

Investor Update

Lonza's Blueprint for the Future

15 October 2020



Aerial view of Hong Kong Downtown

Introduction

Organizational Design

Our Divisions

- Capsules and Health Ingredients
- Small Molecules
- Biologics
- Cell & Gene Therapy, and Bioscience

External Reporting

Company Culture

Concluding Comments

Q&A



Urban crowd from above

Organizational Design



Aerial View of a Crossing in Mexico City

The Case for Change

Decision to carve out LSI in 2019

Different dynamics between LSI and LPBN

Attractive growth opportunities across all LPBN modalities

Increased competition and complexity of Biopharma industry offering

Need to rethink the future set-up of Lonza

Decision to exit LSI via a sales process

Refocus the Lonza business around the LPBN portfolio

Design Principles

A clear focus on the market and customer

Cohesion	A manageable matrix
Simplicity	Standardized and efficient processes and structures
Global Perspective	Selected functions and teams defining global frameworks and standards, and guiding innovation
Workforce Engagement	Shared accountability and decision-making. An aligned organization
High-performing Organization	Clear roles and responsibilities, supported by a balanced performance management system



Winding road at Faroe

Organizational Design

Business Divisions

Four Divisions, each with their own Business Units

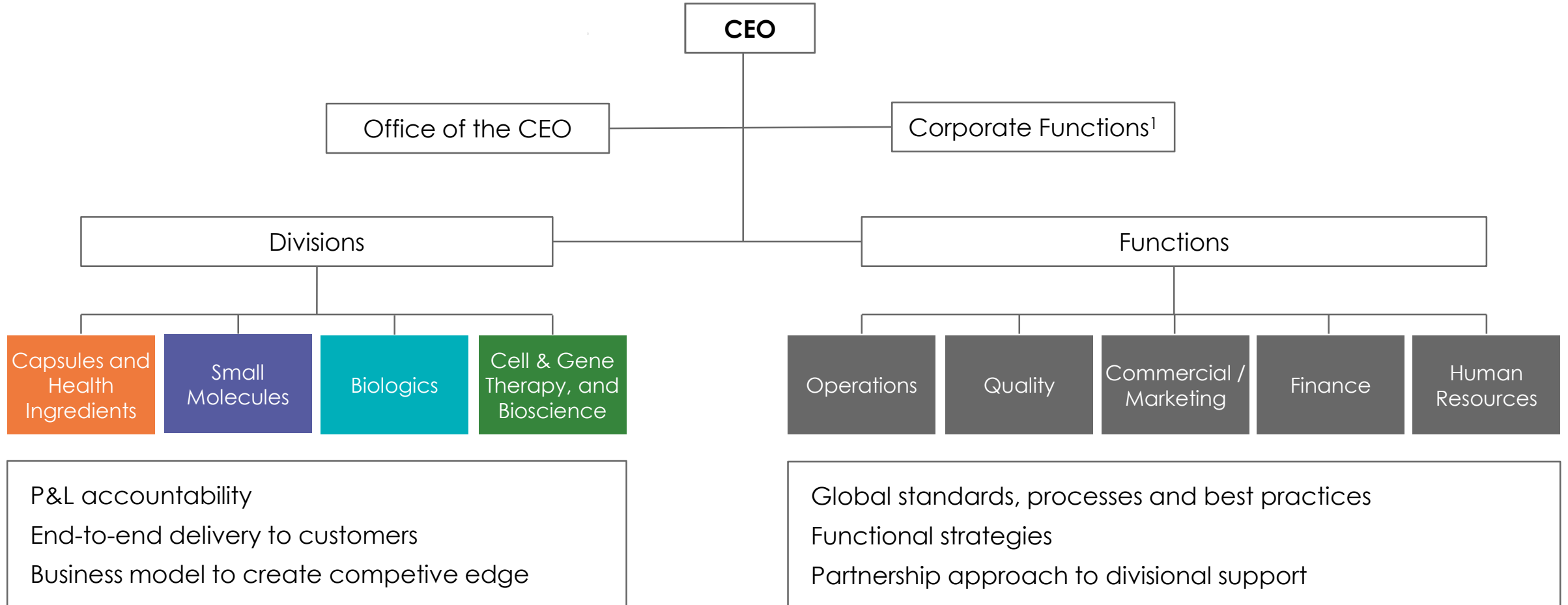
Each holds responsibility for its own value chain and P&L

Global Functions

Five Functions supporting the Divisions and Business Units

Responsible for Group standards, policies, principles and governance

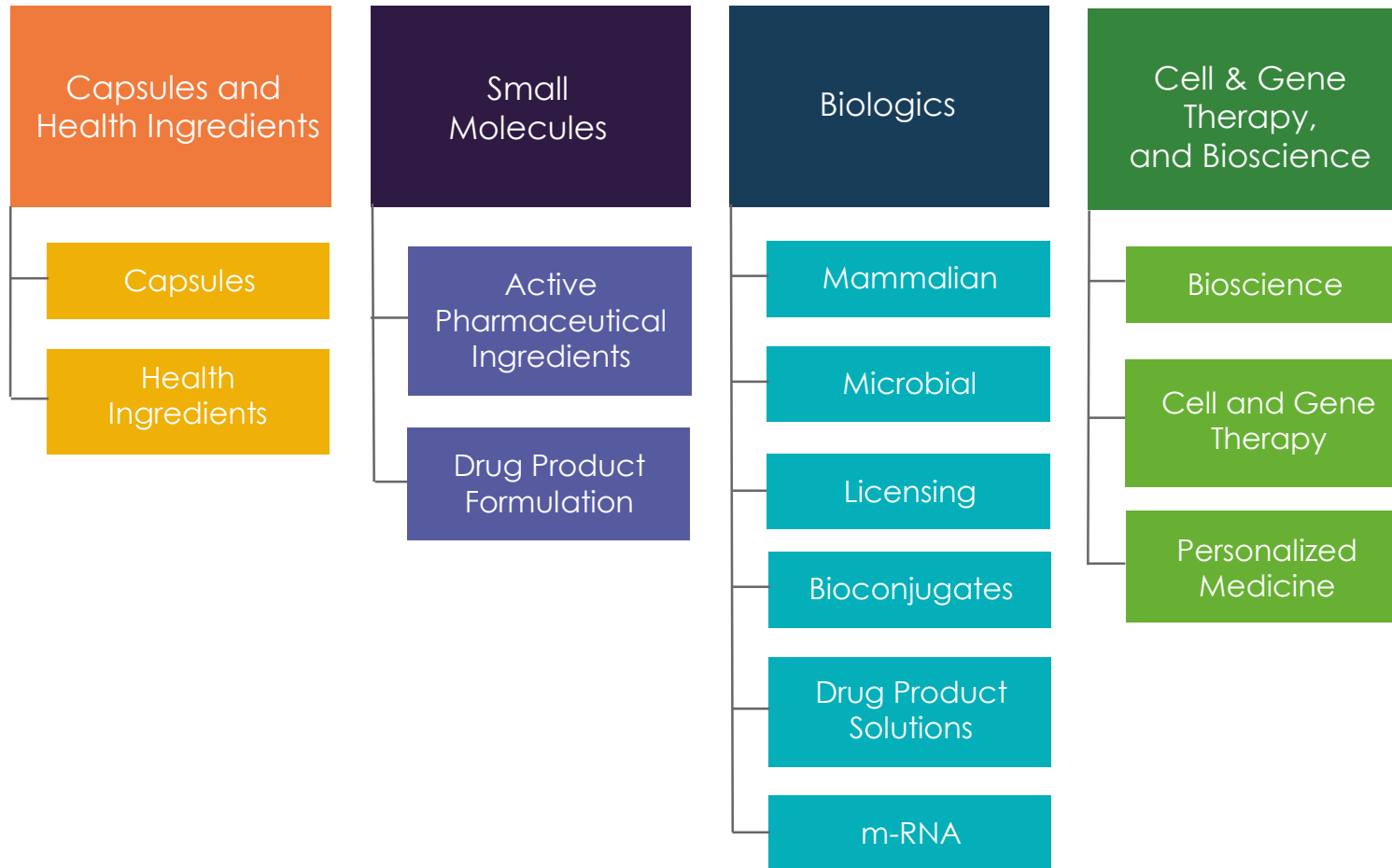
Divisions and Functions Overview



¹ Including: Legal, Communications, Investor Relations, EHS, M&A, Data Management / Digital

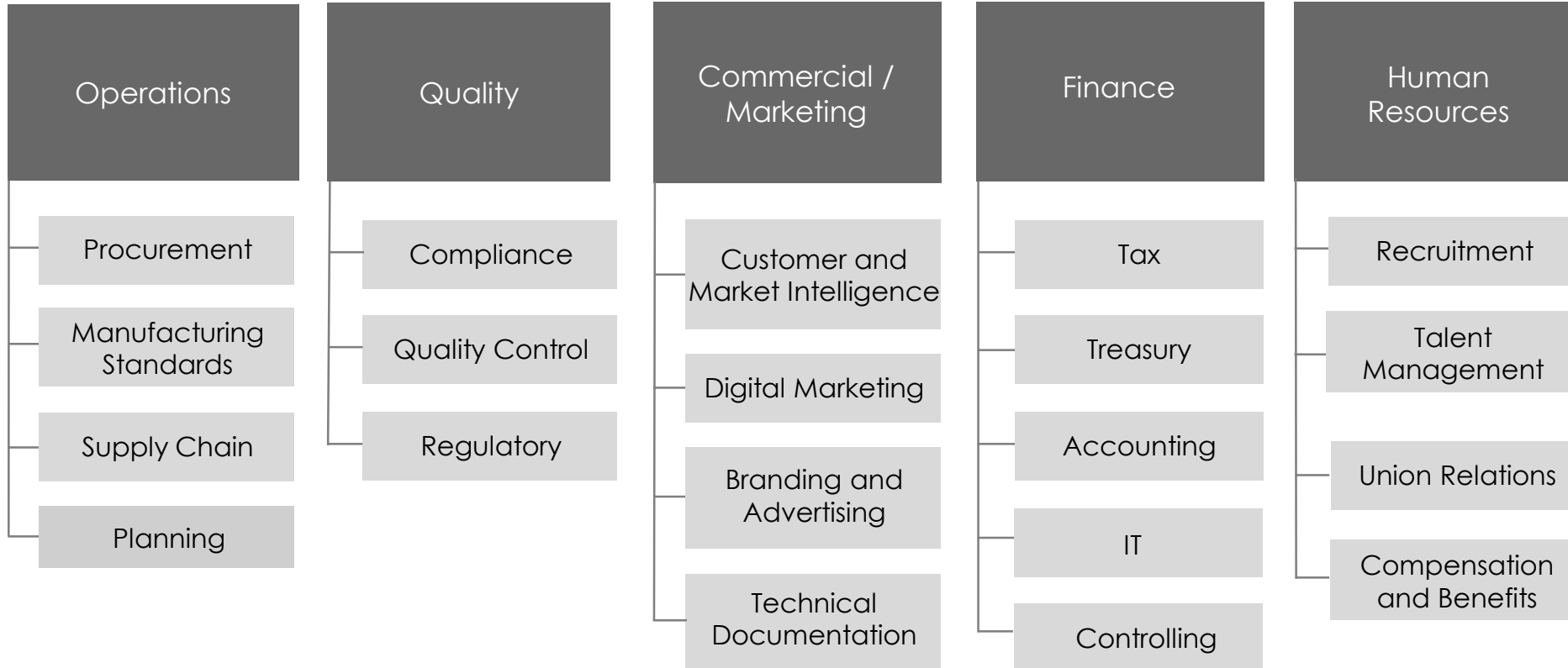
Divisions Overview

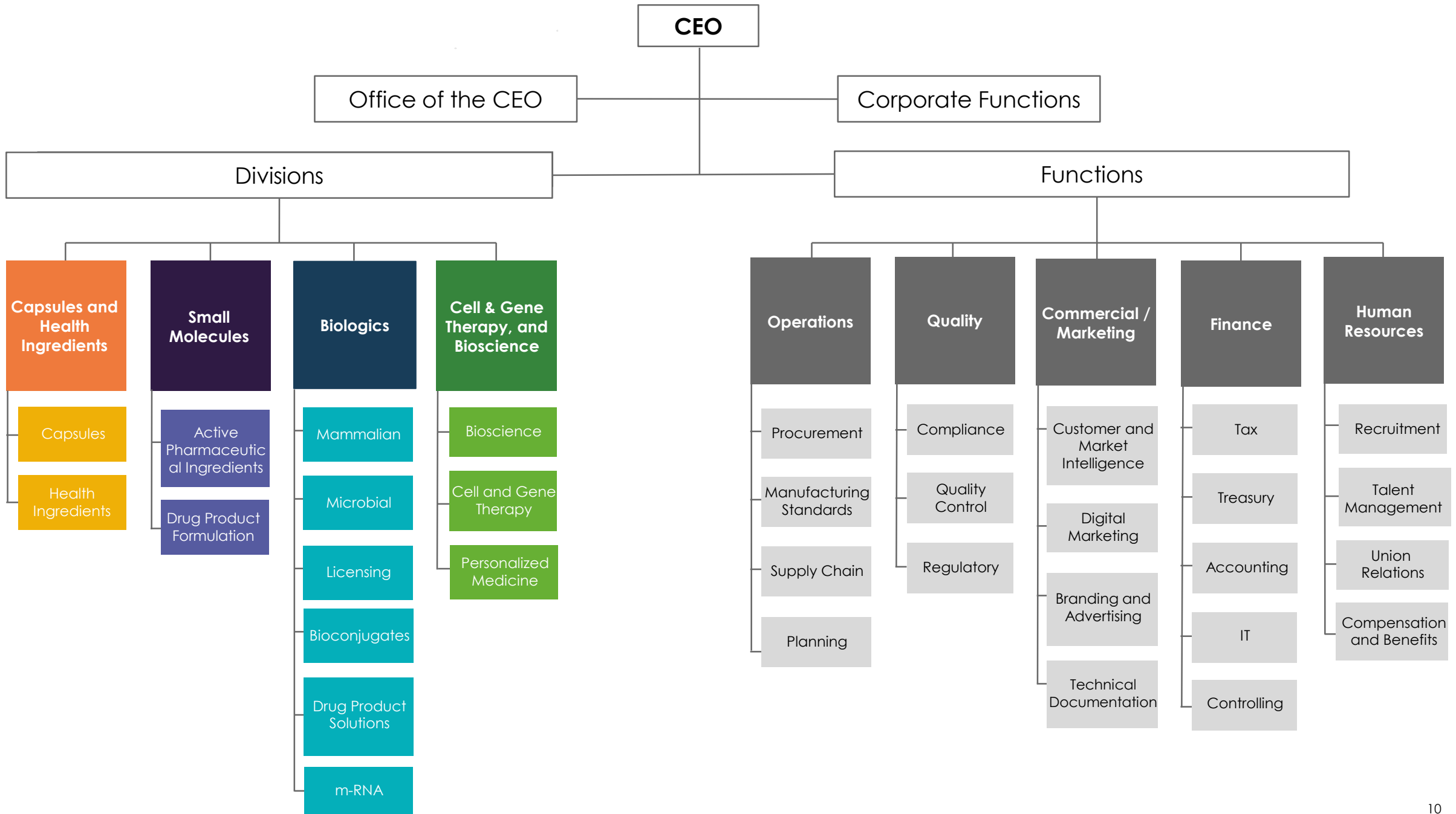
A market-led structure to meet evolving customer needs



Functions Overview

Deep functional expertise across Business Functions





Management Team



Aerial view of overpass at night

Lonza Group Leadership



Pierre-Alain Ruffieux
Chief Executive Officer



Rodolfo Savitzky
Chief Financial Officer



Caroline Barth
Chief Human Resources
Officer



Stefan Stoffel
Chief Operating Officer

Tenure
with Lonza

Commences
1 November 2020

6 years

6 months

30 years

Professional
experience
snapshot



Education and
qualification
snapshot

PhD Biotechnology
(EPFL Lausanne)

