

BIA submission: EMI call for evidence

May 2021



Summary

The UK is leading the world into a new age of technological advances that address humankind's greatest challenges, from a vaccine to free us from COVID-19 to biological fuels that will deliver net-zero carbon. The UK life sciences industry also provides well paid and rewarding jobs, employing over a quarter of a million people, two-thirds outside London and the South East, and invests more in R&D than any other sector.

The EMI employee share scheme is a powerful policy tool for supporting innovative, young and R&D-intensive companies. 68% of biotechs that responded to our survey stated that they offer EMI options to all their full-time employees. It helps them compete in a global jobs market for the talent they need to innovate and grow their businesses by offering a more competitive remuneration package that helps them recruit and retain employees in what are relatively high-risk undertakings where employees may not enjoy the same job security they would in more established businesses.

Overall the scheme works well but the eligibility criteria could be modified to better target it, we recommend:

- The total gross assets threshold is increased to £86 million to align with the SME definition used for R&D tax credits. In the past five years 65 equity investments in EMI-eligible life science companies have exceeded £30 million, but only 18 have exceeded £86 million.¹
- The unexercised share options threshold of £3m is changed to a percentage of total issued share capital value. This will address valuation increases, which should be incentivized not punished, and unexpected fluctuations.
- The individual financial limit of £250,000 is increased to reflect remuneration inflation in senior leadership roles since 2012, allowing the scheme to remain competitive and relevant to the market.
- The £1m lifetime allowance (through Business Asset Disposal Relief) should be returned to £10m so that SMEs can utilise EMI to attract experienced individuals who have benefitted from EMI in the past
- In the event of any changes to Capital Gains Tax rate or Business Asset Disposal Relief, the tax benefits of the EMI scheme should be retained
- The Knowledge Intensive Company definition is used to better target the scheme and reduce costs to the tax payer

¹ BIA analysis of Pitchbook (unpublished)

Respondent's profile (Q1-5)

The BIA is the trade association for innovative life sciences in the UK. Our goal is to secure the UK's position as a global hub and as the best location for innovative research and commercialisation, enabling our world-leading research base to deliver healthcare solutions that can truly make a difference to people's lives.

Our members include:

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

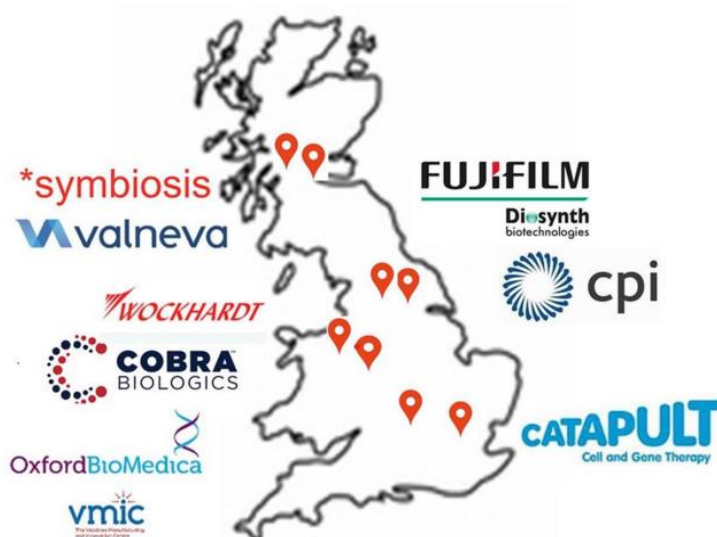
We promote an ecosystem that enables innovative life science companies to start and grow successfully and sustainably.

The UK's R&D-intensive life sciences 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 Government's net-zero agenda. From improving patients' lives through new treatments and digital healthcare, to the development of environmentally-sustainable technologies, such as biological fossil fuel substitutes and biodegradable bioplastics, our deep understanding of biology is helping to address humankind's greatest challenges.

