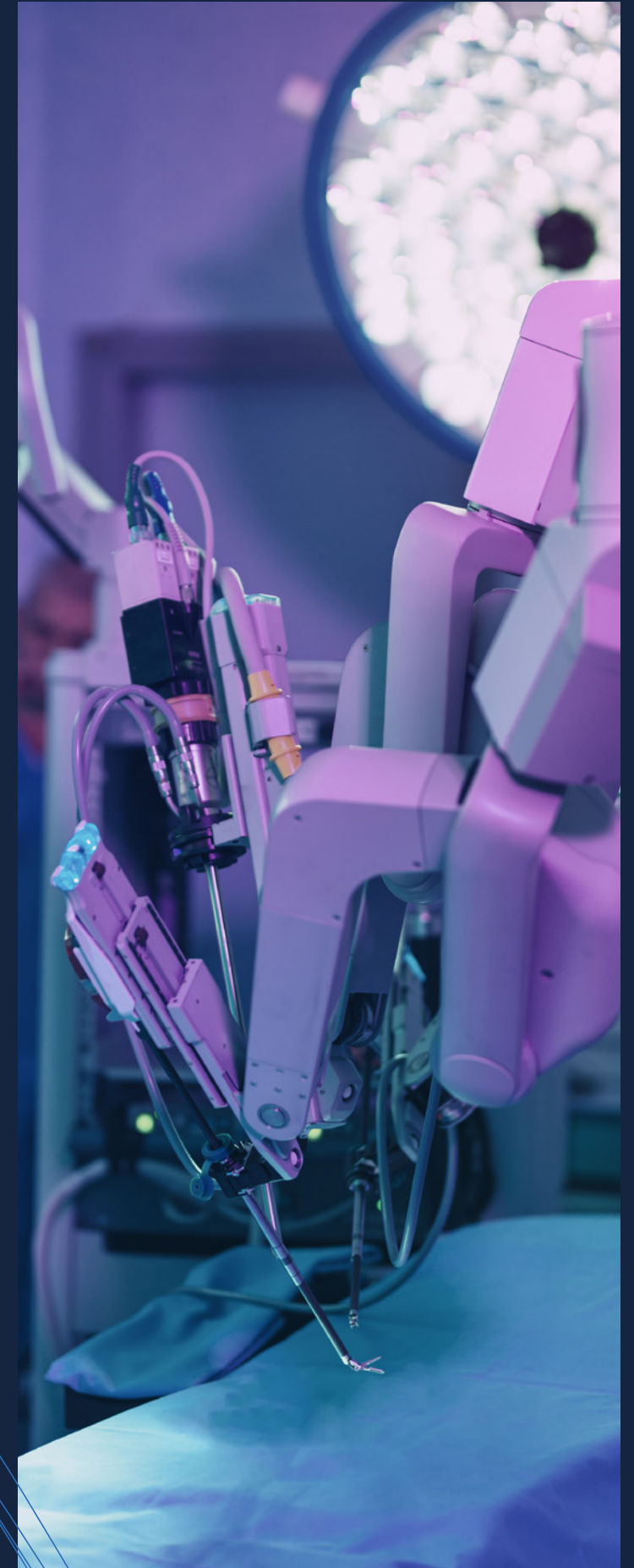
Unsurprisingly, another future-looking statement that respondents strongly agreed with is that precision treatments and procedures will be the norm. Innovators are already focusing on precision and personalisation. The more accurately we can treat the disease of a specific patient, the better the outcome for them.

Precision medicine targets very specific elements of a disease. Today, we're seeing most precision medicines in the field of oncology. And about half of all novel oncologics on the market have a companion diagnostic or a biomarker in their label.

