

UK Life Sciences & Innovation Insight Report

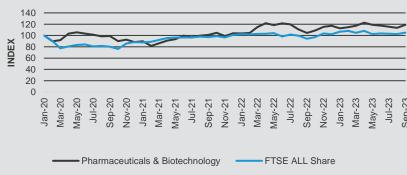
Sector performance

Q3 2023



Share price: Pharma and biotech stocks boost UK equity market

FTSE ALL SHARE, PRICE RETURN INDEX, JAN 2020=100, GBP



Pharmaceutical and biotechnology stocks continue to outperform the broader UK equity market. Analysts note that strong gains in pharmaceutical stocks have buoyed the FTSE All Share in recent months.

Two pharmaceutical firms - Dechra Pharmaceuticals and Hikma Pharmaceuticals - were added to the FTSE 100 index this quarter. Their addition came as part of the index's regular quarterly review process.

Source: Macrobond and Knight Frank Research.

Company creation: Startup growth hits 10-year high

COMPANY INCORPORATIONS - UK LIFE SCIENCES



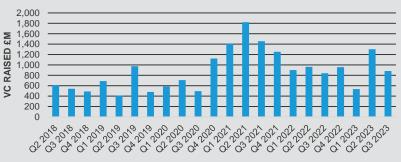
Source: Fame and Knight Frank Research. Data includes active companies only. BVD sector: Biotech and life

The formation of new life sciences companies in the UK continues to accelerate, with 277 incorporated in Q3. This represents a 9% increase from Q2, and a 31% jump compared to the same period in 2022.

So far this year, 813 life sciences companies have launched in the UK the highest number for the first three quarters in the past decade.

VC funding: Dips quarter-on-quarter after record Q2 deal, but remains strong YTD

VC FUNDING INTO UK LIFE SCIENCES COMPANIES £M



Source: PitchBook and Knight Frank Research. HQ location UK, Completed deals only. Covers: Biopharma, MedTech and Digital health. Data as at 17/10/2023.

Q3 venture capital funding for UK life sciences companies totalled £883m. This represents a 32% decrease from Q2, but a 5% increase compared to the same period last year. The £602m raised by YgEia3 in Q2 contributed to the decline

Year to date, UK life sciences companies have attracted £2.7bn in VC backing, marking the second highest level over the past decade for the first three quarters.

Vacancies: Cools in Q3, with job openings concentrated in key clusters

SCIENTIFIC & QA WEEKLY JOB ADVERTS: INDEX 100: AVERAGE FEBRUARY 2020



Vacancies for scientific and QA roles fell 11% quarter-over-quarter, a larger decline than the 3% drop seen across all industries.

The majority of open positions remain located in the Golden Triangle. Other regions with sizable numbers of scientific and QA job openings include the North West, Yorkshire and the Humber, and Scotland.

knightfrank.co.uk/life-sciences

Occupier prospecting

Q3 2023



A data-led approach, to identify and qualify life sciences prospects

Knight Frank are actively tracking the following metrics in order to maintain a watch list of the most promising UK life sciences occupiers:

- · Venture capital funding
- · Private equity financing
- · Changes in employment
- · Changes in financial performance
- Corporate announcements (such as restructuring or expansion plans)
- · University spin-outs
- Clinical trials activity
- New company registrations
- M&A activity
- IPO listings
- · Public funding
- Other sources of research funding, such as via charities and industry

This quarter we take a look at Clinical Trials. The number of clinical trials a company has underway can be an indicator of company growth and progress. A higher number of trials, especially those in late-stage phases, typically signifies that a company has an active pipeline and is effectively advancing candidates from research into clinical development.