Degree Chemical
Engineering
(EPFL Lausanne)

MBA (Chicago Booth)

BSc Industrial and Systems
Engineering
(Tecnológico de Monterrey)

MBA (Open University)

BA European Business
(University of Sunderland)

Diploma in Mechanical
Thermal process and
Chemical Engineering
(Lucern Engineering
College)

Lonza Group Leadership







Claude Dartiguelongue
Capsules and Health
Ingredients



Gordon Bates
Small Molecules



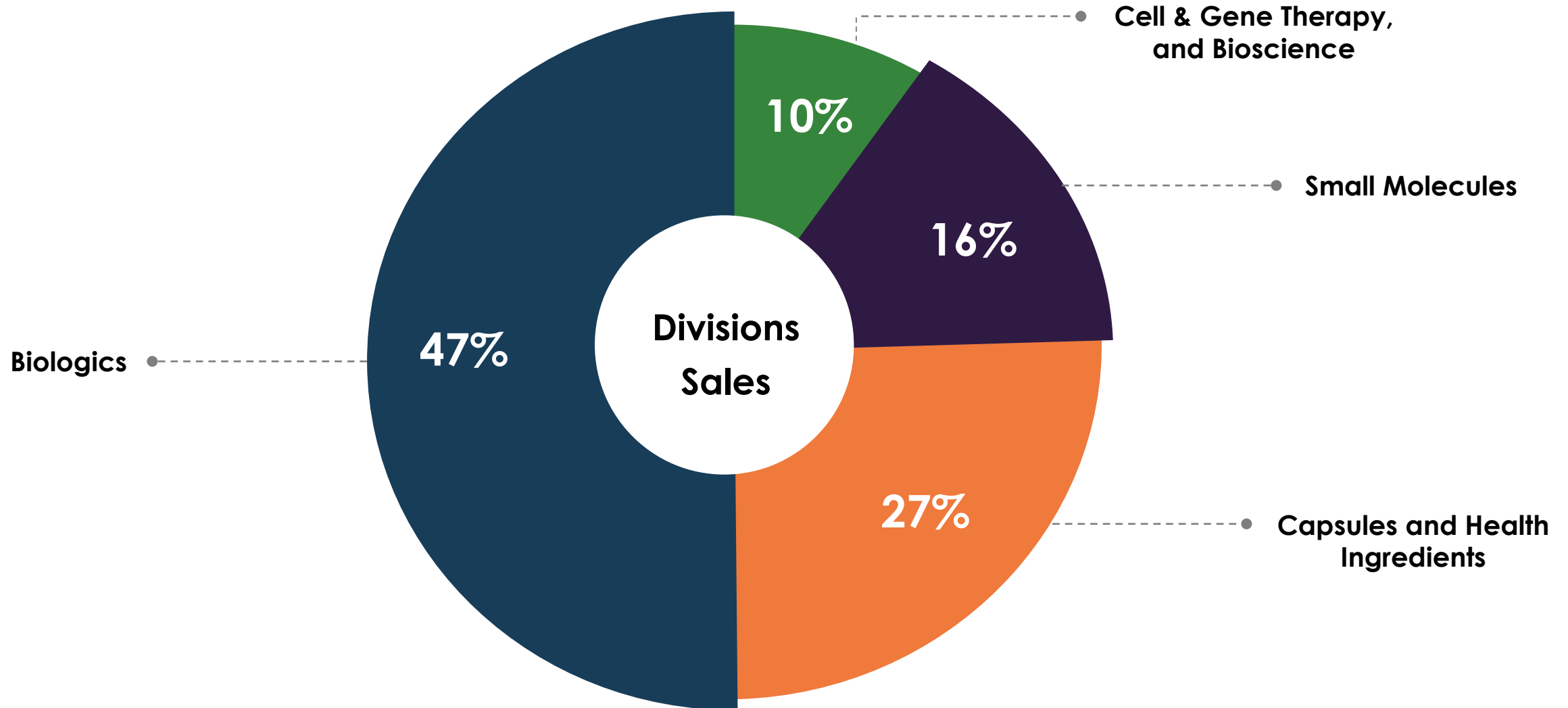
Jean-Christophe Hyvert
Biologics / Cell & Gene
Therapy, and Bioscience

Tenure with Lonza	9 months	17 years	3 years
Professional experience snapshot	 		 
Education and qualification snapshot	<p>MSc Medical Management (ESCP Business School)</p> <p>MSc Biotechnology (University of Grenoble)</p>	<p>MSc Engineering Business Management (University of Warwick)</p>	<p>MBA (Northwestern University)</p> <p>MSc Physics (INSA)</p>

Our Divisions



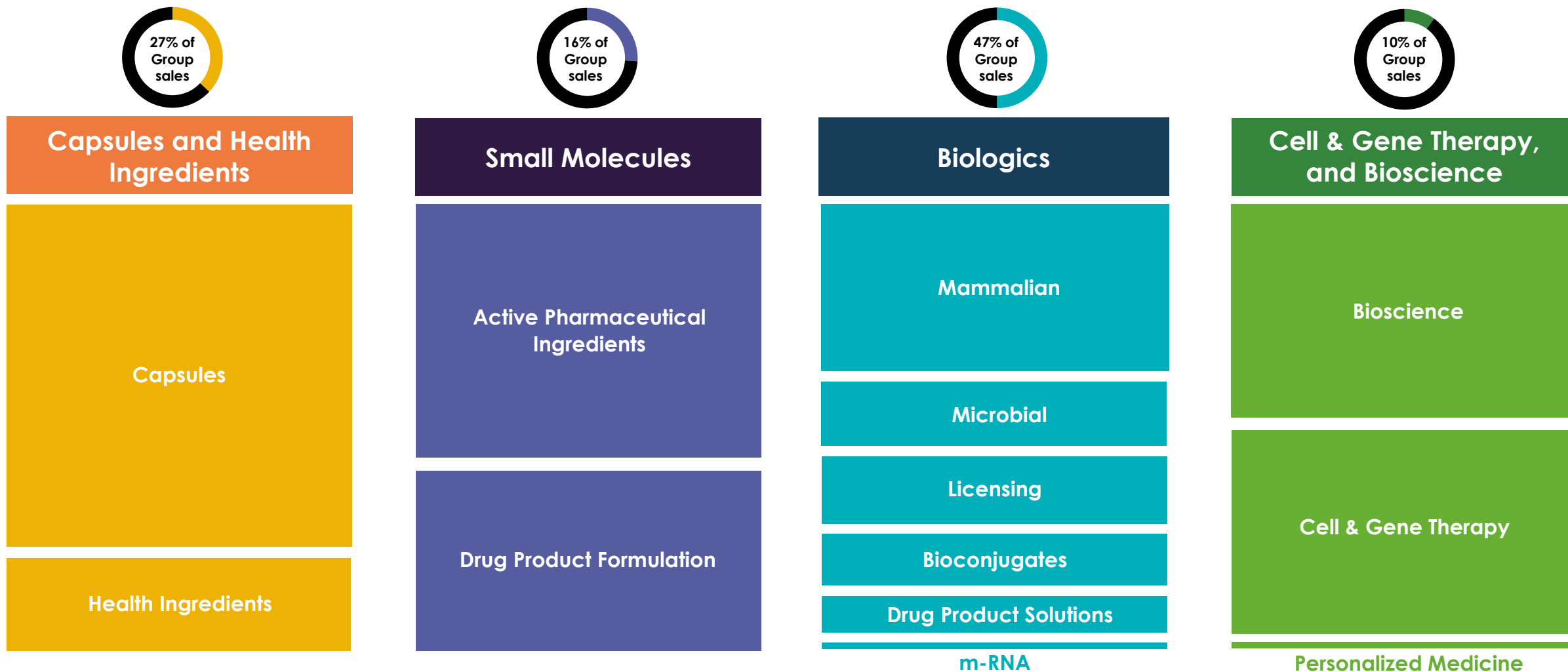
2019 Sales Distribution – Divisions



* Sales figures, expressed in % are approximate and based on full-year 2019 results at actual exchange rate (AER). The split reflects the 3rd party net sales of the LPBN segment in 2019 and excludes any net sales presented under Corporate

Sales Distribution of Divisions and Business Units

Business Unit sales listed in descending order for each Division



* Sales figures, expressed in % are approximate and based on full-year 2019 results at actual exchange rate (AER). The split reflects the 3rd party net sales of the LPBN segment in 2019 and excludes any net sales presented under Corporate

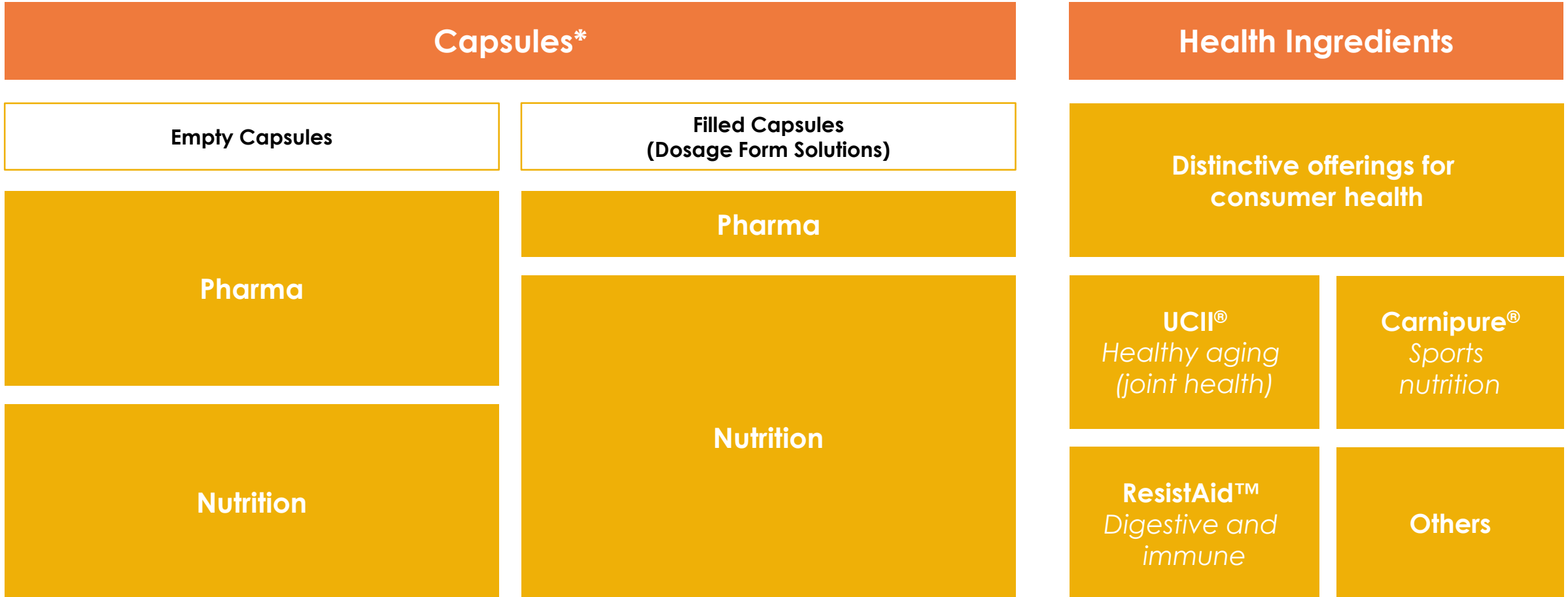
** The size of the boxes for each Business Unit are intended to provide an indicative (but non-specific) view of the size (by proportion of sales)

Capsules and Health Ingredients (CHI)

Lonza



CHI Portfolio



* The size of the boxes for each Business Unit are intended to provide an indicative (but non-specific) view of the size (by proportion of sales)

CHI Offering & Capabilities

Capsules

Pharma Capsules

Empty Capsules

Innovation and quality leader

Strong support along regulatory pathway

Differentiated solutions

- Immediate release
- Modified release
- Others

Nutrition Capsules

Empty Capsules

Multipurpose and functional capsules

Broad product portfolio for the supplement market

Modified release and ingredient performance optimization

Filled Capsules (Dosage Form Solutions)

Unique technologies and capabilities for liquid filled hard capsules

Formulation services

Analytical and stability testing

Health Ingredients

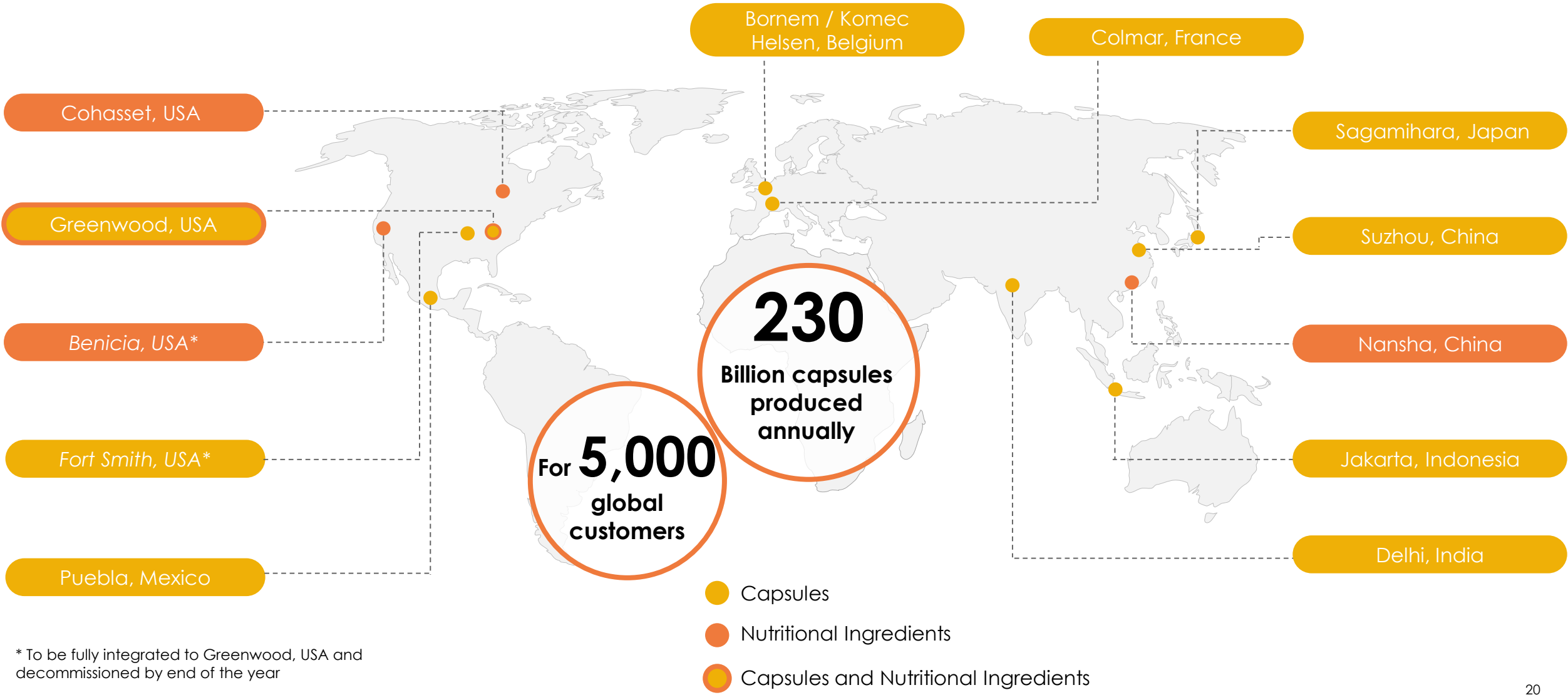
Addresses major consumer health concerns and needs

