

## Simplifying Progress

Welcome to Sartorius

February 2025



#### Our ambition: Better health for more people

Mission

We empower scientists and engineers to simplify and accelerate progress in life science and bioprocessing, enabling the development of new and better therapies and more affordable medicine.

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 in 2024 numbers



### 13,500 employees united by strong values

#### Sustainability

Growing profitably and acting responsibly towards all stakeholders

#### **Openness**

Driving change and progress internally and externally

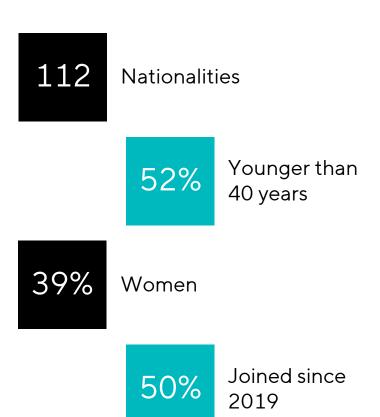
#### Enjoyment

Working in an energetic and rewarding environment







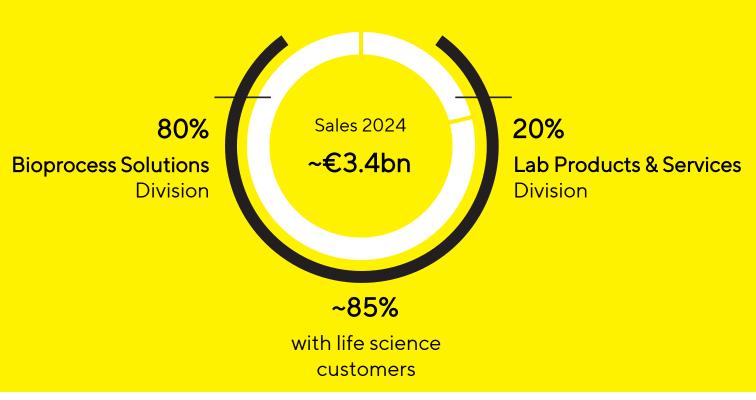




#### Two divisions with a clear focus on the life science industry

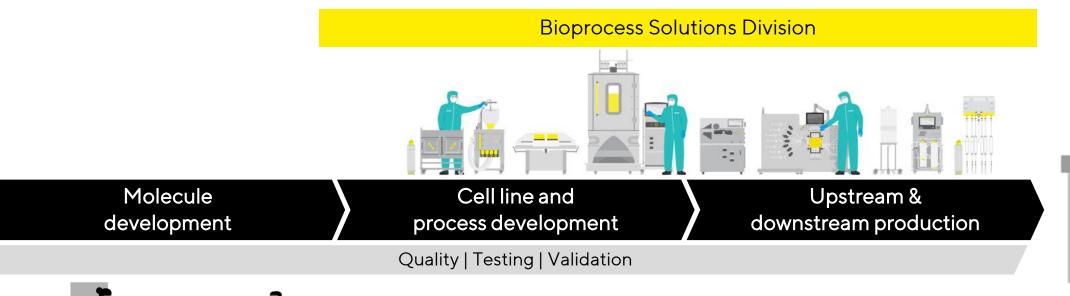
Offers a wide array of innovative technologies for the manufacture of biopharmaceuticals and vaccines as well as cell and gene therapeutics







