

BIA submission to the Autumn Budget 2024

Summary

The Prime Minister's and Chancellor's identification of the life science sector as a key priority for the Government's growth mission, and the ambition to make the UK a powerhouse for life sciences and medical technology, are very welcome. This commitment to, and belief in, the sector continues to be well-founded, with current data demonstrating considerable growth and opportunity across life sciences. However, as the Chancellor has repeatedly stated, stability is essential for businesses to succeed.

The life sciences and biotech sector – despite its world-leading strength – faces unique challenges and the life sciences business model has unique characteristics that must be considered by policy makers when designing an industrial strategy and also when determining the economic benefits that can be gained. The sector is highly R&D-intensive, capital hungry and reliant on specialist global investors. These characteristics and others mean the sector needs special consideration and tailored policies as part of an industrial strategy.

The groundwork for such an approach was outlined in 'A Prescription for Growth',¹ which emphasises the importance of partnerships with industry, and pledges to cement life sciences and biotechnology at the heart of Britain's economic strategy. This Budget represents the vital first opportunity begin putting that plan into action.

We urge the Government to continue prioritising the life science sector and the key policies that underpin its growth and success:

- **Maintain the R&D tax relief schemes as they currently are** until a thorough review and industry consultation has been conducted (described further in the next section)
- **Continue to advance the pensions reform agenda** to increase investment in UK growth
- **Maintain government support along the financing continuum for start-ups and scale-ups by:**
 - **Maintaining the UKRI and Innovate UK budgets in real-terms** to support the UK's world-leading science base
 - **Maintaining the Biomedical Catalyst, including the investor partnerships programme** to ensure a continuum of funding from grants to venture capital

¹ [Labour: A prescription for growth - Labour's plan for the life sciences sector. \(2024\)](#)

- **Moving forward with an Engineering Biology focused fund supporting innovation across TRLs, including for collaborative R&D programmes**, to ensure the UK captures the full benefit of this key technology
- **Continuing funding for the Life Sciences Investment Programme and Future Fund: Breakthrough programme** to maintain and strength the life sciences funding continuum
- **Retaining and fully delivering the Long-term Investment for Technology and Science (LIFTS) programme** to ensure the first life sciences specific VC-pension consortium is established in the UK
- **Moving forward with £520 million manufacturing capital grants programme** to maintain momentum and confidence of global industry to invest in new UK jobs and medicines and vaccines supply chain security
- **Continue with NHS data for R&D programme** to ensure the UK capitalises on its unique intentional competitive advantage in joined up health data
- **Continue the Patent Box** so that the UK remains fiscally competitive for innovation-based companies
- **Continue funding through organised collaborative networks, and continue facilitating access to Horizon Europe funding** to enable UK businesses to contribute to global pandemic preparedness

The UK life science sector is set for expansive growth that would help revitalise the economy and serve as a key asset to the Government's growth mission. The eyes of the global investor community are fixed on the UK, and they eagerly await to see whether the new government is able to successfully navigate the challenges faced by our sector. A strong, confident package in Budget that demonstrates commitment to, and faith in, UK life science is the ideal foundation for a successful Investment Summit in October and London Life Science Week in November, followed by rapid investment and growth from this key sector. We are aware of multiple life sciences investment opportunities that could be landed in the UK in the next six months if government shows its commitment to the sector. The UK has a significant global competitive advantage in life sciences – now is the time to solidify our position as a world leader in innovation, research, and development.

The growth opportunity of UK life sciences

The BIA is the voice of the innovative life sciences and biotech industry, enabling and connecting the UK ecosystem so that businesses can start, grow and deliver world-changing innovation.