- Sports nutrition
- Joint health
- Digestive and immune

Highest safety and quality standards

Regulatory support

Network and Assets



* To be fully integrated to Greenwood, USA and decommissioned by end of the year

Market Overview

Drivers for Demand in Pharma Capsules

Overall growth in Pharmaceutical demand

Many new molecules are heat sensitive, eliminating tableting as an option

End-patient preference drives and defines the oral dosage market

Capsules Selected Competitors

ACG, India

Qualicaps, USA (Owned by Mitsubishi)

Suheung Capsules, South Korea

CapsCanada, Canada

Drivers for Food Supplements' Demand

Demographic Trends

Growth of older/ageing demographic groups

Health condition

Joint health concerns account for ~70% of medical indications at 65+ years

COVID-19

Significant increase in demand for health nutrition supplements



Key Priorities

Accelerate profitable growth

Drive differentiation with capsules

- Focus on innovative capsules
- Quality leadership
- Cutting edge capsule dosage forms and services

Increase capsules capacity

Focus on high-growth, high-margin Joint Health and Nutrition markets

Continuous implementation of operational efficiencies

CHI Growth Rates

Market¹

**Capsules
Estimated Growth**

2 – 3%

CAGR 2020 – 2023

**Health Ingredients
Estimated Growth**

5 – 6%

CAGR 2020 – 2023

Lonza²

**Capsules
Estimated Growth**

3 – 4%

CAGR 2020 – 2023

**Health Ingredients
Estimated Growth**

6 – 8%

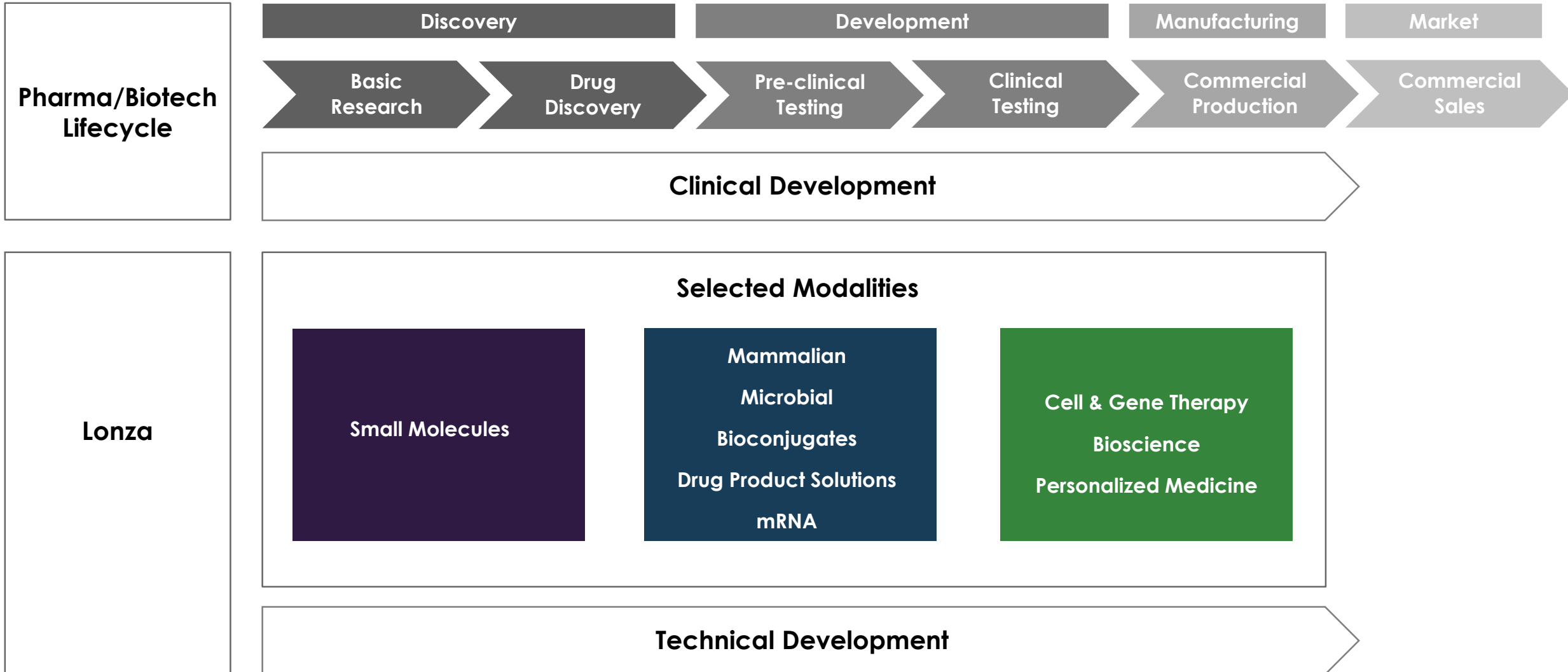
CAGR 2020 – 2023

¹ Based on volume
² Revenue growth

Lonza

Pharma & Biotech

Our Contribution to the Value Chain

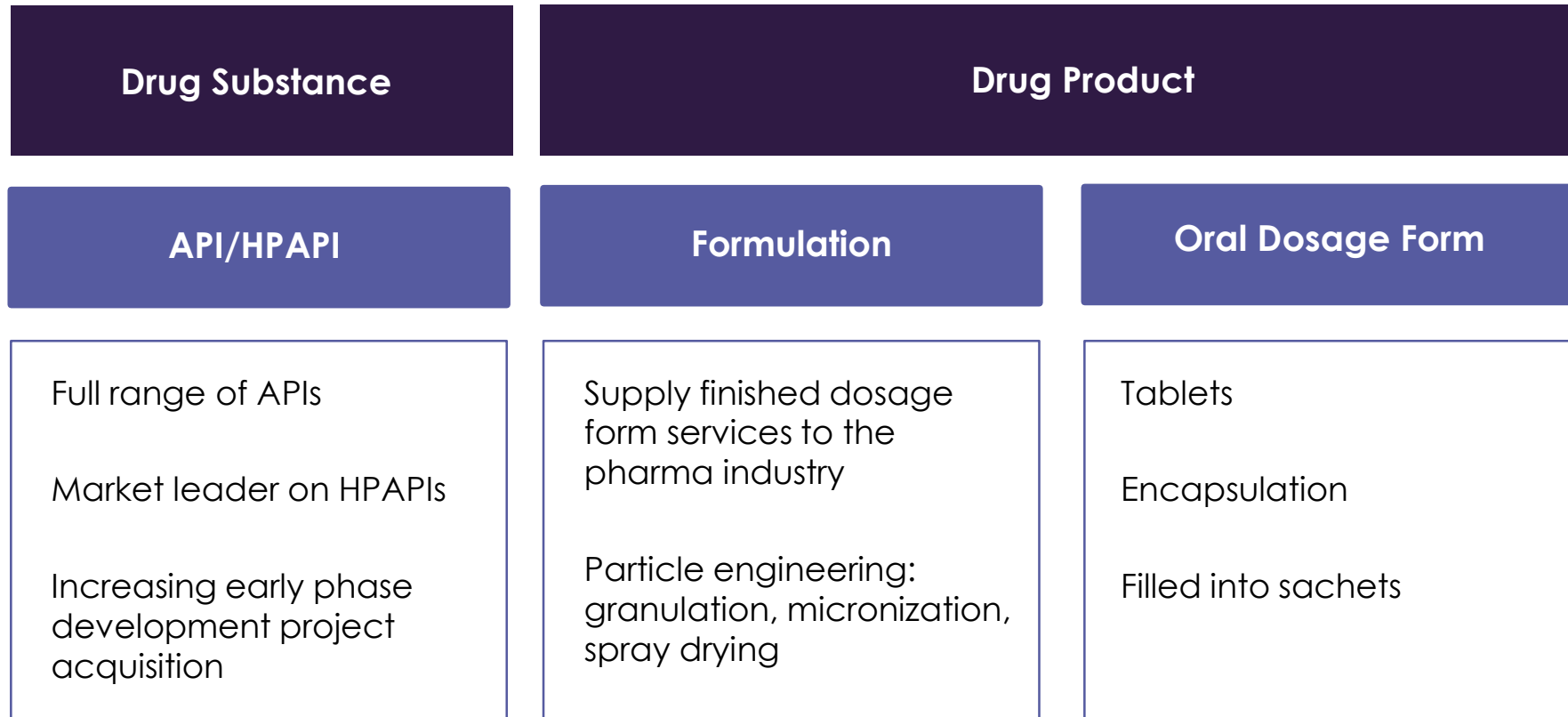


Small Molecules

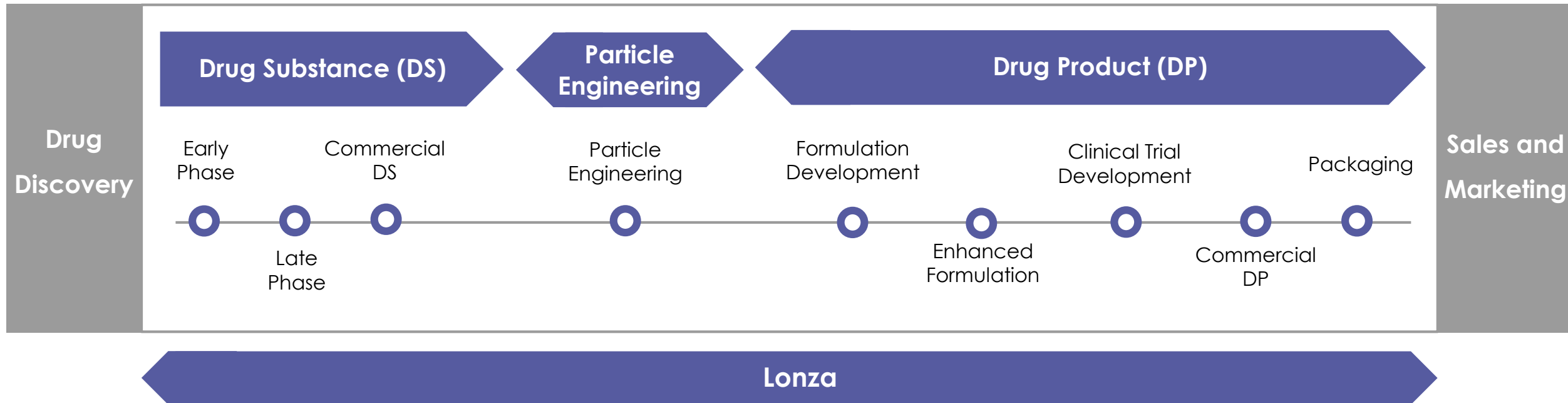
Lonza



Small Molecules Offering



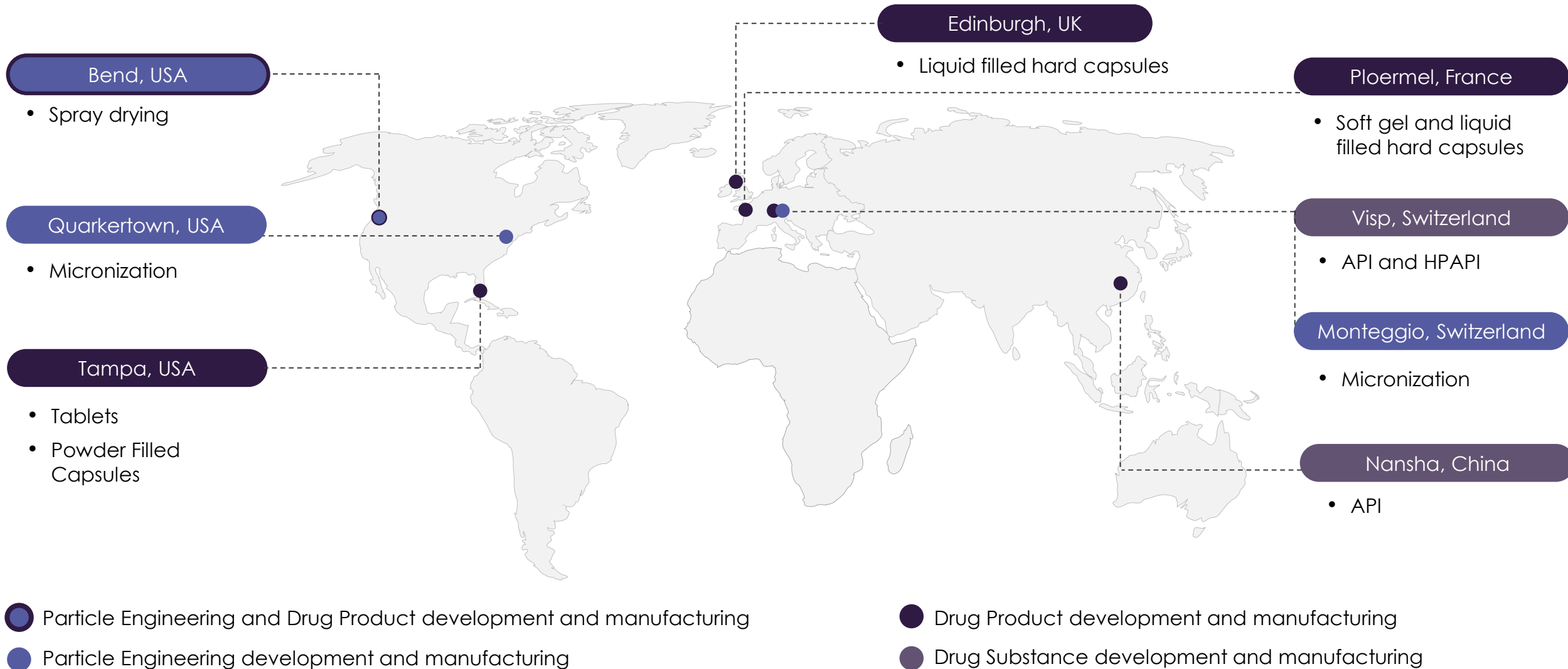
End-to-End Services and Know-How



Selected competitors

- ThermoFisher
- Recipharm
- Catalent
- Siegfried
- Cambrex

Network and Assets



Industry Overview and Lonza Key Priorities

Industry

Accounts for ~70% of global pharmaceutical sales

6,000 molecules in development

Move towards more tailored and complex APIs

Reshoring of the supply chain

Lonza

Adapt business model for smaller companies to secure new early-phase clinical programmes

Retain leadership position in particle engineering technology

Balance of asset scales and location

Continuing investment in Highly Potent API

270

commercial
products in 2019

**19 of top
20 Pharma**

Lonza customers

350

Pre-clinical and
clinical molecules
in 2019



The Rise of Highly Potent API Molecules

Growing demand for more complex and highly potent APIs (HPAPIs)

New way to use small molecules to deliver innovative patient therapies

Interest in HPAPI drugs is largely driven by oncology research

New medicines with lower dose requirements and fewer side effects

Particle engineering is particularly important

Need for well-trained workforce with strong commitment to a culture of safety

Small Molecules Growth Rates

Market¹

Estimated Growth

CAGR 2020 – 2023

4 – 5%

Lonza²

Estimated Growth

CAGR 2020 – 2023

9 – 10%

¹ Based on volume
² Revenue growth

Biologics:
Mammalian

Lonza



Mammalian Offering

Applied Protein Services	Late stage discovery, early stage development Gene sequence analysis Vector development and manufacturing
Cell Line Development and Manufacturing	Selection and manufacturing of host cells
Clinical Development and Manufacturing	Full service drug substance and drug product development and manufacturing
Clinical Commercial Manufacturing	Drug substance
Drug Product Solutions	Parenteral drug product services
Commercial Manufacturing	Drug product (small scale)

