Enabling a Healthier World

Lonza

Annual Report

2020

Estaiada Bridge in Sao Paulo, Brazil

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Road intersection at night in Hong Kong downtown district

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Letter to Stakeholders

Exceptional performance in an extraordinary year

Pierre-Alain Ruffieux
Chief Executive Officer (CEO), Lonza Group

Dear Stakeholders
It is a challenge to summarize in a few words all that we have achieved, and the extraordinary global developments that have redefined our working lives. It would have been a feat simply to have weathered the storm of the COVID-19 pandemic, but our achievements go far above and beyond the obvious and the ordinary. I have shared a snapshot of our endeavors and achievements below.

Financial Performance
We are looking back at another successful year. Lonza (with Specialty Ingredients reported as discontinued operations) achieved CHF 4.5 billion in sales, CHF 1.4 billion in CORE EBITDA, and CHF 1.1 billion in CORE EBIT for the full-year 2020. We delivered on our guidance with 12.0% sales growth in constant currency (7.2% in reported currency).

These strong results reflect the continued positive momentum of the pharma and biotech business. Lonza's Pharma Biotech & Nutrition (LPBN) business achieved 12.2% sales growth in constant currency (7.3% in reported currency) and a 32.1% CORE EBITDA margin. We saw a strong performance across our LPBN businesses, with Biologics remaining a primary driver of growth. We invested around 20% of sales in CAPEX in 2020 to continue to expand the asset footprint supporting our double-digit sales growth and ROIC increase for the future.

Lonza's Specialty Ingredients (LSI)[1] business also reported a strong performance, with 3.4% sales growth alongside an improved CORE EBITDA margin, reported at 20.3%[2].

Alongside this strong performance, we have also worked to establish a stronger cash position, by successfully placing our inaugural Eurobond with a value of EUR 500 million in April. This was further supported by our issuance of a CHF 150 million straight-bond in August. During the uncertainty related to the business impact of the COVID-19 pandemic, we maintained our dialogue with investors at an unscheduled Q1 business update. Alongside this, we provided a more comprehensive overview and appraisal of our new business structure at our October Investor Update. These events were scheduled in addition to our usual reporting processes and events.

Our Contribution through the COVID-19 Pandemic
In a year where the world experienced unprecedented levels of uncertainty, we have shown the collective confidence and resolve to meet unforeseen challenges and grasp unexpected opportunities. Our office-based employees have risen to the personal and professional challenges of home-working, while our lab and manufacturing employees have adapted to maintain operations through new professional practices, including new work shifts and social distancing measures.

Both segments of our business have worked tirelessly in the fight against the COVID-19 pandemic. Our LPBN segment has continued to develop and manufacture a large number of life-saving treatments. These enable our customers to protect their most vulnerable patients, whose needs have never been greater. Meanwhile, the LSI segment has continued to focus on delivering microbial control solutions, which have played a significant role in containing the spread of the virus.

As well as establishing our position as a provider of essential products and services, our colleagues in LPBN have also worked with customers to deliver a direct contribution to controlling the COVID-19 pandemic. Our partnership with Moderna on the COVID-19 Vaccine has placed us in the global spotlight as a company at the forefront of efforts to control the pandemic. Alongside this critical program, we are also working to support a broad range of customers developing treatments and therapies related to COVID-19, including AstraZeneca, Altimmune and Humanigen. Our colleagues in LSI have been similarly industrious in the efforts to control the spread of the virus, with 16 Lonza disinfectant ingredients securing EPA approval for hard surface use against COVID-19.

Redefining our Structure and Focus
While managing the unprecedented uncertainties in our operating environment, we have also worked to redefine and harmonize our business and structure. At a Group level, we have completed the LSI carve-out and made the decision to commence a divestment process. In February 2021, we entered into a definitive agreement with Bain Capital and Cinven to acquire the LSI business and operations for an enterprise value of CHF 4.2 billion. The transaction is anticipated to close in H2 2021. Bain Capital and Cinven have shown they understand the value of the experience and expertise of our Specialty Ingredients employees. They presented the most compelling industrial strategy and vision for the business, and are also keen to prioritize R&D and innovation, as well as to invest in existing facilities to unlock the potential of the business.

As the divestment of LSI continues to gather momentum, we have redoubled our focus on our LPBN business, which will become the

[1] Specialty Ingredients Business (excluding Corporate/carve-out and divestiture costs directly attributable to LSI)
[2] Sales and CORE EBITDA margin in constant exchange rate (CER)

future Lonza. We have worked to harmonize the business structure into four clear divisions and five functions. Financial reporting will be updated to include divisional performance in the future. Alongside this, effective 1 April 2021, three new members (Claude Dartiguelongue, Gordon Bates and Jean-Christophe Hyvert) have been appointed to Lonza's Executive Committee to reflect the new structure of the business and ensure divisional representation. These initiatives will help us to sharpen our focus as we progress towards a new identity as a single business, operating as a preferred global partner to the healthcare industry.

Accelerating Growth in LPBN

Our ambitious strategic growth plans have also continued to maintain momentum with a number of new investments approved, and a wide range of new facilities either ramping up or coming on line. We have commenced landmark work in developing mRNA facilities in Portsmouth (USA) and Visp (CH). We have expanded our Drug Product Services activity and are ramping up a Fill and Finish site in Stein (CH). We have expanded our capsule manufacturing capacity by 10 billion capsules annually and opened a new facility for antibody-drug conjugates payload manufacturing in Visp. We expanded our highly potent drug product development and manufacturing capabilities in Tampa (USA), as well as our particle engineering and drug product capabilities in Bend (USA). We qualified the Cocoon® Platform towards clinical and commercial readiness and saw the first patient treated with an autologous CAR-T therapy, manufactured using the Cocoon® Platform. Inevitably this list only provides a snapshot of activities, and many other important developments and expansion plans are in development or on the horizon.

Nurturing our Culture and Leadership

We have further enhanced our approach to Diversity and Inclusion by establishing a Global Taskforce. The Taskforce has already taken significant steps towards creating an ambassador community across our global site network, to represent the global group and address local issues. In the coming year, this body will work to ensure that we constructively challenge ourselves to tackle emerging issues, such as unconscious bias and hidden diversity. It will help us to ensure that all differences of view, characteristic, perspective, preference and belief are fully endorsed, embraced and valued by our business.

To support and guide us as we work to embed improved Diversity and Inclusion practices, we have been pleased to welcome a new group of female leaders into the business at all levels. Claude Dartiguelongue joined as Head of Capsules & Health Ingredients in January, Caroline Barth joined as Group CHRO in May, and Antje Gerber was appointed to the Head of LSI in July. All these leaders have already proved to be huge assets to our business, by bringing fresh perspectives and helping us to look critically at our existing practices and assumptions. From a cultural perspective, we have worked to redefine a set of cultural values. These will help us guide and galvanize our employee behaviors, as well as enabling company leaders to adopt and exhibit role model behaviors.

Our Commitment to Sustainability

We remain committed to achieving industry best practice in sustainability. Our activities to deliver a sustainable business throughout 2020 are detailed in our designated Sustainability report, which forms a companion document to this 2020 Annual Report.

We recognize the importance of sustainability as an essential component of our long-term strategy (see more on page 21). This is an ethical imperative for our own business. It is also important to ensure we are aligned with the expectations of our customers, investors and employees.

As a company with 123 years of industrial history, in recent years we have actively tackled a number of legacy issues and successfully implemented solutions. During 2020 we informed the public of nitrous oxide emissions caused by niacin production at our Visp (CH) site. While these emissions are not subject to regulatory requirements, we have invested in a catalyst, which will reduce these emissions by up to 98%. This will be operational from 2021.

Outlook

As we look towards 2021, we are cautiously optimistic about our performance. We have proved to be robust and resilient to challenges during 2020 and we remain positive that we will continue to manage any new challenges in the months to come. In this context, our 2021 Outlook anticipates low double-digit CER sales growth, driven by sustained strong momentum across our businesses. We expect this to translate into a CORE EBITDA margin improvement that aligns to our 2023 Mid-Term Guidance trajectory.

Looking to the longer term, we reconfirm our 2023 Mid-Term Guidance at double-digit sales growth per year driven by Biologics, Small Molecules and Cell & Gene Technologies. We anticipate a CORE EBITDA margin of around 33% to 35%, accompanied by double-digit ROIC driven by growth and margin expansion.

Thanks to our Colleagues and Leaders

On behalf of the business, I would like to take this chance to thank Albert Baehny and his leadership team for their tireless and fastidious work across the course of the year. In his role as CEO *ad interim* until November 2020, Albert has galvanized and led the business through a period of unprecedented external uncertainty alongside a time of extensive internal transformation. He has handed over a business with a simplified structural design that is ready and eager to capitalize on the opportunities of the coming year.

More widely, I would like to extend my thanks to all our stakeholders, our customers, shareholders and suppliers, who have supported the Lonza business in 2020. Most importantly, I would like to take a moment to recognize the exceptional contributions of our global community of more than 16,000 employees. Their resolve, determination and fortitude has allowed us to grow and flourish during a year of unprecedented disruption and doubt. Their consistent and concerted efforts have enabled us to achieve our financial targets for the Group, while setting a foundation to deliver long-term advantage. I am proud and grateful for their achievements and look forward to working with them on the next stage of our journey in 2021.

Pierre-Alain Ruffieux
Chief Executive Officer (CEO)

2020 Highlights

January

We started 2020 by announcing strong full-year 2019 results.

March

We strengthened our Executive Committee with the appointment of new Chief Human Resources Officer (CHRO) Caroline Barth, who joined Lonza in May.

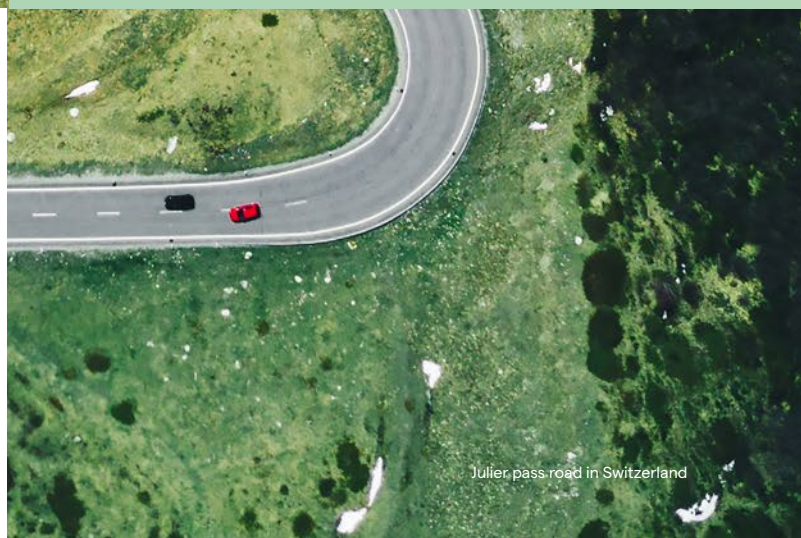
April

We reported a solid Q1 financial performance, despite a challenging environment early on in the pandemic, during an unscheduled investor update.

We successfully placed our inaugural Eurobond with a value of EUR 500 million.

May

We entered into a landmark ten-year collaboration agreement with Moderna Inc. to manufacture the drug substance for Moderna's COVID-19 Vaccine, alongside other mRNA-based collaboration projects from Moderna's innovation pipeline.



Julier pass road in Switzerland

July

We expanded our global particle engineering network and added new dedicated development capacity for spray dry processing.

We reported strong operational performance maintained during COVID-19, with Pharma Biotech business driving group sales growth and margin improvement in H1 2020. In addition, the Board of Directors reviewed strategic options for the long-term future of the LSI business and decided to divest the LSI segment via a sale process.

We announced that our Ibex® Dedicate facility will support the commercial manufacture of Kodiak's KSI-301 – an Antibody Biopolymer Conjugate (ABC) for retinal diseases.

August

We expanded our microbial manufacturing facility in Visp (CH) and extended the long-term partnership with Servier for L-asparaginase API manufacturing.

September

We qualified the Cocoon® Platform towards clinical and commercial readiness and treated the first patient at Sheba Medical Center (IL) with an autologous CAR-T therapy, manufactured using the Cocoon® Platform.

October

We provided details of our new structural design, cultural values and external reporting during Investor Update event.

We announced an expansion of our capsule manufacturing capacity.

We announced an agreement to manufacture AstraZeneca's COVID-19 long-acting antibody combination.

Our Diversity and Inclusion global taskforce lead team was formed.

November

We welcomed new Group Chief Executive Officer (CEO) Pierre-Alain Ruffieux.

We announced an expansion of our highly potent drug product development and manufacturing capabilities in Tampa (USA), as well as our particle engineering and drug product capabilities in Bend (USA).

December

We announced the construction of two new customer-dedicated conjugation suites for the commercialization of ADC in Ibex® Dedicate, Visp (CH).

Annual Report 2020

Lonza at a Glance

1,095 m

CORE EBIT in CHF[1]

4,508 m

Sales in CHF[1]

24.3

CORE EBIT margin in %[1]

12.0%

Sales Growth in %[1,2]

1,406 m

CORE EBITDA in CHF[1]

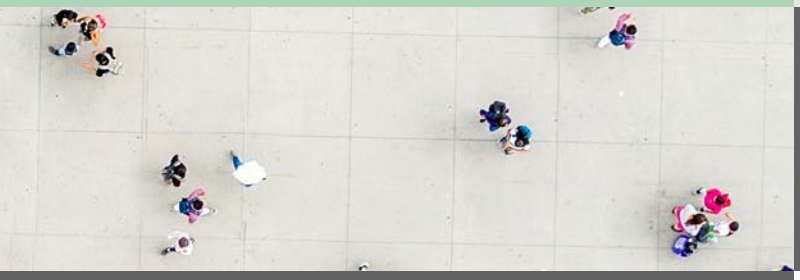
31.2

CORE EBITDA margin in %[1]

High angle view of people on street

9.6

ROIC in %[1]



5,278

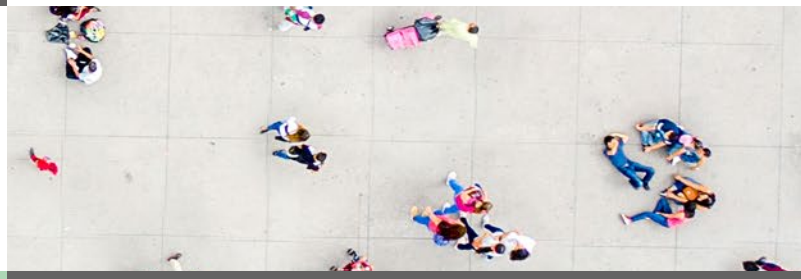
Trademark filings[4]

13,856

Employees (Full-Time Equivalent)[1, 3]

569

Active patent families[5]



>100

Nationalities

>1,065

Small[7] and large[8] molecules

792

Brands[6]

[1] Continuing Business, excluding the Specialty Ingredients business that was reclassified to discontinued operations
[2] Sales in constant exchange rate; in actual exchange rate: 7.2%
[3] Employees including the Specialty Ingredients business: 16,540
[4] Trademark filings including the Specialty Ingredients business; excluding: 2,360
[5] Active patent families including the Specialty Ingredients business; excluding: 406
[6] Brands including the Specialty Ingredients business; excluding: 270
[7] Including active pharmaceutical ingredients (API), highly potent API (HPAPI), dosage form and delivery systems and particle engineering
[8] Including mammalian, microbial, cell & gene therapy products and bioconjugates (applied protein services and drug product services are included for pre-clinical and clinical molecules only)

Financial Highlights [1]

We are looking back at another successful year. Lonza (with Specialty Ingredients reported as discontinued operations) achieved CHF 4.5 billion in sales, CHF 1.4 billion in CORE EBITDA, and CHF 1.1 billion in CORE EBIT for the full-year 2020. These strong results reflect the continued positive momentum of the pharma and biotech business. We delivered on our guidance with 12.0% sales growth in constant currency (7.2% in reported currency). Our CORE EBITDA margin was 31.2%, resulting in a small margin decline of 50 bps which was anticipated and reflects the investments behind our growth initiatives.

The Swiss Franc appreciation against all our major currencies had a major impact on reported sales and led to a significant difference between the sales growth in constant currency and reported currency. However, balance sheet hedges and natural hedges mitigated the FX impact on margins.

Two other important KPIs – earnings per share (EPS) and return on invested capital (ROIC) – have seen an increase in 2020. We are pleased to have achieved a strong 6.9% year on year increase of diluted CORE EPS (CHF 12.19 for 2020) and a 9.6% ROIC, 40 bps ahead of the previous year. These strong results reflect our positive profit performance and an exceptionally low 8.8% tax rate – 1.1 pts below the prior year.

The tax rate was positively impacted by a combination of country profit mix and favorable one-time effects, including the impact of the adoption of Swiss tax reform, fully effective in 2020. We will now guide a tax rate for Lonza, excluding the Specialty Ingredients segment, of around 16% – 18% going forward.

In 2020, we increased the level of capital expenditure (CAPEX) investments to 19.7% of sales. Around 70% of our CAPEX was deployed on growth projects across businesses and geographies to drive long-term business growth. Examples include clinical mammalian capacity in Guangzhou (CN), mid-scale mammalian capacity in Portsmouth (USA), and different mammalian clinical and commercial modular facilities as part of our Ibex® Solutions in Visp (CH). All of these investments continue to build our enterprise value, as they carry attractive rates of return and ROIC levels of more than 30% after operations ramp-up. In addition, many of these investments are made against already partially or fully contracted commercial programs, leading to lower investment risk.

We have achieved an operational free cash flow before acquisitions of CHF 504 million in full-year 2020, resulting in a 36% increase versus the prior year, despite the higher levels of CAPEX investment. This exceptional result reflects the strong EBITDA improvement, continued tight net working capital management – which remained at around 16% of sales – and increased customer funding for some of the investment initiatives. With the positive cash flow result and the higher CORE EBITDA, our Net Debt to CORE EBITDA ratio decreased to 1.63 times[2] by the end of 2020. We remain fully committed to maintaining our investment-grade rating, which is now more strongly underpinned by the favorable net leverage metrics.

[1] All figures refer to Continuing Business, excluding the Specialty Ingredients business that was reclassified to discontinued operations
[2] Based on Lonza Group figures, including the discontinued operations

Outlook 2021 and Mid-Term Guidance 2023

Lonza provides the following Outlook for Full-Year 2021:

- Low double-digit CER sales growth
- CORE EBITDA margin improvement in-line with Mid-Term Guidance

Lonza confirms its Mid-Term Guidance 2023:

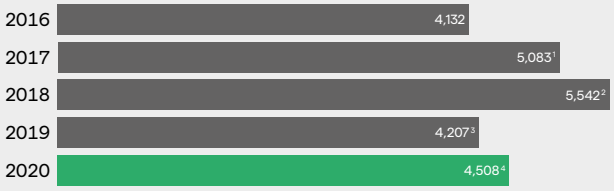
- Double-digit sales growth per year
- CORE EBITDA Margin of around 33%–35%
- Double-digit ROIC

Outlook 2021 and Mid-Term Guidance 2023 are based on the present business composition, existing visibility and constant exchange rates. While the businesses have shown a strong levels of resilience during the pandemic, all forecasts should continue to be treated with some caution at this time of global uncertainty arising from the COVID-19 pandemic.

International port in Hong Kong

Historical Progression

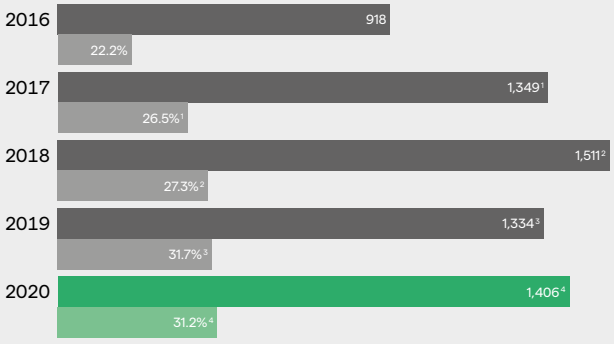
Sales
Million CHF



ROIC
in %

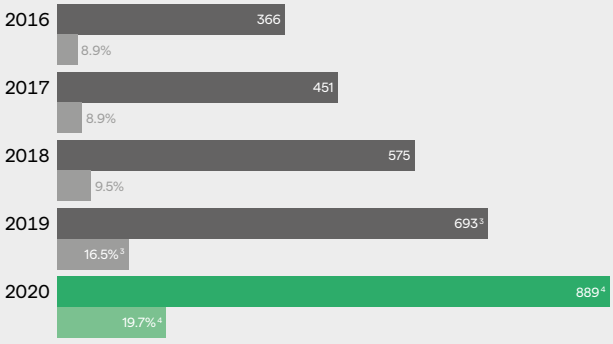
CORE EBITDA
Million CHF

CORE EBITDA Margin
In %



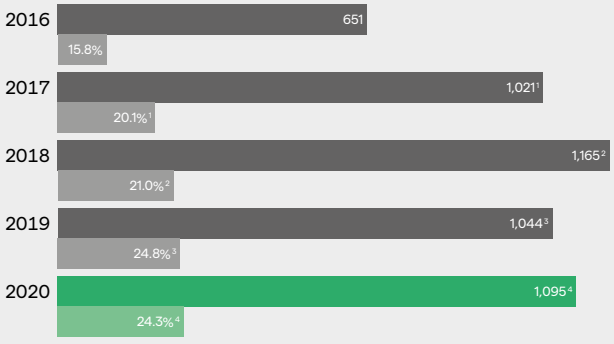
Capital Expenditures (CAPEX)
Million CHF

CAPEX/Sales
In %

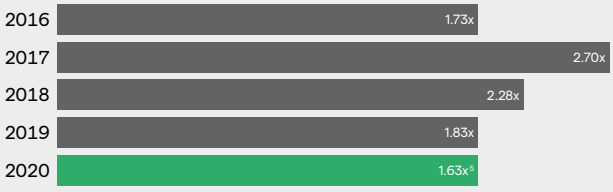


CORE EBIT
Million CHF

CORE EBIT Margin
In %



Net Debt/CORE EBITDA
Ratio



[1] Reported pro-forma 2017 financial results (restated for IFRS 15) include Capsugel full-year 2017 financial result
[2] Restated 2018 financial results reflect the classification of the Water Care business as discontinued operations
[3] Restated 2019 financial results reflect the classification of the Specialty Ingredients business as discontinued operations
[4] Continuing Business, excluding the Specialty Ingredients business that was reclassified to discontinued operations
[5] Based on Lonza Group figures, including discontinued operations

Personal Perspective

Rodolfo J. Savitzky
Chief Finance Officer (CFO)

In a uniquely challenging year, our business has delivered a strong financial performance while effectively executing on key growth projects. By completing the carve-out and commencing the sale of LSI, we were able to focus on investing in our Pharma, Biotech and Nutrition portfolio while optimizing our productivity and cash management.

We continued to keep the bar high for the return on our growth capex initiatives. Once sales for these new assets ramp-up, the expected ROIC is typically more than 30%, helping us achieve our mid-term target of double-digit ROIC. Our cost and cash optimization programs have also helped us to partially fund these investments.

In the uncertain market conditions arising from the COVID-19 pandemic, we have also worked to safeguard our liquidity through increased committed bank facilities and the extension of debt maturity. We also undertook the refinancing of CHF 1 billion, which included a EUR 500 million inaugural Eurobond issuance, the first ever launched with a 100% virtual communication to our investor community.

We remain confident that we can maintain our strong momentum in the future. This confidence is reflected in our revised Mid-Term Guidance for 2023 and in our more granular external reporting, which will be updated to include divisional performance in the future. In order to achieve our Mid-Term Guidance, we will continue investing ambitiously in opportunities to support future growth while optimizing performance across the business.

Road in between tulip fields as seen from above, Netherlands

Investor Information

Shares of Lonza Group Ltd are listed on the SIX Swiss Exchange and Swiss Market Index (SMI). We also maintain a secondary listing on the SGX Singapore Exchange. The nominal value of the Lonza Group Ltd share is CHF 1. Our share price closed at the end of 2020 at CHF 568.8 per share, which represents an increase of 61.56% in 2020.

The free float in Lonza Group Ltd registered shares reached 99.75% at year-end, and the average daily trade volume was 368,854 shares in 2020.

Listing and Security Information

Stock Exchange Listing / Trading:
SIX Swiss Exchange
SGX Singapore Exchange

Common Stock Symbols:
Bloomberg LONN SW
Reuters LONN.S
Six Swiss Exchange LONN
SGX Singapore Exchange O6Z

Security Number:
Valor 001384101
ISIN CH0013841017

Shareholdings

According to disclosure notifications filed with Lonza, the following shareholders held more than 3% of Lonza's share capital as of 31 December 2020:

Principal Shareholder:
BlackRock, Inc., New York, NY (USA) 9.67%

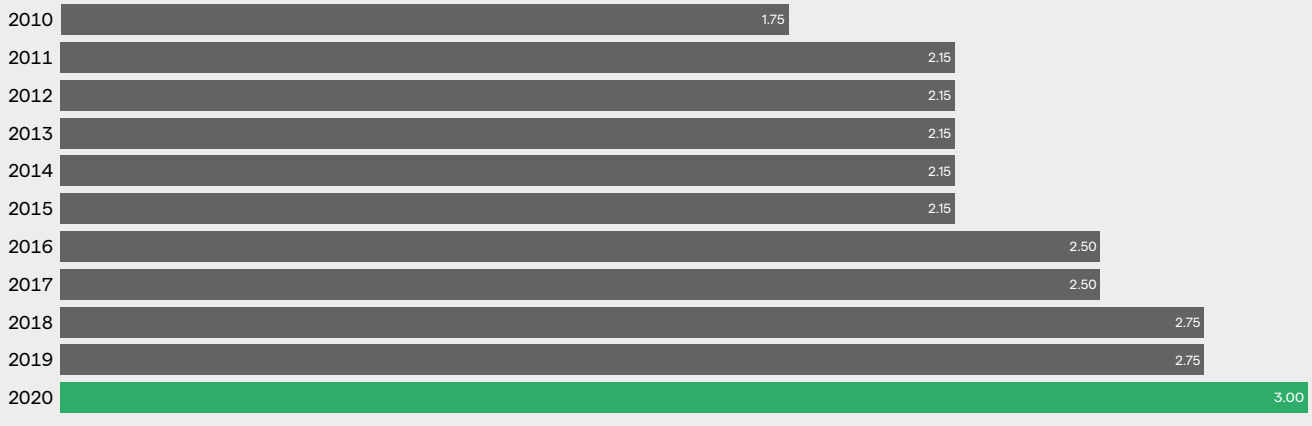
We know of no other shareholder(s) that owned more than 3% of our share capital as of 31 December 2020. To the best of our knowledge, the shareholders mentioned above are not linked by any shareholders' agreement or similar arrangement with respect to their shareholdings in Lonza or the exercise of shareholders' rights. For a full review of the individual disclosure notifications made during 2020, please refer to the SIX Swiss Exchange disclosure platform.

More information for our shareholders and the capital market is available on Lonza's Investor Relations webpage.

Dividend

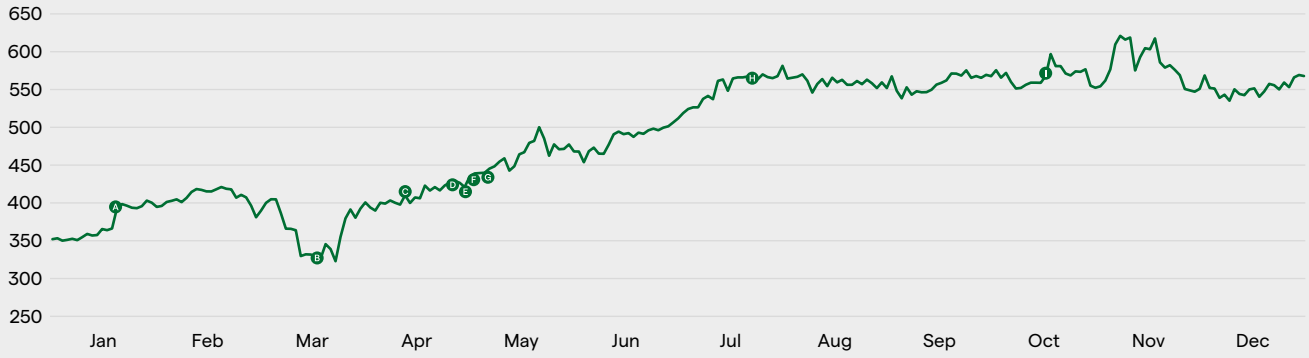
Lonza's Board of Directors is proposing a dividend increase for shareholders of CHF 0.25 per share to CHF 3.00 per share. The proposal represents a pay-out of 25.8% of 2020 reported net profit. Subject to approval at the upcoming Annual General Meeting (AGM) on 6 May 2021, 50% of the dividend of CHF 3.00 per share will be paid out of the capital contribution reserve and will therefore be free from Swiss withholding tax.

Dividend Payment History
In CHF/Share



Lonza Share Price Development 2020

In CHF/Share



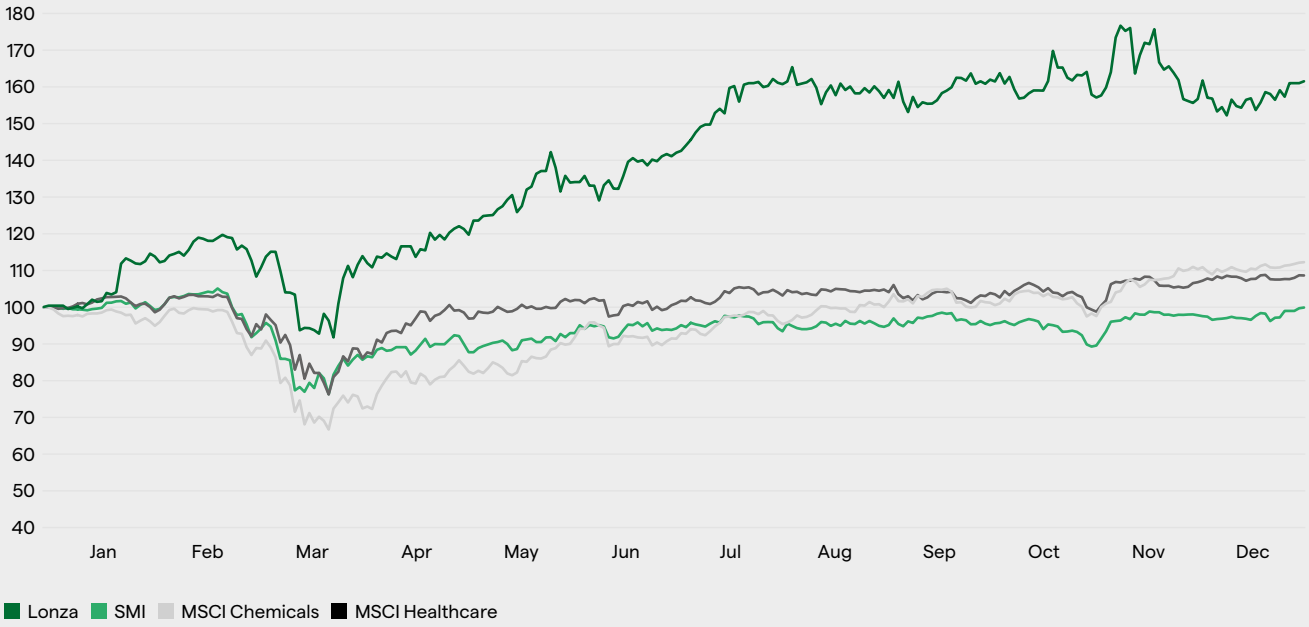
A Full-Year Results 2019	21.01.2020
B Annual Report 2019	17.03.2020
C Q1 Review 2020	17.04.2020
D Annual General Meeting	28.04.2020
E Ex-Dividend Date	30.04.2020
F Record-Dividend Date	04.05.2020
G Dividend-Payment Date	05.05.2020
H Half-Year Results 2020	24.07.2020
I Investor Update	15.10.2020

Share Price High	CHF 622.2
Share Price Low	CHF 322.8
Share Price Closing	CHF 568.8

Source: Bloomberg

Lonza Share Price Development vs. Swiss Market Index (SMI), MSCI Chemicals Index and MSCI Healthcare Index

Rebased to 100



Source: Bloomberg

Upcoming Financial Events

Date	Time	Event
22.04.2021	05:00PM CEST	Closing of the Share Register
06.05.2021	10:00AM CEST	Annual General Meeting for the Financial Year 2020
10.05.2021		Ex-Dividend Date
11.05.2021		Record-Dividend Date
12.05.2021		Dividend-Payment Date
23.07.2021		Half-Year Results 2021
26.01.2022		Full-Year Results 2021

Ten-Year Overview of Major Highlights

Million CHF	2011	2012	2013	2014	2015	2016	2017	2018[1]	2019[2]	2020
Sales	2,692	3,925	3,584	3,640	3,803	4,132	4,548	5,542	4,207	4,508
CORE EBITDA	n.a.	663	711	743	793	918	1,196	1,511	1,334	1,406
Margin in %	n.a.	16.9	19.8	20.4	20.9	22.2	26.5	27.3	31.7	31.2
EBITDA	537	645	647	737	780	848	1,084	1,429	1,264	1,378
Margin in %	19.9	16.4	18.1	20.2	20.5	20.5	23.8	25.8	30.0	30.6
CORE EBIT	326	398	436	475	524	651	904	1,165	1,044	1,095
Margin in %	12.1	10.1	12.2	13.0	13.8	15.8	20.1	21.0	24.8	24.3
Result from operating activities (EBIT)	261	340	253	423	428	486	673	842	825	901
Margin in %	9.7	8.7	7.1	11.6	11.3	11.8	14.8	15.2	19.6	20.0
CORE RONOA in %	n.a.	8.8	12.3	14.3	16.4	21.5	30.0	31.4	32.1	28.9
RONOA in %[4]	6.9	7.5	5.9	10.3	10.8	12.7	9.8	12.1	13.4	14.0
ROIC in %[3,4]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	8.4	8.0	9.2	9.6
Net Operating Assets (NOA)[4]	4,205	3,990	3,916	4,094	3,739	3,739	6,852	6,795	6,166	6,411
CORE EPS (diluted) in CHF	4.34	4.54	4.97	6.76	6.76	8.38	10.78	11.98	11.40	12.19
EPS (diluted) in CHF	2.97	3.35	1.67	4.54	5.26	5.69	9.70	0.00	8.68	9.77
Operational free cash flow (bef. acquisitions)	127	510	519	476	693	638	658	884	371	504
Net debt[5]	2,647	2,301	2,103	2,011	1,660	1,584	3,762	3,534	2,961	2,813
Net debt /CORE EBITDA[5]	n.a.	3.47	2.96	2.70	2.09	1.73	2.70	2.28	1.83	1.63
Number of employees (Full-Time Equivalent)[5]	11,001	10,789	9,935	9,809	9,829	10,130	14,618	15,375	15,468	16,540

[1] Lonza continuing operations, excluding the Water Care business classified as discontinued operations
[2] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)
[3] Introduced in 2018, comparable data for 2017 was provided
[4] Refer to section "Alternative Performance Measures" of the Financial Report for more details on the calculation methodology
[5] "Net debt", "Net debt/CORE EBITDA" and "Number of employees (Full-Time Equivalent)" reflect total group including discontinued operations

Our Strategic Focus

Throughout our 123-year history, the Lonza business strategy has been to respond dynamically to the demands and opportunities of the external environment. This has been a key factor in our growth and success. 2020 provided a unique operating environment, as the business world absorbed and learned to manage the impacts of the COVID-19 pandemic. True to our heritage, we remained agile to these developments by maintaining a strategic focus on internal evolution and external adaptation.

Internally, the decision to divest the Lonza Specialty Ingredients (LSI) segment provided an opportunity for us to refocus on our objective to consolidate our position as a leading partner to the healthcare industry. Concurrently, we remained responsive to the demands of the pandemic, and the developments of the industry. This strategic approach has enabled us to deliver a strong set of financial results while ensuring that the business is set up for long-term success. Importantly, it has also allowed us to make an active and decisive contribution to controlling the pandemic.

Structural Design

The decision to divest the LSI segment has allowed us to focus our energy and attention as a pure-play partner to the healthcare industry. In this context, we have redesigned the Lonza company structure to meet customer needs and expectations, as well as delivering optimal levels of productivity and efficiency. From 1 January 2021, our businesses have been placed into four divisions, each of which are set out below. From 2021, we will report the financial performance for each division.

Small Molecules

- Active Pharmaceutical Ingredients
- Drug Product Formulation

Biologics

- Mammalian
- Microbial
- Licensing
- Bioconjugates
- Parenteral Drug Product Services
- mRNA

Cell & Gene

- Cell & Gene Technologies
- Personalized Medicines
- Bioscience

Capsules & Health Ingredients

- Capsules
- Health Ingredients

Business Performance

In the context of the COVID-19 pandemic, we have redoubled our focus on ensuring business continuity and maintaining resilience. We have worked to strengthen our supply chain and increase our free cash flows, while implementing new safety measures to ensure that employees can still safely attend our manufacturing plants and laboratories. We have been impressed by our people's resolve, dedication and energy throughout the pandemic, as they have adapted to their new working conditions.

To further improve margins during a time of high CAPEX investment, we have redoubled our efforts to deliver lean operations, while maintaining our focus on quality. Although speed has always been an important consideration for our customers, it has become a critical necessity in the context of the COVID-19 pandemic. Our agreement to manufacture the drug substance for Moderna's COVID-19 Vaccine progressed from contract negotiations to production in eight months at our site in Visp (CH), and even more rapidly in Portsmouth (USA). The pre-built capacity provided by our Ibex® Solutions offering has been instrumental in accelerating delivery timelines, and has provided advantages to our customer's business, as well as wider societal benefits.

Innovation

We understand that innovation provides a point of differentiation for our business. We drive innovation with new manufacturing processes, as demonstrated by our work to deliver the mRNA platform in the Moderna COVID-19 Vaccine drug substance. We are also working on process innovation by increasing automation to streamline human intervention. This can be seen in our Cocoon® Platform, which improves efficiency in cell therapy manufacturing by providing an automated, closed production platform.

