

Simplifying Progress

Welcome to Sartorius

July 2024

SARTORIUS

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 2023 numbers

~€3.4bn	Sales revenue	
28.3%	Profit margin ¹	
14,500+	Employees	
60+	Locations worldwide	
150+	Years of experience	

¹ Underlying EBITDA margin

		
~€560mn	Investments in capacities	
2045	Target for climate neutrality	

14,500 employees united by strong values

Sustainability

Growing profitably and
acting responsibly towards
all stakeholders



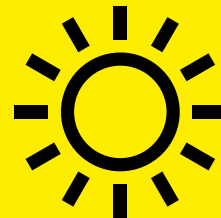
Openness

Driving change
and progress
internally and externally



Enjoyment

Working in an energetic
and rewarding
environment



113

Nationalities

54%

Younger than
40 years

39%

Women

55%

Joined since
2019

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

79%
Bioprocess Solutions
Division

Sales 2023
~€3.4bn

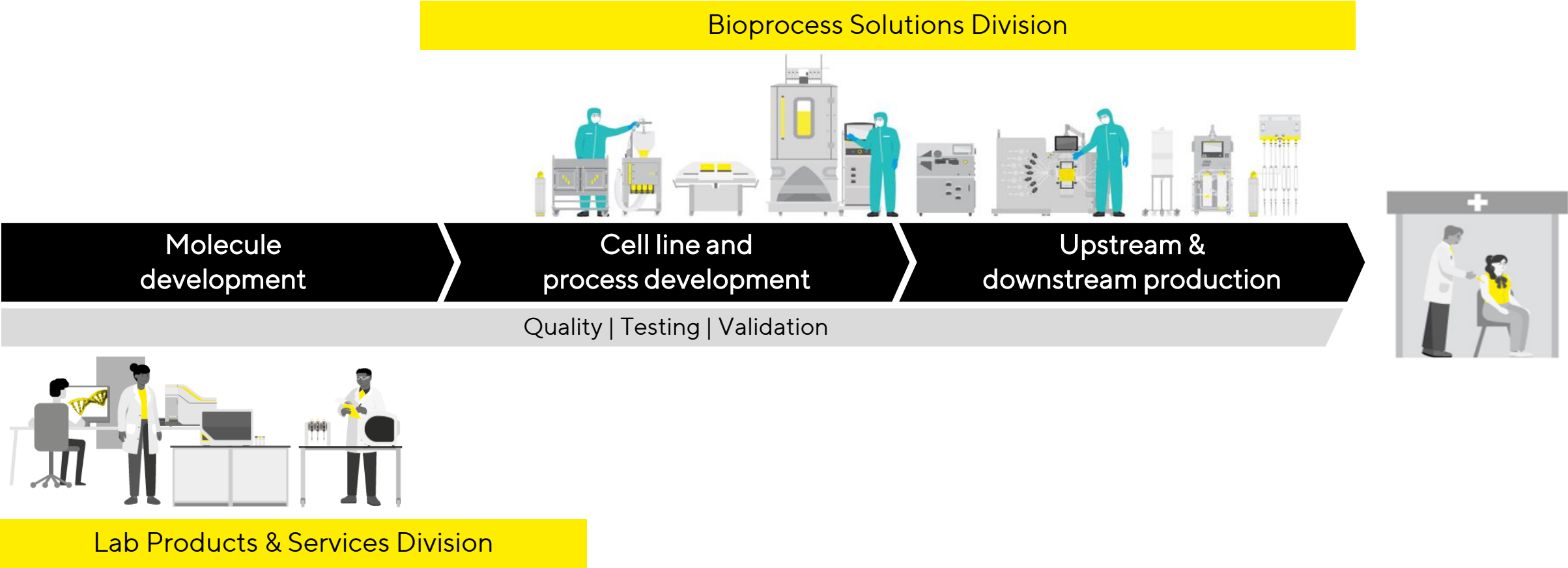
21%
Lab Products & Services
Division

~85%
with life science
customers



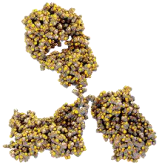
Specializes in equipment and technologies for life science research and pharmaceutical laboratories

Enabling the discovery and production of biopharmaceuticals



The promises of biologics: From established to new concepts

What are biopharmaceuticals?