Top UK life sciences companies ranked by number of active clinical trials

COMPANY	SUB-SECTOR	UK LOCATIONS	NUMBER OF ACTIVE CLINICAL TRIALS
AstraZeneca	Pharmaceuticals and Biotechnology	Cambridge, London, Liverpool (Speke) and Cheshire (Alderley Park and Macclesfield)	775
Eli Lily	Pharmaceuticals and Biotechnology	Basingstoke	325
GSK	Pharmaceuticals and Biotechnology	Stevenage, London, Brentford, Montrose, Irvine, Barnard Castle, Ulverston, Harlow, Ware and Worthing	299
Regeneron Pharmaceuticals	Pharmaceuticals and Biotechnology	Uxbridge	164
ViiV Healthcare	Pharmaceuticals and Biotechnology	Brentford	76

Source: PitchBook and Knight Frank Research. UK locations sourced from company websites. 'Active trials only

Real estate activity

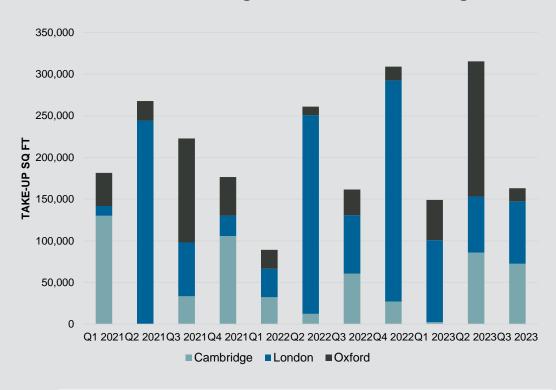
Q3 2023 - Leasing market

Select leasing deals Q3 2023

OCCUPIER	PROPERTY TYPE	BUILDING	CITY	SIZE (SQ FT)	RENT IF AVAILABLE (£ PSF)
hVIVO	Lab (tenant conversion)	40 Bank Street, E14	London	39,049	£53.00
T-Therapeutics	Lab Enabled office	One Granta Park	Cambridge	20,000	Confidential
Ipsen Pharma	Office	The Point, 37 North Wharf Road, W2	London	18,006	£80.00
Insmed	Lab Enabled office	Building 960, Babraham Research Park	Cambridge	17,178	£66.00
XAP Therapeutics	Lab Enabled office	Building 960, Babraham Research Park	Cambridge	10,500	£67.00
Sysmex	Lab Enabled office	The IQ, Oxford Technology Park	Kidlington	10,765	£20.40

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Life sciences leasing volumes, Golden Triangle



Q3 2023 TOTAL	2022 TOTAL	2021 TOTAL
163,152 SQ FT	820,675 SQ FT	848,635 SQ FT

Source: Knight Frank Research. Take-up includes both offices and lab space. In London, take up includes life sciences, office and lab take-up + healthcare + academic space, if there is a life sciences component. It also covers tech companies with a life sciences focus.

Real estate activity

Q3 2023 - Investment market

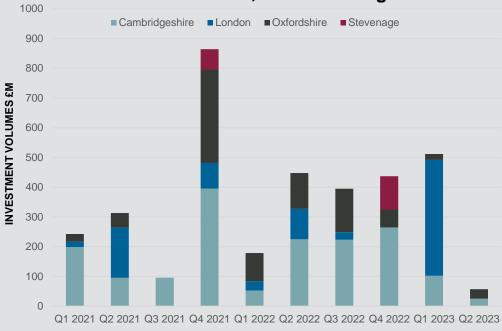
Select investment transactions YTD 2023

(There were no life sciences investment transactions in Q3)

ADDRESS	CITY	SIZE (SQ FT)	PRICE £M	AGREED NIY %	VENDOR	PURCHASER
Assembly & Connector & The Platform, St Pancras Way, Tribeca (development underway)	London	615,502	£290M	Freehold (sold as a consented development with vacant possession)	BlackRock Reef Group	GIC Private Ltd
17 Columbus Courtyard (for repurposing)	London	188,323	£99.75M	Freehold (vacant possession)	DPK Macquarie Group Ltd Sun Hung Kai & Co Ltd	GIC Real estate Oaktree Capital Group, LLC
Westbrook Centre, (for redevelopment)	Cambridge	123,229	£75M	0.95%	Capital London	UBS
Dales Manor Estate (for redevelopment)	Cambridge	130,049	£25M	4.91%	Warehouse REIT Plc	Tristan Capital Partners LLP

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Investment volumes, Golden Triangle £m



YTD 2023 TOTAL	2022 TOTAL	2021 TOTAL
£568.27M	£1.46BN	£1.53BN

Source: Knight Frank Research. Completed deals only.