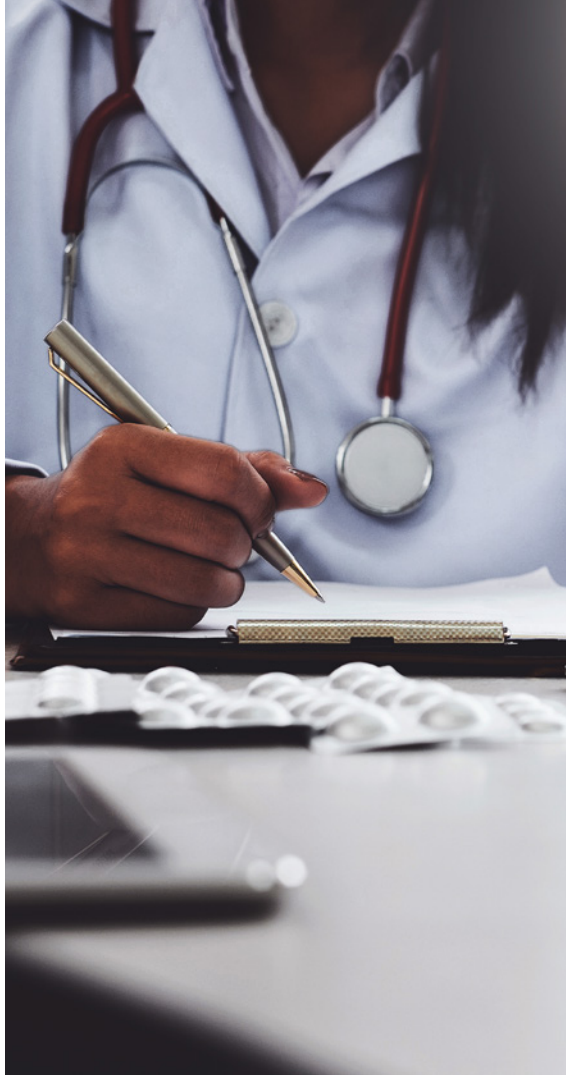
In November 2023, the UK's Medicines and Healthcare products Regulatory Agency (MHRA) was the first in the world to approve the first CRISPR treatment, an historic milestone for the technology and biotech industry. CRISPR is a gene-editing technology that precisely edits genes in a patient's cells to either switch them off or turn them on. It can also be combined with nanotechnology (or nanobots) to ensure accurate delivery of CRISPR to its target cells.

By 2034, we could see this kind of precision tech routinely used to treat and potentially cure a range of diseases, from cancer and rare autoimmune disorders, to viral diseases like HIV. Similarly, in the world of medical devices, we could see miniaturisation transform the way certain procedures are performed. Nanobots could replace invasive, time-consuming and painful diagnostic procedures, like *in vivo* imaging and biopsies, and perform delicate surgical procedures. Advances in next gen sequencing are propelling us through an "omics" era and towards data-driven precision medicine.

While the entire industry agrees that care delivery needs to shift from one focused on treatment and cure, to one dedicated to wellness and prevention, the lowest proportion of respondents (59%) agreed that we will be there by 2034. The paradigm shift is a big ask, and one that requires a huge change in mindset and enormous levels of investment across the ecosystem, from policymakers, governments and their healthcare systems to innovators, manufacturers and the general populations they serve. It's a collective effort reliant on close alignment and collaboration.







“Nowadays, patients walk around with thousands of data points on everything they interact with, their devices, medical records, medical imaging, genetic testing, and more. Our products, services and solutions touch nearly every part of the care pathway - from screening and diagnosis to treatment to monitoring. Our vision for the future is precision care; through integrated clinical care, connected technology, and data across the patient journey to create insights for better, more targeted, more individualised patient care. This will help clinicians give their patients personalised and targeted care that is efficient and high quality, leading to better clinical results and improved overall patient experience.”

