

The science of success: UK biotech financing in 2020



BioWorld

Part of Clarivate

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Forewords



Steve Bates OBE CEO, BIA

We are all fortunate to live at a time when great scientific progress is being made in our understanding of biology, health and disease, making possible life-saving new drugs and life-changing technologies. The record-breaking level of investment in UK biotech companies revealed by this report is proof that our sector is at the leading edge of this golden age.

The £2.8bn of equity raised by the UK biotech sector in 2020 reflects the growing realisation amongst investors, policy makers and the public that today's science is the answer to tomorrow's problems.

In 2020, BIA member companies demonstrated their value and impact; they developed a vaccine for COVID-19 currently being distributed to millions of people around the world, while others have provided ground-breaking diagnostics or have promising life-saving therapies in the pipeline. In a difficult year, UK life science has been a beacon of economic and health success.

None of this would have been possible without the support of investors and a government that shares our vision, having committed to make the UK the "third global life sciences hub" in its 2019 manifesto.

When, in 2015, the BIA published our ambitious Vision for the Sector in 2025, we set the goal of attracting £2.86bn in equity finance per annum. Just five years into that vision, we have hit that target. I'm excited by what can be achieved in the next five years. The UK's biotech companies offer investors an unrivalled opportunity to catch this wave. The UK, combining its world-leading science, entrepreneurial culture and supportive business and policy environment, with the cradle to grave data of the NHS, is the perfect place to invest in and build life sciences businesses.

Global investors recognise this, and we at the BIA are keen to see more UK-based investors benefit from the major opportunity on their doorstep. As UK pensioners benefit from COVID-19 vaccines, I urge them to ask their pension fund trustees and advisors what they are doing to invest in this critical UK success story.

Policy makers must ensure we have the optimum environment for companies to grow, and in doing so they will anchor high quality jobs for the next generation. We must ensure new regulation – such as that being implemented by the National Security and Investment Bill – does not impede the flow of capital into innovative UK businesses, and that our trade policy and tax system remains fit for purpose in a global environment where everyone is competing for high-tech industries. Successful industrial strategy has been vital in getting us to this point and should continue, with the UK's innovation agency, Innovate UK, at its core.

Of course, the pandemic did cause considerable financial problems, and we saw seed and early-stage venture capital withdraw in the second quarter before bouncing back. Government support through the Future Fund, promptly delivered by the British Business Bank, as well as Innovate UK grants and R&D tax credits steadied the ship. We must ensure companies at the earliest stages are nurtured and so we have begun monitoring company creation and grant funding in this report to help us keep an eye on the vital pipeline of innovation these companies represent.

This report provides fantastic hope and opportunity for each one of us and for patients most of all. It reveals a sector that has come of age, that is getting the recognition and investment it deserves. Thank you to all of the BIA members and other contributors, and especially to our data partners Clarivate, for making this report possible.



Mike Ward Global Head of Thought Leadership, DRG, part of Clarivate

Biotechs fared better in 2020 than companies in many other industries. Despite the disruption caused by the pandemic, the global biopharma industry was able to raise record sums of capital, conclude biopartnering deals, and launch new medicines, while minimising the impact on clinical trial activity.

Drawing on the comprehensive coverage of the sector by Bioworld, 2020 was a marquee year for biotech fundraising. In the 12 months to November 30, the total capital raised by the global biotech sector was £80.1bn. A further £164bn was secured through biopartnering transactions, grants and deals with non-profit organizations, providing many companies across the globe with the funds to underpin their sustainable development.

More importantly, the sector was able to mobilise its R&D resources to tackle COVID-19, establishing unprecedented alliances and coalitions with peers that enabled companies to accelerate the development of potential therapeutics, vaccines and diagnostics to combat the pandemic. Indeed, even though the SARS-COV-2 virus was only identified at the end of 2019 and sequenced in January 2020, the biopharma sector was able to deliver promising responses within the year with, according to Cortellis, 649 therapeutic and 192 vaccine candidates in development, with some either approved for use or on the cusp of approval.

With the industry's response to COVID-19 highlighting the potential value of the biotech sector, capital flows into biopharma were robust as investors also looked for asset classes that are more insulated from the economic downturn triggered by the pandemic.

Across the globe, 90 biotech companies raised £14.6bn through initial public offerings. Companies in the United States, primarily those based in California and Massachusetts, took the lion's share of the money, but companies based in mainland China maintained their momentum of recent years with 14 firms completing IPOs, with Hong Kong the favoured destination. Europe slipped behind mainland China for the first time, with 12 European companies netting just £958m.

Biotech companies also raised an additional £25.7bn through 318 follow-on transactions and a further £24.0bn in 558 other financings including debt instruments. A further £25.7bn was raised worldwide through venture and private financings.

Looking forward, the prospects for biotech companies to raise additional capital from venture sources in the coming years are promising as new life science funds continue to be launched. In 2020, venture capital firms were able to raise more than £15.8bn, money that has been earmarked for entrepreneurial life science companies

On top of the sums raised from the capital markets, biopharma companies managed to secure at least an additional £143.4bn in commitments through 1,998 biopartnering deals, with a further £20.6bn associated with non-profit collaborations and grants.