Our approach to innovation further extends across the entire breadth of our divisional offerings from small molecules to biologics. Our Ibex® Solutions offering provides pre-built capacity that can deliver drug product for clinical trials, and expedite clinical and commercial production. We are also extending our capabilities in meeting our customers' complex manufacturing needs, across a wide variety of products and services.

Sustainability

Sustainability is a strategic priority for our business. We have an ethical responsibility to protect the environment, promote diversity and invest in our local communities. It is also an increasing priority for our customers, investors and employees.

We have an established track record in delivering improved levels of environmental stewardship. We are reducing our energy consumption and carbon footprint, while refocusing on renewable energy resources. We are also continuing to decrease our industrial water intensity.

Alongside these important measures, we are taking steps to become a more inclusive and purpose-led organization. In 2020, we established a global Diversity and Inclusion Taskforce to ensure that we provide a welcoming environment in which colleagues are valued for their differences of characteristic, preference, perspective and belief.

We have also worked on multiple community investment projects across the locations and markets in which we operate. Among other projects, in response to the COVID-19 pandemic, we provided disinfectant solutions and personal protective equipment to hospitals in Switzerland and the US, while supporting critical hygiene projects in India.

Long-term Focus

All four of our business divisions operate in growing markets, and our long-term demand forecasts have left us confident to make significant and sustained investments in capacity expansion. We plan to maintain existing levels of CAPEX expenditure for the next two years, to ensure that we fully capitalize on market growth opportunities. In the short term, we are working to improve margins by managing our OPEX, when facilities and operations come online and commence ramp-up. Looking to the longer term, these investments are set to deliver sustained growth while differentiating the scope and scale of our offerings.

Our Approach to Sustainability

We are dedicated to providing the highest quality products and services to our customers, while minimizing our impact on the environment, striving for energy and resource efficiency and helping to improve quality of life.

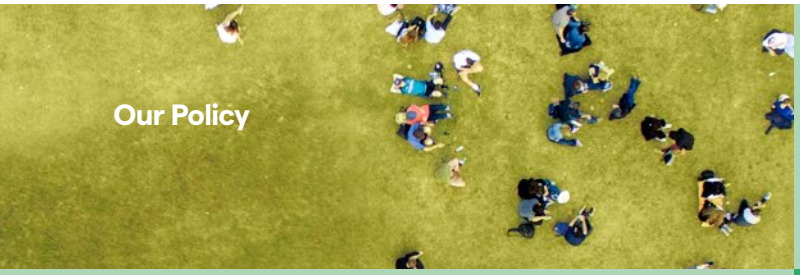
As part of this commitment, we work to ensure transparency by reporting in line with the Global Reporting Initiative (GRI) Standards. These represent the industry standard for reporting on economic, environmental and social indicators. The Lonza Sustainability Report 2020 focuses on the topics most relevant to our business, as identified in our 2018 materiality assessment.

Material Topics and Sustainable Development Goals

In 2018, we performed a materiality assessment with the involvement of more than 100 stakeholders to prioritize our initiatives and activities that best support sustainable development. A total of 16 topics were identified as the most relevant for us globally, reflecting the sustainability benefits and impacts of our operations, products and services along our value chain.

The Sustainability Report 2020 provides more detail on each topic and outlines our management approach and performance results.

In addition to the materiality topics, we also recognize the importance and relevance of the UN Sustainable Development Goals (SDGs). The goals contain a broad range of sustainable development themes, including alleviating poverty and hunger, improving health and education, reducing inequalities, promoting responsible consumption, combatting climate change and protecting natural resources. There is a global ambition to achieve these interconnected goals by 2030.



Our Policy

Our Environment

We improve our environmental footprint by continually reducing energy, water and material demand.

Compliance and Integrity

We ensure that regulatory compliance, integrity and ethical conduct are the foundations in every place we operate.

Vision ZERO

We continually improve our systems and aspire to ZERO incidents, injuries or emissions.

Our People

We develop our employees by helping them grow. We provide safe workplaces, care for employees' well-being and foster their involvement and participation.

Value for Society

We create value for society by delivering science-based solutions to develop the medicines and consumer products of tomorrow. We engage in the communities where we operate.

Central Park, New York

We are committed to contributing to the realization of these goals. From the 17 SDGs, we have identified the eight that we consider the most relevant and pressing for our own industry, operations and sustainability focal areas.

We contribute to the SDGs through our crop protection solutions, which improve crop yields and food quality. Similarly, our nutritional supplements and our products, services and cutting-edge technologies help save, extend and enhance lives. Our company is an equal opportunity employer, empowering employees and investing to improve innovation and resource efficiency. We have also established partnerships and sponsoring programs for research, education and basic healthcare.

UN Sustainable Development Goals (SDGs)

Material Topics for Lonza

Environmental

- Energy Conservation and Efficiency
- GHG Management
- Waste and Recycling
- Environmental Compliance
- Innovation

Economic

- Economic Performance
- Anti–Corruption
- Quality and Reliability
- Customer Satisfaction

Social

- Occupational Health and Safety
- Non–Discrimination
- Protection of Human Rights
- Customer Health and Safety
- Socioeconomic Compliance
- Talent Management

Safety and Sustainability Targets

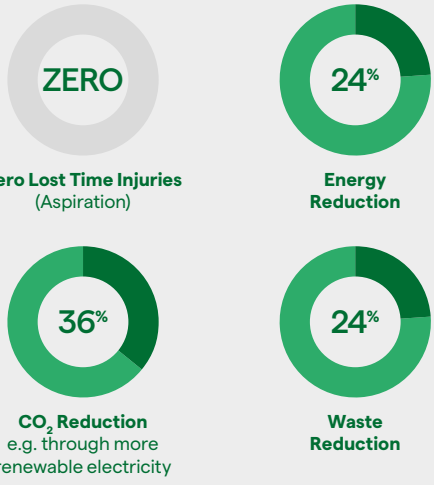
Our long-term goal is to improve our sustainability performance and reduce our environmental footprint. Using 2018 as the baseline, we have defined the targets from 2020 to 2030 (see the table below). We are working to achieve a greenhouse gas reduction of more than 50% compared with our 2010 carbon footprint intensity, in line with the Paris Agreement timeline.

Accidental emissions or leakages are unintended occurrences and are reported when observed. At one production plant at our Visp (CH) site, an unintended release of nitrous oxide emissions (N_2O) was detected, which we addressed as leakage in our 2019 Sustainability Report. The site has developed an action plan together with the relevant authorities. It includes the installation of a new state-of-the-art exhaust gas treatment process to mitigate the emissions, based on a selective catalytical process. The installation will be approximately 18 meters high with an area of 95 m^2; construction began as soon as the permits were granted by the authorities. With this treatment plant, the N_2O emissions will be largely eliminated. It is estimated that it will be in operation by the end of 2021.

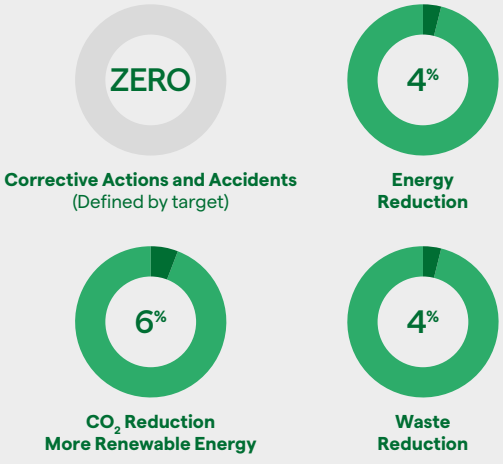
Given the nature of the N_2O emission and the measures undertaken to reduce it in the next two years, we will continue to track our 2019 to 2030 targets using the same baseline and targets as defined in 2018. In parallel, we will track and provide updates on the intensity of the emissions and on the absolute carbon emissions with and without the N_2O leakage, as detailed in our Sustainability Report.

Our safety targets are aligned with our Vision Zero initiative, which aims to accomplish zero workplace injuries or illnesses, zero manufacturing process incidents, zero environmental incidents and zero transportation incidents involving our products or services. Since 2019, our safety targets are set on a local basis and linked to metrics based on identification and closure of safety-related corrective actions at each of our operating sites. This moved us from a lagging metric based on injuries that can have high year-on-year variability, to a leading metric that drives employee behavior and involvement.

Long-term Targets, Total Company Until 2030 – Baseline 2018, Per Million CHF Sales



Milestone 2020 (Per CHF 1 Million Sales), Baseline 2018



We applied targets per CHF 1 million sales on the basis of our diverse product portfolio, which ranges from manufacturing of chemical bulk products to pharmaceutical ingredients; from medical capsules to food supplements; from gene technology to cell-media production. This diversity could only be reconciled with a financially focused denominator. The targets and baseline will be reassessed with the divestment of the Specialty Ingredients segment.

In addition to the global goals, sites set local targets for material topics for their locations (such as emissions, water quantity and parameters). Sites will develop a three-year roadmap, which will include their action plans around global and local targets.

A Systematic Approach to Safety and Sustainability

Our approach to safety and sustainability in Lonza is committed and systematic. We have policies in place, including our aspirational Vision Zero, for the reduction of accidents, incidents and emissions. Across all our sites, we collect data for accidents and incidents, energy, water and waste, and analyze deviations from established goals. Our Environment, Health, Safety and Sustainability (EHS&S) team regularly visits and audits our sites to identify compliance risks and procedures that do not meet our standards.

We also review the impact of workplace risks on our business performance and find ways to mitigate these risks. In this context, we see safety and sustainability as opportunities that allow us to maximize our value creation for society, our customers and our people while reducing our environmental footprint. During the COVID-19 pandemic, additional guidance and procedures were implemented to keep our employees safe and ensure continuity of operations.

At the end of the reporting year, approximately 228 people worked in the core EHS&S field across Lonza. EHS&S operating costs amounted to CHF 67,100 million in 2020. Capital expenditure on EHS&S totaled CHF 79,904 in 2020.

Our Progress in 2020

Energy (GJ/million CHF)

ACHIEVED

CO_2-eq (Scope 1 & 2 mt/million CHF)[2]

ACHIEVED

Waste (mt/million CHF)

NOT ACHIEVED

Indicator [1]	FY 2018	FY 2020	Change	2020 Target	Status
Energy (GJ/million CHF)	2,098	1,790	–14.7%	–4%	Achieved
CO_2-eq. (Scope 1 & 2 mt/million CHF) [2]	150	129	–13.9%	–6%	Achieved
Waste (mt/million CHF)	27.1	27.9	+3%	–4%	Not Achieved

[1] The baseline has been restated due to the inclusion of three sites in the reporting framework (Monteggio, CH, Geleen, NL and Hayward, USA), and the correction of previous data entry inaccuracies

[2] The CO_2-eq rate and the reduction target is relative to the 2018 baseline, recording routine emissions from combustion and general sources, excluding the N_2O leakage, see more in 2020 Sustainability Report

Our Approach to the COVID-19 Pandemic

COVID-19: Maintaining Business Continuity and Protecting our Employee Community

Throughout 2020, we worked tirelessly to manage our business through the COVID-19 pandemic. Our business of delivering medical treatments and microbial control solutions proved critical in the fight against COVID-19 and led to the categorization of Lonza as an "essential business". As such, our license to operate remained intact in nearly all markets with only temporary interruptions in some of our Specialty Ingredients sites.

Even before the scale of the pandemic was fully recognized, we set up a global Lonza Taskforce and implemented global pandemic guidance for our employees. We closely monitored the spread and development of the pandemic, adapting global and local measures, as required, to ensure the continuing safety of our global employee community, whilst also maintaining business continuity as a supplier of essential products and services. Such measures included the implementation of COVID-19 specific components of business continuity plans at each site, restrictions on all international business travel and the requirement that employees should work from their homes if they were able to do so. At all times, local rules and restrictions implemented by different jurisdictions were carefully observed and followed.

While we were able to control and support our operations, we remained dependent on suppliers for raw materials and logistics companies to deliver them. Our teams worked diligently across our supply chain to minimize any disruption, keeping in close contact with suppliers and customers to mitigate any delays arising from a stretched supply chain.

Global COVID-19 Taskforce

To help steer the company through the pandemic, a Global COVID-19 Taskforce was formed in January 2020. This included representatives from a wide range of functions across the business, including Operations, Legal, HR, EHS&S, Corporate Risk and Strategy Implementation, and Communications. This group has worked throughout the pandemic to address challenges, protect Lonza's employees and to help ensure business continuity.

As the pandemic has progressed, additional working groups have been formed to tackle the specific challenges that have arisen. Regional working groups for the EMEA, APAC and the Americas regions were convened, as well as groups to address more specific issues such as personal protective equipment (PPE) supplies and supply chain. Each of these working groups report into the Global COVID-19 Taskforce to ensure a consistent response across the business.

The Taskforce was also responsible for scenario planning to ensure that the business was set up to respond to anticipated challenges. During the first months of the pandemic, the group centralized plans for the anticipated "second wave" of infections. As this new wave of infections spread across many markets in the latter half of 2020, all our sites remained operational thanks to the measures taken, based on learnings from the "first wave" of the pandemic. These measures enable us to ensure the continued health and safety of our global employee community and business continuity for our customers.

Protecting our Employee Community

Since the start of the pandemic, we remained steadfast that employee safety was our top priority. As a manufacturing company, factory- and laboratory-based employees needed to continue to attend work to maintain business continuity. For our site-based colleagues, we made specific provisions for each site to afford the highest possible levels of safety to all employees. Such measures included daily temperature screening, social distancing on site, the provision of mandatory personal protective equipment, increased disinfecting schedules and split team working arrangements. At our Visp (CH) site, we opened a testing center outside the site premises to offer COVID-19 tests for employees who showed symptoms of the virus, or who were requested to test by the SwissCOVID app.

For our employees who transitioned to working remotely, additional resources were provided to assist with the shift and further IT measures were established to ensure that our systems could support the increase in agile and remote working practices. We also provided guidance to help employees make optimal use of our remote working technologies and maintain strong levels of cybersecurity.

The wellbeing of our employee community has been a continuing focus throughout the pandemic. Cognizant of the impact that the pandemic may have on employee mental health, our HR teams have offered advice and support where needed. As an example, our Employee Assistance Program was launched in 2020 and provides a confidential counselling service designed to help employees and their families to navigate any professional or private challenges.

Keeping our Stakeholders Up to Date

Alongside the extensive work undertaken to protect and engage the global employee community, we also worked closely with customers and investors throughout the pandemic. Many investors were rightly concerned by potential financial and economic impacts arising from high levels of macroeconomic uncertainty.

In response to these concerns, we provided an unscheduled quantitative update on our financial performance at the end of Q1 2020. We also provided and attended a number of virtual investor roadshows and conferences throughout the year. In line with the local Swiss regulations and measures to fight COVID-19, we decided to conduct the Lonza Annual General Meeting in 2020 solely by voting through the independent proxy, and without the physical attendance of shareholders. This measure allowed us to hold the Annual General Meeting as planned, in a virtual format.

Our Half-Year 2020 results presentation was executed as a hybrid event. In addition, we held a hybrid Investor Update in October where we provided visibility on the status of COVID-19-related customer projects, as well as information on our new divisional structure, divisional priorities and our 2023 Mid-Term Guidance. Both events were conducted in line with local Swiss regulations including the limitation on number of people being physically present, and the continuing management of social distancing provisions for those who were able to attend.

Personal Perspective

Andreas Bohrer
Group General Counsel

In the early days of the pandemic, the Global COVID-19 Taskforce established a set of agreed behaviors to steer our response: no panic, and no complacency. Achieving the best possible outcome from a challenging situation has remained our end goal and guiding star.

As a global business with a strong internal network, we called on the experience of our teams in China and Singapore early in the pandemic to ensure we were prepared for the eventual spread of the virus to Europe and the Americas. The success of our approach depended on remaining one step ahead of the virus whenever possible. For example, we undertook extensive risk analysis and scenario planning in anticipation of the “second wave” of infection, which commenced in Europe and the Americas during the latter half of 2020.

For Lonza, the pandemic provided an opportunity to support not only our customers and their patients through continuous business operations, but also our employees and their families by promoting safety in the workplace. In addition, we had the opportunity to provide support to local communities around our sites. Last, but certainly not least, we have been pleased and proud to support our customers in commercializing their therapies and treatments to control the COVID-19 virus.

While the pandemic has caused multiple global challenges, it has also demonstrated that our work can make a significant difference to people’s lives. As an essential business, we bring our energy, experience and expertise to help solve one of the most significant issues yet faced by humankind in the third millennium.

Our Role in the Fight Against COVID-19

As a leading global biopharmaceutical development and manufacturing company, it was important to us to participate in projects that support the global efforts against COVID-19. As our business and people demonstrated their resilience by maintaining operations and managing supplies, we were well positioned as a global partner of choice for customers in search of advanced and robust manufacturing capabilities.

In this context, we have received more than 200 enquiries to collaborate with customers on COVID-19 related projects. From an early stage, we chose to focus our energy and attention on those projects where our involvement would create the most beneficial outcomes. Below, we provide a snapshot of the projects that we have supported throughout the year:

- **Moderna COVID-19 Vaccine:** in May 2020, we entered into a ten-year global strategic collaboration with Moderna, in which we became the named manufacturing partner for Moderna's mRNA technologies. Specifically, we were listed as the preferred manufacturer for the drug substance of Moderna's COVID-19 Vaccine – one of the first vaccines considered safe and effective to be deployed in the long-term fight to control and contain COVID-19. Moderna's COVID-19 Vaccine has been already authorized for use in the US, Europe and Switzerland. For more information, refer to page 59.

- **AstraZeneca:** we announced an agreement with AstraZeneca in October 2020 to manufacture its COVID-19 long-acting antibody combination, AZD7442, which is currently being developed for the potential prevention and treatment of COVID-19. Manufacturing is due to begin in H1 2021 at our Portsmouth (USA) site.

- **Altimmune:** in November 2020, we announced an agreement to manufacture Altimmune's AdCOVID™ single-dose intranasal vaccine candidate for COVID-19, expanding commercial readiness in preparation to produce the commercial vaccine in 2021.

- **Humanigen:** we are collaborating with Humanigen to expand Lenzilumab manufacturing capacity in advance of potential Emergency Use Authorization (EUA). Lenzilumab is an antibody with the potential to prevent and treat an immune hyper-response called 'cytokine storm' in COVID-19 patients.

- **U.S. Environmental Protection Agency (EPA) approval for 16 Lonza disinfectant ingredients:** in August 2020, 16 Lonza disinfectant ingredients secured EPA approval for surface use against SARS-CoV-2 virus and were specifically approved to kill the virus on hard surfaces. We experienced unprecedented demand for quaternary ("quat") ammonium-based disinfectant products during the COVID-19 pandemic and committed to increasing production to meet the surge in demand for hygiene products to stop the spread of SARS-CoV-2.

In addition to these group-wide efforts in the fight against COVID-19, our sites have undertaken local initiatives to support the communities in which they operate. These initiatives included hand sanitizer production to provide to hospitals, nursing homes and other institutions in Visp (CH) and Williamsport (USA). We have also supported NGO Hand in Hand Switzerland's emergency plan and delivered sanitizers to 500,000 households in rural, underprivileged communities. Furthermore, we have provided community support, such as donating more than 10,000 pieces of personal protective equipment to the medical teams in Colmar (FR). For more information, please refer to page 9 of the Sustainability Report.

Traffic roundabout, Canada

Talent Management [1]

2020 has been a year of uncertainty, challenge and opportunity, all of which have focused our attention on supporting our people and the strategic ambitions of our business. Growth remains a priority across many business units, and HR has supported in delivering this objective by hiring and onboarding new talent (2,377 new employees) while looking after our 16,540 existing employees, by keeping them engaged and motivated. As part of the carve-out and divestment of the Specialty Ingredients business, we have worked to transform it into an independent unit, while redoubling our efforts to optimize the new organizational structure of the wider Group business by establishing future-fit HR systems and processes.

Many colleagues (36% of the global employee population) are now working remotely due to the pandemic. However, our essential workers (64% of employee population) continue to come to our manufacturing sites and research and development (R&D) facilities, with clear guidelines and procedures to protect and maintain their health and safety. This hybrid approach to on-site and remote working across the organization brings an opportunity to explore innovative ways to use communications and technologies to engage and equip our workforce. Many of these changes have allowed us to become more effective in our collaboration and our sharing of knowledge, and they have set a positive precedent for how we will work in the future.

The Lonza workforce now covers all generations from Baby Boomers[2] through to Generation Z[3], making us a truly cross-generational community. Female presence increases through the generations with a 54% higher presence among Generation Y[4] compared to Generation X[5]. Indeed, in some countries such as the United Kingdom, Spain and the Netherlands, the female-to-male employee ratio broadly sits at 50:50. Overall, the Lonza workforce comprises colleagues from more than 100 countries, providing a vibrant and diverse community of multiple nationalities, languages, cultures and perspectives.

Caring for our Colleagues During the COVID-19 Pandemic

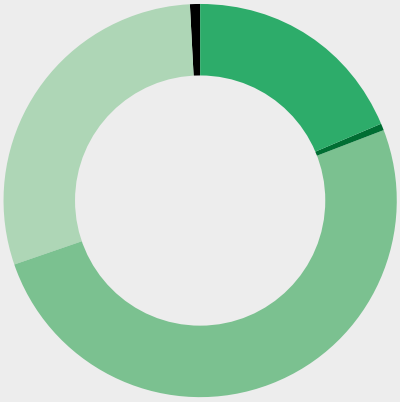
Providing support, safety and security to our colleagues during this time has remained a top priority for our business. Regular communication to our global employees has played a critical role in maintaining their safety. We have developed a comprehensive well-being offering, including an Employee Assistance Program, which is accessible to all of our global employees. We have also updated our absence policy in 2020, to provide greater flexibility to those who need it. Furthermore, as the pandemic has evolved, we have continued to ensure that employees travelling on business away from their home country are fully supported and those who wish to be repatriated can do so safely. With COVID-19 restrictions in place, "virtual assignments" were created as a temporary replacement for all new hire contracts that required a relocation. This ensured we did not lose any incoming talent, as those affected were still able to commence their employment at Lonza.

We understand that the employee experience is a critical component of talent attraction and retention. As many of our employees try to achieve a fair balance between their home and working lives, it has become increasingly important to identify a globally consistent way of recognizing exceptional commitment and additional workloads. In this context, we have rolled out a global recognition scheme, named "Bravo", to allow colleagues to recognize each other, no matter where they are based and what function they are in.

To support the enhanced employee experience, the HR function has also launched several initiatives to review and improve the moments that matter in the candidate and employee journeys. Many employee interviews were conducted to collect valuable feedback and insights into how we can improve the experience.

[1] All figures reflect total Lonza Group, including Lonza Specialty Ingredients business
[2] The generation is generally defined as people born from 1946 to 1964
[3] The generation is generally defined as people born from 1997 to 2012/15
[4] The generation is generally defined as people born from 1981 to 1995
[5] The generation is generally defined as people born from 1965 to 1979/80

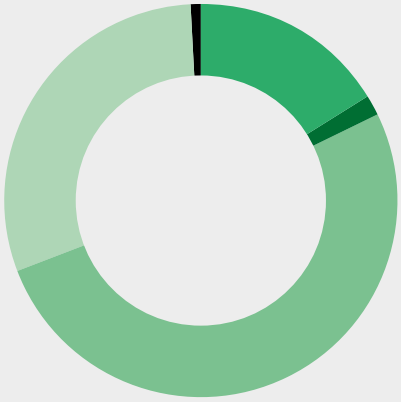
Geographic Diversity



APAC
Central America
EMEA
North America
South America

The figures reflect total Lonza Group, including Lonza Specialty Ingredients business

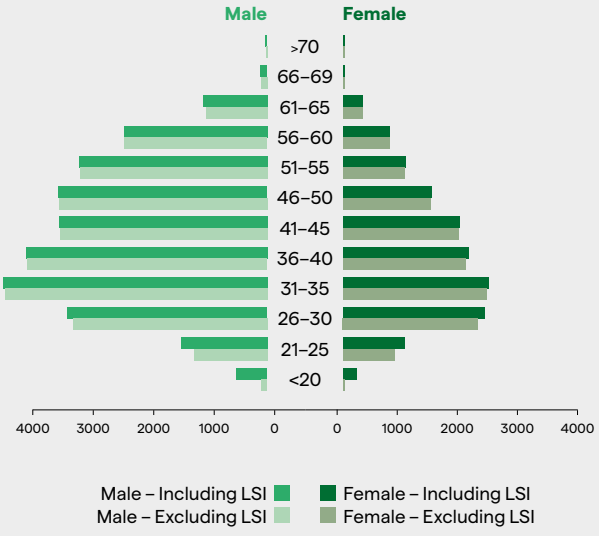
Hires in 2020 by Region



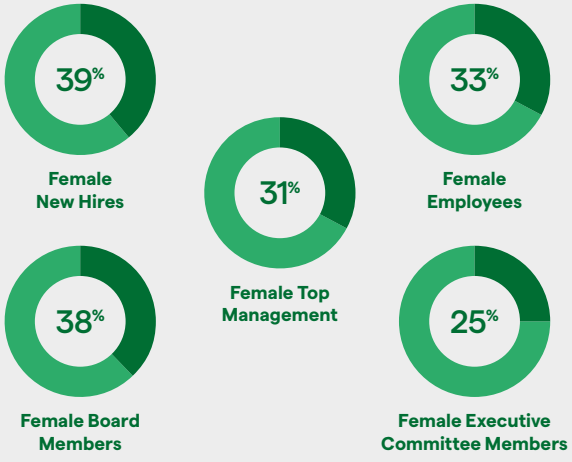
APAC
Central America
EMEA
North America
South America

The figures reflect total Lonza Group, including Lonza Specialty Ingredients business

Broad Balance Across Age Groups



Six employees did not wish to disclose their gender



The figures reflect total Lonza Group, including Lonza Specialty Ingredients business

Attracting Talent

The exceptional circumstances of 2020 gave us the opportunity to further develop and optimize our online and digital talent acquisition technologies. Despite the pandemic and its impact on the global economy, we continued on our growth trajectory, meeting our original hiring plan of recruiting more than 2,300 employees, supporting business continuity across all sites, as well as global growth and strategic projects.

Our collaboration with Moderna has led to growth opportunities at our sites in Portsmouth (USA) and Visp (CH). We are now focused on ensuring the consortium can attract and hire the right people, in the right places at the right time. At a time of restriction on talent mobility, our 436 global mobile workforce has been supported to navigate challenges efficiently, while also ensuring compliance. Most importantly, we have worked to ensure our people are safe and supported. Our talent mobility brings with it an increased global presence for our Lonza brand, and confers greater attractiveness as an employer (we have seen a 29% increase in the number of applications for available roles compared to 2019).

Through video conferencing technology, our interviewing and onboarding processes are now adapted to accommodate a fully remote setting. These platforms have allowed us to adapt dynamically to the environmental constraints of the pandemic, while allowing us to continue to bring top talent into Lonza in support of our ambitious hiring agenda.

Developing Talent

We have approached talent development in a focused way in 2020, by prioritizing specific areas such as Engineering, Operations and Finance. For selected top talent groups, we have a fully virtual mentoring program with a number of expert speakers on leadership development. Furthermore, to support our agile business and respond to the business environment, selected employees have been given the chance to complete a change management certification.

People Managers (17% of Lonza's workforce) play a key role in employee engagement, satisfaction and performance. We understand their importance and provide them with support and development via guided virtual training and refresher courses. These monthly virtual sessions for all Lonza People Managers cover a range of relevant topics such as interviews with our senior executives on how they work from home, to cross-cultural communications and coaching for development. We also offer timely topics to support these People Managers in delivering the specialist professional responsibilities.

In addition, we have made significant progress in applying digital tools for training, such as virtual reality (VR) to allow employees to prepare for their tasks in production at their own speed. There are already five VR training modules with specific "standard work units" successfully deployed; a further 34 modules are currently in development.

We work to ensure that all of our employees have access to training and development, whether they continue to operate in our labs, on our sites or from their homes. We understand that continual learning is key to both professional and personal development. We saw a surge in the use of our e-book library and webinars, as more than 20% of our employee community were recorded as unique users. The content of greatest interest focused on resilience, conducting virtual meetings and leading under crisis and uncertainty. In addition, we offered a five-part "Summer Reading Series" with targeted resources, webinars and training to help our colleagues in the pandemic. Topics included support on parenting, stress management, self-care and personal resilience.

We believe our colleagues and their experiences are a key source of learning. Our mentoring programs across the business allow our employees to learn from each other, create vital networks and share relevant experience and knowledge. We offer global virtual mentoring, which adds a fresh dimension, through learning from different cultural experiences. We also work to ensure that Lonza remains a place to stay and grow for existing employees. Our high internal fill rate across the organization at 30% is testament to this. This means our people often have the chance to move into new roles within the organization and continue on their learning and development journey. This also includes global assignments for select employees.

Embracing Diversity and Inclusion

Diversity and Inclusion (D&I) at Lonza is focused on creating the environment, systems, structures and behaviors for employees to feel truly valued and respected, as well as providing an authentic sense of belonging to our global community. We continue working to ensure that our employees feel they have a voice that will be listened to and the opportunity to work at their best, because our business truly values diversity and difference of characteristic, preference, belief and perspective.

External developments and events this year caused Lonza to stop and think more deeply about our culture of inclusion and the diversity of our workforce. The wide-ranging diversity of our global employee community brings with it a spectrum of opinions, perspectives and experiences, which are the strongest drivers of innovation and creativity.

We understand that hard work and commitment are required to ensure we attract and retain a diverse employee base. As such, we have redoubled our commitment to ensuring Lonza is a place for all, both now and in the future. To support this, we have established a D&I Steering Committee, comprising Group Heads of HR, Communications, Ethics and Compliance and Legal. This is designed to provide strategic direction to a D&I Global Taskforce, comprising select employees to consider the D&I issues that may impact our community. This Taskforce is supported by a community of D&I Ambassadors, who monitor local issues and bring to life our D&I agenda across our global site network.

This comprehensive governance structure is designed to provide a robust assessment of D&I across the company to develop a D&I roadmap. It aims to mitigate unconscious bias, foster inclusive leadership and ensure that all Lonza talents are able to thrive and add value. These initial steps represent the beginning of a journey, and we look forward to sharing further progress in the coming year.

Bringing our Culture to Life

Building a culture relies on a core set of shared values, beliefs, habits and behaviors, as well as a united employee community. A cultural identity must be built and earned. It forms a compass to guide the behavior and mindset of individual employees. Based on this, we are finalizing a refreshed set of cultural values, defining key behaviors that we encourage all employees to embrace every day.

2020 has proved to be a year of many unprecedented events and unexpected opportunities. Our achievement in the HR function allows us to look positively into the future, as we make plans to embed our new values and behaviors into our company culture and engage our valued employees in the journey.

Personal Perspective

Caroline Barth
Chief Human Resources Officer (CHRO)

The HR Function has worked with great care and perseverance on a hiring strategy to meet Lonza's ambitious growth plans. New hiring records were reached and in October 2020 alone more than 300 candidates globally accepted offers of employment from Lonza. This looks set to increase again in 2021, as we anticipate more than 30% further increase on current hiring levels.

During the COVID-19 pandemic, we have flexed to meet changing business needs while adapting to navigate restrictions on movement, always with a focus on providing high touch support for our colleagues on assignment or relocating. Remote interviews have improved efficiency for our hiring managers, while virtual onboarding has provided a fresh view on the employee journey for our candidates. At a leadership level, we also worked on our governance and decision-making processes to maintain a careful balance between business need and recruitment in an uncertain environment.

Turning to our existing employee community, we are working to develop a more robust and structured approach to Diversity and Inclusion, while establishing an Employee Assistance Program (EAP). Such an offering has become particularly important over the last year, when employees are facing unexpected challenges in both their professional and personal lives. As we move into 2021, we will continue to focus on the experience of our existing employees, by ensuring that we localize and live our Employment Value Proposition (EVP), as well as working with the Lonza leadership team and the broader organization to embed a revised set of company values.

Our Businesses

36 Lonza Pharma Biotech & Nutrition (LPBN)

42 Capsules & Health Ingredients (CHI)

46 Small Molecules

52 Biologics

60 Cell & Gene

62 Cell & Gene Technologies (CGT)

66 Bioscience

70 Live Biotherapeutic Products

72 Lonza Specialty Ingredients (LSI)

76 Microbial Control Solutions (MCS)

80 Specialty Chemical Services (SCS)


YV4122
YV4120
YV4124
YV4012
YV4008
YV4010
PT0021
FT0005
QT0044
QT0040

Lonza Pharma Biotech & Nutrition (LBPN)

Our Offerings

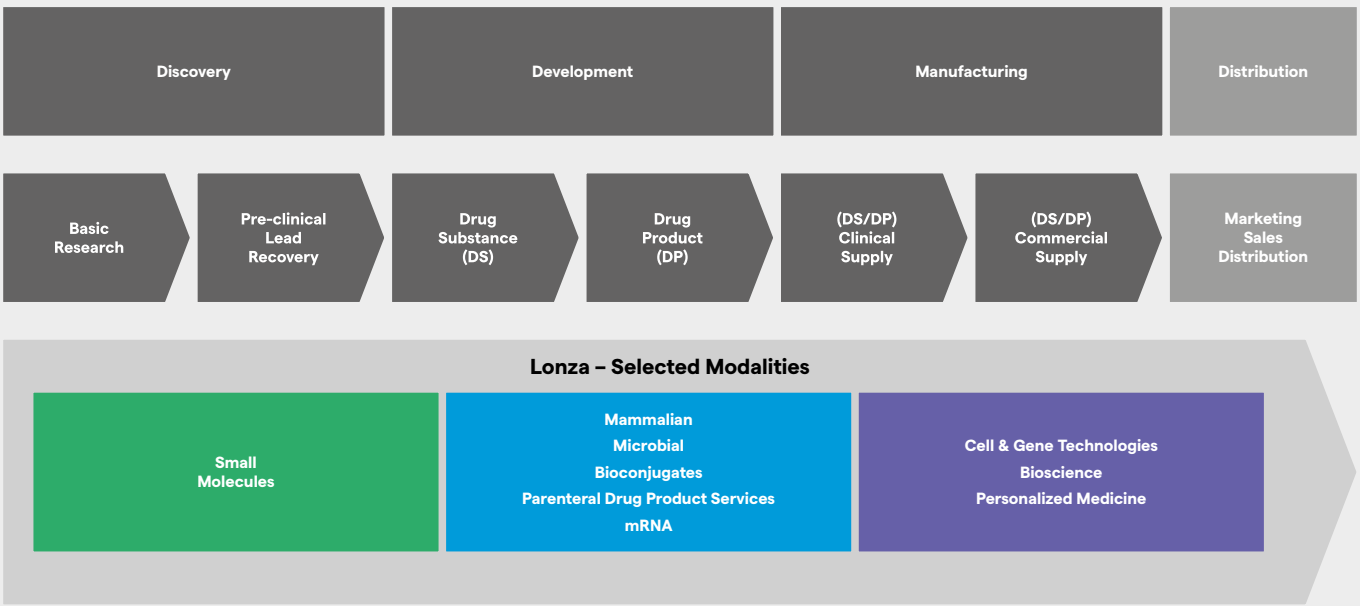
As a leading company for contract development and manufacturing, our LPBN segment is recognized for its reliable, high-quality services, regulatory track record, global footprint, innovative technology platforms and extensive experience.

Our vision is to enable our customers to meet some of the greatest challenges in patient treatment. We cover a wide range of services within the biopharma industry. Our broad capabilities span biologics, small molecules (including highly potent active pharmaceutical ingredients such as cytotoxins), bioconjugates and cell and gene technologies. We support projects from research, discovery and pre-clinical stages, through clinical trials to commercialization and our expertise extends across both drug substance and drug product.

The LPBN segment includes the following offerings:

- Capsules & Health Ingredients
- Small Molecules
- Biologics
- Cell & Gene Technologies
- Bioscience

Pharma & Biotech Contribution to the Value Chain



37

Development and Manufacturing Sites

14

R&D Sites

12,679

Employees (Full-Time Equivalent)

>820

Pre-clinical and Clinical Small[1] and Large[2] Molecules

>245

Commercial Small[1] and Large[2] Molecules

[1] Including active pharmaceutical ingredients (API), highly potent API (HPAPI), dosage form and delivery systems and particle engineering
[2] Including mammalian, microbial, cell & gene therapy products and bioconjugates (applied protein services and drug product services are included for pre-clinical and clinical molecules only)

Personal Perspective

Stefan Stoffel
Chief Operating Officer (COO) Pharma & Biotech

In 2020, our Technical Operations community has shown strong progress on execution performance, which has enabled us to successfully deliver more than 1,000 customer projects across 37 sites worldwide. Moreover, we have commenced operations on a significant number of organic growth projects, supported by a steep hiring increase. Throughout the year, we have onboarded around 2,000 new operations employees in both our base business and strategic growth investments.

Across the teams, we have continuously worked on managing and mitigating the challenges arising from the COVID-19 pandemic to ensure we could maintain supply to our customers. For example, digital solutions were implemented to connect employees, customers and other stakeholders in times of social distancing and restricted travel. These included remote audits and compliance assessments, remote maintenance and virtual training, as well as virtual site tours. We also implemented a home office approach for around 30% of our employee community.

While maintaining our base operations throughout the year, we have established new facilities to upscale worldwide production of vaccines against COVID-19. Being in a position to actively support the fight against the pandemic is a privilege and underlines our teams' outstanding determination and expertise in delivering innovative technologies against highly ambitious targets.

Financial Highlights

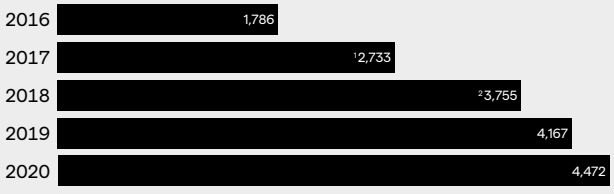
In 2020, the Lonza Pharma Biotech & Nutrition (LPBN) segment achieved 12.2%[1] sales growth and a 32.1% CORE EBITDA margin. We saw a strong performance across our businesses, with Biologics remaining a primary driver of growth. The LPBN segment demonstrated resilience to the impacts of COVID-19. Facilities remained open and supply chains were managed to ensure business continuity. The business worked diligently to expand service offerings to customers while investing in production capacity in response to continued demand.

