

# London's Life Sciences University Spin Out Ecosystem

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- The greatest flow of life sciences financial capital is into London-based companies in the UK.
- London spin outs which remain in London exit most quickly on average and are primarily in seed and venture stage and mostly co-located in the same life sciences cluster as their university of origin.
- Most London spin outs remain in London, and proportionately most incoming companies are from Cambridge into London.
- The frequency of spin outs within and entering London has steadily increased in the past 15 years, with a net increase of spin outs overall.
- Spin out companies from other UK universities tend to enter London at an earlier stage, with low headcounts and less financial capital. These companies raise almost 3x more upon moving into London, but also have the shortest cessation window, and longest exit window indicating a greater need for support or integration after moving.
- London spin out companies that **leave London**, do so at a **later stage** with more financial capital, and **grow their workforce significantly** more upon leaving than those that enter London.
- Most companies locate in London's Knowledge Quarter, regardless of their origin. The Knowledge Quarter is surrounded by UCL and the Francis Crick as anchor institutions, and is home to Google HQ, AstraZeneca, and MSD to name a few.

London's life sciences ecosystem provides **a platform to support the growth and financial acceleration of spin outs** from cities across the UK, as well as an increasing efflux of spin outs which locate across the UK to scale up their workforce and increase the number of high-value jobs in regional hubs.

Spin outs are important to the industry as they bridge the gap between academic discoveries and real-world applications, ensuring that breakthroughs in areas like biotechnology, cell and gene therapy, and Al-driven drug discovery translate into tangible products and services.

London spin outs have **raised billions in venture capital**, driving economic growth and employment, strengthening clusters through collaboration. Spin out companies de-risk innovation for investors through funding into early-stage research, and enhance the global competitiveness of cities to attract talent and pharmaceutical companies.

It is therefore important to understand the profile of **London's spin outs**, and **how, when, and why they move**, to enable strategic growth of the London ecosystem. This will support company retention, infrastructure planning, and access to investment.

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London & Partners is the growth agency for London. Our mission is to create economic growth that is resilient, sustainable and inclusive. We are funded by grants, partners and our portfolio of venture businesses.

### About MedCity

The MedCity team is a unifying voice for Life Sciences in London. We amplify London's strengths, provide information and resources to businesses and entrepreneurs, and support the ecosystem to grow in London.

### Introduction

Bringing together world leading research, an exceptional health system, a thriving commercial ecosystem and first class talent from 3 of the world's top 15 universities for health related research, London's ecosystem is a world-renowned crucible for life sciences development.

As the UK's seat of government and one of the world's major financial hubs, London offers ambitious innovators the support they need to succeed. A rich tapestry of collaboration and national and international connections spark creativity across disciplines and time zones. London's vibrant culture and rich heritage make the city a great place to live and work.

No other global centre unites such diverse strengths, keeping London at the forefront of life sciences and extending its history of innovation to tackle the challenges of the future.

Here we explore **trends in the city's life sciences university spin-out ecosystem**, (companies which are established to commercialise intellectual property developed within a university) highlighting the flow of spin out companies entering, leaving, and staying within London.

We delve into **30 years of sub-sector movements, funding dynamics, and growth patterns**, highlighting London's leadership in venture capital and talent within the life sciences industry, and the stages and profiles of companies which flourish upon entry, and those which expand upon exit.





## Methodology

This data exploration investigates the **rate, movement**, and **relative success** of **life sciences spin outs** from London universities. Data on spin out locations and key decision milestones such as **relocation**, **funding**, **employment growth** and **exit** were analysed to identify trends which may indicate the factors which influence a **company's decision to move**, and how relocation may impact success.

Data was sourced primarily from **Beauhurst** and **Dealroom** and included life sciences companies which have had a headquarters in London and have spun out of a UK university in the past 30 years. The total dataset of **215 companies** was exported and analysed using **PowerBI**, and sorted into 3 key categories: **companies which entered London from another UK university** (n=34), those which were **founded in London and left to another UK location** (n=62), and **London university spin outs** which stayed in London (n=119).

This dataset does **not indicate new overseas movement** for those companies which have been acquired and are exported from the UK. Such companies **are included within 'remained in London'** as their HQ was in the UK at the point of exit.

## Almost **1 in 4** of the UK's Life Sciences spin outs have had a **registered address in London**<sup>2</sup>

- Cambridge spin outs have the highest rate of moving into London of all other universities in the UK, with 8% of Cambridge and 5% of Oxford spin out now having their HQ in London.
- In contrast 7% of London universities spin outs re-locate to Cambridge and 4% move to Oxford. Stevenage is also a popular destination for London spin outs to grow and establish manufacturing in the more affordable outer London belt.
- Not only does London generate a significant volume of spin outs, but 34% of London's high-growth spin outs are exported to other UK locations; strengthening life sciences ecosystems across the country.



