

General Market Overview

PUBLIC MARKETS

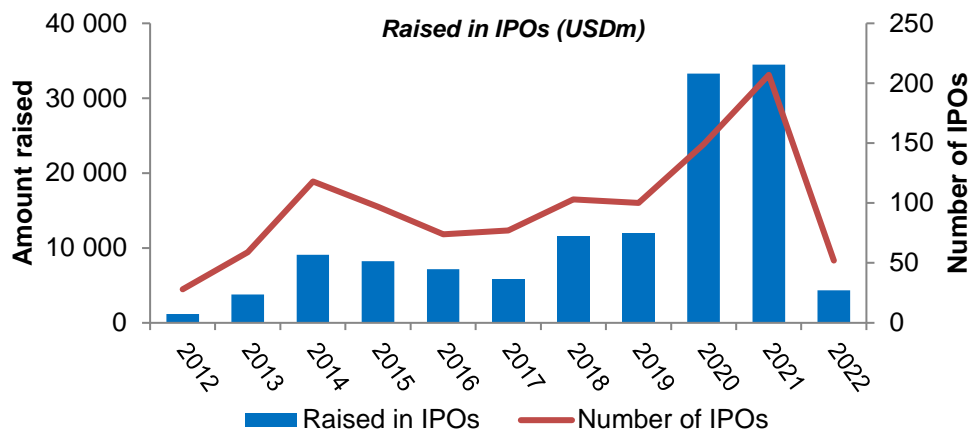
For the second consecutive year, the biotech sector traded down in 2022 despite a strong recovery in Q4 for the larger US biotech indices. The sector did, however, outperform both NASDAQ and S&P 500. Looking more in detail, smaller biotech companies suffered worse with the NASDAQ US Small Cap Biotech Index trading down 33% during the year. The inflow of new capital during the last quarter of the year was also focused on large- and midcap companies. Seventy-five percent of companies with a market cap above USD 10 billion closed the year within 25% of their 52-week high, whereas only 16% of small cap companies were similarly close to their highs. A large number of companies are still trading below cash, reflecting a general negative public market sentiment.

	Q4 2022	2022
NYSE Arca Biotech	↑ 17%	↓ -4%
NASDAQ Biotech	↑ 12%	↓ -11%
BC 100	↓ -6%	↓ -16%
S&P 500	↑ 7%	↓ -19%
NASDAQ	↓ -1%	↓ -33%

Biotech turned up during the final quarter of 2022 and biotech outperformed general indexes on a full-year basis with the NASDAQ Biotech performing relatively 22% points better than the broader NASDAQ index.

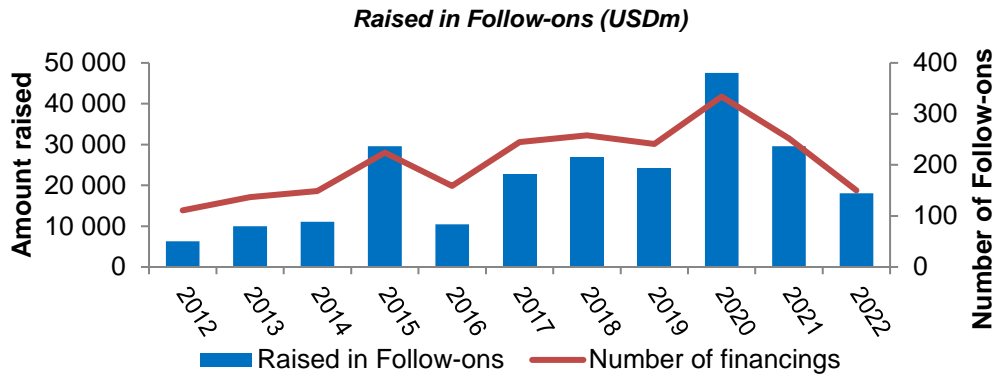
Index performance. Source: BioCentury Financial Center