We have over [650 members](#) including:

- Start-ups, biotechnology and innovative life science companies
- Pharmaceutical and technological companies
- Universities, research centres, tech transfer offices, incubators and accelerators
- A wide range of life science service providers: investors, lawyers, and IP consultants

The UK's R&D-intensive life sciences and biotech sector is universally recognised as world-leading, and it delivers great benefits to the economy, the health of the nation, and it is key to the Labour government's growth mission, clean energy and building an NHS fit for the future. From improving patients' lives through new treatments and digital healthcare, to the development of environmentally sustainable technologies – including fossil fuel substitutes, biodegradable bioplastics and the cleaning of polluted waters – our deep understanding of biology is helping to address humankind's greatest challenges and Labour's priorities for Britain. We therefore warmly welcome the Chancellor's identification of life sciences as a priority sector for the government's industrial strategy.

This is a growing sector of the future that poses a unique opportunity. The UK life sciences industry employs over 300,000 people, with around two-thirds of these jobs outside London and the South East. There are 6,850 life sciences businesses, 75% of which are SMEs, and combined they generate a turnover of £108.1bn.² The average GVA per employee is over twice the UK average at £104,000 and the sector consistently invests more in R&D than any other (£9 billion in 2022).³ The sector is attracting record levels of equity investment and overseas investors.

This strength is spread across the UK. The South East is Europe's Silicon Valley, with thousands of fast-growing agile life science start-ups and scaling companies, many linked to the world-leading universities of London, Cambridge and Oxford, operating at the cutting edge of science to build industries of the future. These companies not only bring in millions of pounds of foreign private capital into the UK, but also create a demand for services and manufacturing that spreads prosperity across the country.

The North West is the third most concentrated area for life sciences jobs. Pioneering efforts by Eli Lilly in the early 1980s resulted in large scale production of recombinant insulin and human growth hormone there, and the past decade has witnessed significant investments, including Pharmaron's Biologics Centre in Liverpool. AstraZeneca are now looking to make a significant £450 million investment in the region to build further on this regional heritage.

Elsewhere, Valnvea manufactures vaccines in Livingston and Fujifilm Diosynth Biotechnologies manufactures complex biological molecules in Stockton-on-Tees, and has just opened a new £100 million microbial manufacturing facility there⁴. The government has also invested into CPI's RNA centre of excellence, which is now the main centre for mRNA expertise in the country. This continues the presence of innovation and industrial research in the region that was initiated by

² [DSIT, DHSC, OLS: Bioscience and health technology sector statistics 2021 to 2022. \(2023\)](#)

³ [ONS: Business enterprise research and development, UK: 2022. \(2024\)](#)

⁴ [FUJIFILM: FUJIFILM Diosynth Biotechnologies celebrates opening of Billingham, UK microbial manufacturing facility. \(2024\)](#)

major chemical companies like the ICI in the early 20th century. Our sector's heritage shows that consistent and stable long-term industrial strategy support in life sciences can deliver long-term prosperity across the UK and drive economic growth and wealth creation.

In the second quarter of 2024, the sector saw a significant rise in VC funding, with £564 million raised compared to Q1's £240 million. This 135% increase marks a stark improvement and is the highest quarterly haul since Q3 of 2021. Public financing other than IPOs also showed a marked increase, with £577 million raised.⁵ This data shows that the sector has a clear path towards sustained growth, supported by large VC deals and significant public market finance raised mainly in America but spent in the UK. Public and private biotech companies secured large rounds from global investors, demonstrating the world-leading capability of UK science and our business leaders. The increase in seed investments in new companies also shows flourishing confidence in UK innovation and an opportunity for the new Labour government.

However, these deals represent many months or even years of effort from companies. The investment boost is fragile given continued instability in stock markets, meaning investment could easily drop. For the life sciences, this is a particular concern.

Due to the long R&D timelines, high risk and cutting-edge nature of life sciences and biotech, the sector is more dependent on venture capital than almost all others. Businesses must raise multiple, successive rounds of venture capital, with the total amount needing to be raised to develop a single new medicine ranging from about £1 billion. Moreover, investing in life sciences is a highly specialised activity, and the UK has relatively few established investors compared to the US or even our European competitors. Sustained industrial strategy support from government is therefore essential to maintain momentum.

