2.10 Forecast Report

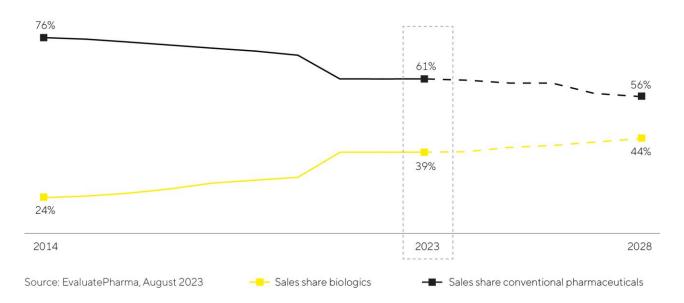
Biopharmaceutical Industry Expected to Grow

Strong, long-term trends drive growth in the pharmaceutical industry, which is almost entirely independent of business cycles. A number of different studies estimate that the global pharmaceutical market will grow by between 3% and 6% annually in the period up to 2027. Within the pharmaceutical market, the biopharma segment has been enjoying particularly strong performance for years and will continue to outperform the market according to various forecasts. Average annual growth is expected to be around 10% in the coming years. The market is anticipated to have a total value of around \$695 billion in 2028, which means that the share of biological medications and vaccines as a percentage of total revenue in the global pharmaceutical market could rise from the current 39% to 44%.

Growth is driven in particular by the increasing demand for medications from the growing and ageing global population as well as the great catch-up potential and improved access to biopharmaceuticals in emerging markets. In addition, the number of approved biopharmaceutical medications is steadily increasing. Of the estimated 20,000+ medications in R&D pipelines, almost 45% are based on biological manufacturing processes. For example, biopharmaceuticals are increasingly being used in yet-to-be fully explored therapeutic areas and in the treatment of rare diseases that have so far been incurable. The pharma industry is increasingly concentrating on advanced therapies such as cell and gene therapeutics or biotechnologically processed tissue products. In 2023, more than 1,600 clinical trials with such treatment approaches were conducted, meaning that this area offers significant growth potential over the medium-to-long term. Innovative types of therapy for regenerative medicine and new substance classes, such as antibody-drug conjugates (ADCs) or mRNA-based drugs, are increasing the number and range of approved biopharmaceuticals in the long term and necessitating investments in innovative production technologies. As a result, they are key growth drivers.

Biosimilars, that is, generic versions of reference biologics with comparable or better efficacy or fewer side effects than the original compounds, are also playing an increasingly important role in the growth of the biotechnology market. Current estimates indicate that by 2028, the market could grow by an annual average of around 15% and reach a total value of approximately \$67 billion. The significantly lower prices of biosimilars, particularly in emerging and developing countries, are creating new, affordable therapy options and are projected to result in increased demand and rising production volume. The development of national production capacities to meet the growing demand for medications is receiving political support in these countries and is fueling the establishment of local biotech companies. The biosimilars market in industrialized countries is also likely to expand considerably in the coming years due to the expiration of patents for highselling biopharmaceuticals and an increasing number of approved biosimilars. While such generic medications have been widely used in Europe for many years and have been able to gain significant market share in some areas, progress in the USA has been rather slow until now due to regulatory, patent-law-related, and marketing hurdles. In the next few years, however, the trend toward increased usage of biosimilars is likely to accelerate.

Biopharmaceuticals are Gaining Importance - Growing Share of Sales in the Global Pharmaceutical Market



