# General Market Overview

## Public Markets

Broader indices, as well as the sector specific ones, traded mostly sideways in Q1 with NASDAQ gaining 2% and the S&P 500 dropping 1%. Increased market volatility ended the quarter due to fear of trade wars between the US and China, and the tech sector was held back led by the privacy concerns at **Facebook Inc**. The biotech sector stock performance was a mixed bag with small- and mid-cap companies performing well, but the sector was, as last quarter, weighed down by the poor performance of large caps, with companies valued above USD 10 billion as a group declining 5%. Two of the four biotechs valued above USD 50 billion struggled during the quarter with **Celgene Corp.** dropping 15% after an eventful quarter announcing two acquisitions (**Impact Biomedicines Inc**. for up to USD 7 billion and **Juno Therapeutics Inc**. for USD 9 billion) but also a pipeline setback when it received a refusal to file letter from FDA for ozanimod to treat multiple sclerosis. The other, **Biogen Inc.**, fell 14% during the quarter after an unexpected modification to its ongoing phase III study to treat Alzheimer's diseases.

| *Index* | *Q1 2018* | *2018* |
|---|---|---|
| NYSE Arca Biotech | 7% | 7% |
| NASDAQ | 2% | 2% |
| BC 100 | 2% | 2% |
| NASDAQ Biotech | 0% | 0% |
| S&P 500 | -1% | -1% |

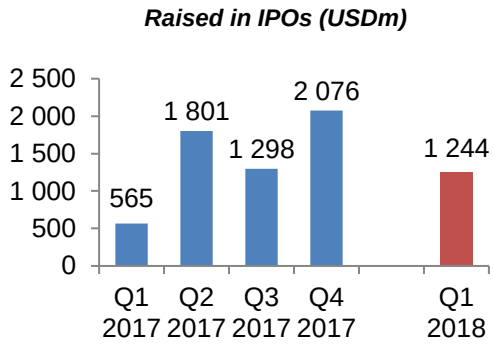
On the whole, small changes to the sector indices, but the performance was scattered all over the map with almost 25% of companies in BioCentury's database increasing more than 25%, while 15% of companies declined more than 25%.

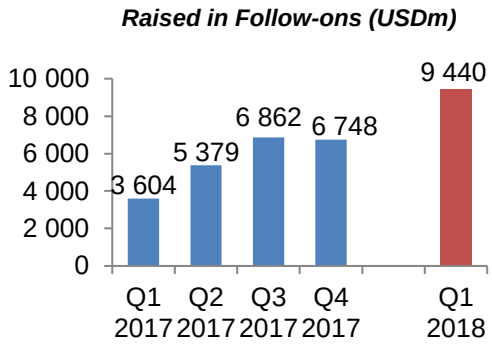
***Index performance. Source: BioCentury Financial Center***

Investors BioCentury have talked to do not anticipate increased generalist investor interest for the sector in the near-term due to worries about large caps' slow performance and many expect the largest biotechs to weigh down the biotech sector again in Q2. However, as soon as large caps start acquiring external assets to fill their pipelines and improve growth profiles, valuations might take an upward path.

## Financings

Despite markets being volatile, the fundraising levels in the public market were once again strong. Seventeen companies completed their IPOs, raising USD 1.2 billion, significantly more than the USD 565 million raised in the opening quarter last year.




***IPO and follow-on financings. Source: BioCentury***

Follow-on markets were even more impressive, with almost USD 9.5 billion being raised in 82 financings, be a wide margin more than every quarter in 2017, a spectacular year itself for follow-ons. More than 75% of follow on capital raised was raised by companies with lead indications within oncology or endocrine/metabolic disorders.