# Simplifying Progress: Enabling the discovery and production of biopharmaceuticals





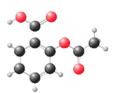


Lab Products & Services Division

### What are biopharmaceuticals?

#### Chemical drugs





Small, simple molecules



Obtained via chemical synthesis



Administered in various ways

#### Biopharmaceuticals





Large molecules, cells or viruses



Produced with living cells in cell culture processes



Administered mainly intravenously

## Advantages of biopharmaceuticals

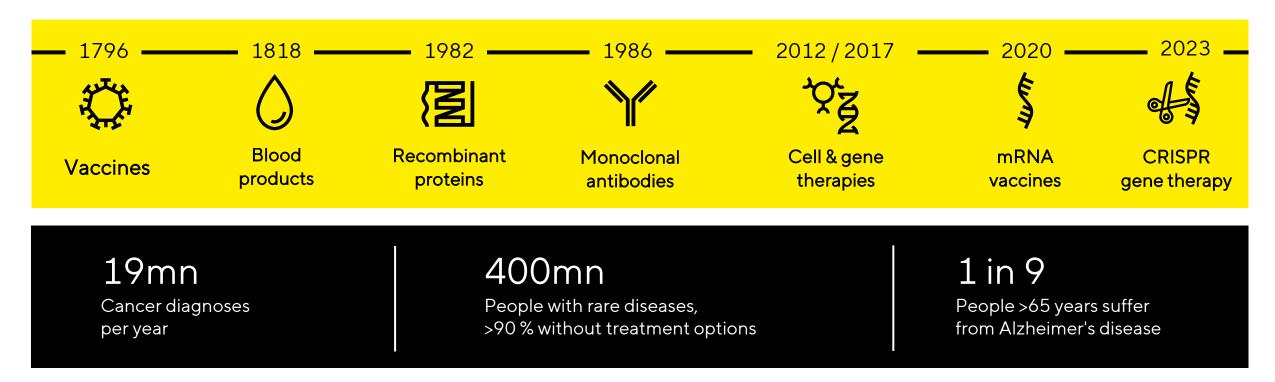
- Target only diseased cells
- Fewer side effects
- Allow first-time or improved treatment of illnesses, e.g. cancer, multiple sclerosis, rheumatism





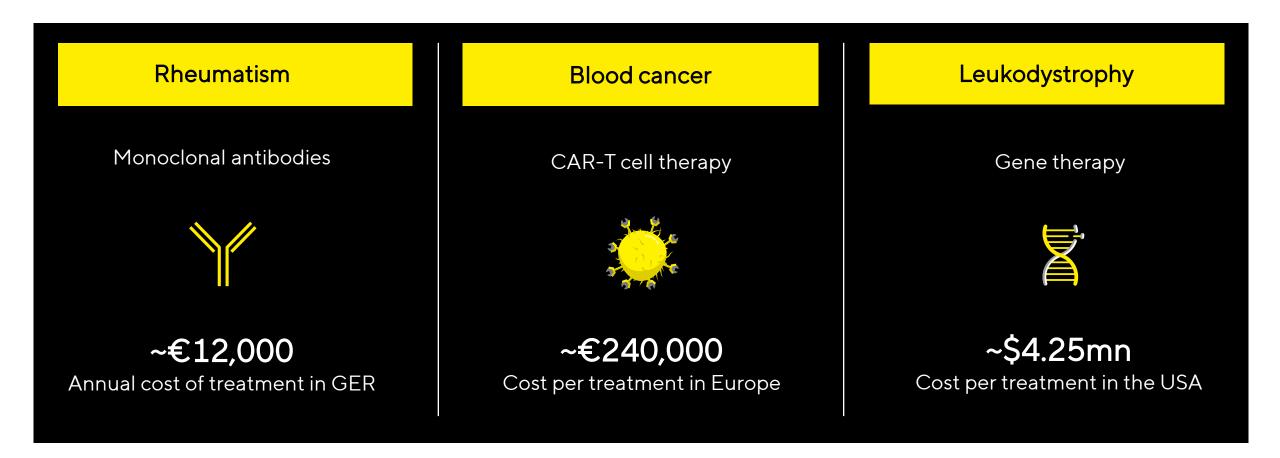
#### The promises of biologics: From established to new concepts

Breakthroughs at an ever-increasing pace and new forms of treatment offer hope for patients