A recent report from CMIT (Capital Market Industry Taskforce), identified the level of additional investment required by the UK economy to support 3% growth to be over £100 billion per year for the next 10 years. This equates to over £1 trillion in additional capital demand, and up to £20 to £30 billion in venture capital. The taskforce outlines some key priorities to drive this agenda forward including creating a UK advantage by increasing domestic investment, and restoring the UK's appetite for risk. This agenda requires energised support and backing from Government, and while the current review from the Pensions Minister – Emma Reynolds MP – is very welcome, increasing investment into life sciences is likely to require a sector specific response.

⁵ [BIA: Finance report Q2 2024. \(2024\)](#)

Sector-specific policies for great British industries

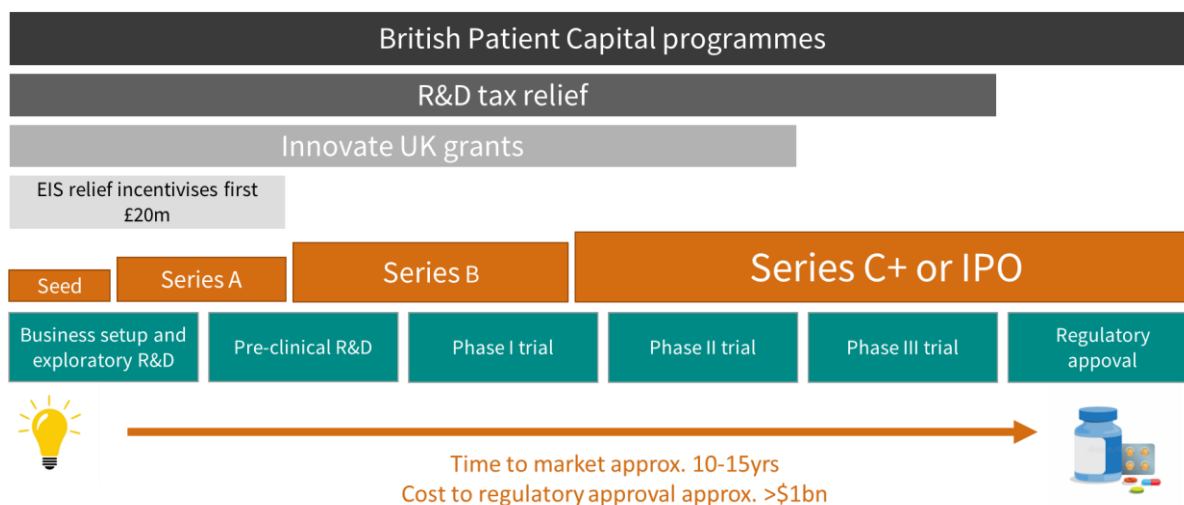
The Labour Party's plan for life sciences¹ rightly recognised the need for specific support for the life sciences sector and the Labour Party manifesto committed to setting out sector specific plans for "great British industries". This is welcome, as the UK's life sciences sector – despite its world-leading strength – faces unique challenges and the life sciences business model has unique characteristics that must be considered by policy makers when designing an industrial strategy and also when determining the economic benefits that can be gained. This is particularly true for start-ups and scale-ups, which are the source of much of the innovation in healthcare; emerging life science companies represent 65% of the global drug development pipeline with an additional 7% being developed by them in partnership with larger firms.⁶

Some of the key unique characteristics include:

