Written evidence submitted by the American Pharmaceutical Group (APG) (PEG0079)

About the APG
The APG represents ten of the largest US research-based bio-pharmaceutical companies with a presence in the UK. APG members have a long-standing commitment to the UK and play a significant role in delivering the UK's life sciences capacity.

APG member companies spend over £55 billion on global R&D, with investment growing 31% between 2016 and 2018 alone. In the UK, our members invest over £1.2 billion annually and employ more than 14,000 people in highly skilled jobs. As each life sciences role supports 3.4 jobs elsewhere in the UK economy, this reaches over 50,000 roles.

We are at the forefront of developing and researching new scientific advances, including in Alzheimer's, antibiotics, vaccines, cancer medicines that are turning the disease into a long-term condition and cures for hepatitis C. In 2017, APG members conducted more than 500 clinical trials in the UK, providing over 24,000 patients with the opportunity to benefit from the latest innovative medicines.

Executive summary of response
In health and life sciences, the UK's response to the COVID-19 pandemic has focused on maintaining key infrastructure and activity, while using innovation to respond in a flexible way. These principles should be central to post pandemic recovery and in order to build future resilience to pandemics and drive economic growth, the requirement for competitiveness will be imperative.

The life sciences sector has been identified as a strategic industry to drive the country's future economic growth and to keep people safe from future health risks. The UK attracts a significant share of investment into its life sciences ecosystem, but there exists a huge opportunity to increase its share of the global investment pool and reverse a trend that has seen the UK slip down the list of priority markets. APG member companies spend over £55 billion on global R&D, with investment growing 31% between 2016 and 2018 alone. If APG members invested an additional one percentage point of their global R&D spend in the UK, this would bring an extra £550 million per year.

For the UK Government to build a world-leading and resilient life sciences ecosystem beyond the pandemic, and to capitalise on its future position outside the European Union (EU) it will need to:

- **Improve its perception and position as a priority market** by reversing its historical status as a 'low and slow' adopter of new medicines. This could have a multiplier effect of improving the health of the nation, building resilience to global health risks and driving UK competitiveness as a location for research and development investment.
- **Ensure the full implementation of Government policies** that have already been committed to. Policies, such as the Life Sciences Industrial Strategy (LSIS) and commitments to improve access to medicines in the Voluntary scheme for branded medicines pricing and access (VPAS), have sent positive signals to global boardrooms, but have been patchily implemented and delivered little real change.
- **Ensure a competitive clinical trials environment** that can compete with other attractive investment markets, both across the EU and globally in terms of affordability, speed of setting up trials, and ease of recruitment.
- **Attract highly skilled professionals from overseas** by ensuring that people are enabled to work and live in the UK with minimum bureaucracy, cost and delay.

What core/guiding principles should the Government adopt/prioritise in its recovery package, and why?

Given the shared global economic impact of the pandemic, as well as the new environment the UK finds itself in outside of the EU, the requirement for competitiveness is an absolute imperative. To put the UK at the forefront of global economic recovery and compete effectively with other countries for international inward investment, the UK will need to invest in its world-leading assets, such as its science base and single payer NHS. In order to do this, the UK should bolster its commercial access environment, which will in turn improve the UK's position as a priority market and therefore increase global life sciences investment.

One of the key learnings from the pandemic is that the UK has proven itself capable of responding in a flexible way to maintain key infrastructure and economic activity. Moving out of an immediate pandemic response environment, it would make sense that the principles remain the same, particularly given the unpredictability of COVID-19, as well as a dynamic set of opportunities and challenges as we leave the EU.

How can the Government borrow and/or invest to help the UK deliver on these principles?

The UK has identified the life sciences as a strategic pillar for its future economic growth and the importance of this ambition should only be reinforced by the impact of COVID-19. In January 2019, before the current pandemic, the World Economic Forum warned that the "frequency and diversity of disease outbreaks are expected to grow steadily, as they have for the past 30 years" as a result of global technological, economic and environmental changes.[1] Within an environment of increasing global health challenges, prioritising life sciences as part of the Government's economic growth strategy makes sense. Successfully doing so can also drive other value multipliers, including stronger economic growth, greater productivity, enhanced balance of trade, growth in the basic and applied science infrastructure and improved health and health security of the UK population.

The life sciences industry is a major component of the UK's economic base:

- The sector generates approximately £64 billion in turnover and employs more than 233,000 scientists and staff in the UK.
- It is also one of the most productive industries – over twice the UK average. Geographically, the sector is spread across the UK with every region host to companies and investment.[2]

International life science companies are major investors in highly productive R&D. APG member companies spend over £55 billion on R&D globally each year, with investment growing 31% between 2016 and 2018 alone. Securing one additional percentage point of even just APG members' collective global R&D spend would bring an extra £550 million to the UK per year.