## **1 in 5** of the UK's Life Sciences spin outs are **from London's universities**<sup>2</sup>

 Since 2000, London life sciences companies have raised over 2.7x as much cumulative venture capital as the next highest location, Cambridge, and 3.4x as much as Oxford, making the capital an excellent location to build investment.



#### Figure 2. Cumulative venture capital invested in Life Sciences by headquarters location<sup>2</sup>

Overall, there has been a net increase of **91** spin out companies in London, **86%** of which have registered in London since 2010.

Figure 3. Count of companies entering, leaving, and spinning out in London by year<sup>2</sup>



- Since 2010, the rate of spin outs from London has increased, with the **highest** frequency of spin out generation in 2017 and 2020.
- London has become an increasingly attractive location for spin outs to grow; in 2023 and 2024, more spin out companies entered London from other UK universities than the number which span out of London universities and stayed in London.
- London spin outs left most frequently in between 2020-2023, which may have been influenced by the challenging business environment during COVID, heightened by the high cost of operations within London.

#### SUBSECTOR DISTRIBUTIONS

### Stay in London

#### **Enter London:**

45% Biopharmaceuticals32% MedTech21% Tools & Reagents17% Digital Platforms

54% Biopharmaceutical17% Digital Platforms9% Diagnostics9% Formulation

#### Left London:

44% Biopharmaceuticals26% MedTech15% Diagnostics11% Digital platforms



Figure 4. Distribution of company stages by movement<sup>2</sup>

- Those which **enter London** from other UK universites have the highest proportions of **seed**, **exited**, **and companies which have ceased to exist may be a better phrase**.
- London's spin outs which **remain in London** are primarily **seed-stage**, with a large proportion of **established companies**.
- London spin outs which have **left London** have higher proportions in **growth stage** than any other group.



## **Purespring Therapeutics**

Relocation to London: An interview with CFO, Sachin Kelkar

Purespring Therapeutics is developing gene therapies to halt or prevent kidney disease, one of humankind's most poorly treated disease areas.

Founded in 2020 on work from the University of Bristol, the company raised an initial seed round before moving to the Knowledge Quarter in London in 2021 where they have gone on to raise an oversubscribed £80 million Series B round, and have continued to grow their workforce in London.

#### Q: How have you benefitted from moving into London?

The London biotech ecosystem is vibrant, with a strong network of accelerators, incubators and support organisations specifically designed to foster the growth of life sciences companies. This was a key driver in our decision to move to London, and one that has provided us with unparalleled opportunities to grow, collaborate and access the resources critical for a biotech's success.

With close proximity to leading research institutions, such as Imperial College London, University College London and King's College London, we have been able to attract a highly skilled workforce with deep expertise in gene therapy, drug development and bioprocessing. This is essential to our mission of transforming the lives of patients with kidney diseases.

Access to early-stage and growth-stage funding was another key driver that we've been able to capitalise on since moving to London. Our founding investor, Syncona, is located here, and the infrastructure and access to funding from global markets has provided Purespring with a solid foundation for growth. We recently completed an oversubscribed £80 million (\$105 million) Series B funding, with participation from a prominent syndicate of both UK-based and European investors, which was certainly facilitated by the geographic and financial benefits that London brings.

## **Q:** Did you consider moving elsewhere after spinning out of Bristol, and what factors influenced that decision-making?

No, we strategically chose to position ourselves in London and have had great success so far. It was a key choice for us to move there, given the proximity to Syncona, whose guidance and resources played a key role in fueling the Company's growth from our earliest stages to our recent, hugely successful Series B fundraise. This decision has ultimately enabled us to unlock access to capital, propel our preclinical programmes forward and cultivate and attract top tier global talent.

#### Q: Do you think you would have had similar challenges elsewhere?

There was a multitude of factors that were considered during the spinout process but overall, the resources and accessibility afforded by London aligned better with Purespring strategic priorities, ultimately outweighing the potential advantages of development elsewhere in the UK. London's comprehensive support for spinouts, including access to skilled labour, increased opportunity for industry and academic collaboration and robust financing options, proved instrumental in the decisionmaking process.

We did consider other emerging biotech hubs, such as Bristol, Cambridge or Edinburgh, which offer tightly knit communities conducive to fostering collaboration. These smaller ecosystems can provide significant advantages for early-stage companies and spinouts, facilitating easier networking and partnership opportunities. These hubs often also benefit from specific regional government grants, tax incentives and funding schemes, providing additional support and structure to biotech's as they grow.

Ultimately, however, the resources afforded by London were best placed to support us through to our current stage of development, with the benefits of growing in the capital far outweighing any challenges.

Most of London's university spin outs originate from London universities. Incoming spin outs enter at a younger age, and those that leave tend to be more mature.



