## After the Big Covid-19 Storm

#### A Look on Upcoming Highlights in the Pharmaceutical and Biotech Industry in 2022

The Covid-19 crisis has taken the pharmaceutical and biotech industry to a new level: Some companies played an important role in managing the pandemic and demonstrated their innovation potential.

Billions of euros and dollars have flowed into the industry. Their public reputation has improved greatly. Now the question is: What does 2022 hold for the biopharma industry? Which companies can play at the forefront in terms of products as well as business?

Covid-19 will continue to be a dominant topic, but other indications are also likely to come back into focus. Last but not least, things will be interesting on the financing side now that the pandemic bubble has burst, and the share prices of many biopharma companies have fallen sharply.

Looking ahead is always also looking into the crystal ball. It is based on an analysis of past developments, the current situation and assumptions. By its very nature, looking ahead cannot predict future developments by 100%. But it does give an idea of the developments that can be expected with a certain degree of probability.

Evaluate, an analysis and consulting firm specializing in pharmaceutical and biotech topics, has taken a look ahead for this industry with its Evaluate Vantage 2022 report. The study provides information for company managers and employees in the industry, for healthcare experts as well as for investors.

#### The Windfall of Covid-19

The report concludes that Covid-19 will still be a front-page story in 2022. "That spotlight should bring some benefits, largely in the shape of broad support—and a lot of money—from investors. But it also means heightened scrutiny, particularly for those that are making billions from successful pandemic vaccines and treatments."



According to the study findings, there is almost unanimous agreement among industry experts that vaccines against Covid-19 will continue to make billions this year for BioN-Tech, Pfizer and Moderna, with these firms' jabs expected to bring in at least \$50 billion in combined revenue.

The huge success of Comirnaty will make the pharma giant Pfizer the world's biggest drug maker by prescription sales in 2022. The Covid-19 vaccine is expected to generate at least \$29 billion in sales this year, accounting for almost half of the company's projected prescription sales.

This also means that BioNTech, the German biotech showcase company, will benefit significantly from Comirnaty. After revenues of up to  $\in$ 17 billion in 2021, the company expects sales of similar magnitude in 2022. This success has catapulted the Mainzbased company into the international top league within a very short time. By cooperating with Pfizer, the BioNTech management has taken a strategically important step. The collaboration made the expertise of a global

corporation as well as global attention available to BioNTech. However, the Corona euphoria does not last forever, as can be seen from BioNTech's share price: since its high of €375, the valuation has more than halved. But management has proven that it is capable of developing and marketing innovative products in a structured manner. And the mRNA technology, that much is clear, offers numerous other potential applications.

The US counterpart in mRNA vaccine development, Moderna, is playing in a similar league. The Evaluate study indicates that the company took a while to get manufacturing ramped up, so 2022 sales of its vaccine are expected to surpass those booked in 2021. It's Covid-19 vaccine Spikevax is the only reason the biotech is being featured in the analysis.

The Tübingen, Germany-based biotech company CureVac, on the other hand, plays no role in this analysis following the failure of its Covid-19 mRNA vaccine candidate. Although the company has been in existence for 22 years and has always proclaimed its pioneering role in mRNA technology, it has not yet brought a product to market. Already in 2017, CureVac had to admit the failure of an mRNA-based drug candidate against prostate cancer. All current pipeline candidates are at an early stage of development and thus still far from a potential market entry. The company's main focus now is on developing a next-generation Corona vaccine, but recent reports indicate that this project is also at risk of delays and the company may make a technology shift. In the meantime, the head of technology has left the company, while the CEO remains on board. Due to all these events, much trust has fallen by the wayside-the share price collapse speaks for itself.

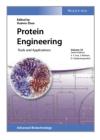
In contrast, another Tübingenbased biotech company could emerge from the shadows in the future. Immatics announced in December 2021 that it has entered into a global license agreement for its TCR bispecific program IMA401 with Bristol Myers Squibb (BMS). The development pro-

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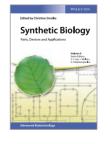


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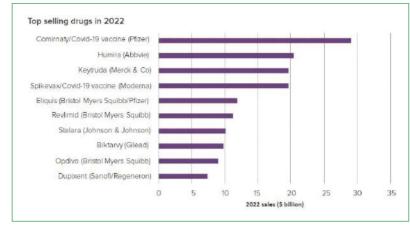
Outside of pandemic-related products, the Evaluate report forecasts Humira to cling on its crown as the biggest selling drug. However, 2022 will be the last year of largesse for AbbVie's anti-rheumatic, with biosimilars due to arrive in the US in 2023. This will hand pole position to Kevtruda. The fact that Merck & Co's cancer antibody is still generating billions of dollars in new sales each year is a testament to the company's success in in broadening the drug's label. In addition, Revlimid, an immunomodulator for the treatment of multiple myeloma, and Opdivo, a checkpoint inhibitor for the treatment of various tumors, will continue to be mega blockbuster brands.