[1] Sales growth at constant exchange rate (CER)

Pharma Biotech & Nutrition

Million CHF	2020	2019	Change in %
Sales	4,472	4,167	7.3
CORE EBITDA	1,436	1,371	4.7
Margin in %	32.1	32.9	
CORE result from operating activities (EBIT)	1,172	1,125	4.2
Margin in %	26.2	27.0	

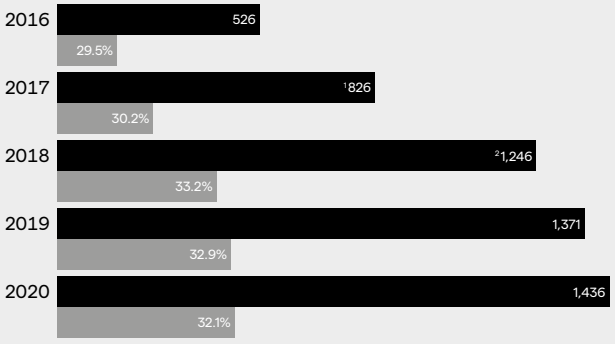
Sales
Million CHF



[1] Reported pro-forma full-year 2017 financial results include Capsugel full-year 2017 financial results
[2] Restated to reflect the 2019 realignment of Lonza's segments into Pharma Biotech & Nutrition and Specialty Ingredients

CORE EBITDA
Million CHF

CORE EBITDA Margin
In %



[1] Reported pro-forma full-year 2017 financial results include Capsugel full-year 2017 financial results
[2] Restated to reflect the 2019 realignment of Lonza's segments into Pharma Biotech & Nutrition and Specialty Ingredients

Innovations in Lonza Pharma Biotech & Nutrition

Innovation lies at the heart of our mission to enable our customers to meet challenging deadlines and address their patients' needs. Research & Development (R&D) plays a central role in how we approach innovation. It provides us with a long-term vision and ensures we make appropriate investments into extending our technology and capabilities to develop the tools we need for our future success.

Our scientific mindset, 360° view of industry trends and experience in transforming discovery into manufacturing applications, have been applied on multiple fronts throughout 2020. Our 14 R&D sites worldwide are an integral part of our global network and support innovation across the business.

Innovation does not happen in isolation. It is underpinned by strong synergies across all our R&D focus areas. Our R&D group is active in viral vectors, cell line construction, cell culture media, cell and gene therapies, capsule design and manufacturing, other oral dosage forms, chemical active pharmaceutical ingredients (APIs) and parenteral formulation and delivery. It is also involved in bio manufacturing and digital technology. Our key areas of interest are summarized here.

Scalable Personalized Medicine

Personalized medicine represents the next leap towards individualized therapeutic solutions tailored to each patient's needs. In many cases, these treatments are lifesaving and potentially curative. The availability of personalized medicine is growing in response to a deeper understanding of complex disease biology and new technological innovations. These are driving the emergence of new modalities that show significant clinical benefit. Many of these therapies address areas of significant unmet medical need, including oncology, where few targeted treatment options are available for certain patients.

As this market continues to grow and evolve, our in-house R&D team has developed and launched a patient-scale cell therapy manufacturing platform. The Cocoon® Platform, a closed and scalable cell therapy manufacturing platform, provides a flexible solution with improved end-to-end automation. These attributes are crucial to enable efficient manufacturing scale-out to meet commercial demand for innovative therapies such as autologous cell therapies. In adopting the Cocoon® Platform, it becomes possible to reduce manufacturing costs and deviations while enhancing process control.

The long-term goal of personalized medicine is to provide individualized therapies at a commercial scale to large patient populations. In September 2020, we reached a significant milestone in our partnership with Sheba Medical Center in Israel. Our collaboration delivered the first autologous CAR-T cell therapy manufactured using the Cocoon® Platform with a cancer patient. This was a major achievement and additional patients are now being treated at Sheba as part of a clinical trial. The Cocoon® Platform is being assessed by other cancer centers and research institutes and is also being used in Lonza's own R&D facilities.

We remain committed to continued R&D efforts focused on expanding the features and functionality of the Cocoon® Platform, including integrated magnetic separation, non-viral transfection using our proprietary Nucleofector® technology and enhanced analytics. In addition, we are developing a multiplex solution called the 'Cocoon® Tree™' which will enable the scale-out of manufacturing.

Digitalization
We are committed to supporting growth across our operations with new digital technologies. The continuing COVID-19 pandemic has accelerated our strong advance towards our digitalization vision. Digitalization across the business enables data collection, analysis and modelling, providing tools that allow us to make better business decisions, follow trends, and provide valuable real-time information. The added security, reliability, time, and resource savings are set to bring benefits to our current and future processes.

In the area of training, virtual reality (VR) will be increasingly used in the future, enabling employees to be prepared for their tasks in production at their own learning speed, regardless of time and place. Experts and trainers can be called in for this training without having to travel to a specific production site. Instead, they can meet the employee in a virtual production room. There are already five VR training modules with specific "standard work units" successfully deployed; a further 34 modules are currently in development.

Another field of focus is the analytics of manufacturing data. The use of machine learning algorithms allows the optimization of processes and yields, while ensuring that our products are of the highest quality. Besides analytical aspects, detailed production process data allow increased transparency for internal monitoring and improvement programs. Moreover, they can allow us to better integrate Lonza into our customers' supply chain ecosystem.

Inventive Capsule and Small Molecule Projects
Our R&D team is advancing with new products that have the capacity to improve patient experiences. As an example, our lipid multiparticulate (LMP) technology can customize drug delivery for patients of all ages as easy-to-swallow, palate-neutral microspheres, which fit both flexible and fixed dosage forms. We strive to develop products that will leave positive first impressions and empower patients to self-administer their own medications. Multiple pediatric products in the pipeline are being prepared for commercial filings, providing novel, taste-masked, and life-saving medicines to the pediatric market.

Many innovative small molecule-based therapies have poor solubility and therefore have poor bioavailability. Spray drying of amorphous dispersions is a mature technology that helps overcome bioavailability challenges and has led to more than 15 commercial products. Our R&D team has been working to improve this and has developed a temperature-shift process resulting in more than a ten-fold increase in solubility. This process has been successfully applied across pre-clinical, clinical and commercial scales, enabling challenging 'brick dust' compounds to reach patients. Recently, this new proprietary technology has been commercialized to enable a breakthrough oncology medicine.

The last decade has brought major innovations in the area of capsule manufacturing. These no longer serve solely as a carrier for the active pharmaceutical ingredient (API) but bring other functionalities. For example, our team has developed an innovative capsule system that can be used to control cargo release timing and location, improving delivery and bioavailability. Applications of this technology include enteric protection, multiple ingredient release and services for dosage form development.

Towards Next-Generation Modalities
Drug manufacturing represents one of the greatest future challenges, especially in the context of novel modalities. With complex diseases and a need for advanced diagnostic tools, the demand for innovative approaches is on the rise. We are witnessing fast progress in material science, nanotechnology and regenerative medicine. Advances in these areas are fueling progress towards next-generation modalities, which bring a transformative potential in medicine and diagnostics.

Induced Pluripotent Stem Cells (iPSCs), exosomes, live bio-therapeutic products, or mRNA-based vaccines require inherently complex starting materials, comprehensive purification and characterization.

From a manufacturing viewpoint, the unique needs and challenges reside in production, characterization and stable formulation development. Our R&D team addresses these challenges as they arise to allow these innovative therapies to advance and scale. With our extensive experience in current good manufacturing practice (cGMP) manufacture and using innovative technologies, our R&D team works to improve product stability, process efficiency and speed to market.

Capsules & Health Ingredients

230
Billion Capsules Produced Annually in 2020

>5,000
Customers Worldwide

10
Production Sites

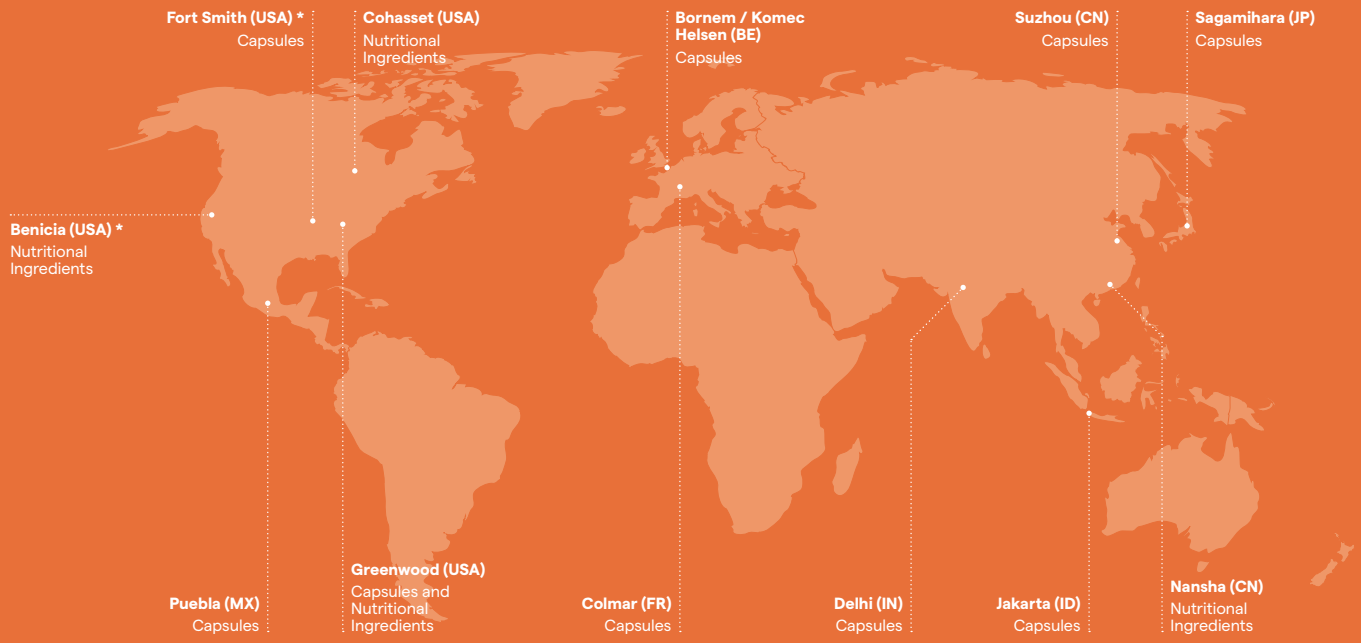
Market Trends

The Capsules & Health Ingredients division serves two primary markets – Pharmaceutical and Nutraceutical. Within the capsules industry we are seeing different dynamics by market:

- Within the Nutraceutical market, the industry benefited from surge demand caused by COVID-19, beyond normal growth rates, as consumers increased their consumption of nutritional and dietary supplements. Apart from COVID-19, we saw more nutraceutical companies introducing new products to the market and using specialty capsules and dosage forms solutions to differentiate themselves. We continue to see end consumer preference trending toward clean label and vegetarian-based capsules. Healthier living and demographic shift to older population remain the key driver for Nutraceutical capsules and ingredients growth, further accelerated by COVID-19.
- In the Pharmaceutical market, COVID-19 impacted supply and demand for pharmaceutical capsules, lowering projected industry growth rates. We saw a decline for some medications, as some patients deferred elective medical procedures as a result of COVID-19. This was partially offset with increased demand for selected over-the-counter (OTC) medication. As we enter 2021, we expect the pharmaceutical market to remain relatively flat. However, we do see longer-term opportunities as we track the drug development pipeline for more complex drugs requiring specialized capsules to overcome bioavailability challenges or requiring multi-excipient drugs, such as those used in oncology. In addition, in many regions, end-patient preference is trending to capsule oral dosage forms.

From a geographic perspective, there was a strong demand for Nutraceuticals coming from North America and steady demand for Pharmaceuticals in EMEA. We see continued increasing demand for both segments in Asia-Pacific markets, especially in generic drugs and the traditional medicine products in China and India.

Our Global Development and Manufacturing Footprint



* Fully integrated to Greenwood, USA and decommissioned in the end of 2020

Our Offerings

Our Capsules & Health Ingredients division is the trusted partner in innovative capsules, dosage form solutions and health ingredients for pharmaceutical and nutraceutical companies.

Our capsules business portfolio has two sub-businesses: empty hard capsules, and liquid-filled hard capsules. In addition, our Dosage Form Solutions portfolio offers formulation and manufacturing services to allow our customers to customize their liquid-filled hard capsules. Alternatively, for customers looking to go to market quickly, we offer “ready-to-go” ingredients, as well as pre-filled liquid or semi-solid hard capsules.

Customers benefit from our rich and extensive end-consumer market insights and long-standing expertise in dose delivery science. This has enabled us to develop a comprehensive range of proprietary dosage forms and delivery technologies. These include targeted delivery, liquid-filled hard capsules, capsule-in-a-capsule or tablet-in-a-capsule solutions and lipid multi-particulates.

We also offer integrated product design, development, clinical supply and commercial manufacturing services to our customers around the world. Our diversified customer base includes companies that make branded, generic and over-the-counter medicines in the pharmaceuticals market, and branded, proprietary, and generic supplements in the nutraceutical market.

In addition to our broad capsule range, we offer a selected portfolio of high-quality nutritional ingredients across joint health, active nutrition, digestive and immune health, weight management, sports activities and pet nutrition.

Our Portfolio

Capsules		Health Ingredients
Empty Hard Capsules	Liquid-filled Hard Capsules	Specialty Ingredients
Capsugel® essential and specialty capsules	**Dosage form solutions**	**UC-II®** (joint health) **Carnipure®** (sports nutrition) **ResistAid®** (immune health)
Pharmaceutical and Nutraceutical Markets	**Nutraceutical Market**	**Nutraceutical Market**

Highlights and Initiatives

The Capsules & Health Ingredients business has maintained operations and business continuity throughout 2020. There was high capacity utilization across existing assets, which led to increased lead time for capsule products. We reported high single-digit sales growth for the full year, mainly driven by our nutritional offerings.

Throughout 2020, we have benefited from increased consumer interest, driven by COVID-19 pandemic. With limited disruption to the manufacturing network arising from the pandemic, we began expanding our capacity to meet increased demand for both nutrition capsules and health ingredients. In addition we made the decision to invest to increase our overall capsule capacity from 230 billion to 260 billion capsules annually by 2022. This additional manufacturing capacity will address the growth across our gelatin, vegetarian and specialty polymers portfolio, as well as the liquid-filled hard capsules sold under the Licaps® brand. The investment will be made over two fiscal years, 2020 and 2021, across eight global manufacturing sites.

Looking ahead to 2021 and beyond, our business priority is to accelerate our profitable growth by meeting our customers' evolving needs to deliver more complex drugs, cleaner vegetable-based dosage forms and ingredients that enable healthier living. We will continue to develop new innovative capsules, enhance drug delivery and improve our operational and functional efficiencies.

Pharma Capsules

In 2020, we introduced an enhanced product line, aimed at tackling concerns around bias during blind clinical trials. Capsugel® DBcaps® double-blinded capsules are designed to provide an over-encapsulation of the drug to overcome the challenges of blinding products during clinical trials. The portfolio now covers a broad range, including both gelatin and FSC-certified hypromellose (HPMC) variations, making it suitable for use with multiple formulation properties and multiple oral dosage form sizes. In late 2020, Capsugel® DBcaps® capsules received the CPhI Pharma 2020 Award for Excellence in Pharma: Finished Formulation. This was assessed against a very demanding set of criteria, including product innovation, purpose, problem-solving capacity and competitive advantage.

Nutritional Capsules
Throughout 2020, we have continued to bring new consumer-driven capsule innovations to the market. For instance, we extended the range of our clean-label colored capsules. The different color options are achieved using a variety of plant-based foods, with Vcaps® Plus Spicy Yellow and Red Radish capsules now launched into the North American market.

Further, our customers continue to leverage our dosage form solutions. We assisted a wide range of product introductions, from mood, immunity, and digestive health to personal care supplements for skin and hair. Technology and dosage forms continue to solve a variety of problems, including the following:

- DUOCAP®, DuoTablet, Minitabs, Beadlets, and Snow Globes: to solve various delivery problems including stability, release profiles, and compatibility
- Liquid fills (LiCaps®): to help stabilize challenging formulas with our unique polymer selections such as PlantCaps® for oxidation protection or DRCaps® for acid protection products
- Lipid Multi-Particulate technologies: to improve ingredient delivery.

Nutritional Ingredients
Within health ingredients, we announced the launch of a new and unique probiotic strain TWK10®, isolated from Taiwanese Kimchi. A novel probiotic designed to deliver sports nutrition benefits for both elite athletes and active consumers, the TWK10® brand has been clinically shown to enhance endurance, improve body composition and energy levels. Licensed exclusively from Synbio Tech, the clean label vegan ingredient can be used in dietary supplements and in foods, with additional applications already in development. The TWK10® probiotic is now available in North America.

Personal Perspective

Claude Dartiguelongue
Capsules & Health Ingredients

As a newly-formed division the Capsules & Health Ingredients (CHI) business has delivered a strong financial performance against the backdrop of a world pandemic.

The COVID-19 pandemic created an unprecedented increase in demand for us as consumers continued to focus on their health during the pandemic. This inevitably placed pressure on our global supply chain but our short-term expansion allowed us to produce an additional 10 billion capsules; we also leveraged our inventory to meet the sales of 230 billion capsules in 2020. We continue to work with our customers and vendors to ensure we stay ahead of this dynamic market environment as the pandemic continues.

Whilst working tirelessly to meet this increased demand, we also focused on bringing different legacy groups together to create one CHI team with common goals and practices. We established a new Leadership Team and developed a structured management framework with a common vision, customer centric strategies and key performance indicators (KPIs) to monitor progress.

As we look to 2021, we are focused on continuing to strengthen our global manufacturing network and innovation capability, as well as becoming a more customer centric organization. We do not simply want to meet our customers' needs, we want to exceed their expectations across the organization. By focusing on these three key pillars, we will continue to be a global leader and better meet the needs of consumers as they look to protect and improve their health.

Small Molecules

>400

Pre-clinical and Clinical Small Molecules[1]

>200

Commercial Small Molecules[1]

[1] Including active pharmaceutical ingredients (API), highly potent API (HPAPI), dosage form and delivery systems and particle engineering

With a global network of eight sites in Europe, USA and China covering drug substance, particle engineering and drug product development and manufacturing, we are geographically aligned with the major growth markets for the biopharmaceutical industry. These key markets account for more than 60% of overall global pharmaceutical growth.

Market Trends

Small molecules remain a key driver for biopharmaceutical sales and account for approximately 67%[1] (CHF 770 billion) of an estimated CHF 1.15 trillion global market[2]. We see continued underlying global market growth of approximately 5% for drugs based on small molecules[3]. Demand drivers include increased global access to medicine as well as new drug launches, which employ small molecules for improved patient therapies.

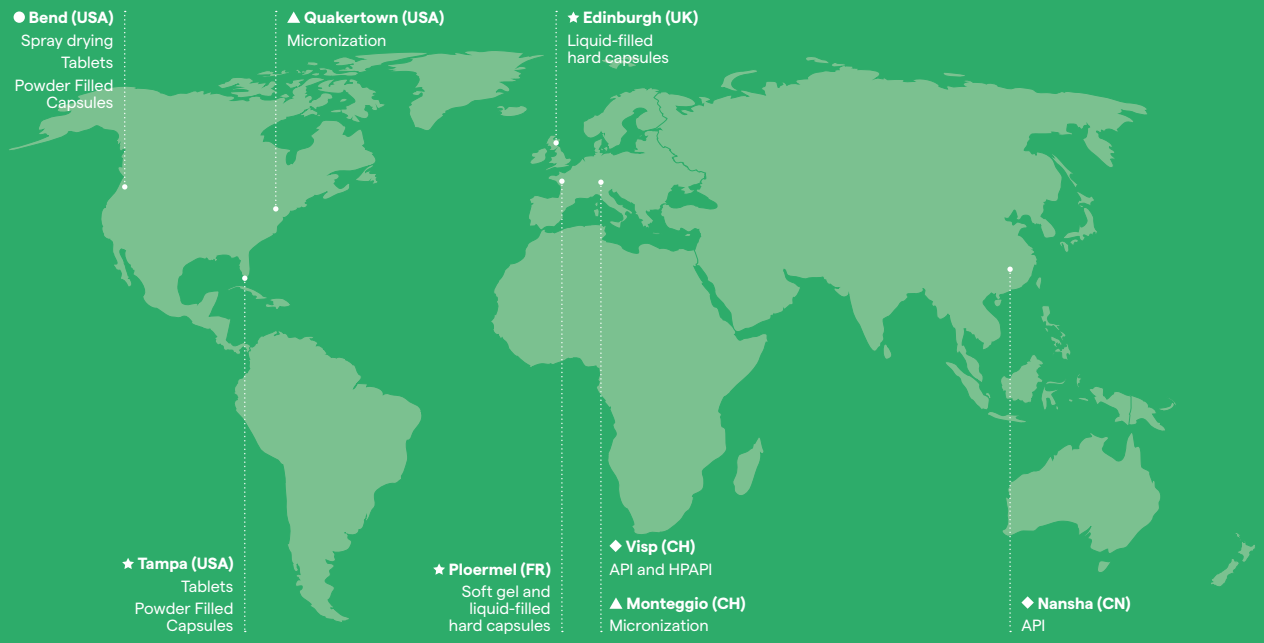
The continuing role of small molecules is apparent as they account for an estimated 60% of the overall clinical pipeline and 75% of the New Molecular Entities (NME) approved by the Food and Drug Administration (FDA) in 2020[4]. Growth in drug candidates based on chemical synthesis averaged 10% CAGR for the period 2014-2020[5], more than twice the rate of the preceding six-year period. With a record number of small molecules in early development phases, we expect this approval trend and overall strong growth to continue.

The trend towards specialty medicines, a segment growing at four times the rate of traditional drugs, continues to drive overall biopharmaceutical market growth[6]. Specialty medicines can generally be described as more patient-centric, higher cost and typically higher complexity versus traditional drug products, with the developed markets of Europe and the US accounting for more than 80% of the global consumption[7]. Oncology research is a dominant factor, representing more than one-third of total specialty sales growth[7]. Though often associated with biologics, small molecules account for more than half of the specialty drug development pipeline.

Small and emerging companies continue to drive innovation in biopharmaceuticals, holding approximately two-thirds of early stage candidate compounds and accounting for half of drug approvals[8]. This represents a significant increase on 2011 when only 31% of approvals came from these companies[9]. Small and emerging companies typically utilize development and manufacturing service providers, including contract development and manufacturing organizations (CDMOs) like Lonza, to advance and commercialize their molecules.

[1] Source: DCAT Pharma Industry Outlook 2020, Bio vs Non-Bio by IQVIA
[2] Source: IQVIA Market prognosis 2019-2023
[3] Source: Evaluate Pharma (2020/07), Small Molecule Forecasts consolidated 2020-2026
[4] Source: FDA 2020
[5] Source: Citeline #PC molecules 2014-2020 vs 2007-2013
[6] Source: DCAT Pharma Industry Outlook 2020: Specialty vs Traditional by IQVIA
[7] Source: DCAT Pharma Industry Outlook 2020: IQVIA MIDAS (Q4 2019)
[8] Source: DCAT 2020: Emerging from the pandemic, based on IQVIA; FDA & Clarivate Analytics Cortellis data
[9] Source: IQVIA – June 2020 (MIDAS and Pipeline Intelligence)

Our Global Development and Manufacturing Footprint



● Particle Engineering and Drug Product development and manufacturing
▲ Particle Engineering development and manufacturing
★ Drug Product development and manufacturing
◆ Drug Substance development and manufacturing

We see several key drug development and manufacturing challenges facing biopharmaceutical companies:

- Highly potent active pharmaceutical ingredients (HPAPI) make up around 30% of candidate compounds, driven by more targeted and effective therapies in oncology, antidiabetics and autoimmune applications[1]. Specialized assets and handling protocols, like those available from Lonza, are critical for the safe and efficient development and manufacturing of HPAPI and drug products based on these compounds.
- An estimated 70% of candidate compounds suffer from poor bioavailability and often require an enabling technology for effective drug delivery[2]. We are a leading provider of such enabling technologies, (including particle size reduction and spray drying), with expertise, development and manufacturing assets in place across our site network.
- Accelerated regulatory pathways are increasingly driving drug development timelines. Closely aligned with the increasing prominence of specialty medicines, regulatory designations for expedited development (including fast-track and breakthrough designation), are becoming standard. With approximately two-thirds of recent FDA approvals having been based on such expedited regulatory pathways[3], the ability to accelerate project milestones and rapidly scale up is becoming critical for effective development and manufacturing services.

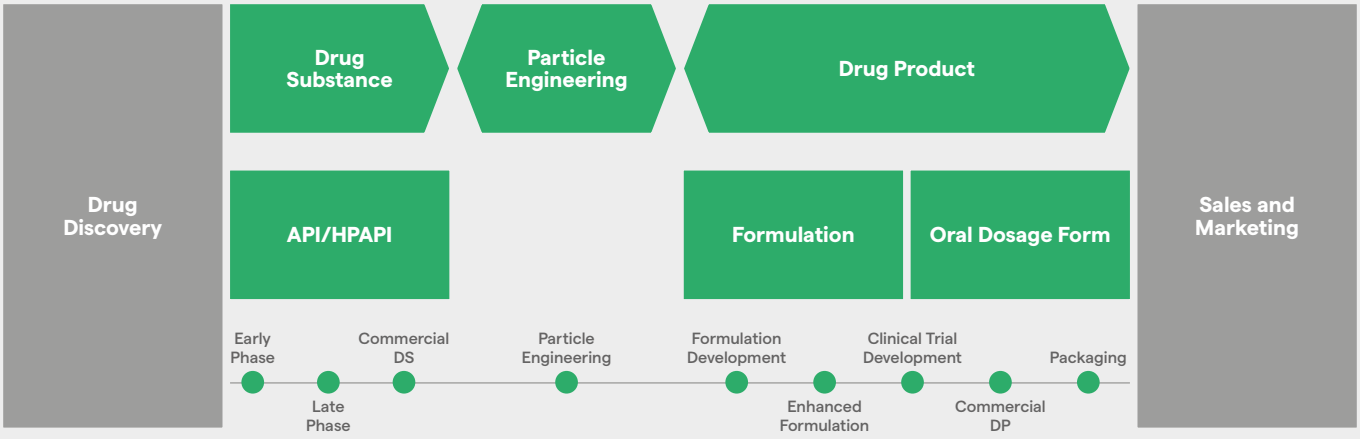
Our Offerings

We support our customers across all aspects of design, development and manufacturing with our ability to offer integrated drug substance to drug product solutions, including particle engineering and drug product packaging. Particle engineering (using our technologies such as particle size reduction and spray drying) is often required to meet today's drug delivery challenges, such as addressing poor bioavailability. This integrated service offering provides substantial value to our customers as it simplifies interfaces, reduces costs and accelerates timelines across the entire drug development pathway.

We offer world-leading expertise and capabilities for the safe and efficient development and manufacture of HPAPI for oncology and other targeted therapies. With more than 20 years of experience in HPAPI, we have progressed more than 30 drug products to commercialization. Our specialized capabilities include handling HPAPI to exposure levels as low as 1ng/m^3 across all manufacturing scales, as well as specific expertise in rapidly scaling up drug substances for commercialization. Our HPAPI handling capabilities include contained processing for particle engineering to enhance bioavailability, improve processing, and enable effective drug delivery. We also provide specialized encapsulated drug products.

[1] Source: FDA SM NCE approvals 2020 combined with internal potency analysis
[2] Source: PharmaCircle Solubility Analysis
[3] Source: FDA SM NCE approvals 2020 (67%)

Our Integrated Service Offering



Particle engineering is a key component of our integrated services offering across drug substance and drug product development and manufacturing. Our particle engineering technologies include particle size reduction, spray drying, hot melt extrusion and melt-spray-congealing which are all used for addressing a range of formulation challenges. We provide customized and fit-for-purpose particle engineering for feasibility studies, clinical studies and commercial scale manufacture. Our technologies are employed to manage a wide range of formulation challenges, from addressing poor bioavailability, controlling drug release, and optimizing particle size distribution for effective drug delivery to the lung. Phase-appropriate assets are in place for our particle engineering technologies to support accelerated timelines to clinic and commercialization.

We are an established partner in early development programs (pre-clinical through to Phase 2) for drug products. The majority of early development is associated with addressing bio-availability and drug delivery challenges as well as accelerated development for clinical trials. Our integrated services include late stage and commercial supply of drug products, providing an accelerated pathway from concept to commercialization.

Our industry-leading bioavailability enhancement services portfolio includes all primary technologies for handling solubility, dissolution rate and/or drug delivery challenges. It also includes proprietary capabilities developed over 25 years.

We have predictive modelling tools for rapid technology selection, specialized processing techniques and phase-appropriate equipment. These all complement our product development teams' experience in meeting required bioavailability targets for new compounds or improving existing drug product performance.

Highlights and Initiatives

Our Small Molecules business successfully managed any potential impacts from the pandemic, by maintaining a robust approach to supply chain planning while adapting quickly to virtual customer engagement. We delivered high single-digit sales growth, as well as reporting a margin increase over the last year[1].

Throughout 2020, we have benefited from a solid project pipeline in the market. Forecasts for 2021 anticipate double-digit sales growth, resulting from new customer contracts. Looking to the future, we are confident that we can significantly outperform the market to deliver on average 9% to 10%[2] annual growth rates (versus 4% to 5% for the market)[3] for the next three years.

[1] Comparison versus 2019 at a constant exchange rate (CER)
[2] Revenue growth
[3] Based on volume; Source: Citeline overall SM pipeline growth 2019-2020

Consistent with market trends, our growth has been driven by oncology products and other indications driving industry growth inclusive of antidiabetics, autoimmune and respiratory therapies. An additional growth driver is the broader need for specialized enabling technologies to advance more challenging molecules and meet more precise target product profiles.

Our forward order book for commercial products remains strong with commitment typically between two and five years. We continue to gain new customers and programs with a significant year-on-year increase in 2020. Moreover, our customer mix continues to diversify with a growing representation of small and emerging companies. Additionally, we have entered into a record number of long-term commercial supply agreements across the portfolio providing a stable base for future revenues.

In 2021 and beyond, our top priorities include continued streamlining of our business processes to ensure that they are phase-appropriate to deliver an enhanced customer experience. We will also continue to focus on securing early phase clinical programs, leveraging our integrated SimpliFiH® Solutions service offering across drug substance and drug product. A further priority area is maintaining our strengths in particle engineering technology and continuing to invest in capabilities and capacity for highly potent API (HPAPI).

Drug Substance Development and Manufacturing
During 2020, we continued to invest in key enablers including manufacturing assets. Examples include:

- Following on previously announced expansion of our HPAPI capacity for the specific support of ADC payload manufacturing in Visp (CH), the first HPAPI suite started operations in early 2020 and is currently used to produce the first batches of a commercial ADC payload. The second suite is targeted to become operational in 2021. This latest HPAPI expansion encompasses two new manufacturing suites capable of handling compounds with occupational exposure levels down to 1ng/m^3.
- Additional HPAPI manufacturing capacity was also brought on line to support AstraZeneca's oncology portfolio. The two new 4m^3 scale, multi-purpose production lines add to our industry-leading capabilities for the development and manufacture of HPAPI.
- Dedicated manufacturing capacity will be built within our existing small molecule API facility in Visp under a collaborative agreement with Aurinia Pharmaceuticals Inc. This will enable the efficient production of voclosporin, which is used to treat patients with lupus nephritis, an inflammation of the kidney. The facility will be equipped with state-of-the-art manufacturing equipment to provide

Personal Perspective

Gordon Bates
Small Molecules

The Small Molecules business saw the continued advancement of our commercial pipeline with multiple products reaching commercial status in 2020, while our clinical pipeline also increased. The signing of major long-term contracts have provided strong mid-term security. Finally, we were pleased to bring our highly potent active pharmaceutical ingredient (HPAPI) capacity on-line at our site in Visp (CH).

As with the rest of the business, we were impacted by COVID-19. The travel restrictions imposed in many markets presented challenges: regulatory inspections and customer visits slowed down, and many core marketing shows were cancelled.

However, we found innovative ways to overcome the challenges, through accelerated use of digital tools including hosting virtual audits and investing in live video tours for new customers. There was a shift from live events to webinars and digital events, which gave opportunities to build awareness of our offer. We also worked to protect our supply chain by securing contracts and establishing multiple supply sources across different geographies to mitigate any potential risks.

Moving into 2021, we look forward to both bringing new capacity online, as well as investing in additional capacity expansion. Learning from many of the innovations and learnings arising from the pandemic, we will continue to use digital outreach to generate demand, while optimizing and improving our customer journey.

cost and production efficiency for the manufacture of voclosporin, while expanding existing capacity and providing supply security to meet future commercial demand.
- In response to customer demand, we also continue to build capacity for API in Nansha (CN).

Particle Engineering
Particle engineering is a key component of our integrated services across drug substance and drug product development and manufacturing. The trend towards more highly potent molecules, driven primarily by oncology applications, has resulted in the need for expanded contained particle engineering processing. To meet increased demand, we announced additional investments in our global particle engineering network for expanded capacity and specialized capabilities. Development capacity (non-current good manufacturing practices – non-cGMP – assets), has been doubled at the Monteggio (CH) micronization site with investments including a new glove-box for isolation, upgraded process controls and expanded operator teams. A new micronization development wing has also been brought online at the Quakertown (USA) site.

In addition, an investment in early phase spray drying and enhanced particle engineering based dosage forms has been also approved for the Bend (USA) site, including 11 new cGMP suites to increase available capacity for clinical-stage development and cGMP activities. This investment includes the segregation of early clinical-stage activities from commercial supply, given the growth of our commercial product portfolio. It also includes implementation of phase appropriate operational and quality systems to enhance agility and improve customer lead times. The first suite became operational in December 2020 with the majority of the project due to be complete by mid-2022.

Drug Product Development and Manufacturing
New investments have been implemented in the Tampa (USA) site's product development labs to enable drug product development activities for highly potent compounds and a high potent capable granulation system has been purchased for manufacturing. Investments include new labs for development, sample preparation and cGMP manufacturing, alongside new roller compaction equipment with containment capability.

Additionally, to leverage our core particle engineering expertise, utilizing both particle size reduction and spray drying technologies, we established a new Center of Excellence for dry powder inhaler (DPI) drug product development at our Bend (USA) site. New services are specifically designed for streamlining formulation development for feasibility and early-stage clinical studies. We also established an evaluation methodology to determine the best particle engineering technology and formulation approach to meet the target DPI product profile.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Biologics

>420

Pre-clinical and Clinical Large Molecules[1]

>45

Commercial Large Molecules[1]

[1] Including mammalian, microbial, cell & gene therapy products and bioconjugates (applied protein services and drug product services are included for pre-clinical and clinical molecules only)

We offer manufacturing services for clinical and commercial material across our sites globally, from small-scale (1,000–2,000L) through mid-scale (6,000L) to large-scale (10,000L, 15,000L[1] and 20,000L). We leverage our expertise in stainless steel, single-use and hybrid technologies to de-risk the path to market for our customers.

[1] Refers to microbial capacity

Market Trends

2020 proved to be a significant financial year for the biopharmaceutical market, with worldwide sales at USD 284 billion and expected to grow at 10% CAGR over the next five years to reach USD 461 billion in 2025[1].

The growth in biopharmaceutical sales and pipeline drive the overall need for biologics clinical development and manufacturing services across the whole spectrum from pre-clinical services to commercial manufacturing. Simultaneously, the product landscape is changing rapidly and is becoming more challenging from a regulatory perspective with increased pressure for speed to market, alongside accelerated development pathways and timelines.

Overall, there are more than 3,500 recombinant proteins and antibodies in pre-clinical and clinical trials and launched treatment[2]. A growing number of molecules in the pipeline are being developed by small and virtual biotech companies. Those do not normally have the in-house manufacturing capacity and expertise to bring their candidates to market and therefore have a higher propensity to outsource. Currently, these emerging biopharma companies constitute approximately 80% of the development pipeline[3].

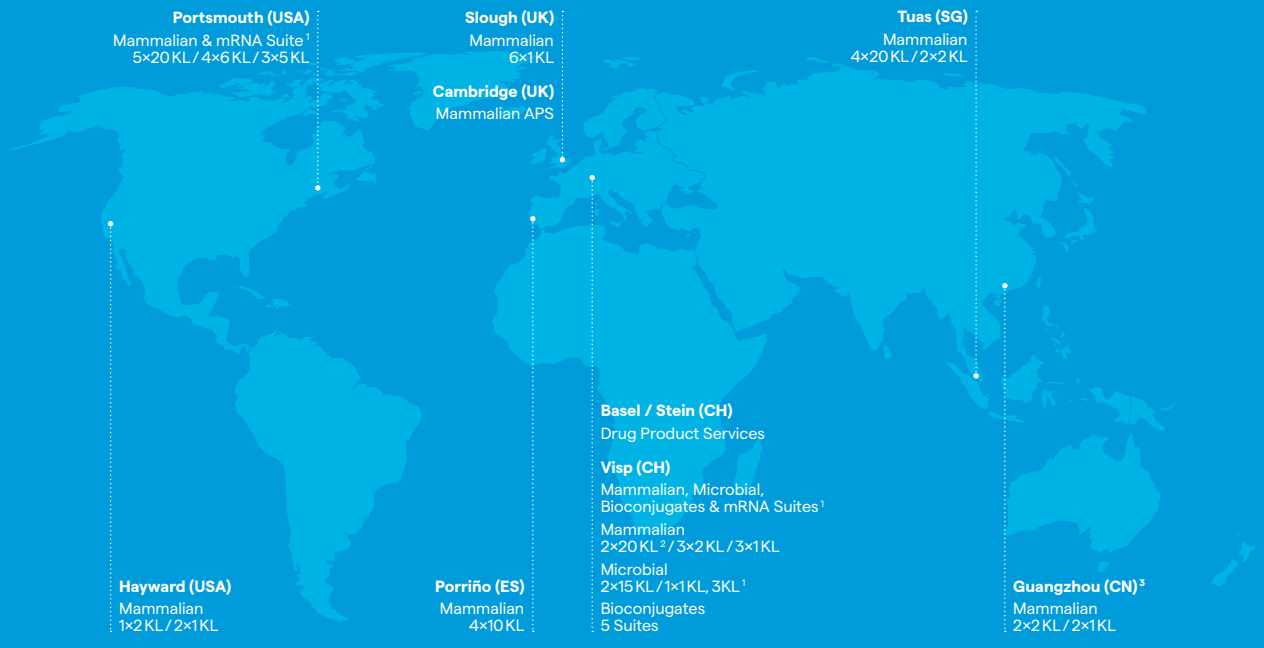
Strong venture capital (VC) funding for biotechs has supported this healthy growth in development[4] and has had a positive impact on outsourcing to contract manufacturers like Lonza. Biotech companies are outsourcing more than 70% of their development and manufacturing service needs to external partners. Among smaller biotechs, this number reaches between 90 and 100%, as secured funding is used for developing therapies in preference to building in-house manufacturing for clinical stage trials[5].

