Our mission

We empower engineers to simplify and accelerate progress in bioprocessing. In this way, we enable new and better pharmaceuticals to be manufactured and help keep medications affordable.

Our vision

We are a magnet and dynamic platform for pioneers and leading experts in our field. We bring creative minds together for a common goal: technological breakthroughs that lead to better health for more people.
Sartorius Stedim Biotech in Brief

>50 Locations worldwide; headquartered in Aubagne, France

~11,900 Employees\(^1\)

~€3.5bn Sales revenue\(^2\)

35.0% EBITDA margin\(^2,3\)

~36% Sales revenue Americas

~38% Sales revenue EMEA

~26% Sales revenue Asia | Pacific

1 As of December 31, 2022 2 FY 2022 3 Underlying EBITDA
Strong Company Values Are the Basis of All Our Activities

**Sustainability**
Growing profitably and acting responsibly towards all stakeholders

**Openness**
Driving change and progress internally and externally

**Enjoyment**
Working in an energetic and rewarding environment
Megatrends in Our Target Markets Offer Strong Growth Opportunities

**Growing and aging population**
- 9 billion people by 2050
- World population over age 60 in 2050: >2bn
- World population over 60 in 2022: ~1bn

**Biologics are gaining importance**
- Sales share of biologics in 2028: ~41%
- Sales share of biologics in 2022: ~37%
- CAGR for the biopharma market in 2022–2026: ~10%

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2. Evaluate Pharma: World Preview 2022, Outlook to 2028, August 2022
What Are Biopharmaceuticals?

<table>
<thead>
<tr>
<th>Biopharmaceuticals</th>
<th>Chemical drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active agent</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Small molecules</td>
<td>Chemical synthesis</td>
</tr>
<tr>
<td>Large molecules &gt; 20,000 atoms</td>
<td>Cell culture processes with living cells</td>
</tr>
</tbody>
</table>

Advantages
- First-time or improved treatment of serious illnesses, such as cancer, multiple sclerosis, rheumatism
- Targets only diseased cells; fewer side effects
- New vaccines
The Manufacture of Biopharmaceuticals Is Complex
As a Consequence, Biotech Medications Are Very Expensive

**HUMIRA® | Abbvie**
- **Monoclonal Antibodies**
- ~€12,000
- Annual cost of treatment in GER
- against inflammatory immune diseases such as rheumatism, Crohn’s disease, or psoriasis

**YESCARTA® | Gilead**
- **CAR-T Cell Therapy**
- ~€280,000
- Cost per treatment in Europe
- combating certain types of blood cancer, for example Non-Hodgkin lymphoma

**HEMGENIX® | CSL**
- **Gene Therapy**
- ~$3.5 mn
- Cost per treatment in the USA
- against hemophilia, a disorder of blood coagulation

Approval 2003, first biosimilars available

EMA-Approval 2018

FDA-Approval 2022
Our Goal: Simplify Manufacturing of Biopharmaceuticals

Our technologies empower engineers in the biopharma industry to ...

... set up robust, flexible and safe processes for industrial production

... reduce setup costs

... enhance product yield
Our Solution: Innovative Technologies for All Phases of Drug Production

Products
Scalable, easy-to-use technologies for the production of biopharmaceuticals, as well as digital tools for biopharma data analytics

Application areas
- Biopharmaceutical manufacturing
- Quality control and testing
The Widest Offering of Solutions in the Industry

Upstream
Production of the desired drug

- Culture media preparation
- Seed cultivation
- Scale-up
- Production
- Clarification & centrifugation

Downstream
Isolation and filling of the desired drug

- Final filling
- Cryo-preservation
- Sterile filtration
- Concentration
- Virus removal filtration
- Polishing
- Chromatography
- Viral clearance

This is Sartorius Stedim Biotech
Flexible Production Systems Are Becoming More and More Prevalent

Classic stainless steel systems

- High initial investment outlay
- High cleaning effort and expense
- Risk of contamination

Flexible systems with sterile bags

+ Faster setup and lower investment throughout the entire life cycle
+ Lower consumption of water and energy
+ Reduced risk of cross-contamination
Data Analytics Has Huge Potential for the Biopharmaceutical Industry

Sartorius Stedim Biotech supports its customers in the digitalization and automation of their processes with its leading software for analysis of bioprocess data.

- Enhanced process control and robustness
- Improved product quality
- Predictive process control

- Powerful solutions for modeling and optimizing development and manufacturing
- Helps provide insights derived from complex data sets
Leading Market Positions Worldwide

Fluid Management

Fermentation

Filtration

#1

#1

#3
Acquisitions Strengthen and Differentiate Our Portfolio

Acquired technologies include

- Cell line and process development services
- Automated single-use centrifugation
- Bioprocessing software
- Cell culture media
- Chromatography and tangential flow filtration systems; microcarriers
Sales Revenue Almost Tripled Over the Last Five Years

Sales CAGR  +~19.5%
EBITDA\(^1\) margin  +12pp

Sales growth and CAGR in constant currencies. 1 Excluding extraordinary items
Sartorius Stedim Biotech 2025 Targets and Initiatives

Strategic initiatives

Regional
- Participate in strong Asian market growth
- Continue to outperform the important U.S. market

Portfolio
- Add high-impact innovations, e.g., digital tools
- Enhance process development capabilities
- Expand into adjacent applications

Operations
- Accelerate workflows across the organization through digitalization
- Extend manufacturing base in Asia

2025 targets

~ €4.4bn
Sales revenue

>35%
EBITDA margin

2025 targets are based on current currency exchange rates; EBITDA excluding extraordinary items
Substantial Investments in the Expansion of Global Capacities

Significant CAPEX ratios
CAPEX in millions of € | ratio in %

<table>
<thead>
<tr>
<th>Year</th>
<th>CAPEX in €</th>
<th>Ratio in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>136</td>
<td>9.4</td>
</tr>
<tr>
<td>2020</td>
<td>159</td>
<td>8.3</td>
</tr>
<tr>
<td>2021</td>
<td>324</td>
<td>11.2</td>
</tr>
<tr>
<td>2022</td>
<td>431</td>
<td>12.3</td>
</tr>
</tbody>
</table>

- **USA**: Marlborough
- **Puerto Rico**: Yauco
- **Germany**: Göttingen, Guxhagen
- **France**: several sites
- **China**: Beijing
- **South Korea**: Songdo

This is Sartorius Stedim Biotech
Thank You.