It is as a result of having a vibrant UK life science ecosystem that the UK has been able to play a leading role in the global response to the pandemic, putting the UK in a strong position to benefit rapidly from vaccines, diagnostics and therapies. The Oxford/AstraZeneca vaccine encapsulates this: the science came from one of our many world-leading universities, the technology was further developed by Oxford spin-out Vaccitech, the regulatory and global distribution capability was provided by the UK-based multinational giant AZ, and Oxford Biomedica and Cobra Biologics provided their existing UK-based manufacturing capabilities to rapidly scale up domestic production. This has been achieved through a public-private partnership that demonstrates the uniqueness of the UK life sciences ecosystem.

This is a growing sector of the future that poses a unique opportunity. The UK life sciences industry employs 256,100 people, with two-thirds of these jobs outside London and the South East.² High-value medicines manufacture is spread across the UK, a fact illustrated by the sites of COVID-19 vaccine production³ (figure 1). There are over 6,300 life sciences businesses in the UK, 82% of which are SMEs, and combined they generate a turnover of £80.7bn. The average GVA per employee is over twice the UK average at £104,000⁴ and the sector consistently invests more in R&D than any other (£4.8bn in 2019).⁵ The sector is also

Figure 1: UK sites of COVID-19 vaccine manufacture



attracting record levels of investment and overseas investors.⁶

A survey of public and private UK biotech companies of varying stages of development found that 68% offer EMI share options to all full-time staff, 8% offer it only to senior staff, and 24% do not offer it at all.⁷

Companies within the life sciences sector benefit from a complementary set of government support schemes. R&D tax relief is widely seen as the most important and effective mechanism to promote innovation. R&D grants are also very valuable and offer a more targeted way for the government to support specific R&D projects to complement tax credits. EMI is probably considered third behind these schemes, and is highly effective in enabling SMEs to recruit and retain the management and technical specialists they require to innovate and grow.

The UK is not alone in recognising life sciences as an industry of the future; both the United States and China, among many others, are committing considerable public investment to grow their life sciences

² UK Government (2019), *Bioscience and health technology sector statistics 2019*: <https://www.gov.uk/government/statistics/bioscience-and-health-technology-sector-statistics-2019>

³ BEIS (2020), *UK Vaccine Taskforce 2020 Achievements and Future Strategy*: <https://www.gov.uk/government/publications/uk-government-vaccines-taskforce-vtf-2020-achievements-and-future-strategy>

⁴ PwC (2017), *The economic contribution of the UK life sciences sector*: <https://www.abpi.org.uk/media/1371/the-economic-contribution-of-the-uk-life-sciences-industry.pdf>

⁵ ONS (2020), *Business enterprise research and development, UK: 2019*: <https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure/bulletins/businessenterprisesresearchanddevelopment/2019>

⁶ Radnor Capital Partners, commissioned by BIA (2021), *UK quoted biotech performance and investor base in 2020*: <https://www.bioindustry.org/resource-listing/rcp-bia-2020-review-january-2021-final-pdf.html>

⁷ Survey of biotech companies conducted by Confluence Tax (a BIA member) in February 2020. N=37. <https://www.confluencetax.com/wp-content/uploads/2020/12/BEE-Survey-Results-Presentation-FINAL.pdf>

sectors. Policies to make it easier for start-ups and scale-ups to recruit and retain the talent they need to innovate and grow are essential to maintain the UK's international competitive edge in life sciences. This is especially true in light of the convergence of life sciences with digital technology, meaning companies in the life sciences sector are now directly competing with global tech firms for skilled employees.

EMI's effect on the recruitment and retention of key employees

Recruitment (Q6)

The BIA strongly agrees that the EMI scheme is meeting its policy objective of helping SMEs recruit employees. The vast majority of life science companies in the UK are SMEs, but they operate in a global jobs market dominated by a small number of large multinational pharmaceutical companies able to offer high salaries: scientists and management talent are by nature internationally mobile. Most R&D-intensive SMEs, especially in life sciences, are also relatively high-risk undertakings where employees may not enjoy the same job security they would in more established businesses. Greater incentives are therefore required to help SMEs attract the talent they need.

