Science, Innovation and Technology Committee inquiry on life sciences investment

Introduction and summary

The BIA welcomes the Committee's attention on this key issue. Since the pandemic, there has been growing recognition from governments around the world that a strong and vibrant domestic life sciences sector is not only an economic imperative but a public health and national security necessity too.

As the trade association representing the UK's innovative life sciences and biotech sector, we have a unique perspective covering the full ecosystem:

- The UK has a world-leading life sciences sector of small, medium and large companies, supported within a vibrant ecosystem benefitting from world-class universities, the NHS and unique data cohorts, and medical research charities
- Ensuring every part of this ecosystem is supported is key to maintaining the UK as an attractive location for life sciences investment
- The UK's start-ups and scale-ups are an under-recognised strength of the UK. They are internationally competitive, second only to the US and attracting 40% of European biotech venture capital, much of it from foreign investors. This creates jobs and R&D activity in the UK.
- With the right fiscal incentives and policies, including to channel investment from the City of London, more R&D and manufacturing investments could be secured for the UK

- Large companies are an equally vital part of the ecosystem. Recent announcements of divestment driven by the commercial environment are very unhelpful to the overall sector
- Increased spending on medicines must be accompanied by better collaboration and alignment across the entire chain from regulation to assessment and reimbursement
- The Sector Plan is a very comprehensive strategy with much to welcome, but its success depends on delivery of commitments, complemented by increasing the NHS spend on medicines to address the growing negative perception of the UK

About the BIA

The BioIndustry Association (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. Our 600+ members include start-ups, biotechnology and innovative life science companies, large pharmaceutical companies, universities, research centres, tech transfer offices, incubators and accelerators, and a wide range of life science service providers: investors, lawyers and IP consultants. We promote an ecosystem that enables innovative life science companies to start and grow successfully and sustainably.

The UK life sciences sector is internationally competitive

The UK sector is composed of 7,320 life science companies, employing 359,000 people, according to the latest figures from the Office for Life Sciences (OLS). Of these companies, 6,880 (94%) are SMEs, and they employ 49% of total life sciences workforce and generate 32% of total turnover. The UK is also home to two of the world's top pharmaceutical companies, AstraZeneca and GSK, and many other leading companies have significant R&D activity here, including MSD and UCB.

The UK also has four of the global top ten universities for life sciences and medicine, ranks third for global life science paper citations, and has unique health datasets made possible by the cradle-to-grave health service. This is underpinned by high public spending on health

R&D and medical research charities, which invest £1.6 billion annually. Ensuring that every part of this private and public life sciences ecosystem is critical to maintaining the international competitiveness of the UK.

The spin-outs, start-ups and scale-ups that compose the 6,880 SMEs in the OLS dataset are an under-recognised strength of the UK ecosystem and clearly demonstrate international competitiveness. The UK is second only to the US for biotech venture investment and accounts for about 40% of European biotech venture annually. BIA data shows that much of this venture investment comes from overseas investors; 51% of investors in UK biotech deals were not from the UK, with 27% from the US and 15% from Europe.

These companies are responsible for much of the life science innovation coming out of the UK. In fact, there is a global trend of these smaller emerging companies accounting for an ever-larger proportion of the pipeline for new medicines. Data from IQVIA shows that, in 2022, they were developing 65% of products, up from less than 50% in 2016 and 34% in 2001. Companies like MSD have benefited significantly from this UK innovation – their blockbuster drug Keytruda originated from Cambridge, and they recently acquired Verona Pharma, a UK-based biotech, this summer for $10 billion to access its drug for Chronic Pulmonary Obstructive Disease.

In the face of geopolitical uncertainty, the UK's community of start-ups and scale-ups, including those based within London's King's Cross and Knowledge Quarter, continue to go from strength to strength with investment from major pharma, tech, international investors and property players, such as Google DeepMind's Isomorphic Labs and British Land - and from scaling TechBio companies like Relation Therapeutics. It is important that we, as a sector and a country, continue to retain and express confidence in these engines of life sciences innovation, the investment in them and jobs that they are creating in the UK. Most recently, these include:

- NRG Therapeutics, a Stevenage startup, closed an oversubscribed £50m Series B to advance its first-in-class drugs for ALS/MND and Parkinson's into early clinical studies.

