



Simplifying Progress



Sartorius & Sartorius Stedim Biotech Virtual Capital Markets Day 2021

May 20, 2021

SARTORIUS

Agenda

- 2:00 pm **Strategy & Financials | Q&A**
Speakers: Joachim Kreuzburg, Rainer Lehmann
- 2:30 pm **Deep Dive BPS | Q&A**
Speakers: René Fáber, Ulrike Lemke
- 3:10 pm **Coffee Break**
Selection of virtual product demonstrations & tours
- 3:40 pm **Deep Dive LPS | Q&A**
Speakers: Gerry Mackay, Fiona Coats
- 4:15 pm **Sustainability at Sartorius | Q&A**
Speakers: Joachim Kreuzburg, Katharina Tillmanns
- 4:45 pm Closing of event





Note

This presentation contains statements concerning the future performance of the Sartorius Group and Sartorius Stedim Biotech. These statements are based on assumptions and estimates. Although we are convinced that these forward-looking statements are realistic, we cannot guarantee that they will actually materialize. This is because our assumptions harbor risks and uncertainties that could lead to actual results diverging substantially from the expected ones. It is not planned to update our forward-looking statements.

Transcripts or recordings of this event are not permitted.



Simplifying Progress



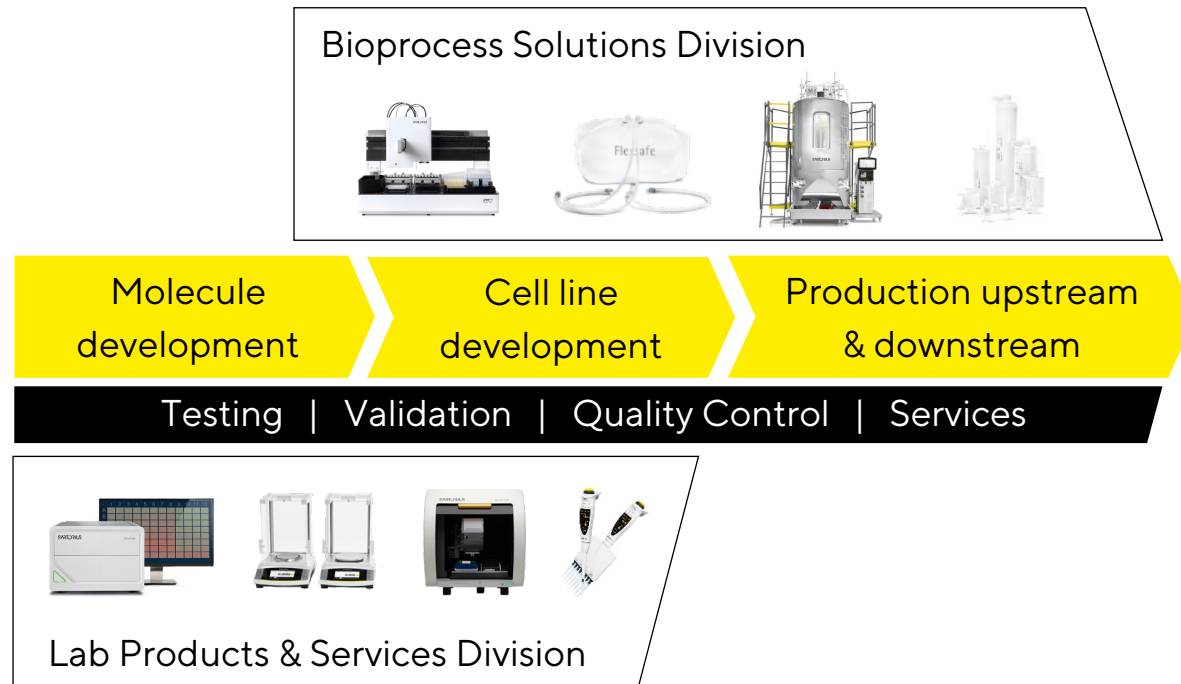
Strategy & Financials

Joachim Kreuzburg, Rainer Lehmann | CMD 2021

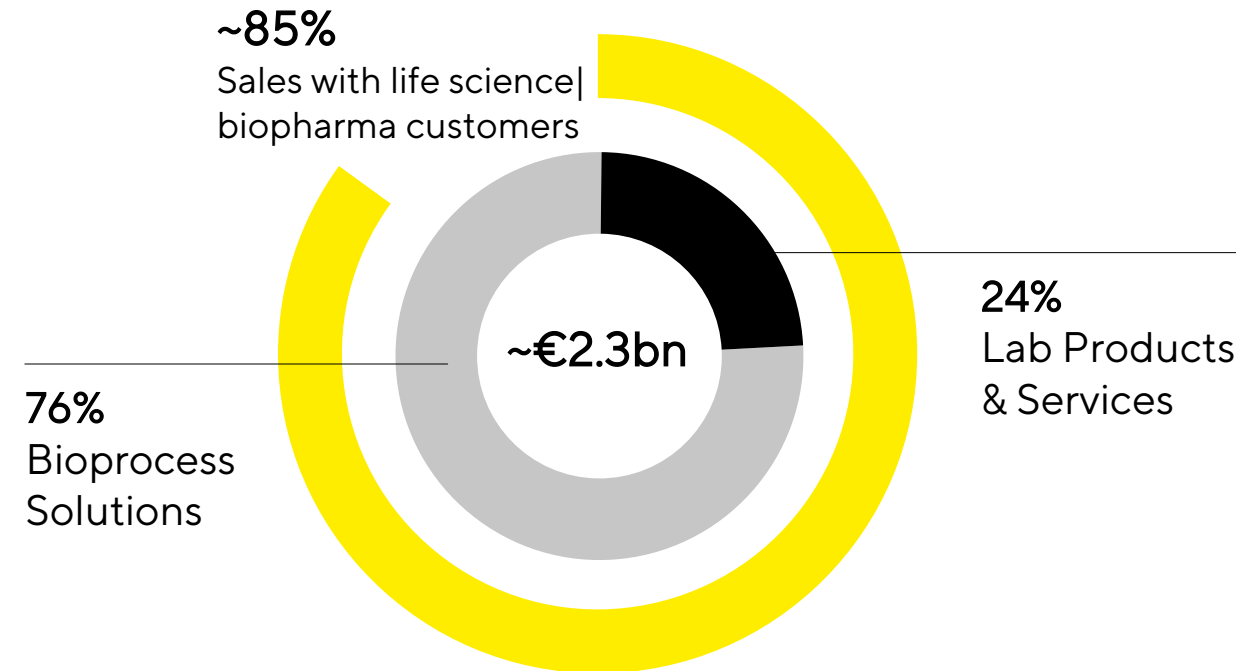
SARTORIUS

Two divisions with a complementary focus on the life science market

Covering the entire biopharma value chain



Biopharma the increasingly dominating customer segment

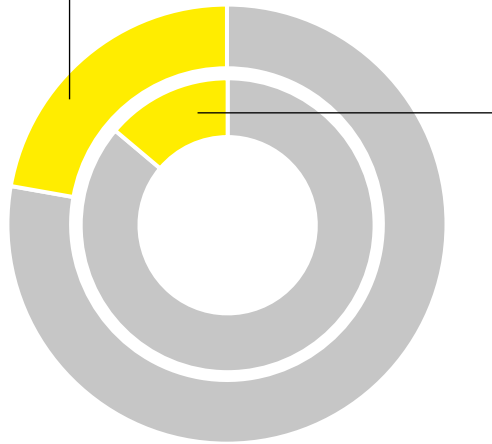


Attractive market environment offers strong growth opportunities

Growing and aging population

9 billion people by 2050

World population over age 60 in 2050
>2bn

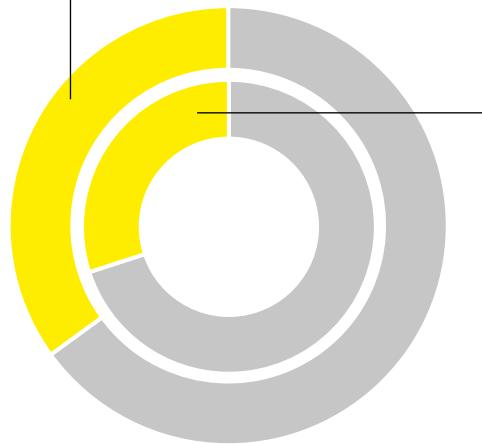


World population over 60 in 2020
~1bn

Biologics are gaining importance

Share of biologics in pharma end market

Sales share of biologics in 2026
~35%



Sales share of biologics in 2020
~30%

~10% CAGR
for the biopharma market
in 2020 – 2025

Strong macro trends and dynamic sector developments require innovative technologies

Sector trends

Drug pipeline

- Rise of new modalities; increasing complexity
- More molecules with lower volumes; more follow-on biologics

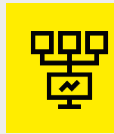
Markets

- China maturing, becoming an innovator
- Small biotechs driving dynamics

Customer needs

- Do more with less in a shorter time
- Increase R&D efficiency and production flexibility

