

General Market Overview

PUBLIC MARKETS

The biotech sector continued the upward trend in Q3 and had clawed back most of the fall from the July 2015 peak with both the BC 100 and the Nasdaq Biotech Index (NBI) closing just a few percentages below all time high, a bar reached by the NYSE Arca Biotechnology index already in January. The NYSE Arca Biotechnology index added another 23% during the quarter and biotech indices in general outperformed broader indices, fueled by a late run from large cap biotechs that came out on top among market cap segments for the first time in six quarters.

However, investors BioCentury talked to were starting to see risks of a possible correction as many small- and mid-caps were starting to be considered expensive and other macro risks were seen on the horizon. So far in Q4, investors have proved to be right. In the ending quarter of 2018, biotech indices have struggled, losing more than the broader market as there have been continued concerns about rising interest rates, trade tensions between the US and China, and general market worries about valuation adjustments. The NBI lost 6% on a single day in the end of October, the worst day in more than seven years, also bringing the index in red numbers for the year and the BC 100 and NYSE Arca Biotech indices have also seen their gains for 2018 being almost erased in Q4 so far.

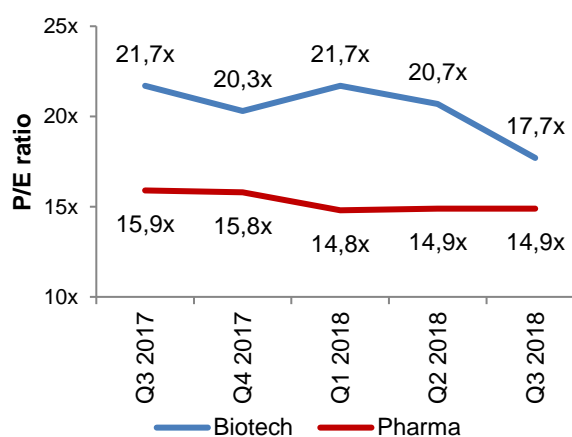
Index		Q3 2018	2018 YTD
NYSE Arca Biotech	📈	23%	📈 38%
NASDAQ	📉	7%	📈 17%
BC 100	📉	9%	📈 16%
NASDAQ Biotech	📈	11%	📈 14%
S&P 500	📉	7%	📉 9%

During Q3, there was an even split between gainers and losers in the BC 100 index, but just like in Q2, winners gained more than losers lost and the index added 9%.

Index performance. Source: BioCentury Financial Center

Biotech's average Price/Earnings multiple is approaching pharma's multiple after being down 19% year-over-year. From Q3 2018, Earnings Per Share estimates for 2019 were used, while 2018 EPS estimates were used for other quarters.

Average Price-to-Earnings (P/E) multiple



Source: BioCentury Financial Center

Although performing well in Q3, large cap biotechs remain cheap compared to pharma companies. The average Price/Earnings multiple of the largest four biotechs; Amgen, Biogen Inc, Celgene Corp and Gilead Sciences Inc finished the quarter at 11.8x, well below Pharma's average multiple of 14.9x.

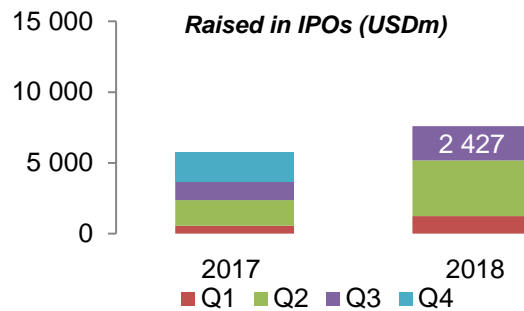
HealthCap's public holdings posted a mixed performance in Q3, just like previous quarters during the year. Public Swedish holdings performed best, with **Bonesupport AB** climbing the most, closing the quarter 128% up following positive news flow showing strategic progress. **MIPS AB** added another 39% in Q3, bringing the valuation up a total of 113% through the first nine months of 2018. **Orexo AB** increased 112% following a US court ruling Orexo's long term Zubsolv patent to be valid. Orexo thereby recovered from weak share price performance in the first half of the year and is now up 54% year-to-date.

FINANCINGS

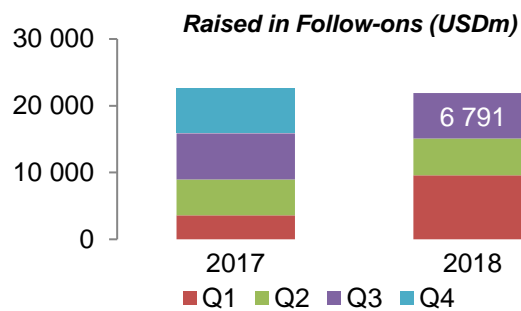
High-quality biotech companies are well positioned to handle any public market financing drought, being well-funded after a record year of fundraising. No such drought has been seen yet, however, with strong financing numbers continuing through Q3.

In what has now extended to a six-year biotech IPO window, many more companies completed their IPOs in Q3, for the most part pricing in the middle to upper part of their proposed ranges.