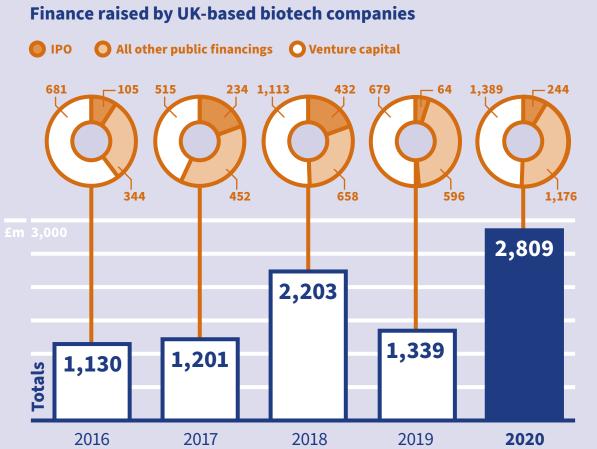
Overall trends

UK-based biotech companies raised a total of £2.8 billion in 2020*, marking the best ever year for the sector. The annual haul far exceeds the previous record of £2.2bn set in 2018. It is also over twice the total raised in 2019 and over ten-times that raised in 2012, when the BIA began publishing investment data.

Venture capital financings secured £1,389m, Initial Public Offerings (IPOs) netted £244m, and all other public financings raised £1,176m. By percentage, the split was 49% VC, 9% IPOs, and 42% from all other public financings.

The record sum was fuelled by both public and private markets, neither of which were greatly put off by the COVID-19 pandemic's impact on global economies. The uncertainty did impact investment in the youngest companies, however.

The successful year means many UK biotechs are well capitalised as we head into 2021 with continuing high levels of global economic uncertainty.





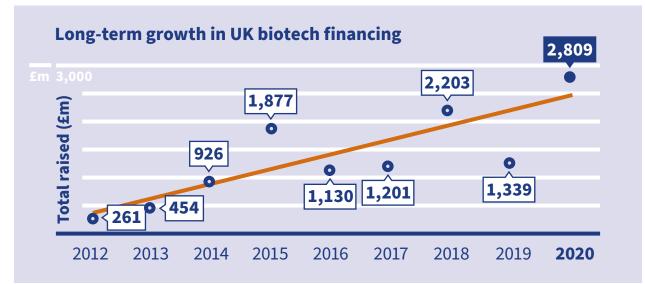
Kate Bingham Managing Partner, SV Health Investors 2020 was a phenomenal year for our country's life sciences and clinical community, driven by the UK's global contribution to help control the COVID-19 pandemic.

Academic science at the Jenner Institute at Oxford, since partnered with AstraZeneca, was rapidly developed and approved by the MHRA as the first vaccine suitable for global distribution. Steve Bates and the BIA's taskforce led by Ian McCubbin spearheaded the scale up and manufacturing work for the Oxford vaccine starting in early 2020, meaning the UK would be able to roll out the vaccine as soon as it was approved.

Meanwhile, the UK's RECOVERY trial provided definitive data to support the use of dexamethasone and the two arthritis drugs (tocilizumab and sarilumab) to treat severe COVID patients, as well as proving that alternative treatments were futile.

I am delighted to see the building momentum of the UK life sciences industry, which raised a total of £2.8 billion in 2020, marking the best ever year for the sector. The world total for biotech VC investments increased from £14.6bn in 2019 to £25.7bn in 2020, reflecting the global excitement for the fact that science and scientists would lead us out of the pandemic.

The UK Vaccine Taskforce, which I Chaired in 2020, has helped position the UK at the forefront of global vaccine R&D and manufacturing during this pandemic. The successes and innovation we have seen in the UK was based on the astonishing contribution, foresight, commitment and generosity of the UK biotech community, including those in discovery, clinical, regulatory and manufacturing. The UK now needs to maintain this momentum and levels of innovation, and extend it across all therapeutic, diagnostic and healthtech sectors so we can build well financed, world leading UK companies that can help save lives around the world.



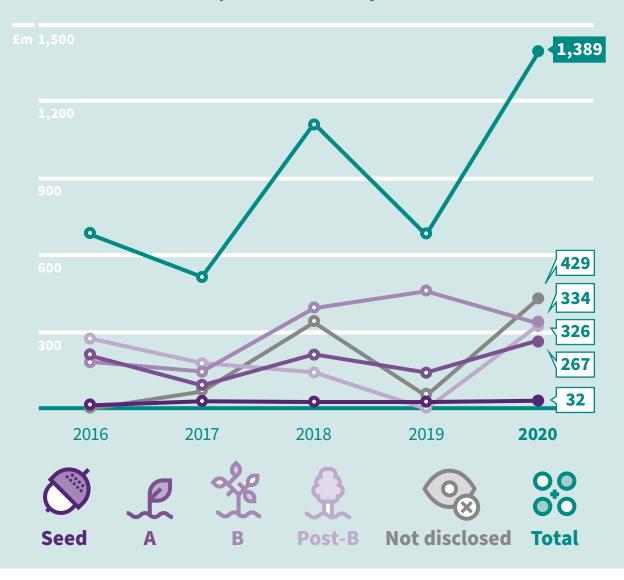
* The dataset in this report covers the period from 1 December 2019 to 30 November 2020. It provides fundraising data based on the headquarters location of the company. Where fundraises weren't in pound sterling, the relevant exchange rate of the time was used. The data is provided by DRG, part of the Clarivate Group, and Bioworld, with additional data sourced from the London Stock Exchange, the British Business Bank, Beauhurst and Pitchbook.

Venture capital

A record £1.39bn was invested into private UK biotechs in 2020 as investors continued to recognise the long-term value creation the sector can deliver.

Despite a temporary drop in seed and series A financings in the second quarter of the year when the pandemic hit the UK, funding was extremely healthy across all series.