Network and Assets



¹ Ibx® Solution – under construction, operational Q1 2021

² Under construction, operational Q2/Q3 2021

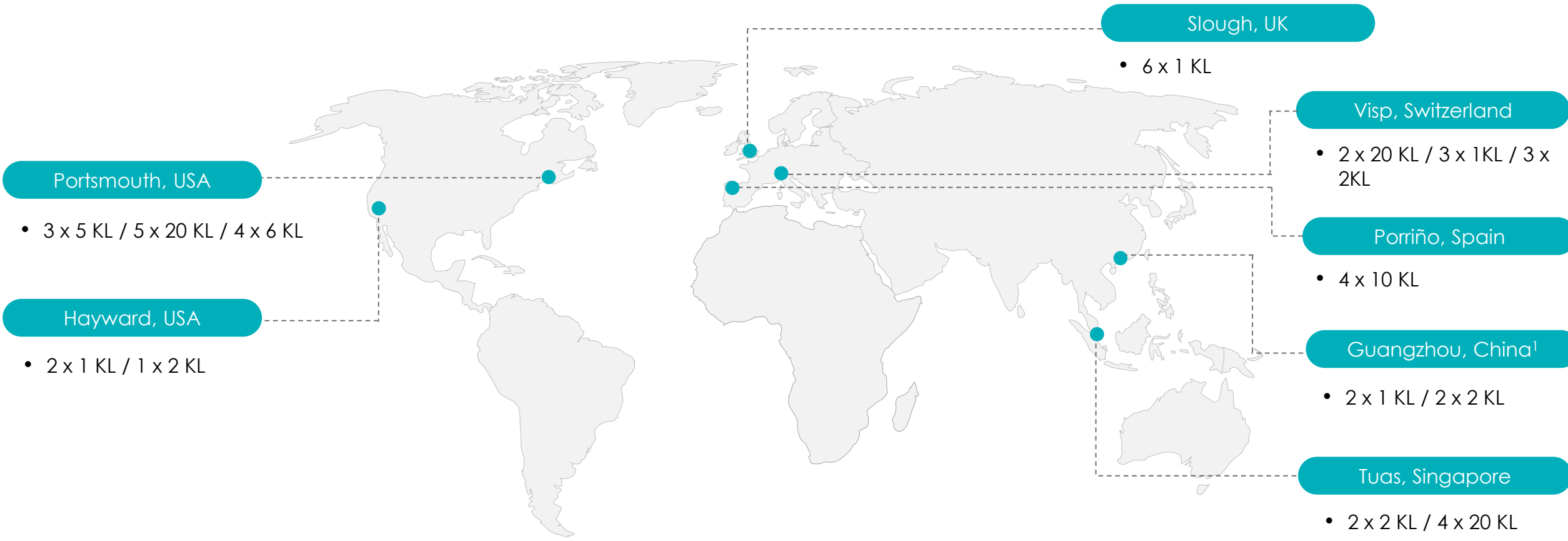
³ Drug Substance and Drug Product in Visp, Switzerland

⁴ Drug Substance

Core

New capabilities

Mammalian Network Capacity – 330 Kiloliter (KL) by end of 2020



¹ Under construction, operational Q2/Q3 2021

Ibex[®] Complex in Visp, CH

Ibex proposal has been validated and wins significant new contracts

Ibex[®] Facility

Sanofi JV Facility

Ibex[®] Design & Develop

Ibex[®] Dedicate

Examples

Strong small-scale pipeline

Most capacity is contracted for the next two years

Examples

Large microbial contract

Moderna

Kodiak – Bioconjugation

Advanced negotiation for Bioconjugation with an Asian customer (identity undisclosed at this time)

Plant ramp-up expected from Q4 2020

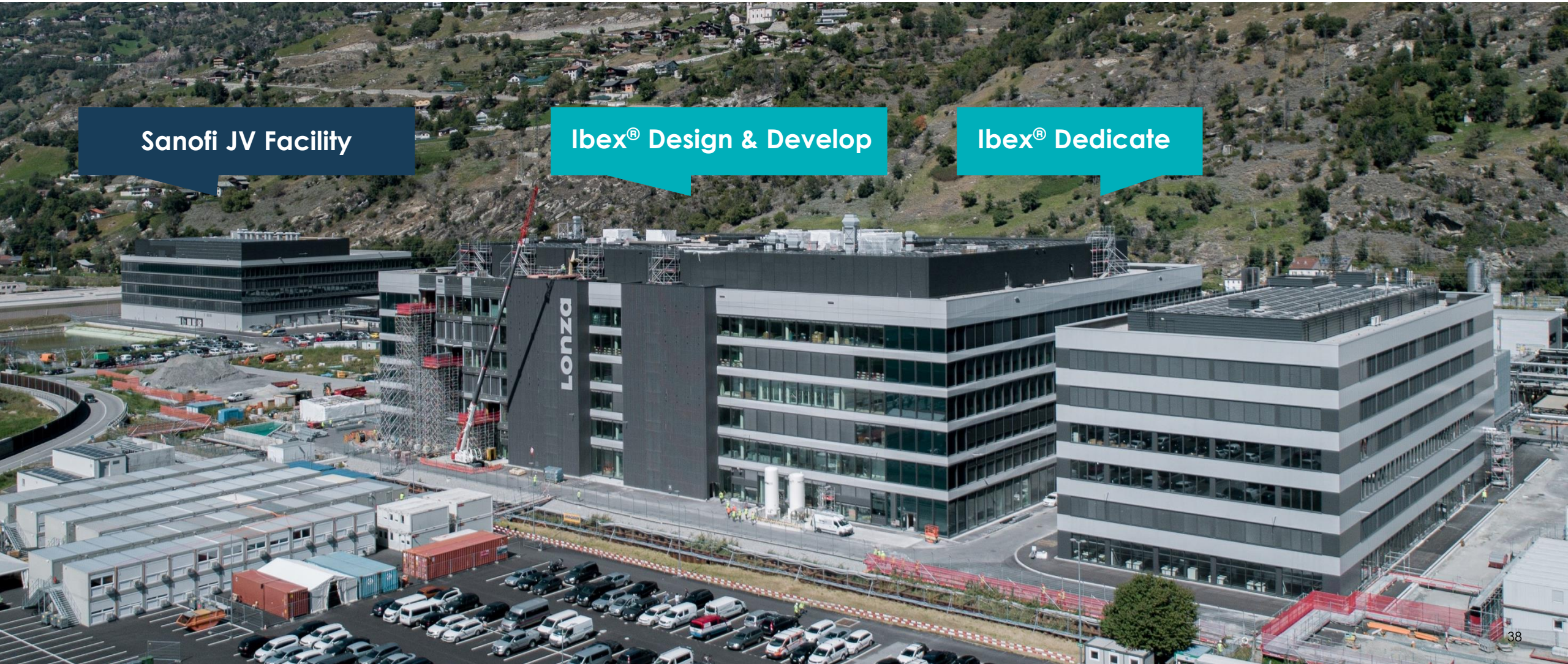
Lonza's reserved capacity is already contracted

Ibex® Complex in Visp, CH

Sanofi JV Facility

Ibex® Design & Develop

Ibex® Dedicate



Key Priorities

Increase early phase sales, strengthen Applied Protein Services

Increase end-to-end offering for small and large Pharma and Biotech

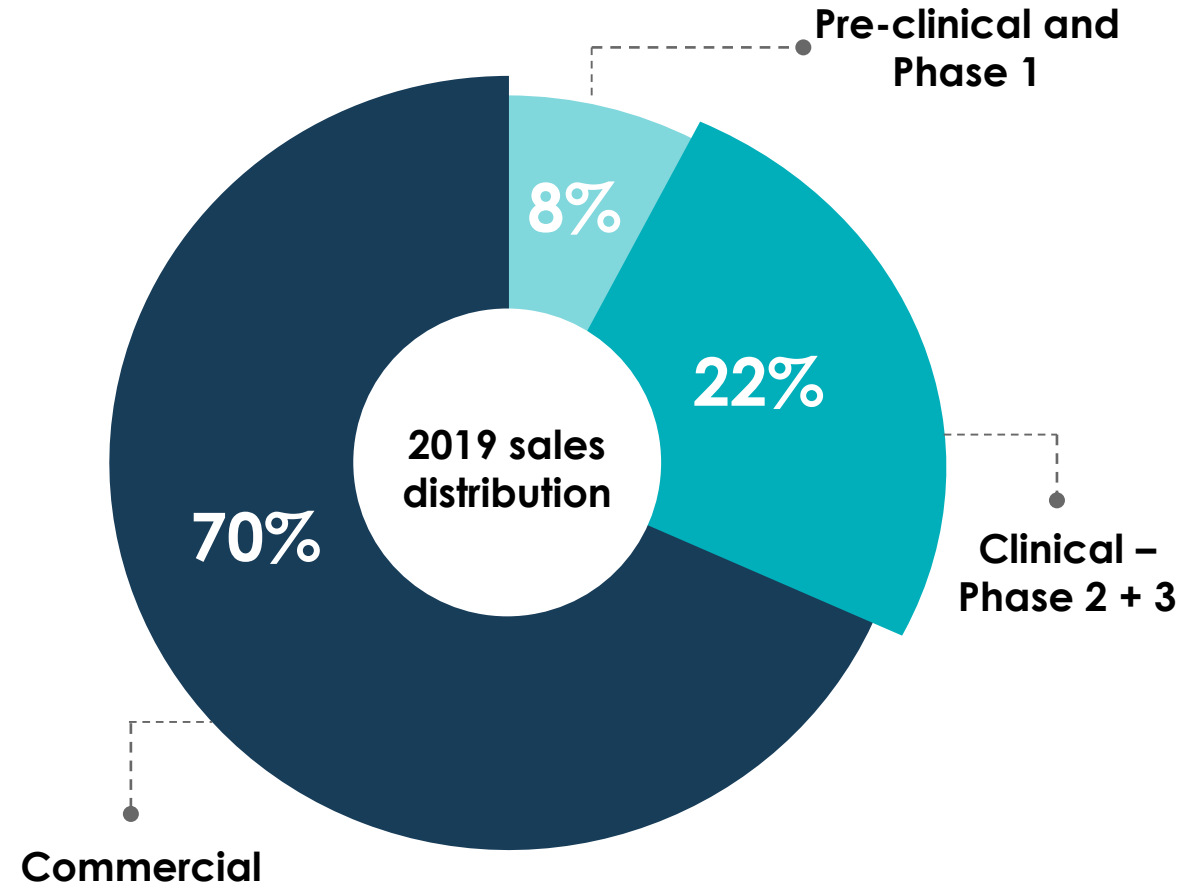
Leverage Ibex® Solutions

Add incremental capacity

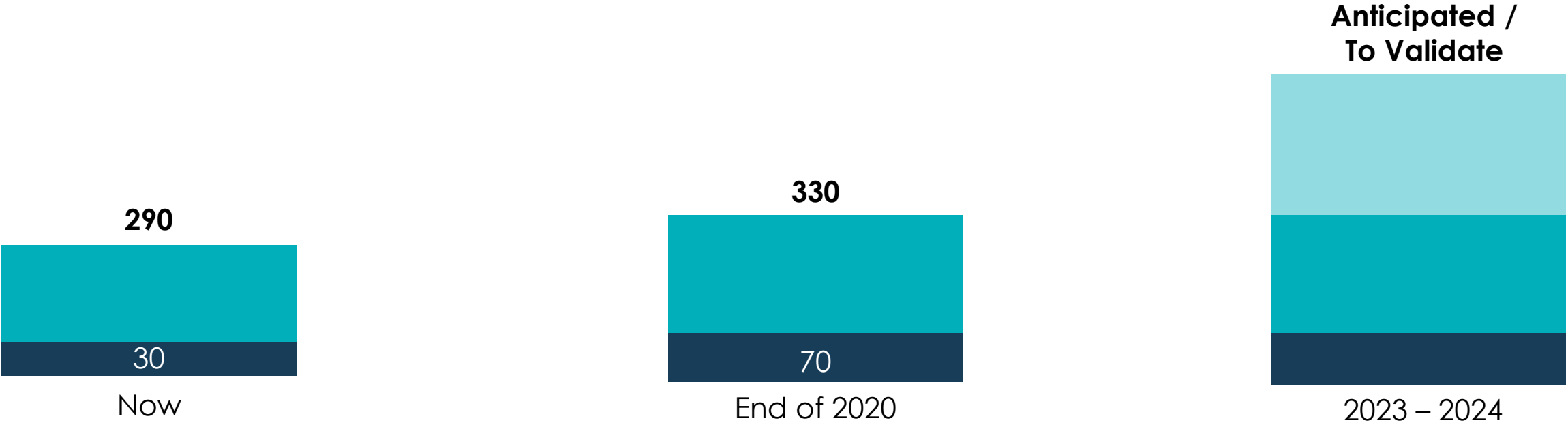
Geographic expansion

Asset-specific process improvements

Build presence in commercial Fill & Finish



Lonza Mammalian Fermentation Capacity in Kiloliter (KL)



- Small/Mid-scale (<10 KL)
- Large-scale (>10 KL)
- Anticipated

- Additions by December 2020**
- 4 x 6 KL in Portsmouth, USA
 - 3 x 1 KL + 3 x 2 KL in Visp, CH
 - 2 x 1 KL + 2 X 2KL in Guangzhou, CN¹
 - 2 x 20 KL in Visp, Sanofi JV

- Additions by 2023 – 2024**
- Small and mid-size capacities
 - Large-scale facility (ies)

¹Under construction, operational Q2/Q3 2021

Mammalian Growth Drivers and Estimated Production Capacity

Growth Drivers

Solid base line demand in therapeutics

Biosimilars – geographic adoption of new therapeutics

Venture capital funding expected to continue

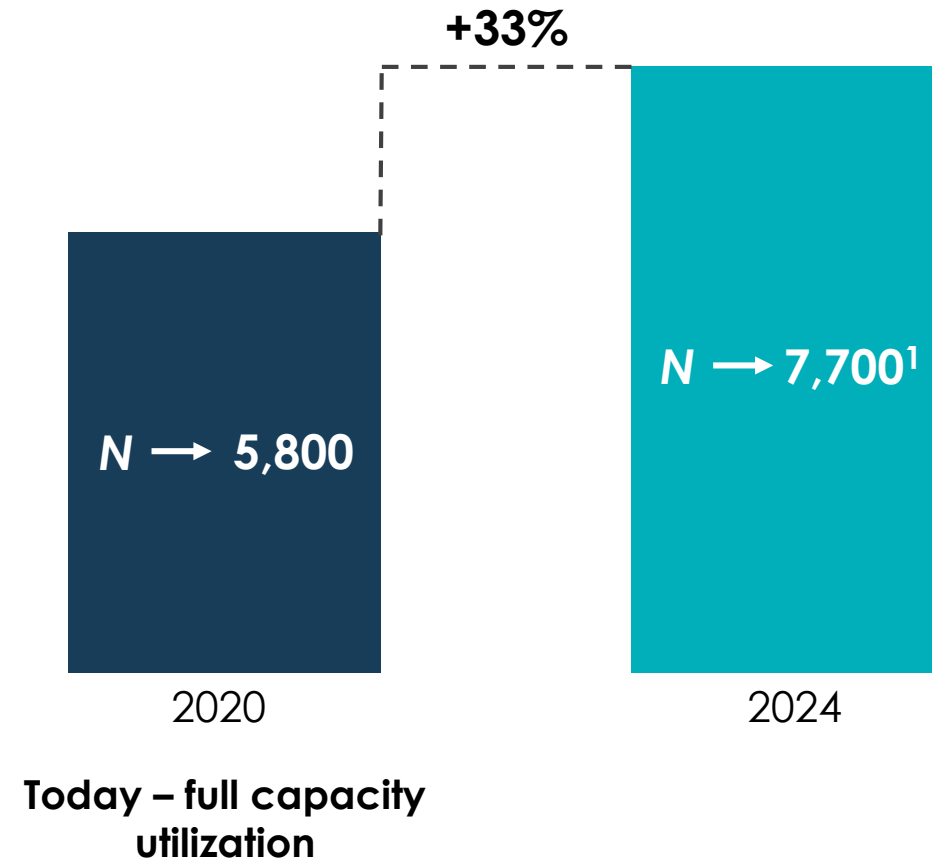
Improvements to platform processes

Increased speed of regulatory approvals

COVID-19 has driven a higher level of demand than anticipated

Future impact of Alzheimer's therapeutics?

