General Market Overview

Public Markets

The biotech sector was off to a good start in the opening quarter of 2019 as almost three out of four companies saw their stock prices climb. The median gain among companies tracked by BioCentury was 15% and all market cap bands were up, in part recovering from closing Q4 and the full year of 2018 down. The largest biotech companies, valued at USD 10 billion or more, posted the smallest increase with a median gain of 6%. Just as in the first quarter of 2018, **Biogen** suffered the biggest drop in the group. A year ago the company fell 14% after an unexptected modification to its ongoing phase III study to treat Alzheimer’s disease, and this year the company lost 23% in the opening quarter of the year after discontinuing its late-stage trials with aducanumab to treat Alzheimer’s disease. The large biotech group was led by **Celgene Corp** adding almost 50% on the news that **Bristol-Myers Squibb Co**. would acquire the company. It was, however, mainly the strong performance of small and mid-cap companies that created the positive momentum in the public markets in Q1, fueled by renewed optimism about increasing M&A levels.

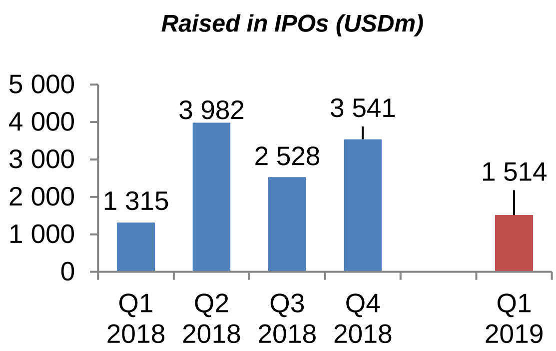
Index	*Q1 2019*	*2019 YTD*
NYSE Arca Biotech	21%	21%
NASDAQ	16%	16%
BC 100	16%	16%
NASDAQ Biotech	15%	15%
S&P 500	13%	13%

In general, biotech indices climbed at a similar pace as broader indices in Q1, but did not manage to fully recover the downturn in Q4 of 2018.

Index performance. Source: BioCentury Financial Center

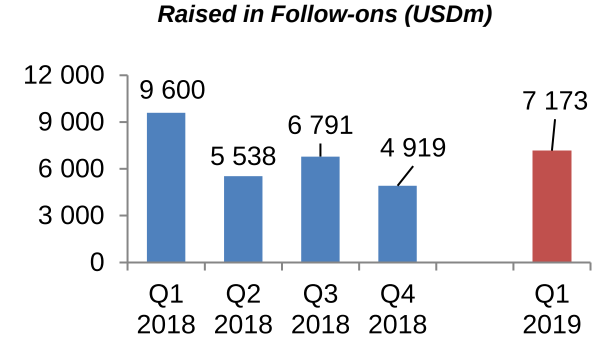
Financings

The IPO financing climate was slow in the first quarter just as the opening quarter of each year usually is. In Q1 USD 1.5 billion was raised in 15 completed IPOs, less than half of both the amount and number of IPOs compared to the previous quarter, but many analysts also attributed the significant drop to the US government shutdown. There has also been some concern expressed that companies might have difficulties reaching targeted valuations in their public floatation, as many pre-IPO rounds are completed at a high pricing.



IPO financings. Source: BioCentury Financial Center

Although the biotech IPO market has slowed down in early 2019, medtech companies have continued to complete successful IPOs at high valuations. Last year, not only did German medical imaging and diagnostics business **Siemens Healthineers** close the largest healthcare flotation in history raising EUR 4.2 billion, but a recent Vantage report by Evaluate concludes that even excluding the Siemens IPO, 2018 was the strongest year since 2014 for medtech offerings. Q4 of 2018 even set a new record as ten medtech companies raised USD 695 million in IPO proceeds, despite the sliding share prices at the end of the year.



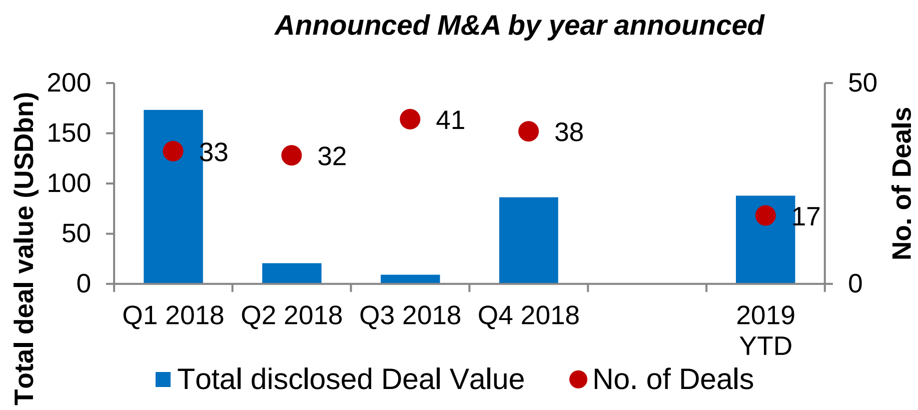
While IPO financings dropped compared to the three preceding quarters, the opposite was seen when it comes to follow-on financings as USD 7.2 billion was raised in Q1.

Follow-on financings. Source: BioCentury Financial Center

In HealthCap's portfolio, notable financings in Q1 include public Norwegian company **Nordic Nanovector's** NOK 222 million PIPE in January, and private Canadian company **Fusion Pharma**, closing a USD 105 million series B financing featuring several corporate investors.

M&A

2019 got off to a good start on the M&A front as **BMS** announced in early January that they would acquire **Celgene** in a stock and cash deal valued at almost USD 80 billion, including milestones. As the quarter proceeded, we saw three additional deals with total disclosed deal value above USD 1 billion as **Eli Lilly** acquired **Loxo Oncology** in January for USD 7.2 billion and in February **Roche** acquired **Spark Therapeutics** and **Ipsen Group** acquired **Clementia Pharmaceuticals** for USD 4.8 billion and USD 1.3 billion, respectively.



M&A. Source: BioCentury Financial Center, as of April 23, 2019

An increasing interest for gene therapy companies can be observed. **Roche**'s acquisition of **Spark Therapeutics** gives the Swiss pharma company access to Luxturna, the first FDA approved in vivo gene therapy, approved in December 2017 to treat vision loss due to an inherited retinal dystrophy caused by a genetic mutation. The approval itself represents another trend as an increasing number of small biotechs take products to market themselves. A BioCentury analysis shows that of all 2018 FDA approvals, 27% represented the filing company's first approval, up from 11% in 2014. Among these, many are orphan drug approvals that are easier to manage for smaller biotechs. Spark's pivotal phase III trial with Luxturna enrolled just 31 people.

Also, **Biogen** acquired **Nightstar Therapeutics,** for USD 877 million, in order to establish a clinical pipeline of gene therapy candidates in ophthalmology.

In HealthCap's portfolio, French gene therapy company **Vivet Therapeutics** announced an agreement with **Pfizer** worth up to EUR 605 million where Pfizer gets an option to acquire Vivet and the companies will collaborate on the development of Vivet's lead program, a gene therapy targeting Wilson disease.