Biotech companies with a strong manufacturing partner can receive improved funding, setting up a positive feedback loop. VC funds have also begun to establish their own virtual biotech companies. Such virtual companies have a lean team of managers, meaning close partnerships with manufacturing companies such as contract development and manufacturing organizations (CDMOs) are critical to deliver successfully outsourced projects. Additionally, there is a burgeoning ecosystem of smaller pharma companies in China, supported by strong access to funding and bolstered by expectations of biologics growth.

Within biologics, **mammalian** remains the preferred production technology within the industry[5] and has the highest growth potential due to pipeline increase and improvements in technology[6,7]. These drive the need for new molecule design,

[1] Source: EvaluatePharma® World Preview (2020), Outlook to 2026
[2] Source: Citeline® Pharmaprojects™ Database (rec. protein & antibody)
[3] Source: IQVIA® 2019 "Emerging Biopharma's Contribution to Innovation"
[4] Source CB Insights & Biotechgate (2020)
[5] Source: HighTech Business Decisions (HTBD) Report: Biopharmaceutical Contract Manufacturing (2020)
[6] Roots Analysis Research report Biopharma contract Manufacturing Market (3rd Edition) (2019)
[7] Informa Citeline® Pharmaprojects® database (2020)

Our Global Development and Manufacturing Footprint



[1] mRNA suites and microbial 3KL
[2] 50:50 Sanofi-Lonza joint venture
[3] Operational in Q2/Q3 2021

manufacturing technologies and process improvement capabilities for biologics. The pipeline of molecules in development and launched drugs will drive the demand for mammalian manufacturing capacity in an already tight market[1]. While there has been a sustained need for large-scale manufacturing capacity, there is a trend towards small-scale bioreactors and single-use technologies for newer therapies, which are largely focused on smaller patient subgroups[2]. Additionally, growth in China, biosimilars, COVID-19 related projects, innovation and potentially the launch of new therapies for large patient populations with unmet needs may further increase demand[1,9]. Today's total estimated installed capacity in the industry (5.8 million liters) will increase to more than 7.7 million liters by 2024[3].

The microbial segment is an attractive additional technology to mammalian and provides further possibilities for biopharma companies who have molecules with both technologies. In contrast to mammalian, **microbial** manufacturing capacity is expected to expand comparatively moderate, despite the attractiveness and growth potential of the segment[4]. More than three-quarters of the biotherapeutics development pipeline are from emerging biopharma companies with an increasing number of complex molecules produced in microbial expression systems[5].

Bioconjugates are a growing class of biopharmaceuticals with antibody drug conjugates (ADCs) molecules being the biggest segment, representing 40% of the bioconjugate molecules pipeline. In 2020, two new ADCs were approved, leading to a total of nine commercialized drugs. There are moderate facility and capacity expansions required. The innovation pipeline is solid, with more than 240 ADCs currently under development across various clinical stages in around 550 trials. Due to rising demand and further expected approvals, there is a consistent trend for outsourcing of ADC manufacturing[6].

The market for biologics is growing in all segments, including **drug product services**. The large and growing pipeline, and the fact that biologics must be delivered parenterally[7] when systemic exposure is needed for treatment, is driving the growing need for drug product services. Vials currently dominate, but alternative delivery technologies are increasing[8] for commercial target product profiles, especially for indications where self-administration by the patient is beneficial.

[1] Source: UBS "Biologics Manufacturing" (2020)
[2] Sources: BDO/BPTC bioTRAK® Report Mammalian Supply (2020); UBS "Biologics Manufacturing" (2019)
[3] Source: Internal Analysis
[4] Source: BDO/BPTC bioTRACK® database (2020) Mammalian though 2024 & Microbial through (2022)
[5] IQVIA® Report: Emerging Biopharma's Contribution to Innovation (2019), Informa Citeline® Pharmaprojects™ Database (2020)
[6] Sources: Roots Analysis Report: ADC Contract Manufacturing Market, 4th Edition (2020), Roots Analysis Report: Antibody Drug Conjugates Market,5th Edition (2019), Informa Citeline® Pharmaprojects™ Database (2020)
[7] Source: Citeline Pharmaprojects Database (2020); HighTech Business Decisions (HTBD) Report: Biopharmaceutical Contract Fill-and-Finish: Best Practices Study (2018)
[8] Source: HighTech Business Decisions (HTBD) Report: Biopharmaceutical Contract Fill-and-Finish: Best Practices Study (2018)
[9] Informa Citeline® Pharmaprojects® database (2020)

Due to accelerating timelines for market readiness, increased competition and market opportunities, biotech companies are looking at flexible and integrated solutions that correspond to their development, clinical and commercial needs. Innovative business models, new modalities and strong partnerships play a critical role in accelerating the clinical development process and speeding up patients' access to essential drugs.

Our Offerings

We are a leading contract development and manufacturing partner for biopharmaceuticals, serving our customers for all clinical and commercial manufacturing needs throughout the product lifecycle. We work in partnership with customers of all sizes, from start-ups to large biotechs and major pharmaceutical companies.

Our modalities across Biologics include mammalian and microbial expression systems, covering both drug substance and parenteral drug product services, as well as bioconjugates and mRNA.

Throughout our biological modalities, we are uniquely positioned to offer customers a truly global development and manufacturing network. With an agile supply chain to address changing and uncertain market dynamics and security of supply, to eventually overcome any potential product shortages or eliminate macro-economic burden (e.g. trade restrictions), this distinctive offering is appreciated by both customers and the wider industry.

Mammalian
The mammalian cell culture derived molecules are the largest segment within Biologics. They represent over two-thirds of total global biologic products sales[1].

We have a strong global mammalian network with late-stage discovery, pre-clinical, clinical and commercial capabilities. With more than 30 years of experience in mammalian cell culture, our offering starts right after the late-stage discovery phase with our Applied Protein Services. This includes technologies and programs designed to assess and mitigate risks, reduce attrition and improve the quality and safety of therapeutic proteins in a cost-efficient and timely manner. These technologies include our Epibase® *in silico* and *in vitro*, immunogenicity screening, and our antibody humanization and de-immunization services.

We offer a wide range of contract development and manufacturing services from vector construction, cell line and process development, characterization, process optimization, and clinical and commercial manufacture from small to large scale. We use industry-leading technologies, such as our proprietary GS Xceed® Gene Expression System for mammalian expression. This expression manufacturing platform enables the production of high-quality products under current good manufacturing practices (cGMP) in a time- and cost-effective way. This can help improve speed to the clinic or market while helping to reduce the costs and delays associated with low yields and poor batch quality. The system now underpins dozens of commercially available products, plus hundreds of others in clinical trials.

Microbial
Microbial expression of biological molecules represents the second largest segment in the Biologics market after mammalian. With more than 30 years of experience in microbial fermentation for biopharmaceuticals, we cover a complete line of service offerings from strain development to large-scale commercial manufacturing. The microbial cell-based derived molecules are produced exclusively in Visp (CH).

Specific services that enhance our microbial offering include supporting analytical development with a wide range of testing expertise in microbial products, and drug-product development services for parenteral formulations.

We have extensive experience in microbial processes using advanced engineering and process development capabilities. Our toolbox contains well-established technologies for efficient, scalable and regulatory compliant processes. Our XS Technologies® platform for microbial expression includes *Escherichia coli*, *Pichia pastoris* and *Bacillus subtilis* expression systems.

[1] Source: Evaluate Pharma® (2020) World Preview and Outlook to 2026

Bioconjugates
Bioconjugates are a growing class of biopharmaceuticals. Our bioconjugates business reflects our broad and established capability in manufacturing complex molecules.

We produce bioconjugates exclusively in Visp (CH) where we have manufacturing assets to produce all the individual elements needed for bioconjugate constructs including customers' novel payload and linkers. Our experience spans a broad range of bioconjugation technologies, including commercial antibody drug conjugates (ADCs), radio-immunoconjugates (mAb conjugated to chelating agents), vaccines (haptens conjugated to carrier proteins), PEGylation and cross-linking antibodies conjugated to nanoparticles (TNPs) and non-cytotoxic drugs (including peptides).

We were among the first CDMOs to support commercialization of bioconjugates and currently manufacture the majority of leading ADC therapeutics, which are approved in more than 60 countries.

Parenteral Drug Product Services
Our Drug Product Services (DPS) team focuses on parenteral dosage forms and offers solutions for customers developing therapeutic proteins, peptides and cell and gene therapies, as well as small molecules that require a parenteral dosage form. These products are designed for injection, infusion, intravenous, subcutaneous and intraocular routes of administration.

The DPS team provides a complete portfolio of services for parenteral dosage forms, including formulation development, simulated clinical administration set-up and testing, analytical method development and quality control. Further services include primary packaging and device design and integration, drug product process development, and manufacturing of parenteral dosage forms for stability testing and pre-clinical or clinical testing. Our resources and expertise provide comprehensive support for large customer portfolios and complex biopharmaceuticals.

Our customers benefit from seamless integration of pharmaceutical ingredients and drug substance development for rapid and reliable entry into the clinic and for robust late-stage development. In addition, our DPS team offers best-in-class analytical and specialized services for routine processes and troubleshooting in pharmaceutical manufacturing.

Personal Perspective

Jean-Christophe Hyvert
Biologics

In 2020, we demonstrated the strength of our strategic direction and resilience of our business.

In addition to managing the day-to-day manufacturing activity and product delivery, we have made significant contributions to the development and commercialization of vaccines and therapies for COVID-19 pandemic, across multiple modalities. We have supported the early development of therapies for customers, as well as developing large-scale capacity for antibody therapies for customers such as Humanigen and AstraZeneca.

Our rapid upscale for Moderna was enabled by our pre-investment in our Ibex® facilities and our flexible approach. We now have a total of four confirmed customers for Ibex® Dedicate, three of which were signed in 2020 (including Moderna and Kodiak). This market appetite shows that customers increasingly understand the potential of Ibex® Solutions to accelerate drug development and ensure commercial supply. It also reflects their trust in Lonza as a partner to build and manage new facilities.

As we move forward, we will continue to build on our existing expertise, technological leadership, and assets to support more complex biologics to market for our customers. Indeed, we already support bispecifics, bioconjugates, and microbial, offering the opportunity to express complex molecules. We will also continue to invest in expanding our capacity and capabilities to meet customer needs and market demand. In doing so, we will continue to remain the critical partner in the development and manufacture of new and innovative medicines.

Ibex® Solutions

Ibex® Solutions
Ibex® Solutions consists of three innovative offerings that span the complete product lifecycle of a biopharmaceutical – from preclinical to commercial stages, from drug substance to drug product, all in one location. The goal is to get new medicines to patients faster and give customers flexibility to manage supply addressing drug development uncertainty and market demand changes.

The three offerings Ibex® Design, Ibex® Develop, and Ibex® Dedicate have been developed in response to a highly dynamic market with rapidly evolving customer needs. The home for Ibex® Solutions is our biopark in Visp (CH), which leverages our existing infrastructure, support networks and a stable and highly skilled workforce.

Ibex® Dedicate
Ibex® Dedicate is a fully customizable and flexible manufacturing solution, tailored to the customer precise operational and business needs. The offering enables companies with products in late clinical and commercial stages to respond quickly to changes in market demand, de-risk their programs and simplify their supply chain.

Ibex® Dedicate is integrated into our existing Visp (CH) site. Based on a modular, technology-agnostic concept with prebuilt shells and infrastructure, Ibex® Dedicate saves time to market and provides solutions to multiple technologies, including drug substance and drug product. Our flexible ownership and operating models help our customers to reduce investment risk by providing speed, flexibility and customization opportunities.

Ibex® Design and Develop
Ibex® Design and Ibex® Develop cover the development and clinical manufacturing phases, supporting companies preparing for clinical trials, up to the launch of their product. Due for completion in H1 2021, the facility that will house these offers will be highly automated and use single-use technology (1,000L and 2,000L bioreactors). They will deliver clearly defined packages and timelines, essential for small companies with limited time and funds. They will provide drug product for clinical trials within 12 months, with an option to supply drug product for toxicology studies in only nine months, and from the start of process characterization to BLA submission in 22 months.

Sanofi Joint Venture (JV) Facility
The Sanofi JV facility is due for completion in H1 2021. This large-scale commercial facility (20,000L bioreactors) provides a new model for CDMO-sponsor relations. Both Sanofi and Lonza have 50% of the available capacity, giving them substantial flexibility within the collaboration.

Highlights and Initiatives

In 2020, our Biologics business experienced some limited supply and manufacturing risks arising from the pandemic, but has continued to manage the situation. We saw an increase in new customers and programs, a number of which were focused on new drug candidates for COVID-19. There was high utilization across clinical and commercial – from small to large scale. We reported strong financials for 2020, with sales growth in the mid-teens, but lower operating margin as a result of the operational expenses arising from growth projects[1].

Forecasts for 2021 anticipate double-digit sales growth for the third consecutive year. This will be supported by key strategic growth initiatives across the business. In this context, we are confident that we can outperform the market and deliver the following growth rates on an annual basis for the next three years:

- Mammalian – Lonza (10–14%)[6]; Market (7–8%)[2]
- Microbial – Lonza (9–10%)[6]; Market: (7–8%)[3]
- Bioconjugates – Lonza (10–12%)[6]; Market: (6–8%)[4]
- Drug Product Services – Lonza (20%)[6]; Market (7%)[5]

To support market demand and our future growth, we are investing in new capacities across our global site network. As an example, by the end of 2020, we had installed mammalian capacity of around 330,000L. We are evaluating and planning additional capacities for small, mid- and large-scale in both 2023 and 2024.

In addition, we have invested in capacity expansion for bioconjugates, microbial development and manufacturing and single-use technology in Visp (CH), as well as an expansion of our parenteral drug product development and manufacturing services in Basel and Stein (CH). Furthermore, we continue to build capacity across our US and Asian sites. In Portsmouth (USA) we are adding mid-scale (6K) capacity for clinical and commercial monoclonal antibodies manufacturing, and in Hayward (USA) we are installing single-use technologies for mammalian clinical and commercial launch manufacturing. In Tuas (SG) we expanded our development services for mAb and in Guangzhou (CN), we are opening a new clinical mammalian manufacturing facility, to be operational in Q2/Q3 2021.

[1] Comparison versus 2019 at a constant exchange rate (CER)
[2] Based on volume; Source: Internal Analysis
[3] Based on volume; Source: Roots Analysis Research Report Biopharma Contract Manufacturing Market (2019)
[4] Based on volume; Source: Roots Analysis Research Report ADC contract manufacturing Market (2018)
[5] Based on volume; Source: HighTech Business Decisions (HTBD) Report: Biopharmaceutical Contract Fill-and-Finish: Best Practices Study (2018)
[6] Revenue growth

Expression Technologies

In 2020, we further enhanced the performance of our proprietary GS Gene Expression System® for optimized recombinant protein production with our newly-launched GSv9™ chemically defined media and feeds platform that maximizes cell concentration and protein yields while reducing production time. As a result, we are helping our customers to accelerate time to market for the next generation of therapeutics.

Since its introduction, there have been dozens of commercial products launched using our GS Xceed® Gene Expression System and we continue to support the development pipeline. As an example, we have partnered with Junshi Biosciences to produce a neutralizing antibody for COVID-19, expressed using our GS Xceed® Gene Expression System. This follows on from Junshi's successful launch in China of the first domestic PD-1 targeting antibody using GS Xceed® in 2019. Together with the technical and regulatory expertise, this expression system is expected to provide valuable support for Junshi's COVID-19 management program by helping to improve cell line development timelines and yields.

Clinical Development and Clinical Drug Substance Manufacturing

In 2020, we announced a collaboration with LamKap Bio Group to manufacture bispecific antibodies for cancer treatment. LamKap Bio Group develops fully human bispecific Kappa Lambda (κλ) antibodies targeting malignant cells in solid cancers. Within the collaboration, we have provided cell line development, drug substance and drug product services and current Good Manufacturing Practices (cGMP) for two programs. In addition, our LightPath™ cell line development program, optimized to ensure improved process yield and throughput, provides LamKap with material to enter Phase 1 clinical studies. LightPath™ is a Gene-to-Investigational New Drug (IND) cell line development program, designed to rapidly and cost effectively progress molecule candidates to a stable, commercially viable cell line. The program helps to reduce the time to IND filings, development of cGMP-compliant master and working cell banks.

Another example of collaboration within clinical development and manufacturing is with Surrozen Inc, to provide cell line development, drug substance and drug product (DP) process development and cGMP manufacturing, as well as regulatory support for its Investigational New Drug (IND) filing. Surrozen is developing first-in-class bispecific antibodies that selectively stimulate tissue regeneration. The agreement includes our Light Path™ cell line development program that will provide Surrozen with material to enter a Phase 1 clinical study.

In response to the urgent need for prevention and treatment of COVID-19, we have signed an agreement with AstraZeneca for the manufacture of a combination of two Long-Acting Antibodies (LAABs). The agreement enables AstraZeneca to leverage our extensive antibody manufacturing expertise, as well as QC testing, regulatory expertise, and experience with accelerated manufacturing campaigns. AstraZeneca will be one of the first companies to access our new mid-scale facilities in Portsmouth (USA).

Our integrated end-to-end offering is designed to meet the unique needs of virtual biotechs and their investors. The partnership announced with Anthos Therapeutics Partners, a biotech created by Blackstone Life Sciences and Novartis, utilized our novel milestone business model and leveraged our global network of process development and cGMP manufacturing facilities across Europe and the USA. The partnership supports the development and manufacturing of Abelacimab – a novel, fully human, Factor XI and XIa antibody, which could, if approved, address a range of thrombotic disorders.

Commercial Drug Substance Manufacturing
During 2020, we continued to invest in key enablers including manufacturing assets and announced the expansion of our microbial manufacturing facility in Visp (CH). The new facility will provide mid-scale commercial manufacturing to multiple customers and in particular, will support Servier, a long-term Lonza partner, with drug substance for acute lymphoblastic leukemia (ALL) therapies. The new mid-scale (3,000L) microbial facility will tap into existing central utilities and labs to complement the existing small-scale (1,000L) and large-scale (15,000L) assets in Visp. The facility is expected to be operational in the second half of 2022 with plans to add 100 new staff to the existing, highly-experienced microbial team.

In response to the COVID-19 pandemic, we announced a collaboration with Humanigen to expand lenzilumab manufacturing capacity in advance of potential Emergency Use Authorization in 2020. Lenzilumab is an antibody with the potential to prevent and treat an immune hyper-response called a "cytokine storm" in COVID-19 patients. This collaboration provides Humanigen with additional capacity for cGMP production of lenzilumab with commercial manufacturing scheduled to begin in 2021 at Hayward (USA).

Ibex® Solutions
Our Ibex® Solutions concept has attracted widespread and sustained customer interest, resulting in a series of strategic contracts. As an example, three important deals have been signed for Ibex® Dedicate for microbial and bioconjugates, including with Moderna and Kodiak Sciences.

The long-term contract with Kodiak Sciences covers manufacturing of KSI-301, an Antibody Biopolymer Conjugate (ABC) for the treatment of retinal diseases. The agreement will provide Kodiak with a custom-built bioconjugation facility in our Ibex® Dedicate facility in Visp (CH) with the flexibility to increase or reduce capacities in response to market demand. The construction is targeted for completion in 2021 with plans to utilize our global network of facilities, including Nansha (CN) and Visp to produce the biopolymer, and Portsmouth (USA) to produce the antibody.

In addition, we announced a long-term, strategic collaboration for bioconjugation with a global biopharma company. Under the terms of the agreement, we will construct two new customer-dedicated conjugation suites for the commercialization of antibody-drug conjugates (ADCs) at our Visp site, totaling 1,500m^2 of active manufacturing space and built out within a pre-existing shell. The high throughput bioconjugation suites will be capable of handling highly-potent materials for cancer therapies and will initially manufacture two therapies. The new dedicated facility will employ around 200 staff with operations expected to start from the end of 2022.

The Sanofi JV facility is due for completion in H1 2021, with our available large-scale capacity already contracted.

Parenteral Drug Product Services
Since setting up Parenteral Drug Product Services in November 2016, we have built a leading CDMO business for pharmaceutical development of sterile drug product, supporting more than 80 customers in 2020.

Many patients need to regularly receive significant numbers of injections or infusions. With the aim of improving patient convenience, we have entered into a development and manufacturing collaboration with Ypsomed to offer comprehensive patch injector-based solutions to the pharmaceutical and biotech industry. As part of the agreement, we will provide drug product formulation and process development, filling, final assembly and testing of the final drug/device combination product. The goal is to reduce the number of hospital visits required for therapy administration and provide patients with a wearable patch injector for self-administration into subcutaneous tissue in their own homes.

mRNA
The COVID-19 pandemic has highlighted the increased need for industry partnerships and coordination. We have entered into a ten-year global strategic collaboration with Moderna with a current focus on supporting the commercial manufacture of the drug substance for Moderna's COVID-19 Vaccine using an mRNA-based technology platform.

While we are not a traditional vaccine manufacturer, we have the scientific and technical skills to produce mRNA, enhanced by our global network, which has the ability to produce the vaccine in USA, Europe and Asia.

We have installed four production lines, one in Portsmouth (USA) and three in Visp (CH). Manufacturing of mRNA began in July 2020 at our site in Portsmouth and production commenced in Visp (CH) at the end of 2020. In addition, we use our Ibex® Solutions complex at Visp, which is ideally suited to this challenge because of its flexibility to install a broad range of manufacturing technology.

Cell & Gene

Personal Perspective

Jean-Christophe Hyvert
Cell & Gene

Across the Cell & Gene Technologies (CGT), Personalized Medicine and Bioscience businesses, we continue to grow in response to market demand, while developing new and differentiated tools and technologies for emerging modalities. The CGT business grew significantly over the course of 2020, by advancing the commercialization of multiple programs while initiating several new Investigational New Drugs (INDs) and continuing to industrialize operations. Double-digit growth rates have been maintained in both Viral Vector and Cell Therapy across development services and cGMP supply.

We continue to focus on vein-to-vein networks, by establishing a network of collaborations (with partners including Be The Match Biotherapies, Vinetti and Cryoport). These collaborations will enable us to link apheresis with cold chain and tracking across the CGT supply chain. We have also formed internal collaborations to incorporate our MODA-ES® electronic batch system to create a full chain of custody through the patient value chain.

Our proprietary Cocoon® Platform, which automates the production of autologous cell therapies was used for the first time to treat a patient with CAR-T therapy. This has resulted in extensive interest from other renowned cancer treatment centers and universities, which are also interested in developing patient-specific therapies.

Market demand for Bioscience products was temporarily impacted by the COVID-19 pandemic during Q2, as many academic and research centers were closed. However, demand bounced back in Q3 and the business is currently showing high single-digit growth. Significant digital investments in Bioscience over the course of the year will deliver an enhanced customer experience and improved internal operational efficiency.

Cell & Gene Technologies (CGT)

>20
Years cGMP Experience

>120
Process Development Projects

~200
Customers Served in 20+ Years

4
Centers of Excellence

Market Trends

Cell and gene therapies are a new frontier in medicine; they have the potential to transform the way patients diagnosed with cancers or genetic diseases can be treated. These novel drug candidates have the capacity to provide improved patient outcomes and, in some cases, may even prove to be curative.

The cell and gene therapy market continues to grow at pace and – despite the global economic and social challenges of COVID-19 pandemic – 2020 proved to be a highly successful year for regenerative medicine. In 2020, the global financings in the sector broke the previous financing records that were made in 2018 (USD 13.3 billion) and reached USD 19.9 billion, showing a 100% increase from USD 9.8 billion in 2019[1]. The influx of capital into the field of cell and gene therapy is testament to its potential to transform patient treatments and outcomes. Several pharmaceutical and biotechnology companies and academic institutions are developing cell and gene therapies to treat COVID-19. At the same time, there have been delays to the development of non-COVID-19 related cell and gene therapies, as supply chain lines and treatment centers have been impacted by the pandemic.

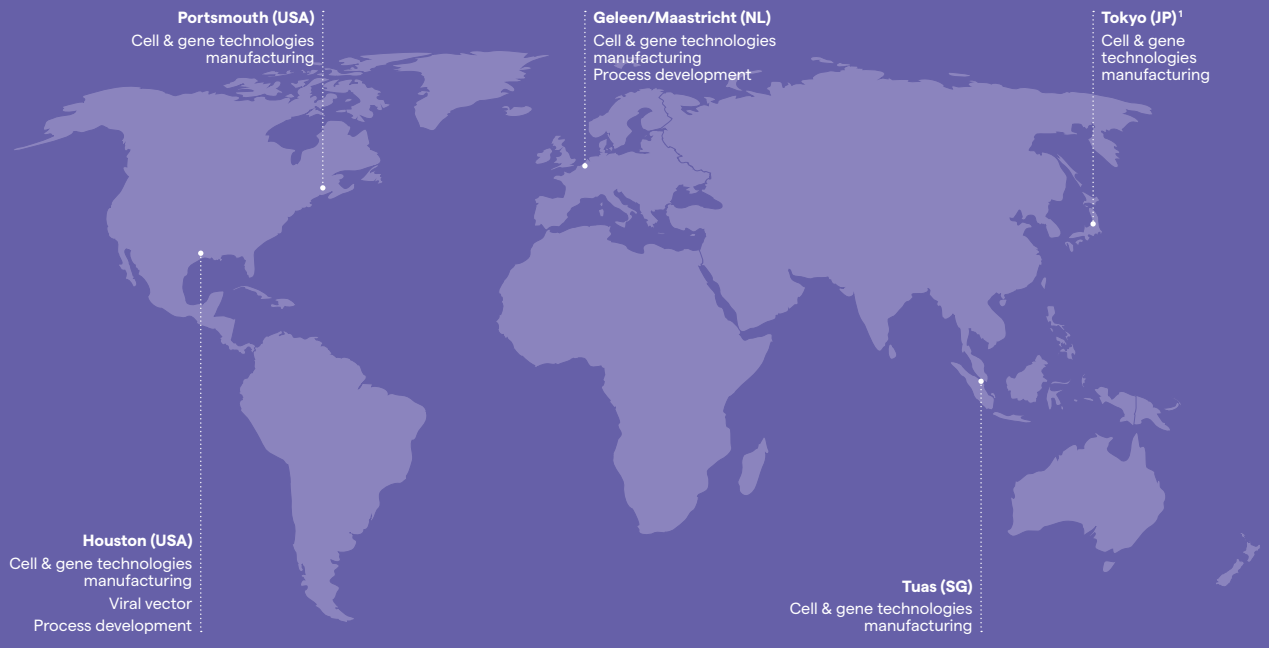
In 2020, the pipeline for cell and gene therapies continued to expand rapidly with more than 2,000 active therapies in development[2]; there are more than 1,200 regenerative medicine clinical trials[1], with five landmark commercial approvals in the past two years of therapeutics for blood cancer, ocular disease, spinal muscular atrophy and blood disorder. We are at an inflection point with an increasing number of products moving towards late-stage and commercialization.

The manufacture of such medicines brings new challenges. For example, the small patient-scale batch sizes for autologous products require automated solutions to enable scalability and efficiencies in manufacturing to meet commercial demand for certain larger indications. Furthermore, getting these treatments to patients around the globe can present logistical challenges. For allogeneic cell and viral vector gene therapies, there is a challenge in scaling-up to increase batch sizes and treat more patients per batch.

Today the cost of production still represents a major hurdle on the path to commercialization. New technologies must be developed to enable robust and efficient manufacturing and yield replicable, high-quality medicines. These challenges need to be addressed to bring affordable curative medicines to patients globally.

[1] Source: Alliance for Regenerative Medicine (Jan 2021)
[2] Source: Alliance for Regenerative Medicine (H1 2020)

Our Global Development and Manufacturing Footprint



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

Our Offerings

Our vision is to enable customers to industrialize their process, from concept to patient. To achieve this objective, we have invested significantly in talent, resources and capacity across our global network of manufacturing sites in recent years. We have built state-of-the-art process development laboratories in Houston (USA) and Geleen/Maastricht (NL) to scale-up early stage processes and make them robust, reproducible and commercially viable for our customers. In addition, we have increased our sites' capabilities and expertise for current good manufacturing practices (cGMP). We now count over 1,000 employees worldwide in our Cell & Gene Technologies (CGT) business across our four centers of excellence located in Houston (USA), Portsmouth (USA), Geleen/Maastricht (NL) and Singapore (SG).

Our offering within the CGT space stands out from the competition in three key areas:

- We have an unmatched level of expertise and capability in process and assay development to successfully de-risk and industrialize processes from early stages to commercial scale. Our large and experienced process and assay development teams supported dozens of customers in 2020, enabling them to de-risk their process and advance towards market approval. These capabilities are coupled with global, state-of-the-art manufacturing across four sites on three continents.
- We provide an integrated offering of key services beyond traditional manufacturing, to meet customer needs from end-to-end. This ability to support customers beyond manufacturing is a particular success factor for CGT customers due to its pioneering nature. Key services include:
  - Dedicated CGT regulatory support from initial regulatory submission to market authorization for fast-track approvals
  - In-house tissue acquisition services with customized solutions to navigate the complexities of tissue sourcing
  - Leading vein-to-vein partners for supply chain orchestration, apheresis network management, transport and logistics including Vineti, Cryoport and Be The Match BioTherapies
  - CGT media products, transfection technologies such as our proprietary Nucleofector® device & Bacterial Endotoxin Testing (BET)
- We provide a service offering and expertise in emerging and promising cell and gene therapy modalities:
  - Exosome-based therapeutics manufacturing capabilities
  - Induced Pluripotent Stem Cell (iPSC) manufacturing expertise
  - Cell-based autologous and allogeneic immunotherapies manufacturing solutions
  - Viral vectors manufacturing for gene therapy including the production of adeno-associated virus (AAV), lentiviral and oncolytic viral vectors

Highlights and Initiatives

In 2020, our Cell & Gene Technologies (CGT) business maintained business continuity through the pandemic, with strong demand for products and services. We reported strong sales growth, well ahead of the market. Margin and operational improvements were achieved, with increased throughput on existing assets[1].

Forecasts for 2021 anticipate further margin improvements in the coming year, as asset utilization continues to pick up and further efficiencies are achieved. Overall, cell and gene therapy market demand remains strong. In this context, we are confident that we can grow together with the industry at around 20% to 25%[2] annually for the next three years.

Our growth strategy is focused on early phase, pre-Investigational New Drug (IND) pipeline, and securing late stage clinical and commercial contracts. To support market demand and our growth, we are investing in new capacities across our site network. We continue to build capacity in Houston (USA) and Portsmouth (USA) while expanding in Geleen/Maastricht (NL).

To improve the efficiency in our production facilities, we have started implementing our proprietary MODA-ES® solution in our manufacturing centers, allowing patient traceability throughout the manufacturing process for our suites. In addition, the MODA-ES® allows open parallel processing of cell and gene therapies, which enables sites to improve production efficiency.

Personalized Medicine
Overall, 2020 has been a transformational and successful year for the Cocoon® Platform and for the Personalized Medicine business in general, and this is expected to continue into 2021.

As an important milestone, we qualified the Cocoon® Platform towards clinical and commercial readiness and treated the first patient at Sheba Medical Center (IL) with an autologous CAR-T therapy, which was manufactured using the Cocoon® Platform. The Israeli Ministry of Health approved use of the Cocoon® Platform to manufacture a CD19 CAR-T cell immunotherapy for an on-going Phase 2 clinical trial for B-cell malignancies after a full comparability study. The Cocoon® Platform will enable Sheba to reduce immunotherapy-manufacturing costs by lowering manpower, time and space requirements. This will also allow Sheba to deliver potentially curative cellular immunotherapies to more patients.

To enable the next generation of precision cell therapy manufacturing, we are collaborating with IsoPlexis on the use of the IsoLight automated proteomics platform. The platform will provide quality analytics for cell therapy products generated on our Cocoon® system. By using the Cocoon® Platform's automated programming and on-board real-time analytics, the collaboration seeks to improve the biological understanding of starting material, and process and product analytics to enable more efficient manufacturing and higher quality cell therapies.

Another example of collaboration announced is with Noga Therapeutics to develop its autologous lentiviral gene therapy on the Cocoon® Platform. This collaboration will be the first use of the system to manufacture an autologous gene therapy aimed at curing a monogenetic gene disorder (immunodeficiency). The flexibility of the Cocoon® Platform and programming allow the system to be used for many processes, including this CD34 cell based gene therapy.

Further, we announced a series of additional collaborations, reflecting the crucial role of research institutes and academic clinical centers in developing next-generation cell therapies, including early-phase clinical cell therapy manufacturing. The collaborations include tech transferring cell therapy manufacturing processes developed independently at the Stanford University School of Medicine, Fred Hutchinson Cancer Research Center and Parker Institute for Cancer Immunotherapy onto the Cocoon® Platform. These leading institutions will evaluate the Cocoon® Platform's potential to manufacture a range of unique cell therapies.

Clinical and Commercial Programs
In 2020, we announced a clinical manufacturing agreement, in place since 2018, with Rocket Pharmaceuticals for the development and manufacturing of Leukocyte Adhesion Deficiency-I (LAD-I). The announcement of the collaboration was made public following Rocket Pharma's publication of positive preliminary data from Phase 1 and 2 trial of RP-L201 for LAD-I. The agreement includes analytical assays and development services. Manufacturing takes place in both the Houston (USA) and Geleen (NL) sites.

To advance a next-generation, off-the-shelf, allogeneic immuno-oncology therapy, we signed a strategic partnership with Indapta Therapeutics. Indapta is developing a proprietary cancer therapy based on a specific, potent variety of Natural Killer immune cells for use in combination with multiple monoclonal antibodies. Within the collaboration, we will provide process development, clinical manufacturing and regulatory support for IND filing in our Houston (USA) site.

Over the course of 2020, we have committed to fighting the COVID-19 pandemic and deploying our expertise and resources to help our customers in this area. One example of our work is the agreement with Altimmune Inc regarding the manufacture of AdCOVID™, a single-dose intranasal vaccine candidate for COVID-19, designed to generate a broad immune response with the unique ability to promote nasal mucosal immunity. The agreement builds on existing collaborations with Altimmune and supports the customer's commercial readiness to produce the vaccine in 2021.

[1] Comparison versus 2019 at a constant exchange rate (CER)
[2] Revenue growth

Partnerships

Induced Pluripotent Stem Cells (iPSCs) are a critical material used in the development and manufacture of cell therapies, given their capacity to self-renew and their ability to differentiate into many different cell types. With the aim of making high quality iPSC therapies available at an affordable cost to our customers, we have entered into a worldwide agreement with FUJIFILM Cellular Dynamics, Inc. Under the agreement, FUJIFILM Cellular Dynamics grants us a non-exclusive right to use their patents related to iPSC generation, including episomal vectors and reprogramming factors, for the clinical manufacture and differentiation of iPSC lines in cell therapies. In return, we have granted FUJIFILM Cellular Dynamics a non-exclusive license for expanded use of our innovative Nucleofector® technology, to enable efficient transfection of cells, stem cell and cell lines. The agreement enables drug developers to leverage both companies' expertise and technologies for the generation of iPSCs through licensing agreements.

In order to improve efficiency across the CGT supply chain and to reinforce our vein-to-vein network, we have announced a strategic partnership with Be The Match BioTherapies®. The partnership establishes Be The Match BioTherapies and Lonza as preferred partners and aims to support the companies' shared goal of providing end-to-end solutions that streamline the development of cell and gene therapies across the CGT supply chain. This collaboration builds on existing partnerships announced by both companies including Lonza's partnership with Cryoport and Vineti.

Bioscience

313
Bioscience Products Filed with Regulatory Agencies

285
Primary Cell Types

7
Key Production Sites

2,825
Scientific Publications Used a Lonza Bioscience Product in 2020

Market Trends

All four areas in which the Bioscience business operates support evolving market needs across drug discovery, development and manufacturing. Our business covers For Further Manufacturing (FFM) Cell Culture Media, Discovery Solutions, Testing Solutions and Software / Informatics Solutions.

In the Discovery market, recent developments in Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR) and non-viral, *ex-vivo* gene therapy are driving demand for alternative processes, such as nucleofection. At the same time, new applications in *in vitro* toxicology and immunotherapy are driving demand for liver cells and immune cells, supporting custom cell biology services.

Several developments and trends drive demand for offerings in the informatics and testing markets. Large biotech and pharmaceutical companies are actively adopting global, integrated and automated solutions in quality control and manufacturing environments. Traceability and data integrity within current good manufacturing practices (cGMP) are becoming a critical part of the manufacturing and release process for many of these companies. With cell and gene therapy on the rise, there is an increasing need for cost-effective and flexible IT systems, which can be rapidly deployed to improve decision making, quality and compliance needs.