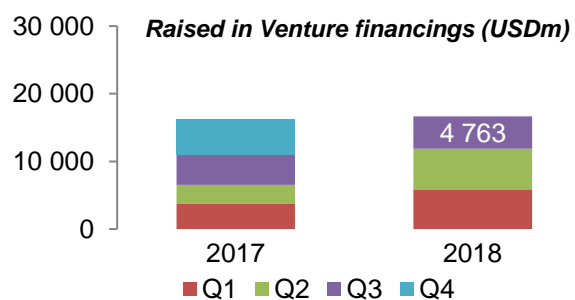
Compared to Q2 2018, the expected market cool-off during summer months was somewhat present, but nonetheless, USD 2.4 billion was raised, bringing the IPO financings for 2018 ahead of the total numbers for 2017 and within striking distance of 2015's record.



Total public follow-on financings through Q3 2018 amount to USD 21.9 billion, almost at the same level as the full-year 2017, which in turn was second only to 2015 since 1994, in terms of amount raised.



2018 is already a record year for venture financings with a total of USD 16.6 billion, some USD 0.3 billion ahead of last year's record.



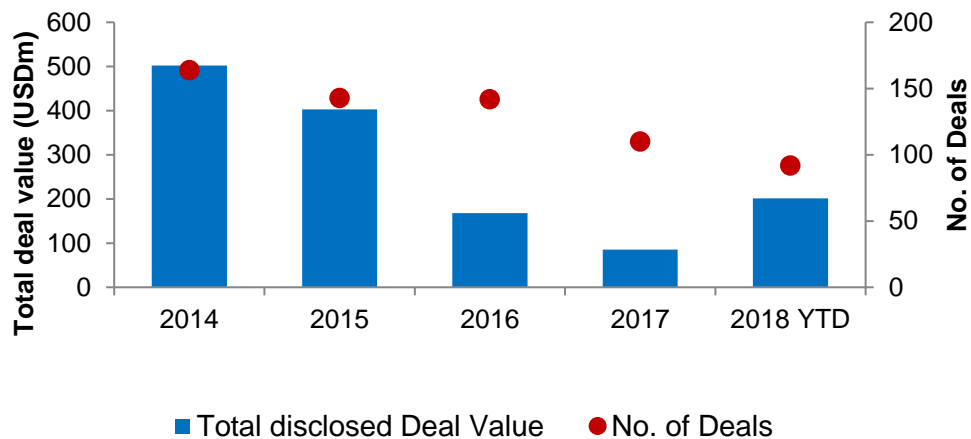
IPO, follow-on and venture financings. Source: BioCentury Financial Center

Early in Q4, public HealthCap company **Vicore Pharma** raised SEK 82 million in an oversubscribed rights issue paving way to continue with the clinical development plan where the company is currently working on the design of the phase II study with compound C21 for the treatment of idiopathic pulmonary fibrosis.

M&A

M&A activity remains at lower levels than expected with only one deal announced in Q3 with deal value exceeding USD 1 billion as **Alexion** announced its acquisition of **Syntimmune** for USD 400 million upfront and up to USD 800 million in milestone payments. The quarter fell short of the corresponding quarter in 2017 by over USD 13 billion, but then with the USD 12 billion acquisition of Kite Pharma included in the numbers as a clear outlier. Deals announced in 2018 have however on average been larger than in the two previous years, bringing the total deal value already well above both 2016 and 2017.

Announced M&A by year announced

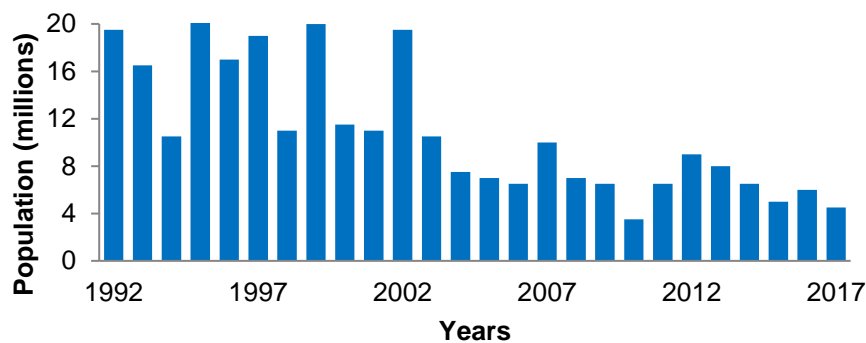


M&A. Source: BioCentury Financial Center

DRUG APPROVALS

Through end of October, the FDA has approved 47 new drugs, one more than in the full year of 2017, which was the highest number since 59 drugs were approved in 1996. As in recent years, about half of drugs approved have been approved for orphan diseases. In a recent analysis conducted by BioCentury, a clear trend was observed as the average target population size for drugs approved in 1995 was more than 20 million, but has been below 10 million every year since 2004, falling below 5 million three times. The earlier blockbuster model aiming for high prevalence diseases has gradually been replaced since the 90's by the specialty model aiming at more targeted treatments and the result can be seen in the population size targeted with the approvals of the last 15 years.

Average target population per drug approved by the FDA



Source: Adapted from BioCentury, Sept 1 2018, A Pathway to Biopharma 3.0.