For more developed companies, large series B+ rounds have now become more attainable, allowing them to secure enough capital to invest heavily in R&D and scale rapidly. The availability of later-stage private capital, much of it sourced from US investors, also means companies have the option to stay private longer, which has led to fewer IPOs in recent years.



UK biotech venture capital investment by series



Jason Mellad CEO and Co-Founder, Start Codon Despite the challenges of the global COVID-19 pandemic and our recent exit from the European Union, the UK will continue to be a powerhouse for life science innovation and commercialisation. We have the right combination of world-leading biomedical research universities, ambitious young talent, patient capital and experienced leaders required for a thriving biotech ecosystem.

The UK is home to a fertile seed funding environment that is enhanced by a range of initiatives including over £40m of product development grant funding from Innovate UK in 2020 alone (see page 27), broad commercialisation expertise provided by the Catapult Network, accelerators such as Start Codon which invest significant seed capital, and the (Seed)Enterprise Investment Scheme (S/EIS) tax incentive to encourage business angel investment and mentorship.

The significant decrease in equity-backed start-ups in 2020 reflects a global trend of temporary uncertainty and increased risk aversion experienced by cautious investors during the earliest days of the pandemic. However, these figures do not accurately convey the numerous potential new-cos which, in my experience, have decided to delay spinning-out of academic institutions where they continue to achieve key development milestones. In 2020, our accelerator was inundated by applications from hundreds of UK-based potential life science start-ups seeking seed funding and I anticipate that we will witness a wave of new ground-breaking companies securing early capital in 2021. I am also increasingly contacted by leading US, European and Asian life science investors who are keen to back UK-based healthcare companies and, importantly, help them grow and scale within Britain. For example, Apple Tree Partners, Morningside and Sequoia Capital have all recently established UK offices so that they can directly tap into our ecosystem. Similarly, Hummingbird, Epidarex and several other pioneering investors announced the successful close of new biotech-focussed venture funds in 2020 and are actively deploying capital into new enterprises.

It is often said that innovation flourishes in challenging times. I believe that the upward biotech investment trends over the past decade and a renewed global focus on the early detection and prevention of disease, decentralised care, precision medicine and digital health will drive early stage UK biotech investment to new heights in 2021 and beyond.

Company creation

There was a significant drop in biotech company creation in the UK in 2020 compared to previous years, and a smaller decline in first-time investments in nascent companies.

Our data shows reduced seed and series-A investment in the second quarter of the year but a quick bounce back in Q3. By looking at company formation, we can see that the pandemic has potentially had a more severe impact on entrepreneurial activity than the overall venture capital data would suggest.

This is the first time the BIA has presented this data. The past five years has seen a very slow decline in the number of biotech companies being founded in the UK but relatively sustained numbers of companies receiving their first investment. These two datapoints, which do not necessarily represent the same companies in any given year, are presented together because companies are often created to hold IP or for other reasons many years before they become active; the investment data therefore provides an indication of the number of companies "getting off the ground".

Both metrics show a decline in 2020, with only 8 companies created, down from 30 in 2019 and 47 in 2018. The number receiving their first investment also dropped from 70 to 49, but this is within the natural variation of past years. The data suggests that investors remained reasonably confident in backing fledging businesses in 2020 but founders themselves decided to bide their time. We will continue to monitor this data in future reports.



UK biotech company creation and first-time investments



Sam Roberts Managing Director, Health & Care, Legal & General Legal & General is one of the UK's leading financial services groups and a major global investor. Legal & General Retail Retirement wants to help customers lead longer, healthier, happier lives and we see the UK's fertile life science sector as key to supporting people to make the most of those later years.

This sector has offered several opportunities for investment by Legal & General over the last decade. We've invested in key life sciences infrastructure, such as science and technology parks in the North and Midlands (including Alderley Park, one of the COVID Lighthouse labs) and academic campuses (in Manchester, Liverpool and Birmingham) and world-leading biotech funds (such as Syncona). More recently, we have started direct investment in healthtech – most recently co-leading a US\$50m Series C for Congenica, a firm that has pioneered software that enables rapid genomic data analysis at scale. We were also selected as investor partners by Innovate UK, for their Healthy Ageing Challenge.

We are excited by the explosion of innovation in diagnostics, devices and digital technologies that support the identification, monitoring and management of health risk. These innovations will transform healthcare and industries such as our own. The leading global position of the UK in some of these areas, such as genomics and AI, as well as the depth of academic and clinical expertise and increasing availability of health data, make this sector very attractive for investment. We are keen to play our part in this growing sector, particularly at scale up stage, an area where capital has historically been in short supply.



Top UK venture rounds

UK biotech companies are increasingly able to raise large venture rounds thanks to overseas capital attracted to UK innovation. These rounds are mostly being led by US firms but sovereign wealth funds and other large investors from the East are also becoming regular participants.

In 2020, Oxford Nanopore raised a total of £162.8m in fresh capital in three tranches: £29m in January; £49.4m in May and £84.4m in October. All three deals brought in new shareholders from around the world.

Immunocore secured the largest individual deal of just over £100m, and Freeline also topped the £100m mark across an extended Series C deal. Both companies' deals were led by East Coast US investors. Alongside COMPASS Pathways and Achilles Therapeutics, this means five companies were able to net over £50m of venture capital funding in the year, which is two more megarounds than in 2019 and the same as in the previous record year of 2018. It is also worth noting that a further three deals came close to the £50m milestone.