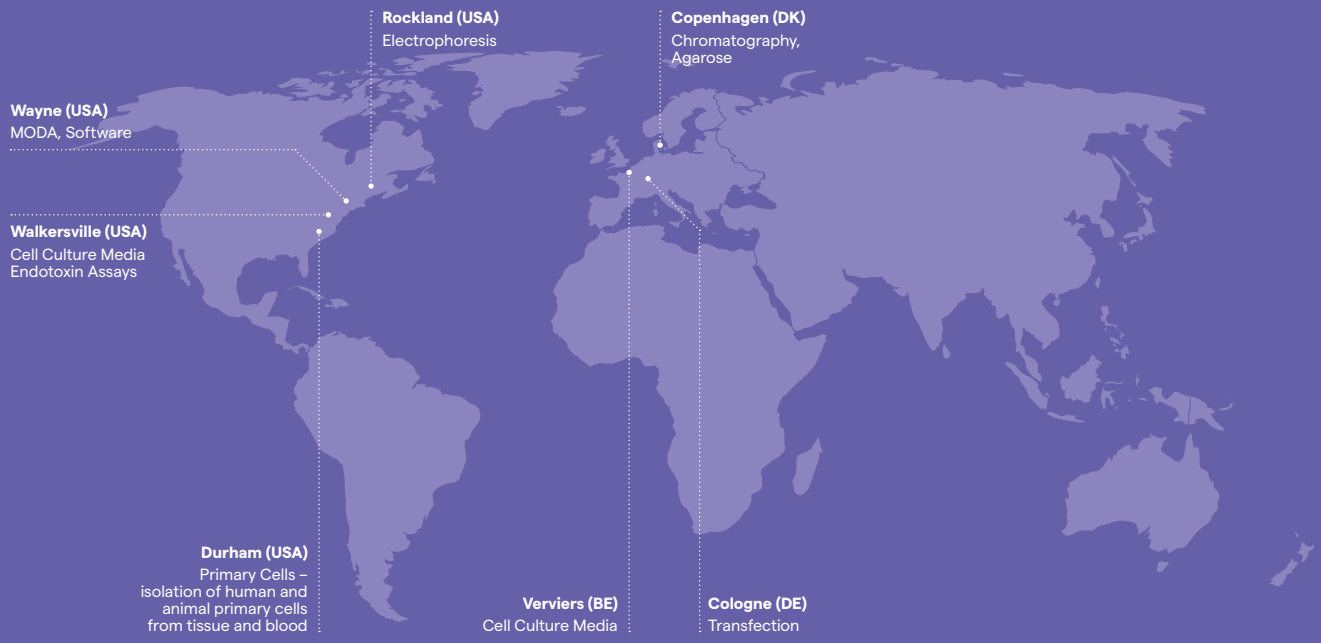
Our Offerings

Our Bioscience business is a market-leading provider of specialty raw materials and enabling technology solutions in core target markets including cell and gene therapy, injectable drugs, vaccines and bio-manufacturing.

We serve customers across the world in academic and government institutions, as well as in major biotech and pharmaceutical organizations. Our offerings provide our customers with tools to develop, manufacture and test therapeutics, from basic research to final product release. We are equipped with solutions, manufacturing capabilities and scientific expertise to work for our customers as they advance from research, through translation, to clinical production. Our global network ensures consistently high standards of quality, compliance and supply security, and provides access to a range of resources to partner with our customers for any challenge.

Our **FFM Cell Culture Media** business serves customers in the bioprocessing market. FFM Cell Culture Media are used at various stages in the development and production of therapeutics, including antibodies, antibody drug conjugates (ADCs), viral and classical vaccines, and cell therapy treatments including CAR-T.

Our Global Development and Manufacturing Footprint



Our **Discovery Solutions** support customers in disease research, drug discovery and development and cell and gene therapy. Our offerings include products and services targeting cardiovascular, respiratory, neurological, metabolic, cancer and other disease-research areas. Our Nucleofector® Transfection technology enables highly efficient transfection of human cell types that have traditionally been difficult to transfect. This enables customers to advance non-viral transfection methods for cell and gene therapy, and to leverage the transformative potential of CRISPR gene editing technologies.

Our **Testing Solutions** provide a complete portfolio for endotoxin and pyrogen testing, including traditional and sustainable methods with fully integrated automated solutions. Our products and platforms are applied for quality control testing and product release in the pharmaceutical, medical device and dialysate markets.

Our fully integrated **Software / Informatics Solutions** streamline quality control processes for biologics and cell and gene therapies, and offer insight into manufacturing operations, with quick access to management, compliance and trending data. Our MODA-ES® Platform is a comprehensive solution that bridges the current gap between manufacturing and quality control to provide a single batch record with an intuitive review and approval interface.

Highlights and Initiatives

Our Bioscience business experienced a solid level of organic growth from existing customers over the course of 2020. Our sites remained operational and the business reviewed its commercial operations to improve both customer experience and operational efficiency. We reported high single-digit sales growth for the year, along with margin gains, driven by efficiency improvements [1].

Forecasts for 2021 anticipate low double-digit sales growth. This will be supported by continuing digital investment and innovation to maintain and extend existing customer relationships. Looking to the future, we are confident in anticipating growth at around 10% to 12% [2] (versus 6% to 8%) [3] on an annual basis for the next three years (CAGR 2020 – 2023).

[1] Comparison versus 2019 at a constant exchange rate (CER)
[2] Revenue growth
[3] Based on volume; Source: Internal Analysis

Discovery Solutions
Bioscience is strongly positioned to support the fight against COVID-19, with our extensive offering of cell biology products for respiratory disease research and development of treatments and vaccines. We were able to rapidly support an increased demand for our respiratory cell products and worked directly with our customers to optimize our offering to suit the quickly developing needs of the research community as they tackled this global pandemic.

COVID-19 presented a significant challenge to our Discovery Solutions customers in 2020, as many research labs were closed during the second quarter. However, our team found creative ways to support our customers as they continued to work remotely, by providing extensive online tutorials, virtual device demos and other initiatives that helped to keep projects running. This allowed a rapid increase in activity as scientists returned to their laboratories.

In 2021, we will celebrate the 20th anniversary of the Nucleofector® technology with a launch of next generation formats and products for use in clinical manufacturing workflows.

For Further Manufacturing (FFM) Cell Culture Media
In 2020, we launched a new medium – the first chemically defined, non-animal origin medium, to enhance and accelerate the production of Adeno Associated Virus (AAV) in Spodoptera Fuigiperda (Sf9) insect cells. The TheraPEAK® SfAAV™ Medium accelerates cell growth, increases productivity and reduces process variability and costs, expediting time-to-market for safe, scalable, life-saving gene therapies.

We have also expanded our cell culture media portfolio with the addition of the GSv9™ Media and Feeds, providing a fully integrated solution specifically designed to optimize recombinant protein production using our GS Gene Expression System®. The new chemically defined, animal-free origin media and feeds are robust, easy to implement and enable greater batch-to-batch consistency. As a result, biopharmaceutical manufacturers can more easily develop streamlined and scalable bioproduction processes.

Last, but not least, various FFM cell culture media have been deployed throughout 2020 in support of multiple COVID-19 related projects globally.

Testing and Informatics Solutions
In 2020, we expanded our extensive portfolio of endotoxin testing products, through a strategic partnership with Sanquin Reagents B.V. for the commercialization of a range of specialized reagents for pyrogen testing of parenteral pharmaceuticals and medical devices using the Monocyte Activation Test (MAT). The new partnership will facilitate global access to the sustainable, highly sensitive methodology for in vitro pyrogen testing. This is essential for the safety of parenteral pharmaceuticals during development, manufacture and release to market. As part of this partnership, we have launched PyroCell® MAT System, which combines Sanquin's optimized MAT reagents with our media and accessories, providing customers with a complete testing solution.

Within our core testing products, we saw a strong uptake in WinkQCL® 6.0 Endotoxin Software upgrades arising from the launch and associated support contracts in the previous year. In addition, our fully automated and integrated PyroTec® PRO System extended its application to bring on board turbidimetric reagents. This automated solution continues to gain global traction with multi-site placements in mid to large pharmaceutical companies and to support an increase in testing volumes associated with vaccine release.

In Informatics, we expanded our MODA-ES® Platform and functionality with the launch of the ELogs module. The MODA-ES® – Electronic Batch Record Solution was also successfully implemented across two of our cell and gene therapy sites in the last 12 months, enabling the digitalization of cell and gene therapy manufacturing operations for greater operational efficiency. Already in use by many major vaccine manufacturers, the MODA-EM® Solution for paperless QC Microbiology was selected by The Vaccine Manufacture and Innovation Center (VMIC) in the UK to support its vision of a paperless facility and meet its ambitious timelines.

Live Biotherapeutic Products

Market Trends

The microbiome is increasingly under exploration as a potential target for new therapies. Live biotherapeutic products (LBP) that influence mucosal or skin microbial ecosystems are being explored for diseases that are increasing in prevalence, such as obesity, cancer and diabetes. Biopharma companies are pursuing various strategies for modifying the microbiome, aiming to either restore specific microbial populations missing in disease, remove harmful ones or introduce genetically engineered strains.

There are currently no commercially available LBP. However, in 2020, there has been significant progress in the industry development pipeline with promising clinical results, combined with significant fundraising activity. As clinical development programs move towards regulatory approval, the demand for commercial manufacturing is expected to grow significantly in the coming years. Many companies developing LBP are smaller biotech or academic spin-offs who may not want to build up in-house manufacturing resources. These companies are looking for development and manufacturing partners who can scale production of strict anaerobes, provide specific drug delivery options and help navigate an emerging regulatory landscape.

BacThera Offering and Footprint

In 2019, a 50/50 strategic joint venture (JV) was established between Lonza and Chr. Hansen for the development and manufacturing of LBP for pharma and biotech customers. The JV was approved to start operating under the name BacThera.

Since the beginning of 2020, BacThera has offered drug substance and drug product development services for customers developing LBP. The organization has grown to more than 70 employees (34% located in Switzerland and 66% in Denmark) and has already been successful in winning non-cGMP projects from North America, Europe and APAC. Customer project delivery is progressing according to plan, with encouraging results and excellent customer feedback.

The current manufacturing footprint is focused in Denmark and Switzerland. At the beginning of 2021, BacThera finalized the set-up of its cGMP drug substance facility in Hørsholm (DK), and the cGMP drug product facility in Basel (CH), with cGMP certification to take place in H1 2021.

Over the next few years, BacThera aims to expand its offering to larger cGMP batch sizes for Phase 3 and commercial production, with the goal of having drug substance and drug product supply chain available under one roof.

Lonza Specialty Ingredients (LSI)

Discontinued Operations

11
R&D Centers

9
Market Fields

>5,800
Customers Worldwide

With offices in 32 countries across five continents and 2,684 employees (full-time equivalent), we take care of our customers and their regional or local requirements.

Market Trends

One of the major market trends in 2020 was the significantly increased need for disinfectants, leading to a sudden, sky-rocketing demand for actives and formulated solutions in spring, following the outbreak of the COVID-19 pandemic. At the same time, personal health and well-being, as well as efficient home care, remained a key priority for consumers, who also continued to move forward towards increasingly environmentally friendly and sustainable products. Markets like vitamins and intermediates were also facing stronger demand, while the uncertainty stemming from the pandemic has deeply affected some industrial markets such as the aerospace and the electronics sectors.

Moreover, regulatory scenarios are becoming increasingly complex, with a growing need for local adaptations. Smaller companies in particular are experiencing greater challenges as they work to keep their licenses in line with more stringent regulations in their individual jurisdictions. Our leading position in Microbial Control enables us to address and meet market challenges and offer solutions, which protect our customers' brands.

Our Offerings

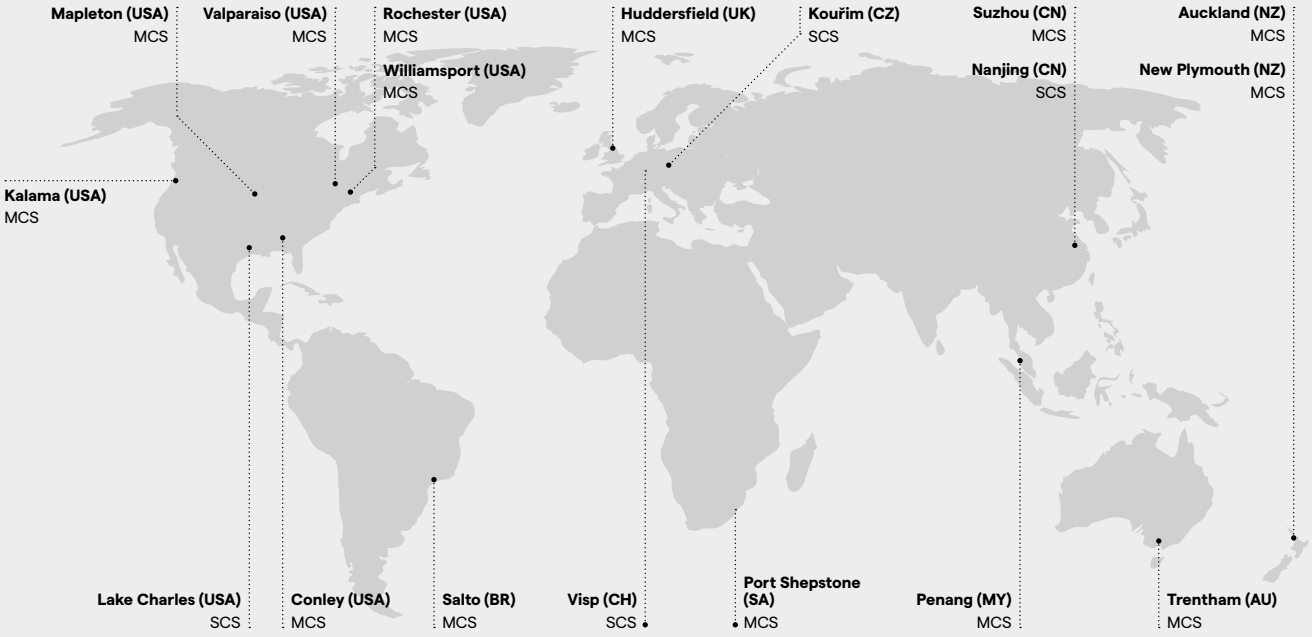
The Lonza Specialty Ingredients (LSI) segment comprises Microbial Control Solutions (MCS) and Specialty Chemical Services (SCS) offerings.

In MCS, we are a leading supplier of biocides, preservatives, complementary technologies and fully formulated, registered and safe solutions. We offer these in a wide range of consumer and industrial markets, including hygiene, as well as in wood applications and crop protection. Our regulatory expertise and extensive data packages allow us to support customers globally with solutions that are compliant with all applicable standards and, in many cases, support their "license to operate". Our SCS business provides solutions for composite materials and processing additives in technically demanding industries. We also offer performance intermediates and chemicals for many industrial applications, including agricultural intermediates, food and feed ingredients, cosmetics, and custom development and manufacturing for non-current good manufacturing practice (non-cGMP) products.

In July 2020, the Board of Directors decided to divest the LSI segment via a sale process, which was initiated in H2 2020. The LSI business has proven its value as a highly profitable specialty chemicals business with a leading position across a range of attractive end-markets. It has also demonstrated resilience in the challenging market conditions arising from the COVID-19 pandemic.

On 8 February 2021, we have entered into a definitive agreement with Bain Capital and Cinven to acquire Lonza's Specialty Ingredients business and operations for an enterprise value of CHF 4.2 billion. Both Bain Capital and Cinven have strong experience in the industrials sector and an established track record of successful investments in portfolio companies.

Our Global Development and Manufacturing Footprint



MCS Microbial Control Solutions
SCS Specialty Chemical Services
* Nansha (CN), within SCS network, has been fully integrated to Lonza Pharma Biotech & Nutrition in Q4 2020

The two private equity bidders showed strong and sustained interest since the beginning of the official sale process, thereby confirming that they are the best home for the business and the right transaction partner for Lonza. Smooth transition for employees and customers is a priority for both seller and buyers. The transaction is anticipated to close in H2 2021.

Financial Highlights

In 2020, Lonza Specialty Ingredients (LSI) largely maintained business continuity through the pandemic, with some minor headwinds caused by demand fluctuations. Despite these challenges, LSI [1] delivered a solid performance, with 3.4% sales growth alongside an improved CORE EBITDA margin, reported at 20.3% [2]. This was supported by sustained high demand for Microbial Control Solutions, arising from global efforts to control the COVID-19 pandemic. Over the course of 2020, the LSI business continued to show resilience across the top and bottom lines, supported by a market orientated organization and a strategic focus on efficiency.

[1] Specialty Ingredients Business (excluding Corporate/carve-out and divestiture costs directly attributable to LSI)
[2] Sales growth and CORE EBITDA margin at a constant exchange rate (CER)

Specialty Ingredients (Discontinued Operations) [1]

Million CHF	2020	2019 (Restated) [2]	Change in %
Sales	1,677	1,713	(2.1)
CORE EBITDA	322	286	12.6
Margin in %	19.2	16.7	
CORE result from operating activities (EBIT)	263	201	30.8
Margin in %	15.7	11.7	

[1] For both 2019 and 2020, Specialty Ingredients reported as discontinued operations includes certain corporate costs directly attributable to LSI together with carve-out/ divestiture related costs
[2] The year 2019 was restated to reflect the classification of the Specialty Ingredients business as discontinued operations. Carve-out and divestiture costs related to Specialty Ingredients (CHF 19 million), which were previously reported in Corporate in 2019, have been reclassified to discontinued operations

Innovations in Lonza Specialty Ingredients (LSI)

Our Microbial Control Solutions businesses are addressing a wide range of consumer-oriented and industrial markets, as well as wood applications and agricultural offerings along a common microbial control platform. The innovation focus is on smart microbial control solutions for resource protection and a consumer-centric healthy environment, anticipating the evolving needs of each marketplace. There is also an increasing focus on challenging regulatory requirements that carry both risks and opportunities for competitive differentiation. Furthermore, our Specialty Chemical Services teams are constantly striving to develop new technologies to make our production processes more sustainable and offer attractive solutions to our customers' demands (e.g. CDMO service or unique composites products).

Regulatory Stewardship
The changing regulatory landscape is impacted by multiple factors. Chemical regulations are becoming more stringent and increasing in number, complexity and enforcements. Due to the heavily regulated nature of the microbial control platform, the choice of chemicals available is shrinking while the need for new and established products continues to expand.

These challenges offer us opportunities to differentiate by using our extensive scientific and regulatory knowledge. This year, our deep understanding and expertise has enabled us to successfully move our DDAC and ADBAC disinfectant compounds past a major regulatory hurdle of the European Biocidal Products Regulation. Our leading position in Microbial Control Regulatory enables us to address and meet market challenges and offer solutions, which protect our customers' brands. This includes stepping up our specific education activities about the importance of disinfection in the fight against COVID-19, while keeping essential industries open more generally.

Microbial Control Solutions has also leveraged its expertise in hygiene via the addition of 16 products to the US Environmental Protection Agency (EPA) list of substances that have been proved in testing to kill the novel coronavirus, SARS-CoV-2, on hard surfaces with both dilutable concentrates and formulations for disinfectant wipes. This is by far the largest number of approvals recently added to the EPA COVID-19 list and is indicative of the complex multi-faceted process of product testing and regulatory activity that keeps us at the forefront of claims generation.

Hand hygiene products provide a frontline defense against COVID-19 in daily life. The Microbial Control Solutions team has leveraged its regulatory toxicology expertise by leading the industry to sustain both Benzalkonium Chloride and Benzethonium Chloride as viable actives for Topical Antiseptic over-the-counter (OTC) drug applications in the US.

Academic Collaborations
In the last three years, we have established collaborations with academic institutions that can help us further develop and maintain our leading position in microbial control. We collaborate with the University of Sofia (BG) – a world renowned school in colloid science and formulation, Sheffield University (UK) – a leading research center for bacterial adhesion and biofilm, Manchester University (UK) – with world class Physical and Microbiology departments and Oxford University (UK).

Whilst working to gain deeper insight into how biocides interact with other ingredients in the formulations, we discovered a unique phenomenon in 2020. We noted an interplay between hydrodynamic and colloidal forces, more specifically the vortex in thin liquid film. Such a phenomenon has never been observed before; it acts as an indicative measure of the quality of research we are involved in. The findings were recently published in one of the leading journals in the field, the Journal of Colloid and Interface Science 576 (2020) 345–355.

In collaboration with Manchester University's School of Biological Sciences and School of Physics and Astronomy, we have been awarded a three-year grant (2019-22) from Innovate UK, a non-governmental public body operating as part of the UK Research and Innovation organization. With this support, we are working on combatting antimicrobial resistance (AMR) through developing a better understanding of the interaction between microorganism and biocide and enabling market expansion through sales growth from active ingredients and formulated products.

Start-up Funding
In early 2018, we launched an exclusive Venture Capital Fund in partnership with Prolog Ventures to invest in potentially game-changing, infection control-centric start-ups focused on North America.

The Prolog Lonza Fund offers value by providing early-stage, high-growth companies with access to our global resources and expertise. In return, we can gain insights into innovative business models and technologies, evolving disinfection trends and changing demands as well as new solutions enabling efficient infection control in hospitals and beyond. By tapping into the entrepreneurial ecosystem, we aim to expand our future business growth opportunities.

In 2020, the Prolog Lonza Fund invested in Kinnos, a start-up company producing a colorizing additive for disinfectants used in hospital cleaning protocols. Hygiene compliance tools – like coloring disinfected surfaces – increasingly raise interest to improve infection control measures and to ensure public safety.

In addition, the Prolog Lonza Fund invested in CleanSlate UV, a start-up company focusing on UV light technology for disinfection of devices including mobile phones. This technology raised special interest during the COVID-19 pandemic and sheds light on growing market opportunities in the healthcare environment, beyond traditional chemistry.

New Technologies
Innovation is a key component of our Specialty Chemical Services business. Within Custom Development & Manufacturing Organization (CDMO) business, we are constantly supporting innovation at our customers' end, by offering background intellectual property and flexible assets, and by involving highly skilled, experienced and scientifically-trained teams.

In this context, we have most recently developed two highly innovative technologies to improve sustainability in two different chemical reactions:

- In 2020, we patented a copper free coupling reaction. As well as being used as catalysts and reactants in organic chemical reactions, Copper(I) salts also exhibit biocidal activity and can be very toxic to aquatic life. This means that if they are used in a chemical process, the effluent requires special treatment to remove the copper before it reaches a wastewater treatment plant. Our new copper free coupling reaction, achieves both higher yields and selectivity by minimizing the formation of side products linked to competing side reactions triggered by copper ions. The process can also be used for similar coupling reactions with different starting materials and does not require any special equipment.
- Fluorine substituents have a determining influence in the biological activity of active ingredients as well as inherent docking properties in enzymes. These properties are crucial in the development of many new active ingredients and active pharmaceutical ingredients containing fluorine substituents. However, the industrial manufacturing of these products poses many hurdles connected to the introduction of the fluorine substituent. One important class of these products contains fluoroalkyl groups, the introduction of which has been a subject of intense academic research, although none are applicable to industrial processes as some of the required reagents would generate significantly more waste and increase costs. In collaboration with LIKAT (the Leibniz Institute of Catalysis in Rostock) (DE), we have developed four catalytic protocols which have solved many industrially associated problems arising from fluoro-alkylation reactions. In several examples, the waste levels can be reduced by more than 90%. Fluoroalkyl groups can also be introduced to advanced intermediates, avoiding the need to use fluorinated intermediates at the beginning of the chemical route. The catalysts used can be reused several times before losing their activity.

Personal Perspective

Antje Gerber
Lonza Specialty Ingredients

The COVID-19 pandemic has presented LSI with both an opportunity and a unique challenge, as demand for disinfectants skyrocketed with the increased global focus on good hygiene practices. The business successfully ramped up production in record time to address additional needs. Overall, the entire LSI portfolio demonstrated a sound resilience to COVID-19.

We have also been through a period of significant transformation within the business, finalizing a new organizational structure that is aligned to growth in the key markets for microbial control and specialty chemical services. Alongside these structural developments, we have completed a carve-out of LSI from Lonza. This has allowed the Board of Directors to make the decision to divest the LSI business.

As we make progress with this divestment, we are also working to accelerate our growth momentum, while also leveraging our strong regulatory expertise, our leadership in microbial control solutions and our niche growth in Specialty Chemical Services. All while maintaining good profitability in more mature businesses.

Importantly, we have worked to develop our values (performance, collaboration, passion and care) around which we will focus our organizational development and product offerings.

Microbial Control Solutions (MCS)

6

Market Fields

Our Offerings

We are a trusted and innovative supplier of microbial control solutions and chemical technologies used in hygiene, home and personal care, wood protection, paints and coatings, material protection and crop protection applications.

Our extensive, global regulatory knowledge has become a key differentiating factor as the biggest challenge for our customers remains the increasingly complex and evolving regulatory landscape. Our deep understanding of both current and future regulatory requirements helps our customers to ensure regulatory compliance in their numerous end markets across the world and our ready-to-use solutions provide them with a continued "license to operate".

Hygiene
Our Hygiene business offers solutions for disinfecting and sanitizing surfaces in healthcare, industrial, institutional and consumer home settings. These include schools, food-processing plants, restaurants, grocery stores and healthcare settings, such as hospitals. Our products help prevent the spread of infection and are available in a range of formats, including concentrates and ready-to-use liquids, wipes and solids. We have not only improved the germicidal registered claims for our core quaternary ("quat") ammonium-based disinfectants that fight against SARS-CoV-2, but also expanded our offering into enhanced hydrogen peroxide solutions. This has allowed us to become a leading supplier in the market with effective hygiene formulations.

Our global registrations portfolio includes activities under many legislative agencies around the world including the US Environmental Protection Agency (EPA), the Canadian Therapeutic Products Directorate (TPD), ECHA, Agência Nacional de Vigilância Sanitária (ANVISA) in Brazil, and the China and Japan Ministries of Health. We also provide regulatory and toxicology expertise, supporting compliance with global regulatory regimes. Our regulatory support covers both active ingredients and finished formulations in relevant regions, providing our customers in many cases with a "license to operate".

Home & Personal Care
Within our Consumer Preservation business, we offer a comprehensive range of preservatives to discerning formulators across the global home & personal care markets. Our solution offering builds on our cutting-edge, anti-microbial know-how and our next-generation preservation systems.

Within Home Care, our focus remains on ensuring that our homes remain healthy places, by providing new and innovative solutions to clean, sanitize and disinfect rooms and surfaces. Our innovative research and development (R&D) programs, aligned with industry-leading regulatory and toxicology expertise, allow us to offer convenient and effective solutions to the many microbial challenges we face at home.

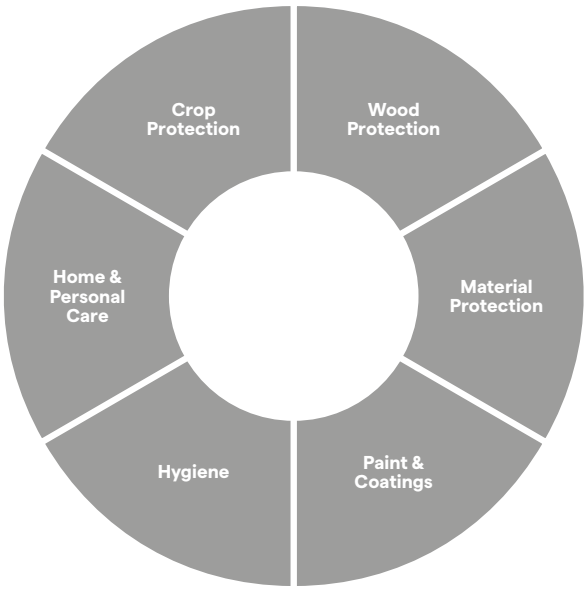
9

R&D Centers

>4,700

Customers Worldwide

Our Products and Services



Responding to more environmentally friendly market requirements such as the use of high efficiency, low temperature washing machines, the laundry hygiene business has developed technologies that provide hygienic solutions. These solutions facilitate consumer laundry products, which kill bacteria, reduce malodor and provide long-lasting freshness for both the clothing itself and washing machines.

We are a leading producer of dandruff-fighting ingredients, built on Zinc Pyrithione – the world's most recognized and widely accepted anti-dandruff active. Our Zinc Omadine® brand is recognized as the global standard for cosmetic anti-dandruff treatment products. With the PO.Fresh® active, we broadened our portfolio of anti-dandruff actives such as Piroctone Olamine, supporting our position as a key partner for scalp health brands worldwide.

Wood Protection
Our Wood Protection products deliver solutions that enhance the performance and increase the longevity of wood, one of the world's greatest renewable resources. We manufacture high quality formulated products that protect wood from mold, insects, fungal decay and fire to help make the most of wood as a sustainable and adaptable construction material.

Our proven preservative technologies extend the service life of lumber, ensuring it can be used as a high-performance material. Sapstain and mold-control treatments keep lumber clean between the sawmill and the consumer's door. Our heavy-duty industrial offerings protect wood in the most hostile environments, including utility, railway, marine and agricultural applications. Our formulations for glue line protection of strand and veneer-based engineered wood products secure the future of wood against alternative materials. We support our customers with our flagship brands of Wolman®, Tanalith®, Dricon® and AntiBlu®. Our R&D centers in Atlanta (USA), Castleford (UK) and Melbourne (AU) keep us at the forefront of international advancements.

Material Protection
Our Material Protection business offers solutions that include anti-microbials, corrosion inhibitors, lubricants and a variety of other specialty additives. These products are used across a range of industries including Metal Working Fluids, Powdered Metal, Polymers and Textiles, and Oil and Gas.

Our industry recognized brands, such as Densil®, Omacide®, Proxel®, Lonzabac®, Vanquish®, Zinc Omadine®, Bardac®, Barquat®, Vantocil® and Dantogard® protect our customers' products and processes from harmful bacteria and fungi. This lengthens the use of a product or protects a process, thereby providing solutions that reduce system costs and waste.

Paints & Coatings
We are a leading supplier of ingredients for Paints & Coatings, which includes providing wet state preservation for waterborne architectural paint and other formulations in the building and construction market space. Additionally, we play a critical role in the protection of marine vessels from marine antifouling and offer best-in-class technology for paint dry film protection against defacement from algae and fungi. Innovation efforts include providing slow-release technologies and an increasing focus on using potentiators that reduce the amount of biocide used while maintaining the efficacy of the coating system.

Customers acknowledge our global brands of Proxel®, Omadine®, Densil® and Umigard®. Each brand reflects our global recognition in the various applications for microbial control ranging from protection on a homeowner facade to the hull of an ocean-going vessel.

Crop Protection
Our Crop Protection has a business-to-many (B2M) model where we serve both the business-to-business (B2B) and the business-to-consumer (B2C) market.

In the B2B market, we provide our clients with top grade preservatives such as Proxel®, as well as formulation ingredients used in the production of crop protection products. Over the past five decades, we have also been selling the active ingredient Meta® Metaldehyde to our business partners. With time, our Meta® product has developed to become the active of choice for controlling slugs and snails. This is not only because we have a premium product and a continuous production system that allows us to meet market demand during fluctuations, but also because we have invested significantly in registration packages across the world.

To serve our B2C distribution partners and support farmers in protecting their crops, we have developed an ever-increasing range of ready-to-use products such as fungicides, insecticides and herbicides, as well as foliar nutrients and tank mix adjuvants.

In order to further support our clients in the control of slugs and snails, we have also extended our molluscicide offering to include Axcela® pellets, a ready-formulated product for use in a wide range of global agricultural needs.

To provide full support to the farming community, we also offer post-harvest sanitation solutions such as FREXUS®. This line of products ensures effective sanitization in the food and farming industries.

Highlights and Initiatives

Hygiene
Our Hygiene business delivered a strong performance in 2020, supported by a series of new long-term customer agreements. In response to the unprecedented demand for quaternary ("quat") ammonium-based disinfectant products during the COVID-19 pandemic, we have increased our production of hygiene products. Total of 16 products have been added to the US EPA list of disinfectants that proved in laboratory tests to kill SARS-CoV-2 on hard surfaces, including both dilutable and concentrates for disinfectant wipes. They include quat-based Lonzagard® products, which are used in a wide range of professional and retail-branded cleaners.

Lonzagard® R-82G is one of the first quat-based disinfectant cleaners registered in the US, Canada and European countries. These registrations allow disinfectant brand owners and professional hygiene service providers to expand a single formulation into multiple countries.

Furthermore, our Nugen® NR Disinfectant Wipe has been recognized in the North American non-woven industries with the most prestigious of awards. The patent-pending product, which kills a range of bacteria and viruses without the need for pre-cleaning of food contact surfaces, was a finalist in the World of Wipes 2020 Innovation Awards. The Nugen® NR Disinfectant Wipe was recognized specifically for its ability to kill norovirus – a key food safety gap previously unaddressed by quat-based pre-saturated food contact surface sanitizing wipes. Approved by both EPA and National Sanitation Foundation (NSF) under D2 (no-rinse) category, it is the only market innovation of its kind in the quat-based food contact surface sanitizing wipes category.

In addition, the Nugen® EHP-TB expands our hydrogen peroxide ready-to-use offering for healthcare settings with enhanced tuberculocidal claims and improves the efficacy contact time from three minutes to just one.

Home & Personal Care
Our Home & Personal Care business saw an increased interest in the preservation and laundry offerings in 2020. However, there was reduced market demand for skin care, hair care and food. Through the year, we continued to strengthen the consumer laundry hygiene portfolio, with chemistries such as Bardac® 2080 and Bardac® 22 active ingredients. These now enjoy adoption across all regions as the performance-critical antimicrobial components of consumer hygiene products such as laundry detergents and rinse-stage sanitizers. Technically engineered from our laundry development center in Blackley (UK), our offerings in the increasingly important consumer laundry hygiene market have expanded from performance-substantiated active ingredients to the development, registration and delivery of fully-formulated consumer product offerings.

Within Personal Care, the lockdown measures arising from the COVID-19 pandemic led to longer storage time of personal care products, creating an even greater reliance on product shelf life and preservation efficacy. In this context, our FormulaProtect® tool has proved to be a strong choice for our customers, as it enables formulators to personalize their preservative decision-making, providing options based not only on key technical and regulatory criteria, but also on their response to marketing trends. With a comprehensive range of preservation, our Geogard® line showed high recognition from our customers as it offers broad-spectrum protection built from alternative, globally-accepted chemistries. These deliver preservatives that can support a clean label claim and use ingredients accepted by ECOCERT, NATURE and other eco-friendly, natural and organic certification bodies.

Wood Protection
Our Wood Protection business experienced increased demand in 2020, leading to a strong performance, as well as positive retail and Do It Yourself (DIY) business.

Our newly launched Vacsol® 6118 is a modern, metal-free, Biocidal Products Regulation (BPR)-authorized wood preservative system, designed with novel actives for the highly regulated European market. This novel formulation provides a flexible preservative system approach to the construction timber market sector.

In 2020, we launched a digital solution in North America (Treat Right® Business Intelligence), which improves the effectiveness and competitiveness of our customers. Through conversations with customers and our familiarity with their facilities, we came to understand their needs and found an opportunity to create a digital-enabled platform to help run their plants more efficiently. The system not only provides business insights for the customer, it also delivers significant benefits by enabling Lonza to remotely access and service their operations.

Material Protection
Our Material Protection business experienced adverse market environment as a result of COVID-19. At the same time, there was an increased demand driven by the COVID-19 pandemic for Material Protection customers to develop products that have antibacterial and antiviral claims. The EPA has clarified the regulatory pathway and we are working with key partners to support the development of plastics, textiles and coatings products that support these claims.

In other industrial segments, we remain focused on offering sustainable supply chains by shipping more concentrated products to reduce our customers CO_2 footprint.

Paints & Coatings
In 2020, we focused our innovation efforts on new dry film technologies, including antimicrobials for hygienic coatings, which have been shown to be effective against bacteria and viruses. No single global regulatory framework exists for establishing claims of residual sanitization on coated surfaces, particularly as it relates to efficacy against viruses. Nonetheless, our experience and expertise in this area allows us to provide regulatory support throughout an approval process, and support the creation of claims in new market spaces such as coatings. We are currently partnering with key customers to bring such claims with new technologies to the marketplace.

Crop Protection
In 2020, our Crop Protection business experienced lower global demand in Agro Specialties as a result of COVID-19, considered as a one-off event. We been driving forward a geographical expansion initiative. We are working on internationalizing our crop protection portfolio by taking a number of products developed at our New Zealand center of excellence, and registered and sold in Australia and New Zealand, to other key regions in the world, such as the USA, LATAM, Australia and Asia.

We reached our first milestone with the launch of our first fungicide and the submission of two insecticide dossiers in the US. This initiative will allow farmers in different parts of the world to access our crop protection products, offering them an additional tool to protect their high value crops (including fruit, nuts and vegetables). This increased level of protection arises from our innovative formulations, which aim to combine different active ingredients into a single product.

Specialty Chemical Services (SCS)

>1,000

Custom Solutions
(Realized Over the Last 45 Years)

Our Offerings

Our Specialty Chemical Services business provides solutions for composite materials and processing additives for technically demanding industries, like electronics and transportation. We also provide performance intermediates and chemicals for many industrial applications, such as agro intermediates, food and feed ingredients, cosmetics, and non-cGMP custom development and manufacturing. In this area, we are the only company to offer both chemical and biotechnological multipurpose technology platforms.

Performance Intermediates & Chemicals
We are a partner of choice for our customers, ensuring security of supply with the highest quality in specialty chemicals. Our cracker in Visp (CH) is the backbone of a comprehensive, fully backward integrated chemical network (Verbund). Originating from this enabling technology, we offer a variety of basic chemicals and performance intermediates based on special technologies, such as Hydrocyanic Acid (HCN), Cyanogen Chloride, Acetylene, Ethylene, Ketene and Diketene chemistry.

Our diverse product portfolio serves customers with key raw materials and intermediates for many applications, including coatings, composites, colorants, adhesives, agrochemicals, cosmetics, vitamins, pharmaceuticals and more. At a global level, we are also the leading vitamin B3 supplier offering Niacin from Visp (CH) and Niacinamide from Nansha (CN).

Our Hydrazine business serves a diverse portfolio of applications including water treatment, lubricants, agriculture, pharmaceuticals, electronics and aerospace.

As a leading global supplier of Pyromellitic Dianhydride (PMDA), we offer a high quality and stable supply of the product as a key raw material for a variety of industries, including electronics, energy, aerospace and other high performance applications. PMDA is also used as an effective additive for specific resins for high-temperature resistant applications and as intermediate for unique lubricants.