- **R&D is a core part of business activity:** often it is the only activity a life sciences or biotech business undertakes in the first 10-15 years
- **High R&D intensity:** almost all money raised by companies is invested directly into R&D activities
- **Exponentially increasing R&D spending:** medicines must undergo clinical trials or other regulatory trials of increasing size and cost to prove them safe and effective
- **Business growth and R&D spend funded by successive venture capital rounds:** Multiple funding rounds, supported primarily by specialist investors, are needed to sustain the long-development timelines and high costs
- **Internationally mobile firms and capital:** it is a global sector supported by global investors, the UK is in competition to attract and retain both companies and investors
- **Employment of high-skilled, high-earning labour:** roles from R&D, to manufacturing, to sales are technical but accessible to a broad range of people, and spread across the country
- **Large involvement of local R&D supply networks:** networks provide crucial infrastructure that supports the testing and development of new products, and large and small companies collaborate in development programmes
- **Long timelines to commercialisation, revenue- and profit-making:** the complete development process for a new drug can take 10-15 years and require >\$1 billion in capital
- **High risk associated with R&D investments:** fewer than 14% of all drugs in clinical trials make it through regulatory approval

⁶ [IQVIA: Emerging Biopharma's Contribution to Innovation. \(2022\)](#)

Figure 1. Simplified life sciences and biotech business stages (green), funding stages (orange) and main government fiscal support (greyscale)



These characteristics require special consideration and tailored policies as part of a sector-specific approach to industrial strategy. This spans tax, access to finance, skills, regulation and much more, but crucially for this Budget, maintaining and not disrupting the financing continuum is critical. Innovative life science and biotech companies are supported by fiscal support from start-up to market (figure 1.), which is essential to success.

Maintaining this continuum of support and successful application of a wider sector specific industrial strategy would capture economic, environmental and societal benefits, including high-value job creation across the country, the creation of new industries of the future, and the continuation of the UK's standing as a research and innovation powerhouse.

We welcome the recently announced commitment to the Enterprise Investment Scheme (EIS) and the Venture Capital Trust (VCT) scheme. Both play a critical role in the success and growth of young businesses across the UK. However, it is essential that other schemes targeting innovative, R&D companies are properly valued, and supported accordingly.

Labour have already committed to many of the components necessary for a sector-specific strategy. The groundwork for such an approach was outlined in 'A Prescription for Growth',¹ which emphasises the importance of partnerships with industry. Constructive and genuine partnerships between industry and a mission-led government would provide the necessary framework to deliver focused support and targeted investment. This framework, in combination with Labour's assurance of stability and its commitment to long-term budgets, would lead to a sector-specific approach aligned with broader industrial strategy that fosters sustainable growth and addresses the unique challenges and opportunities of each sector.

Funding programmes that must continue

Sustained innovation and investment demand a predictable environment, and only through this stability can the sector continue to advance and drive breakthroughs in healthcare, the economy, and beyond. For our sector, stability is the change we need, in contrast to the past few years of disruptive tax changes.

We understand and appreciate the current pressure that public finances are under, and thus understand the “tough decisions” the Prime Minister and Chancellor have said this government will need to make to repair finances and focus on growth. Keeping the life science sector on the positive trajectory that we’ve seen over the first half of this year does not call for copious additional spending, but it does require the maintenance and continued support of initiatives already in place.

To that end, the BIA is urging the government to:

- **Maintain the R&D tax relief schemes as they currently are** until a thorough review and industry consultation has been conducted (described further in the next section)
- **Continue to advance the pensions reform agenda** to increase investment in UK growth
- **Maintain government support along the financing continuum for start-ups and scale-ups by:**
 - **Maintaining the UKRI and Innovate UK budgets in real-terms** to support the UK’s world-leading science base
 - **Maintaining the Biomedical Catalyst, including the investor partnerships programme** to ensure a continuum of funding from grants to venture capital
 - **Moving forward with an Engineering Biology focused fund supporting innovation across TRLs, including for collaborative R&D programmes,** to ensure the UK captures the full benefit of this key technology
 - **Continuing funding for the Life Sciences Investment Programme and Future Fund: Breakthrough programme** to maintain and strengthen the life sciences funding continuum
 - **Retaining and fully delivering the Long-term Investment for Technology and Science (LIFTS) programme** to ensure the first life sciences specific VC-pension consortium is established in the UK
 - **Moving forward with £520 million manufacturing capital grants programme** to maintain momentum and confidence of global industry to invest in new UK jobs and medicines and vaccines supply chain security
- **Continue with NHS data for R&D programme** to ensure the UK capitalises on its unique intentional competitive advantage in joined up health data
- **Continue the Patent Box** so that the UK remains fiscally competitive for innovation-based companies