**Elie Chaillot**  
President & CEO  
GE HealthCare International

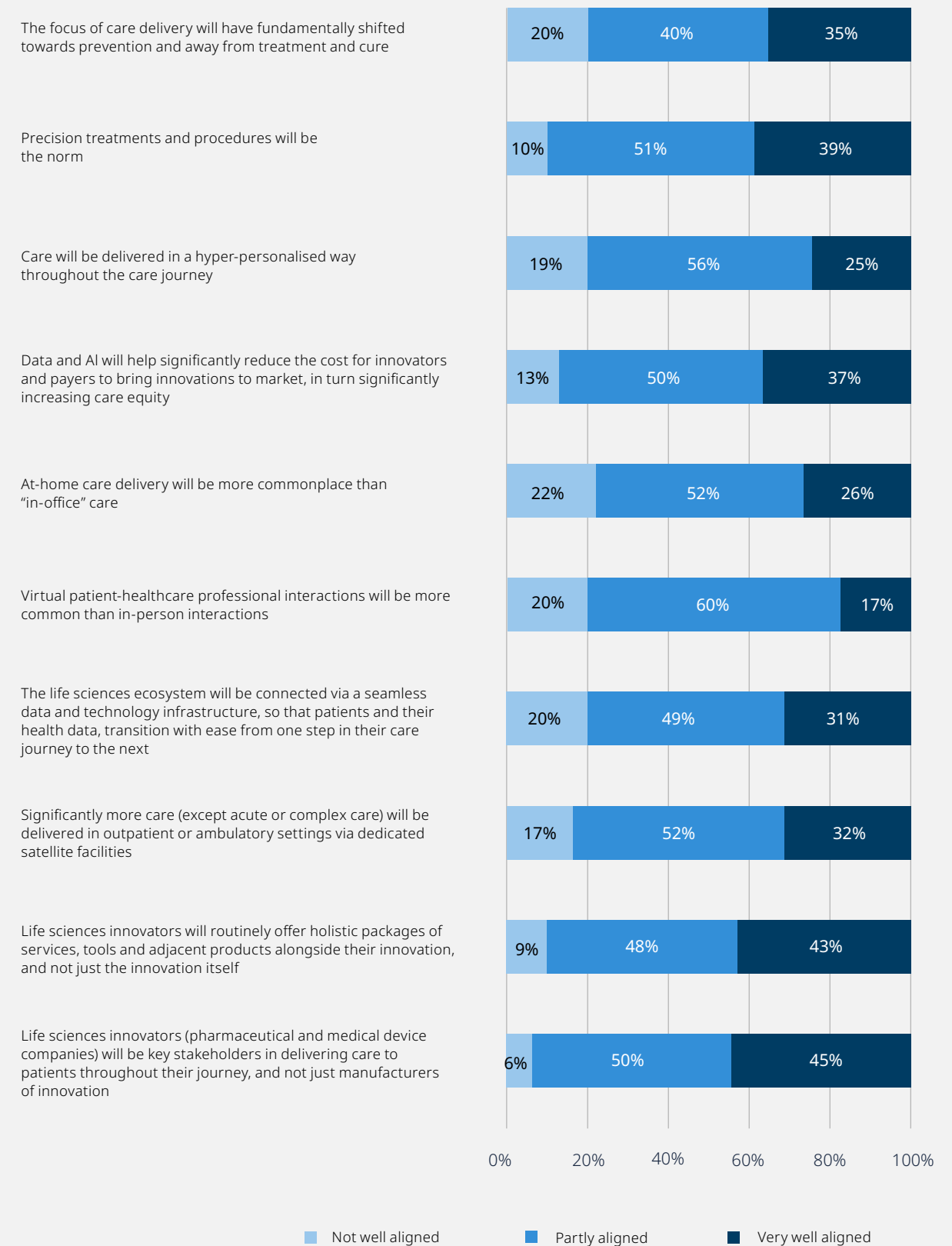
But several respondents allude to a lack of an implementable strategy. They mentioned challenges like senior leadership being unwilling to change, resource constraints and no appropriate investment. They also talked about the lack of infrastructure or system integration, and the constant challenge of a highly varied and fragmented approach to healthcare delivery across the globe.

“Given the pace of change of the global regulatory landscape and its increasing complexity across jurisdictions, it is critical for life sciences businesses – now more than ever – to stay up to date on how the landscape is evolving and position themselves in the best way possible for future growth,” says **Marco de Morpurgo**.