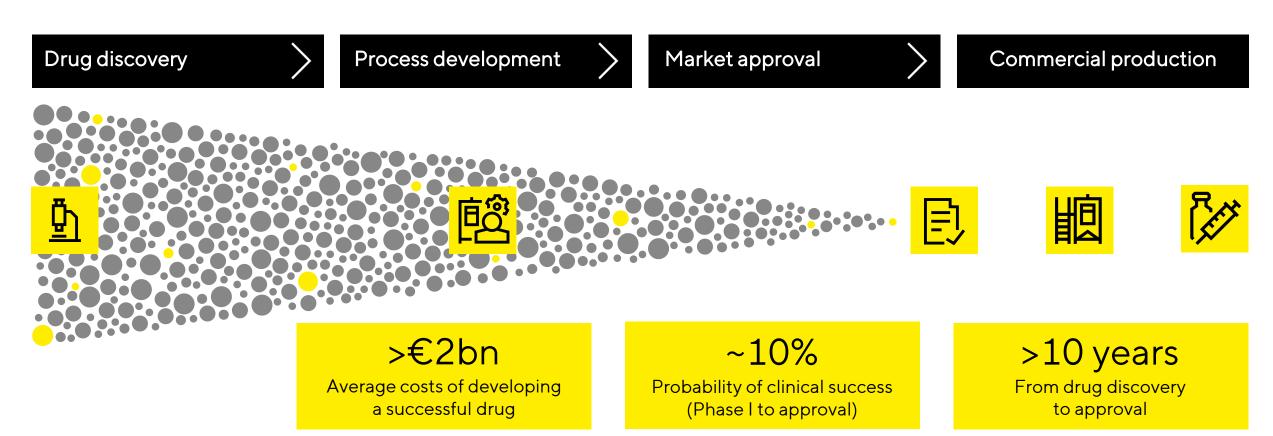


### Many biotech medications are highly effective, but very expensive





### Only one out of 10,000 new drug candidates reaches the market



Schematic example of biologic drug discovery with data from the Association of the British Pharmaceutical Industry



### Helping researchers in the labs to accelerate drug discovery



#### Our ambition Reduce costly trial & error



#### Our solutions

Powerful bioanalytical tools and lab essentials



- **Understand diseases**
- **Conduct experiments**
- Make better use of data
- Identify molecules
- Develop new drugs



Live cell analysis



**Pipetting** 



Cell characterization



Weighing



Protein analysis



Cell selection



Filtration



Water purification



### Once discovered also the manufacture of biologics remains complex



### Providing technologies to increase productivity in bioprocessing



#### Our ambition

More efficient bioprocessing



#### Our solutions

Technologies for all phases of drug manufacturing



- Set up safe and flexible processes
- Increase resource and material efficiency
- Reduce investments
- Enhance product yield



Media & reagents



Chromatography





Filtration



Bioreactors & fermenters



Fluid management



Data analysis

### Offering integrated end-to-end manufacturing solutions

**Upstream** Production of the desired drug Cell culture media & Seed Scale-up Production cultivation preparation Downstream Isolation and filling of the desired drug Final Cryo-Sterile Concen-Virus clearance Chroma-Clarification & filling filtration tration & filtration centrifugation preservation tography



### Helping customers to reduce their environmental footprint



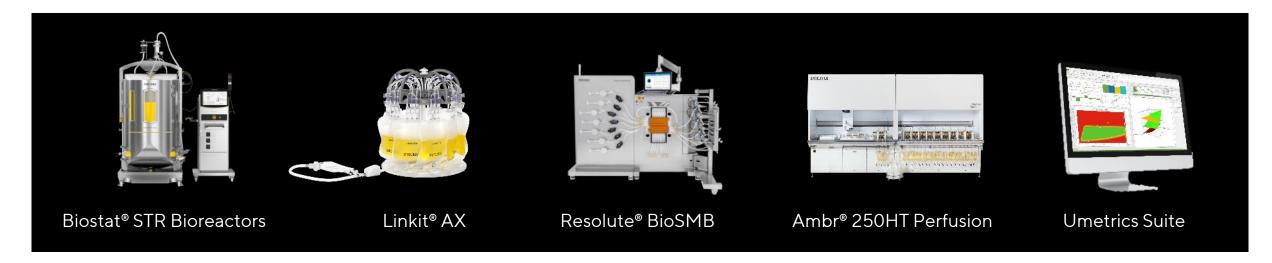




Data analytics



- No water-/energyintensive cleaning
- Less cleanroom space, less energy usage
- Higher yields