Company	Deal date	Round	Value (£m)
Oxford Nanopore	26/05/2020	ND	162.8*
Immunocore	02/03/2020	B	100.3
Freeline	30/06/2020	C	100*
COMPASS Pathways	17/04/2020	B	60.7
Achilles Therapeutics	19/11/2020	C	52.7
Exscientia	26/05/2020	C	49
F2G	12/08/2020	G	45.6
Purespring Therapeutics	19/11/2020	A	45
Bit.Bio	09/06/2020	A	41.5
NodThera	03/06/2020	B	41.3

Top ten venture deals

* Combination of two or more individual raises within the time period covered by this report.



Dr Gordon Sanghera CEO, Oxford Nanopore Oxford Nanopore is a UK innovator, with global impact in the field of DNA and RNA sequencing technology. Our technology is now used in 100 countries for a range of biological research applications, helping scientists to resolve important biological questions in clinical, plant, animal, and microbial research. More than 1400 scientific publications now describe the use of the technology, from the handheld MinION sequencer that can be used in any environment and by anyone – from labs in LMICs to the arctic – to the PromethION for large scale human or plant genomic studies.

In early 2020, our devices were used to generate the first sequence of the emerging SARS-CoV-2 virus, the cause of COVID-19. Throughout the year, Oxford Nanopore sequencing continued to be used extensively in genomic epidemiology of the disease, delivering rapid insights that could be used in diagnostic and vaccine development, understanding clinical management, and informing public health policy.

In 2020 we also developed LamPORE, a high-accuracy, scalable diagnostic test for COVID-19. Through this process we also accelerated our diagnostics infrastructure, and we're excited about the road ahead as methods continue to be developed using nanopore sequencing for rapid characterisation of infectious disease, cancer, and tissue typing. The potential of nanopore sequencing technology for diagnostic and other regulated markets like food safety has become more evident during the year.

During 2020, Oxford Nanopore announced more than £160m in private investment to support rapid advancement of the Company's commercial and manufacturing operations, as well as ongoing innovations in the field of nanopore technology.

UK biotech VC performance

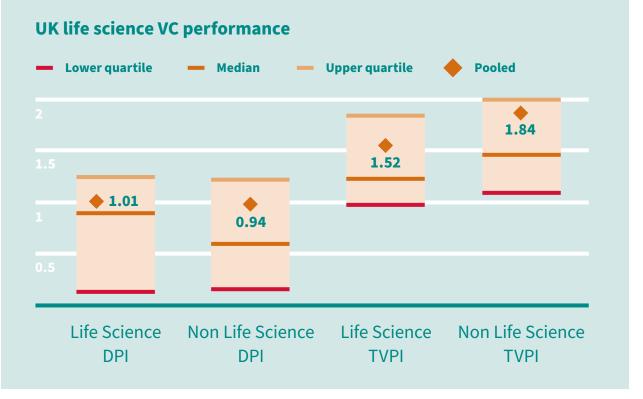
In 2020, the BIA worked with the British Business Bank to collect and analyse data on the performance of UK-based life sciences venture capital funds to address the lack of publicly-available information on which investors can make informed investment decisions.

The findings are positive but the dataset is too young and shallow to be conclusive; it will become richer and more accurate as the cohort of venture funds grows and matures. Please see page 15 for a description of the data by Judith Hartley of British Patient Capital, part of the British Business Bank.

To further aid investors' decision making, the BIA published a clear and comprehensive guide in 2020 explaining how the sector works, what the risks are, and how investors can gain exposure in line with their own risk appetite and level of expertise.

Opportunity on your doorstep: A guide to investing in the UK biotech sector, has been created to help investors from the biggest institutions down to individuals planning for their retirement to understand the sector, including its diverse business models, the R&D process and the risks and benefits.

Download the free guide at: www.bioindustry.org/policy/invest-in-biotech



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Judith Hartley CEO, British Patient Capital

Contrary to received wisdom, UK venture capital is now delivering returns on par with the US.

For many institutional investors, US venture capital is an important component of their wider allocation to the private markets. Historical returns are strong, the market is mature, and average fund sizes allow for significant commitments.

Analysis undertaken by our parent company, the British Business Bank, has found for VC funds with a 2002–2011 vintage year, UK VC returns come out slightly ahead of those of the US.¹ As the UK VC market matures, driven by strong underlying fundamentals in tech and science-based innovation, we see an increasing interest from institutional investors. In addition to the £1bn of commitments that British Patient Capital has made, we have been joined by other institutions committing £4.8bn alongside us.² In life sciences dedicated funds British Patient Capital has made commitments totalling £123m with commitments from other investors at £673.1m.

As the chart on page 14 shows, life sciences funds perform relatively well in terms of realised returns – Distributed to Paid-In capital (DPI) – compared to non-life sciences funds. DPI directly measures the cash returned to investors from portfolio company exits. With life science funds' DPI multiples slightly ahead of other funds, the research challenges a common perception that life sciences funds take longer to generate returns, given the R&D and clinical trial process associated with early-stage life science companies.

The low DPI multiple for both life sciences funds and non-life sciences funds is explained by the broad vintage coverage (2002–2015). A typical venture capital fund has at least a ten-year life, so many of the funds in both cohorts are still relatively young, and yet to exit all their investments.

The TVPI or Total Value to Paid-In capital multiples show the value created from exited companies, and the valuation of companies still held in fund manager's portfolios. While life sciences funds have a lower TVPI multiple than non-life science funds, tech companies tend to have more frequent valuation mark-ups as these companies reach key milestones, whereas life science companies are held at the same value for longer.

In addition to the exposure that institutional investors can gain, via life sciences VC funds, to UK companies exploiting and developing breakthrough healthcare technology, there are also diversification benefits. The constant demand for healthcare, which tends to be paid for predominantly by governments and insurance companies rather than consumers, means that the sector is insulated from economic cycles.