To build and maintain a globally competitive life science ecosystem, the UK needs to attract partnerships and investment from global companies and investors. This will require setting itself apart from competitor countries in factors that determine investment in research and development, manufacturing and capital infrastructure. This includes investing in capability in early science, a well-supported research and development infrastructure, competent regulatory authorities, a highly skilled workforce and a thriving environment for innovative medicines.

The UK has a strong early science and academic ecosystem. However, it diverges from competitor countries in the cost and ease of setting up late stage trials, and it ranks very poorly

[1] World Economic Forum, Outbreak Readiness and Business Impact Protecting Lives and Livelihoods across the Global Economy, 2019
[2] Life Sciences Industrial Strategy 2017

compared to other countries in making new medicines available to patients who need them. For many international investors in life sciences, the UK has been sliding down the global rankings as a country to operate and invest in.

What measures and support will businesses need to rebuild consumer confidence and stimulate growth that is sustainable, both economically and environmentally?

As demonstrated in a 2018 survey of US boardrooms,[3] for American investors in life sciences, the single greatest factor shaping boardroom sentiment and future investment decisions is the ability to quickly launch medicines and technologies and to get them to the patients who need them. The UK has traditionally struggled to do this at a pace commensurate with comparable countries, with a reputation as a low and slow adopter of innovation. For UK affiliates of these companies, overturning the negative perception in boardrooms of the UK market for innovation would be the single most powerful means to strengthen the UK's case for further investment.

For many APG members, the UK has already fallen out of the top 10 markets, while for others the UK's position as a top 10 market is supported only due to its commercial grouping with the Republic of Ireland. This means that the UK is becoming a less attractive market for investment in research and development and is increasingly unlikely to be part of the 'shortlist' of countries for major long-term capital investments. Without a new approach towards patient access to medicines and clinical trials it will struggle to shed its reputation as a challenging place to do business and a country that values innovation in medicines and medical devices far less than competitor countries.

Historically, the UK has been a very competitive location for running clinical trials, and this has had a net benefit for the health system and economy by improving overall health outcomes, speeding up free access to the latest treatments and creating highly skilled and productive jobs. However, the attractiveness of the UK for running trials is being undermined by the complexity, speed and affordability of doing trials in the UK compared to other countries. This will be exacerbated by the UK leaving the EU regulatory framework, requiring additional filing for medicines to be used in the UK in addition to the EU. Furthermore, the low and slow adoption of new medicines and devices in the UK health system means that trials are more challenging to run in the UK; the standard of care is often lower than competitor countries, with the comparator treatments used to test the safety and efficacy of new medicines often taking much longer to be adopted into routine clinical practice.

The UK Government's offer to life science investors should include a firm commitment to:

- Solve the long-standing barriers to the access and uptake of medicines in the UK, such as those highlighted in the 2017 LSIS.
- Embed the positive changes made during the COVID-19 pandemic in relation to the speed in the set-up of clinical trials and regulatory flexibility and pragmatism demonstrated by the MHRA.

The Government has sent positive signals to investors with policy commitments that could contribute to delivering on these goals (in the form of the LSIS, NICE Methods Review and the NHS Commercial Framework) and global boardrooms keenly await the outcomes of these initiatives. This can be delivered in a way that is sustainable for the NHS due to the landmark VPAS agreement that completely caps medicines budgets year on year and guarantees any overspend is rebated by industry.

[3] APG/PPP (2018) Global Perspectives on the Life Sciences Ecosystem

How can the Government best retain key skills and reskill and upskill the UK workforce to support the recovery and sustainable growth?

The UK has traditionally had a thriving life sciences sector and the attraction and development of a highly skilled workforce within the UK has been reliant on:

- An existing life sciences ecosystem with dynamic career paths
- A strong science base within universities and hospitals
- Ease of movement, so that skilled workers can live and work in the UK
- Being able to see the development of medical technologies 'from bench to bedside' and being available to patients in the UK

The UK does have a science base and life sciences ecosystem that is competitive compared to France, Germany and Switzerland. However, people working in the UK are concerned about freedom of movement for themselves and colleagues due to uncertainty after leaving the EU. Government should set out a clear and swift process for highly skilled professionals at all levels to be able to work and live in the UK.

Is the Industrial Strategy still a relevant and appropriate vehicle through which to deliver post pandemic growth?

The LSIS was published in 2017 and sent very positive signals to the life sciences investor community. However, its policy intentions relating to access to the latest medicines and medical devices have not been implemented throughout the NHS, and there has been no noticeable impact on the uptake of new medicines in the UK. The LSIS committed that by 2023, the UK would be in the top quartile of comparator countries for speed of adoption and overall uptake of innovative, cost-effective products. However, recent data from Government has shown that this is still not the case.[4] The perception remains that the UK continues to slide down the table of key countries for life sciences and the policies contained within the LSIS have not yet arrested that trend.