The sector is also undergoing a transformation due to the emergence of digital- and data-enabled technology; machine learning and artificial intelligence are rapidly being embedded into routine life science R&D, meaning companies in our sector are now in competition for these skills with many other sectors. Our members report that the offer of EMI share options is a core part of their remuneration offer to help them be competitive in the jobs market.

The growing UK life sciences SME sector must attract experienced and skilled employees from larger companies but SMEs cannot offer the job security, salaries or pension packages of larger companies. The potential of a substantial financial gain, accentuated by EMI tax relief, helps compensate for this. It is worth noting that larger companies also offer share options as part of remuneration packages, so EMI provides SMEs with a distinct additional benefit to offer. Our members report that senior-level staff most value the tax efficiency of the scheme but employees at all levels find EMI share options attractive, with some members reporting that even university leavers ask about it in interviews. (As mentioned previously, 70% of companies that responded to a survey on the EMI said that they offer it to all full-time employees.) The brand of EMI is well recognised and understood, it should therefore be protected. Moreover, in the event of any changes to Capital Gains Tax rate or Business Asset Disposal Relief, the tax benefits of the EMI scheme should be retained.

Case study: Arecor

Arecor is a biopharmaceutical company transforming patient care by bringing innovative medicines to market. Through the enhancement of existing medicines using its Arestat™ technology, Arecor is developing a broad portfolio of therapies both through its proprietary pipeline and through partnerships with leading pharmaceutical and biotech companies. As an R&D-intensive, IP-focused business, the skills and knowledge of its 31 employees, the majority of which are highly trained scientists, ensure the success of the company.

Arecor offers EMI share options to all employees working 25 hours a week or more. This helps it compete for talent with larger, more established companies that are able to offer enhanced benefit schemes. Employee ownership of shares also means they have a closer interest in the ongoing success of the

business and feel rewarded when the company does well. The share options vest over time and are viewed as part of talent retention in a competitive market.

Arecor has found that early-career researchers are particularly attracted to the benefit, as they often have had no prior exposure to share ownership and find the prospect exciting. More senior recruits will expect it as part of their remuneration package. Arecor's commitment to recruiting, developing, retaining and rewarding highly motivated people creates a culture focused on delivering excellence, which in turn drives the business forward.

Case study: Prosonix

Founded in 2006, Prosonix was an Oxford-based biotech developing inhaled treatments for respiratory diseases using its particle engineering technology platform, including one for asthma. Nine years later, it was acquired for £100m by Circassia, another company working in respiratory medicine. All 22 employees of Prosonix were offered EMI share options as part of their remuneration package. As a result, many received a significant lump sum on completion of the deal.

One employee who worked as a Research Scientist at the time said "it was a life changing experience as the financial benefit enabled me to pay off a large portion of my mortgage. The EMI share option is a key company benefit I look out for when I am applying for jobs with small biotech companies. The prospect of significant financial reward outweighs the lower salary and insecurity risk associated with working for small companies. The gamble did pay off for me. I used to work for Evotec and heard first-hand from happy Oxford Asymmetry employees who had gained from their share option scheme after the merger with Evotec. It's one of the reasons why I chose to work for Prosonix as the company participated in the EMI scheme."

Another who worked as a Chemical Engineer said "when Prosonix was bought by Circassia I received a lump sum which was roughly twice my annual salary. I used that as a deposit to buy my first house which had significant impact to my life. After having a very positive experience of the EMI scheme I am attracted to the jobs that offer EMI share options and they certainly influence my decision to stay with a company in the long-term."

A Senior Product Development Manager had a similar view: "when offered a higher salary role with no EMI options, I made the math and decided staying was worth a gamble. It paid off. I was able to repay the whole mortgage on my house, buy a much nicer car and put enough money in the bank to not have to worry too much for the next few years."

Retention (Q7)

Our members report that EMI share options also strongly support retention, particularly for more senior staff where they may have larger stakes.

EMI options will not normally vest and be capable of exercise in a short time period, meaning staff must remain with the company for a period (usually multiple years). Recruitment and training are significant costs for SMEs, and staff turnover is disruptive (more so than for larger companies), so this time allows that investment in people to be recouped.