Consist of
complex molecules



Obtained from living cells in
cell culture processes

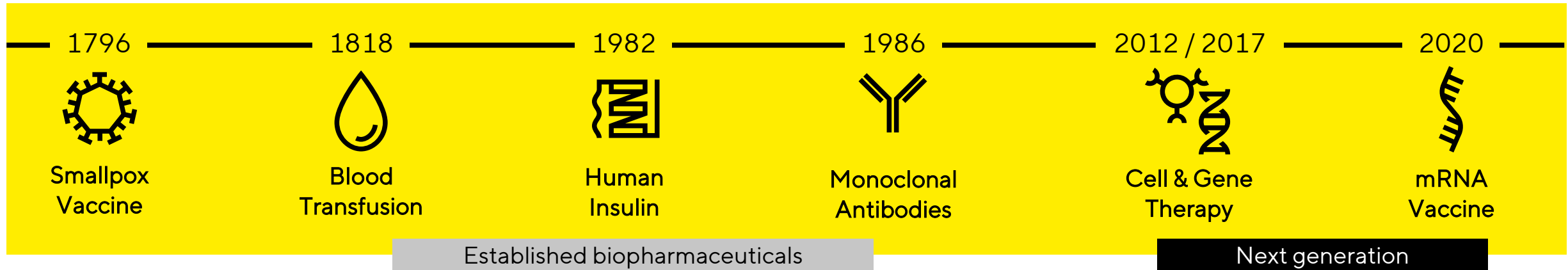


Administered mainly
intravenously



Advantages

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



Many biotech medications are highly effective, but very expensive

Rheumatism

Monoclonal antibodies



~€12,000

Annual cost of treatment in GER

Blood cancer

CAR-T cell therapy



~€280,000

Cost per treatment in Europe

Hemophilia

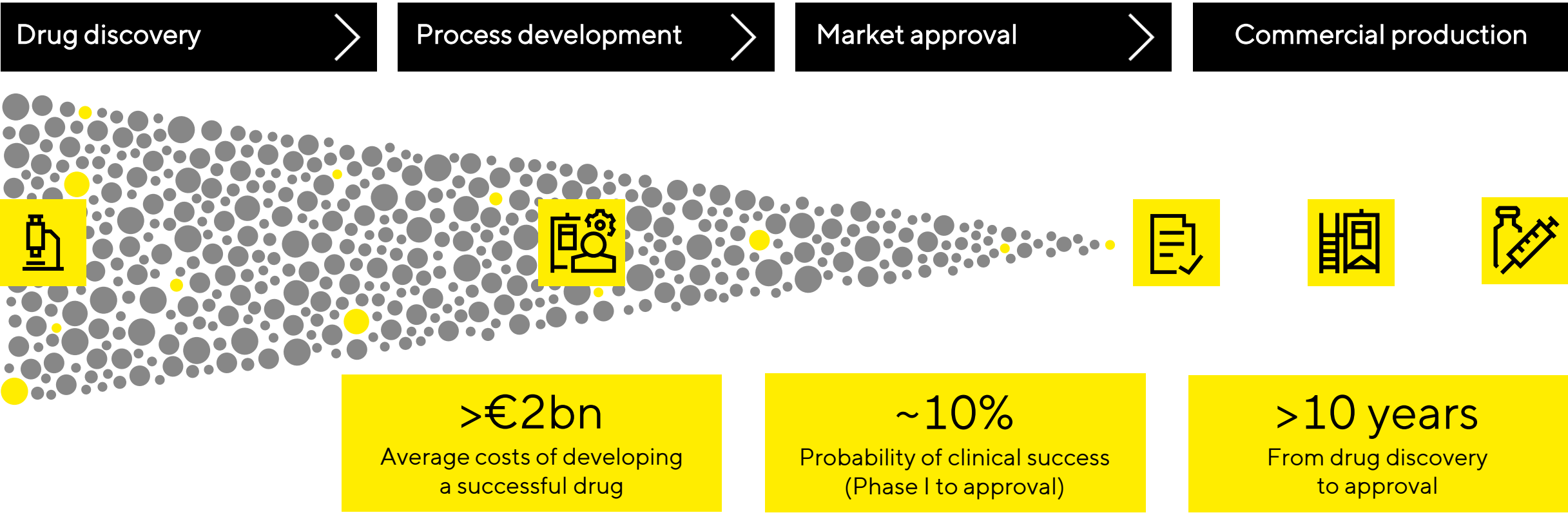
Gene therapy



~\$3.5mn

Cost per treatment in the USA

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



Cell characterization



Protein analysis



Cell selection



Pipetting



Weighing



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



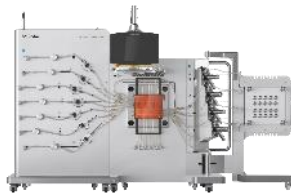
- ✓ Set up safe and flexible processes
- ✓ Increase resource and material efficiency
- ✓ Reduce investments
- ✓ Enhance product yield