Capacity Expansion in kiloliter (KL)



¹Based on announced capacity increases, without Lonza's future expansion

Market Overview

Market

More than 2/3 of the pipeline comes from small and mid-sized Biotechs

Sustained need for large-scale manufacturing capacity

Trend towards small-scale bioreactors combined with single-use technologies

Increasing pipeline of new molecular formats and more complex molecules

Selected Key Manufacturers

Pharma companies

- Roche
- J&J
- Novartis
- Boehringer Ingelheim
- Sanofi
- Amgen
- Biogen

CDMO companies

- Lonza
- Samsung Biologics
- Wuxi Biologics
- Boehringer Ingelheim
- Fujifilm
- Patheon

Mammalian Growth Rates

Market¹

Lonza²

Estimated Growth

7 – 8%

CAGR 2020 – 2023

Estimated Growth

10 – 14%

CAGR 2020 – 2023

¹ Based on volume
² Revenue growth

Biologics:
Microbial



Microbial Offering

Offering

More than 30 years of experience

From clinical to commercial supply

Regulatory expertise to support IND
and BLA

Proprietary XS Technologies® platform
includes *Pichia pastoris*, *Escherichia coli*
and *Bacillus* expression systems

Network and Assets



Clinical development and manufacturing



Commercial manufacturing



Ibex® Dedicate for tailored ownership and risk
sharing models



Installed capacity: 1 x 70 L, 1 x 1 KL, 2 x 15 KL



New mid-scale manufacturing to be operational
in 2022 (Ibex® Solutions and multipurpose)

**Visp,
Switzerland**

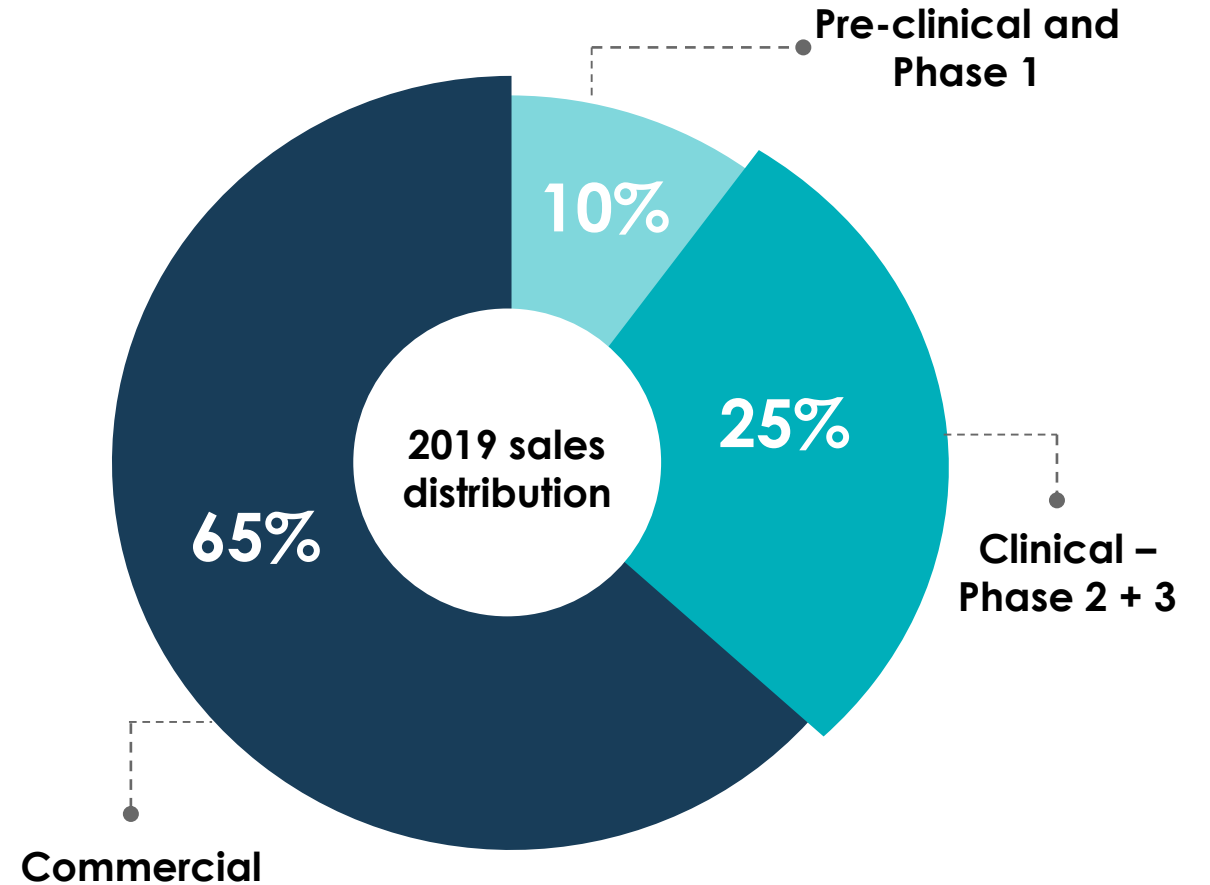
Key Priorities

Leverage Lonza's proprietary expression systems

Expand development capacity to grow pre-clinical and early phase customers

Expand manufacturing capacity for full scope (small, mid and large scale)

Leverage Ibex® Dedicate



Industry Overview

Represents ~30% of total Biopharma

More than 2/3 of microbial derived biotherapeutics are from small/mid-sized Biotechs

Increasing number of complex molecules produced in microbial systems

Industry growth driven by outsourcing

Moderate capacity expansion

A few companies dominate the commercial manufacturing space

Installed Capacities 2020 E



Selected Players

- | | |
|---|--|
| <ul style="list-style-type: none">• <i>Lonza</i>• <i>Fujifilm</i>• <i>AGC Biologics</i>• <i>Wacker</i> | <ul style="list-style-type: none">• <i>Merck KGaA</i>• <i>Roche</i>• <i>Novartis</i>• <i>UCB</i>• <i>GSK</i> |
|---|--|

Microbial Growth Rates

Market¹

Lonza²

Estimated Growth

7 – 8%

CAGR 2020 – 2023

Estimated Growth

9 – 10%

CAGR 2020 – 2023

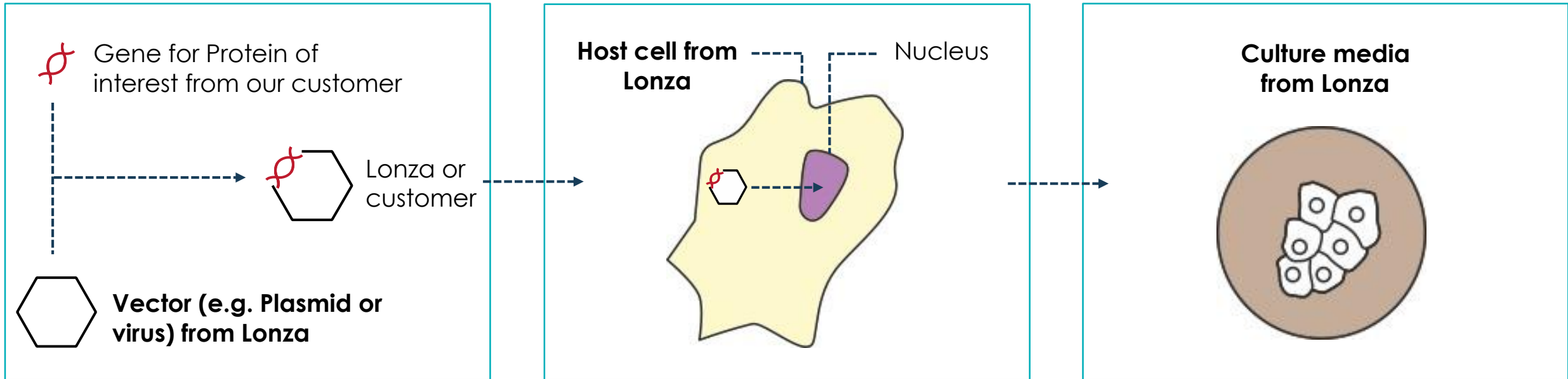
¹ Based on volume
² Revenue growth

Biologics:
Licensing

Lonza



The Concept Starts with Lonza's Expression System



Gene for a desired protein is combined with a DNA sequence

The recombinant DNA sequence is inserted into a host cell – cell bank

The host cell is grown in culture to reproduce the desired protein

Expression System: Vector + Host cell + Media + Know-how



The Licensing Business

More than 200 customers for around 600 molecules

80% of revenues from royalties with balance from annual fees, milestones and other payments

Sales and marketing focused on early stage innovators – first contact with Lonza

Our Mammalian Gene Expression Systems (GS) account for the majority of revenues

The Business Unit portfolio also includes microbial expression systems (XS) and viral vector technology (Lentiviruses and Adeno-Associated Viruses)

In 2019 we launched GS piggyBac™ to enhance production of complex proteins

Biologics:
Bioconjugates

Lonza





Bioconjugates Overview

Biopharmaceuticals developed by attaching two molecules together, of which one is a biomolecule

Powerful anti-cancer therapeutics exploiting the high specificity of a monoclonal antibody (selection of the cell tumor) with enhanced tumor cell-killing capacity by attaching a highly cytotoxic agent

Main class of bioconjugates are the Antibody Drug Conjugates (ADCs)

Extensive manufacturing infrastructure required, alongside trained professionals

Bioconjugates Offering

Offering

Proven track record

Supports the majority of commercially approved ADCs

Competency around complex molecules

Capacity expansion

Most integrated “under one roof” supplier

Network and Assets



Bioconjugation

- Clinical development and manufacturing
 - Commercial manufacturing
-



Highly Potent API

- API development and manufacturing
-



Mammalian and Microbial

- Clinical and commercial development
 - Clinical and commercial manufacturing
-



Ibex[®] Dedicate

- Tailored ownership and risk sharing models

**Visp,
Switzerland**

Bioconjugates Growth Rates

Market¹

Estimated Growth

CAGR 2020 – 2023

6 – 8%

Lonza²

Estimated Growth

CAGR 2020 – 2023

10 – 12%

¹ Based on volume
² Revenue growth

Lonza

**Biologics:
Drug Product Solutions
(DPS)**



DPS Offering

Drug Product Solutions (DPS)

Drug Product Services

Expertise in formulation of API with excipients

Analytical capabilities

Stability and usability of final therapeutics



Fill & Finish

Acquisition of Novartis Stein (CH) facility

Drug product clinical fill & finish

Vials (liquid), vials (lyo), prefilled syringes

New capacity in Visp (CH) in 2021

Drug
Substance

Final Medical
Drug Product

Analytical Expertise Overview

Analytical methods for formulation development

Visible particles

Turbidity

UV

pH

Osmolality

Residual moisture

Methionine oxidation

Surfactant content

Injection force

Viscosity

Others

Particle characterization

Light obscuration

Flow imaging microscopy

Electrical zone sensing

Resonant mass measurement

Nano tracking analysis

Dynamic light scattering

Others

Industry Overview

Industry

Large and growing pipeline with all biologics being parenteral

New molecular formats require more specialized DP formulation know-how

Development of orphan drugs with narrower indications

Vials currently dominate; alternative delivery technologies are increasing

Competitive Landscape

Fragmented and disparate competitor community

Selected value chain competitors

- Wuxi
- Catalent
- Patheon

Selected specialized competitors

- Vetter
- KBI
- Corialis

Big pharma

- Internal know-how and assets

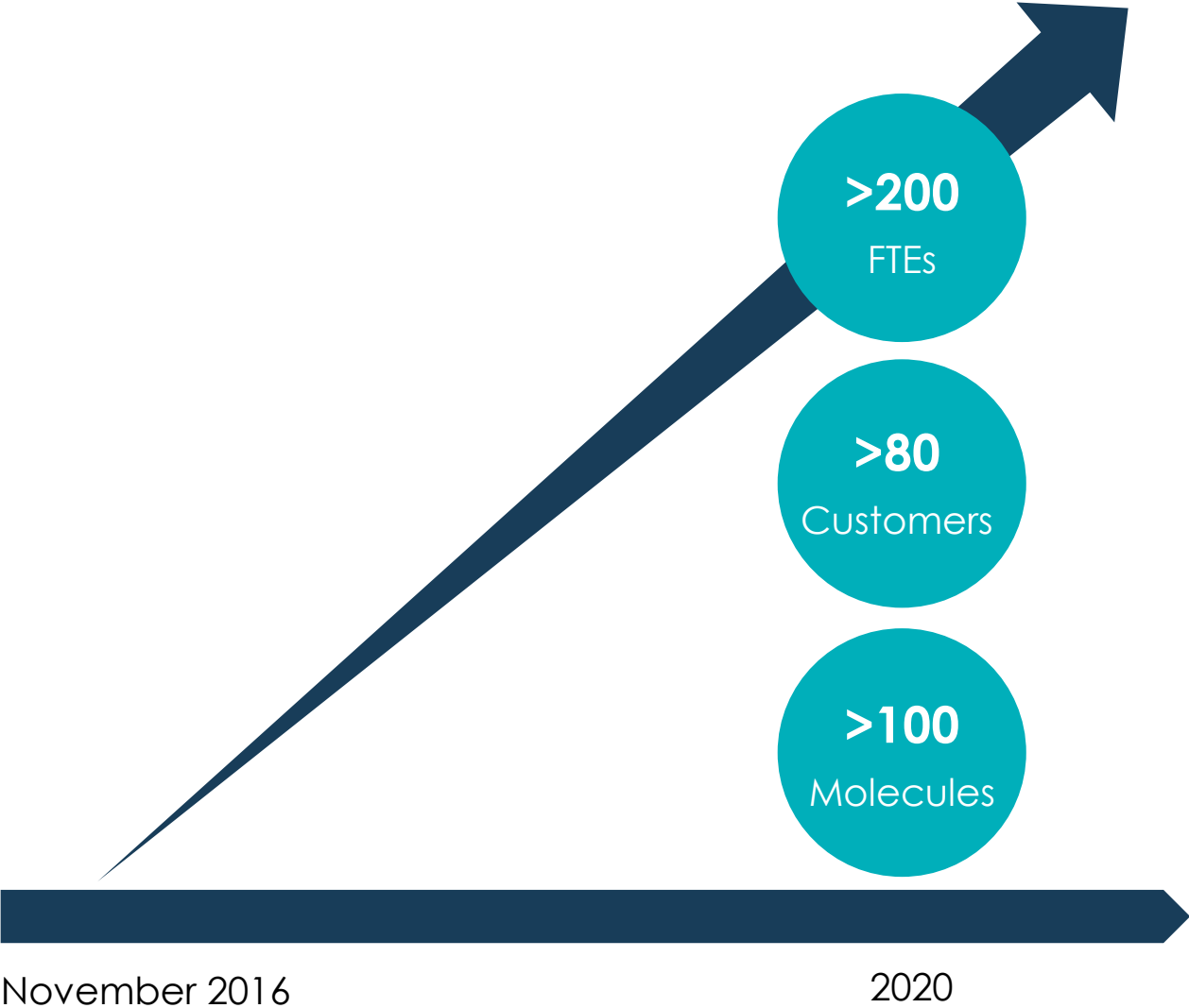
End-to-End Offering Extension

Built a leading offering over four years

Started in November 2016

Created leadership in science and regulatory know-how

Large number of customers are integrated with the Business Unit to provide end-to-end offering



DPS Growth Rates

Market¹

Estimated Growth

CAGR 2020 – 2023

7%

Lonza²

Estimated Growth

CAGR 2020 – 2023

20%

¹ Based on volume
² Revenue growth

Biologics:
mRNA

Lonza





Strategic Collaboration with Moderna on mRNA platform

Ten year strategic collaboration agreement on mRNA and lipid nano-particles

Moderna is the leading developer of mRNA-based new therapeutics and vaccines

Lonza will gain access to all mRNA-based projects from Moderna's innovation pipeline