- **Continue funding through organised collaborative networks, and continue facilitating access to Horizon Europe funding** to enable UK businesses to contribute to global pandemic preparedness

R&D tax reliefs are critical to sector success

R&D tax credits, introduced by the Labour government in 2000, have been critical to the growth and success of UK life sciences and biotech. BIA members regularly cite them as the most important support they receive from government. Crucially for pre-revenue companies, they reduce the cost of investing in R&D with cash payments, so that the level of investment required is more proportionate to the level of risk, thus incentivising private (often venture capital) investment into start-ups and scale-ups.

Existing studies commissioned by HMRC show that R&D tax reliefs deliver £3 of private R&D investment for every £1 of tax foregone, which is already a positive return on investment. However, it is likely that the current evidence base significantly underestimates their impact in cutting-edge sectors like the life sciences, as it considers all companies eligible for R&D tax relief together, rather than considering the unique sector characteristic described above. As a result, the existing evidence base that supports R&D tax relief is not granular enough to effectively inform policy making, particularly in regard to how taxpayers money can be targeted to support priority sectors within an industrial strategy and growth mission. The evidence base does not account for high-growth and agile businesses (often venture capital backed) that are rapidly building the industries of the future.

In addition, fraud remains a significant problem within R&D tax relief. It is a considerable barrier to a fair, effective, and efficient scheme, with numerous reports detailing how current measures to tackle fraud are having very real consequences for legitimate claims. Blunt HMT policy changes to reduce fraud in the recent past have inadvertently harmed the life sciences sector – despite the fact that the vast majority of fraud/non-compliance is happening in other sectors⁷ – and made the UK less competitive for global investment. These were due, in large part, to the insufficient evidence base that restricted understanding of how R&D tax relief supports high-growth businesses.

A thorough review using a better, more comprehensive evidence base and industry consultation will allow government to tailor the R&D tax credit scheme to increase private investment and economic growth. It will also allow HMT and HMRC to determine the most effective way to tackle fraud without harming genuine claimants in sectors that deliver the greatest value for taxpayers.

⁷ [HMRC: HMRC's approach to Research and Development tax reliefs. \(2023\)](#)

A new R&D tax relief study to inform the business tax roadmap

Working with London Economics (LE), the BIA has published a proposal⁸ for a robust economic study that the Chancellor should commission as part of her promised business tax roadmap to understand how R&D tax relief can be targeted towards innovative growth sectors of the economy, like life sciences.

As described above, R&D intensive sectors such as life science have many characteristics that set them apart from more traditional sectors, and these characteristics make the methods typically used to assess the impacts of tax relief less effective.

Our proposed study takes these characteristics into account, and will provide a more accurate picture of just how important R&D tax reliefs are for the life sciences, and enable the better targeting of reliefs. This in turn will allow the government to cut the fraudulent waste of taxpayers' money in ways that do not harm genuine law-abiding companies that have been hit in the past by rushed policy making from the previous government.

More effective anti-fraud measures and more accurate targeting of reliefs will lead to savings that would allow the UK to return the rate of R&D tax relief to its former, internationally competitive, growth-boosting level in a cost neutral – or even cost negative – way. This would reverse harmful cuts that reduced support for start-ups and scale-ups by the Conservative government, which Labour opposed in Opposition at the time.⁹

The Labour Party confirmed its intention to conduct a study, such as that outlined here, in its pre-election plan for the sector, 'A Prescription for Growth'.¹ The BIA welcomes this commitment, and urges government to embed this evidence in its plans for a more targeted and effective R&D tax relief scheme in order to secure the future of the sector, and continue supporting the delivery of UK innovation and economic growth.