Our experience at British Patient Capital, combined with latest data, shows the competitiveness of the UK VC asset class in both tech and life sciences. The sector continues to mature, and we are now reaching the point where institutional investors can consider a systematic approach to UK venture commitments, and building relationships with leading fund managers.

1 British Business Bank, Analysis of UK VC Financial Returns, October 2019. 2 As of 31 March, 2020.

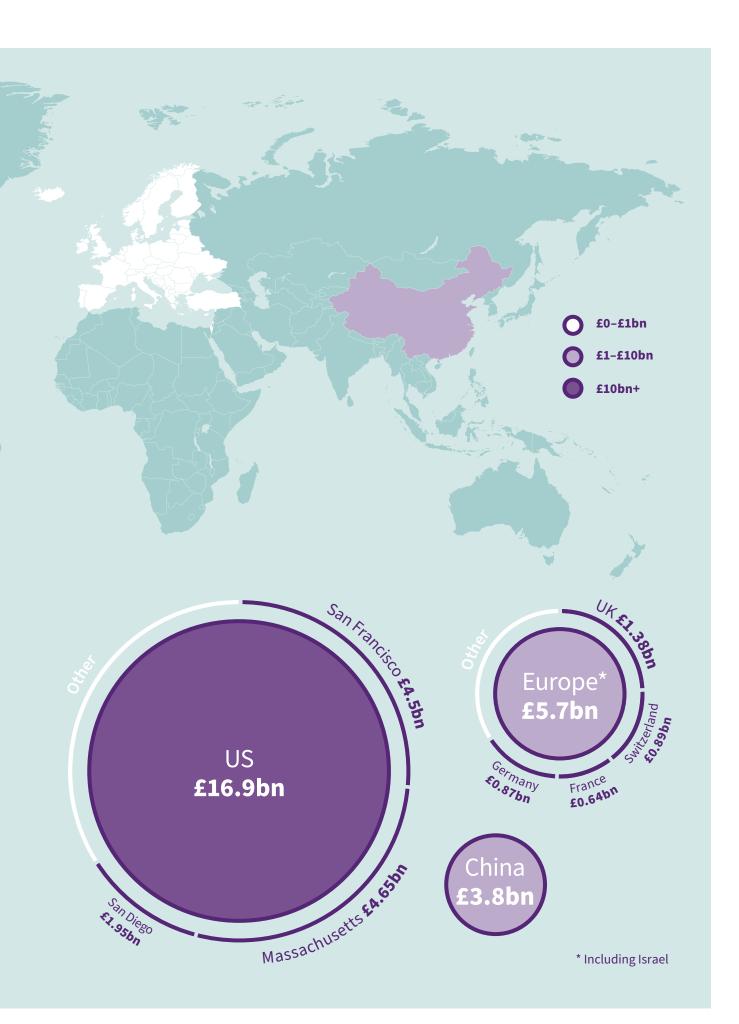
Venture capital financing in Europe, US and China

The UK is not the only country to have seen a surge in private biotech investment, driven not only by investors' growing interest in companies developing solutions to the pandemic but also the broader sector. The world total increased from £14.63bn in 2019 to £25.69bn in 2020.

The US and its biotech hubs of San Francisco and Boston Massachusetts account for the lion's share of investment, showing the importance of clustering in the sector. The West and East Coast hubs accounted for £4.55bn and £5.65bn, respectively, or 27% and 33% of the US total of £16.88bn. In the previous year, US companies raised £9.45bn.

In Europe, the total raised increased from £2.57bn in 2019 to £5.74bn in 2020. UK biotech companies raised more private capital than any other European country, accounting for 24% of the continent's total. Switzerland placed second followed by Germany.

China also increased its takings from £2.03bn in 2019 to £3.8bn in 2020. This is likely to be an underestimate however, due to poorer data coverage in the country.



Public markets

UK IPOs

There were just three UK biotech IPOs in 2020, reflecting a growing trend for companies to remain private for longer, made possible by the increased availability of venture capital. A total of £244m was raised.

Freeline Therapeutics, a clinical-stage gene therapy company founded by Syncona in 2015, listed on NASDAQ on 7 August, securing £119m (\$158.8m). The listing valued the company at \$624m. Freeline is headquartered in Stevenage, close to London, where it has in-house manufacturing facilities alongside its laboratories developing treatments for inherited, systemic debilitating diseases.

COMPASS Pathways also secured a large IPO on NASDAQ, raising £110m (\$146.6m) on 18 September. The company is developing psilocybin therapy for the treatment of mental health challenges. It combines the pharmacological effects of psilocybin, a psychoactive substance found in magic mushrooms, with psychological counselling support.

In the UK, diagnostics company Verici Dx listed on London's AIM on 20 October with a £14.5m IPO. The company uses next-generation sequencing to inform kidney transplants. Another AIM IPO – Abingdon Health – occurred in December, after the cut-off for data collection for this report.

Company name	Date	Market	Value (£m)
Freeline Therapeutics	07/08/2020	NASDAQ	119
Compass Pathways	18/09/2020	NASDAQ	110.3
Verici Dx	20/10/2020		14.5
Total			243.9



Theresa Heggie CEO, Freeline Therapeutics

Freeline was born in 2015 in the laboratories of Professor Amit Nathwani of UCL & the Royal Free Hospital and incubated by Syncona, the UK's leading cell & gene therapy venture investor.

