

General Market Overview

PUBLIC MARKETS

Even with the bearish Q3 of 2015 in fresh memory, Q1 of 2016 showed that it could get worse as the public biotech indices recorded its worst quarter in 14 years, with all market cap segments trading downwards. Even among big caps with market caps exceeding USD 5 billion, only three out of 36 companies managed to finish the quarter in the black. The market downturn has marked a definite end to the sector bullrun that was initiated following the 2008-2009 financial crisis and that according to BioCentury data was the longest (333 weeks) and best performing (+543%) of the last five bull markets.

<i>Index</i>	<i>Q1 2016</i>	<i>2016</i>
Dow Jones 30	↗ 1%	↗ 1%
S&P 500	→ 1%	→ 1%
FTSE 100	→ -1%	→ -1%
NASDAQ	↘ -3%	↘ -3%
BC London	↘ -7%	↘ -7%
NYSE Arca Biotech	↓ -22%	↓ -22%
BC 100	↓ -26%	↓ -26%

Biotechs listed in London and other European markets have been somewhat spared from the worst depreciation, but also because they never fully participated in the upside. Broader indices recovered well in March to end the quarter about level with closing prices last year.

Index performance. Source: BioCentury Financial Center

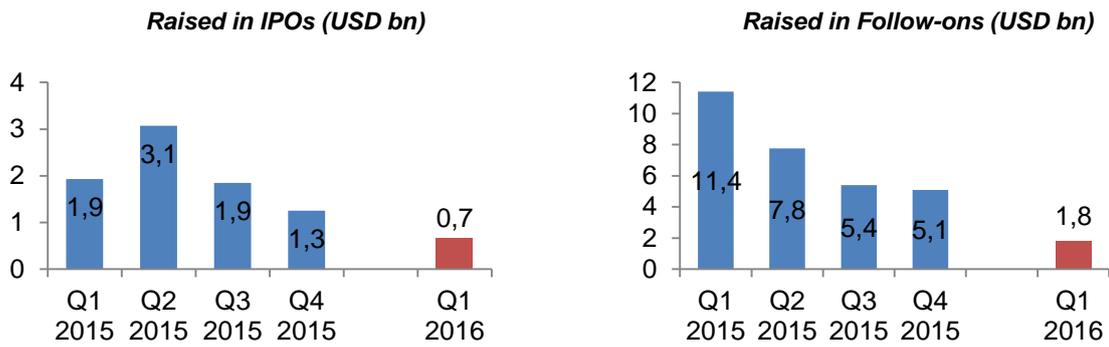
Although most analysts BioCentury have been talking to see slim chances for biotech to keep pace with broader markets this year, consensus is that biotech is at or near the floor as the strong fundamentals of the sector remains unchanged. Investors will be searching for individual winners as takeouts could start to take place in the second half of 2016, benefiting from attractive valuations. Many companies are well funded though after last year's record-breaking follow-on financing levels, and are in no hurry to be bought.

The BC 100 has traded up some 10% from its mid-February bottom and interesting opportunities are emerging with a large number of phase II data readouts and PDUFA dates scheduled for the months to come.

PUBLIC FINANCINGS

The weak Q1 performance of biotech stocks had its impact on public fundraising as only USD 1.8 billion was raised in 30 follow-ons and USD 669 million was raised in 10 IPOs.

Performance among the IPO class of Q1 was much better than the sector in general, as nine of the ten new issues ended the quarter above water and the median gain was 18%. All IPOs were trading below issue price at some point before recovering.



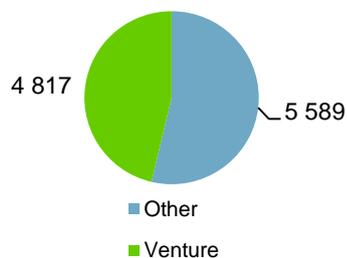
IPO and follow-on financings. Source: BioCentury Financial Center.

Only 30 companies closed follow-on financings in Q1, compared to 92 companies in Q1 of last year. It should be noted, however, that many companies are cash rich following the public financing climate of 2015 when USD 30 billion was raised in follow-ons, compared to USD 11 billion in 2014.

OTHER FINANCINGS

The biotech industry has year-to-date raised a total of almost USD 14.5 billion with venture financings (mostly in Series A and B rounds) contributing with some 46% of total amount raised.

Total Biotech Financings YTD 2016 (USD millions)



The USD 4.8 billion raised in venture financings through mid-April is USD 1.2 billion, or 33%, more than in the corresponding period last year

Biotech financings. Source: BioCentury Financial Center.