Developing the UK investment ecosystem through pensions reform and the Mansion House Compact

The Mansion House Compact was an enormous step forward for the UK's financial services industry and has given hope to start-ups and scale-ups that the City is ready to engage with them and invest in their growth, in a way that foreign investors and pension funds already do. UK pension funds have a significantly lower allocation to private equity and infrastructure assets

⁸ [BIA: Improving the evidence base for R&D tax relief in the life sciences sector. \(2024\)](#)

⁹ [BIA: Chancellor gives boost to medical innovation and life sciences industry in Spring Budget. \(2023\)](#)

(around 6% combined) than many of their peers (Canadian public sector pensions 34%, Finnish pensions 17%, and Australian supers 14%).¹⁰

This has led to fewer venture capital funds in the UK that are of the scale required to support the growth of innovative businesses. As a result, investment is largely coming from overseas investors, which is a vulnerability for our domestic sector as it creates an incentive to move closer to where the investors are (usually the US) and means value is not being captured in the UK. Therefore, we welcome the Chancellor's pledge to press ahead with this agenda – bolstered by the Pensions Review led by Emma Renolds MP – to increase domestic investment in the sector, and are keen to engage with the government at the earliest opportunity.

As the British Business Bank showed in their latest Equity Tracker report, the UK still under-invests in life sciences venture capital more than any other sector when compared to the US.¹¹ This is despite the fact that we are widely recognised as world-leading in life sciences and the clear leader in Europe, accounting for a third of all life sciences venture investment across the continent.

There is a clear market failure demonstrated by the British Business Bank's data: UK investors do not want to invest in UK life sciences. The quality of UK life sciences and the companies is not at fault, as they attract a disproportionate number of expert US investors. Risk aversion in the UK investor base is widely acknowledged, and life sciences is seen as one of the riskiest sectors to invest in (this is not necessarily true, but is a perception). Strong government leadership is needed to change this behaviour, and to address the very unique market failure for life sciences in particular. The French achieved this for tech through the Tibi scheme, which Labour has already recognised as a learning opportunity for the UK ecosystem. We would welcome further discussion and industry engagement on how this could be taken forward. Mandation and strings attached to tax reliefs enjoyed by the pensions and savings industry should not be taken off the table.

This must be closely linked to a re-energised push on pensions reform and the Mansion House Compact. It is vital that the government champions this agenda at the highest levels to maintain momentum and hold the Compact signatories to their commitments. A specialist vehicle, potentially run by the British Business Bank to provide a route for pension fund investment into life sciences, should also continue to be explored. This again would mirror the Tibi experience, when the BPI France provided such a vehicle.

¹⁰ [William Wright and James Thornhill: Comparing the asset allocation of global pension systems: Analysis of investment in domestic equities & of home bias by pension funds in the UK and around the world. \(2024\)](#)

¹¹ [British Business Bank: Small business equity tracker \(2024\)](#)

The UK life science sector is set for expansive growth that would help revitalise the economy and serve as a key asset to the Government's growth mission. The eyes of the global investor community are fixed on the UK, and they eagerly await to see whether the new government is able to deliver the tailored and stable support our sector needs to grow.

A strong, confident package in Budget that demonstrates commitment to, and faith in, UK life science is the ideal foundation for a successful Investment Summit in October and London Life Science Week in November, followed by rapid investment and growth from this key sector. We are aware of multiple life sciences investment opportunities that could be landed in the UK in the next six months if government shows its commitment to the sector. The UK has a significant global competitive advantage in life sciences – now is the time to solidify our position as a world leader in innovation, research, and development.

For any further information on the contents of this submission, please contact the BIA policy team at policy@bioindustry.org.