After a series of regional and global commercial leadership roles in global biotech companies, based both in the US and Europe, I was recruited to lead Freeline into the next phase of its growth. Of course, when I accepted this position, I did not expect to start in the midst of a global pandemic!

However, COVID hasn't stopped us from progressing our programmes and building a strong financial foundation. Just after I joined Freeline as CEO in June 2020, we completed a \$120 million Series C financing led by Syncona and joined by Novo Ventures, Wellington, Eventide, Cowen and other leading US and European biotech investors.

Only 36 days after our Series C, we completed our US IPO on the Nasdaq for total proceeds of \$180 million. Our Series C and IPO were amongst the largest clinical-stage biotech financings by a UK company in recent years. We believe that our success can pave the way for more UK and European biotech companies to access the US capital markets.

Our strong balance sheet allows us to progress all our programmes this year, and we expect to have our third product in the clinic by the end of 2021. We are particularly excited about starting our pivotal phase 2b/3 study of FLT180a, as we believe this is the only gene therapy under development that can offer patients with Haemophilia B the opportunity of a true functional cure. Other key milestones this year include dosing additional Fabry patients with FLT190 in our phase 1/2 study; dosing the first Gaucher patients with FLT201 and readying our Haemophilia A program for clinical trials next year.

We continue to progress our research-stage pipeline and further develop our industry-leading approach to CMC and analytics, which is critical for success in gene therapy.

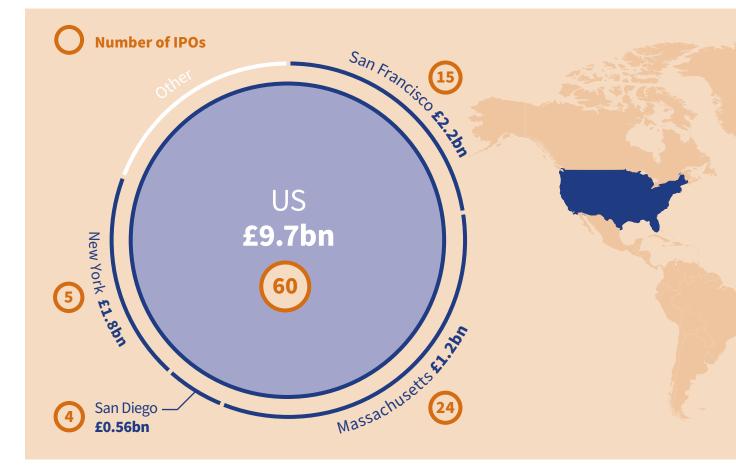
We are proud of the milestones we've accomplished in the six years since our humble beginnings in a basement laboratory at the Royal Free Hospital. 2020 was a truly transformative year for Freeline Therapeutics and we now look forward in 2021 to bringing our treatments to patients here in the UK and around the world.

IPOs in Europe, US and China

The pandemic and US Presidential election didn't dent global investors' appetite for biotech. Ninety companies raised a total of £14.57 billion on public exchanges.

The US sector continues to lead the world with its risk-friendly public markets and, as was the case for venture capital, San Francisco and Boston Massachusetts are where the majority of that investment is being made. £2.2bn was raised by the West Coast hub and £3.2bn by the East Coast hub, and they made up 23% and 33%, respectively, of the US total of £9.7bn. This total was up from £5.28bn in 2019.

A total of £958m was raised by European biotech companies' initial listings, up from £430m in 2019. The big European IPOs also took place on the US' NASDAQ, led by Switzerland's ADC Therapeutics, which netted £187.5m in May, followed by Germany's CureVac, which secured £165m in August.



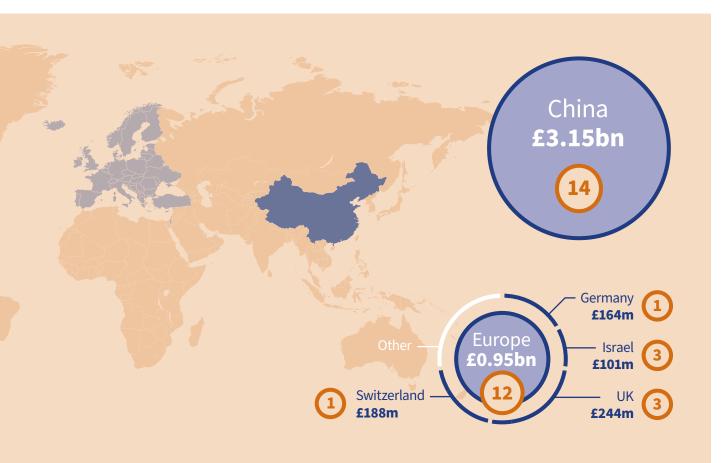


Melanie Senior Life sciences analyst and writer, and author of the BIA's *Opportunity on your doorstep* 2020 was the year that biotech went mainstream. The sector's central role in protecting the health and sustainability of entire nations became clear to everyone. A widening range of professional and retail investors flocked in, as biotech's rapid, collaborative response to the pandemic generated approved vaccines less than a year after the virus was first sequenced.

Last year's record international biotech IPO haul reflects this excitement. The rise of China and Hong Kong continued, alongside growth in innovation, and more accessible public exchanges. Biotech is increasingly global, just like the challenges facing human and environmental health.

Those same challenges explain why this is a sector poised for long-term growth, well beyond this (and any future) pandemic. The products and tools of biotechnology are advancing not just healthcare, but also cleaner energy production, more efficient manufacturing and more sustainable agriculture.

The case for including biotech within a growth-focused portfolio was always strong. Now it is compelling.