For those respondents who strongly agreed with a future-looking statement (rated 6 or 7, where 7 is completely agree), the majority said their businesses’ growth strategies are only partly aligned, meaning that their businesses are not necessarily preparing themselves appropriately for this potential future (Figure 17). This was the case across all statements about future healthcare delivery. Respondents’ businesses seem most prepared to become partners in care with other key stakeholders in the healthcare ecosystem, while they seem least prepared for shifts in the care setting, from in-person or in-office to virtual and out-of-hospital, and the consequent impacts on how their innovations are valued.

Life sciences businesses recognise the importance of understanding the trajectory of the industry and the healthcare systems it serves. And this is often reflected in their vision, purpose or mission. Specifically, businesses understand the value of the patient voice and forming closer partnerships with stakeholders across the ecosystem, in optimising levels of care.

**Figure 17:** For the future-looking statement(s) in the previous question for which you scored at least 6, overall, how well aligned is your business’ growth strategy?





## 8. Concluding remarks

The last few years have thrown the life sciences industry into the spotlight, with rapid changes in the way business is done, how innovations are brought to market and how care is delivered. Innovators have been helped or hindered to differing extents by the pandemic, economic uncertainty and geopolitical volatility. Despite the challenges, businesses continue to push scientific and technological boundaries and deliver advancements – and breakthroughs – to patients.

Last year we saw the huge impact of long-acting GLP-1 agonists on the way obesity is managed and understood. And we saw how this drug class can lead to health benefits for some patients, including improvements in heart health and slowing the progression of kidney disease.

We saw the regulatory approval of the world's first gene-editing therapy, based on CRISPR technology.

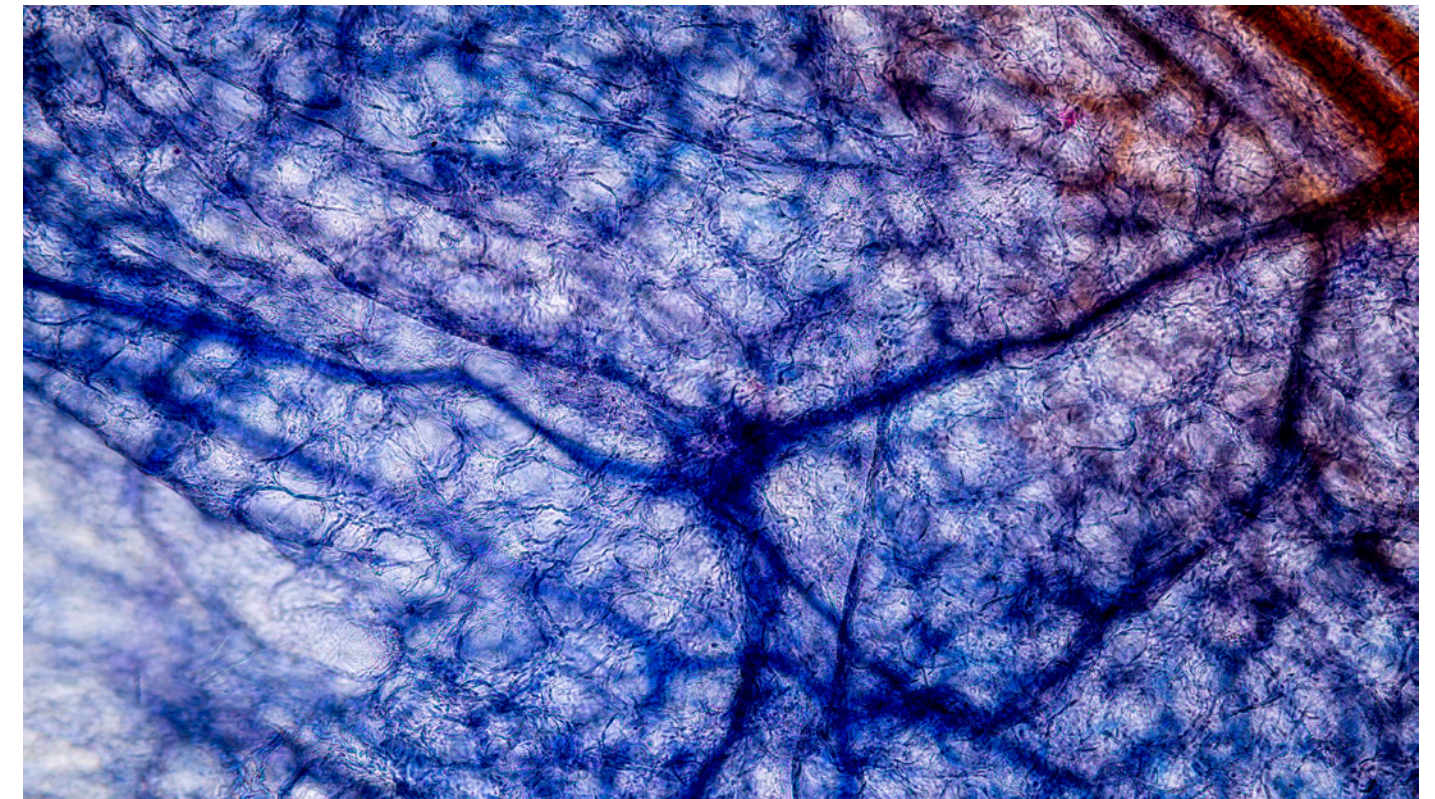
And the sector is in the middle of an AI revolution, with excitement growing for its potential to transform businesses across the value chain, not just the innovations they bring to patients.