Our solutions



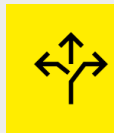
Process intensification

Maximize overall productivity of the different unit operations



Data-driven optimization

From bioanalytics in R&D to MVDA in bioprocessing



High-impact innovation

New technologies that enable production of advanced drug modalities



Reliable partner

With a localized production footprint in all relevant biopharma markets

Adding innovation, also by acquisitions, is an integral part of our strategy

M&A track record since 2015

11
Acquisitions

~2
per year on
average

~€2.1bn
invested

+~950
employees

Recent acquisitions strengthened positioning in high growth areas and broadened offering in key technologies



Biological Industries
(Dec. 2019)

Cell culture media



Selected businesses
from **DHR**
(Apr. 2020)

Bioanalytics |
Chromatography



**BIA
Separations**
(Nov. 2020)

Tools for gene and cell therapies



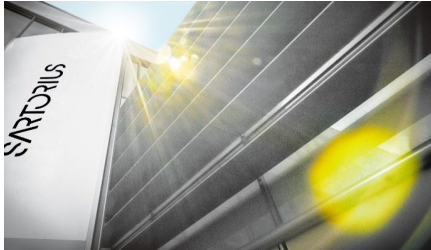


**WaterSep
BioSeparations**
(Dec. 2020)

Delivered on 2020 targets; 2025 mid-range ambition significantly raised

Growth strategy

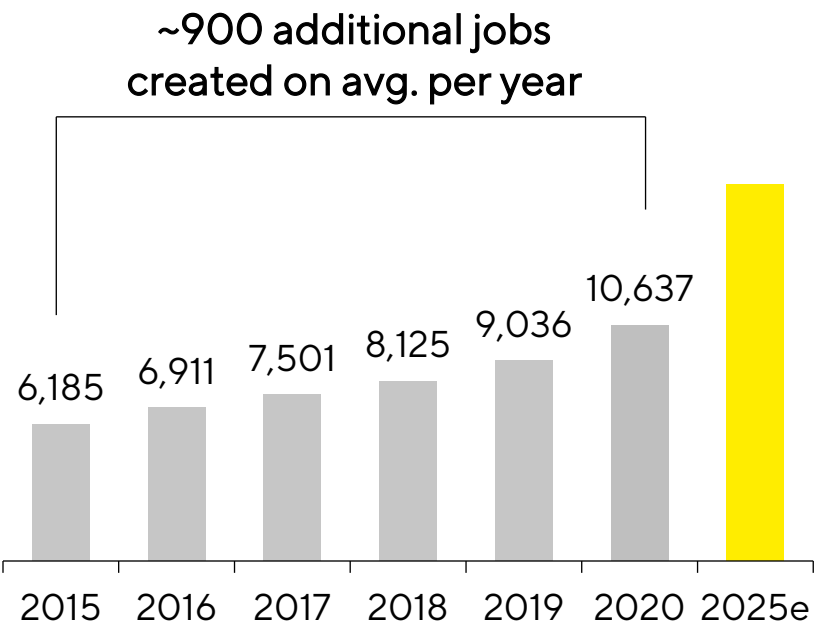
- Continued strong organic growth targeted
- Strategic acquisitions; complementary to product portfolios
- Above-average growth in the Americas and Asia
- Create >1,000 new jobs on average per year

	SSB	BPS	LPS	Sartorius Group
Sales revenue	~€4bn	~€3.8bn	~€1.2bn	€5bn
EBITDA margin	~33%	~34%	~25%	~32%
				

2025 targets based on assumption of constant 2020 FX; EBITDA adjusted for extraordinary items

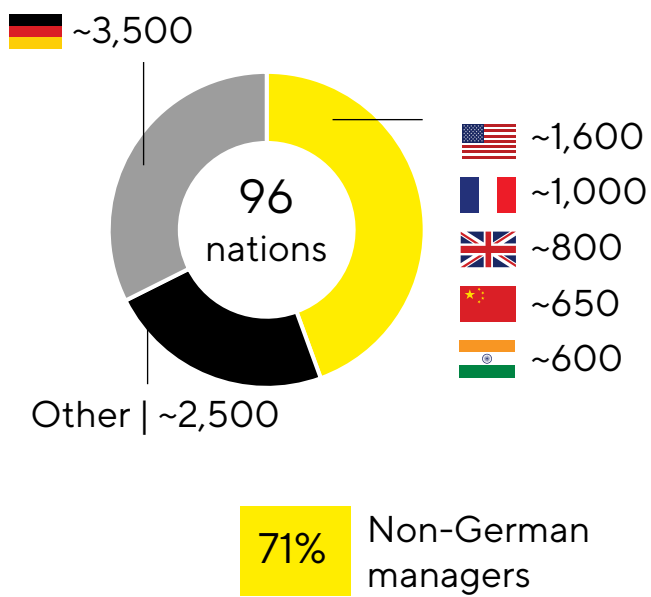
Attracting the best employees is a key factor to continue our growth path

Creation of jobs
Total number of employees

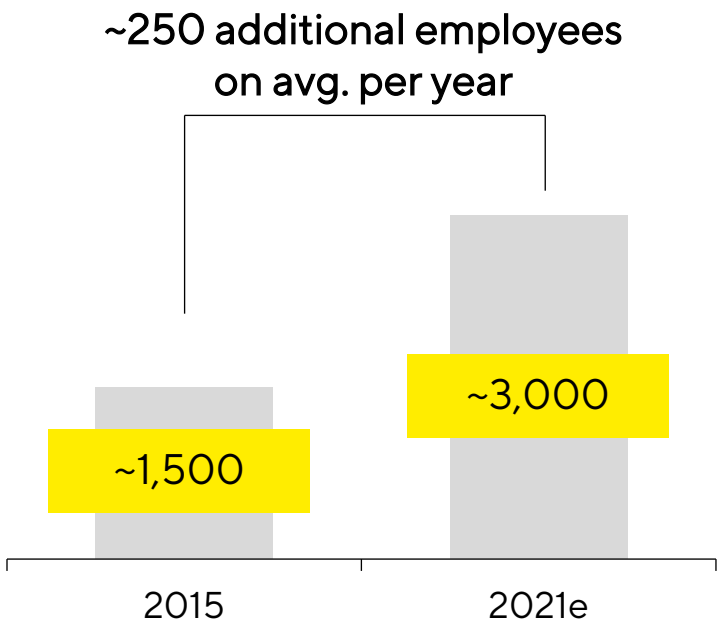


Reporting date: Dec. 31, 2020

Broad international footprint
Employees by nationality

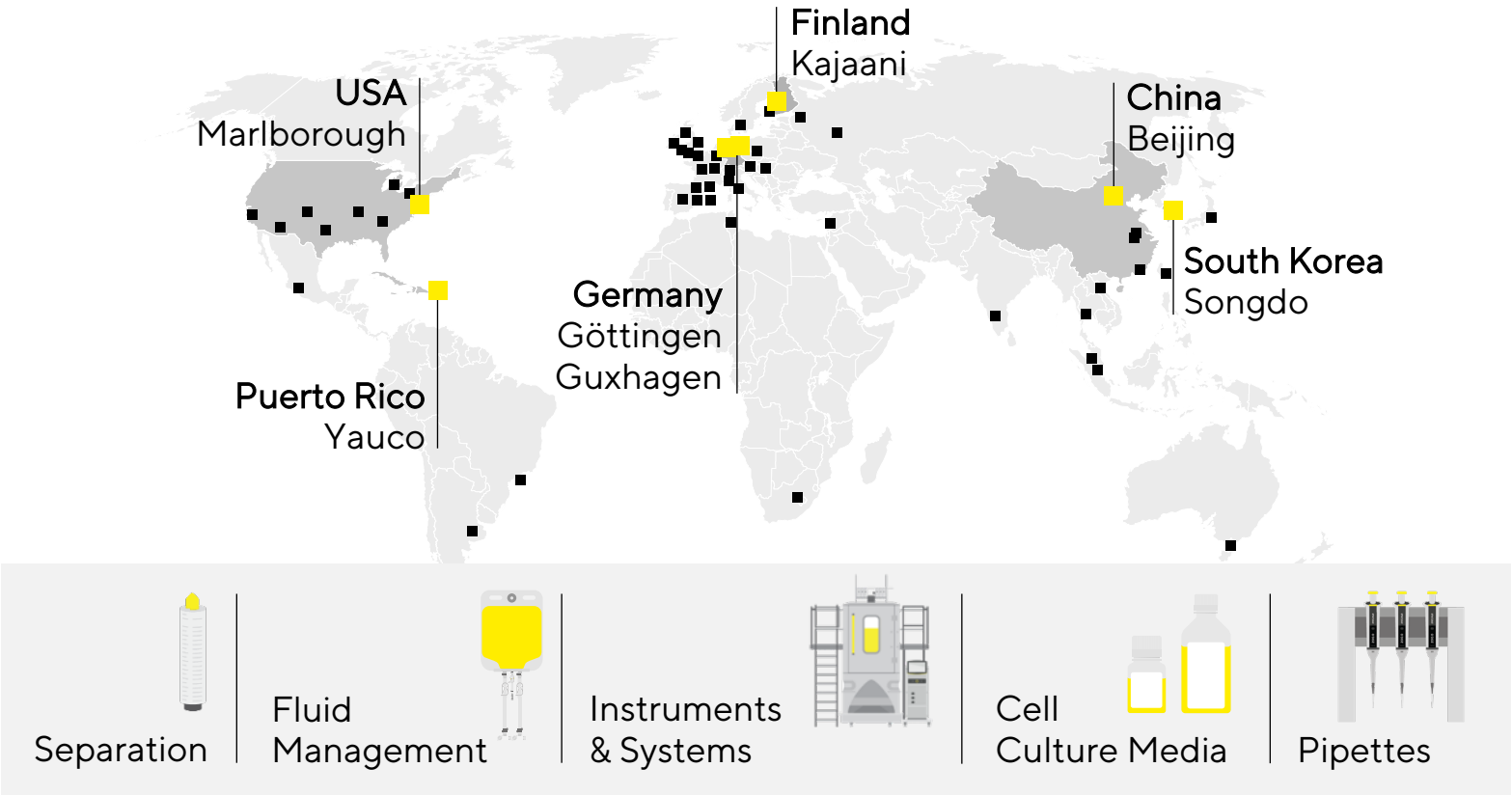
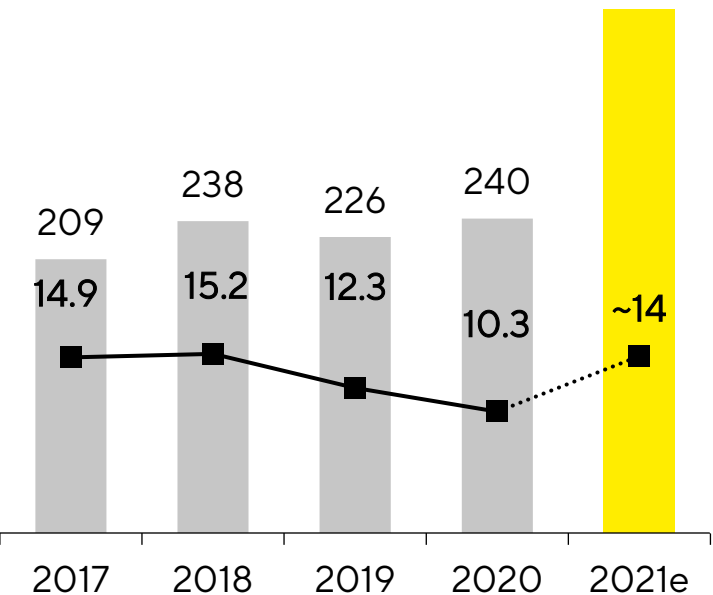