- Cambridge biopharma company Alchemab Therapeutics extended its Series A to $114m and progresses its licensing deal with Eli Lilly and Company.
- Charm Therapeutics, co-founded by Nobel laureate David Baker, raised $80m in a Series B backed by Nvidia, to expand its DragonFold AI drug design platform.
- OMass Therapeutics signed a licensing deal with Genentech (Roche), securing $20m upfront and over $400m in potential milestones for its inflammatory bowel disease programme.
- BoobyBiome, a female-founded London startup pioneering breast milk microbiome preservation, secured a £2.5m seed round led by Empirical Ventures. It is developing both a device to protect the natural microbiome in expressed breast milk and a live microbial drop for formula-fed infants.

These deals highlight UK firms' ability to attract significant international capital and create jobs on a daily basis, while also addressing areas of high unmet medical need from neurodegeneration to women's and infant health. However, they are not household names and do not receive the same press attention. Continued global investor interest underlines the importance of maintaining a competitive environment for scaling innovative science in the UK.

Increasing investment in and support for scaling life science companies is critical to maintaining international competitiveness

Many of the current government's decisions early in its tenure reflect the potency and scale of the life sciences opportunity, and represent important steps that demonstrated faith in, and commitment to, the sector in challenging economic and geopolitical times. The designation of the life sciences as a priority sector for growth in the Industrial Strategy is emblematic of this approach, and underpins many of the actions that followed, such as the increase in funding to both the British Business Bank (BBB) and National Wealth Fund

(NWF). In addition, the stabilisation of R&D tax reliefs and continuation of the Mansion House agenda are both critical for the ongoing health and resilience of the sector.

Although the UK life sciences and biotech sector is a strong performer compared to European competitors (consistently accounting for approximately 30-40% of the continent's annual total), compared to the US, the sector receives much lower levels of investment, even when accounting for GDP. The BBB's latest Equity Tracker showed the US life sciences sector raises 59% more investment relative to GDP than the UK sector, and that this is the biggest sectoral funding gap seen in British venture capital. The BBB's data also showed that UK life sciences is the only R&D-intensive UK sector that has not increased its market share of global venture investment over the last ten years.

There is a funding gap at early and late-stage VC rounds (Series B+/£20m+), where most investment comes from foreign—primarily US—investors. Since 2015, this trend has extended to public markets, with many UK life science firms choosing to list on Nasdaq over the London Stock Exchange. As scaling businesses follow capital, the UK risks losing high-value R&D, manufacturing, and leadership roles overseas. In turn, financial returns and tax revenues flow abroad, limiting domestic wealth creation and reinvestment in future growth.

Pension reform

Uk pension funds are well placed to increase their exposure to late-stage VC funds and growth-stage public market deals, thus increasing investment into life sciences, growing the companies and incentivising UK life sciences manufacturing investment. Without a better domestic supply of capital, companies will continue to look overseas for investment and expanding their businesses, rather than creating value in the UK.

The Mansion House Accord, signed in May 2025, was an important sign from government that they were committed to the Mansion House agenda. It is critical that government continues to give this agenda, and the Accord specifically, its full backing and maintain pressure on the pensions industry to invest in UK life sciences. The option of mandation should remain on the table, if the pensions industry does not allocate to venture capital.

Targeted public investment

However, as pension reform may take multiple years to result in the substantial extra investment our sector needs, funding from the public financial institutions (including BBB, NWF, and Innovate UK) is a vital source of capital for innovative UK businesses that are scaling now and want to stay in the UK. It is vital that these funds are resourced and supported accordingly, and that a significant proportion are directed to the life sciences.

Innovate UK provides essential grant funding for the earliest stages of innovation. It's programmes, including the Biomedical Catalyst, which has been shown to leverage up to £5 for every £1 public investment, should be scaled up and rolled out quickly to maintain the pipeline of early stage companies.

The BBB, and its subdivision the BBB Direct Investments team (formerly known as British Patient Capital), have become a critical cornerstone of the UK venture ecosystem and will be instrumental in the government's growth mission and industrial strategy. The teams should be expanded to enable rapid deployment of new capital. The additional resourcing for the Bank delivered through the Industrial Strategy and Spending Review was extremely welcome; care should be taken not to spread it too thinly. The BBB has identified life sciences as suffering the greatest scale-up funding gap of all sectors, when compared to the US, so it is here that the majority of funding should be focused. The BBB is also developing the British Growth Partnership (BGP), which will provide a state-backed vehicle through which pension funds and other institutional investors can invest into life sciences and technology companies within the BBB portfolio. This should also be prioritised.