Figure 6. Distribution of company age at point of moving headquarters

**Entered London** 

**London's Imperial, UCL, and King's College** spin outs have both the highest frequency of university **spin out creation, and of spin outs leaving London.** 

Companies **enter London** from other UK Universities at an average of **7.8 years** after spinning out, and London University spin outs **leave Londo**n at an average of **9.1 years** after spinning out.

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Left London

Spin outs in London are able to **build financial capital in their early stages**. As companies grow, a **larger workforce is developed outside of London**, potentially due to lower costs of operating, and greater lab space availability.

#### Figure 7. Change in funding raised before and after moving headquarters



Figure 8. Change in employee count before and after moving headquarters<sup>2</sup>



- Those which enter London have raised and average of £4.6m in funding before entering London, and go on to raise 3x more after moving to London, on average.
- London university spin outs raise on **average 2.3x more after they leave**, with many large rounds coming from acquisitions and IPOs. The difference in the increase in funding received before and after companies which enter vs leave is not statistically significant. (p=0.108)
- London spin outs which **leave** to other cities **grow their workforce by 72% on average**, whilst those which **enter London** from other universities **grow by 47% on average**. This difference in headcount growth between companies which entered vs. left London is statistically significant.





### **Quell Therapeutics** Growth in London: Interview with CEO, **Jain McGill**

Quell Therapeutics is a clinical-stage company on a mission to make life better for those battling severe immune and inflammatory disease by leveraging the potential of Tregs to reinstate immune balance.

#### Q: What were your main goals in founding the company?

I had two main aspirations. First, I wanted to develop a truly transformational technology—something that we could look back on and say, "We did that." Second, I believe the UK needs companies like Quell. If the data supports it and we earn the right to grow, we could become a UK-based biotech success story, similar to the way BioNTech has in Germany.

## Q: How did the company start, and why did you choose London as your base?

The company spun out from research at King's College London, UCL, and Hanover in Germany. It quickly became clear that the only place in Europe, and perhaps even the world that we could have set Quell up was London. At Quell, we take PhDs, post docs and postgraduates from deep translational immunology programmes, and there are more university hospitals with deep translational immunology in London than I think anywhere else in the world. So, for us it's a phenomenal place to be, and a great place for talent as a city that attracts ambitious young people from all over the world.

That said, London has a very high cost of living and lower salaries compared to US cities, but people still want to come here from the US and from all over Europe. We have this wonderful map in our kitchen at Quell that has pins showing where in the world everyone has come from, and it just shows how, and it just shows how international we are as a company.

## **Q**: You've raised a significant amount of capital. Can you tell us more about that?

Yes, we've secured a substantial amount of funding, with just over half coming from European and UK investors plus a significant amount of US capital, as well as an \$85 million investment from AstraZeneca. This kind of funding from a large pharmaceutical company is crucial and positions us to make a meaningful impact.

AstraZeneca is a global company with a strong presence in the UK, the US, and Europe. When we partnered with them, we worked with scientists in Gothenburg (Sweden), Cambridge (UK), and Boston (US), and London's global connectivity made it easier for us to fit into that framework. Choosing AstraZeneca also aligned with our goal of keeping skills and talent in the UK as well as building out advanced translational immunology capabilities here too. Language was another advantage to working with US investors and large pharmaceutical companies as it's much easier to build trust and partnership when you share a language. Because of language, London is also an attractive city for seasoned, British-trained professionals to return to, knowing their families can access world-class education and vibrant cultural experiences in London.

#### Q: What challenges have you faced growing in London?

We do face a challenge with fewer C-suite biotech leaders in the UK, in part due to the larger critical mass of companies, greater earnings potential, and a macro- climate of 'biotech builders' in the US, all of which draws leadership away. However, there are many British-trained executives in the US who are open to returning, so we need to think about how we encourage seasoned professionals back to run our growing UK companies.

Those people who return from the US bring with them valuable industry networks, including connections in large pharma, investors, and biotech firms in the key hubs of Boston and San Francisco, and provide a critical injection of experienced C-suite talent, which is in relatively short supply here. Companies based solely in the UK, or in any one country, often lack those critical links to key

#### players in the US market.

**Q: We've talked a lot about the US and having such close ties, so is that an expansion you see in your future?** Right now, we operate solely in the UK, with two sites in London, but expanding to the US is both necessary and desirable. If you don't conduct pivotal trials in the US, you miss out on engaging with US scientists and key decision-makers. This can impact adoption when your product becomes commercial, given over 55% or so of the global market for new drugs is in the US. If you don't maximise your market engagement, then no revenue flows back to the UK, so having your patents held here doesn't really matter. So, expanding to the US is desirable, but we need to ensure the right incentives exist to keep companies firmly rooted in the UK.