Doubling customer-facing staff
Employees in sales | marketing functions



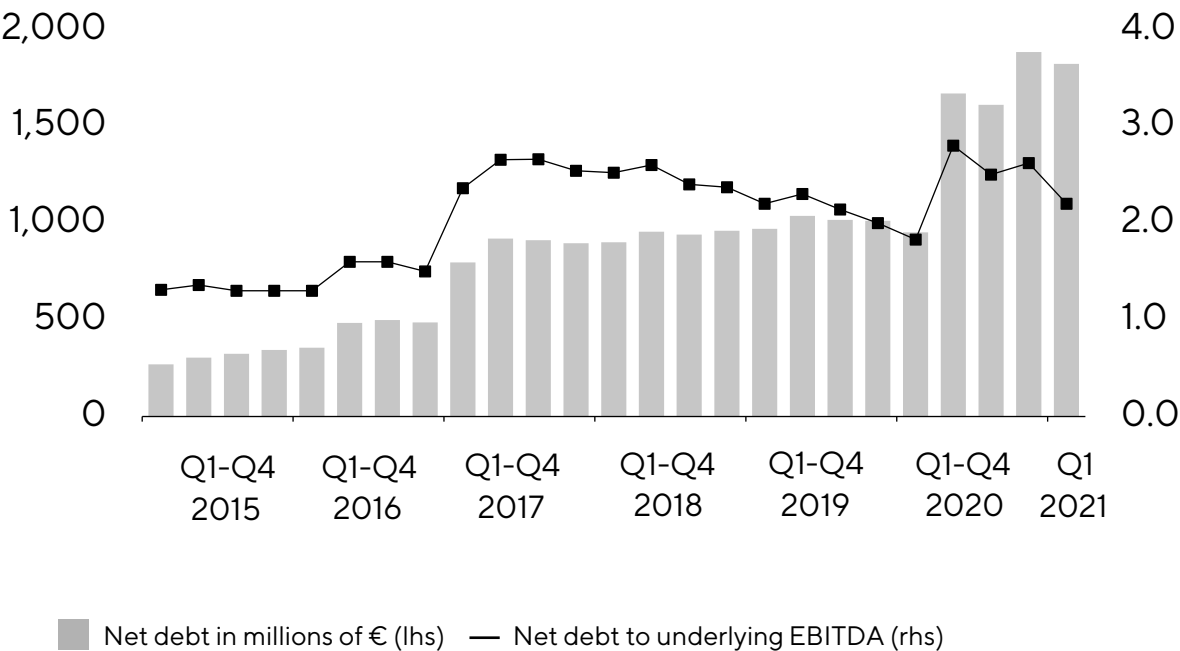
Balancing the geographical manufacturing process

Investment program
accelerated and expanded
CAPEX in millions of €; ratio in %

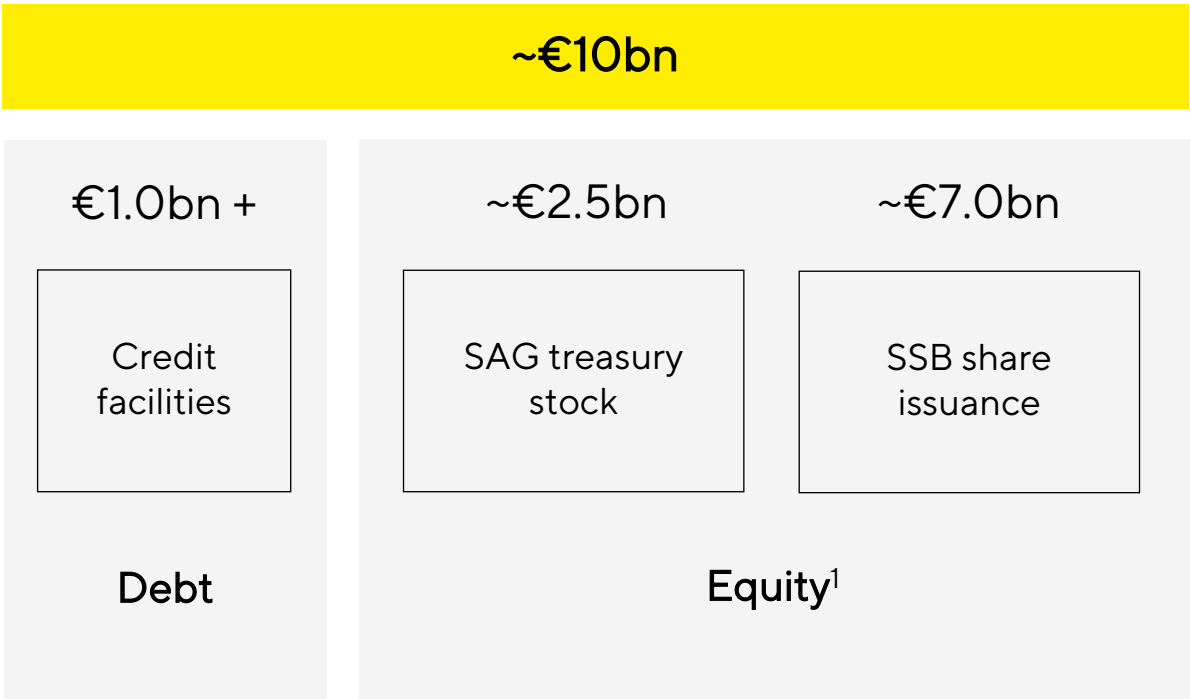


Successful deleveraging over the past quarters; flexible financing options

Net debt and net debt to underlying EBITDA



Considerable financing options



¹ Based on closing prices of May 18



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Bioprocess Solutions

René Fáber, Ulrike Lemke | CMD 2021

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Total solutions provider for the biopharma and life science markets

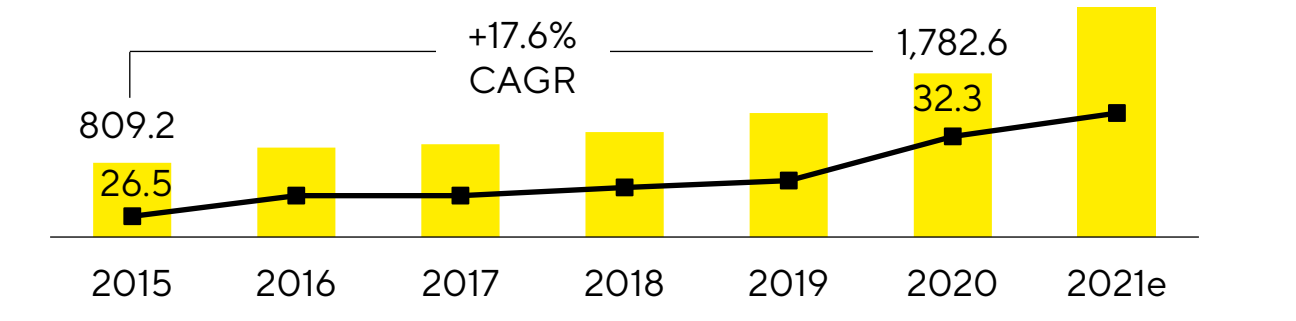
Tools for life science research and drug discovery and development



