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.
As of December 31, 2021, FY2021, 3 Underlying EBITDA

Sartorius Stedim Biotech in Brief

>50
Locations worldwide; headquartered in Aubagne, France

~10,400
Employees¹

~€2.9bn
Sales revenue²

35.8%
EBITDA margin²,³

~33%
Sales revenue
Americas

~42%
Sales revenue
EMEA

~26%
Sales revenue
Asia | Pacific

¹ As of December 31, 2021, 2 FY 2021, 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 60 in 2050: >2bn
- World population over 60 in 2021: ~1bn

**Biologics are gaining importance**
- Sales share of biologics in 2026: ~37%
- Sales share of biologics in 2021: ~34%

~10% CAGR for the biopharma market in 2021–2026

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**What Are Biopharmaceuticals?**

<table>
<thead>
<tr>
<th>Biopharmaceuticals</th>
<th>Chemical drugs</th>
<th>Active agent</th>
<th>Manufacturing</th>
<th>Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Small molecules</td>
<td>Chemical synthesis</td>
<td>Mainly oral</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large molecules &gt; 20,000 atoms</td>
<td>Cell culture processes with living cells</td>
<td>Mainly intravenous</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
The Consequence: Biotech Medications Are Extremely Expensive

**HUMIRA®**
Annual revenue of ~$20.7 billion; is used to treat rheumatism and other inflammatory autoimmune diseases, such as Crohn’s disease and psoriasis
Manufacturer: Abbvie

Cost per annual treatment
>€20,000 in Germany

Source: Abbvie

First less expensive biosimilars out on the market:
- Imraldi® from Biogen
- Hyrimoz® from Sandoz
- Amgevita® from Amgen

**ZOLGENSMA®**
Currently the world’s most expensive medical drug; gene therapy used to treat spinal muscular atrophy
Manufacturer: Novartis

Cost per treatment
~$2,000,000 in the U.S.

Source: Novartis
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 #1
Fermentation #1
Filtration #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

kSep  Umetrics  Biological Industries  Life Science assets from Danaher  BIA Separations  WaterSep  Cell Genix  Xell  Chromatography assets from Novasep

2016  2017  2019  2020  2021  2022
Sales Revenue Almost Tripled Over the Last Five Years

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales CAGR</th>
<th>EBITDA Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>+10.8%</td>
<td>+14.3pp</td>
</tr>
<tr>
<td>2013</td>
<td>+15.9%</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>+19.4%</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>+20.4%</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>+4.1%</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>+13.7%</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>+18.8%</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>+34.6%</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>+52.6%</td>
<td>~€2.9bn</td>
</tr>
<tr>
<td>2021</td>
<td>~€544m</td>
<td>35.8%</td>
</tr>
</tbody>
</table>

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

Strategic initiatives

Regional
- Participate in strong Chinese 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

- ~€4bn Sales revenue
- ~35% EBITDA margin

2025 targets are based on 2020 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</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>177</td>
<td>14.6</td>
</tr>
<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>2022e</td>
<td>324</td>
<td>~14.5</td>
</tr>
</tbody>
</table>

This is Sartorius Stedim Biotech
Thank You.