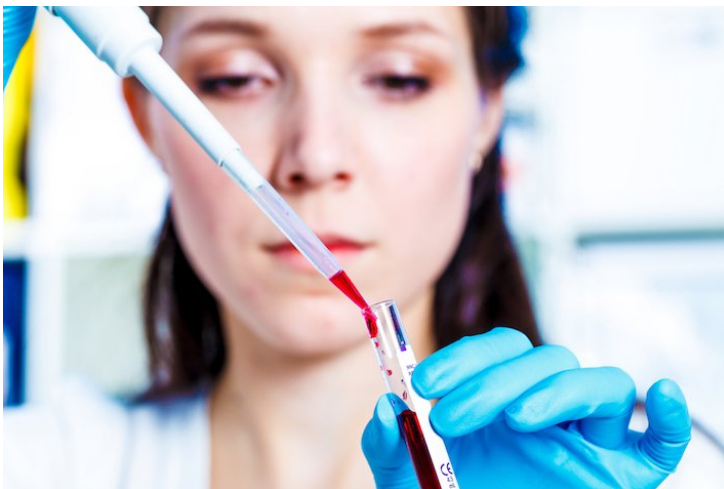


Is Biotech Headed for Bear Run?

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2020 and 2021 were remarkable for biotech startups as the financing smashed all records. Venture Capital financing hit an all-time high of over \$35 billion globally in 2021. Now, as the pandemic weakens, inflation is on the rise, and the impact of the Russo-Ukraine conflict is intensifying. Let's find out whether these global events are setting the stage for a 'bust phase'.



Fundraising across the biotech sector rocketed off the charts in 2020 and 2021. In 2020, VC (Venture capitalists) funding grew to \$36.6 billion from \$14 billion in 2019. In China, the number of funding rounds grew four times faster than in Europe and the US. (Source: McKinsey)

Following an unprecedented pandemic-driven investment surge in 2020, investment figures remained resilient through 2021 and garnered almost the same with \$36.3 billion (PitchBook).

Asia has become an increasingly active biotech geography. CipherBio data demonstrates that in 2020 by far the largest biotech funding location in Asia is China, with 10 out of 16 Asian deals being sealed in this country.

In addition to enterprises developing RNA medicines, developers of adoptive immune cell therapies, and PROTAC (proteolysis-targeting chimera) approaches were prominent in fundraising and partnering. Financing also rolled into machine learning ventures. Mergers were down, as pharma showed a greater interest in partnerships.

VC funding peaked in the first quarter of 2021, and has declined slightly since – with market research firms claiming anywhere between 10 - 30 per cent dip in the sector. The first quarter of 2022 was the slowest in three years for new stock offerings signalling a tougher financing environment.

"Yes, the budget has burst. The biotech bull-run started in 2020. The Nasdaq Biotechnology Index hit a high on 17 Sept 2021 of 5392 points and as at 13 June 2022 was at 3368 points, a decline of 38 per cent. Why has that happened? A variety of factors, such as: rising interest rates; lack of favourable data from clinical trials; a decline in M&A activity in biotechs; investors are in a 'risk off' mentality; cash burn in biotech; " 'tourist investors' " came in to invest in companies fighting COVID-19 but have now exited the sector; the US Government is renewing calls to regulate drug prices; and of course, Russia's invasion of Ukraine," said **Ben McLaughlin, Partner, Baker & McKenzie, Australia**. Some experts, however, feel that the downturn is short-term and the sector will likely rebound.

"Like all other industries, the biotech sector goes through cycles. However, looking past any short-term swings, I think that the long-term trajectory for the sector has been and is trending upwards as healthcare spending has grown continuously and spending is at ~10 per cent of GDP. As the population ages, the demand for better healthcare and medicines also increases, and this demand is fundamental to lives, not linked to market conditions," said **Daphne Teo, CEO and Founder of NSG BioLabs, Singapore**.

Srikant Sastri, Governance Board Member, BioAngels, India echoes the same sentiments, "Not at all. Biosciences & biotech are clearly recognised as sunrise industries with the ability to make a big impact in different spheres of our economy and life. COVID-19 -merely brought this potential into sharp focus and caught the attention of policy makers and & investors. During the pandemic, the industry proved that they are best-in-class and came forward with a slew of innovations that were widely recognised. This momentum will now provide ongoing impetus to this sector."

Pandemic pivots

COVID-19 has been the catalyst for countless pivots. Many startups pivoted their missions and offerings or added services tailored to the pandemic

For example, Indonesia's Nusantics, a genomics technology company, was focused solely on the field of microbiome analysis. The company changed course in 2020 to produce COVID-19 testing kits when they were needed most.

Australia's Atomo Diagnostics, that developed a rapid blood test for HIV, also repurposed its technology to work on self-testing kits for COVID-19.

"Startups which have pivoted and survived this tough period have developed creativity and become more resilient. This puts them in a great position to apply such strengths and capabilities to continue to innovate and build winning positions. As a founder of a company, NSG BioLabs, that started only months before COVID-19, I believe our team has grown stronger by adapting our business and operations quickly, and we were able to thrive and become a leading platform for biotech innovation. Now and in the coming years, there will be more challenges and opportunities to face as part of our ever-changing industry and world, and we need to continue to have our nimble and creative mindset," said Daphne.

Another wave or low tide?

This is a reset time for the sector. First time fundraisers or early-stage companies will find it hard to raise capital. Investors would shy away from riskier business for some time and prefer stable businesses.

"There has been much value destruction, so we should expect a flight to quality. I expect investors to redeploy capital from microcap startups into companies that are already in commercialisation. As one investor said, once markets stabilize, they will look at firms in Phase 3 trials which also have significant addressable markets. VCs will continue to look at health tech, as this is a rapidly expanding sector, with huge potential in the long-term. With the fall in prices, we may see more big pharma acquisitions of publicly-traded biotech. This has been predicted for some time, but is yet to materialize," said Ben.

Not all is lost though. Experts are confident the sector will bounce back and the funds won't dry up completely.

"Asia is an incredibly exciting area for biotech funding. We see the ecosystems coming to greater maturity in terms of the quality of science, research and clinical infrastructure, and talent pools. Also, there are many diseases with immense unmet needs, for example in oncology, cardiology, immunology, neurology, and others, which means that the market opportunities are also immense. VCs will be looking for innovation that stands good chances at delivering transformational impact for patients. Significant areas of interest include those that are changing the pharmaceutical industry and medical landscape, like AI, precision medicine, nucleic acid and gene therapies, and synthetic biology, as examples," said Daphne

Start-ups with cutting-edge platform technologies—which constitute a base or infrastructure on which other therapies can be developed—have benefited the most and VCs will continue to bet on such emerging technologies. Cell therapy 2.0, next-generation gene therapies, precision medicine, new delivery methods etc are some of the areas where VCs will continue to pump money.

The business of biotech is not expected to return to its pre-pandemic “old ‘normal’.” Companies will need to adapt to many new challenges in the rapidly evolving business environment. Yet, as 2021 demonstrated, there are also huge potential opportunities for biotech as it faces the future, according to EY’s Beyond Borders 2022 report.

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