Among the few European companies expected to play a significant role in the current year, Sanofi appears in the analysis along with its US cooperation partner Regeneron. The companies can continue to rely on revenues from Dupixent, a treatment for severe dermatitis. Furthermore, recent sales drivers include the European companies Novo Nordisk with Ozempic and AstraZeneca with Tagrisso.

#### Products and Indications

In addition, there are a number of potential new products that could be ready to launch this year and generate high sales in the medium term, with Alzheimer's disease poised to provide plenty of regulatory news. Lilly and Roche are striving to join Biogen on the market with their respective projects. With two big hopes in the pipeline for approval next year, BMS is under pressure to convince investors that it can avoid the fast-approaching patent cliff on Revlimid.

For Germany, the Association of Research-Based Pharmaceutical Companies (VFA) expects more than 45 drugs with a new active ingredient coming on the market this year. This means that 2022 is also likely to be another record year. More than a quarter of the new therapies will be directed against infectious diseases, another quarter against cancers. New treatments are also expected for rare genetic defects.





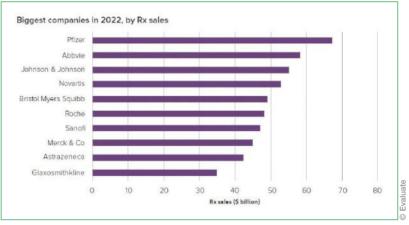


Fig. 2: Biggest companies in 2022, by Rx sales; Rx sales (\$ billion)

#### The Costs of Research

Another way to identify the projects that are likely to be in focus is to look at biopharma's most costly development programs.

According to the report, disease areas that require vast and lengthy car-

competitors should the winds of Alzheimer's disease shift.

Islatravir is Merck & Co's big bet in the long-acting HIV antiviral space, though safety concerns emerged in late 2021. Elsewhere, success in respiratory syncytial virus infections (RSV) is hugely important

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Evaluate Vantage 2022 report

diovascular outcome trials to prove a drug's safety will always come out on top in this sort of analysis. Hence the appearance of Lilly's Tirzepatide and Novartis's Pelacarsen; whether any interim readout will happen for the latter project remains a topic of interest for the Swiss pharma giant's investors.

Roche has run a larger program with Gantenerumab than other amyloid-beta mAb (monoclonal antibody) developers and, therefore, has more to lose in terms of costs incurred than for GlaxoSmithKline (GSK), which is struggling to revive investor support.

#### Hurdles and Trends

To get this financing on track, however, the industry must overcome a number of hurdles. In this regard, pharmaceutical information service Informa Markets points out that supply chain problems in the biopharma sector will continue to plague the industry in 2022. There will also be increasingly compressed timelines for technical transfers, and European pharma policy revisions could probably be in a pivotal year.

Moreover, the Covid-19 pandemic has forced pharma companies to become more agile and open-minded in approaching drug discovery and development, including managing evolving clinical trials. In this context, Sujay Jadhav, CEO of Verana Health, points out that the adoption of artificial intelligence (AI) in the pharmaceutical industry has long been in its nascent stages. But in 2022, the industry will benefit from new insights in understanding patients and diseases thanks to advances in AI.

Jane Z. Reed, director life sciences at Linguamatics, an IQVIA company, adds, that 2021 proved to be a pivotal year for the adoption of data science in the pharmaceutical industry for drug discovery and development. And Jim Robbins, senior vice president of life sciences at Arcadia, a healthcare data and software company, points out that life science researchers will be investing more in pharmacogenomics in 2022 because genetic mutations play an important role in many diseases.

#### How to Invest all the Money

Covid-19 and the billions in sales some companies are making from pandemic products raise the question of what companies intend to spend those windfall profits on in 2022. Based on the Evaluate report many biopharma watchers are expecting an uptick in M&A this year. Another likely trigger for these transactions is lower valuations in the wake of the difficult months on the stock market.

The authors of the report emphasize that the US and European biotech sectors began 2022 in a bear market as the pandemic bubble burst and investors looked for Covid-19 recovery stories in other sectors. The highs of the pandemic era could never be maintained, and many consider the current retrenchment part of the cycle.

Although the Covid 19 party appears to be over for shareholders, there is much to look forward to in terms of new products, candidates and sales in 2022—and beyond.

Thorsten Schüller, CHEManager