FINANCINGS AND DEALS



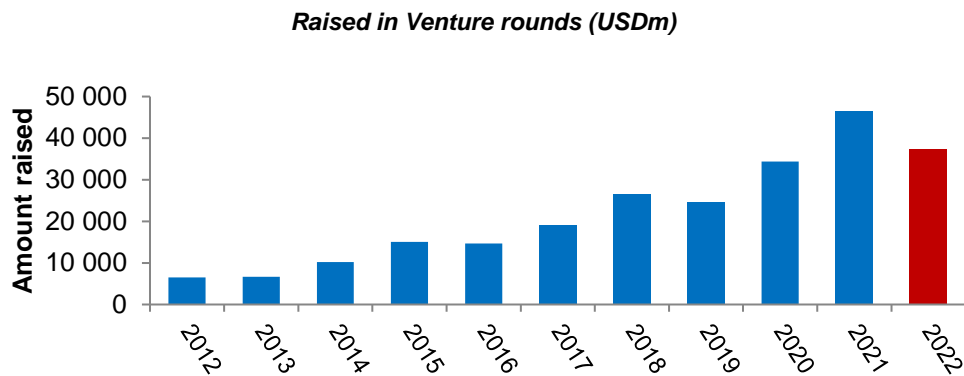
Biotech IPO financings, by year. Source: BioCentury Financial Center

IPO activity remained low throughout the year compared to the record highs of 2021 and 2022. Approximately USD 4.4 billion was raised in 52 IPOs, numbers lower than every year since 2013. As we enter 2023, analysts remain reserved about what to expect from the IPO window. New IPOs will most likely be limited to late clinical stage or approved product companies until interest rates are reduced.



Biotech Follow-on financings by year. Source: BioCentury Financial Center

Follow-on performance was up 8% in the last quarter of 2022, indicating that companies were able to raise capital on positive news despite the negative market sentiment and also rewarded by the stock market. Follow-on financings are expected to remain catalyst driven in the near future. Entering 2023, BioCentury estimates that 41% of unprofitable public biotech companies have less than a year of cash reserves, but only 21% of these have expected phase I/II data readouts or upcoming regulatory catalysts during the year.



Biotech venture financings by year. Source: BioCentury Financial Center

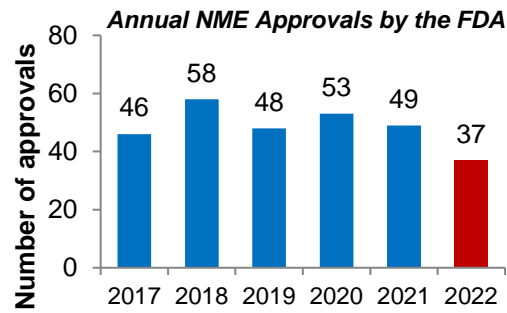
Venture financings decreased compared to the high levels of 2021 but remained in line with previous years. Oncology, neurology, and immunology were the focus of high value private financings.

M&A ACTIVITIES

In 2022, a total of 225 M&A deals at a combined disclosed value of USD 105 billion were recorded in the BioCentury BCIQ database, as compared to 227 deals with a combined value of 160 billion in 2021. Only 18 European deals were announced, representing a 60% decline in both volume and value compared to 2021. Most deals in 2022 were focused on low-risk late-stage or commercial assets and the largest deal was Amgen’s (NASDAQ: AMGN) USD 28 billion acquisition of Horizon therapeutics (NASDAQ: HZNP) to strengthen Amgen’s rare disease portfolio.

M&A activity is likely to remain a main driver of the sector in 2023.

PRODUCT APPROVALS



NME approvals by the FDA, by year. Source: FDA

The FDA approved 37 new drugs in 2021, a decrease compared to the average of 51 new drugs per year over the last 5 years. A contributing factor could be increased scrutiny of the agency's accelerated approval pathway after the controversial approval of Biogen's Aduhelm for Alzheimer's disease. Notably, three new gene therapies were approved in 2022, each one at the highest drug price ever recorded. More approvals of gene therapies are expected in 2023.