## **Q**: What are your hopes for the UK's life sciences industry growth in the coming years?

The UK has some of the best universities but hasn't done a great job of keeping commercialised technology here. Traditionally, many UK investors have structured their investments to exit at the first sign of promising data, selling to larger, often US-based, companies rather than scaling businesses here. This means UK biotech has been great at producing innovation but not necessarily at growing global companies.

However, investors like Syncona and SV Health Investors are now backing UK-based biotechs with the ambition to build rather than sell. With pension fund reforms potentially bringing more capital into private markets, there's an opportunity to scale more companies in the UK. That requires investors who understand the longterm risks and rewards of biotech, and management teams who are aligned with a growth-focused strategy. The talent base and science is already here, and if we can shift both investment and leadership aspirations, then the UK certainly has the potential to create multiple homegrown biotech giants and truly play alongside the likes of Boston; sharing in a talent and investment pool and strengthening each other. London university spin outs that remain in London typically exit or cease operations sooner.

#### Figure 9. Distribuition of Years to Exit (IPO, Aquisition)<sup>2</sup>



#### Figure 10. Distribuition of Years to Death<sup>2</sup>



- Those entering London from other UK universities often take longer to exit but face a shorter window to cessation after incorporation, likely due to entering at an earlier, high-risk stage with less funding and smaller teams.
- Conversely, spin-outs **leaving London are more mature, with greater funding and larger workforces**. They tend to exit at an average age of 8 years, which is older than those staying in London, though their cessation occurs later than both stayers and entrants.

The **most popular cluster** for spin outs from universities in London, and those moving into London, is the **Knowledge Quarter**, which is home to the **largest volume of laboratory space** alongside top academic institutions such as **UCL** and the **Francis Crick Institute**. For London spin outs, the next **most popular destination is the White City Innovation District**, home to **Imperial**, and for incoming spin outs from other universities, is **SC1**.

#### Figure 11. Volume and value of companies by Life Sciences cluster<sup>2</sup>



University spin outs tend to **co-locate to their university of origin** in London. For example, across London's clusters the percentage of spin outs from local universities is:

- **Knowledge Quarter: 43%** University College London, London School of Hygiene and Tropical Medicine, and Royal Veterinary College
- White City Innovation District: 41% Imperial (24% University College London)
- SC1: 23% King's College London
- Paddington Life Sciences: 52% Imperial
- Barts Life Sciences: 53% Queen Mary's
  University

- The Knowledge Quarter has a high count of small, early stage companies.
- In contrast, the second most popular location for spin outs, White City Innovation District, has fewer companies, but with significantly higher median values, suggesting that spin outs have grown more in this district in comparison to the smaller startups in the Knowledge Quarter.
- The Knowledge Quarter and White City offer the largest amount of laboratory space, with over 1.55M ft<sup>2</sup> and 0.7M ft<sup>2</sup> space available in each district, respectively, in January 2025. The London Lab Showcase shows this trend is likely to continue, with planning approved for a further 1.38M ft<sup>2</sup> and 0.5M ft<sup>2</sup> to be developed by 2032<sup>3</sup>.
- Barts Life Sciences has the largest difference between location of London spin outs, and very few incoming spin outs. This is likely due to a current lack of laboratory space for spin outs which aren't part of Queen Mary's University and grow within the onsite incubator at the university. Significant investment in laboratory space has been made at Barts, with over 560,000 square feet of commercial laboratory space to be delivered by 2032, which may trigger an influx of companies to the district.
- Companies which have entered London in White City have a lower valuation than those which spin out from London Universities. In contrast, the spin outs which have entered London in Paddington and Barts Life Sciences Whitechapel have higher valuations than those which spun out of London universities.

## **Conclusions and References**

London's life sciences ecosystem plays a crucial role in nurturing spin out companies, serving as both an incubator for early-stage ventures and a gateway for financial growth. The city attracts spin outs from across the UK, particularly from Cambridge, with companies that enter London raising significantly more capital than before.

Whilst many spin outs remain in London, those that do leave tend to be later-stage companies with stronger financial backing and larger workforces, contributing to the growth of regional life sciences hubs. In regional hubs, mature companies are able to scale with more cost-effective space, increasing high-value employment across the UK.

London's Knowledge Quarter continues to be the focal point for company co-location with academic institutions and global research hubs like the Francis Crick Institute, which reinforce the city's position as a crucible for life sciences innovation and investment.

### Any questions?

Please get in contact, sign up to our newsletter, or read more about MedCity

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lain McGill, CEO, Quell Therapeutics

#### References

- 1. Dealroom (2025). VC Investment Stats & Insights. Retrieved from (app.dealroom.co/] (09/01/2025)
- 2. Beauhurst (2025). Advanced Search BeahurstImpact. Retrieved from [platform.beauhurst.com] (09/012025)
- 3. MedCity (2024). London Lab Showcase Report 2024. Retrieved from [medcityhq.com/resources/london-lab-showcase-report-2024/]