Current focus is the COVID-19 vaccine candidate mRNA 1273

COVID-19 Vaccine Candidate mRNA 1273 – Lonza's Role

Portsmouth USA

One Drug Substance production line

Annual capacity 100 mio doses

CAPEX funded by Moderna: ~CHF 70 mio

First Drug Substance batch targeted for end October 2020

Visp Switzerland

Three Drug Substance production lines

Annual capacity 300 mio doses

CAPEX

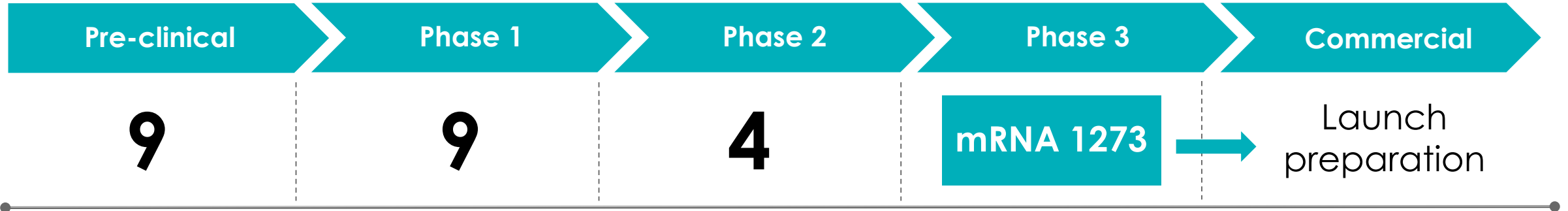
- Moderna: two lines; ~CHF 140 mio
- Lonza: one line; ~CHF 70 mio

First Drug Substance batch targeted for early November 2020

Production located in Ibex® Dedicate facility

Moderna with Most Advanced mRNA Platform

23 development candidates



Moderna has the most advanced mRNA platform

Moderna is not only a COVID-19 vaccine company

Moderna has one of the most advanced COVID-19 vaccine development programs

Moderna has 23 development candidates across a range of infectious diseases and therapeutic areas

Cell & Gene Therapy, and Bioscience Division

Lonza



Bioscience

Lonza



Bioscience Offering

Bioscience Discovery

Support customers in disease research, drug discovery and development, including cell and gene therapy

Primary human cells and stem cells from various tissues

Optimized cell culture media

Nucleofector® transfection device

Bioscience Media

Cell Culture Media support the growth of plant/animal cells *in vitro*

Used at various stages in the development and production for large molecule therapeutic, cell and gene therapy

Bioscience Testing

Automated and integrated solutions for Endotoxin Testing to ensure safety of injectable drugs

Bioscience Informatics

Integrated software platforms to streamline quality control processes for biologics and cell and gene therapies (MODA™)

Network and Assets





Market Overview

Global addressable Research Products market estimated at around CHF 950 mio¹

- ~ CHF 300 mio in standard cell culture media for research use
- ~ CHF 300 mio in primary cells and cell specific media
- ~ CHF 150 mio in transfection
- ~ CHF 200 mio – others

Lonza serving academic, government institutions, biotech startups and large pharma

Bioscience Growth Rates

Market¹

Lonza²

Estimated Growth



CAGR 2020 – 2023

Estimated Growth



CAGR 2020 – 2023

¹ Based on volume
² Revenue growth

Cell & Gene Therapy (CGT)

Lonza



CGT Overview and Lonza Participation

Autologous Cell Therapy

1 batch = 1 patient

Product examples

- Kymriah® (Novartis)
- Yescarta® (Gilead)
- ZYNTEGLO™ (Bluebird Bio)
- Tecartus™ (Gilead)

Complexity and high costs of manufacturing / logistics

Allogeneic Cell Therapy

1 batch = multiple patients

“Off-the-shelf” model (bulk)

Centralized manufacturing

Currently no industrialized processes

Viral Vector Gene Therapy

Viruses are used as “vehicles” to deliver genes into patients to restore functional cells

“Off-the-shelf” model

Different types of viruses are used: Adenovirus, Adeno Associated Virus (AAV) and Lentivirus

Unmatched CGT Experience

Experience

20+ years of GMP experience; acquisition of Cambrex in 2007
2 commercial products

Process Development

> **120** projects

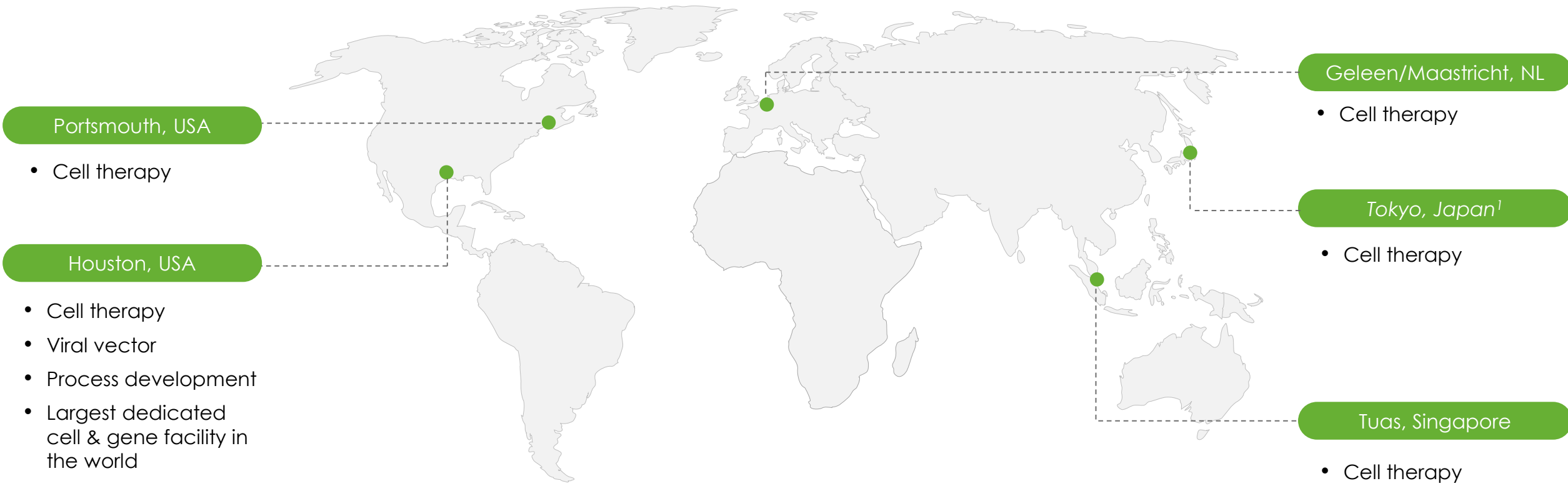
Viral Vector Production

250 and 2,000 L suspension production

Market Access

> **160 CGT** customers globally

Network and Assets



Portsmouth, USA

- Cell therapy

Houston, USA

- Cell therapy
- Viral vector
- Process development
- Largest dedicated cell & gene facility in the world

Geleen/Maastricht, NL

- Cell therapy

Tokyo, Japan¹

- Cell therapy

Tuas, Singapore

- Cell therapy

¹ The facility is owned and operated by Nikon CeLL innovation Co. Ltd. under Nikon-Lonza Partnership

Industry Overview

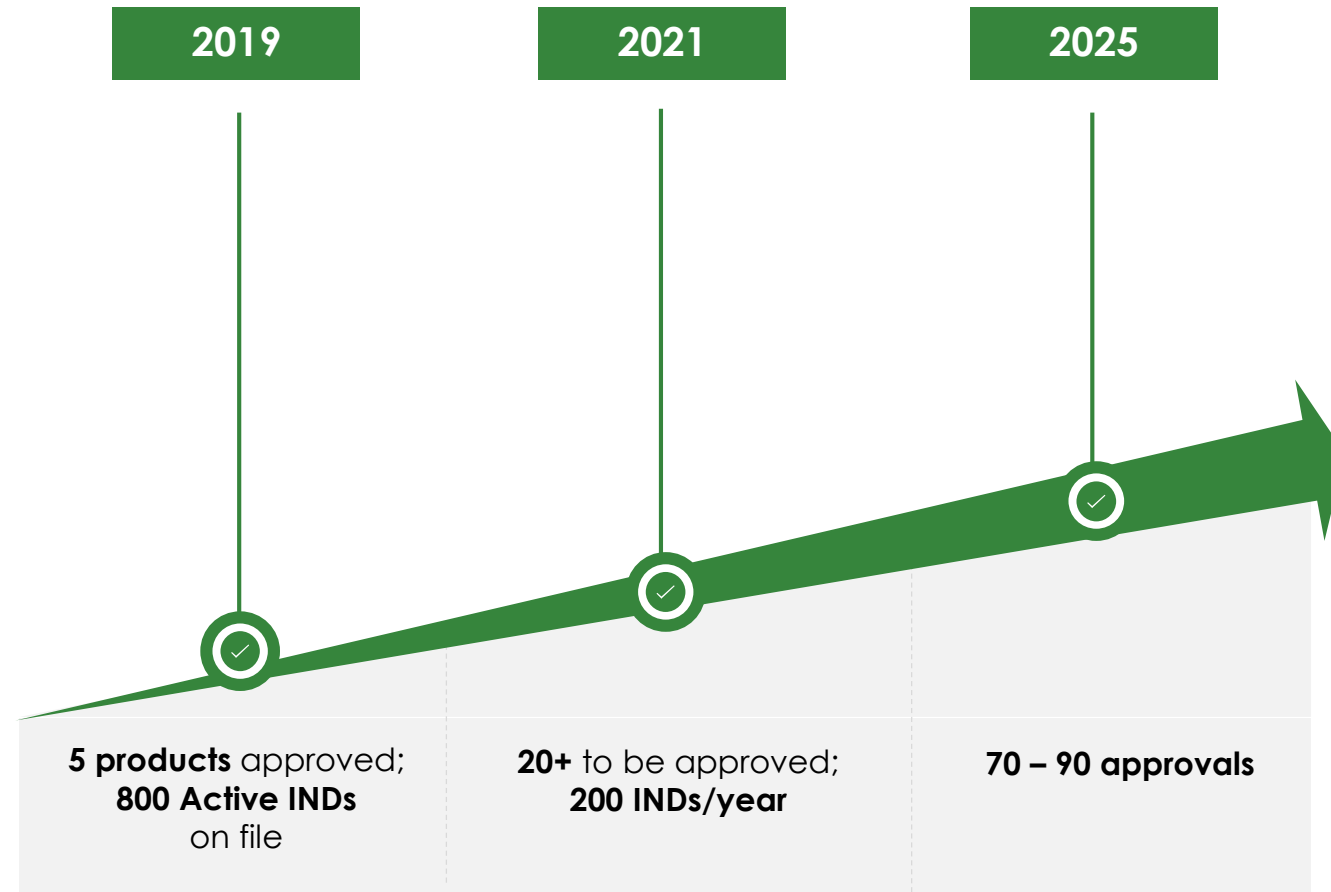
CGT is a laboratory-based science that is growing into an industry

Transformational efficacy of CGT is established

Accelerated approval pathways

Manufacturing is challenging: manual, unscalable and slow processes

Selected competitors: Hitachi, ThermoFisher/ Brammer, Oxford BioMedica, Wuxi, MilliporeSigma, Fujifilm, Catalent / MasterCell & Paragon





Key Priorities

Secure long-term sustainable growth

Align capacity expansion with growth ambition

Improve operational execution and reduce costs

Maintain technology leadership

Invest in top talents: identify, build and retain

CGT Growth Rates

Market¹

Lonza²

Estimated Growth

CAGR 2020 – 2023

>20%

Estimated Growth

CAGR 2020 – 2023

20 – 25%

¹ Based on volume
² Revenue growth

Personalized Medicine

Lonza



Challenges in Autologous Cell Therapy

Manual and complex manufacturing process

A challenge to scale the manufacturing process

Variation in starting patient material

Need to bring manufacturing closer to patient

COGs and therapy costs are unsustainable

Pricing: problem not solved

The economics don't work today

**Develop a system to answer the needs
for manufacturing automation,
scale-up, process control and COGs**

**Lonza Cocoon[®]
Solution**

Meeting the Challenges in Autologous Cell Therapy

Cocoon® system answers the needs for manufacturing scale-out, costs, quality and process control

Costs

- Space efficiency
- Automation
- Ability to scale-out

Quality

- Process control and analytics
- Few manual steps

Opportunity

- Strong pipeline with over 500 products in development
- Robust pre-clinical pipeline

Quantity

- Ability to scale-out and create hubs



Commercial Potential of Cocoon® Platform

Model	Opportunity	Partners / Customers	Revenue Sources
Cocoon Sales	Cocoon and Cassette supply	Industry and academic clinical centers	Sales of Cocoons, Cassettes etc.
CDMO Services	CDMO services	Industry customers	Payment for CDMO services
Development / Manufacturing Partnerships	Jointly accelerating therapy path to clinical trials and commercialization	Biopharma companies	Product royalties Milestones Therapy product manufacturing in Cocoon (CDMO)

First Cancer Patient Treated Using Cocoon® Platform

08 Sep 2020

Sheba Medical Center Treats First Patient with CAR-T Cell Immunotherapy Manufactured Using the Lonza Cocoon® Platform

- First cancer patient dosed at Sheba Medical Center, Israel with autologous CAR-T therapy manufactured using Lonza's Cocoon® Platform
- Israeli Ministry of Health (MOH) approved use of the Cocoon Platform to manufacture a CD19 CAR-T cell immunotherapy for an ongoing Phase II clinical trial for B-cell malignancies
- MOH approval follows an extensive study that showed comparability of the therapy whether manufactured using the manual, open process or the automated, functionally closed Cocoon Platform

Basel, Switzerland and Tel Aviv, Israel, 8 September 2020 – Lonza and Sheba Medical Center announced the first patient has been treated at Sheba Medical Center with a CD19 CAR-T cell immunotherapy manufactured using Lonza's Cocoon® Platform. The Cocoon Platform is an automated and functionally closed system for patient-scale cell therapy manufacturing, designed to overcome some of the manufacturing challenges of manually producing personalized medicines, including autologous CAR-T cell therapies.

With the goal of increasing access to innovative cell therapies, Sheba Medical Center and Lonza have collaborated to translate Sheba's open, manual manufacturing process into the Cocoon Platform since mid-2019. In less than a year, teams from Lonza Personalized Medicine and Collaborative Innovation Center (CIC) in Haifa, IL worked closely with Sheba Medical Center to complete process development, tech transfer, training and a full clinical comparability study requiring regulatory approval before the first patient could be treated. The successful approval of the Cocoon Platform clinical comparability study illustrates the platform's flexibility and ability to manufacture a final cell immunotherapy which is comparable to the original manual process while meeting the extensive patient safety criteria.

The current Phase II clinical trial at Sheba has successfully dosed over 100 patients over the last two years with positive clinical results. Sheba and Lonza plan to treat additional patients under the same CD19 CAR-T cell immunotherapy protocol using the Cocoon Platform. The Cocoon Platform will enable Sheba to reduce immunotherapy manufacturing costs by lowering manpower, time, and space requirements. It is hoped that this will ultimately allow Sheba to deliver potentially curative cellular immunotherapies to more patients.