In addition, the launch of the NWF is very welcome. If effectively targeted and aligned with the priority sectors and pro-innovation approach of the government's wider Industrial Strategy, the NWF can be an effective tool in delivering the government's growth and clean energy missions, generating returns for the taxpayer, and crowding in capital. Both life sciences and engineering biology, which has strong sustainability benefits, have already been earmarked as potential targets for the fund, and government must ensure that these funds reach the sector. This will crowd-in private capital, particularly from UK and international pension funds and sovereign wealth funds.

The increase in funding of these institutions and allocation of the life sciences as a priority target are key steps in the right direction, but the sector-specific characteristics and capital hungry nature of the life sciences will require a more targeted approach, and BBB, NWF, and Innovate UK should continue to work together and with our industry to ensure this is delivered.

Health data and clinical trials

The UK's universal, cradle-to-grave NHS is a unique asset for attracting investment. It has unrivalled health data sets and patient cohorts that are extremely valuable for researchers and companies to use in R&D. Likewise, a single health service with world-leading clinicians should be a prime location for complex clinical trials. Unfortunately, both the NHS's data and clinical trial infrastructure suffers from fragmentation, bureaucracy and high costs, limiting its value in attracting investment in the form of UK and international companies placing their R&D here.

The commitment in the Life Sciences Sector Plan to create a single front door for data access – the Health Data Research Service – is extremely welcome, as is the Prime Minister's commitment to reduce clinical trial setup times from 250 days to 150 days. Giving the NIHR a growth mandate and requirement to support smaller biotech companies as well as large companies' commercial clinical trials is also very much overdue. Ensuring all these commitments deliver for UK SMEs will be critical to the growth of UK life sciences.

Manufacturing incentives

The UK's leadership in life sciences innovation has not historically been translated into downstream commercial manufacturing investment because of deficiencies in the broader commercial environment. Crucially, the UK has often been out competed by international competitors willing to offer more incentives to crowd in globally-mobile investment. The medicines manufacturing capital grants programmes established under the previous administration and committed to by the Chancellor in the Spending Review, namely the Life Science Innovative Manufacturing Fund, have been a welcome development to incentivise investment into commercial stage manufacturing facilities. It is now essential

that the full £520 million programme is rolled out quickly and made available for small, medium and large companies to support the whole ecosystem and nurture a diverse manufacturing base; crucially, grants must be tailored to SMEs' specific needs, as well as large companies, which has tended to be the priority in the past.

Addressing the lack of scale-up capital and encouraging more "sticky" investments, including manufacturing, is more urgent and timely than ever before, given the current geopolitical landscape and macroeconomic trends. The government must seize the opportunity to demonstrate that the UK is the preeminent destination on the global stage for businesses to start, scale, and stay in the UK.

Maintaining a competitive commercial environment for life science companies is equally critical to the UK's international competitiveness

There is growing concern around global boardroom perspectives of the attractiveness of the UK's commercial environment, presenting a risk of the UK being deprioritised as a 'first wave' launch market for innovative new medicines. Ensuring sustainable investment in medicines is critical for attracting global life sciences companies to invest in R&D, initiate clinical trials and manufacture innovative products in the UK and drive valuable health benefits to patients. The presence of these larger companies greatly benefits smaller companies in the ecosystem, due to the cluster effect, exchange of ideas and talent, and proximity of investors and commercialisation partners. What the UK spends on healthcare therefore impacts the whole ecosystem.

UK medicines spending

The UK medicines budget has only grown at an average of 1.1% and rising to 2% since 2024. This means that medicines growth has declined by 11% when taking inflation into consideration, whilst the NHS budget has grown by 33% in real terms, demonstrating the disconnect between the set growth for medicines and the NHS overall budget. The UK also

invests a smaller share (9%) of overall healthcare costs on medicines compared to other comparator countries, including France (15%) and Germany (17%).

Underinvestment in medicines has detrimental implications for patient access to medicines and patient outcomes. According to research by the King's Fund, the UK also lags behind other countries on health outcomes, ranking 16th and 18th out of 19 comparable countries, for preventable and treatable causes of mortality. Further, EFPIA Patients W.A.I.T. data shows that England lags behind (65%) peer countries including Germany (90%) and Spain (71%) on the degree of new medicine availability on the NHS. This demonstrates the impact long-term underinvestment in medicines versus other countries has on the attractiveness of the UK as a destination for investment and product launches, with implications for patients accessing treatments and declining health outcomes.