The biopharmaceutical industry must meet growing demand for medications while producing an increasing number of approved medications and ensuring new types of therapy. Therefore, industry observers expect that worldwide bioreactor capacities will continue to expand in the years to come. At the same time, the industry faces rising cost pressure. This increases the significance of innovations for boosting flexibility and efficiency in biopharmaceutical research and production. In the future, the biopharmaceutical market will shift away from a low number of especially high-selling medications that account for a majority of total production volume toward an expanding range of products for smaller groups of patients. Technological progress leads to ongoing improvements in the productivity of biopharmaceutical production processes. Therefore, according to the research and consulting institute BioPlan, many manufacturers will likely rely increasingly on flexibly usable single-use technologies for the commercial production of many new medications. Particularly in the case of relatively small batches, single-use technologies already ensure more cost-effective production than conventional stainless-steel units and have a better environmental footprint. To master these challenges, more and more pharmaceutical companies are relying on digitalization and automation as well as innovative software solutions for controlling and optimizing their processes. A further trend is process intensification, in which several process steps, called unit operations, are interconnected, which, among other things, enables greater product quantities to be manufactured faster while achieving higher quality.

Further Growth Expected in the Laboratory Market

Various market observers expect the market for laboratory instruments and consumables to grow by around 5% annually in the next few years and to reach a total value of around \$103 billion in 2027.

Regarding end markets, the greatest dynamics will probably continue to be generated by the pharmaceutical and biopharma industries, in particular, as a result of continuous research into and approval of new medications, the high momentum of scientific and technological innovations, and strong growth in China. For instance, EvaluatePharma expects sector-specific research spending to increase annually by 3.6% during the period from 2023 to 2028. According to market studies, the product area of bioanalytical instruments should particularly benefit from this and further grow at an above-average rate within the laboratory market. According to leading providers of laboratory instruments, demand for laboratory products in the pharmaceutical and biopharmaceutical industries is expected to expand moderately in 2024, despite the

encouraging medium-term outlook. The reasons cited include restrained investment activity in the current interest rate environment, the persistently muted funding environment, especially for small and medium-sized biotech companies, and severe market weakness in China.

Budget increases for academic and public-sector research institutions should continue to act as a growth driver in some countries, while the projected slowdown in global economic growth poses risks to demand from industrial end markets. Market observers continue to expect China and India to generate the highest growth rates in the medium term. Stricter regulatory requirements in a range of industries are also stimulating increased demand for instruments used in sample analysis and quality control. In addition, investments in laboratory infrastructure are becoming more attractive, especially in China, as a result of governmentsupported efforts to promote innovativeness in several key industries. In previous years, this had entailed a rise in the share of global R&D spending attributable to China.

Sources: BioPlan: 20th Annual Report and Survey of Biopharmaceutical Manufacturing Capacity and Production, April 2023; Evaluate Pharma: World Preview 2023, August 2023; Alliance for Regenerative Medicine: Sector Snapshot, August 2023; citeline: Pharma R&D Annual Review 2023, May 2023; Markets and Markets: Biosimilars Market - Forecast to 2028, 2023; SDi: Global Assessment Report 2023, April 2023; www.fda.gov

Future Business Development

Based on the slight demand recovery since the end of the third quarter of 2023 and the market outlook forecast by industry observers, Sartorius Stedim Biotech expects profitable growth for 2024 and beyond. However, as inventory optimization measures of customers have not yet been fully completed the company projects business momentum to increase only gradually over the course of the year leading to a moderate first half of 2024. In addition, business performance could also be affected by increasing geopolitical tensions going forward.

Against this backdrop of still somewhat unstable market trends and therefore limited visibility, management forecasts an increase in Group sales revenue in the mid to high single-digit percentage range, including a contribution of acquired businesses of around 2 percentage points. In terms of profitability, management expects the underlying EBITDA margin to rise to more than 30% compared to the previous year's figure of 28.3%. The above-average profitability of the Polyplus business will have a slightly positive effect on the margin development. The capex ratio is projected to be around 13%, below the prior-year figure of 17.1%. Excluding potential capital measures and/or acquisitions the ratio of net debt to underlying EBITDA is expected to be 3.5.

Forecasts have been prepared based on historical information and are consistent with accounting policies. All forecast figures are based on constant currencies, as in the past years. Management points out that the dynamics and volatilities in the industry have increased significantly in recent years. In addition, uncertainties due to the changed geopolitical situation, such as the emerging decoupling tendencies of various countries, are playing a greater role. This results in higher uncertainty when forecasting business figures.