The strategy will soon be three years old and since its publication, the timetable and expectations for the exit from the European Union have shifted. We are also, as a country, considering the implications of living within an ongoing pandemic and how to prepare and respond to future pandemics. Now would be a pertinent time for a refreshed LSIS that takes into account learnings about implementation, as well as the need to build competitiveness and resilience in life sciences. Any new LSIS should also provide mechanisms for driving the implementation of the original 2017 recommendations, as well as new recommendations; it is a failure of implementation rather than intent that has reduced the relevance of the Industrial Strategy to international investors. A new LSIS should be delivered alongside honouring the commitments set out in the VPAS to truly signal to global boardrooms that the UK should be a priority market for investment post pandemic.

What opportunities does this provide to reset the economy to drive forward progress on broader Government priorities?

According to our members' boardrooms, the single most important action the UK government could take to attract further life sciences investment into the UK would be to address the challenges that UK patients have to gain access to innovation. This also requires a commitment to invest in NHS capacity, data and technologies. Such investment would have a multiplier effect that would also help progress government priorities:

[4] Office for Life Sciences, Life Science Competitiveness Indicators, 2019

- According to analysis by Pfizer and PwC in 2017, closing the gap in access to medicines to a level experienced by patients in comparable countries could result in 4,000 new jobs within R&D and associated roles and £705 million in Gross Value Added (GVA) realised each year.[5]
- Further, widening access to innovative medicines creates health benefits and welfare effects from reduced absences from work and the ability for patients to resume their daily lives, in turn boosting the economy.[5]
- The link between health and wealth is well established and in fact, health inequalities in the UK are worsening.[6] Improving access to the latest treatments as standard across the country, no matter where a patient lives, supports the levelling up agenda and reduces socio-economic inequalities, playing a key role in reducing health inequalities. APG members are passionate about supporting the Government and the NHS to 'level-up' on access to healthcare and health outcomes.
- Improving the standard of care in the UK to that of comparable countries, as well as enhancing the clinical trials infrastructure in the UK, will make the country a more attractive location for clinical trials. This not only makes the latest medicines available to patients at limited cost to the NHS, but also improves the standard of clinical care in hospitals that participate in trials.[7]

What lessons should the Government learn from the pandemic about actions required to improve the UK's resilience to future external shocks (including – but not limited to – health, financial, domestic and global supply chains and climate crises)?

COVID-19 has demonstrated the strategic importance of a strong life sciences sector to maintaining domestic supplies and rapidly scaling up research, manufacturing and diagnostics. Learnings from the pandemic that the Government should consider are:

- Global health challenges require global solutions. The UK should seek to place itself at the centre of the global supply chain, simultaneously building domestic resilience and drawing international investment and partnerships to the UK.
- Strategic life sciences investments cannot be made in every country. The UK competes with countries considered more attractive than the UK to secure the investment in life sciences required to build resilience.
- The LSIS highlighted the UK's challenges in attracting investment into medicines manufacturing in the last 10-15 years versus countries such as Ireland, Germany and the US. Manufacturing investments are long-term strategic decisions so the UK should act now to ensure the next wave of investments does not bypass the UK.

Whilst APG understands the desire of the UK to increase its resilience and self-sufficiency, the best way to do that would be improving procurement of innovative medicines to strengthen its position within global supply chains; enhancing its position as a priority market.

What opportunities exist for the UK economy post Brexit and the pandemic for export growth?

The UK has put into place policy blueprints for growing the life sciences sector in the UK and competing for additional investment in the form of the LSIS, VPAS, and Life Sciences Recovery Roadmap. These initiatives need to be matched by a smooth exit from the EU transition period and send strong signals to global boardrooms that the UK recognises, and is serious about overcoming the factors that negatively impact the UK market as a destination for investment.

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[5] Pfizer & PwC, Driving Global Competitiveness of the UK's Life Sciences Ecosystem For the benefit of UK patients, the economy and the NHS, 2017
[6] Marmot M., Health Inequality in England: The Marmot Review 10 years on, 2020
[7] Sumit R. Majumdar, MD, MPH; Matthew T. Roe, MD, MHS; Eric D. Peterson, MD, MPH; et al, 2008, Better Outcomes for Patients Treated at Hospitals That Participate in Clinical Trials

A commitment from the Government to maximise the potential of the VPAS agreement and LSIS, bringing the UK in line with comparator countries in access to and uptake of innovative medicines, and an effective implementation plan to deliver this, would send such a signal. This should include a commitment to end policies, such as category management and inclusion of innovative new medicines within therapy-wide tenders. These contradict the Government and NHS's own ambitions for the sector and health service, and are unnecessary, costly and time-consuming because the capped medicines budget guaranteed by the VPAS makes such initiatives cost-neutral to the taxpayer.

The Government should also seek to emulate competitor countries such as France by facilitating high-level engagement between global boardrooms and Cabinet-level Government representatives including the Prime Minister. The collective achievements of industry, NHS, MHRA and others during COVID-19 have shown the potential of collaboration and the effectiveness of senior engagement between industry and Government. This should continue as the UK moves away from the immediate challenge of fighting the pandemic to kickstarting an economic recovery and building resilience from future threats.

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