Real estate activity

Q3 2023 – Other real estate activity



Funding, operating models and partnerships in Q3 2023

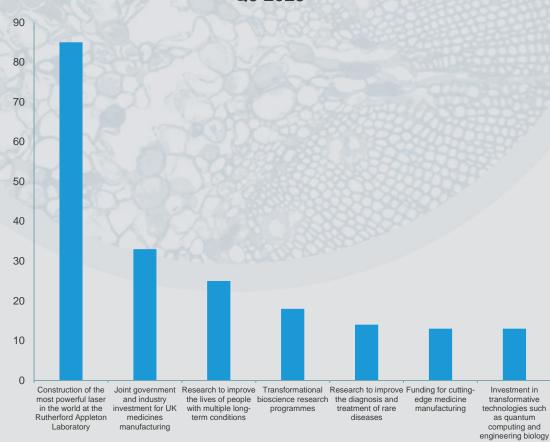
COMPANY / ENTITY / LOCATION	ACTIVITY
Pioneer Group	Formed a partnership with King's College London to develop 95,000 sq ft of life sciences incubator facilities.
Liverpool City Council	Procuring a partner to work on a 20-year development, investment and generation plan which will focus on growth across innovation sectors such as life sciences.
Feldberg Capital	Acquired Brunswick Property Partners in the UK for an undisclosed amount. The acquisition forms part of Feldberg's strategy to focus on real estate developments and investments in Western Europe. The company has plans to continue investment across workspace, life sciences, logistics and next-generation residential properties.
British Land	Appointed Mike Wiseman, most recently its head of office leasing, to lead workspace leasing for the firm's innovation and life sciences properties. He will also be responsible for asset management and accelerating the delivery of British Land's innovation strategy. Head of Broadgate developments Gareth Roberts has been appointed as head of development for innovation and life sciences.
Mission Street	Strengthened its advisory board with the appointment of Nick Sturge, who will advise on the delivery of the group's life sciences scheme in Bristol.

Government investment tracker



Q3 2023 - Summary of key public investments into life sciences

Top UKRI investments into life sciences research and development
Q3 2023



Other significant Government announcements:

- The UK government agreed to rejoin the European Union's Horizon research programme, the
 world's largest multilateral research initiative. The move was welcomed by the academic community
 and life sciences industry, which had strongly advocated for the UK to regain access to this critical
 source of research funding and collaboration.
- Launch of the Mansion House Reforms, measures aimed at unlocking pension fund assets for investment into growth sectors. Nine major pension providers committed to allocate 5% of default funds to unlisted equities by 2030, which could unlock £50bn if all providers follow. However, there are no mandated allocation requirements. A consultation will explore doubling Local Government Pension Scheme investments in private equity to 10%, potentially unlocking £25bn by 2030. The reforms also aim to improve pension trustee skills, overcome cultural barriers to illiquid investments, and make listing in the UK easier.
- Liverpool was named England's second Investment Zone. The news follows the first Advanced
 Manufacturing Investment Zone in South Yorkshire. In Scotland Glasgow City Region and North East
 of Scotland will be Scotland's Investment Zones. Investment Zones are focused on driving growth in
 priority sectors including life sciences.
- The levelling-up secretary and officials drew up proposals known internally as "Cambridge 2040". According to an article in The Sunday Times, officials have started identifying potential sites for new homes, laboratories and business parks, and discussing potential rail, bus or tram networks. Sources say the proposals could lead to up to 250,000 homes being built in the city and surrounding area. However, questions remain about overcoming infrastructure and public service constraints to enable sustainable long-term growth.
- The UK government signed an agreement with BioNTech to provide up to 10,000 patients with precision cancer immunotherapies by 2030.
- The Medicines and Healthcare products Regulatory Agency (MHRA) designated three new UK
 approval bodies, almost doubling the UK's capacity to certify medical devices.
- The UK's Advanced Research and Invention Agency (ARIA) appointed eight programme directors who will be responsible for selecting and funding high-risk, high-reward R&D projects. Each director will oversee their own £50m budget.
- Strategic plans for the growth of other innovation sectors forged ahead, including £40m of funding for local and regional authorities to accelerate 5G innovation as well as an Al summit in the UK on the safety of Al.
- The government announced funding of £5.5m to establish a Medicines Manufacturing Skills Centre of Excellence. A competition to allocate funding, led by Innovate UK, opened at the end of September.