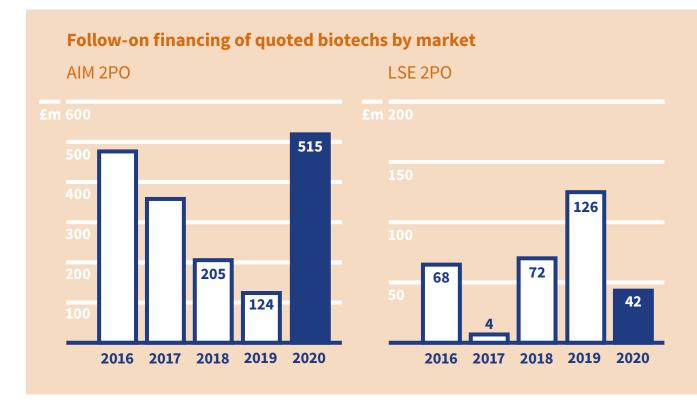


Follow-on financing

Despite the temporary shock as the pandemic hit Europe and America, fundraising by biotech companies quoted on public markets has been incredibly buoyant in 2020, with £1.18bn raised.

London's AIM has seen the highest levels of financings since 2015, with £515m raised, while NASDAQ continued to be the deepest source of capital for biotech companies, providing £620m.

Companies took advantage of strong investor appetite to secure significant new capitalisations. Leading the way was Adaptimmune Therapeutics, which raised £168m on NASDAQ. While Verona Pharma, which is dual-listed on AIM and NASDAQ, raised £160m in a private placing from Novo Holdings and 22 other investors. AIM-quoted Abcam raised £121.3m from investors, and Synairgen raised £94m across two placings on AIM over the year.



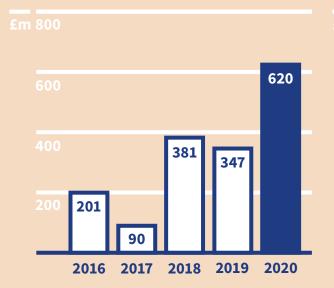


Richard Marsden CEO, Synairgen

2020 has been an extraordinary year for Synairgen, none of which would have been possible without the support of investors. As I write this, we are starting to enrol clinical trial sites into our phase III trial for our asset SNG001 as a treatment for COVID-19.

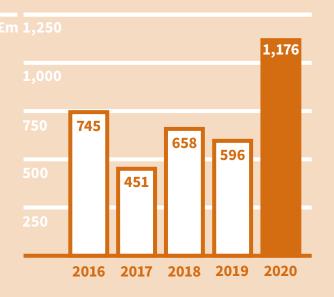
We are very fortunate to be operating in the UK, a country committed to its innovating life science sector, and an industry supported by the academic sector, the NHS/NIHR, and the investment community.

We were one of the first companies in the world to run a placebo-controlled clinical trial for COVID-19. We realised our broad-spectrum antiviral, inhaled interferon beta-1a, SNG001, had the potential to be an effective therapeutic to accelerate recovery from COVID-19. Having worked with the MHRA and HRA to gain necessary approvals, we raised £14m in an oversubscribed placing in March 2020 to conduct a phase II trial of SNG001 in hospitalised COVID-19 patients, and were delighted to announce positive data from the trial in July 2020. Overall, SNG001 was associated with greater odds of improvement, more rapid recovery, and reduced odds of progression to severe disease. On the back of this data, we were able to raise a further £80m to fund the progression into a phase III trial, and crucially, the manufacturing required for clinical trials and the marketplace. As we continue our hard work, we are cognisant and thankful for the investment support that has allowed us to reach this stage. We welcome the introduction of vaccines for SARS-CoV-2, but there remains a critical need for effective treatment options should uptake be poor, or if mutations occur that render the vaccines less effective, or for the emergence of future pathogenic viruses that cause severe viral lung infections.



NASDAQ 2PO





M&A, debt and grant funding

Mergers and acquisitions

Amidst the turbulent year, some important M&A deals were executed, including high-value exits that returned capital to investors.

In September, KaNDy Therapeutics, a UK biotech developing a treatment to alleviate symptoms of menopause, was acquired by German giant Bayer for £658m upfront, with the potential of further development milestones and sales payments. UK VC firm Advent Life Sciences, global biotech fund Orbimed, and the Stevenage Bioscience Catalyst were among those that exited through the deal.

Boston Scientific, which acquired UK biotech BTG in 2019, divested the BTG specialty pharma business for £601m cash to the Stark International Lux SARL and SERB SAS affiliates of SERB. Boston Scientific always planned to divest the non-medical device assets of BTG following its acquisition.

Mergers are also being used by UK biotechs to acquire NASDAQ listings. Cambridge-based F-Star Therapeutics reverse-merged into NASDAQ-listed Spring Bank Pharmaceuticals in November to give the VC-backed UK biotech a public listing without an IPO. The new entity will trade on NASDAQ as F-Star Therapeutics. Concurrent with the closing of the combination, a syndicate of US and European investors including Atlas, AESCAP, SR One, M Ventures, MH Partners and others, injected £18 million into F-star.



Markus Bauman Head of European Strategic Relationships, Goodwin Procter LLP In the last extraordinary year, our clients took advantage of a robust market for traditional deal structures like IPOs (Freeline) and M&A (KaNDY, and most recently, Kymab). But 2020 saw another financial product, SPACs become a key part of the tool-kit for the most ambitious UK biotechs.