Snapshot of the Bioprocess Solutions Division

Track record of dynamic growth

Sales revenue in millions of €; EBITDA margin¹ in %

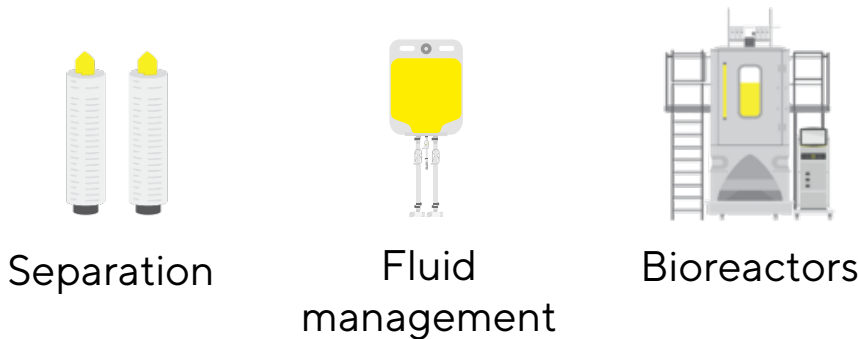


High share of recurring revenues

Division sales by category



Leading in core bioprocessing segments

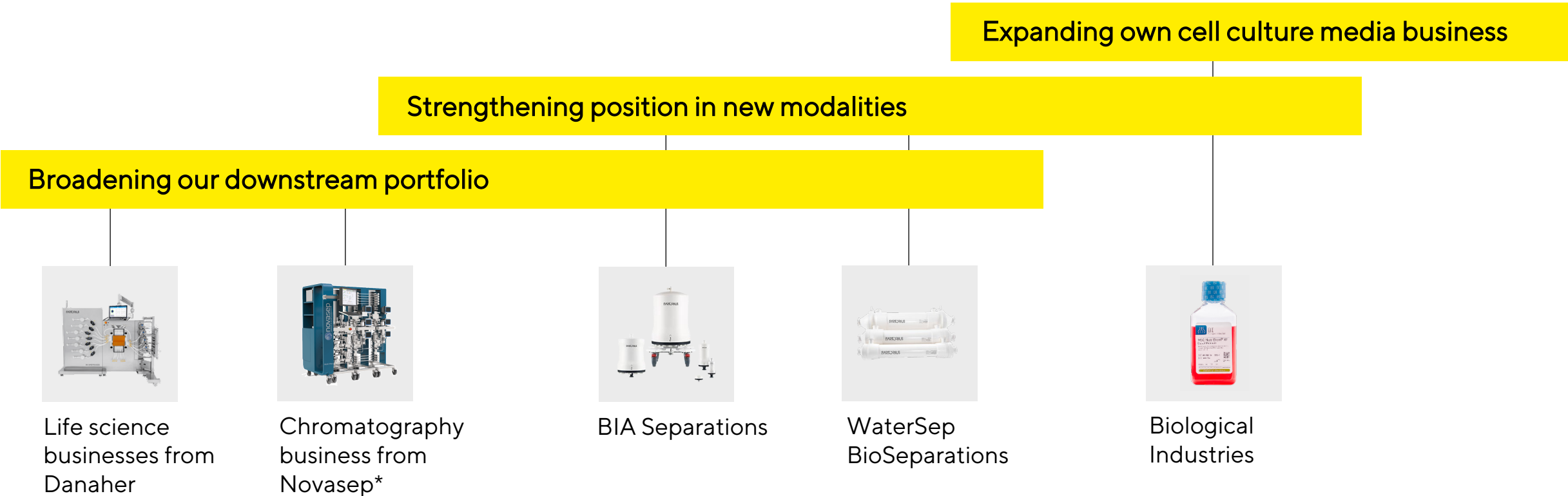


Advancing our footprint in



Based on FY 2020 figures; sales CAGR in constant currencies, including non-organic growth ¹ Excluding extraordinary items

Continuously adding innovations

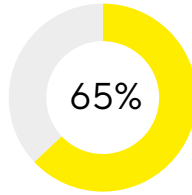


*Acquisition expected to close in H1 2021, subject to antitrust approvals

The market landscape is dynamic across therapy modalities

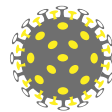
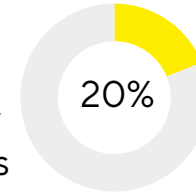
Protein-based therapies

- mAbs
- Bi-/Multi-specifics
- Bioconjugates | ADCs
- Recombinant proteins and peptides
- Protein-based vaccines



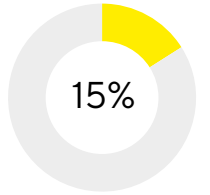
Viral-based therapies

- Viral vectors for gene therapy
- Virus and viral vector vaccines
- Oncolytic viruses
- Novel modalities (e.g., mRNA, DNA, Exosomes)



Advanced therapies

- Cell therapy (e.g., iPSC, MSC)
- Gene-modified cell therapy (CAR-T)



Unmet needs

Efficiency

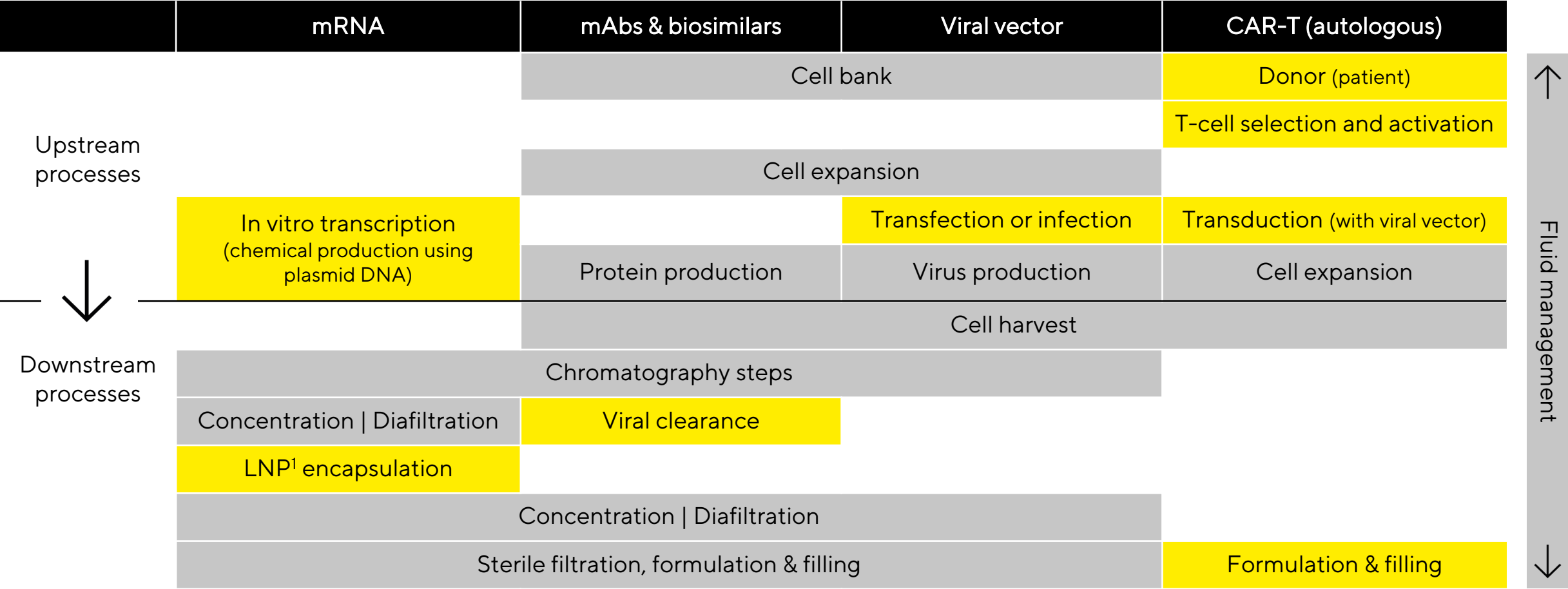
Yields

Robust
manufacturing



Share of molecules in R&D pipeline; source: Global Data, March 2021

Our technologies address customer workflows across modalities



Key differences from one workflow to the other are marked in yellow; 1 Lipid nanoparticles

Helping customers to speed up process development and manufacture more efficiently

Process development

Making our customers' work life easier by simplifying products and processes through innovations by addressing:



Automation and high throughput



Predictability (data analytics and process simulation tools)



Process scalability

Manufacturing

Continuously lower cost of goods in drug manufacturing by solutions which help to:



Increase titers and product yields



Intensify processing and reduce facility costs



Accelerate product release

Process intensification – a key trend for protein-based therapeutics



Cost pressure

Peak sales have halved; cost of development increased 30% since 2010

Low cost of goods sold & cost of development



More products, low-volume products, products with unpredictable demands

80% of products with <500 kg/yr, 70% <300 kg/yr, 50% <100 kg/yr

Flexible multi-product facilities



New, less stable modalities (e.g., bi-specifics)