Access to rare disease medicines

This issue is particularly pertinent for rare diseases, which are often severe, progressive and disabling. Treatments for rare diseases are often at the forefront of scientific and medical innovation, with many therapies offering potentially curative interventions to patients with high unmet need. However, companies developing treatments for rare diseases face significant challenges navigating existing regulatory and access pathways and securing NHS patient access in the current commercial environment. EFPIA Patients W.A.I.T. data shows that only 50% of non-oncology orphan medicines approved by the European Medicines Agency (EMA) are made available to patients in England, ranking 10th in Europe and behind Germany (85%), France (67%) and Spain (61%).

A recent survey of BIA and ABPI members also found that since 2020, approximately 45% of rare disease medicines reported were made available to UK patients. Challenges with demonstrating cost-effectiveness at NICE QALY thresholds, limited flexibility in NICE's Standard Technology Appraisal (STA) route and an unfavourable commercial environment in the UK were consistently cited by companies as reasons behind decisions to delay submissions for new medicines to MHRA and NICE.

Recognising the full value of innovative medicines

Current UK health technology assessment (HTA) methods used by NICE and the Scottish Medicines Consortium (SMC) do not recognise the full value of cutting-edge medicines to patients, families, carers and the UK economy which is exacerbating inequitable access to potentially transformative medicines. We welcome comments made by Health Minister Zubir Ahmed MP around the need to consider wider economic and clinical benefits within medicines value assessments during the evidence session on 16 September as part of this inquiry on life sciences investment.

Change is required to address challenges with existing access pathways and value assessments to deliver on Government plans to diagnose and treat diseases early, preventing ill health and saving NHS resources. We welcome calls to increase NICE QALY thresholds, and we call for any proportional increase to the STA thresholds to also be applied to the thresholds used in the Highly Specialised Technologies (HST) programme in order to ensure that it benefits treatments for ultra-rare diseases.

However, increases to QALY threshold will not resolve the challenges around recognising the wider value of innovative therapies, and health technology assessment methods should be genuinely reviewed to enable this. We also call Government to introduce a reimbursed early access scheme for promising, innovative new therapies, as well as exploring how the Innovative Medicines Fund (IMF) can be better utilised to enable broader and more timely access to rare disease medicines earlier in the pathway. The discount rate for health gains should also be reduced to 1.5% in order to better recognise the value of treatments where benefits accrue over a lifetime and to bring it in line with HM Treasury Green Book. NICE has previously acknowledged that there is an evidence-based case for changing the discount rate to 1.5%.

The BIA supports the need for a greater shift in government's approach towards medicines spending and understanding the value medicines offer to patients, the NHS and the economy, recognising medicines spending as a key investment that benefits the health and wealth of the nation. We recommend a more pro-innovation approach which enables medicines to receive the same proportional increase in funding as the rest of the NHS and

supports both SMEs and large pharmaceutical companies within the life science ecosystem to prioritise the UK market.

Fostering an attractive commercial environment for life sciences companies is critical in delivering on ambitions to strengthen the UK's international competitiveness and move towards embedding a prevention-led healthcare system.

Delivering on the Life Sciences Sector Plan

The Life Sciences Sector Plan is a very comprehensive strategy with much to welcome. It contains clear actions, informed by industry, and identifies senior responsible officers for their delivery. It is also an ambitious plan and will require prioritisation of actions and cross-government backing to successfully deliver quickly enough to address the most urgent current challenges impacting the invertibility and growth of the UK life sciences ecosystem.

Areas we are most concerned about are:

- Pre-clinical translation (Action 2a) and health data (Action 7) infrastructure is being established in a way that might not support UK SMEs and scale-ups. Specifically, funding structures could create prohibitive access costs for smaller companies, industry needs are not being incorporated into planning and change drivers are not aligned with each other and the Growth Mission.
- The 120-day clinical trial setup time target (Action 3) is at risk, largely due to lack of capacity within NHS Trusts
- Low levels of equity investment into UK companies remains a major threat to realising the Plan's ambitions. Cross-government action (including Office for investment and HM Treasury) to engage Mansion House signatories on the life sciences opportunity and link this up with BBB activity (Action 13/14) needs to be stepped up
- Metrics on improving access and aligning purpose between MHRA and NICE (Actions 25-27) do not show progress for biopharma, or it is not being communicated externally, confounding existing negative perceptions of UK commercial environment.

Finally, it has been broadly noted that the Plan did not contain any actions on addressing the commercial environment and increasing the NHS spend on medicines to address the

growing negative perception of the UK. Addressing the commercial environment is critical to the overall successful delivery of the Life Sciences Sector Plan and improving the overall investibility of the UK life sciences ecosystem.