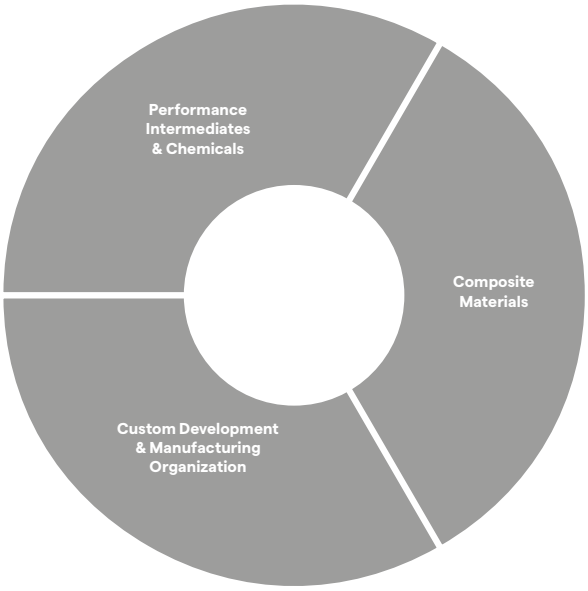
3

Market Fields

>1,300

Customers Worldwide

Our Products and Services



Composite Materials
We are a leading manufacturer of specialized resins to the composite and high performance materials industry. Our product offerings include Primaset® thermoset resins, a novel class of high performance thermoset cyanate ester resins. They are characterized by glass temperatures up to 400°C (800°F). Application areas include electronics, aerospace, automotive, and industrial composites and compounds.

In addition, we offer the Lonzacure® range of special curing agents for high performance materials such as Epoxy, Polyimide, Polyurea and Polyurethane. Our composite thermoset resin systems are used in modern consumer electronics to help enhance performance, as well as in the production of lightweight, reliable structural and interior elements for passenger aircrafts.

Custom Development & Manufacturing Organization (CDMO)
Our CDMO business has strong expertise in the realization of new and innovative products. In addition to plant protection, we also use our extensive process development expertise to serve other markets, namely home and personal care, hygiene, food additives and supplements as well as technical applications like materials for novel rechargeable batteries, inks for industrial printers and other highly delicate applications. Our customers benefit from our technological expertise and our ability to scale up highly sophisticated processes.

In Visp (CH), we run several flexible multi-purpose plants, including hydrogen cyanide (HCN) and Ketene and Diketene handling. These allow us to execute technologically challenging projects, while delivering benefits from the integration into our value chains, our many decades of manufacturing experience and strong development skills.

Our biotechnological capabilities are based at our cutting-edge fermentation plant in Kouřim (CZ). Our services include full life-cycle management for customers' products and we offer one of the broadest downstream processing portfolios available at one site.

Our products and services for the various markets derive from our strong focus on customer needs with a high level of expertise in chemical and biological technology. We support our customers in the development and production of their innovative products for highly sophisticated applications. We can also offer full life-cycle management.

Highlights and Initiatives

Performance Intermediates & Chemicals
Our Performance Intermediates & Chemicals business reported good performance in 2020, which was driven by increased production volumes and supported by price increases in Vitamin B3. The business was also impacted by the slowdown in consumer electronics and industrial applications.

In response to the growing demand for non-current good manufacturing practice (non-cGMP) intermediates for pharma, agro intermediates and food and feed applications, we successfully launched a major capacity expansion in our Visp (CH) site to produce certain pharma and other intermediates.

Custom Development & Manufacturing Organization (CDMO)
In 2020, our CDMO business performance was driven by the successful scale-up of new projects in Visp (CH), supported by indicators of growth in the fermentation business. Our expansion into new markets – beyond our traditional agrochemical base – was increasingly successful. Customers positively acknowledged the approach to broaden our offerings with a rising number of enquiries for chemical- and biotechnological- derived custom development and manufacturing projects.

In addition, we are strengthening our positioning as a partner of choice for companies with highly innovative products, where a reliable and trusted supply chain is critical. By possessing one of the broadest backward integration of in-house raw materials in the CDMO business globally, our supply chain has demonstrated its resilience during the peak of the pandemic with uninterrupted delivery. We have also seen increasing demand from the personal care industry for our CDMO services in 2020.

Composite Materials
During 2020, our Composite Materials business felt some headwinds, as the electronics and aviation sectors were negatively impacted by COVID-19. However, we saw solid demand in the industrial sector and a strong project pipeline in certain geographies and applications.

Due to the increased demand of Primaset® Cyanate Ester during recent years, the Composite Materials group decided in 2018 to install another production line in the dedicated plant at Visp (CH). This second line was successfully launched in 2020 and will support the future demand of this product group.

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Hopewell Centre, Hong Kong

Consolidated Balance Sheet

Assets[1]

Million CHF	Notes[2]	2020	2019
Non-current assets			
Property, plant and equipment	7	3,591	3,817
Intangible assets	6	2,640	3,073
Goodwill	6	3,072	3,651
Other non-current assets	8	301	237
Deferred tax assets	22	24	23
Total non-current assets		**9,628**	**10,801**
Current assets			
Inventories	10	1,136	1,392
Trade receivables	11	715	759
Current tax receivables		32	14
Other receivables, prepaid expenses and accrued income	12	404	341
Cash and cash equivalents	13	495	505
Assets held for sale[3]	5	2,019	29
Total current assets		**4,801**	**3,040**
Total assets		**14,429**	**13,841**

[1] At 31 December
[2] See the accompanying notes to the consolidated financial statements
[3] In 2020, assets held for sale relate to the Specialty Ingredients disposal group (see note 5). In 2019, assets held for sale related to land in Guangzhou (CN), that was sold in 2020

Equity and Liabilities [1]

Million CHF	Notes [2]	2020	2019
Equity			
Share capital	26	74	74
Share premium		2,804	2,906
Treasury shares		(100)	(51)
Retained earnings and reserves		4,037	3,565
Total equity attributable to equity holders of the parent		**6,815**	**6,494**
Non-controlling interests		69	71
Total equity		**6,884**	**6,565**
Liabilities			
Non-current provisions	14	90	145
Employee benefit liabilities	24	283	511
Other non-current liabilities	16	710	549
Non-current debt	15	2,784	2,766
Deferred tax liabilities	22	581	630
Total non-current liabilities		**4,448**	**4,601**
Current provisions	14	67	52
Other current liabilities	16	1,212	1,216
Trade payables	17	308	453
Current debt	15	796	774
Current tax payables	22	159	180
Liabilities held for sale [3]	5	555	0
Total current liabilities		**3,097**	**2,675**
Total liabilities		**7,545**	**7,276**
Total equity and liabilities		**14,429**	**13,841**

[1] At 31 December
[2] See the accompanying notes to the consolidated financial statements
[3] In 2020, liabilities held for sale relate to the Specialty Ingredients disposal group (see note 5)

Consolidated Income Statement [1]

Million CHF	Notes [2]		2020	2019 [3]
Sales	3		**4,508**	**4,207**
Cost of goods sold			(2,660)	(2,444)
Gross profit			**1,848**	**1,763**
Marketing and distribution			(235)	(201)
Research and development	23		(84)	(76)
Administration and general overheads [4]			(610)	(650)
Other operating income	20.1		42	47
Other operating expenses	20.2		(60)	(58)
Result from operating activities (EBIT) [5]			**901**	**825**
Financial income	21.1		12	20
Financial expenses	21.2		(106)	(124)
Net financial result			**(94)**	**(104)**
Share of loss of associates / joint ventures	9		(4)	(2)
Profit before income taxes			**803**	**719**
Income taxes	22		(71)	(71)
Profit from continuing operations			**732**	**648**
Profit / (loss) from discontinued operations, net of tax	5		139	(2)
Profit for the period			**871**	**646**
Attributable to:				
Equity holders of the parent			869	645
Non-controlling interest			2	1
Profit for the period			**871**	**646**
Earnings per share for profit from continuing operations attributable to equity holders of the parent:				
Basic earnings per share – EPS basic	27	CHF	9.81	8.73
Diluted earnings per share – EPS diluted	27	CHF	9.77	8.68
Earnings per share for profit attributable to equity holders of the parent:				
Basic earnings per share – EPS basic	27	CHF	11.68	8.70
Diluted earnings per share – EPS diluted	27	CHF	11.63	8.65

[1] For the year ended 31 December
[2] See the accompanying notes to the consolidated financial statements
[3] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)
[4] Includes the amortization of acquisition-related intangible assets (2020: CHF 142 million, 2019: CHF 142 million)
[5] Result from operating activities (EBIT) excludes interest income and expenses as well as financial income and expenses that are not interest related (see note 21) and Lonza's share of profit / loss from associates and joint ventures

Consolidated Statement of Comprehensive Income[1]

Million CHF	Notes[2]		2020		2019
Profit for the period			**871**		**646**
Other comprehensive income					
Items that will not be reclassified to profit or loss:					
Remeasurements of net defined benefit liability	24	(32)		(43)	
Income tax on items that will not be reclassified to profit or loss	22.2	1	(31)	7	(36)
Items that are or may be reclassified subsequently to profit or loss:					
Exchange differences on translating foreign operations		(230)		(153)	
Cash flow hedges – effective portion of changes in fair value		6		(6)	
Cash flow hedges – reclassified to profit or loss		(10)		1	
Income tax on items that are or may be reclassified to profit or loss	22.2	8	(226)	0	(158)
Other comprehensive income for the period, net of tax			**(257)**		**(194)**
Total other comprehensive income for the period			**614**		**452**
Total comprehensive income attributable to:					
Equity holders of the parent			614		452
Non-controlling interests			0		0
Total comprehensive income for the period			**614**		**452**

[1] For the year ended 31 December
[2] See the accompanying notes to the consolidated financial statements

Consolidated Statement of Cash Flows [1]

Million CHF	Notes [2]	2020	2019
Profit for the period		**871**	**646**
Adjustments for non-cash items:			
– Income taxes	22	115	63
– Net financial result		102	124
– Share of loss of associates / joint ventures		8	3
– Depreciation of property, plant and equipment (incl. depreciation of right-of-use of leased assets)	7	340	351
– Amortization of intangibles	6	186	193
– Reversal of impairment	4,7	(3)	(7)
– Impairment losses on property, plant, equipment, intangibles and assets held for sale	4,6,7	38	16
– Impairment losses on capitalized contract assets		12	0
– Increase in provisions	14	42	67
– Increase / (decrease) in employee benefit liability		(2)	2
– Loss on disposal of property, plant and equipment		7	6
– Amortization of other liabilities / assets		(47)	(22)
– Share-based payments	25	48	56
– Non-cash items related to discontinued operations (incl. recycling of accumulated foreign exchange losses)	5	(3)	126
– Non-cash customer payment [3]		0	(14)
Income taxes paid		(150)	(137)
Interest paid		(49)	(80)
Total before change in net working capital		1,515	1,393
Increase in inventories		(129)	(171)
Increase in trade receivables		(167)	(106)
Increase / (decrease) in trade payables		(38)	40
(Increase) / decrease other net working capital		131	(81)
Use of provisions	14	(52)	(56)
Decrease in other payables, net		(130)	(42)
Net cash provided by operating activities		**1,130**	**977**
Purchase of property, plant and equipment	7	(892)	(757)
Purchase of intangible assets	6	(81)	(29)
Acquisition of subsidiaries, net of cash acquired [4]	5.3	(15)	(24)
Disposal of subsidiaries, net of cash disposed of	5.2	7	620
Purchase of unconsolidated investments		(32)	(15)
Proceeds from unconsolidated investments		9	1
Proceeds from assets held for sale		29	0
Prepayment of leases		(20)	(21)
Capitalized contract costs		(17)	(3)
Net proceeds from sales and purchases of other assets		8	4
Increase in loans and advances		(91)	(69)
Interest received		5	5
Dividends received		1	3
Net cash used for investing activities		**(1,089)**	**(285)**

Million CHF	Notes[2]	2020	2019
Repayment of straight bonds	15	(150)	(300)
Repayment of bank loan	15	0	(198)
Repayment of syndicated loan	15	(144)	(119)
Issuance / (repayment) of term loan	15	(526)	265
Issuance of straight bonds	15	970	0
Increase / (decrease) in debt	15	4	(94)
Principal elements of lease payments		(30)	(24)
Increase in other non-current liabilities[5]		318	60
Decrease in other non-current liabilities		(2)	0
Capital injection from owners of the non-controlling interests		0	1
Purchase of treasury shares		(141)	(48)
Dividends paid[6]	27	(206)	(206)
Net cash used for financing activities		**93**	**(663)**
Effect of currency translation on cash		(20)	(6)
Net increase in cash and cash equivalents		**114**	**23**
Cash and cash equivalents at 1 January		505	482
Cash and cash equivalents at 31 December		**619**	**505**
Cash and cash equivalents classified as held for sale	5	(124)	0
Cash and cash equivalents at 31 December (as reported)		**495**	**505**

[1] For the year ended 31 December. The Group has elected to present a statement of cash flows that includes an analysis of all cash flows in total – i.e. including both continuing and discontinued operations; amounts related to discontinued operations by operating, investing and financing activities are disclosed in Note 5.1
[2] See the accompanying notes to the consolidated financial statements
[3] Payment from customer in the form of quoted equity instruments
[4] In 2020, CHF 15 million deferred purchase price payment related to the sterile drug product fill & finish business acquired in 2019
[5] During 2020 Lonza received CHF 19 million of funds from customers to purchase equipment for utilization at Lonza facilities. These amounts are not separately disclosed in the consolidated cash flow statement as the related equipment is not owned by Lonza
[6] Includes dividends of CHF 2 million (2019: CHF 2 million) paid to minority shareholders of a subsidiary

Consolidated Statement of Changes in Equity

Million CHF	Notes[1]	Attributable to equity holders of the parent							Non-controlling interests	Total equity
		Share capital	Share premium	Retained earnings	Hedging reserve	Translation reserve	Treasury shares	Total		
At 1 January 2019		**74**	**3,110**	**3,672**	**(11)**	**(556)**	**(71)**	**6,218**	**72**	**6,290**
Profit for the period		0	0	645	0	0	0	645	1	646
- Remeasurement of defined benefit liability		0	0	(36)	0	0	0	(36)	0	(36)
- Exchange differences on translating foreign operations		0	0	0	0	(151)	0	(151)	(1)	(152)
- Cash flow hedges		0	0	0	(6)	0	0	(6)	0	(6)
Other comprehensive income, net of tax		0	0	(36)	(6)	(151)	0	(193)	(1)	(194)
Total comprehensive income for the period		**0**	**0**	**609**	**(6)**	**(151)**	**0**	**452**	**0**	**452**
Dividends	27	0	(204)	0	0	0	0	(204)	(2)	(206)
Recognition of share-based payments	25	0	0	76	0	0	0	76	0	76
Movements in treasury shares		0	0	(68)	0	0	20	(48)	0	(48)
At 31 December 2019		**74**	**2,906**	**4,289**	**(17)**	**(707)**	**(51)**	**6,494**	**71**	**6,565**
Profit for the period		0	0	869	0	0	0	869	2	871
- Remeasurement of defined benefit liability		0	0	(31)	0	0	0	(31)	0	(31)
- Exchange differences on translating foreign operations		0	0	0	0	(221)	0	(221)	(2)	(223)
- Cash flow hedges		0	0	0	(3)	0	0	(3)	0	(3)
Other comprehensive income, net of tax		0	0	(31)	(3)	(221)	0	(255)	(2)	(257)
Total comprehensive income for the period		**0**	**0**	**838**	**(3)**	**(221)**	**0**	**614**	**0**	**614**
Dividends	27	0	(102)	(102)	0	0	0	(204)	(2)	(206)
Recognition of share-based payments	25	0	0	54	0	0	0	54	0	54
Movements in treasury shares		0	0	(94)	0	0	(49)	(143)	0	(143)
At 31 December 2020		**74**	**2,804**	**4,985**	**(20)**	**(928)**	**(100)**	**6,815**	**69**	**6,884**

[1] See the accompanying notes to the consolidated financial statements

Translation reserve
The translation reserve of the consolidated statement of changes in equity comprises all foreign exchange differences arising from the translation of the financial statements of foreign entities including the impact on translating monetary items that form a net investment in a foreign operation.

Notes to the Consolidated Financial Statements

Note 1
Accounting Principles

1.1
Lonza Group

Lonza Group Ltd and its subsidiaries (hereafter «the Group» or «Lonza») operate under the name Lonza. Lonza Group Ltd is a limited liability company incorporated and domiciled in Switzerland. The Group is headquartered in Basel, Switzerland. Lonza is one of the world's leading and most-trusted suppliers to the pharmaceutical, biotech and specialty ingredients markets. It harnesses science and technology to create products that support safer and healthier living and enhance the overall quality of life. Benefiting from its regulatory expertise, Lonza is able to transfer its know-how from pharma to hygiene and fast-moving consumer goods all the way to coatings and composites and the preservation and protection of agricultural goods and other natural resources.

1.2
Basis of Preparation

The consolidated financial statements for 2020 and 2019 are reported in Swiss francs (CHF), rounded to millions, and based on the annual accounts of Lonza Group Ltd (Company) and its subsidiaries at 31 December, which have been drawn up according to uniform Group accounting principles. The consolidated accounts are prepared in accordance with International Financial Reporting Standards (IFRS) and with Swiss law. They are prepared on the historical cost basis, except that derivative financial instruments and contingent considerations are stated at their fair values and the employee benefit liability is stated at the fair value of plan assets less the present value of the defined benefit obligation.

Following the Board of Directors' decision on 23 July 2020 to divest the Specialty Ingredients (LSI) segment, a divestment process was initiated in H2 2020. In the consolidated financial statements, discontinued operations in both 2020 and 2019 (restated) include the LSI business together with certain corporate costs directly attributable to LSI together with carve-out / divestiture related costs. Furthermore, as of 1 October 2020, the assets and liabilities related to LSI business were reclassified to assets and liabilities of a disposal group held for sale. The prior year balance sheet (including the related notes) is not required to be restated.

1.3
Changes in Accounting Standards

The following new or amended standards became applicable for the current reporting period and did not have any material effect on the Group's financial statements:

- Amendments to References to Conceptual Framework in IFRS Standards
- Definition of a Business – Amendments to IFRS 3
- Definition of Material – Amendments to IAS 1 and IAS 8
- Interest Rate Benchmark Reform – Amendments to IFRS 9, IAS 39 and IFRS 7

1.4 Accounting Standards Issued, but Not Yet Effective

The following revised standards have been issued, but are not yet effective. They have not been applied early in these consolidated financial statements.

These amendments are still being evaluated and the Group does not currently expect them to have a significant impact on the consolidated financial statements.

Standard/Interpretation	Effective date
COVID-19-Related Rent Concessions (Amendment to IFRS 16)	1 January 2021
Interest Rate Benchmark Reform phase 2 – Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16	1 January 2021
Onerous Contracts – Cost of Fulfilling a Contract (Amendments to IAS 37)	1 January 2022
Annual Improvements to IFRS Standards 2018–2020	1 January 2022
Property, Plant and Equipment – Proceeds before Intended Use (Amendments to IAS 16)	1 January 2022
Reference to the Conceptual Framework (Amendments to IFRS 3)	1 January 2022
Classification of Liabilities as Current or Non-Current (Amendments to IAS 1)	1 January 2023

1.5 Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements represent the accounts for the year ended 31 December of Lonza Group Ltd and its subsidiaries. Subsidiaries are those entities controlled, directly or indirectly, by Lonza Group Ltd. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Changes in ownership interests in subsidiaries are accounted for as equity transactions if they occur after control has already been obtained and if they do not result in a loss of control. The significant subsidiaries included in the consolidated financial statements are shown in note 33.

The full consolidation method is used, whereby the assets, liabilities, income and expenses are incorporated in full, irrespective of the extent of any non-controlling interests. Payables, receivables, income and expenses between Lonza consolidated companies are eliminated. Intercompany profits included in year-end inventories of goods produced within Lonza are eliminated, as well as unrealized gains on transactions between subsidiaries. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

The Group's interests in equity-accounted investees comprise interests in associates and joint ventures, as disclosed in note 9. Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities. Associates and interests in joint ventures are accounted for in the consolidated financial statements using the equity method of accounting. They are recognized initially at cost, which includes transaction costs.

Subsequent to the initial recognition, the consolidated financial statements include the Group's share of the profit and loss and other comprehensive income of equity-accounted investees, until the date on which significant influence or joint control ceases. Dividends paid during the year reduce the carrying value of the investments.

Segment Reporting
For the purpose of segment reporting, the Group's Executive Committee (EC) is considered to be the Group's Chief Operating Decision Maker. The determination of the Group's operating segments is based on the organizational units for which information is reported to the EC on a regular basis. The information provided is used as the basis of the segment revenue and profit disclosures reported in note 2. Selected segment balance sheet information and performance measures are also routinely provided to the EC.

Revenues are primarily generated from the sale of products. The Pharma Biotech & Nutrition segment also derives revenues from rendering of services as well as the sale or licensing of products or technology to third parties. Residual operating activities from certain global activities are reported as «Corporate.» These include the EC and global group functions for communications, human resources, finance (including treasury and tax), legal, environmental and safety services. Transfer prices between operating segments are set on an arm's-length basis. Operating assets and liabilities consist of property, plant and equipment, goodwill and intangible assets, trade receivables/payables, inventories and other assets and liabilities, such as provisions, which can be reasonably attributed to the reported operating segments. Non-operating assets and liabilities mainly include current and deferred income tax balances, post-employment benefit assets/liabilities and financial assets/liabilities such as cash, investments and debt.

Revenue Recognition
Revenue is measured based on the consideration specified in the contract with a customer und excludes amounts collected on behalf of third parties. Revenues are recognized when a customer obtains control of a good or service and thus has the ability to direct the use and obtain the benefits from the good or service. In the custom manufacturing business, customer agreements may foresee payments at or near inception of contracts, which typically relate to setup efforts (e.g. system preparation, facility modification) for new customer-dedicated production facilities. Such setup efforts typically do not represent separate performance obligations, as no good or service is transferred to the customer. The payments for these setup efforts comprise part of the expected transaction price and are deferred as contract liabilities (non-current deferred income) until performance obligations are satisfied. Product sales are recognized when control of the products has been transferred, i.e. when the products are delivered to the customer, the customer has full discretion over the sales channel and pricing of the products, and there is no unfulfilled obligation that could affect the customer's acceptance of the products. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the customer, and either the customer has accepted the products in accordance with the sales contract, the acceptance provisions have lapsed, or the Group has objective evidence that all criteria for acceptance have been satisfied. Contracts with customers may include volume discounts based on aggregate sales over a specified period. Revenues from these sales are recognized based on the price specified in the contract, net of the estimated volume discounts. Accumulated experience is used to estimate and provide for such discounts, using the expected value method, and revenues are only recognized to the extent that it is highly probable that no significant reversal will occur. A contract liability is recognized for expected volume discounts payable to customers in relation to sales made until the end of the reporting period. Revenues from providing services are recognized in the accounting period in which these services are rendered. For most services revenue recognition over time is appropriate. This is done with reference to output (i.e. analysis delivered) to measure the amount of revenue to be recognized. Revenue recognition over time is not applied for customer service contracts where the consideration depends on a defined outcome or result and its achievement cannot be estimated. In this case, revenues are only recognized at the point in time when the service has been completed and accepted by the customer.

Research & Development
Research & development costs are generally charged against income as incurred. Development costs are only capitalized when the related products meet the recognition criteria of an internally generated intangible asset, which mainly require the technical feasibility of completing the intangible asset, the probability of future economic benefits, the reliable measurement of costs and the ability and intention of the Group to use or sell the intangible asset. Fixed assets (buildings, machinery, plant, equipment) used for research purposes are valued similarly to other fixed assets. Such assets are capitalized and depreciated over their estimated useful lives.

Expenses for research & development include associated wages and salaries, material costs, depreciation on fixed assets, as well as overhead costs.

Other Operating Income and Other Operating Expenses
Other operating income and other operating expenses include items not assignable to other functions of the consolidated income statement. They mainly include gains and losses from the disposal of intangible assets, property, plant and equipment and other non-current assets, income and expenses from the release and recognition of provisions, income and expense related to restructuring, gains and losses from currency-related operating derivative instruments, as well as operating exchange rate gains and losses.

Net Financial Result
Net financial result comprises interest payable on borrowings calculated using the effective interest method, the interest expenses on the net defined-benefit liability, the finance charge for finance leases, dividend income, foreign exchange gains and losses arising on financial assets and liabilities, gains and losses on hedging instruments that are recognized in the income statement and gains/losses on sale of financial assets. Interest income/expense is recognized in the income statement as it accrues, taking into account the effective yield of the asset or liability or an applicable floating rate. Dividend income is recognized in the income statement on the date

that the dividend is declared. Interest income and expense include the amortization of any discount or premium or other differences between the initial carrying amount of an interest-bearing instrument and its amount at maturity calculated on an effective interest rate basis.

Foreign Currencies
Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). The consolidated financial statements are presented in Swiss francs (CHF), which is the Group's presentation currency. For consolidation purposes the balance sheet of foreign consolidated companies is translated to CHF with the exchange rate on the balance sheet date. Income, expenses and cash flows of the foreign consolidated companies are translated into CHF using the monthly average exchange rates during the year (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions). Exchange rate differences arising from the different exchange rates applied in balance sheets and income statements are recognized in other comprehensive income. In the individual company's financial statements, transactions in foreign currencies are translated at the foreign exchange rate applicable at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are translated at the foreign exchange rate ruling at that date. All resulting foreign exchange gains and losses are recognized in the individual company's profit or loss statement, except when they arise on monetary items that form a part of the Group's net investment in a foreign entity. In such a case, the exchange gains and losses are recognized in other comprehensive income.

Hedge Accounting
The Group uses derivatives to manage its exposures to foreign currency and interest rate risks. The instruments used may include interest rate swaps, forward exchange contracts, FX swaps and options. The Group generally limits the use of hedge accounting to certain significant transactions. At inception of designated hedging relationships, the Group documents the risk management objective and strategy for undertaking the hedge. The Group also documents the economic relationship between the hedged item and the hedging instrument, including whether the changes in cash flows of the hedged item and hedging instrument are expected to offset each other

Cash Flow Hedging
This is a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with a recognized asset or liability or a highly probable forecast transaction and could affect profit or loss. The hedging instrument is recorded at fair value. The effective portion of the hedge is included in other comprehensive income and any ineffective portion is reported in other operating income/expenses (instruments to manage the foreign currency exposure related to sales or purchases) or financial income/expenses (foreign currency exposure related to debt repayment or interest exposure on the Group's debt). If the hedging relationship is the hedge of the foreign currency risk of a firm commitment or highly probable forecasted transaction that results in the recognition of a non-financial item, the cumulative changes in the fair value of the hedging instrument that have been recorded in other comprehensive income are included in the initial carrying value of the non-financial item at the date of recognition. For all other cash flow hedges, the cumulative changes in the fair value of the hedging instrument that have been recorded in other comprehensive income are included in cost of goods sold, other operational income/expenses or other financial income/expense (based on the principles explained above) when the forecasted transaction affects net income.

Fair Value Hedging
This is a hedge of the exposure to changes in fair value of a recognized asset or liability, or an unrecognized firm commitment, or an identified portion of such an asset, liability or firm commitment, that is attributable to a particular risk and could affect profit or loss. The hedging instrument is recorded at fair value and the hedged item is recorded at its previous carrying value, adjusted for any changes in fair value that are attributable to the hedged risk. Changes in the fair values are reported in other operating income/expenses (instruments to manage the foreign currency exposure related to sales or purchases) or financial income/expenses (foreign currency exposure related to debt repayment or interest exposure on the Group's debt).

Capitalized Contract Costs
The Group recognizes contract assets mainly consisting of contract fulfilment costs that are incurred after a contract is obtained but before goods or services have been delivered to the customer. These costs arise from long-term contracts in the custom manufacturing business for customer specific production facility expansions or modifications on Lonza's premises. They typically include costs for commissioning, qualification and start-up, as well as for activities relating to process development and technology transfer.

Property, Plant and Equipment
Property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment losses. The assets are depreciated on a component basis over their estimated useful lives, which vary from 10 to 50 years for buildings and structures, and 5 to 16 years for production facilities, machinery, plant, equipment and vehicles. Fixed assets are depreciated using the straight-line method over their estimated useful lives. Subsequent expenditure incurred to replace a component of an item of property, plant and equipment that is accounted for separately, including major inspection and overhaul expenditure, is capitalized. Other subsequent expenditure is capitalized only when it increases the future economic benefits embodied in the item of property, plant and equipment. Borrowing costs incurred with respect to qualifying assets are capitalized and included in the carrying value of the assets. All other expenditure

is recognized in the income statement as an expense as incurred. The residual values and the useful life of items of property, plant and equipment are reviewed and adjusted, if appropriate, at each balance sheet date.

Leases
The Group assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Lonza applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. Lonza recognizes lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, restoration costs and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets. If ownership of the leased asset transfers to Lonza at the end of the lease term or the cost of the right-of-use asset reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

Lease liabilities are initially measured at the present value of the lease payments, considering fixed payments (including in-substance fixed payments), variable lease payments that are based on an index or a rate, amounts expected to be payable by the lessee under residual value guarantees, the exercise price of a purchase option if the lessee is reasonably certain to exercise that option, and payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option, less any lease incentives receivable.

Extension and termination options are included in a number of property and equipment leases across the Group. These terms are used to maximize operational flexibility in terms of managing contracts. In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated). The majority of extension and termination options held are exercisable only by the Group and not by the respective lessor. This assessment is reviewed if a significant event or a significant change in circumstances occurs which affects this assessment and that is within the control of the lessee.

In calculating the present value of lease payments, Lonza uses its incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable. The incremental borrowing rate is derived from market information, the weighted average duration of the lease and the underlying specifics of the leased asset. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made.

Lonza applies the short-term lease recognition exemption to its short-term leases (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of other movables that are considered to be of low value. Lease payments on short-term leases and leases of low value assets are recognized as expense on a straight-line basis over the lease term.

In some circumstances, Lonza could act as a lessor. In case of a sublease, Lonza would account for the head lease and the sublease as two separate contracts. The sublease will be classified as a finance or operating lease by reference to the right-of-use asset arising from the head lease.

Intangible Assets
Purchased intangible assets with a finite useful life are stated at cost less accumulated amortization and accumulated impairment losses. Intangible assets acquired in a business combination are recognized at their fair value. Intangibles include software, licenses, patents, trademarks and similar rights granted by third parties, capitalized product development costs and capitalized computer software development costs. Costs associated with internally developed or maintained computer software programs are recognized as an expense as incurred. Costs that are directly associated with the production of identifiable and unique software products controlled by the Group, and that will probably generate future economic benefits exceeding costs beyond one year, are recognized as intangible assets. Those direct costs include the software development employee costs and an appropriate portion of relevant overheads. Intangible assets are amortized using the straight-line method over their estimated useful lives, which is the lower of the legal duration and the economic useful life. Useful lives vary from 3 to 5 years for software, 5 to 35 years for patents, trademarks and similar rights and 4 to 16 years for development costs. All intangible assets in Lonza have finite useful lives, except for the Capsugel trade name acquired in 2017 and the trademarks acquired in 2011 through the Arch Chemicals business combination and 2007 through the Cambrex business combination. The Group considers that these trademarks have an indefinite useful life as they are well established in the respective markets and have a history of strong performance. The Group intends and has the ability to maintain these trademarks for the foreseeable future.

Goodwill and Business Combinations
Business combinations are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value at the date of acquisition and includes the cash paid plus the fair value at the date of exchange of assets,

liabilities incurred or assumed and equity instruments issued by the Group. The fair value of the consideration transferred also includes contingent consideration arrangements at fair value. Directly attributable acquisition-related costs are expensed in the period the costs are incurred and the services are received and reported within administration and general overhead expenses. At the date of acquisition, the Group recognizes the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquired business. The identifiable assets acquired and the liabilities assumed are initially recognized at fair value. Where the Group does not acquire 100% ownership of the acquired business, non-controlling interests are recorded as the proportion of the fair value of the acquired net assets attributable to the non-controlling interest. Goodwill is recorded as the surplus of the consideration transferred over the Group's interest in the fair value of the acquired net assets. Any goodwill and fair value adjustments are recorded as assets/liabilities of the acquired business in the functional currency of that business.

When the initial accounting for a business combination is incomplete at the end of a reporting period, provisional amounts are recognized. During the measurement period, the provisional amounts are retrospectively adjusted and additional assets and liabilities may be recognized to reflect new information obtained about the facts and circumstances that existed at the acquisition date which, had they been known, would have affected the measurement of the amounts recognized at that date. The measurement period does not exceed 12 months from the date of acquisition. Goodwill is not amortized but is tested annually for impairment. Changes in ownership interests in subsidiaries are accounted for as equity transactions if they occur after control has already been obtained and if they do not result in a loss of control. Goodwill may also arise upon investments in associates and joint ventures, being the surplus of the cost of investment over the Group's share of the fair value of the net identifiable assets. Such goodwill is recorded within investments in associates and joint ventures.

Inventories
Inventories are reported at the lower of cost (purchase price or production cost) or market value (net realizable value). In determining net realizable value, any costs of completion and selling costs are deducted from the realizable value. The cost of inventories is calculated using the weighted average method. Prorated production overheads are included in the valuation of inventories. Adjustments are made for inventories with a lower market value or which are slow moving. Unsalable inventory is fully written off. Costs include all expenditures related directly to specific projects and an allocation of fixed and variable overheads incurred in the Group's contract activities based on normal operating capacity.

Receivables
Receivables are carried at the original invoice amount less allowances made for doubtful accounts, volume rebates and similar allowances. A receivable represents a right to consideration that is unconditional and excludes contract assets. An allowance for doubtful accounts is recorded for expected credit losses over the term of the receivables. These estimates are based on specific indicators, such as the ageing of customer balances and specific credit circumstances. Expenses for doubtful trade receivables are recognized within the cost of goods sold. Volume rebates and similar allowances are recorded on an accrual basis consistent with the recognition of the related sales, using estimates based on existing contractual obligations, historical trends and the Group's experience. Receivables are written off (either partly or in full) when there is no reasonable expectation of recovery.

For trade receivables, the Group applies the simplified approach prescribed by IFRS 9, which requires/permits the use of the lifetime expected loss provision from initial recognition of the receivables. The Group measures an allowance for doubtful accounts equal to the credit losses expected over the lifetime of the trade receivables.

Financial Instruments
The Group has classified its financial assets in the following measurement categories, which are disclosed in note 29: amortized cost or fair value through profit or loss (including hedging instruments). At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss.

Amortized Cost
Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost, less provision for impairment. Interest income from these financial assets is included in other financial income using the effective interest rate method. The Group derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all the risk and rewards of ownership of the financial asset are transferred. Any interest in such transferred financial assets that is created or retained by the Group is recognized as a separate asset or liability. Assets at amortized cost are mainly comprised of accounts receivable, cash and cash equivalents and loans and advances.

Equity Investments at Fair Value Through Profit or Loss
These are equity investments in non-quoted companies that are kept for strategic reason and in investment vehicles that invest in the Group's target markets. These assets are subsequently measured at fair value. Dividends are recognized as financial income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognized as a financial income or a financial expense in the income statement.

Fair Value Through Profit or Loss
These are primarily contingent consideration assets (and liabilities) that are initially recorded and subsequently carried at fair value with changes in fair value recorded as a financial income or a financial expense in the income statement.

Fair Value Through Profit or Loss – Hedging Instruments
These are derivative financial instruments that are used to manage the exposures to foreign currency and interest rates. These instruments are initially recorded and subsequently carried at fair value. Apart from those derivatives designated as qualifying cash flow hedging instruments, all changes in fair value are recorded as other operating income/expenses (instruments to manage the foreign currency exposure related to sales or purchases) or financial income/expenses (foreign currency exposure related to debt repayment or interest exposure on the Group's debt).

Debt Instruments
These are initially recorded at cost, which is the proceeds received net of transaction costs. They are subsequently stated at amortized cost; any difference between the net proceeds and the redemption value is recognized in the income statement over the period of the debt instrument using the effective interest method.

Cash and Cash Equivalents
Cash and cash equivalents include cash in hand, in postal and bank accounts, as well as short-term deposits and highly liquid funds that have an original maturity of less than three months.

Impairment
Assets that are subject to amortization and depreciation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Goodwill and intangible assets with indefinite useful lives are tested for impairment annually, and whenever there is an indication that the assets may be impaired. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less cost of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units).

Calculation of recoverable amount – in assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

Reversal of impairment – An impairment loss is reversed if the subsequent increase in recoverable amount can be related objectively to an event occurring after the impairment loss was recognized. An impairment loss in respect of goodwill is not reversed. In respect of other assets, an impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

Assets Held for Sale and Discontinued Operations
Disposal groups comprising assets and liabilities are classified as held-for-sale if it is highly probable that they will be recovered primarily through sale rather than through continuing use.

Such disposal groups are generally measured at the lower of their carrying amount and fair value less cost to sell. Any impairment loss on a disposal group is allocated first to goodwill and then to the remaining assets and liabilities on a pro rata bases, except that no loss is allocated to inventories, financial assets or deferred tax assets, which continue to be recognized in accordance with the Group's other accounting policies. Impairment losses on initial classification as held-for-sale and subsequent gains and losses on remeasurement are recognized in profit or loss. Once classified as held-for-sale, intangible assets and property, plant and equipment are no longer amortized or depreciated. A discontinued operation is a component of the entity that has been disposed of or is classified as held for sale and that represents a separate major line of business or geographical area of operations or is part of a single coordinated plan to dispose of such a line of business or area of operations. Classification as a discontinued operations occurs at the earlier of disposal or when the operation meets the criteria to be classified as held-for-sale.

The income statement activity of the discontinued operations is presented separately in the consolidated income statement. The comparative consolidated income statement and consolidated statement of comprehensive income are restated to show the discontinued operations separately from continuing operations. Balance sheet and cash flow information related to discontinued operations are disclosed separately in the notes.

Deferred Taxes
Tax expense is calculated using the balance-sheet liability method. Additional deferred taxes are provided wherever temporary differences exist between the tax base of an asset or liability and its carrying amount in the consolidated accounts for the year.

Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and, for deferred tax assets, operating loss and tax credit carry-forwards.

