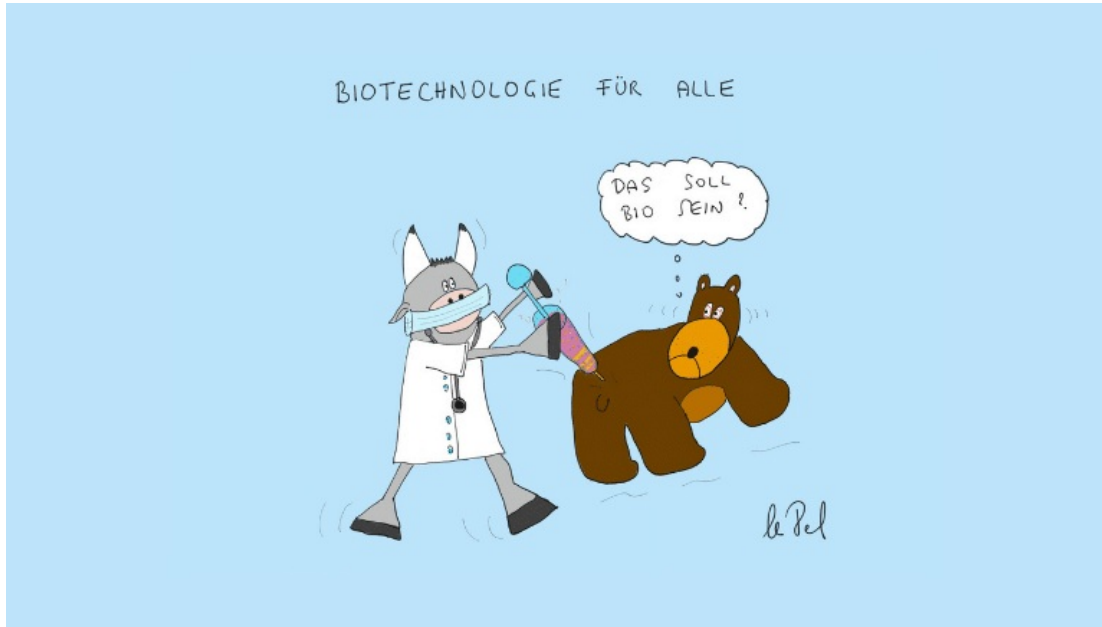


<https://blog.en.erste-am.com/what-potential-do-biotechnology-shares-hold/>

What potential do biotechnology shares hold?

Dieter Kerschbaum



Why is everybody talking about biotechnology (“biotech”) shares?

The shares of companies of the biotechnology sector are definitely among the ones with the highest growth opportunities, but also the ones subject to the most drastic price fluctuations. Investment funds offer a diversified approach, i.e. they invest in a larger number of interesting, listed biotech companies. One of those funds is [ESPA STOCK BIOTEC](#). After a setback in 2015, it has been on the upswing ever since (see the chart below; source: Thomson Reuters Datastream, 22 February 2019*). Chances are that biotech shares will maintain their growth momentum in the coming years. The biotech sector has seen a renewed spirit of optimism lately. Pioneering research results in diseases with high needs of medical input and persistent sales and earnings growth are plausible buying arguments.

**) Historical performance data are not indicative of the future development of the fund.*

Biotechnology in a nutshell

Biotechnology is a technology that is based on biology. It makes use of cellular and biomolecular processes in developing new medicines. At the moment, patients have more than 250 biotechnological products and vaccines at their disposal, many of them for previously untreatable diseases. Biotechnology is a collective term for a vast number of procedures, products, and methods. The application of biotechnology is not limited to one field but is versatile. For example, biotechnologists research small and large organisms, plants, animals, and humans as well as minuscule parts such as cells and molecules. (source: [OECD](#))

Areas of biotechnology

Green Biotechnology encompasses herbal, plant-based applications e.g. for agricultural purposes. [Red Biotechnology](#) is the area of medical/pharmaceutical applications such as e.g. the production of medication and diagnostic items. [White Biotechnology](#) – or industrial biotechnology – comprises biotechnological production methods especially for [chemical compounds](#) in the [chemical industry](#) as well as processes in the [textile](#) and [food industry](#). (source: BMBF, Deutschland)

Healthcare expenditures are globally on the rise

The healthcare industry is regarded as leading industry of the 21st century. Due to global population growth to 9.2bn by 2050 and the predicted doubling of the population of people above the age of 60 by then, healthcare expenditures in the OECD countries will increase from currently 6 percent of GDP to 9.5 percent. (source: [OECD](#))

The biotechnology sector will benefit from the development of new, innovative, and successful medications. For the coming years, sales and earnings are expected to grow in the high single digits. The FDA approved a record number of 59 new medications in 2018 (after 40 in 2017) in the USA (source: [FDA](#)). The USA is an R&D leader and will continue to support innovation.

What are the growth drivers in biotechnology?