Media & reagents



Bioreactors & fermenters



Chromatography



Filtration



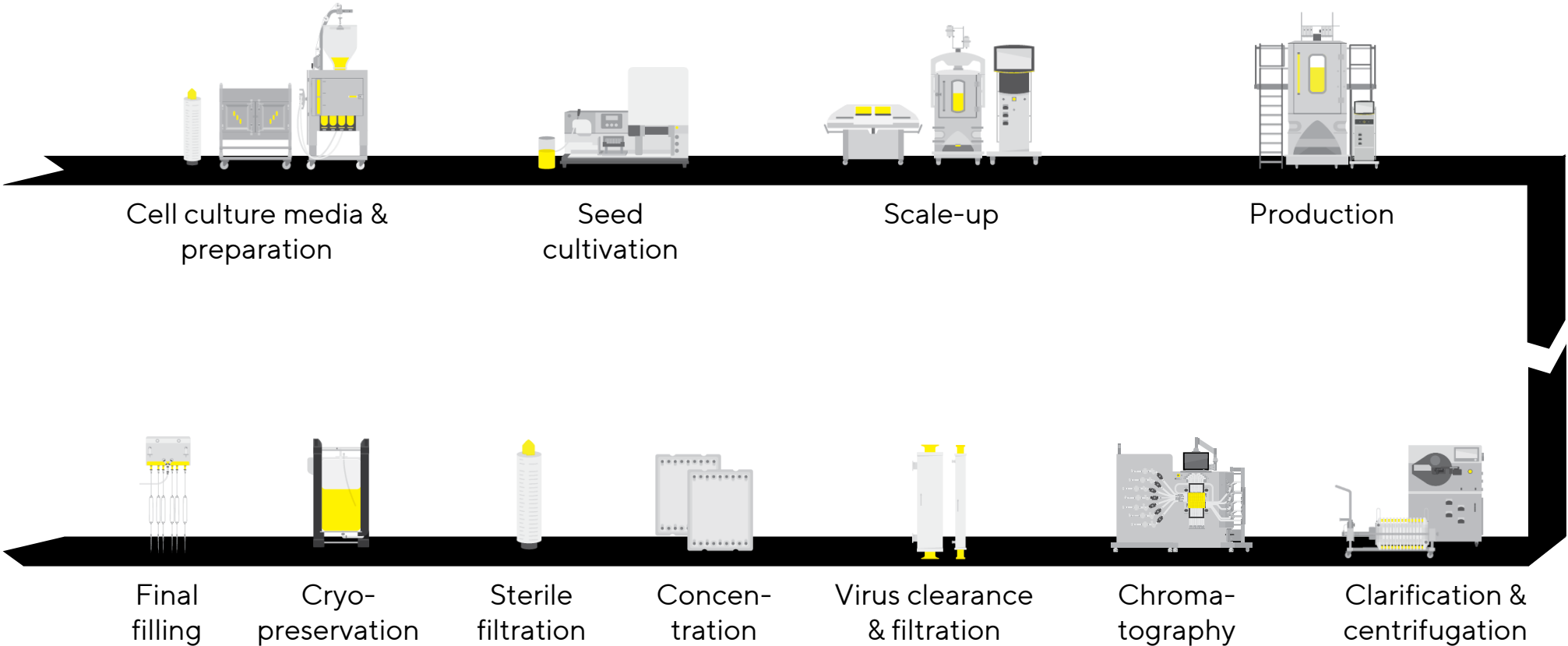
Fluid management



Data analysis

Offering integrated end-to-end manufacturing solutions

Upstream
Production of
the desired
drug



Downstream
Isolation and
filling of the
desired drug

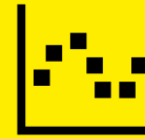
Helping customers to reduce their environmental footprint