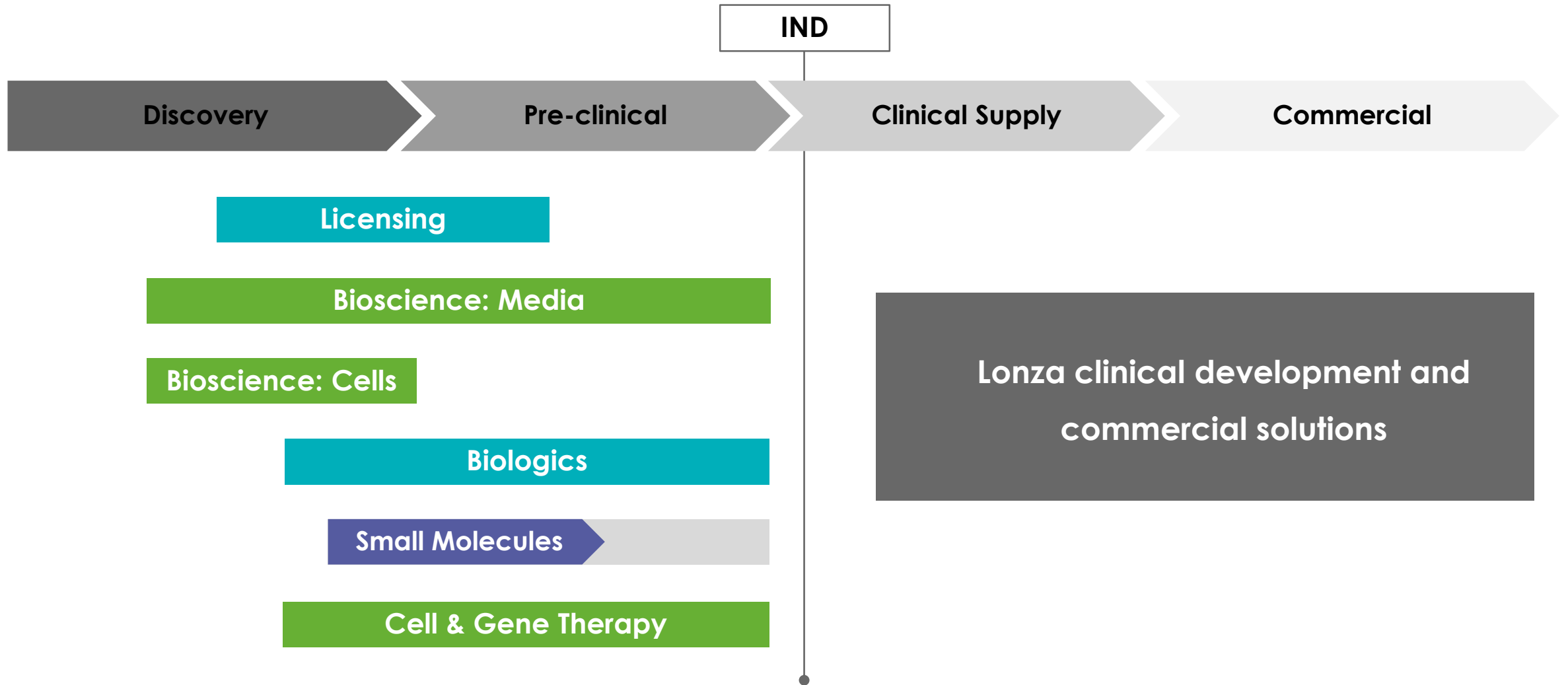
End-to-End Offerings

An aerial photograph showing a multi-lane road intersection cutting through a vast, vibrant green agricultural landscape. The fields are divided into rectangular plots by thin white lines. Several cars are visible on the road, and the overall scene is bright and clear. The Lonza logo is positioned in the upper right corner of the image.

Lonza

Agricultural area and thoroughfare

End-to-End Offerings



From Gene to IND to Drug Substance and Drug Product

Example integration of Cambridge, Slough and Basel / Stein

Cambridge
UK

Site receives genes from customers
Genes are analyzed
Recommendations are made from *in silico* and *in vitro* analysis, which predicts the behavior of the genes. This ensures that the best genes are selected
The empty vector(s) are developed

Slough
UK

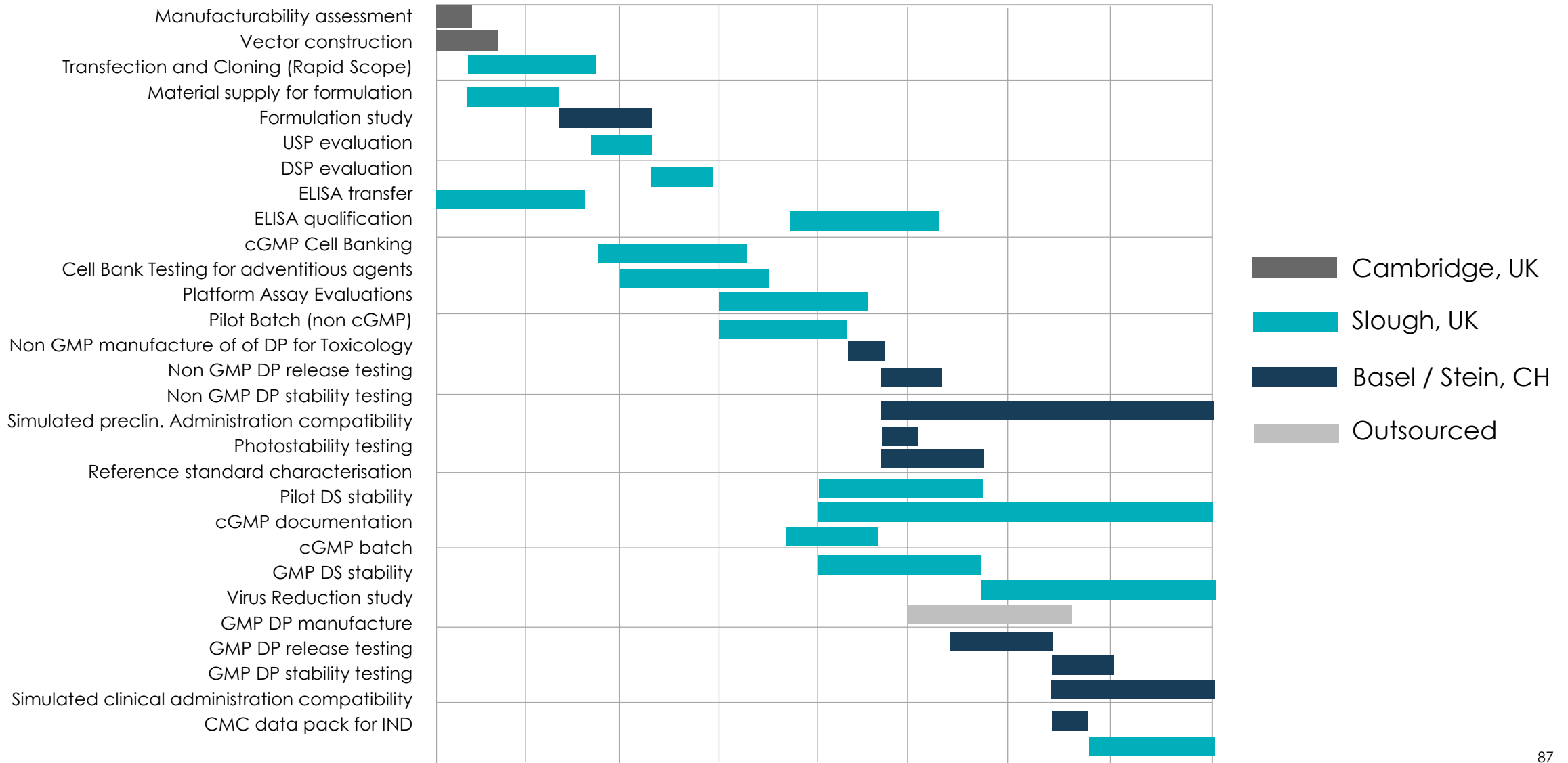
The host cell is selected and produced
The host cell is opened and the vector with the gene is introduced
The host cell is grown
A cell line is selected for the manufacture of the Drug Substance

Basel / Stein
Switzerland

Drug Product Services
Formulation and analytics for developing the Drug Product
Involved from the outset with Slough site

Drug Product Development

Example integration of Cambridge, Slough and Basel / Stein



Strong Pipeline Building



Aerial view of a traffic roundabout.



Strong Pipeline Building

Contracted business in Biologics and Small Molecules is up high double-digit versus 2019, driven by new assets coming on line and strong market demand

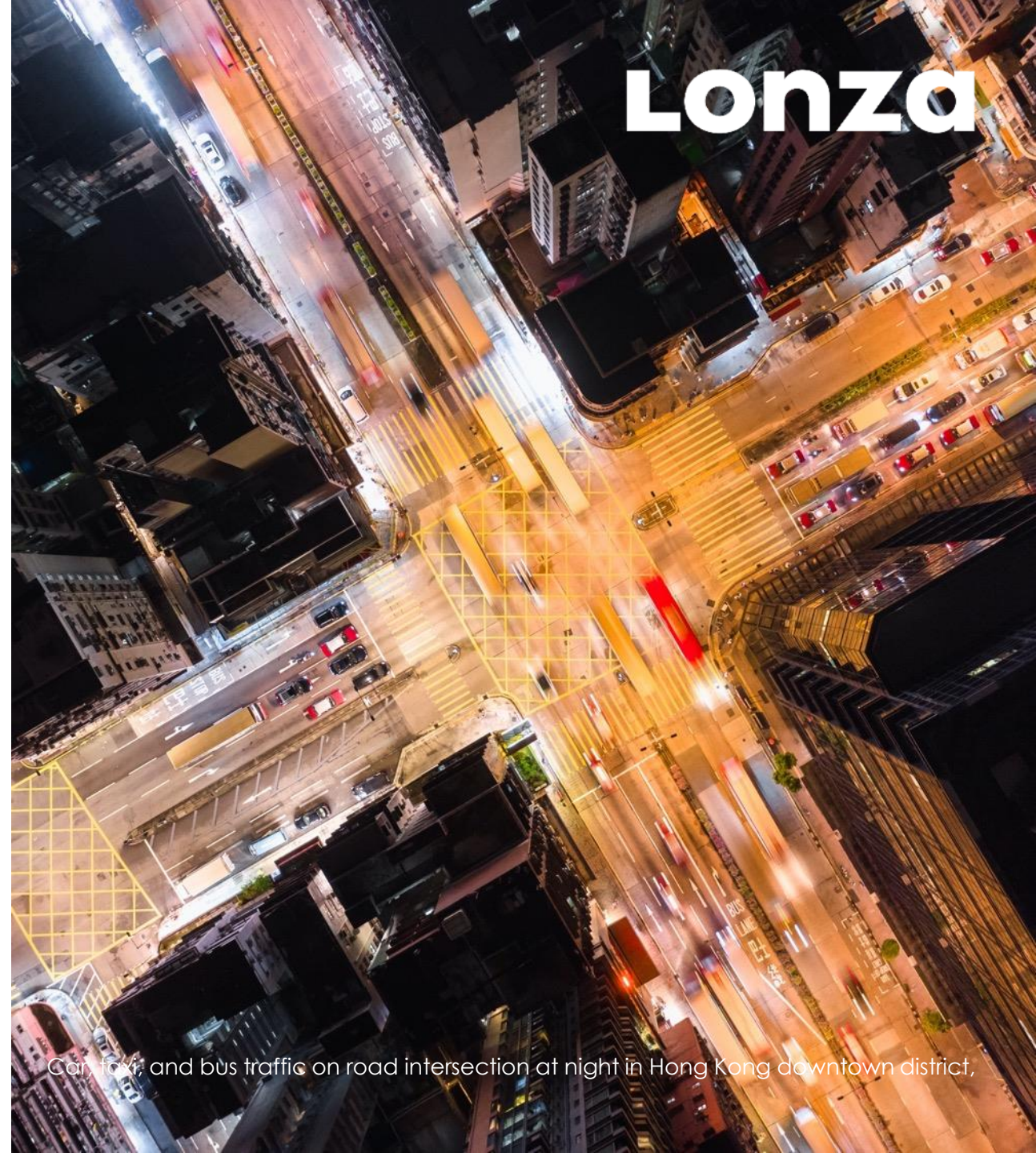
New customer acquisition across Biologics, Small Molecules and Cell & Gene Therapy continues with >30% increase over 2019

New projects in Biologics and Small Molecules up >30% versus 2019

New projects in Cell & Gene Therapy up >20% versus 2019

Investment Projects 2020 – 2023

Lonza



Car, taxi, and bus traffic on road intersection at night in Hong Kong downtown district,

Selected CAPEX Projects 2020 – 2023 (1/2)

Site	Project / Technology
<p>Visp, Switzerland</p>	<p>Ibex® Design – pre-clinical to clinical Phase 1 Ibex® Develop – clinical phase 2 to commercial Ibex® Dedicate – fully customizable. 50:50 JV Sanofi-Lonza for large-scale biologics commercial manufacturing Capacity expansion of Small Molecules Capacity expansion of bioconjugation Capacity expansion of Microbial development and manufacturing Manufacturing of mRNA for COVID-19 vaccine</p>
<p>Basel / Stein, Switzerland</p>	<p>Expansion of parenteral drug product development services Expansion of facility for drug product manufacturing</p>
<p>Geleen, Netherlands</p>	<p>Expansion of Cell & Gene Therapy manufacturing</p>
<p>Portsmouth, USA</p>	<p>Mid-scale (6K) for commercial monoclonal antibodies manufacturing Manufacturing of mRNA for COVID-19 vaccine</p>
<p>Tuas, Singapore</p>	<p>Expansion of development services for mAb</p>

Selected CAPEX Projects 2020 – 2023 (2/2)

Site	Project / Technology
Houston, USA	Capacity expansion of Cell Therapy manufacturing
Hayward, USA	Single-use technologies for clinical and commercial manufacturing of mAb
Guangzhou, China	Small-scale clinical and early commercial Mammalian offerings
Nansha, China	Increase capacity for Small Molecules
Bend, USA	Increase capacity in spray drying for Small Molecules
Many sites in focus	Increase capacity for empty capsules Increase capacity for dosage form solutions

External Reporting



Lonza

Vineyards by the lake - Lavaux, Switzerland



Pedestrian and bicycle paths in the green summer park.