Other news



- Life sciences M&A activity has picked up with \$80bn spent in the first half of the year globally. In the UK large deals included Abcam, who signed an agreement to be acquired by Danaher for £4.5bn, and EMIS Group, who reached a definitive agreement to be acquired by UnitedHealth Group for £1.24bn. Deal activity is being driven by the need to fill revenue gaps and acquire new assets to alleviate the patent cliff.
- The integration and convergence of technology and life sciences continues to accelerate, especially in the field of artificial intelligence (AI). According to GlobalData, pharmaceutical job postings for generative AI roles surged 407% between April and July 2023, highlighting the industry's demand for AI skills. The top UK cities for AI talent are London, Manchester, Edinburgh, Cambridge and Bristol, based on Knight Frank's AI cities index. Traditional life sciences companies are also actively pursuing AI, as evidenced by Merck's new strategic collaboration with BenevolentAI. Venture capital funding is also on the rise, with AI startups like Causaly and Eagle Genomics securing investments in Q3 2023.
- Statistics from the National Institute for Health and Care Research (NIHR) showed that more commercial and industry-led studies are occurring compared to pre-pandemic levels. Commercial research studies increased by almost 200 on pre-pandemic levels going up to 1,757. Industry activity jumped to 764, exceeding 671 studies in 2019/20. Additionally, 1m participants across England took part in NIHR research in 2022/23, an increase of 220,000 on pre-pandemic levels. The NIHR called out the National Contract Value Review Approach as a key component in how the sector is promoting study growth, with data indicating that, following the first six months of the process' implementation, set up times were reduced by 45%. Led by NHS England, the approach is the UK's standardised way of costing and contracting commercial research, which will be further refined this autumn following the government's approval of recommendations from the O'Shaughnessy Review.
- Cambridge was in the spotlight with data from Cambridge Ahead finding that growth in the Cambridgeshire and Peterborough region outpaces the national economy. The study examined 37 key business and science parks who collectively invest an average of £2.4bn annually in R&D activities, accounting for 44% of the £5.4bn corporate R&D spending in the entire East of England region. Within the examined parks, there are 2,400 companies providing employment opportunities to over 50,000 individuals. Five major life science parks (Babraham Research Campus, Cambridge Biomedical Campus, Chesterford Research Park, Granta Park, and Wellcome Genome Campus) alone contributed 59% of the total R&D spending in the region during the 2021-22 period. Cambridge was also ranked the number one science and technology cluster globally by intensity (relative to population density) in 2023 by WIPO. It filed 6,582 PCT applications and published 37,136 scientific articles, both per 1m inhabitants over the last five years.
- The Times' 2024 world university rankings placed Cambridge 2nd, Oxford 3rd, and Imperial College London 10th for life sciences. The UK remains a top performer, consistently having the second most universities in the top 200 after the US. The UK was also ranked 4th in WIPO's (World Intellectual Property Organisation) 2023 global innovation index. The index uses 80 indicators to track global innovation trends in 130 plus economies.
- Two separate reports reveal the current state of the UK's spinout landscape. The first report compiled by Octopus Ventures ranked the University of Dundee as Britain's most successful university for start-up exits. The Entrepreneurial Impact Ranking measured UK universities' effectiveness in terms of their production of intellectual property, creation of spinout companies and successful exits from such spinout companies, relative to their total funding. The second report from Beauhurst and Parkwalk Advisory ranked The University of Oxford (64) and the University of Cambridge (50) as the top institutions by number of equity deals secured. Imperial College London has moved up the rankings to third place (26) as the Imperial College Enterprise Funds accelerated the spinout process there.

Knight Frank Life Sciences & Innovation team contacts



Our UK network of offices is aligned to the Life Sciences and Innovation sector, operating across London, the Golden Triangle and the UK Cities markets where innovation and research ecosystems thrive. These teams connect with our wider global platform. Whatever your requirements, our team of market experts, supported by deep research capabilities, can help meet your real estate demands within the Life Sciences and Innovation sector.

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