Single-use
technologies



Process
intensification



Data
analytics



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



Biostat® STR Bioreactors



Linkit® AX



Resolute® BioSMB




Ambr® 250HT Perfusion



Umetrics Suite

Cell and gene therapies: New modalities, new challenges



Next generation biopharmaceuticals

Viral Vectors	mRNA	Stem Cells
Exosomes	DNA	New Vaccines

6,000+


~60

Innovative treatments for patients

Candidates in development¹


Approved therapies worldwide

¹ GlobalData, October 2023, CGT = Cell & Gene Therapies

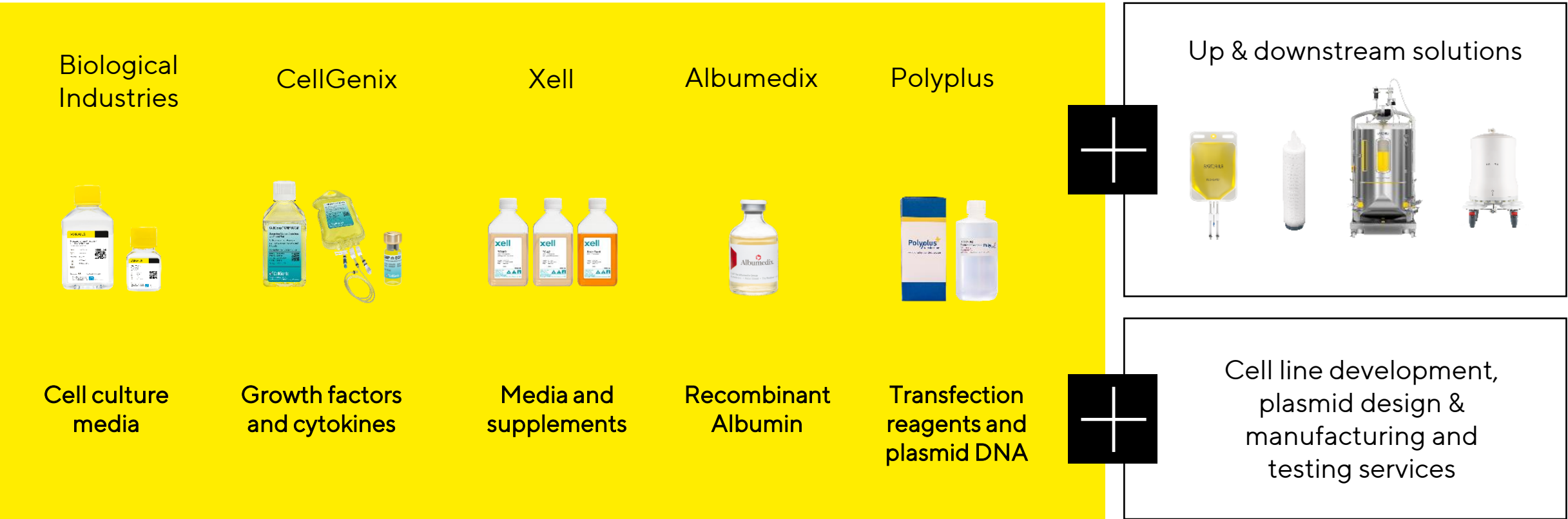


Enabling CGT: High need for innovation

- + Robustness of production process
- + Yields, productivity, cost-per-dose
- + Time-to-market
- + Regulation under development
- + Manufacturing close to patients