Increased Reporting Granularity

Principles for external reporting

Increase granularity by modality for investors

Ensure external reporting fully reflects new divisional structure from 1 January 2021

Focus on key financial metrics by reducing number of Alternative Performance Metrics (APMs)

Tighten CORE definition to only exclude material one-time effects

Increase qualitative disclosures to facilitate accurate interpretation of financial performance

Divisional Performance Indicators

Considerations on segment reporting

	Division	Group
Sales AER / CER	✓	✓
CORE EBITDA/ margin	✓	✓
Capex	✓	✓
Cash flow	–	✓
ROIC	–	✓
CORE EPS	–	✓
Net Debt/ CORE EBITDA	–	✓

Performance by modality group for Sales, CORE EBITDA margin and Capex

Key focus on growth, profitability, liquidity and capital return at Group level

Elimination of CORE EBIT and CORE RONOA APMs to align reporting to the steering model

Convergence of CORE and Reported Financials

Impact of CORE adjustments on EBITDA

Impact of CORE EBITDA adjustments on Lonza profitability¹

	2018 ²	2019	H1 2020
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New CORE Definition			
EBITDA margin	25.8%	25.8%	28.8%
CORE EBITDA margin	27.0%	26.7%	28.8%

Moderate impact of CORE adjustments on financial results in the past – to be further reduced under new CORE policy

Old CORE Definition			
CORE EBITDA margin	27.3%	27.4%	29.1%
Delta pts	30	70	30

CORE adjustment threshold increased to only exclude significant one-off events

¹ Based on Lonza Continuing operations excl. Water Care

² 2018 financials not restated for the impact of IFRS16

Different Financial Profile for Lonza after Divestment of LSI

Bridge to new reporting structure

FY 2019 financial performance overview (Indicative figures)

CHF mio	Lonza ¹	LSI Discontinued Operations ²	Future Lonza
Sales <i>% CER growth vs. PY</i>	5,920 7.3	1,693 (2.5)	4,227 11.7
CORE EBITDA <i>% margin</i>	1,620 27.4	302 17.8	1,318 31.2
Capex <i>% Sales</i>	786 13.3	91 5.4	695 16.4
Operational Free Cash Flow	495	136	359
ROIC	9.1%	9.7%	8.9%

Future Lonza vs. current Lonza Group

Sales growth and margin accretive

Higher Capex driven by growth project investments

Maintained strong operational free cash flow

Future Lonza ROIC more rapidly increasing behind growth projects

¹ Based on Lonza Continuing operations excl. Water Care

² LSI 2019 segment financials as proxy for LSI Discontinued Operations

Behind a Strong Balance Sheet

Cash generation and capital allocation priorities

Cash Generation

Accelerated CORE EBITDA increase behind strong sales growth and high operating leverage

Capex investments required to support long-term growth leveling over time

Capital Allocation

Organic growth projects

Selected acquisitions

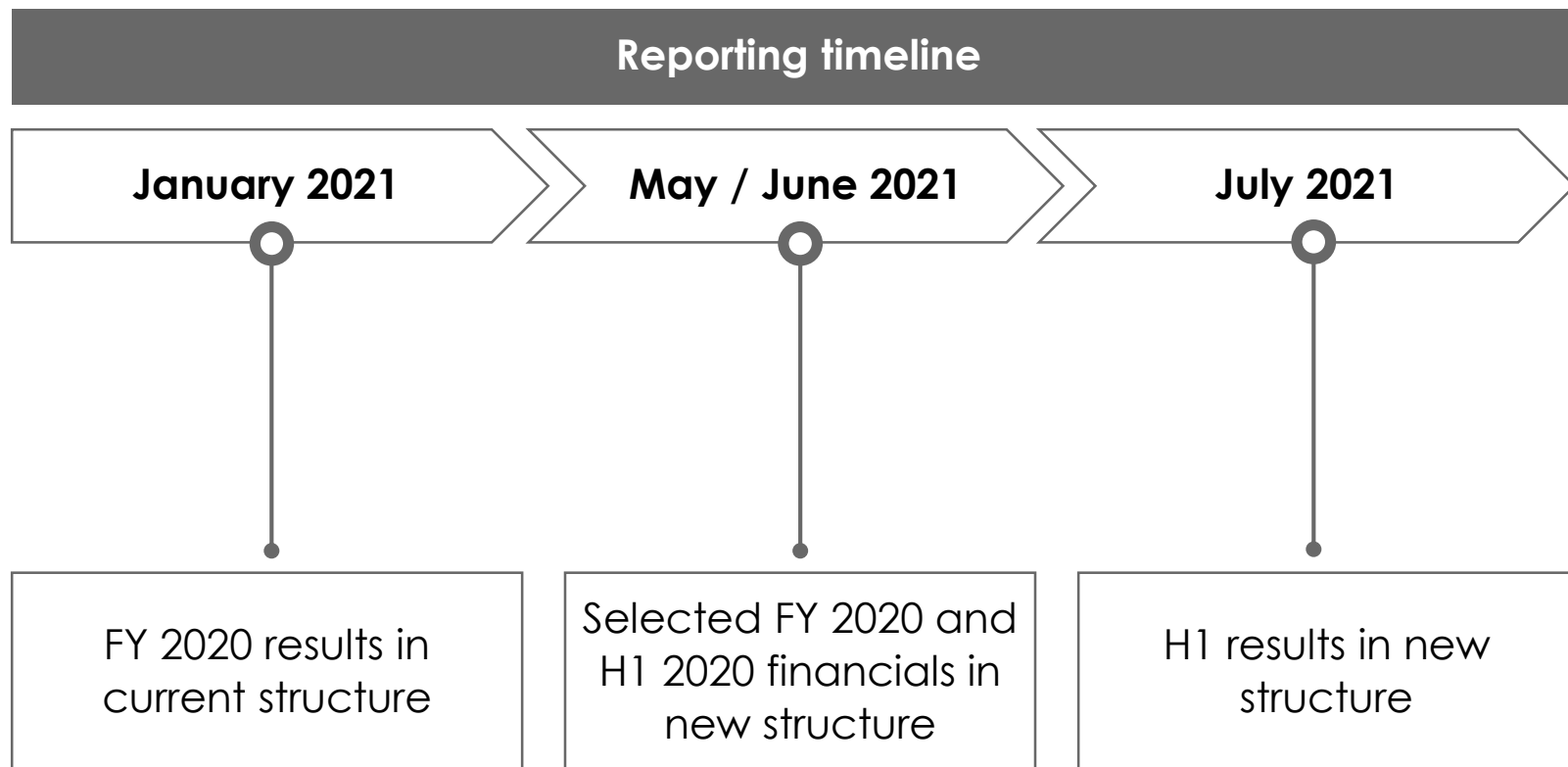
Dividends



Commitment to Strong Investment Grade Rating

New Reporting Structure to be Reflected in H1 2021 Financial Results

New reporting structure timeline



FY 2020 results reported in current organizational structure, LSI as discontinued operations

Update of FY 2020 and H1 2020 Sales, CORE EBITDA, EBITDA and Capex figures in new organizational structure in May / June 2021

H1 2021 results to be reported in new organizational structure (with restated H1 2020 financials)

Complementary Financial Models by Business

Divisional financial models

	CDMO Commercial	CDMO Clinical	Product Business
Revenue profile	Long-term contracts (5-10y in Biologics, 5-7y in SM)	<2y	~1y
Main revenue recognition consideration¹	Batch release	Rendering of services/ batch release	Shipment
Operating leverage	● ● ●	● ● ○	● ● ○
Growth project impact (Opex)	● ● ●	● ● ○	● ○ ○
Capital intensity	● ● ●	● ● ○	● ○ ○
Quarterly results variability			

¹ Other specific revenue recognition criteria may apply

Portfolio of Attractive Businesses

LPBN baseline



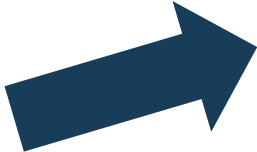

	Capsules & Health Ingredients	Small Molecules	Biologics ¹	Cell & Gene, and Bioscience
Sales Split H1 2020 ²	~25%	~15%	~45%	~10%
Approx. CORE EBITDA H1 2020	~35%	~25%	~35%	Break-even

¹ Excluding Licensing

² Licensing attributable to ~5% of total sales

Attractive Financial Trajectory for all Divisions

3-year projections

	Capsules & Health Ingredients	Small Molecules	Biologics ¹	Cell & Gene, and Bioscience
Sales CAGR 2020 - 2023 (CER)	Low-to-mid single-digit	High-single-digit to Low-double-digit	Low double-digit	Double-digit
CORE EBITDA margin 2023 trajectory ambition				

¹ Excluding Licensing

2023 Financial Guidance

Balance short term margin vs. long-term growth

Double-digit sales growth driven by Biologics, Small Molecules and Cell & Gene Therapy businesses

Improved CORE EBITDA margin despite investments in growth projects

Capex to remain at 2019 level in 2021 and 2022 as investment cycle continues

Double-digit ROIC driven by growth and margin expansion

**Double-digit
Sales Growth**

**~ 33% – 35%
CORE EBITDA
Margin**

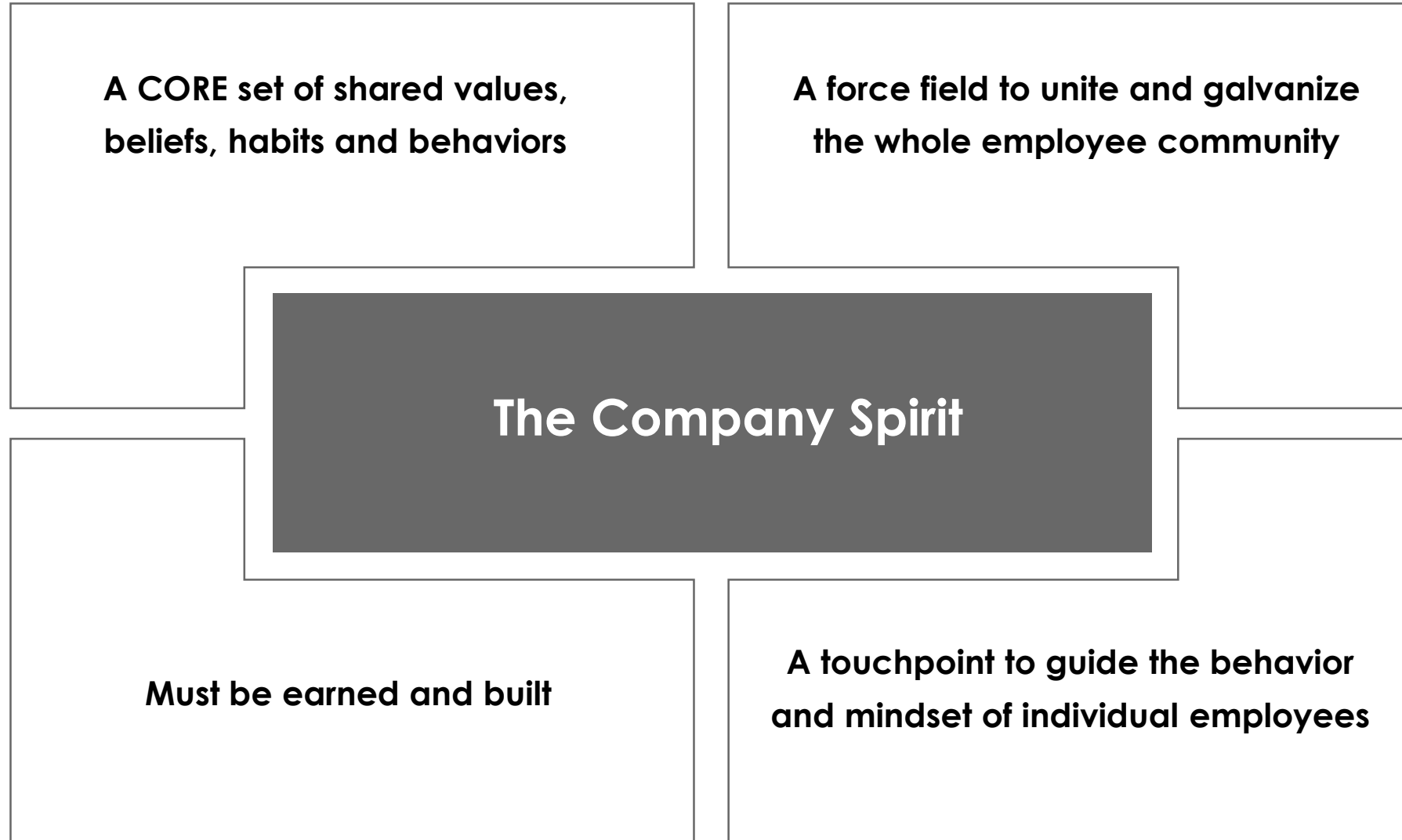
**Double-digit
ROIC**

Company Culture



Aerial view of Independence monument in Mexico City

What Culture Means at Lonza



The Values that Define our Culture

Collaboration	Collaborative based on mutual trust Collective contribution to the whole
Accountability	A focus on performance and results Highly aligned, committed and accountable teams and individuals
Focus	Pragmatic, motivated and conscientious Market and customer-centric business Attentive to developing our best talent
Integrity	High standards of integrity and probity Constructive attitude
Openness	Non-hierarchical management style Encouraging different views and open communication



Urban crowd from above

Building our Culture through Leadership Behaviors

Champion company values

Calm, resilient and consensual approach

Predictable, but responsive to change

Encourage and embrace new ideas and perspectives

Encourage creative and constructive dissidence

Grounded and down-to-earth

Nurture, develop and grow future talent

Conclusion



Lonza

Julier pass road in Switzerland

Our Business Today

Resilience

Robust pipeline across our modalities

Large Pharma is increasingly less likely to invest in production facilities

Small Biotech companies rely on manufacturing partners to deliver path to commercialization

Growth

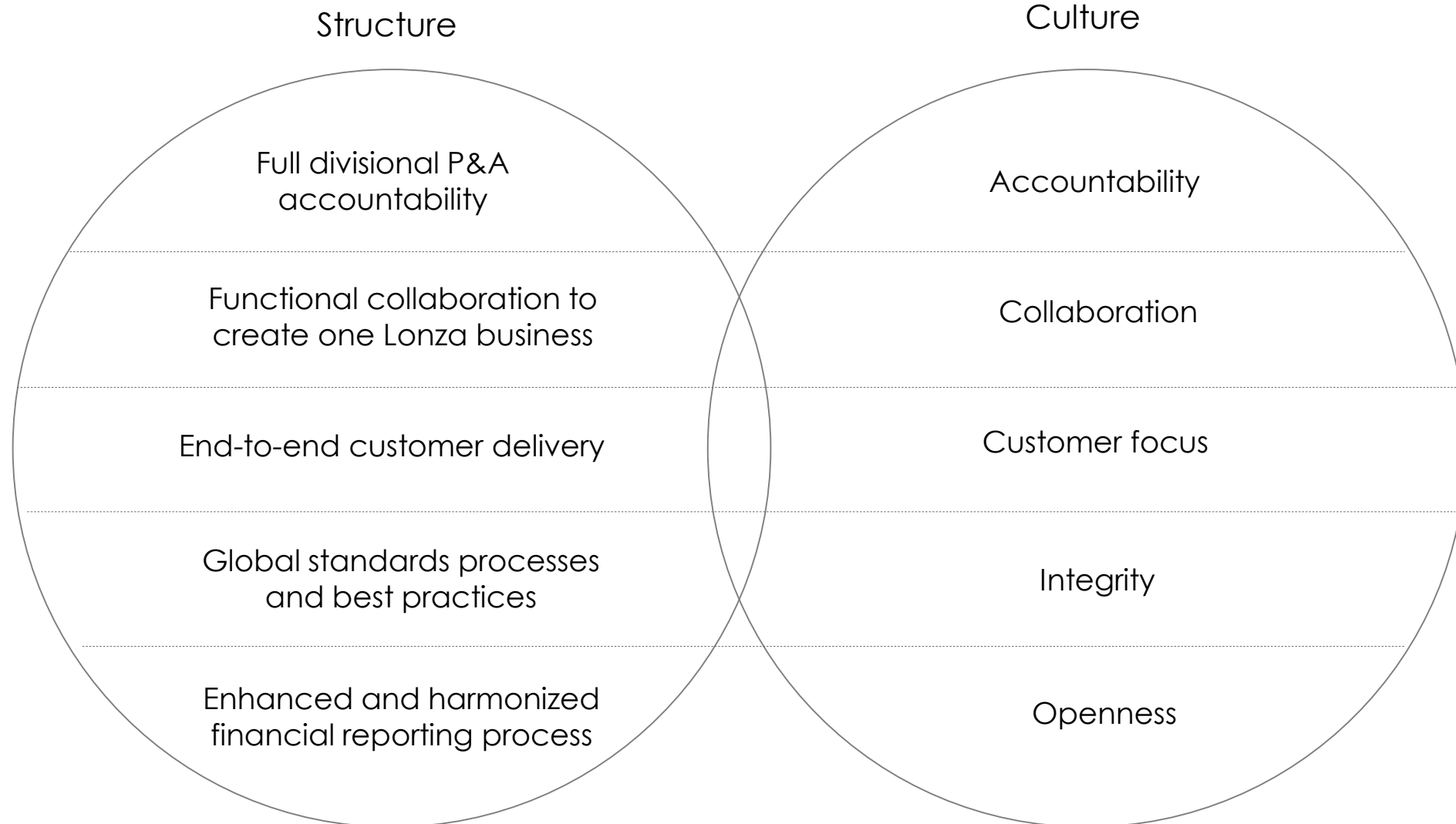
All Divisions show attractive growth levels

Contribution to the value chain – following the molecule from late stage discovery to final drug product

High entry barriers arising from reputation, quality, reliability, complexity and high initial investment costs

The Lonza Business Blueprint

A fully aligned structure and culture



Immediate Priorities

Dedicated
focus on
transformation
and delivery

Smooth and
seamless
leadership
transition

Single
industry focus
and single
business
identity

Q&A



Lonza

People crowd motion through the pedestrian crosswalk