Staff at all levels take into account the added benefits of EMI when comparing remuneration packages of their current employer and potential new employers and will generally forfeit their unexercised options on resignation in most companies, this therefore also helps with retention. Companies find that the promise of participation in future share option pools also aids retention, as loyal employees are able to avoid dilution through continued participation.

Impact on company growth and development (Q8-9)

The success of UK life science SMEs, the majority of which are pre-revenue and in the R&D phase, is wholly dependent on the speed at which they can conduct R&D to get a product to market before a competitor and the innovative quality of that product to address a complex medical or scientific problem (such as cancer). The skill of its management and scientists is therefore paramount, and the company's growth and development rests on them recruiting and retaining the skills they need.

In addition to recruitment and retention, EMI share options also align the interests of employees with the leadership and other shareholders, which benefits the company's performance and growth prospects. This is of course true for all employee share option schemes, but the added value of EMI relief accentuates the effect.

One of the key aspects of the EMI share scheme is the ability to agree value of the shares with HMRC. This ensures that the shares do not create income tax liabilities that would reduce participation and therefore effectiveness in the scheme, and maximises capital gains. This also allows all parties to have certainty, thus eliminating costly negotiations and uncertainty during M&A transactions, which are exit opportunities for employees' shareholdings. Suggestions by HMRC that they will no longer provide this service are highly concerning and will greatly devalue the EMI scheme.

Case study: Vaccitech

Vaccitech plc, the University of Oxford spin-out that owns IP for the platform technology behind the COVID-19 vaccines now produced by AstraZeneca, previously provided EMI share options to all its eligible staff. It no longer does after exceeding the £30m gross assets threshold.

Vaccitech plc currently has 48 staff, the vast majority of whom are based in the UK. In the year ended December 31, 2019, a total of 855 share options were granted, and in the year ended December 31, 2020, a total of 2,470 share options were granted, which reflects the company rapidly scaling to develop multiple programmes and growing investor interest in its technology, which ultimately led to an IPO in 2021.

The company found EMI valuable in attracting and retaining staff, and the scheme also plays an important role in rewarding performance based on milestones being met in R&D and business development (which itself aids retention).

All EMI options were to be settled in equity at a predetermined price agreed with HMRC, which helps provide the company, employees and future investors with certainty. They generally vest over a period of four years and all have a life of 10 years before expiration.

Recruitment and retention of key employees in high growth companies (Q10-15)

The consultation does not define a high growth company but on the basis that it is an SME that has exceeded the eligibility criteria as it has grown, we do believe that such companies in the life sciences sector are likely to still be pre-revenue R&D-intensive companies and therefore face the same challenges competing with more established companies for the skills they need.

These companies would likely still be SMEs, but due to large capital injections from investors for R&D or acquisitions of other companies, they exceed the £30 million in gross assets test, or a successful clinical trial could result in a large valuation increase so that unexercised options exceed the £3 million market value threshold. Despite this growth, they still may only be able to offer insecure job opportunities and fewer benefits than profitable and established businesses. Few companies that exceed the standard SME definition still face the same challenges.

Ensuring the EMI scheme remains accessible to these businesses would therefore be beneficial to continuing to meet the policy objectives of the scheme. Other forms of remuneration or employee benefits, including other tax efficient employee share schemes, would not be as efficient for these companies to offer nor as attractive to employees due to the lower tax relief rate offered.

CASE STUDY: ReNeuron

ReNeuron is an AIM-quoted clinical-stage SME based in South Wales developing novel stem cell therapies targeting areas of significant unmet or poorly met medical need. The company uses employee share options as a recruitment and retention tool. It favours EMI over other option schemes due to its ease of use and the tax benefits that employees value, especially the Business Asset Disposal Relief. All permanent employees are offered EMI share options, and the company believes they are particularly effective for retaining staff at senior levels. The company currently employs 34 people.