More potent, but also more complicated, sensitive molecules (fed-batch incompatible)

Perfusion-enabled processes

Low CAPEX investment

<50%

Faster buildout time

<2 years

Flexible, smaller footprint

50-70%

Higher productivity

2-3x with PI

Lower COGS

>30%

Increasing digitalization across the value chain



Bioprocess data

Production of active pharmaceutical ingredients

Powerful solutions for digitalization and automation

- Leading software for process data
- Improved process control and robustness
- Deeper process understanding of complex data sets



Artificial intelligence

Interdisciplinary topic

Data analytics and artificial intelligence (AI) for life science applications

- Sartorius a shareholder of the DFKI since 2020
- Learning systems for life science applications
- Extension of Sartorius AI Lab (SAIL)



Our products are widely used in the development and production of biologics against COVID-19

200+ companies
developing
coronavirus vaccines



The majority work with
Sartorius products



We helped our customers to manage extremely challenging development timelines and to ease scaling of vaccine processes all the way to commercialization

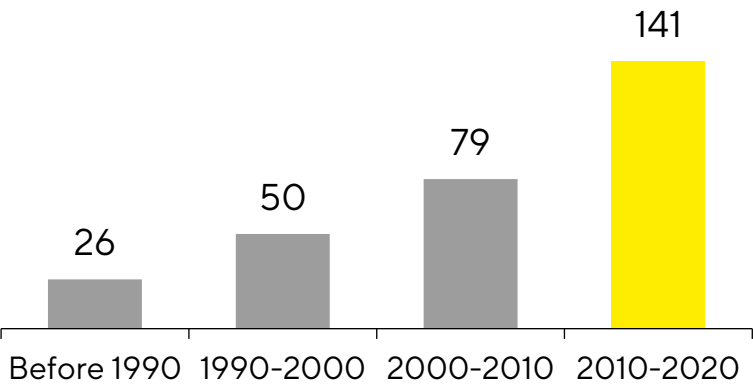
- Education on SUT processes
- Delivery of key products across vaccine modalities (viral vectors, mRNA, proteins) and Covid-19 therapeutics
- Joint development of solutions with our application expertise

Vaccine development acceleration here to stay

- mRNA validated
- New technologies in manufacturing; capacity and technology decisions established
- Pace of development

The Chinese market is in the next development phase

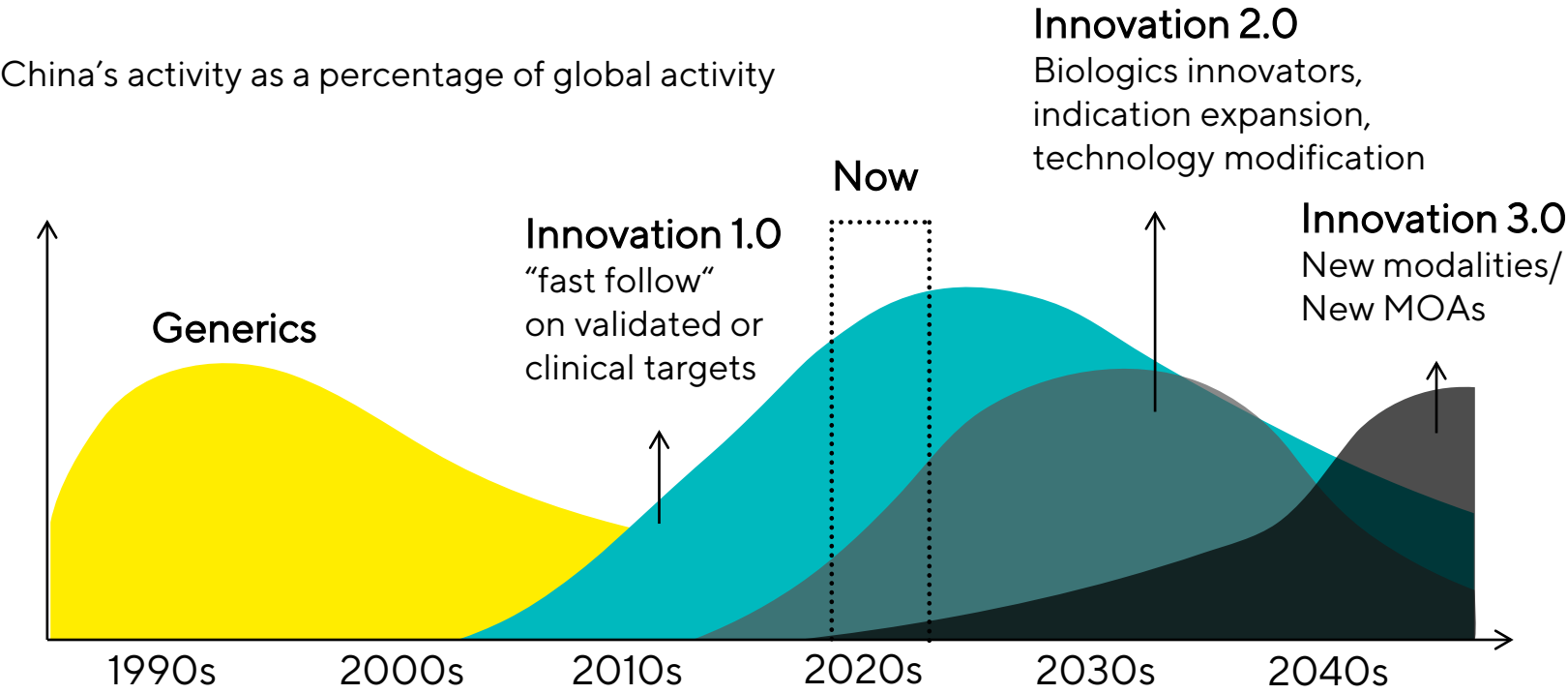
Dynamic increase in new biopharma companies



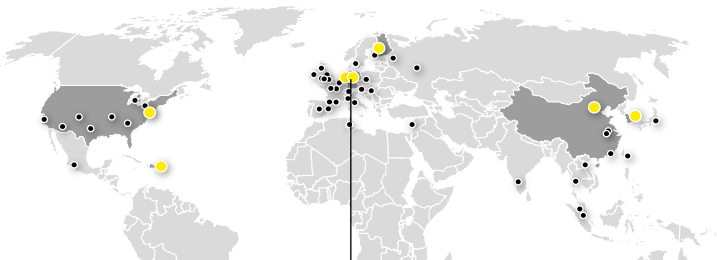
Source: BCG, Sartorius

Increasingly focusing on innovative medicines


China’s activity as a percentage of global activity




Regionalizing our supply chain and manufacturing; increasing our global capacity



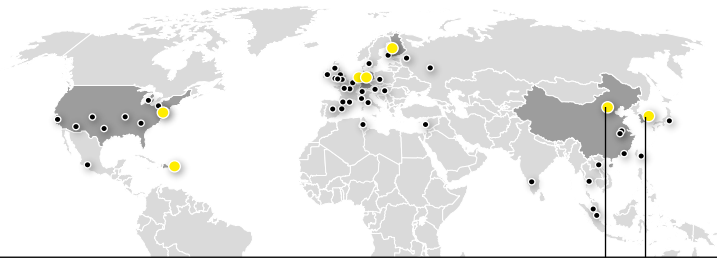
Germany | Göttingen, Guxhagen
Production capacities increasing




Separation



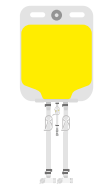
Instruments and systems




China and South Korea
Capacities will be created in selected areas



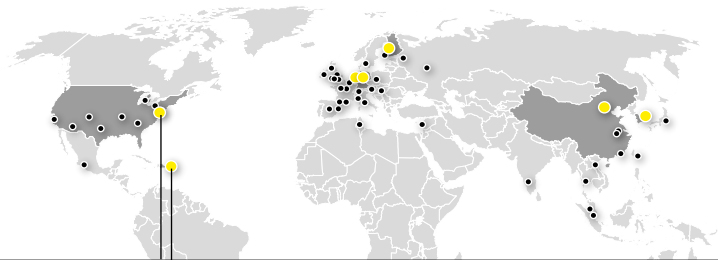
Separation




Fluid management




Cell culture media




Puerto Rico and USA
Capacities will be ramped up for selected areas



Cell culture media



Fluid management



Customer interaction

Ambitious mid-range targets up to 2025

Initiatives

Portfolio

- High-impact innovation to enable stable and economic manufacturing of advanced therapeutics
- Provide tools for the next phase of bioprocessing (e.g., PAT, process intensification)

Sales

- Leverage strong customer access and reach across the newly integrated businesses
- Take advantage of improved cross-selling opportunities with the Lab Products & Services Division
- Increase share of wallet with existing customers

Financial targets

Sales
revenue

~€3.8bn

EBITDA
margin

~34%

2025 targets are based on 2020 currency exchange rates; EBITDA excluding extraordinary items