### Cell and gene therapies: New modalities, new challenges



#### Next generation biopharmaceuticals

Viral Vectors mRNA Stem Cells

**New Vaccines** Exosomes DNA

9,000+ ~100 Innovative treatments for patients

Candidates in development<sup>1</sup>

Approved therapies worldwide

Regulation under development

Manufacturing close to patients



#### Enabling CGT: High need for innovation

Robustness of production process

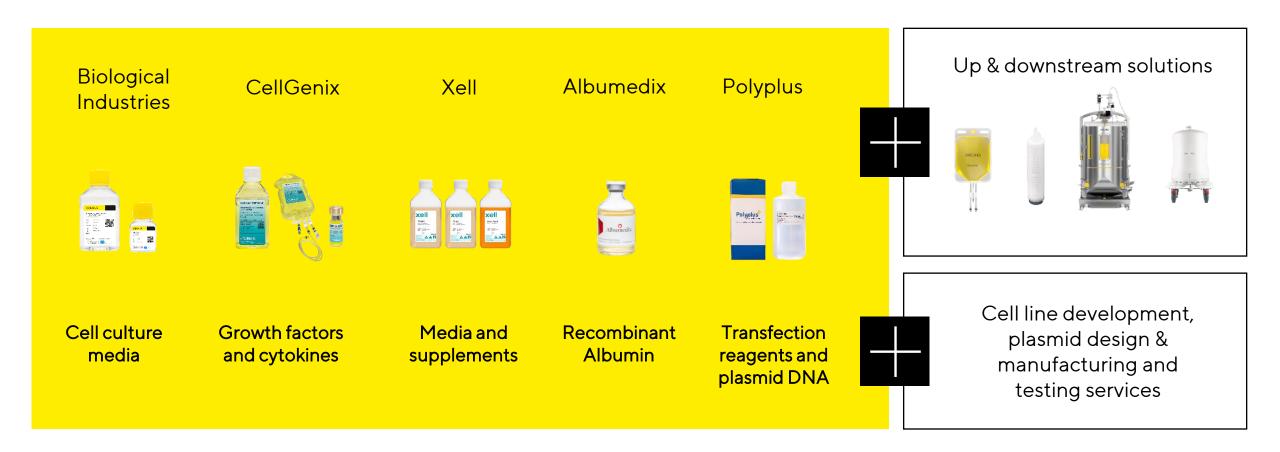
Yields, productivity, cost-per-dose

Time-to-market



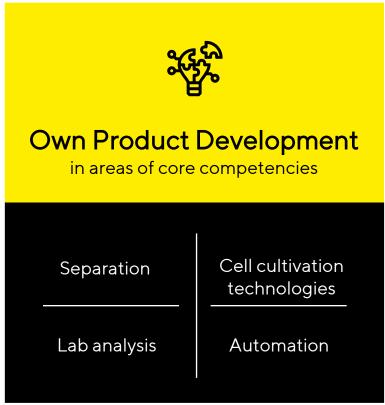
1 Global Data, October 2024, CGT = Cell & Gene Therapies