There's not only stiff competition among innovators to bring the first and best treatments to market, but between markets to become the world's top life sciences hub. This is helping to drive sector growth in the longer term.

Life sciences is recognised by many markets as a key economic driver, and is a strategic priority for many governments, including the US, Canada, China, South Korea, the UK, Ireland, France and Germany. Countries are jostling for position by offering incentives to researchers, businesses and investors, building world-class manufacturing facilities and creating cutting-edge R&D labs they hope will attract the best talent and future-proof their leadership on the global life sciences stage.

Our survey respondents reflect the overall sentiment we're seeing towards the sector in 2024, after a challenging 2023: there are signs of positivity and momentum in terms of investment and support for life sciences innovation, but also challenges to sector growth.

We look forward to our next Life Sciences Index report, where we'll continue to examine how businesses are navigating this ever-evolving and exciting sector.



“The regulatory environment represents one of the biggest uncertainties for life sciences innovators today and macroeconomic headwinds continue to apply pressure on growth. That said, signs of increased investment and dealmaking in the sector point to a positive future as we look beyond 2024. One thing we can always be sure of is that innovations will continue to emerge, helping the global life sciences ecosystem to improve health outcomes and transform lives.”

Marco de Morpurgo  
Global Co-Chair, Life Sciences

“Coming out of the pandemic, it is clear now, more than ever, that the life sciences industry plays a critical role in supporting economic growth and sustaining health outcomes around the world. Like many industries, the life sciences sector is facing external headwinds in 2024, including a complex, and, at times, aggressive regulatory landscape. Nonetheless, the innovative life sciences industry is continuing to make investments in future growth and is well-poised for success in 2024 and beyond. We hope you find this index helpful in assessing the market, opportunities and risks presented as you continue your important missions to make positive contributions to the global health ecosystem.”