## M&A

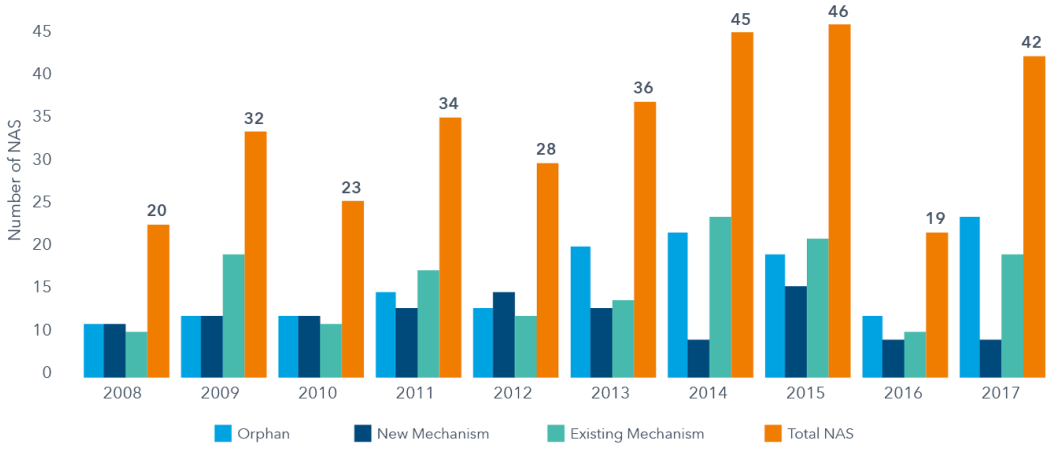
The M&A landscape was off to a good start in 2018, as predicted by many analysts late last year, with the largest deals announced already in January as Celgene announced the two acquisitions mentioned above, together with **Sanofi S.A.**'s two announced acquisitions of **Ablynx N.V** and **Bioverativ Inc.** for USD 4.8 billion and USD 11.6 billion, respectively. However, the pattern from Q1 last year repeated itself as seven of the eleven announced deals were announced in January, with two slower months following. On a positive ending note, at the end of the quarter, **Takeda Pharmaceutical Co. Ltd.** revealed that it was considering making an offer to acquire **Shire PLC.** The announcement set in motion a process that would require Takeda to make a formal bid within a month, but speculation began that Takeda's interest would face competition as Shire's position as worldwide leader in rare disease therapies would attract other players. Currently, Takeda has upped its rejected initial offer and is currently offering approximately GBP 44 billion in a combined cash and share offer.

After the quarter, **Alexion Pharmaceuticals Inc**. announced its tender offer to acquire HealthCap VI company **Wilson Therapeutics** for SEK 232 per share, or about EUR 690 million. The acquisition, adding Wilson's late-stage asset in phase III trials to treat Wilson's disease, is Alexion's first since the new management team joined in 2017 and a first step to rebuild its clinical pipeline focusing on rare diseases and to break its dependence on Soliris sales.

## MEDICINE MARKET OUTLOOK

A recent IQVIA Institute report analyzing U.S spending on medicines revealed a very slim growth of 0.6% in 2017, but adjusted for manufacturer discounts and rebates as well as economic and population growth, medicine spending actually declined by 2.2% on a per capita basis. In addition, the report concluded that spending has shifted strongly in favor of specialty medicines on the expense of traditional treatments. In dollar terms, growth was only USD 0.7 billion in 2017 due to new and protected brands contributing considerably less than in previous years, and generic sales declined by USD 5.5 billion. Generic growth has been a positive driver in the last couple of years, but greater competition in a number of markets drove down prices in 2017.

As illustrated in the graph below, 2017 was a year when a solid 42 New Active Substances (NAS) were launched in the US, according to IQVIA analysis. Moreover, half of NAS launched were orphan drugs, a recent trend the report expects to continue during a five-year outlook.




Source: IQVIA LifeCycle New Product Focus, IQVIA Institute, Mar 2018

Chart notes: A New Active Substance (NAS) is a new molecular or biologic entity or combination where at least one element is new; NAS launches in the United States by year of launch regardless of timing of FDA approval. New Mechanism refers to the first product with a new mechanism of action for its FDA approved indication. Existing Mechanism refers to subsequent products with existing mechanisms of action for an indication. Orphans are drugs with one or more orphan indications approved by the FDA at product launch. Products are not reclassified as orphan if they subsequently receive an approval for an orphan designated indication.

Report: Medicine Use and Spending in the U.S.: A Review of 2017 and Outlook to 2022, Apr 2018

The anticipated net spending growth of 2-5% in the outlook through 2022 will be largely driven by a large and steady number of new medicines, many of which will by specialty and orphan drugs as significant shifts are becoming apparent in the regulatory process with as many as 19 drugs receiving a breakthrough designation last year and 18 included patient-reported outcomes as part of their approved label from FDA.