However, ReNeuron has often been unable to consistently offer EMI share options to its senior staff and Board Directors due to the £250,000 personal limit and to all staff due to breaching the £30m gross assets threshold. Approximately half of its senior leadership team have exceeded the personal limit in the past three years, undermining the scheme's ability to help retain vital talent, and the company has been unable to offer options to all employees for four of the past five years because equity funding rounds have taken its gross assets over the limit, despite the company remaining loss-making due to its intense R&D investment (it has no product on the market yet). The company believes the limits have not maintained pace with operating conditions in the UK, including remuneration inflation, and should be increased to allow consistent functioning.

Case study: Enesi Pharma

Enesi Pharma is developing next-generation unit solid dose vaccination products using its Implavax® technologies targeting infectious diseases and emergent threat pathogens, which affect millions of people around the world. Recent public collaborations include with BARDA on pandemic flu, Walter Reed Army Institute of Research (WRAIR) for Shigella, The Gates Foundation on Measles and Rubella, Public Health England on Anthrax, and The Pirbright Institute and the University of Oxford using the ChAdOx vector for Plague.

Enesi Pharma was founded in 2017, and is based at Milton Park, Oxfordshire, where it employs 32 people, and has tripled in size since foundation. The area has hundreds of biotech companies and larger scientific employers, meaning the job market is competitive. The company offers EMI share options to all its employees as part of its compensation package and believes it is invaluable to remain attractive to talent. A number of its scientists and leadership team have previously worked at other biotech companies where they had EMI options and benefitted when those companies were acquired.

David Hipkiss, CEO of Enesi and serial entrepreneur believes the incentive for talent to remain in the SME sector has been reduced as a result of the lifetime allowance for tax relief being reduced to £1m: “it is possible for a senior or long serving employee to gain close to or more than this amount in their first company acquisition or IPO event. After that, these experienced scientists and leaders have less incentive to take the continuing risk with new companies and impart their learnings and skills into new ventures and teams. It also effectively means new SMEs that might want to hire them will not have the ability to offer EMI as part of their compensation package, meaning that SME is disadvantaged through no fault of its own.”

EMI eligibility criteria (Q16-18)

Our members report that it can be easy for a business growth event, as described above, to unexpectedly and/or unavoidably exempt a company from the EMI eligibility criteria, despite the company remaining within the policy scope of the scheme. We therefore believe it would aid the policy objectives of the schemes to amend the criteria to enable these companies to continue to benefit. We recommend:

- The total gross assets threshold is increased to £86 million to align with the SME definition used for R&D tax credits. In the past five years 65 equity investments in EMI-eligible life science companies have exceeded £30 million, but only 18 have exceeded £86 million.⁸
- The unexercised share options threshold of £3m is changed to a percentage of total issued share capital value. This will address valuation increases, which should be incentivized not punished, and unexpected fluctuations.

The personal circumstances of employees or prospective employees also prevent some SMEs from utilising the EMI scheme for its intended policy purpose. To address this, we recommend:

⁸ BIA analysis of Pitchbook (unpublished)

- The individual financial limit of £250,000 is increased to reflect remuneration inflation in senior leadership roles since 2012, allowing the scheme to remain competitive and relevant to the market.
- The £1m lifetime allowance (through Business Asset Disposal Relief) should be returned to £10m so that SMEs can utilise EMI to attract experienced individuals who have benefitted from EMI in the past

Finally, to ensure the continued successful functioning of the EMI scheme, we recommend:

- In the event of any changes to Capital Gains Tax rate or Business Asset Disposal Relief, the tax benefits of the EMI scheme should be retained
- The Knowledge Intensive Company definition is used to better target the scheme and reduce costs to the tax payer

We do not believe the existing criteria have a significant distorting effect by encouraging companies to remain within them but do believe that, for the reasons outlined above, some of the thresholds inappropriately prevent legitimate use of the scheme and thus prevent it achieving its full policy objectives. The changes proposed would not expand the scheme to larger companies to the extent that it would have a distorting impact, especially as we are not proposing the employee threshold be increased.

For any further information on the contents of this submission please contact Dr Martin Turner, Head of Policy and Public Affairs, by emailing mturner@bioindustry.org