Deferred tax assets and liabilities are measured using enacted or substantially enacted tax rates in the respective jurisdictions in which Lonza operates that are expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. In assessing the recoverability of deferred tax assets, management considers

whether it is probable that some portion or all of the deferred tax assets will not be realized. For transactions and other events recognized in other comprehensive income or directly in equity, any related tax effect is recognized in other comprehensive income or in equity.

Liabilities for income taxes, mainly withholding taxes, which could arise on the remittance of retained earnings, principally relating to subsidiaries, are only recognized where it is probable that such earnings will be remitted in the foreseeable future.

Employee Benefits
Employee-benefit liabilities as stated in the consolidated balance sheet include obligations from defined-benefit pension plans, other post-employment benefits (medical plans) as well as other long-term employee-related liabilities, such as long-term vacation accounts.

Defined-Benefit Plans (Pension and Medical Plans)
Most of Lonza's subsidiaries operate their own pension plans. Generally, they are funded by employees' and employers' contributions. In addition, the Group operates three medical plans in the United States. The Group's net obligation in respect of defined-benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets. The calculation of defined-benefit obligations is performed annually by a qualified external actuary using the projected unit credit method. When the calculation results in a potential asset for the Group, the recognized asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any applicable minimum funding requirements. Remeasurements of the defined-benefit liability, which comprise actuarial gains and losses and the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognized immediately in other comprehensive income.

The Group determines the net interest expense on the net defined-benefit liabilities for the period by applying the discount rate used to measure the defined-benefit obligation at the beginning of the annual period to the net defined-benefit liability, taking into account any changes in the net defined-benefit liability during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined-benefit plans are recognized in profit or loss. While the net interest expense is disclosed within financial expenses, the other expenses related to defined-benefit plans are allocated to the different functions of the operating activities. When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that related to past service or the gain or loss on curtailment is recognized immediately in profit or loss. The Group recognizes gains and losses on the settlement of a defined-benefit plan when the settlement occurs.

Provisions
A provision is recognized in the balance sheet when (i) the Group has a legal or constructive obligation as a result of a past event, (ii) it is probable that an outflow of economic benefits will be required to settle the obligation, and (iii) a reliable estimate of the amount of the obligation can be made. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. A provision for restructuring is recognized when the Group has approved a detailed and formal restructuring plan, and the restructuring has either commenced or been announced publicly. Future operating costs are not provided for.

Provisions for environmental liabilities are made when there is a legal or constructive obligation for the Group that will result in an outflow of economic resources. Provisions are made for remedial work where there is an obligation to remedy environmental damage, as well as for containment work where required by environmental regulations.

Share Capital
Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds. Where any Group company purchases Lonza Group Ltd's equity share capital (treasury shares), the consideration paid, including any directly attributable incremental costs (net of income taxes), is deducted from equity attributable to the Group's equity holders until the shares are cancelled, reissued or disposed of.

Dividend
Dividend distribution to Lonza's shareholders is recognized as a liability in the Group's financial statements in the period in which the dividends are approved by the Lonza shareholders.

Share-Based Compensation
The Group operates various equity-settled, share-based compensation plans. The fair value of the employee services received in exchange for the grant of shares and other share-based compensations is recognized as an expense. The total amount to be expensed over the vesting period is determined by reference to the fair value of the shares granted. At each balance sheet date, the entity revises its estimates of the number of shares that are expected to become vested. It recognizes the impact of the revision of original estimates, if any, in the income statement, and a corresponding adjustment to equity over the remaining vesting period.

1.6 Significant Accounting Estimates and Judgments

Key Assumptions and Sources of Estimation Uncertainty

Use of Estimates

The preparation of the financial statements and related disclosures in conformity with International Financial Reporting Standards requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses. Actual results could differ from those estimates. Estimates are used in impairment tests, accounting for allowances for doubtful receivables, inventory obsolescence, depreciation, employee benefits, taxes, environmental provisions and contingencies. Estimates and assumptions are reviewed periodically and the effects of revisions are reflected in the financial statements in the period they are determined to be necessary. The key assumptions about the future key sources of estimation uncertainty that entail a significant risk of causing a material adjustment to the carrying value of assets and liabilities within the next financial year are described below.

Impairment Test of Property, Plant and Equipment, Intangible Assets and Goodwill

The Group has carrying values with regard to property, plant and equipment of CHF 3,369 million (2019: CHF 3,581 million), goodwill of CHF 3,072 million (2019: CHF 3,651 million) and intangible assets of CHF 2,640 million (2019: CHF 3,073 million) (see notes 6 and 7). The intangible assets include trademarks acquired through business combinations with a carrying value of CHF 261 million (2019: CHF 353 million), which have an indefinite useful life and are not systematically amortized. Goodwill and intangible assets with indefinite useful lives are reviewed annually for impairment. To assess if any impairment exists, estimates are made of the future cash flows expected to result from the use of the asset and its possible disposal. Actual outcomes could vary significantly from such estimates of discounted future cash flows. Factors such as changes in the planned use of buildings, machinery or equipment, or closure of facilities, the presence or absence of competition, technical obsolescence or lower-than-anticipated sales of products with capitalized rights could result in shortened useful lives or impairment. The impairment analysis as explained in note 6 is sensitive to the discount rate used for the discounted cash flow model, as well as the expected future cash-inflows and the growth rate used for calculation purposes. The key assumptions used to determine the recoverable amount for the different cash-generating units are further explained in note 6.2.

Pensions

Many of the Group's employees participate in post-employment plans. The calculations of the recognized assets and liabilities from such plans are based upon statistical and actuarial calculations. In particular, the present value of the defined-benefit obligation is influenced by assumptions on discount rates used to arrive at the present value of future pension liabilities and assumptions on future increases in salaries and benefits. Furthermore, the Group's independent external actuaries use statistically based assumptions, covering areas such as future withdrawals of participants from the plan and estimates of life expectancy. At 31 December 2020, the present value of the Group's defined-benefit obligation was CHF 2,218 million (2019: CHF 3,478 million). The plan assets at fair value amounted to CHF 1,940 million (2019: CHF 3,004 million), resulting, compared with the present value of the pension obligation, in a funded status deficit of CHF 278 million (2019: CHF 474 million) (see note 24.1). The actuarial assumptions used may differ materially from actual results due to changes in market and economic conditions, higher or lower withdrawal rates or longer or shorter lifespans of participants and other changes in the factors being assessed. These differences could affect the fair value of assets or liabilities recognized in the balance sheet in future periods.

Environmental Provisions

Lonza is exposed to environmental liabilities and risks relating to its operations, principally in respect of provisions for remediation costs, which at 31 December 2020 amounted to CHF 113 million (2019: CHF 144 million), as disclosed in note 14. Provisions for non-recurring remediation costs are made when there is a legal or constructive obligation and the cost can be reliably estimated. It is difficult to estimate any future action required by Lonza to correct the effects on the environment of prior disposal or release of chemical substances by Lonza or other parties, and the associated costs, pursuant to environmental laws and regulations. The material components of the environmental provisions consist of costs to clean and refurbish contaminated sites and to treat and contain contamination at sites. The Group's future remediation expenses are affected by a number of uncertainties that include, but are not limited to, the method and extent of remediation and the responsibility attributable to Lonza at the remediation sites, relative to that attributable to other parties. The Group permanently monitors the various sites identified as at risk for environmental exposures. Lonza believes that its provisions are adequate, based upon currently available information; however, given the inherent difficulties in estimating liabilities in this area, there is no guarantee that additional costs will not be incurred beyond the amounts provided. Due to the uncertainty of both the amount and timing of future expenses, the provisions provided for environmental remediation costs could be affected in future periods.

Income Taxes

At 31 December 2020, deferred tax assets of CHF 24 million (2019: CHF 23 million), current tax receivables of CHF 32 million (2019: CHF 14 million), deferred tax liabilities of CHF 581 million (2019: CHF 630 million) and current tax payables of CHF 159 million (2019: CHF 180 million) are included in the consolidated balance sheet. Significant estimates are required in determining the current and deferred assets and liabilities for income taxes. Certain of these estimates are based on interpretations of existing tax laws or regulations.

Lonza operates in numerous tax jurisdictions and, as a result, is regularly subject to audit by tax authorities. Lonza provides for income tax-related uncertainties whenever it is deemed more likely than not that a tax position may not be sustained on audit, including resolution of related appeals or litigation processes, if any. The provisions are recorded based on the technical merits of a filing position, considering the applicable tax regulations and are based on Lonza's evaluations of the facts and circumstances as of the end of each reporting period.

Management believes that the estimates are reasonable and that the recognized liabilities for income tax-related uncertainties are adequate. Various internal and external factors may have favorable or unfavorable effects on the actual amounts of estimated income tax assets and liabilities. These factors include, but are not limited to, changes in tax laws, regulations and/or rates, changing interpretations of existing tax laws or regulations and changes in overall levels of pre-tax earnings. Such changes that arise could affect the assets and liabilities recognized in the balance sheet in future periods. Such changes in the facts and circumstances could affect the assets and liabilities recognized in the balance sheet in future periods.

Critical Accounting Judgments in Applying the Group's Accounting Policies

In the process of applying the Group's accounting policies, management has made the following judgments that have the most significant effect on the amounts recognized in the financial statements (apart from those involving estimations, which are dealt with above).

Revenue Recognition

The Group has recognized revenues for sales of goods during the year to customers who have the right to rescind the sale if the goods do not meet the agreed quality. The Group believes that, based on past experience with similar transactions, the quality delivered will be accepted. Therefore, it is appropriate to recognize revenue on these transactions in the reporting period.

Revenues are recognized only when, according to management's judgment, performance obligations are satisfied, control over the assets have been transferred to the customer and no future performance obligation exists. For certain transactions, recognition of revenues is based on the performance of the conditions agreed in particular contracts, the verification of which requires evaluation and judgments by management.

The Group is required to determine the transaction price in respect of each of its contracts with customers. In making such judgment, the Group assesses the impact of any variable consideration in the contract, due to potential refunds, contractual price changes, batch success fees, estimated breakage, discounts or penalties, additional commission paid by distributors, profit sharing and the existence of any significant financing components. In determining the impact of variable consideration the Group uses accumulated experience to estimate the impact of variable consideration.

The Group has various contractual agreements that contain several components promised to the customer. As these contracts may include multiple performance obligations, the transaction price must be allocated to the performance obligations on a relative stand-alone selling price basis. Management estimates the stand-alone selling price at contract inception based on observable prices of the type of product likely to be provided and the services rendered in similar circumstances to similar customers. If a discount is granted, it is allocated to both performance obligations based on their relative stand-alone selling prices. Contractually agreed upfront or other one-time payments are allocated to the performance obligation to which they relate.

Intangible Assets

The Group considers the Capsugel trade name acquired through the business combination in 2017, as well as the trademarks acquired in 2007 through the Cambrex business combination, to have indefinite useful lives, as they are well established in the respective markets and have a history of strong performance.

The Group intends, and has the ability, to maintain these trademarks for the foreseeable future. The assumption of an indefinite useful life is reassessed whenever there is an indication that a trademark may have a definite useful life. In addition, intangible assets with indefinite useful lives are tested for impairment on an annual basis (see note 6).

Note 2
Operating Segments

2.1
General Information

According to the requirements of IFRS 8 "Operating Segments", Lonza identified the following two market-focused segments: Lonza Pharma Biotech & Nutrition and Lonza Specialty Ingredients.

On 23 July 2020 the Board of Directors decided to divest the Specialty Ingredients (LSI) segment. The LSI business was classified as discontinued operations as of 1 October 2020. Independent from this classification, the financial results of the discontinued operations have been continuously reviewed by the Executive Committee of Lonza Group. Prior period LSI segment results were restated to conform to the current presentation as LSI Discontinued Operations. The two reportable segments are described as follows:

Pharma Biotech & Nutrition
The Pharma Biotech & Nutrition segment Lonza is one of the world's leading providers of technology platforms along the value chain from pre-clinical to commercial, including drug substance and drug product. This comprises development and manufacture of customized active pharmaceutical ingredients (APIs) and biopharmaceuticals as well as formulation services and delivery systems for pharmaceutical and nutritional applications. Lonza's offerings to consumer health companies are complemented with a small portfolio of science-backed ingredients (nutritional supplements).

Lonza manufactures products that are at the forefront of powerful new treatments for cancer, diabetes, immune system disorders, heart conditions, Alzheimer's and Parkinson's diseases, inflammation and many other medical diseases and conditions. Lonza's customers cover a wide spectrum: from the world's largest pharmaceutical companies, to the broad range of biotechnology firms, medical research and testing organizations, as well as smaller start-ups pioneering breakthrough medical treatments, and consumer health and nutrition companies.

Specialty Ingredients
The Specialty Ingredients segment represents the two operating businesses, Microbial Control Solutions and Specialty Chemical Services, as well as certain corporate activities directly related to the carve-out / divestiture process.

The Microbial Control Solutions business serves consumer and technical markets by safeguarding resources and peoples' wellbeing. In consumer markets, the segment has offerings in professional hygiene, and home and personal care. In technical markets, the segment has offerings in paints and coating, wood protection, material protection and crop protection.

The Specialty Chemicals Services business serves selected attractive specialty chemical niche markets, where a high level of customization or exclusivity is required. It serves markets with demand for its solutions in electronics, aerospace, food and feed ingredients, agro chemicals and diversified specialty chemicals.

Corporate
Corporate includes mainly corporate functions, such as finance and accounting, legal, communication, information technology and human resources.

2.2
Information About Reportable Segment Profit or Loss, Assets and Liabilities including Reconciliations

In the following table, revenues and profit or loss are disclosed by the two reportable segments and corporate, which include the costs of the corporate functions, including eliminations, and adds up to the Group total. Lonza does not allocate financial result, income and expenses from associates and joint ventures as well as taxes to the reportable segments. The information disclosed by the operating segments is the same as that reported monthly to the Group's Executive Committee.

Year ended
31 December 2020

Million CHF	Pharma Biotech & Nutrition	Specialty Ingredients classified as Discontinued Operations	Total operating segments	Corporate/ Eliminations	Group total
Sales third-party	4,472	1,677	6,149	36	6,185
Intersegment sales [1]	26	55	81	(81)	0
Total sales	4,498	1,732	6,230	(45)	6,185
Result from operating activities (EBIT)	**1,010**	**197**	**1,207**	**(111)**	**1,096**
– Percentage return on sales in %	22.6	11.7	19.6	n.a.	17.7
Included in result from operating activities (EBIT):					
Research and development	(153)	(31)	(184)	(1)	(185)
Depreciation and amortization	(406)	(72)	(478)	(48)	(526)
Impairment, net of reversal of impairment	(16)	(11)	(27)	(20)	(47)
Restructuring expenses	(21)	(3)	(24)	(1)	(25)
Environmental expenses	0	(3)	(3)	(11)	(14)
Major components of reportable segment net assets:					
Goodwill	3,072	492	3,564	0	3,564
Investments in associates / joint ventures	9	10	19	47	66
Intangible assets	2,572	206	2,778	68	2,846
Property, plant & equipment	3,496	605	4,101	95	4,196
Other non-current operating assets	22	6	28	(1)	27
Net Working Capital	768	249	1,017	(71)	946
Other non-current operating liabilities	461	23	484	78	562
Net Operating Assets (NOA) [2]	**6,397**	**1,043**	**7,440**	**13**	**7,453**
Return on Net Operating Assets (RONOA) [3] in %	15.6	16.3	n.a.	n.a.	14.4
Return on invested capital (ROIC) [3] in %	9.9	12.6	n.a.	n.a.	9.8
Investing activities in non-current assets:					
Additions to property, plant and equipment	801	83	884	8	892
Additions to intangible assets	19	2	21	60	81
Additions to investment in associates / joint ventures	6	9	15	0	15
Number of employees (Full-Time Equivalent)	12,679	2,684	15,363	1,177	16,540

[1] Intersegment sales were based on prevailing market prices
[2] Net Operating Assets comprises all operating assets less operating liabilities
[3] Refer to section "Alternative Performance Measures" for details on the calculation methodology

Year ended
31 December 2019

Million CHF	Pharma Biotech & Nutrition	Specialty Ingredients classified as Discontinued Operations [4]	Total operating segments	Corporate/ Eliminations	Group total
Sales third-party	4,167	1,713	5,880	40	5,920
Intersegment sales [1]	7	59	66	(66)	0
Total sales	**4,174**	**1,772**	**5,946**	**(26)**	**5,920**
Result from operating activities (EBIT)	**952**	**147**	**1,099**	**(127)**	**972**
– Percentage return on sales in %	22.8	8.6	18.7	n.a.	16.4
Included in result from operating activities (EBIT):					
Research and development	(139)	(48)	(187)	(1)	(188)
Depreciation and amortization	(396)	(104)	(500)	(44)	(544)
Impairment, net of reversal of impairment	5	(10)	(5)	(4)	(9)
Restructuring expenses	(5)	(22)	(27)	(3)	(30)
Environmental expenses	0	(3)	(3)	(17)	(20)
Major components of reportable segment net assets:					
Goodwill	3,111	540	3,651	0	3,651
Investments in associates / joint ventures	7	1	8	53	61
Intangible assets	2,812	235	3,047	26	3,073
Property, plant & equipment	2,906	749 [5]	3,655	162	3,817
Other non-current operating assets	32	3	35	4	39
Net Working Capital	804	336	1,140	(242)	898
Other non-current operating liabilities	261	22	283	121	404
Net Operating Assets (NOA) [2]	**6,293**	**1,301**	**7,594**	**(171)**	**7,423**
Return on Net Operating Assets (RONOA) [3] in %	15.3	10.9	n.a.	n.a.	12.9
Return on invested capital (ROIC) [3] in %	9.9	8.7	n.a.	n.a.	9.1
Investing activities in non-current assets:					
Additions to property, plant and equipment	607	88	695	62	757
Additions to property, plant and equipment from acquisitions	62	0	62	0	62
Additions to intangible assets	17	3	20	9	29
Additions to goodwill and intangible assets from acquisitions	16	0	16	0	16
Additions to investment in associates / joint ventures	6	0	6	51	57
Number of employees (Full-Time Equivalent)	11,148	2,750	13,898	1,570	15,468

[1] Intersegment sales were based on prevailing market prices
[2] Net Operating Assets comprises all operating assets less operating liabilities
[3] Refer to section "Alternative Performance Measures" for details on the calculation methodology
[4] Income statement related information are restated to reflect the classification of the Specialty Ingredients business as discontinued operations. Whereas balance sheet information were not restated
[5] Includes CHF 135 million of assets of the Visp (CH) site shared across operating segments allocated to Specialty Ingredients for reporting purposes

2.3 Measurement of Operating Segment Profit or Loss

The accounting principles applied to the operating segments are based on the same accounting principles used for the consolidated financial statements. Lonza evaluates the performance of its operating segments on the basis of the result from operating activities (EBIT) as well as the CORE result from operating activities.

2.4
Geographical Information

Year ended
31 December 2020

Million CHF	Revenue from external customers (sales)	Property, plant and equipment	Intangible assets	Goodwill	Other non-current assets	Total
Belgium	378	87	1,346	2,466	29	3,928
Czech Republic	6	18	0	0	0	18
Denmark	115	5	0	10	0	15
France	242	83	130	10	2	225
Germany	221	5	19	63	0	87
Ireland	265	0	0	0	0	0
Italy	28	0	0	0	0	0
Netherlands	56	39	0	30	0	69
Spain	26	121	1	0	0	122
Sweden	159	0	0	0	0	0
Switzerland	635	1,810	116	63	250	2,239
United Kingdom	185	139	60	8	7	214
Rest of Europe	95	0	0	0	1	1
Europe	**2,411**	**2,307**	**1,672**	**2,650**	**289**	**6,918**
Canada	84	3	144	26	0	173
Mexico	47	10	21	0	0	31
United States	2,568	1,370	749	875	27	3,021
Rest of North and Central America	13	3	0	0	0	3
North and Central America	**2,712**	**1,386**	**914**	**901**	**27**	**3,228**
Brazil	64	5	12	0	1	18
Rest of Latin America	28	0	0	0	0	0
Latin America	**92**	**5**	**12**	**0**	**1**	**18**
China	247	204	75	4	1	284
India	69	17	23	1	1	42
Indonesia	32	20	14	0	0	34
Japan	218	41	42	0	3	86
Singapore	78	207	36	0	0	243
South Korea	112	0	0	0	0	0
Thailand	38	0	30	0	0	30
Rest of Asia	68	3	0	0	0	3
Asia	**862**	**492**	**220**	**5**	**5**	**722**
Africa	**16**	**2**	**1**	**0**	**0**	**3**
Australia & New Zealand	**75**	**8**	**20**	**8**	**1**	**37**
Other countries	**17**	**1**	**2**	**0**	**0**	**3**
Total	**6,185**	**4,201**	**2,841**	**3,564**	**323**	**10,929**

Year ended
31 December 2019

Million CHF	Revenue from external customers (sales)	Property, plant and equipment	Intangible assets	Goodwill	Other non-current assets	Total
Belgium	306	82	1,432	2,462	18	3,994
Czech Republic	5	29	0	0	0	29
Denmark	106	5	0	10	0	15
France	217	91	135	9	2	237
Germany	223	4	21	63	0	88
Ireland	338	0	0	0	0	0
Italy	27	0	0	10	0	10
Netherlands	45	26	0	31	0	57
Spain	22	114	0	0	0	114
Sweden	157	0	0	0	0	0
Switzerland	576	1,330	73	63	187	1,653
United Kingdom	149	142	64	8	9	223
Rest of Europe	76	0	0	1	0	1
Europe	**2,247**	**1,823**	**1,725**	**2,657**	**216**	**6,421**
Canada	77	1	166	28	0	195
Mexico	44	12	25	0	0	37
United States	2,506	1,392	872	952	13	3,229
Rest of North and Central America	16	5	0	0	0	5
North and Central America	**2,643**	**1,410**	**1,063**	**980**	**13**	**3,466**
Brazil	66	7	19	0	1	27
Rest of Latin America	20	0	0	0	0	0
Latin America	**86**	**7**	**19**	**0**	**1**	**27**
China	221	228	78	4	1	311
India	80	18	26	2	1	47
Indonesia	22	25	16	0	0	41
Japan	209	47	46	0	3	96
Singapore	77	246	42	0	0	288
South Korea	116	0	0	0	0	0
Thailand	29	0	34	0	0	34
Rest of Asia	89	4	1	0	1	6
Asia	**843**	**568**	**243**	**6**	**6**	**823**
Africa	**19**	**2**	**1**	**0**	**0**	**3**
Australia & New Zealand	**78**	**7**	**22**	**8**	**1**	**38**
Other countries	**4**	**0**	**0**	**0**	**0**	**0**
Total	**5,920**	**3,817**	**3,073**	**3,651**	**237**	**10,778**

2.5
Information About Major Customers

In 2020, Lonza's largest customer accounted for 4.7% and the second, third, fourth and fifth largest customers for 4.4%, 4.4%, 3.7% and 3.3% in relation to total Group sales, respectively. No other customer accounted for 3.3% or more of Lonza's total sales. While the four largest customers related to the Pharma Biotech & Nutrition segment, the fifth largest customer pertained to the Specialty Ingredients segment.

In 2019, Lonza's largest customer accounted for 5.3% and the second, third, fourth and fifth largest customers for 4.9%, 3.4%, 3.4% and 2.0% in relation to total Group sales, respectively. No other customer accounted for 2.0% or more of Lonza's total sales. Out of the five largest customers, the first three, as well as the fifth, largest customers are related to the Pharma Biotech & Nutrition segment. The fourth largest customer is related to the Specialty Ingredients segment.

Note 3
Revenues

3.1
Disaggregation of Third-Party Revenues

Lonza derives revenue from its business models of Contract Development and Manufacturing (primarily in the Pharma Biotech & Nutrition segment) and sales of products (in both operating segments). These business models and the markets Lonza operates in are the basis for disaggregating revenue into categories that depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

The Pharma Biotech & Nutrition segment derives its revenues primarily from long-term supply agreements with pharmaceutical customers. This segment provides a range of product and manufacturing services, over the entire range from research to commercial supply. Lonza supports its customers' research activities as well as the whole life cycle of a customer product from development of a drug substance to commercial supply. Within this segment, there is a separation between divisions, which focus on different modalities and markets:

- Capsules & Health Ingredients is the trusted partner in innovative capsules and dosage form solutions and in health ingredients for pharmaceutical and nutraceutical companies
- Small Molecules is an integrated development and manufacturing service provider for small molecule drug substances and their intermediates. Small Molecules supports customers across all aspects of design, development and manufacturing, with the ability to offer integrated drug substances to drug product solutions, including particle engineering and drug product packaging
- Biologics is the leading contract development and manufacturing partner for biopharmaceuticals, serving customers for all clinical and commercial manufacturing needs throughout the product lifecycle. The modalities across Biologics include mammalian and microbial expression systems, covering both drug substance and parenteral drug product services, as well as bioconjugates and mRNA
- Cell & Gene:
  - Cell and Gene therapies are a new frontier in medicine with the potential to transform the way patients diagnosed with cancers or genetic diseases can be treated. Lonza's vision is to enable customers to industrialize their processes, from concept to patient
  - Bioscience is a market-leading provider of specialty raw materials and enabling technology solutions in core target markets including cell and gene therapy, injectable drugs, vaccines and bio-manufacturing

The Specialty Ingredients segment focuses on product sales. Within this segment, there is a separation between divisions, which focus on different markets and operating distinct technology and asset platforms:

- Microbial Control Solutions is a leading supplier of biocides, preservatives, complementary technologies and fully formulated, registered and safe solutions. Microbial Control Solutions offers these in a wide range of consumer and industrial markets, including hygiene, as well as in wood applications and crop protection
- Specialty Chemical Services provides solutions for composite materials and processing additives in technically demanding industries. In addition, it also offers performance intermediates and chemicals for many industrial applications, including agricultural intermediates, food and feed ingredients, cosmetics, and custom development and manufacturing for non-current good manufacturing practice (non-cGMP) products

The table below shows information for the Group's two operating segments provided to the Group's Executive Committee and also illustrates the disaggregation of recognized revenues for 2020 and 2019:

Million CHF	2020	2019
Capsules & Health Ingredients	1,153	1,127
Small Molecules	692	655
Biologics	2,146	1,959
Cell & Gene	481	426
Pharma Biotech & Nutrition	**4,472**	**4,167**
Other Revenues	36	40
Lonza Continuing Operations	**4,508**	**4,207**
Microbial Control Solutions	1,068	1,031
Specialty Chemical Services	587	662
Other Revenues	22	20
Lonza Specialty Ingredients – Discontinued Operations	**1,677**	**1,713**
Total Group	**6,185**	**5,920**

3.2
Contract Assets and Liabilities

The Group recognized contract assets mainly consisting of contract fulfilment costs that are incurred after a contract is obtained but before goods or services have been delivered to the customer. These costs arise from long-term contracts in the custom manufacturing business for customer-specific production facility expansions or modifications on Lonza's premises. They typically include costs for commissioning, qualification and start-up, as well as for activities relating to process development and technology transfer. The assets are amortized on a straight line basis over the term of the specific contract they relate to, consistent with the pattern of recognition of the associated revenue. Additionally, if services rendered by Lonza exceed the payment received, a contract asset is recognized.

Contract liabilities mainly consist of upfront and other one-time payments, typically resulting from long-term contracts in the custom manufacturing business. These payments make up part of the expected transaction price and are deferred until batches are released. Additionally, if the payments received exceed services rendered, a contract liability is recognized. The non-current portion of deferred revenue is included in other long-term liabilities in the consolidated balance sheet.

The Group has recognized the following revenue-related contract assets and liabilities:

Million CHF	2020	2019
Trade receivables	715	759
Total trade receivables	**715**	**759**

Million CHF	2020	2019
Accrued income	185	190
Capitalized contract cost[1]	42	31
Total contract assets	**227**	**221**

[1] Thereof non-current CHF 29 million (2019: CHF 31 million) and current CHF 13 million (2019: CHF 0 million)

Million CHF	2020	2019
Non-current deferred income (see note 16)	444	250
Current deferred income (see note 16)	513	359
Total contract liabilities	**957**	**609**

Movement in Capitalized Costs to Fulfill a Contract

Million CHF	2020	2019
At 1 January	**31**	**31**
Asset recognized from costs incurred to fulfill a contract at 31 December	28	3
Amortisation and impairment loss recognized as cost of providing services during the period	(17)	(3)
At 31 December	**42**	**31**

Movement in Contract Liabilities

Million CHF	2020	2019
At 1 January	**609**	**659**
Revenue recognized that was included in the contract liability balance at the beginning of the period	(365)	(421)
Increases due to cash received, excluding amounts recognized as revenue during the period	739	373
Reclassification to asset held for sale	(13)	0
Currency translation effects	(13)	(2)
At 31 December	**957**	**609**

Note 4
Restructuring

Year ended
31 December 2020

Million CHF	Pharma Biotech & Nutrition	Corporate	Total
Impairment of property, plant and equipment and intangible assets[1]	4	20	24
Restructuring charges	21	1	22
Total	**25**	**21**	**46**

Year ended
31 December 2019

Million CHF	Pharma Biotech & Nutrition	Corporate	Total[2]
Impairment of property, plant and equipment and intangible assets[1]	(5)	3	(2)
Restructuring charges	5	4	9
Total	**0**	**7**	**7**

[1] Net of reversal of impairment (2020: CHF 0 million; 2019: CHF 4 million)
[2] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)

In 2020, Lonza recognized an impairment loss of CHF 20 million related to production facilities in Nansha. These assets were previously reported in the Specialty Ingredients segment. However, due to local regulatory requirements, these assets will be retained by Lonza following the divestment of the Specialty Ingredients business subject to a supply agreement with a limited contractual term. The impairment of CHF 20 million reflects the estimated future cash flow expected to be generated under the supply agreement. The impairment charge has been recognized as a component of other operating expenses.

The 2020 restructuring charges of the Pharma Biotech and Nutrition segment relate to projects for reorganizational changes (CHF 10 million) as well as the discontinuation of certain businesses and technologies (CHF 11 million). These costs were included in marketing and sales (CHF 7 million), research and development (CHF 6 million) and administration and general overheads (CHF 8 million).

City street crossing at rush hour, China

Note 5
Business Combinations and Sale of Businesses

5.1
Lonza Specialty Ingredients: Discontinued Operations (2020 and 2019) and Assets Held for Sale (2020)

Lonza Specialty Ingredients – 2020
On 3 June 2019, Lonza announced its intention to carve out its Specialty Ingredients segment. As the carve-out neared completion, strategic options were reviewed and on 23 July 2020, the Board of Directors decided to divest LSI segment via a sale process, which was initiated in the second half of 2020.

On 8 February 2021, Lonza announced that it has entered into a definitive agreement with Bain Capital and Cinven to acquire Lonza's Specialty Ingredients business and operations for an enterprise value of CHF 4.2 billion. The transaction is expected to close in H2 2021, subject to customary closing conditions.

In the 2020 consolidated financial statements, the LSI related assets and liabilities were classified as a disposal group in assets/liabilities held for sale and its results from operations were disclosed as discontinued operations.

In the consolidated income statement, discontinued operations in both 2020 and 2019 (restated) include the LSI business together with certain corporate costs directly attributable to LSI together with carve-out / divestiture related costs. Accordingly, for 2019, carve-out costs (CHF 19 million) which were previously reported in Corporate have been reclassified to discontinued operations.

Intragroup transactions between Lonza's continuing and discontinued operations have been attributed in a way that reflects how these transactions are expected to be continued in the future. As intercompany loans and debts are expected to be settled prior to or at the closing of the transaction, effects from these transactions within financial result were eliminated. To the contrary, certain supply and service agreements are expected to continue after the closing of the transaction and therefore were not eliminated. The Group has primarily identified supply and service agreements between continuing operations and LSI in Lonza's facilities in Visp (CH) and Nansha (CN). As a result of the separation of the businesses into dedicated legal entities (as from June 1, 2020 for the Swiss site and May 1, 2020 for the Chinese site), sales from the Lonza continuing business to discontinued operations amounted to CHF 104 million while sales from discontinued operations to the Lonza continuing business amounted to CHF 36 million.

In the statement of financial position, assets and liabilities related to LSI business were reclassified to assets and liabilities of a disposal group held for sale as of 1 October 2020. As the carrying amount of the disposal group held for sale was lower than its respective fair value less costs to sell, no impairment losses have been recorded.

5.2
Water Care Divestiture
The sale of the former Water Care business and operations was completed on 28 February 2019 for USD 630 million.

In 2019, the loss from discontinued operations related to the Water Care divestment (net of tax of CHF 117 million) includes the loss from operating activities (CHF 6 million), income taxes on sale of discontinued operations (CHF 68 million), the accumulated exchange rate translation impact (CHF 13 million), divestiture related costs (CHF 7 million) and other effects.

The results from the Specialty Ingredients (for 2020 and 2019) and Water Care (two months in 2019) businesses, which are presented as discontinued operations, are as follows:

Million CHF	2020[2]	Specialty Ingredients	Water Care	2019 (restated)[1] Total
Sales	1,677	1,713	74	1,787
Costs of goods sold[3]	(1,158)	(1,221)	(57)	(1,278)
Gross profit	**519**	**492**	**17**	**509**
Marketing and distribution	(107)	(112)	(12)	(124)
Research and development	(35)	(48)	(1)	(49)
Administration and general overheads[4]	(176)	(175)	(9)	(184)
Other operating income	26	19	0	19
Other operating expenses	(32)	(29)	0	(29)
Result from operating activities (EBIT)	**195**	**147**	**(5)**	**142**
Net financial result	(8)	(16)	(1)	(17)
Share of loss of associates / joint ventures	(4)	(1)	0	(1)
Profit / (loss) before income taxes from discontinued operations	**183**	**130**	**(6)**	**124**
Income taxes	(44)	(15)	0	(15)
Profit / (loss) from operating activities, net of tax	**139**	**115**	**(6)**	**109**
Loss on sale of discontinued operations	0	0	(43)	(43)
Income tax on sale of discontinued operations	0	0	(68)	(68)
Profit / (loss) from discontinued operations, net of tax	**139**	**115**	**(117)**	**(2)**
Attributable to:				
Equity holders of the parent	139	115	(117)	(2)
Non-controlling interest	0	0	0	0
	CHF			CHF
Basic earnings per share	1.87	1.55	(1.58)	(0.03)
Diluted earnings per share	1.86	1.55	(1.58)	(0.03)

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations
[2] 2020 contains an operating expense (CHF 2 million) and an income tax gain (CHF 1 million) related to Water Care
[3] Including impairment charges on the active production sites (2020: CHF 13 million, 2019: CHF 10 million, mainly in Visp and Kourim for both years)
[4] Including carve-out and divestiture costs related to Specialty Ingredients (2020: CHF 35 million, 2019: CHF 19 million)

The primary components of the cash flow statements from discontinued operations are as follows:

Million CHF	2020	LSI	Watercare	2019 (restated)[1]
Net cash used for operating activities	155	200	(20)	180
Net cash used for investing activities	(77)	(89)	0	(89)
Net cash used for financing activities	7	(212)	0	(212)
Net cash flows for the year	85	(101)	(20)	(121)

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)

At 31 December 2020 the assets and liabilities held for sale related to LSI are as follows:

Million CHF	2020
Goodwill	492
Intangible assets	206
Property, plant & equipment	605
Other non-current assets	54
Inventories	309
Trade receivables	180
Other receivables	49
Cash and cash equivalents	124
Assets of disposal group classified as held for sale	**2,019**
Non-current provisions	(18)
Employee benefit liability	(191)
Other non-current liabilities	(14)
Deferred tax liabilities	(48)
Trade payables	(91)
Other current liabilities	(173)
Current debt	(14)
Current tax payables	(6)
Liabilities directly associated with assets of disposal group classified as held for sale	**(555)**
Net assets directly associated with disposal group classified as held for sale	**1,464**
Amounts included in other comprehensive income instead of OCI:	
Accumulated remeasurement of defined benefit liability	(131)
Accumulated exchange differences on translating foreign operations	(290)

As of December 31 2020, there were 290 million losses of accumulated currency translation reserves related to LSI entities. These losses will be reclassified to the income statement upon closing of the divestment of the Specialty Ingredients business, which is expected to happen in the second half of 2021.

The cumulative gains and losses recognized in other comprehensive income related to the LSI operations as of 31 December 2020 and 2019 are as follows:

Million CHF	2020	2019
Remeasurements of net defined benefit liability, net of taxes	(10)	(4)
Exchange differences on translating foreign operations, net of taxes	(25)	(32)
Cumulative expense recognized in other comprehensive income	**(35)**	**(36)**

5.3
Acquisitions of Fill and Finish Business from Novartis in Stein, Switzerland

Effective 31 July 2019, Lonza purchased a sterile drug product fill and finish business from Novartis in Stein (CH). The total consideration for this business amounts to CHF 71 million (spread over two years), of which CHF 30 million has been paid as of 31 December 2020.

Portions of the valuations of the acquired assets and liabilities were performed by an independent valuation provider.

The business is reported within the Pharma Biotech & Nutrition segment and did not have a significant impact on the consolidated financial statements for the year ended 31 December 2019, with the exception of the acquired property, plant and equipment.

The net identifiable assets acquired and liabilities from the 2019 acquisitions are set out in the table below:

Million CHF	Stein business	Other	Total
Current assets	1	13	14
Property, plant & equipment	60	2	62
Current liabilities	0	(1)	(1)
Net identifiable assets	**61**	**14**	**75**
Goodwill	10	6	16
Total consideration	**71**	**20**	**91**
Cash consideration	15	14	29
Deferred consideration (present value)	56	6	62
Total consideration transferred	**71**	**20**	**91**
Cash consideration	15	14	29
Cash and cash equivalents acquired	0	(5)	(5)
Cash outflow on acquisition	**15**	**9**	**24**

Note 6
Intangible Assets and Goodwill

6.1
Cost and Accumulated Amortization and Impairment

Intangible assets include software purchased from third parties, related software implementation costs, as well as patents, trademarks, client relationships acquired and development costs. Their amortization is included in the line item "Administration and general overheads" of the consolidated income statement.