Lisa LeCointe-Cephas  
Global Co-Chair, Life Sciences



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# 9. Appendix

## Sample and methodology

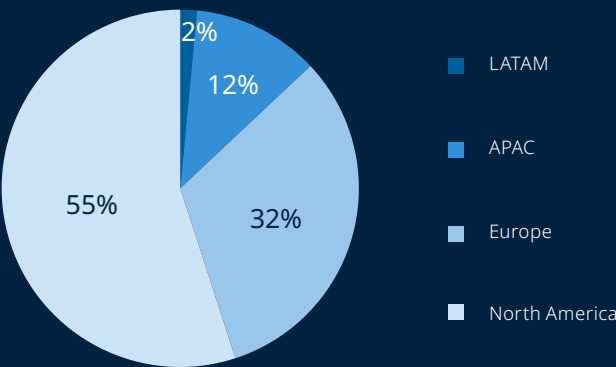
In Q3 2023, NewtonX, on behalf of DLA Piper, surveyed 200 people from the top 100 innovative biopharma and top 100 innovative medtech companies, according to fiscal year 2021 global revenues data, as analysed by Scrip Intelligence (now Citeline; for medtech companies) and Torreya (now Stifel; for biopharma companies).

Respondents working for generics or biosimilars businesses, or businesses where the majority of manufactured goods are generics or biosimilars, were excluded. The online survey included largely quantitative questions. NewtonX recruited respondents, coded and collated results. DLA Piper designed the survey and analysed the results. All responses are anonymised and presented in aggregate. For all questions, N=200 unless otherwise specified.

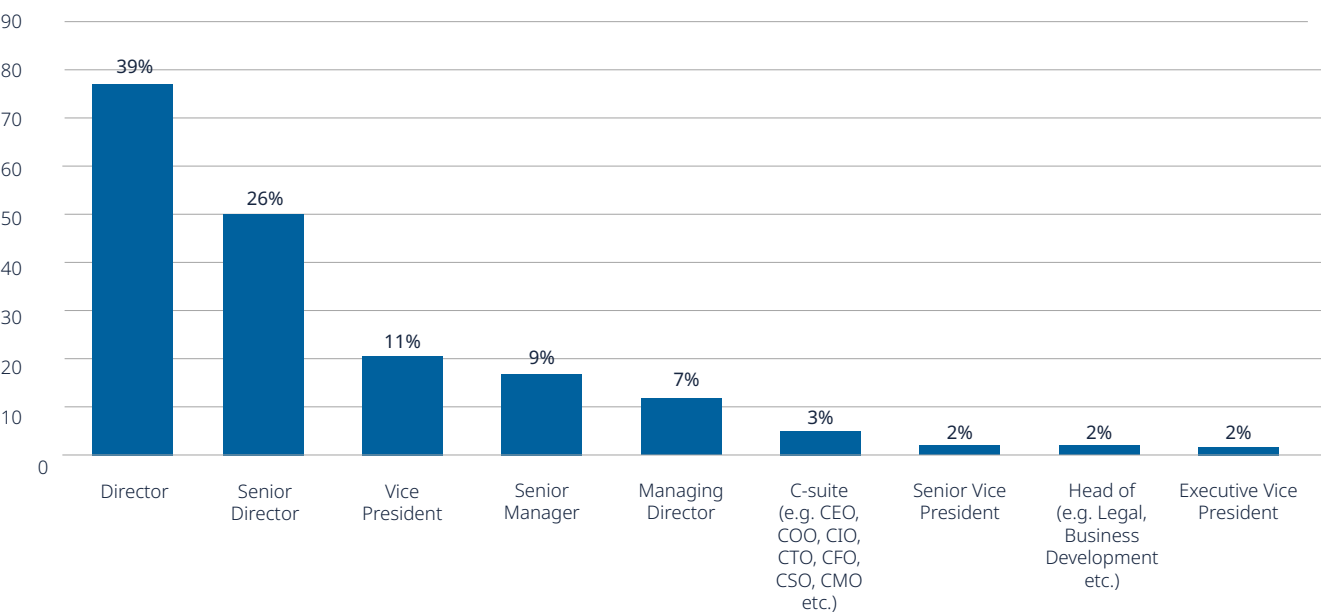
Of the 200 respondents, 56% worked for pharma, 23% for medical device companies, and 21% for biotechs. Most (55%) were based in North America, followed by Europe (32%). No respondents were based in the Middle East or Africa. Almost two thirds of respondents held roles with a global remit (65%), a quarter with a regional remit, and 11% with a local remit.