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Lab Products & Services

Gerry Mackay, Fiona Coats | CMD 2021

SARTORIUS

Solution provider for the biopharma and life science market

Tools for life science research and drug discovery & development

Lab Products & Services Division





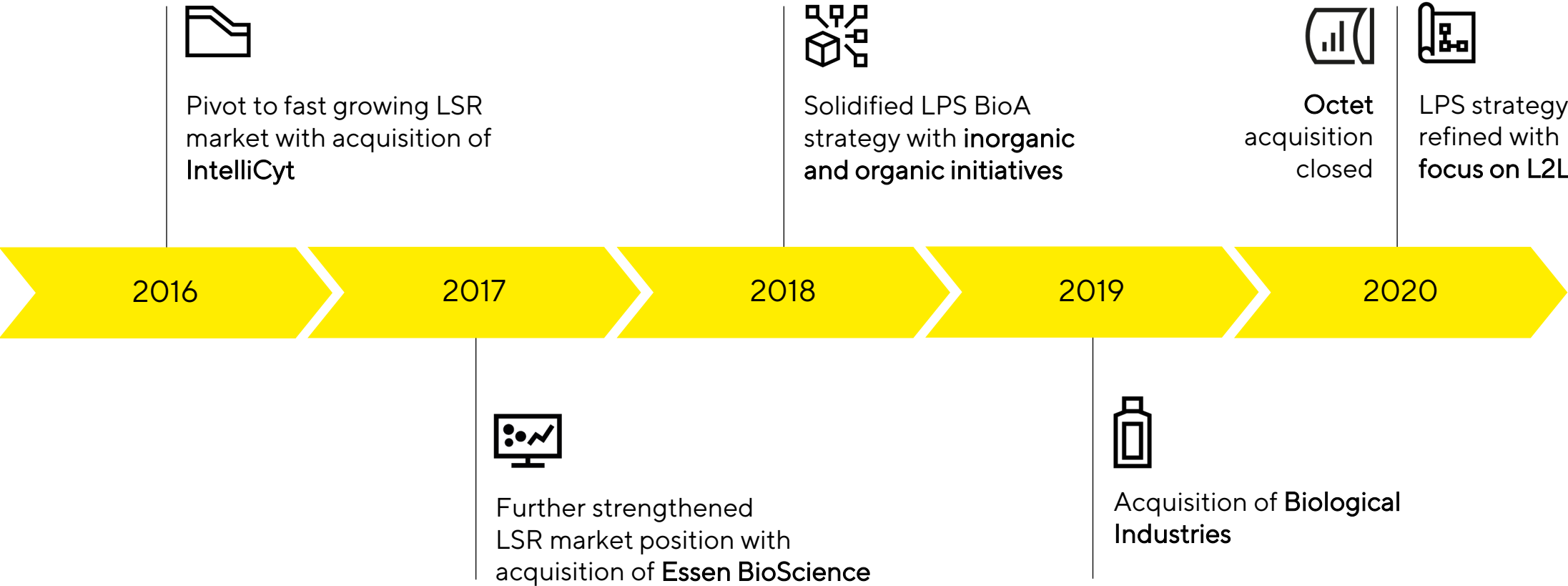
Testing | Validation | Quality Control | Services

Bioprocess Solutions Division





We continue the strategic transformation path to expand our position in life science research



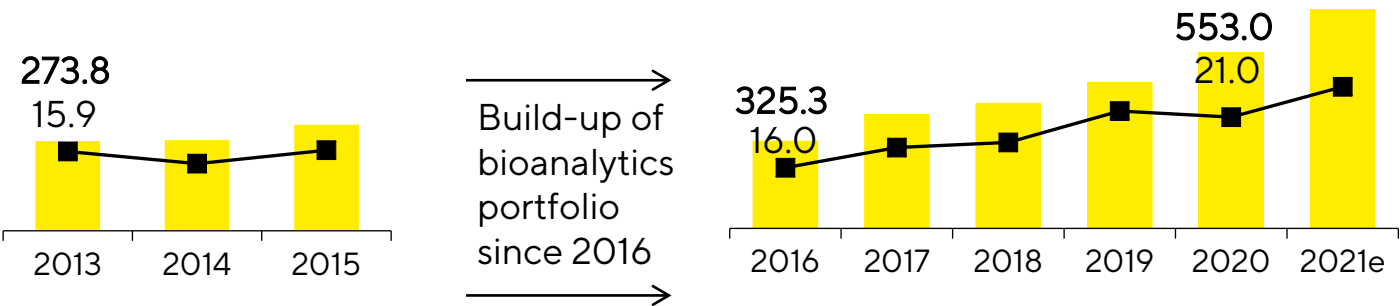
Snapshot of the Lab Products & Services Division

Premium portfolio of lab instruments, consumables, and software



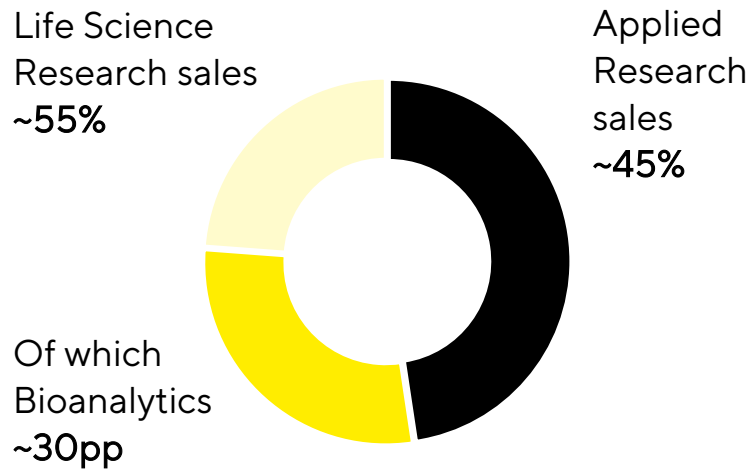
Division in transition to a new growth and profitability profile

Sales revenue in millions of €; EBITDA margin¹ in %



¹ Excluding extraordinary items

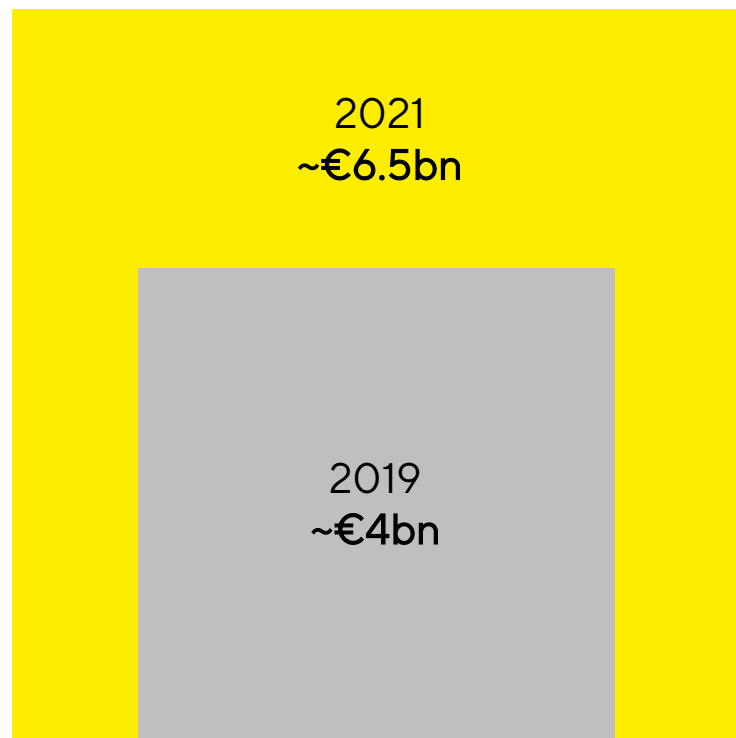
Sales by end-market 2020



Since 2019, we have increased our overall addressable market

We now better serve **attractive and growing** customer segments with our LPS solutions:

- **Innovative technologies** for research, drug discovery, quality control and process development
- **Critical tools** for clinical, government and environmental testing and monitoring



The addition of the **Octet platform, and specialty media** has increased our market opportunity and strengthened our product offering

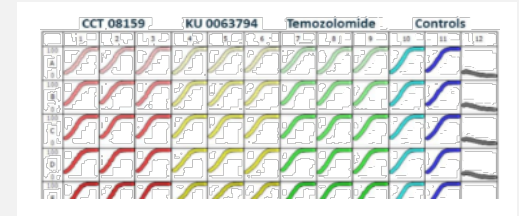
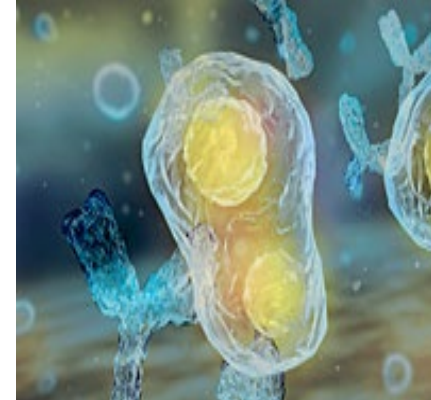
Overall addressable market growing in the mid- to high- single digits

Reduce costly trial & error in drug discovery with optimized cell and molecule development



The challenge

Explore cellular mechanisms and interactions
Find the best-performing lead candidate
and cell line in the shortest time frame



Our solutions

More biologically relevant insights, faster
Optimal clone selection and evaluation