Creating a technology platform for cell and gene therapy applications



How we innovate



Own Product Development

in areas of core competencies

Separation

Cell cultivation
technologies

Lab analysis

Automation

Recent focus; selected projects



Acquisitions

of complementary technologies

Media & reagents

Chromatography

Bioanalytical instruments



Cooperations

with partners leading in their fields

Nanoparticles

Bioprinting

Artificial
intelligence

Cell models

Resilient global setup, well prepared for further growth



Customer proximity



Redundant capacity



Operational excellence



Global resilience



Ann Arbor, Michigan, USA
Bioanalytical products & services



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




Freiburg, Germany
Cell culture components



Göttingen, Germany
Filter production, product development



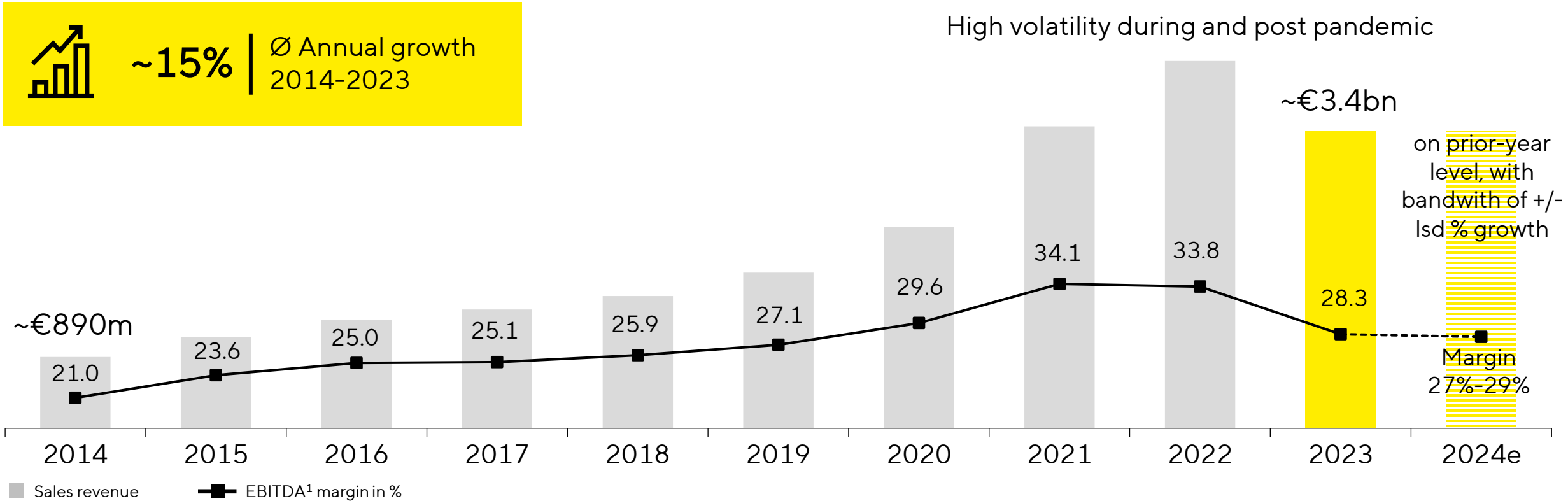
Aubagne, France
Clean rooms, product development, labs



~12 %
Expected capex
ratio 2024

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

Strong financial track record; profitable growth



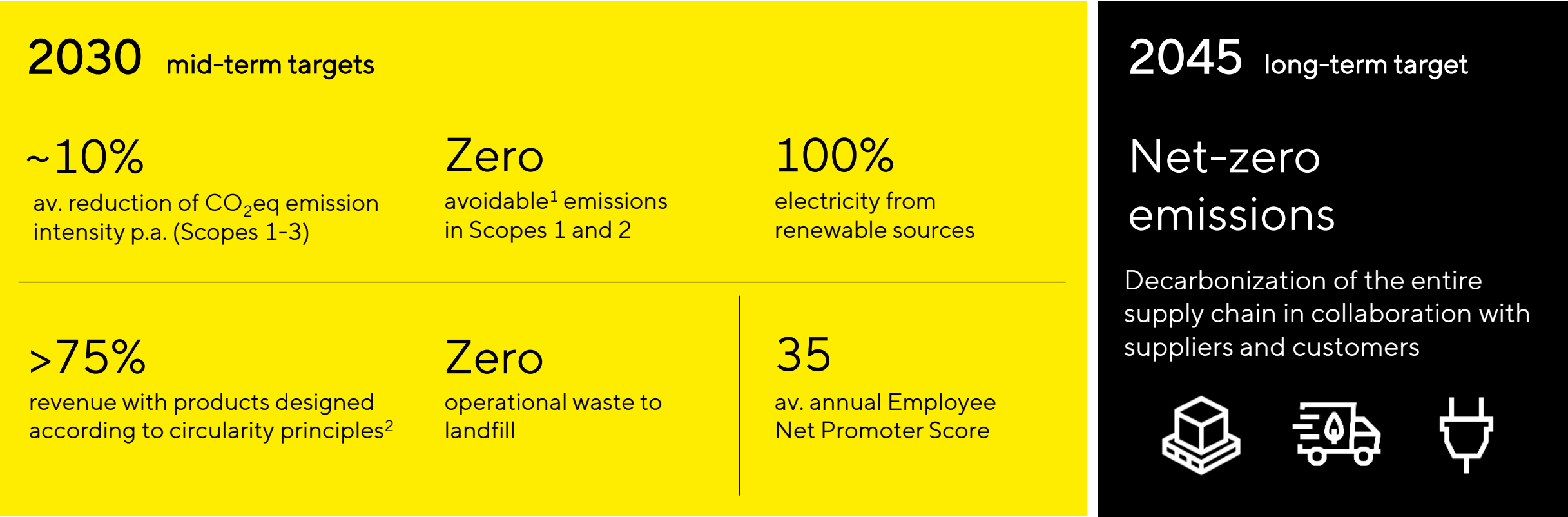
Sales CAGR for continued operations, in constant currencies; EBITDA margin excluding extraordinary items

Ambitious midterm targets backed by strong market fundamentals



¹ Thereof around a fifth through acquisitions

Broad and ambitious sustainability agenda in implementation



1 Process emissions from membrane manufacturing are currently considered unavoidable based on available technology, 2 Including product and transport packaging

Simplifying Progress

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SARTORIUS