### Extensive technology platform for cell and gene therapy applications

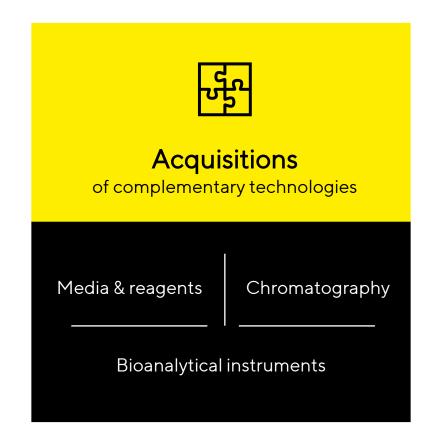


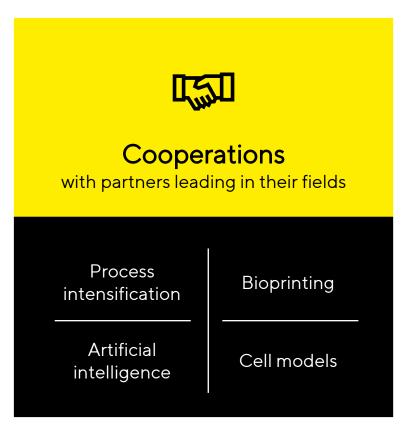


#### How we innovate



Recent focus; selected projects





### Resilient global setup, well prepared for further growth







Redundant capacities

Operational excellence



Expansion of production & R&D capacities; selected current projects

#### Opened in 2024

Selected projects



Marlborough, USA Center for Bioprocess Innovation



Ann Arbor, USA
Bioanalytical products & services

#### Current investments

Selected projects



Göttingen, Germany Filters



Songdo, South Korea Media, bags, filtration, labs, training



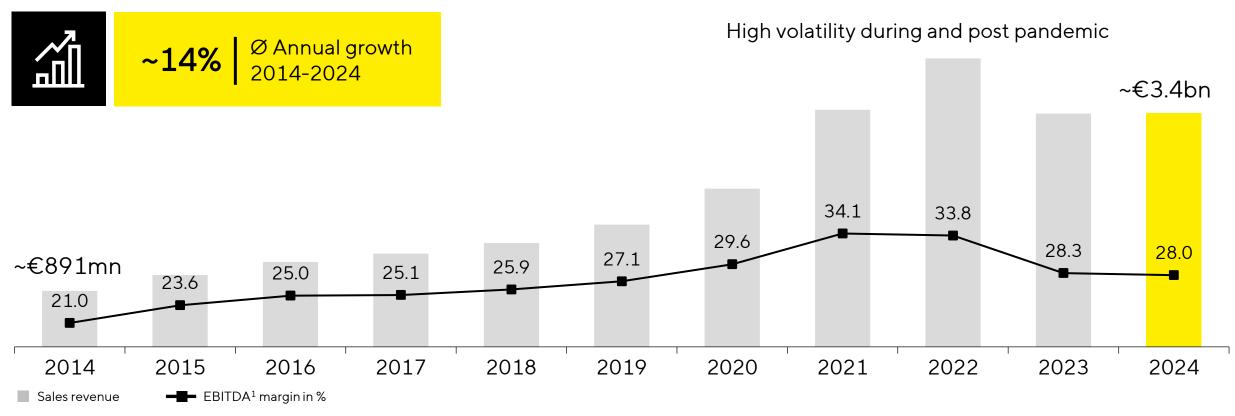
Freiburg, Germany
Cell culture components



Aubagne, France Clean rooms, product development, labs



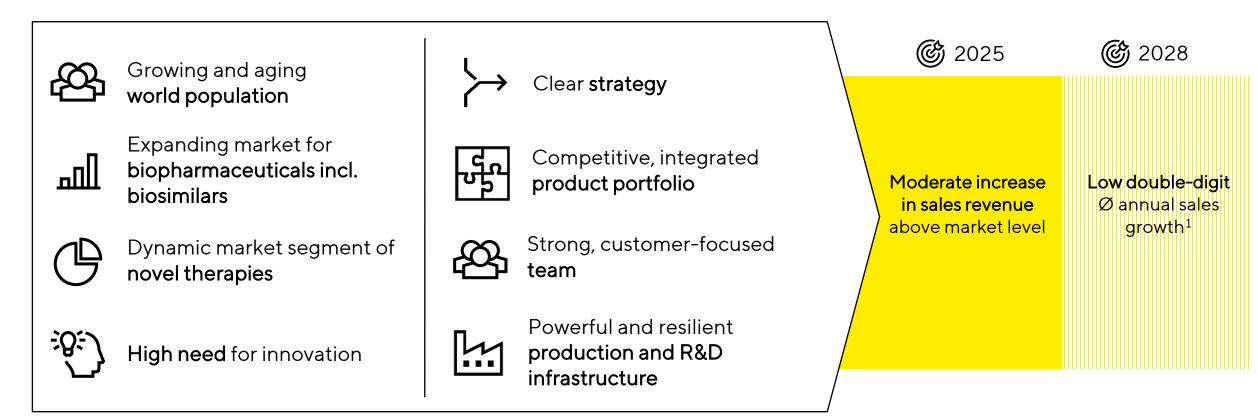
### Strong financial track record; profitable growth



Sales CAGR for continued operations, in constant currencies; EBITDA margin excluding extraordinary items



### Ambitions backed by strong market fundamentals



<sup>1</sup> Thereof around a fifth through acquisitions



### Ambitious sustainability agenda in implementation

2030 mid-term ambitions

~10%

av. reduction of  $CO_2$ eq emission intensity p.a. (Scopes 1-3)

Zero

avoidable<sup>1</sup> emissions in Scopes 1 and 2

100%

electricity from renewable sources



1 Process emissions from membrane manufacturing are currently considered unavoidable based on available technology

2045 long-term ambition

Net-zero emissions

Decarbonization of the entire supply chain in collaboration with suppliers and customers







# Simplifying Progress

#### Sartorius AG

Corporate Communications & IR Otto-Brenner-Straße 20 37079 Göttingen Germany