Molecule development – customer processes and Sartorius solutions

Target ID | validation

Tracking cellular mechanisms

Real-time, live cell analysis with cell-based assays, e.g., proliferation, cytotoxicity, apoptosis

Incucyte® SX5



Library screening

Screening antibody libraries

Binding and specificity assays, species cross-reactivity

iQue3®



Lead selection & optimization

Selecting the best leads

Assessing and optimizing the properties of lead antibodies: titer, epitope binning, cross-reactivity and kinetics

Octet®



Candidate characterization

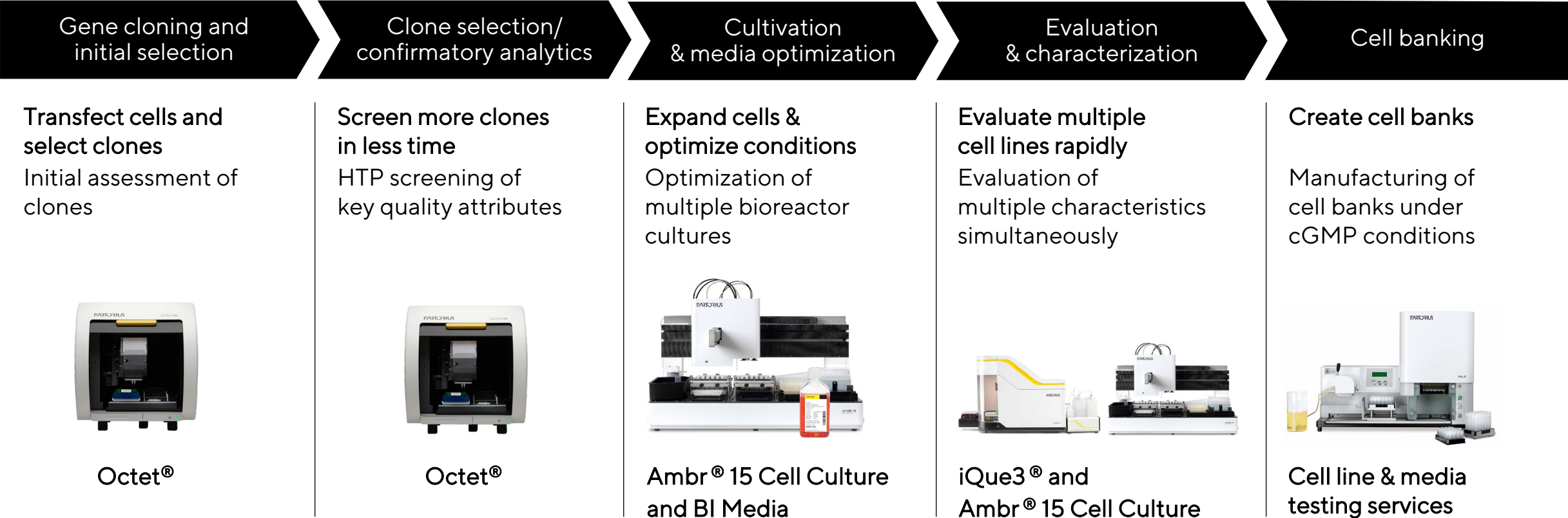
Characterizing antibodies

Assessing the structural properties of the lead antibodies as well as binding and functional properties

Cell line & media testing services



Cell line development - customer processes and Sartorius solutions



The LPS Division provides critical tools for biologics discovery and development and the global pandemic response

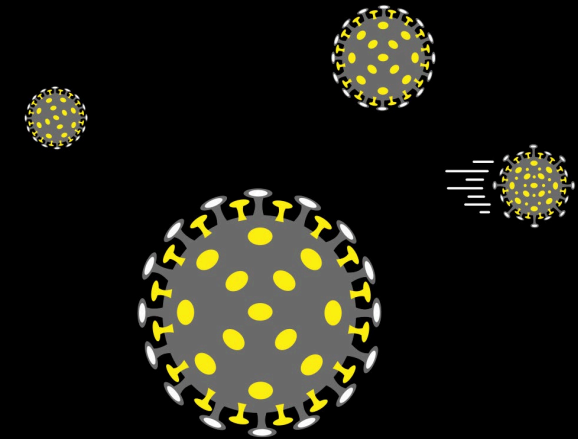
Tools for life science research and drug discovery & development



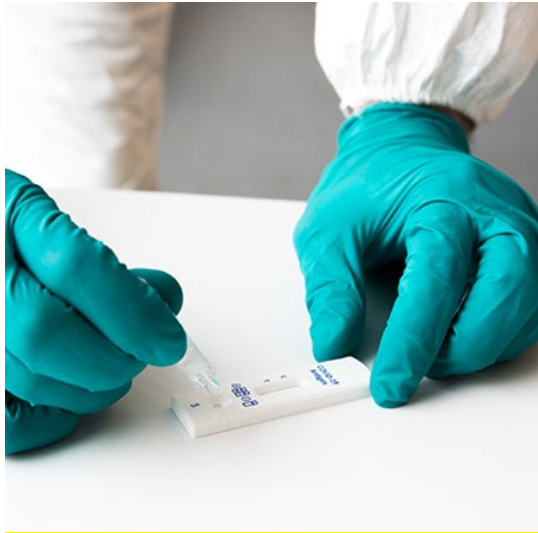
Molecule development

Cell line development

Helping identify SARS-CoV-2 infection and advance treatments for COVID-19



LPS solutions contribute to identifying COVID-19 infection and advancing vaccine research and development



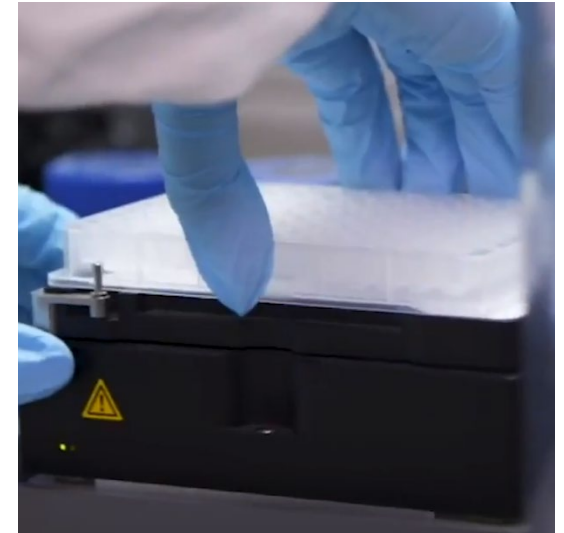
**Patient
testing**



**Environmental
testing**



**Vaccine
research**



Virology

Ambitious mid-range targets up to 2025

Initiatives

Portfolio

- Launch best-in-class products by executing on innovation roadmaps (L2L) for each business area
- Complementary acquisitions of bioanalytical tools to further increase relevance of our portfolio; strengthen the growth profile

Sales

- Further expand focus on fast growing segments in Life Sciences
- Take advantage of cross-selling opportunities with BPS Division (e.g., cell line development, cell therapies)
- More digital tools to support virtual selling process and digital interaction; expand e-commerce platform

Financial targets

Sales revenue ~€1.2bn

EBITDA margin ~25%

2025 targets are based on 2020 currency exchange rates; EBITDA excluding extraordinary items



Simplifying Progress



Sustainability at Sartorius

Joachim Kreuzburg, Katharina Tillmanns | CMD 2021

SARTORIUS

Sustainability is an integral part of our business

3 GOOD HEALTH
AND WELL-BEING



Good health and well-being at the focus of Sartorius' business activities

SUSTAINABLE
DEVELOPMENT GOALS

Our 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.



200+ companies developing
coronavirus vaccines



The majority work with
Sartorius products

Single-use products offer key benefits including a better eco-footprint

3

GOOD HEALTH AND WELL-BEING

Sterile products enable the accelerated availability of new therapies and medicines

9

INDUSTRY, INNOVATION AND INFRASTRUCTURE

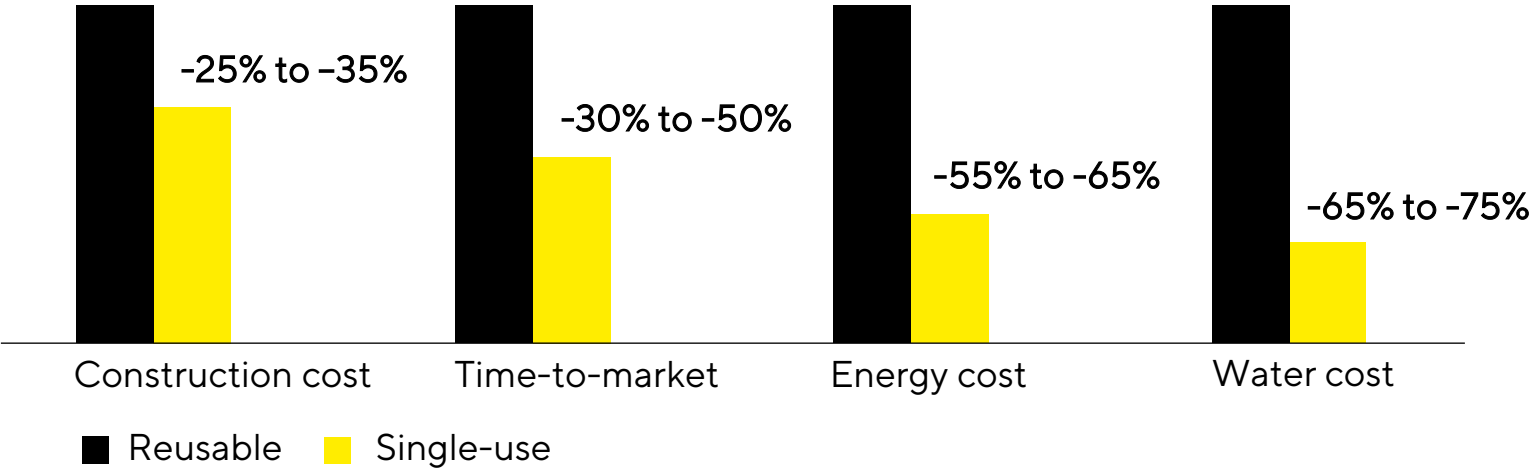
Innovative life science tools are key drivers for progress in health care