In one of the quarter's largest financings among European biotechs and also one of the largest-ever Scandinavian biotech venture rounds, HealthCap VII made its first initial investment in Swedish oncology company **Aprea AB**, raising a total of USD 50 million in a Series B financing.

M&A

The largest announced, but not completed, acquisition in 2015 was **Pfizer's** USD 160 billion takeover of Botox-maker **Allergan**, headquartered in Ireland. The deal was expected to close in early 2016, but was recently mutually terminated following the US Treasury's announcement to prevent tax inversion deals. Following the terminated merger plans, BC 100 jumped 6.3% the next trading day on speculations on the next M&A target.

Driving the big cap markets at the moment are expectations of deals by, among others, **Allergan**, **Pfizer** and **Gilead Sciences**. **Allergan** is progressing the sale of its generics business to **Teva Pharmaceutical Industries** for USD 34 billion in cash and almost USD 7 billion in Teva stock. Some of the Teva money is

likely to be used in acquisitions. Also, a few companies such as **AstraZeneca**, **Sanofi** and **Gilead** might buy big due to their need to accelerate their pipelines, according to a recent Evaluate Pharma report.



Biopharma trade sales. Source: HBM Pharma.

According to BioCentury data, 24 mergers or full acquisitions were announced during Q1 of 2016, with 19 disclosing an aggregate deal value of USD 46 billion, or USD 2.4 billion on average. The upfront amount was on average USD 1.6 billion in the 14 deals with disclosed upfront amounts.

The largest deal announced in Q1 was **Shire's** USD 32 billion acquisition of **Baxalta**, creating the world's biggest rare-disease drugmaker.

HealthCap IV portfolio company **Onxeo SA** announced its acquisition of **DNA Therapeutics** for EUR 1.7 million in stock, EUR 1 million in milestones and EUR 25 million in sales based royalties.

DRUG APPROVALS

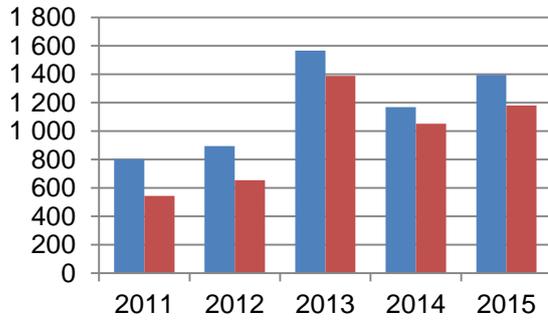
AbbVie's drug Humira will be the best selling drug going off patent in late 2016 and biosimilar makers are circling with several companies having phase III studies ongoing with their version of the arthritis molecular antibody. AbbVie has managed to create a complicated IP protection setup though, with over 70 patents related to the formulation, manufacturing and method of treatment, most of which are issued in recent years.

Smaller biopharma companies, as defined by HBM Pharma as companies not on the top 30 list in terms of sales, filed about a third of the 45 new drug approvals in 2015. However, a much higher percentage of drugs approved have its development origin in small companies, a trend that can be seen for the last decade.

A growing share of new approved drugs are in the rare disease space. Not only has the number of FDA approved orphan drugs reached record highs in recent years (17 in 2014, 21 in 2015), the average peak sales potential of approved orphan drugs is not much lower than for other new drugs.

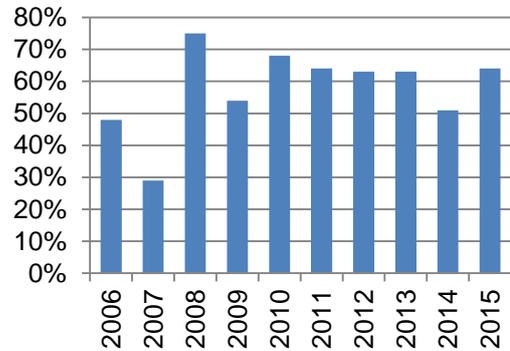
The peak sales potential of approved orphan drugs has surpassed the USD 1 billion mark for three consecutive years.

Average peak WW sales potential, approved drugs, by year



■ All approvals ■ Orphan drugs

New drugs (NMEs) approved by size of drug development originator



■ Smaller biopharma companies' share

Approved NMEs' potential sales and development origin. Source: FDA, HBM Pharma and HealthCap analysis

For almost a decade, the share of new innovative drugs having its development origin in smaller companies has stabilized at levels above 60%.