- The **mapping of the human brain** has revolutionised the development of medications. Despite many innovations and successes in research, only a few medications are on the market for the 1,200 so-called rare diseases. This is where biotechnology can hopefully make a contribution.
- **The fight against cancer.** According to the WHO, 9.6mn people died from cancer last year. The costs of this treacherous disease amount to a gigantic USD 1,200bn annually. Many diseases have not been fully researched yet, so there is no effective medication either. This may soon change. New medications can be used against various forms of cancer, for example *Revlimid* von [Celgene](#), which treats multiple myeloma. The clinical trials by [Bristol-Myers](#) for *Opdivo* were less successful. At the end of last year, the company had to announce that the treatment of patients with lung carcinoma had been a failure.
- **Lifestyle** diseases like diabetes (422mn adult sufferers worldwide) or liver diseases have to be fought effectively. The Danish company [Novo Nordisk](#) is currently testing a substance against fatty liver, which can at the same time be used against Alzheimer’s

- **Immune therapies** represent the new age of cancer therapy. At the moment, cellular approaches seem promising.
- In addition, the pipelines are well-stocked in the field of **neurological diseases**. The latest breakthroughs have come from medications against severe forms of epilepsy and postpartum depression.
- **Increased number of company acquisitions and takeovers.** Expiring patents in the pharmaceutical and biotech sector put the former success story at risk and have to be offset by new products. Company acquisitions and takeovers are a way of maintaining growth. At the end of February, the US diagnostics and biotechnology group [Danaher](#) announced the takeover of the pharmaceutical business unit of [General Electric](#) for USD 21.4bn. Meanwhile, the Swiss pharmaceutical group [Roche](#) agreed to take over the US biotech company [Spark](#) for USD 4.3bn and thus for the first time engages with gene therapy (source: Handelsblatt, 26 February 2019). Further examples are the takeovers of [Celgene](#) by [Bristol Myers](#), [Loxo](#) by [Eli Lilly](#), [Tesaro](#) by [GlaxoSmithKline](#), and [IMDZ](#) by [Merck](#).

Setback risks for biotechnology

The trade-off for the basically positive growth perspectives of the biotechnology industry is the risk of potential setbacks that should not be underestimated. In the most recent US presidential election campaign, the influence of politics on the pricing of medication came with a negative effect. Both Hillary Clinton and Donald Trump declared themselves in favour of lower drug prices. But if innovations are not being paid for and prices are also strongly regulated, will there be any innovation?

Another factor that could be detrimental to growth in the future is the concentration of research and entrepreneurialism in US biotech companies. The biotech cluster is based in the USA and not in Europe. This does not mean that Europe does not generate innovation, but the degree does not measure up to the USA. In the USA, there are some clusters around Boston, San Francisco, and New York, where companies have set up joint research projects. This approach does not exist to the same extent in Europe. The few that do exist in the UK, France, Germany, and Sweden are not comparable to what is going on in the USA in terms of size. Also, the Anglo-Saxon attitude towards risk is different than the European one. Venture capital that is needed to be successful more quickly is more readily available in the USA than in Europe.

ESPA STOCK BIOTEC: portfolio invested in top biotech companies

Investors looking for an investment vehicle that diversifies across the global biotechnology sector can for example invest in ESPA STOCK BIOTEC. The fund was issued in 2000 by Erste Asset Management and invests in a portfolio that consists of about 80 listed companies, mainly from the USA, which is regarded as global biotech centre. Since its launch date, ESPA STOCK BIOTEC has achieved an annual performance of 8.70% (as of 31 January 2019; source: www.erste-am.at)*. This fund captures all essential areas of application of biotechnology such as for example cancer research, personalised medicine, Alzheimer's, cell therapy, rare diseases, and gene therapy. By investing in ESPA STOCK BIOTEC, investors may benefit from rising share prices but at the same time have to be willing to take risks and possibly accept significant price fluctuations. The timing risk can be contained by setting up a fund savings plan with regular investments ([s Fonds Plan / s fund plan](#)).

Note: Depending on the performance of the investment fund, the performance of an s Fonds Plan will differ from that of a single investment (higher or lower). A loss of capital is possible in both cases.

***Performance calculated according to the OeKB method. The performance accounts for the management fee and any performance fee. It does not allow for a one-time load of up to 4.00%, if applicable at the time of purchase, nor any other fees reducing return such as individual account or depositary fees. Historical performance data are not indicative of the future development of the fund.**

For legal documents and additional information on the aforementioned fund, please visit www.erste-am.at.

ESPA STOCK BIOTEC – (ISIN AT0000746755 T, ISIN AT0000746748 A)

Benefits for the investor:

- Participation in the world's most important biotechnology companies
- Chance of significant increase in prices
- Optimum diversification across global biotechnology companies even with small investment
- Suitable for fund savings plan (s Fonds Plan)

Risks to be aware of:

- The fund price may fluctuate significantly (i.e. high volatility)
- The investor bears the sector risk of the US biotechnology sector
- Due to the investment in foreign currency, the value of the fund and its shares may be affected by fluctuations in foreign exchange rates
- Capital loss is possible

Summary:

Shares from the biotechnology sector are drawing attention from investors, and rightly so. For the coming years, sales and earnings are expected to grow in high single digits." Like in previous years, new research results and mergers could support share prices. Investors should bear the risks in mind when investing. The share prices in the biotech sector are likely to be subject to high volatility also in the future.

Legal note:

Prognoses are no reliable indicator for future performance.

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Dieter Kerschbaum

Communications Specialist Austria, Erste Asset Management