## Respondent profiles in figures

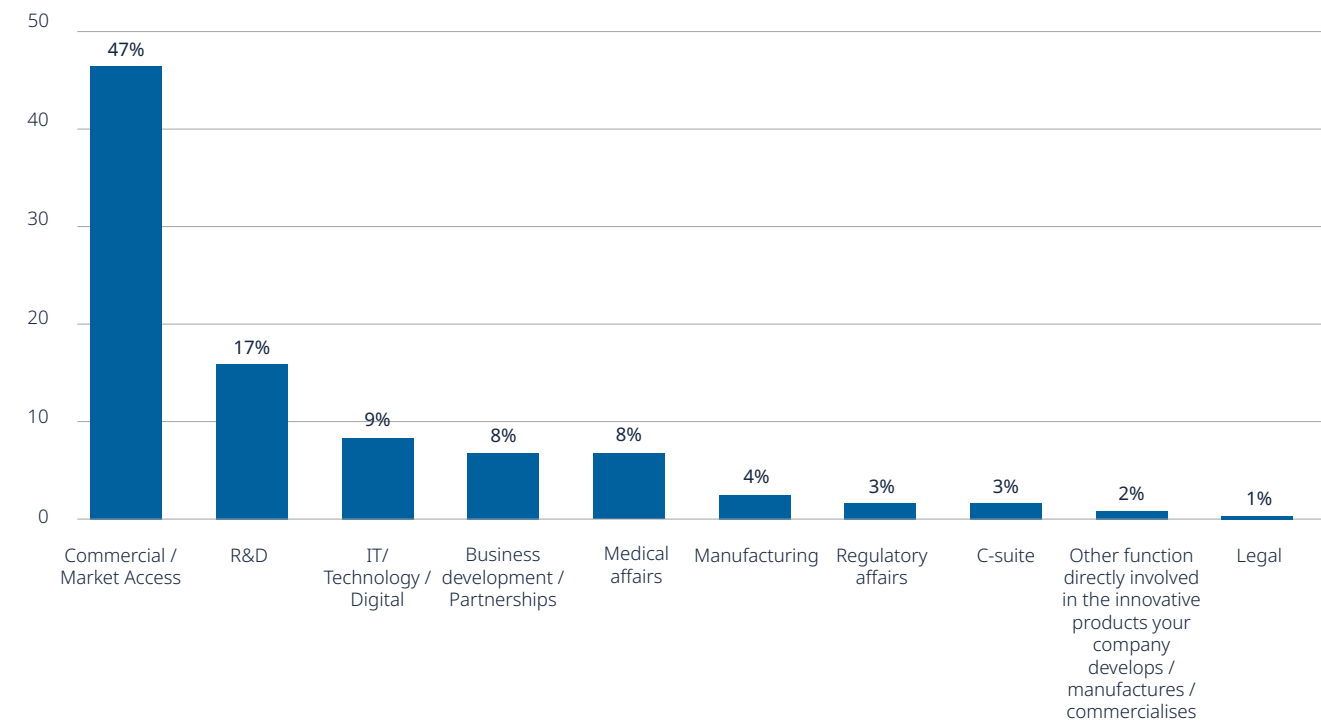
Locations of respondents



## Role of respondents



## Business function that respondents work in





Contributors

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International Life Sciences Corporate co-lead



## About us

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Our award-winning lawyers combine subject matter expertise with deep sector knowledge so that we can help with all your legal needs, including but not limited to corporate transactions, litigation, regulation, compliance and investigations, IP strategy and enforcement, data privacy, and licensing and distribution.

Working across more than 40 jurisdictions, our clients span the full life sciences ecosystem, from suppliers and distributors, contract research organizations and diagnostics companies, through to pharmaceutical and medical device manufacturers, biotech and healthtech innovators, as well as investors, payers and care providers.

We are frequently exposed to the latest innovations, including mRNA vaccines, new cell and gene therapies, cutting-edge healthtech, and more.

Whether you're a large pharmaceutical, mid-sized medical device or startup biotech company, our global team can help you succeed.

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