SPACs, or Special Purpose Acquisition Companies, are newly-formed companies that raise capital in an IPO for the sole purpose of acquiring assets or, more typically, one or more companies identified post-IPO. SPAC IPOs in the US have increased dramatically during the past year (59 in 2019 to 248 in 2020), as operating companies, PE and VC firms, institutional investors and other constituents have recognized the advantages of combining with a SPAC to access the public markets and/or obtain liquidity.

There are over 20 high quality sponsor-backed life science-focused SPACs, including Perceptive, which completed its first business combination, or "deSPAC transaction" with our client Immatics NV. SPACs can provide a variety of advantages over a traditional IPO or other liquidity alternatives, including quicker access to public markets, more attractive pricing, and more flexible structures. Business combinations with SPACs are also complex transactions, with a limited timeframe for completion, thus requiring deep market knowledge and thorough preparation for success, through all aspects of the SPAC lifecycle.

Acquirer	Domicile of acquirer	Target	Domicile of target	Date	Value (£m)
Cognate BioServices	US	Cobra Biologics	UK	21/01/2020	Not disclosed
Astellas Pharma	Japan	Nanna Therapeutics Ltd	UK	21/04/2020	69.5
SERB Specialty Pharmaceuticals	Belgium	Veriton Pharma	U K	20/05/2020	Not disclosed
Bayer AG	Germany	KaNDy Therapeutics Ltd	UK	11/08/2020	658
Spring Bank Pharmaceuticals*	US US	F-Star Therapeutics	UK	22/11/20	N/A
SERB Specialty Pharmaceuticals	Belgium	BTG Specialty Pharmaceuticals business	• ик	30/11/2020	601

UK biotech M&As 2020

* Reverse merger

Debt

Established and scaling biotech companies in the US continued to access debt finance to a significant extent in 2020, as did more established biotech companies in some European countries, including Ireland, Germany and Switzerland.

The vast majority of UK biotech companies are pre-revenue and pre-market approval, and exist in an environment with few risk-friendly banks, meaning debt finance remains a seldom-accessed resource. However, the Future Fund launched by the British Business Bank in May to provide support to innovative companies impacted by COVID-19 utilised convertible notes and required matched funding from private investors in the same form. This years debt figures for the UK are therefore probably understated because companies may not have chosen to advertise their receipt of Future Fund cash, and the British Business Bank has not made the data public.

Region	Deal count	Average (£m)	Debt* total (£m)
San Francisco	7	620	4337.5
New York	7	78	548.1
Massachusetts	9	51	457.7
San Diego	6	75	447.3
New Jersey	5	78	392.4
Japan	1	266	266
Ireland	2	323	646.6
Germany	4	120	480.4
Switzerland	3	109	327.6
France	13	9	116.7
UK**	10	6	60.9
Israel**	3	8	22.8
World total	101	89	8979.4

Selected global debt financing deals by country/state

* Debt, senior and convertible notes.

**Excludes a £400m convertible debt financing by Novocure, which originates from Israel but is registered in Jersey, a self-governing dependency of the United Kingdom.

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Grant funding

Non-dilutive grant funding is a crucial support for early-stage businesses and highly innovative but risky research projects. It complements and leverages downstream private investment.

UK biotech companies can access grant funding from the UK Government, devolved governments, and international funders. This is the first time we have reported grant funding data. We are not able to capture all funding sources (the US Government and its agencies being a major one we are unable to report) but the data here gives a strong indication of the financial support UK biotech companies are receiving alongside their equity finance investors.

The past three years have seen a step-change in levels of grant funding being awarded to UK biotech companies, largely driven by Innovate UK and the UK Government's Industrial Strategy, which prioritised R&D investment.

However, UK biotech companies received £41m in grants in 2020, down 36% compared to 2019. This may be in part due to allocated funds from the Industrial Strategy being depleted and also Innovate UK's normal grant competition timetable being disrupted by the pandemic. The data also does not include the £30m Biomedical Catalyst competition announced in July, which is yet to announce the grant recipients.



Grant funding to UK biotech businesses by year of award

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About the BIA

Established over 25 years ago at the infancy of biotechnology, the BioIndustry Association (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
- Pharmaceutical and technological companies
- Universities, research centres, tech transfer offices, incubators and accelerators
- A wide range of life science service providers: investors, lawyers, IP consultants and IR agencies

We promote an ecosystem that enables innovative life science companies to start and grow successfully and sustainably, and we do this through Influence, Connect, Save.

Influence

The BIA represents the interests of its members to a broad section of stakeholders, from government and regulators, to patient groups and the media. We also work with organisations at an international level to ensure that UK biotech is represented on the global stage including Europabio, EFPIA and ICBA. BIA is the key thought leader for the sector – working across a wide range of related issues including policy, finance, science, regulatory, legal and talent.

Connect

The BIA provides many varied opportunities for life science leaders to connect with each other – to network, share and learn from experience, to access sector thought leadership and to take key issues forward. From the famed BIA Gala Dinner, to the CEO & Investor Forum, Women in Biotech networking evenings, quarterly committee meetings and our many regional events, to name but a few, the BIA provides access to a highly respected and diverse network. BIA also works to ensure that we provide opportunities and promotion for our members internationally – through panels and networking events at major events overseas, we are raising the profile of the UK as a global hub. We know that promoting what you do as an organisation is important, and we help organisations to raise their profile – at events and through our online presence and communications.

Save

For many of our emerging members (and a good number of well-established ones too) the BIA Business Solutions Scheme provides significant savings that are helping them to grow more cost-effectively. We believe this is the most competitive scheme of its kind in the UK.

For more information about the BIA and our finance work, please contact **info@bioindustry.org**.



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