Biopharma accounts for 0.01% of total plastic waste

None of our plastic ends up in the oceans

Sustainability aspects of single-use bioprocessing

- Reduced risk of cross-contamination
- Enable better ecological footprint during usage phase
- Optimized process design for efficient manufacturing



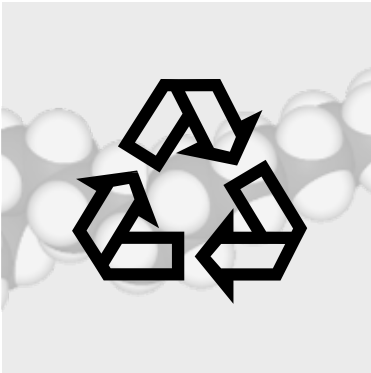
Three sustainability initiatives with a focus on products and supply chains



Product responsibility
Further reduction in the environmental footprint of our products and their use

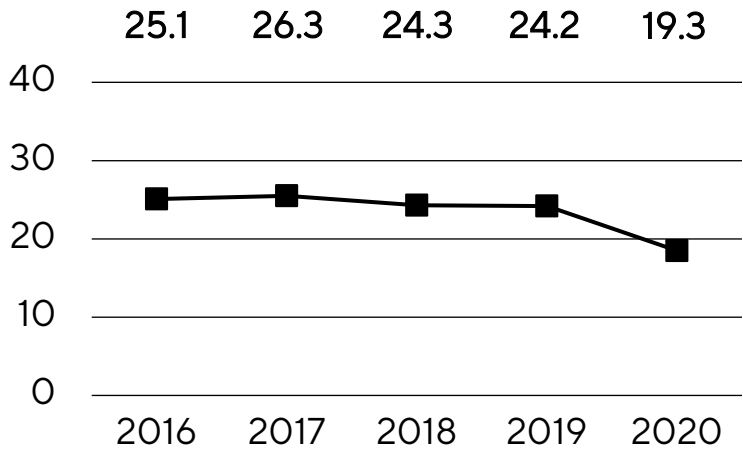


Improving material efficiency along the product life cycle



Climate protection
Significant decrease in emission intensity

Development of climate-relevant emissions



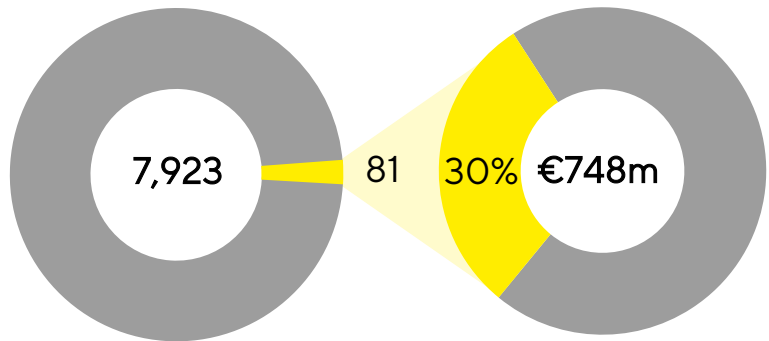
in proportion to annual sales, in t | € in millions



Supply chain
Ensuring compliance and contribution of supply chains

No. of suppliers

Purchasing volume



Assessment conducted by EcoVadis

Initiatives to improve the efficiency of materials along the product life cycle



Examples – recycling in Aubagne and packaging design



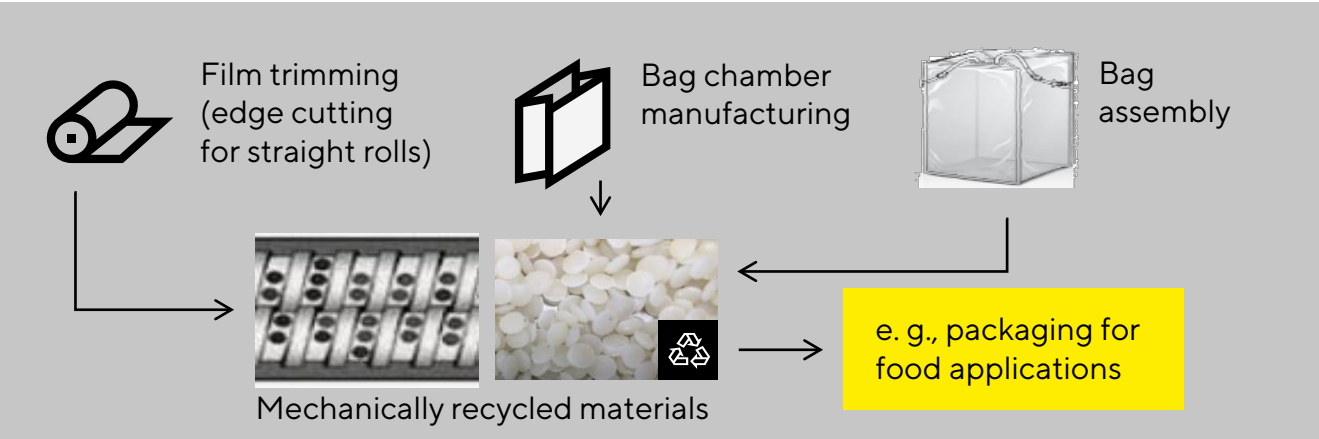
Film mandrels, pallets, roll supports



Packaging



Film trimming



Rethink packaging to recycle plastic and reduce weight and complexity



- Easy-to-separate cardboard boxes and foam materials
- Reduction of packaging weight
- Optimization of logistics data

-43%

less weight

+33%

more product on pallet

+100%

return for recycling

Comparison of former vs. new packaging for MaxiCap 10" filter elements

Sartorius targets annual decrease in carbon intensity by at least ~7.5%

Global GDP growth¹ ~3.5% p.a.

Reduction of CO₂ emissions² ~4.2% p.a.

Decrease in carbon intensity³ ~7.5% p.a.



Improvement of energy efficiency and reduction of emissions in own operations



Maximize sourcing of renewable energy by 2030



Compensation of emissions where appropriate and effective



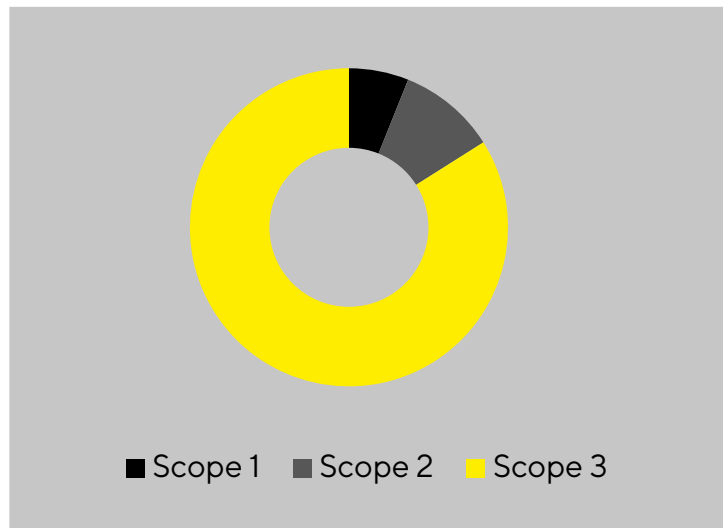
Reduction of carbon footprint in supply chains

1 In line with UN SDG 8 on economic growth to fight poverty | 2 Defined based on the target to keep global warming below 1.5°C | 3 Carbon intensity = CO₂ emissions and equivalents per unit of value added

High relevance of the supply chains' ESG performance

Impact of supply chains

For example, 80% of CO₂ emissions in Scope 3 of which purchased goods are the most relevant factor

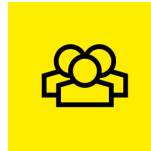


Targets

Ensure and support improvement of supplier ESG performance: reduce environmental footprint; uphold human rights



- Energy and emissions
- Materials and waste
- Water and wastewater



- Human rights
- Labor conditions
- Health & safety

Management approach

Different lenses, multiple steps, involvement of external expertise

- 1 Code of conduct
- 2 ESG checks
- 3 EcoVadis assessment
- 4 Supplier engagement

Transparency, auditing, and rating

Reporting



Supply chains



Rating



In addition, Sartorius passes more than 350 regular customer audits per year.