Year ended
31 December 2020

Million CHF	Goodwill	Capsugel trade name / Arch Chemicals and Cambrex Trademarks	Patents, trademarks, client relationship	Computer software	Technologies/ Development cost	Construction in progress	Total
Cost							
At 1 January	**3,651**	**353**	**1,918**	**173**	**1,438**	**2**	**7,535**
Additions	0	0	3	69	7	0	79
Disposals	0	0	(3)	(23)	(5)	0	(31)
Reclassification from property, plant and equipment	0	0	3	0	0	0	3
Reclassification to asset held for sale	(492)	(82)	(236)	(15)	(63)	0	(888)
Transfers / reclassification	0	0	2	0	0	(2)	0
Currency translation differences	(87)	(10)	(120)	(3)	(26)	0	(246)
At 31 December	**3,072**	**261**	**1,567**	**201**	**1,351**	**0**	**6,452**
Accumulated amortization and impairment							
At 1 January	**0**	**0**	**(397)**	**(144)**	**(270)**	**0**	**(811)**
Amortization	0	0	(68)	(21)	(97)	0	(186)
Disposals	0	0	3	23	2	0	28
Impairment losses	0	0	(1)	(1)	0	0	(2)
Reclassification to asset held for sale	0	0	138	15	40	0	193
Currency translation differences	0	0	29	3	6	0	38
At 31 December	**0**	**0**	**(296)**	**(125)**	**(319)**	**0**	**(740)**
Net carrying amount 31 December	**3,072**	**261**	**1,271**	**76**	**1,032**	**0**	**5,712**

The Capsugel trade name acquired through the business combination in 2017 as well as the trademarks acquired through the acquisitions of Arch Chemicals (2011) and Cambrex (2007) are considered to have indefinite useful lives. As a result, these intangible assets with a carrying amount of CHF 261 million as of 31 December 2020 (2019: CHF 353 million) are not systematically amortized.

Development costs as of 31 December 2020 predominantly include technologies acquired with the acquisitions of Capsugel, amounting to CHF 912 million (2019: CHF 1,000 million), Octane of CHF 100 million (2019: CHF 117 million), and the Arch Chemical acquisition of CHF 23 million (2019: CHF 29 million).

Year ended
31 December 2019

Million CHF	Goodwill	Capsugel trade name / Arch Chemicals and Cambrex Trademarks	Patents, trademarks, client relationship	Computer software	Technologies / Development cost	Construction in progress	Total
Cost							
At 1 January	**3,748**	**363**	**1,955**	**163**	**1,471**	**2**	**7,702**
Additions	0	0	6	14	9	0	29
Disposals	0	0	(8)	(2)	0	0	(10)
Acquisition of subsidiaries	16	0	0	0	0	0	16
Currency translation differences	(113)	(10)	(35)	(2)	(42)	0	(202)
At 31 December	**3,651**	**353**	**1,918**	**173**	**1,438**	**2**	**7,535**
Accumulated amortization and impairment							
At 1 January	**0**	**0**	**(335)**	**(130)**	**(177)**	**0**	**(642)**
Amortization	0	0	(76)	(16)	(101)	0	(193)
Disposals	0	0	7	2	0	0	9
Impairment losses	0	0	0	0	0	0	0
Currency translation differences	0	0	7	0	8	0	15
At 31 December	**0**	**0**	**(397)**	**(144)**	**(270)**	**0**	**(811)**
Net carrying amount 31 December	**3,651**	**353**	**1,521**	**29**	**1,168**	**2**	**6,724**

6.2
Impairment Tests for Cash-Generating Units Containing Goodwill and Intangible Assets with Indefinite Useful Lives

In 2020, Lonza has identified several cash-generating units within its operating segment Pharma Biotech & Nutrition and Specialty Ingredients classified as discontinued operations:

Pharma Biotech & Nutrition
The various technologies (mammalian, chemical, etc.) applied within the segment are the cash-generating units identified and subject to impairment testing of goodwill and intangible assets with indefinite useful lives.

Specialty Ingredients
The business units of Lonza's discontinued operations are the cash-generating units identified and subject to impairment testing of goodwill and intangible assets with indefinite useful lives.

The following cash-generating units maintain carrying amounts of goodwill as presented below (at year-end exchange rates):

Million CHF	2020	2019
Chemical and Capsules & Health Ingredients business (representing a group of cash-generating units)	2,632	2,652
Chemical – Development and manufacturing of drug substances and drug products (representing a group of cash-generating units)	38	38
Bioscience Solutions / Cell Therapy / Viral Therapeutics (representing a group of cash-generating units)	346	363
Mammalian & Microbial – Operations and Development Services	34	35
Cell Therapy / Viral Therapeutics (representing a group of cash-generating units)	22	23
Specialty Ingredients (representing a group of cash-generating units)	0	525
Microbial Control Solutions	0	11
Specialty Chemicals Services	0	4
Total carrying amounts of goodwill as at 31 December	**3,072**	**3,651**
Specialty Ingredients (representing a group of cash-generating units)	477	0
Microbial Control Solutions	11	0
Specialty Chemicals Services	4	0
Goodwill transferred to assets held for sale	**492**	**0**

The following cash-generating units maintain carrying amounts of intangible assets with indefinite useful lives as presented below (at year-end exchange rates):

Million CHF	2020	2019
Chemical and Capsules & Health Ingredients business (representing a group of cash-generating units)	237	238
Bioscience Solutions / Cell Therapy / Viral Therapeutics (representing a group of cash-generating units)	24	26
Specialty Ingredients (representing a group of cash-generating units)	0	89
Total carrying amounts of intangible assets with indefinite useful life as at 31 December	**261**	**353**
Specialty Ingredients (representing a group of cash-generating units)	82	0
Intangible assets with indefinite useful lives transferred to assets held for sale	**82**	**0**

The recoverable amount of the above cash-generating units is based on the value-in-use calculation. The supporting cash flow projections for 2021 to 2025 are based on the Lonza business strategy review and exclude any future cash inflows and outflows expected to arise from the growth potential of future capital expenditures.

The cash flow projections beyond the five-year period, of the most significant cash-generating units below, are based on the concept of perpetual growth rates, which do not necessarily reflect the Group's strategic objective targets for the future growth potential of the underlying businesses. The key assumptions and the approach to determining the value in use of the significant cash-generating units carrying significant goodwill are based on the following:

The combined business Chemical and Capsules & Health Ingredients represents the group of cash-generating units which consists of Chemical Development and Manufacturing of Drug Substances and Drug Products as well as Capsules & Health Ingredients. The cash flow projections for 2021–2025 are based on a 5.8% (2019: 6.9%) average sales growth with increasing EBIT margins. The cash flow projections beyond the five-year period are based on 2.0% (2019: 2.0%) growth rate. A pre-tax discount rate of 5.2% (2019: 6.1%) has been used in discounting the projected cash flows.

The Bioscience Solutions/Cell Therapy/Viral Therapeutics businesses are characterized by strong dynamic growth across the majority of its markets, driven by the aging population and improved access to healthcare. The cash flow projections for 2021–2025 are based on a 20.9% (2019: 17.3%) average sales growth. The cash flow projections beyond the five-year period are extrapolated using a 2.0% (2019: 2.0%) growth rate. A pre-tax discount rate of 5.7% (2019: 6.3%) has been used in discounting the projected cash flows.

The Specialty Ingredients business includes the cash-generating units of Microbial Control Solutions and Specialty Chemical Services. These cash-generating units are the combination of the activities acquired through the Arch Chemicals acquisition in 2011, and the former Life Science Ingredients activities from Lonza. As Lonza entered into a definitive agreement to sell its Specialty Ingredients business the recoverable amount of this cash-generating units is based on the "fair value less cost to sell" calculation. The goodwill and intangible assets carrying amounts will be covered by the expected proceeds from the sale.

A sensitivity analysis for the cash-generating units and groups of cash-generating units to which a significant amount of goodwill or intangible assets with indefinite useful lives are allocated was performed. The analysis was based on changes in key inputs which management considers to be reasonably possible:

- A reduction in cash flows by 10%
- Or an increase in discount rate by one percentage point
- Or a reduction in the perpetual growth rate by one percentage point.

Management concluded that no impairment loss would need to be recognized on goodwill or intangible assets with indefinite useful lives in any of the cash-generating units (or group of cash-generating units).

Note 7
Property, Plant and Equipment

Million CHF	2020	2019
Property, plant and equipment own assets	3,369	3,581
Right-of-use of leased assets	222	236
Total	**3,591**	**3,817**

7.1
Property Plant and Equipment Own Assets

Year ended
31 December 2020

Million CHF	Land	Buildings and structures	Production facilities	Construction in progress	Total
Cost					
At 1 January	**99**	**2,019**	**4,762**	**978**	**7,858**
Additions	0	23	135	712	870
Disposals	0	(4)	(25)	(1)	(30)
Reclassification to asset held for sale	(10)	(414)	(1,603)	(91)	(2,118)
Transfers / reclassification	1	87	251	(339)	0
Currency translation differences	(8)	(67)	(181)	(42)	(298)
At 31 December	**82**	**1,644**	**3,339**	**1,217**	**6,282**
Accumulated depreciation and impairment					
At 1 January	**(6)**	**(1,088)**	**(3,183)**	**0**	**(4,277)**
Depreciation charge	0	(67)	(243)	0	(310)
Disposals	0	7	20	0	27
Impairment losses (note 4)	0	(10)	(26)	0	(36)
Reversal of impairment losses (note 4)	0	0	3	0	3
Reclassification to asset held for sale	4	289	1,258	0	1,551
Currency translation differences	1	26	102	0	129
At 31 December	**(1)**	**(843)**	**(2,069)**	**0**	**(2,913)**
Net carrying amount 31 December	**81**	**801**	**1,270**	**1,217**	**3,369**

Year ended
31 December 2019

Million CHF	Land	Buildings and structures	Production facilities	Construction in progress	Total
Cost					
At 1 January reported as per IAS 17	**99**	**1,982**	**4,538**	**551**	**7,170**
Finance lease assets transferred to right-of-use of leased assets	0	(19)	(8)	0	(27)
At 1 January reported as per IFRS 16	**99**	**1,963**	**4,530**	**551**	**7,143**
Additions	0	28	76	653	757
Disposals	(1)	0	(19)	0	(20)
Acquisition of subsidiaries	0	21	41	0	62
Transfers / reclassification	0	25	188	(213)	0
Currency translation differences	1	(18)	(54)	(13)	(84)
At 31 December	**99**	**2,019**	**4,762**	**978**	**7,858**
Accumulated depreciation and impairment					
At 1 January reported as per IAS 17	**(4)**	**(1,049)**	**(2,965)**	**0**	**(4,018)**
Finance lease assets transferred to right-of-use of leased assets	0	14	4	0	18
At 1 January reported as per IFRS 16	**(4)**	**(1,035)**	**(2,961)**	**0**	**(4,000)**
Depreciation charge	0	(64)	(256)	0	(320)
Disposals	0	0	9	0	9
Impairment losses (note 4)	**0**	**(4)**	**(9)**	**0**	**(13)**
Reversal of impairment losses (note 4)	0	3	4	0	7
Transfers / reclassification	(1)	(1)	2	0	0
Currency translation differences	(1)	13	28	0	40
At 31 December	**(6)**	**(1,088)**	**(3,183)**	**0**	**(4,277)**
Net carrying amount 31 December	**93**	**931**	**1,579**	**978**	**3,581**

Commitments for capital expenditure in property, plant and equipment amounted to CHF 410 million at year-end 2020 for continuing business (2019: CHF 411 million for the total Group), mainly related to capital expenditures at the Visp (CH) and Portsmouth (US) sites. No assets were pledged for security of own liabilities in 2020 and 2019.

7.2
Leases
Right-of-use of Leased Assets

Year ended
31 December 2020

Million CHF	Buildings and structures	Others	Total
Net carrying amount at the year ended	213	9	222
Additions for the year ended	45	3	48
Depreciation for the year ended	(26)	(4)	(30)
Impairment for the year ended	0	0	0

Year ended
31 December 2019

Million CHF	Buildings and structures	Others	Total
Net carrying amount at the year ended	227	9	236
Additions for the year ended	23	1	24
Depreciation for the year ended	(27)	(4)	(31)
Impairment for the year ended	0	0	0

Lease Expenses

Leases are presented as follows in the income statement:

Million CHF	2020	2019 (restated)[1]
Expenses related to short-term leases and low value assets[2]	(7)	(9)
Expenses related to variable lease payments not included in lease liabilities[2]	(4)	(5)
Other rent expenses (including incidental expenses)[2]	(6)	(7)
Depreciation of right-of-use of leased assets[2]	(30)	(31)
Interest expense on leases[3]	(8)	(8)
Total	**(55)**	**(60)**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)
[2] Included in cost of goods sold and administrative expenses
[3] Included in financial result

During the year ended 31 December 2020, CHF 17 million (2019: CHF 21 million) was recognized as an expense in the consolidated income statement for continuing business in respect of leases not in scope of IFRS 16.

Lonza predominantly leases office buildings, together with warehouses, equipment and vehicles. The maturities of the lease liabilities are presented in note 29.3.

As of 31 December 2020, the Group has entered into a lease commitment which is expected to commence in the first half of 2021. The expected future total impact on the Group's assets is estimated at approximately CHF 110 million, thereof CHF 44 million was prepaid as of 31 December 2020, and an additional payment of CHF 22 million will be made before the commencement date, resulting in an estimated lease liability of CHF 44 million upon commencement.

Note 8
Other Non-Current Assets

Million CHF	2020	2019
Contingent consideration related to sale of business (see note 29.6)	7	20
Capitalized contract costs (see note 3)	29	31
Investments in associates / joint ventures (see note 9)	56	61
Other investments	33	24
Defined benefit pension plan asset (see note 24.1)	2	10
Loans and advances (see note 15)	162	72
Other assets	12	19
Total	**301**	**237**

Loans and advances at 31 December 2020 includes a CHF 149 million loan to BioAtrium AG (2019: CHF 69 million). This associate company represents a strategic partnership between Sanofi and Lonza (see note 9). It also includes a CHF 11 million loan to BacThera (Joint-venture, see note 9).

Note 9
Investments in Joint Ventures and Associates

The following table summarizes the carrying amounts of interests in joint ventures and associates, which are accounted for using the equity method.

Million CHF	2020	2019
Balance sheet value		
Interests in joint ventures	9	8
Interests in associates	47	53
Total	**56**	**61**

Net income statement effect	2020	2019 (restated)[1]
Share of profit / (loss) of joint ventures	(4)	0
Share of profit / (loss) of associates	0	(2)
Total	**(4)**	**(2)**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)

In 2020, the Group received dividends of CHF 1 million (2019: CHF 2 million) from associates and joint ventures.

9.1 Joint Ventures

Million CHF	2020	2019
Carrying amount of interests in joint ventures	9	8
Share of profit / (loss)[1]	(4)	(2)

[1] Prior year was restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)

In April 2019, the Group established together with Chr. Hansen Holding A/S a strategic partnership in developing and manufacturing live biotherapeutic products for Pharma Biotech & Nutrition customers. This partnership brings together Chr. Hansen's extensive know-how in developing, upscaling and manufacturing bacteria strains and Lonza's strong capabilities in pharma contract manufacturing and outstanding formulation and drug delivery technologies. The phased investment of approximately EUR 90 million will be shared equally between the parties over a period of three years and will be deployed to build cGMP-compliant pharma production capabilities. In addition to the equity funding, Lonza financed the joint venture with a loan of CHF 11 million in 2020. Lonza accounts for its 50% share in BacThera Ltd (name of the legal entity founded for the strategic partnership) as a joint venture in accordance with IFRS 11. The investment in BacThera Ltd had no significant financial impact on the Group's consolidated financial statements 2020.

9.2 Associates

Lonza holds a 50% stake in BioAtrium Ltd (CH), as well as in another individually immaterial company.

BioAtrium Ltd

BioAtrium Ltd was founded in 2017 for the strategic partnership with Sanofi. This strategic partnership will build and operate a largescale mammalian cell culture facility for monoclonal antibody production in Visp (CH). The total commitment of both partners is estimated to be CHF 290 million and is equally shared between the two parties. The facility completed the ramp-up activities at the end of December 2020 and commenced its operational manufacturing. Lonza continues to account for its share in BioAtrium Ltd as investment in associates in accordance with IAS 28. In 2020, Lonza granted additional loans of CHF 80 million to BioAtrium Ltd. The financial results of BioAtrium Ltd in both reporting periods represent predominantly the costs incurred as part of the operational ramp-up phase. According to the shareholder's agreement, these costs were funded by both shareholders. Since BioAtrium Ltd started the operational manufacturing at the end of December 2020, there have been no significant financial impacts on Lonza's 2020 consolidated income statement.

The following table summarizes certain financial information of BioAtrium Ltd and Lonza's investment in the associate:

Million CHF	2020	2019
Percentage of ownership	**50%**	**50%**
Current assets	70	6
Non-current assets	323	220
Current liabilities	19	9
Non-current liabilities (including non-current debt – CHF 297 million; 2019: CHF 138 million)	303	138
Net assets (100%)	**71**	**79**
Group's share of net assets (50%)	36	40
Carrying amount of interest in BioAtrium Ltd	**44**	**44**

Other Associates

Million CHF	2020	2019
Carrying amount of interests associates	3	9
Share of profit / (loss) [1]	0	0

[1] Prior year was restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)

Note 10
Inventories

Million CHF	2020	2019
Inventories	1,252	1,506
Value adjustments	(116)	(114)
Total	**1,136**	**1,392**

Million CHF		2020		2019
Raw materials	32%	365	28%	390
Work in progress	13%	147	10%	134
Finished goods	42%	480	47%	660
Other	13%	144	15%	208
Total	**100%**	**1,136**	**100%**	**1,392**

By Operating Segments

Million CHF		2020		2019
Pharma Biotech & Nutrition	100%	1,136	77%	1,069
Specialty Ingredients [1]	0%	0	23%	323
Total	**100%**	**1,136**	**100%**	**1,392**

[1] Specialty Ingredients inventories are classified as held for sale as of 31 December 2020

The cost of inventories recognized as expenses during the period and included in “Cost of goods sold” amounted to CHF 2,676 million (2019 (restated): CHF 2,422 million).

Inventory Value Adjustments

Million CHF	Raw materials	Work in progress and finished goods	Other	Total 2020	Total 2019
At 1 January	**23**	**54**	**37**	**114**	**109**
Increase	14	87	6	107	82
Reversal / Utilization of write-downs	(5)	(65)	(2)	(72)	(72)
Transfer to assets held for sale	(2)	(11)	(18)	(31)	0
Currency translation differences	(1)	0	(1)	(2)	(5)
At 31 December	**29**	**65**	**22**	**116**	**114**

People on street, Spain

Note 11
Trade Receivables

Million CHF	2020	2019
Receivables from customers	729	775
Allowances for credit losses	(14)	(16)
Total	**715**	**759**

The Group's credit risk is diversified due to the large number of entities comprising the Lonza customer base and the dispersion across many different industries and regions. Management has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis. At 31 December 2020, there were no significant concentrations of credit risk. The maximum exposure to credit risk is equal to the carrying amounts.

Reconciliation of Changes in Allowance Accounts for Credit Losses

Million CHF	2020	2019
Balance at the beginning of the year	**16**	**14**
Write-offs	(7)	(6)
Increase in provision for credit losses	9	9
Decrease in provision for credit losses	(3)	(1)
Reclassification to assets held for sale	(1)	0
Balance at the end of the year	**14**	**16**

In general, Lonza does not require collateral in respect of trade and other receivables, but uses credit insurance for country risk where appropriate.

Accounts Receivable Securitization Programs

In the past, Lonza maintained a securitization program for a portion of its US businesses with Wells Fargo Bank, N.A., which was terminated in September 2020.

As of 31 December 2019, the consolidated balance sheet includes receivables which Lonza sold to Wells Fargo Bank, N.A. for which it obtained funds of USD 92 million (CHF 89 million). These are disclosed as other current liabilities (see note 16).

Note 12
Other Receivables, Prepaid Expenses and Accrued Income

Million CHF	2020	2019
Other receivables	87	73
Prepaid taxes and social security payments	4	4
Prepaid expenses and accrued income	256	241
Capitalized contract costs (see note 3)	13	0
Derivative financial instruments (see note 29.5)	37	21
Contingent consideration related to sale of business (see note 29.6)	7	0
Current advances	0	2
Total	**404**	**341**

"Other receivables" include accruals and receivables for taxes (other than income taxes).

Note 13
Cash and Cash Equivalents

Million CHF	2020	2019
Cash	345	429
Time deposits	150	76
Total	**495**	**505**

Note 14
Provisions

Million CHF	Environmental	Restructuring	Other	Total
At 1 January 2020	**144**	**26**	**27**	**197**
Increase	15	17	13	45
Used	(27)	(15)	(7)	(49)
Reversed	(1)	(6)	0	(7)
Transfer to liabilities held for sale	(18)	(8)	(1)	(27)
Currency translation differences	0	(1)	(1)	(2)
At 31 December 2020	**113**	**13**	**31**	**157**
thereof current	32	10	25	67
thereof non-current	81	3	6	90

Environmental
The environmental provision comprises the estimated probable future expenses for environmental remediation and protection of CHF 111 million (2019: CHF 122 million) primarily in relation to the plant in Visp (CH). The majority of the provision is expected to be utilized within ten years. The legacy Arch related provisions include environmental risks for existing as well as divested plants.

Lonza maintains an old landfill close to its Visp (CH) site. This landfill was in use from 1918 until 2012 and contains hazardous materials. Lonza will need to perform remediation measures in order to comply with environmental regulations.

In 2020 Lonza completed a pre-study that addresses potential remediation methods and measures. Furthermore, Lonza and the environmental authorities of the canton of Valais aligned on the base principles of a remediation strategy during 2020. As of 31 December 2020 Lonza's detailed investigations are still ongoing in order to identify the most critical areas regarding the groundwater protection, to identify and define appropriate remediation methods and to evaluate the extent of remediation required.

As of 31 December 2020, it is not possible to make an informed judgment on, or reasonably predict, potential additional required remediation measures, and as it is not possible, based on information currently available to management, to estimate the potential liability, there could be adverse outcomes beyond the amounts accrued.

Restructuring
The restructuring provision primarily reflects the expected employee termination costs related to ongoing restructuring programs (see note 4).

Other
Other provisions are predominately associated with customer claims and the asset retirement obligations of Lonza's Singapore based operations.

Note 15
Net Debt

The net debt comprises:

Million CHF	2020	2019
Debt		
Non-current debt	2,784	2,766
Current debt	796	774
Total debt of continuing business	**3,580**	**3,540**
Current debt classified as held for sale (see note 5)	14	
Total debt	**3,594**	**3,540**
Loans and advances (floating interest rates)		
Non-current loans and advances	(162)	(72)
Current advances	0	(2)
Cash and cash equivalents	(495)	(505)
Cash and cash equivalents classified as held for sale (see note 5)	(124)	0
Total loans and advances and cash and cash equivalents	**(781)**	**(579)**
Net debt	2,813	2,961

Non-current Debt

Million CHF	2020	2019
Straight bonds	1,374	764
Syndicated loan (2019-2024)	0	137
Term loan	612	671
German private placement	669	1,048
Other long-term debt	129	146
Total non-current debt	**2,784**	**2,766**

Straight Bonds – Fixed Interest Rates

Million CHF	2020	2019
CHF bonds		
0.625% CHF 150 million, 2015/2020, due 22 September 2020, issued at 100.135%	0	150
0.2% CHF 125 million, 2017/2021, due 12 July 2021, issued at 100.179%	125	125
0.125% CHF 250 million, 2016/2021, due 1 November 2021, issued at 100.037%	250	249
3% CHF 105 million, 2012/2022, due 11 October 2022, issued at 100.74%	105	105
1%, CHF 300 million, 2020/2023, due 28 April 2023, issued at 100.015%	299	0
1.25% CHF 175 million, 2015/2023, due 22 September 2023, issued at 100.133%	175	175
0.7% CHF 110 million, 2017/2024, due 12 July 2024, issued at 100.222%	110	110
0.35%, CHF 150 million, 2020/2026, due 22 September 2026, issued at 100.148%	150	0
EUR bonds		
1.625% EUR 500 million, 2020/2027, due 21 April 2027, issued at 99.424%	535	0
Total including current portion	**1,749**	**914**
Less current portion of straight bonds	(375)	(150)
Total non-current straight bonds	**1,374**	**764**

Current Debt

Million CHF		2020		2019
Due to banks and other financial institutions		6		6
Others		63		44
Non-current debt due within one year				
– German private placement	352		0	
– Term Loan	0		541	
– Straight bond (2015-2020)	0		150	
– Straight bond (2016-2021)	250		0	
– Straight bond (2017-2021)	125		0	
– Others	0	727	33	724
Total current debt		**796**		**774**

Debt: Movements in Carrying Value of Recognized Liabilities

Million CHF	2020	2019
At 1 January	**3,540**	**4,051**
Repayment of straight bond	(150)	(300)
Issuance of straight bonds	970	0
Issuance / (repayment) of term loan	(526)	265
Repayment of syndicated loan	(144)	(119)
Repayment of bank loan	0	(198)
Increase / (decrease) in other debt	4	(94)
Changes from financing cash flows	**154**	**(446)**
Amortization of financing costs and discounts	**5**	**5**
Reclassification to liabilities held for sale	**(14)**	**0**
Net foreign currency transaction (gains) losses	(105)	(66)
Currency translation effects	0	(4)
Changes in foreign exchanges rates	**(105)**	**(70)**
At 31 December	**3,580**	**3,540**

Breakdown of Total Debt by Currencies

			2020			2019
Million CHF	Average Interest Rate %	%		Average Interest Rate %	%	
CHF	0.81	36	1,272	0.84	29	1,032
EUR	1.13	36	1,293	0.91	37	1,300
USD	2.20	28	1,015	3.12	34	1,208
Total		**100**	**3,580**		**100**	**3,540**

Following the 2019 assignment of Lonza's investment grade credit rating by S&P (BBB+), Lonza refinanced and extended its syndicated Term and Revolving Bank Facilities Agreement effective 6 September 2019, as described below.

Eurobond
In April 2020 Lonza issued its inaugural Eurobond with a coupon of 1.625% in the European capital market. The net proceeds were used to refinance existing debt and general corporate purposes. The new bond with a volume of EUR 500 million has a maturity of 7 years. The notes have been offered under a standalone Prospectus and have been listed on the Luxembourg Stock Exchange.

Term Loan
In 2019, Lonza issued term loan tranches of EUR 500 million, USD 500 million and USD 200 million carrying floating interest rates and repayable in 2020, 2024 and 2025 respectively. This term loan effectively replaced the EUR 450 million and USD 489 million term loan tranches issued in 2017 with maturity dates in 2020 and 2022 and the bank loan of USD 200 million. The net proceeds received in 2019 totaled CHF 265 million.

German Private Placement
The dual-currency German private placement (Schuldscheindarlehen) of EUR 700 million and USD 200 million tranches carry fixed and floating interest rates (LIBOR/EURIBOR + margin) respectively, and are repayable in 2021 (EUR 325 million), 2022 (USD 150 million), 2023 (EUR 375 million) and 2024 (USD 50 million). The single-tranche German private placement (Schuldscheindarlehen) of USD 100 million carry floating interest rates (LIBOR + margin) and is repayable in 2024.

Syndicated Loan
In 2019 Lonza signed a syndicated loan with a consortium of banks on the following terms: multi-currency credit facility of CHF 1,000 million equivalent, due 2024, at floating interest rates. This syndicated loan effectively replaced the syndicated loan signed in 2017. The facility was not used as of 31 December 2020 (2019: CHF 80 million and USD 65 million).

Others
Other current and non-current debt compromise industrial revenue bonds of USD 134 million issued by governmental institutions in the United States (repayable in 2022, 2025, 2030 and 2047).

Note 16
Other Non-Current and Current Liabilities

Other Non-Current Liabilities

Million CHF	2020	2019
Non-current deferred income (see note 3)	444	250
Lease liabilities	210	219
Contingent consideration (see note 29.6)	26	28
Derivative financial instruments (see note 29.5)	25	0
Other liabilities	5	52
Total other non-current liabilities	**710**	**549**

Other Current Liabilities

Million CHF	2020	2019
Accrued liabilities and other payables	425	469
Current deferred income (see note 3)	513	359
Lease liabilities	24	25
Derivative financial instruments (see note 29.5)	4	26
Liability related to securitization program (see note 11)	0	89
Contingent consideration	2	2
Other financial liabilities	229	238
Accrued interest payables	15	8
Total other current liabilities	**1,212**	**1,216**

Note 17
Trade Payables

Million CHF	2020	2019
Payable to third parties	308	453
Total	**308**	**453**

Payables to third parties principally comprise amounts outstanding for trade purchases and ongoing costs. The carrying amount of trade payables approximates their fair value.

Note 18
Material and Energy Costs

Million CHF	2020	2019 (restated)[1]
Material costs	938	923
Energy costs	61	25
Total	**999**	**948**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)

Note 19
Personnel Expenses

Million CHF	2020	2019 (restated)[1]
Wages and salaries	1,211	1,065
Operating expenses defined benefit pension plans	36	40
Other social security contributions	257	251
Other personnel expenses	139	119
Total	**1,643**	**1,475**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)

Note 20
Other Operating Income and Expenses

20.1
Other Operating Income

Million CHF	2020	2019 (restated)[1]
Gain from foreign exchange rate differences and other operating derivative instruments	9	6
Supplier rebates and insurance benefits	1	5
Government grants, research & development and other tax credits	18	4
Release of provisions	1	2
Gain from disposal of property, plant and equipment and other assets	0	6
Sundry income	13	24
Total	**42**	**47**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)

20.2
Other Operating Expenses

Million CHF	2020	2019 (restated)[1]
Loss from foreign exchange rate differences and other operating derivative instruments	(8)	(11)
Loss from disposal of property, plant and equipment and other assets	(7)	(12)
Settlement of customer claims / litigations	(13)	(16)
Increase in provision	(5)	0
Impairment of Corporate assets Guangzhou site (CN)	(20)	(3)
Sundry expense	(7)	(16)
Total	**(60)**	**(58)**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)

Note 21
Net Financial Result

21.1
Interest and Other Financial Income

Million CHF	2020	2019 (restated)[1]
Interest income	3	4
Foreign exchange rate differences, including impact from currency related financial derivative instruments	0	0
Interest related financial derivative instruments	0	13
Net gains on investments measured at fair value through profit or loss	7	0
Other financial income	2	3
Total	**12**	**20**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)

21.2
Interest and Other Financial Expenses

Million CHF	2020	2019 (restated)[1]
Interest expenses	(52)	(64)
Amortization of debt fees and discounts	(7)	(5)
Interest IAS 19 on employee benefit liabilities	(2)	(3)
Interest expenses on IFRS 16 lease liabilities	(8)	(8)
Foreign exchange rate differences, including impact from currency	(19)	(31)
Interest related financial derivative instruments	(9)	0
Negative impact from fair value adjustment on contingent purchase price consideration (see note 29.6)	0	(4)
Net losses on investments measured at fair value through profit or loss	(5)	(2)
Other financial expenses	(4)	(7)
Total	**(106)**	**(124)**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)

Interest expenses comprise interest expenses on the Group's debt (refer to note 15) as well as other interest.

Note 22
Taxes

22.1
Income Taxes

Major components of tax expenses

Million CHF	2020	2019 (restated)[1]
Current taxes	(84)	(132)
Deferred tax expense relating to the origination and reversal of temporary differences	(10)	60
Deferred tax income resulting from tax rate changes	23	1
Total	**(71)**	**(71)**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)

Lonza Group Ltd is domiciled in Switzerland. Following the implementation of the Swiss tax reform effective 1 January 2020 which among other changes abolished the holding regime, the income tax rate for Lonza Group Ltd. domiciled in Basel is 13% (2019: 8%).

As the Group operates across the world, it is subject to income taxes in several different tax jurisdictions. From 2020 on, Lonza applies the ordinary tax rate of its top holding company (Lonza Group Ltd) in the Canton of Basel in Switzerland as the Group's tax rate. Before 2020, and prior to the Swiss Tax Reform, the Group applied the ordinary tax rate of Lonza AG, domiciled in the Canton of Valais, of 22% as the Group's tax rate.

The Group's effective tax rate for 2020 is 9% (2019: 10%).

The enactment of the Valais tax reform reduced the Valais income tax rate to 20.1% (for 2020), 18.6% (for 2021) and 17% (for the years 2022 and following). As a result of this tax rate reduction, Lonza recognized non-recurring adjustments to its deferred tax liabilities resulting in a net income tax benefit of CHF 21 million.

Reconciliation of Tax Expense

Million CHF	2020	2019 (restated)[1]
Profit before income taxes	803	719
Tax at the group rate (2020: 13 % / 2019: 22 %)	105	155
Deviation from average group tax rate	22	(53)
Non-deductible expenses	10	1
Tax-free earnings	(27)	(37)
Deferred tax effect from tax rate changes	(23)	(1)
Changes in prior year estimates (including valuation allowances)	(27)	(8)
Tax on unremitted earnings	1	0
Effect of non-recognition of deferred tax assets	8	12
Other	2	2
Total	71	71
Current tax expenses (charged) / credited directly to equity	**17**	**11**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)

The components of deferred income tax balances are included in the following captions in the consolidated balance sheet:

Components of Deferred Income Tax Balances

	2020		2019	
Million CHF	Assets	Liabilities	Assets	Liabilities
Current provisions	16	15	16	21
Non-current provisions / Employee benefit liabilities	105	33	223	38
Intangible assets	0	570	0	691
Inventories, net	15	33	9	49
Property, plant and equipment	13	126	16	203
Other assets	0	0	2	0
Tax loss carry-forwards and tax credits	71	0	129	0
Netting of deferred tax assets and deferred tax liabilities	(196)	(196)	(372)	(372)
Total	**24**	**581**	**23**	**630**

The development of deferred tax (expenses) / income can be explained as follows:

Million CHF	2020	2019 (restated)[1]
Deferred tax assets	24	23
Deferred tax liabilities	(581)	(630)
Net deferred tax liability, at 31 December	**(557)**	**(607)**
Less deferred tax liabilities net, at 1 January	607	682
(Increase) in deferred tax liabilities, net	**50**	**75**
Currency translation differences	(17)	(13)
Movements of deferred (tax assets) / liabilities recognized in other comprehensive income	(1)	(7)
Movements of deferred (tax assets) / liabilities recognized in equity	0	(8)
Deferred tax expense related to discontinued operations	(5)	14
Reclassification to assets / liabilities held for sale	(14)	0
(Expense) / income recognized in income statement	**13**	**61**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5)

Unrecognized Tax Losses: Expiry

Million CHF	2020	2019
Within 1 year	4	0
Between 2 to 5 years	122	94
After 5 years	36	39
Unlimited	29	144
Total	**191**	**277**

In addition to the unrecognized tax losses shown in the above table, the Group has additional unrecognized tax losses for US state tax purposes in the amount of CHF 346 million at 31 December 2020 (2019: CHF 572 million). These losses expire in more than 5 years.

In assessing whether it is probable that future taxable profit will be available to utilize these tax loss carry- forwards, management considers whether such benefits are recoverable on the basis of the current situation of the company and the future economic benefits outlined in specific business plans for each relevant subsidiary.

Deferred tax liabilities have not been established for withholding tax and other taxes that would be payable on the remittance of earnings of foreign subsidiaries, where such amounts are currently regarded as permanently reinvested. The total unremitted earnings of the Group that would be subject to withholding tax or other taxes upon remittance, but which regarded as permanently reinvested, were CHF 416 million at 31 December 2020 (2019: CHF 673 million).

22.2
Disclosure of Tax Effects on Each Component of Other Comprehensive Income

	2020			2019		
Million CHF	Before-tax Amount	Tax (Expense) Benefit	Net-of-tax Amount	Before-tax Amount	Tax (Expense) Benefit	Net-of-tax Amount
Exchange differences on translating foreign operations	(230)	7	(223)	(153)	0	(153)
Cash flow hedges	(4)	1	(3)	(5)	0	(5)
Remeasurement of defined-benefit liability	(32)	1	(31)	(43)	7	(36)
Other comprehensive income	**(266)**	**9**	**(257)**	**(201)**	**7**	**(194)**

Note 23
Research & Development Costs

Research & development (R&D) costs include all primary costs directly related to this function, as well as internal services and imputed depreciation. These costs are incurred for:

- Development of new products and services
- Improvement of existing products and services
- Development of new production processes
- Improvement of existing production processes
- Cost for patents
- Purchase price for product and process know-how to the extent not capitalized

The R&D costs for the total group amounted to CHF 185 million, of which CHF 160 million in continuing business (2019: Total Group: CHF 188 million, continuing business CHF 141 million) and represent the full range of R&D activity. However, the consolidated income statement discloses lower levels of research & development costs (see "Results from Continuing and Discontinued Operations" in section "Alternative Performance Measures"), as the remainder of such costs are absorbed in cost of goods sold for R&D products and services sold.

Note 24
Employee Benefit Liabilities

The tables below reconcile the Group's employee benefit liabilities in the consolidated balance sheet as well as the related remeasurement in the statement of other comprehensive income:

Million CHF	2020	2019
Defined benefit pension plans (see note 24.1)	280	484
Post-employment medical benefits (see note 24.2)	0	25
Non-current vacation accrual (Swiss entities)	3	2
Total	283	511

Million CHF	2020	2019
Remeasurement for:		
Defined-benefit pension plans (see note 24.1)	31	44
Post-employment medical benefits (see note 24.2)	1	(1)
Total	**32**	**43**

24.1 Defined-Benefit Pension Plans

The Group operates defined-benefit pension plans in various countries, with the major plans being in Switzerland, Great Britain and the United States (as described below). For pension accounting purposes, these plans are considered as defined-benefit plans.

Pension Plan in Switzerland

The Group's Swiss pension plan is governed by the Swiss Federal Law on Occupational Retirement, Survivors and Disability Pension Plans (BVG), and is funded through a legally separate trustee-administered pension fund (Pensionskasse der Lonza). The Board of Trustees is responsible for the investment of the assets, which cannot revert to the Company. The cash funding of these plans, which may from time to time involve special payments, is designed to ensure that present and future contributions should be sufficient to meet future liabilities.

The plan contains a cash balance benefit formula, accounted for as a defined-benefit plan. Employer and employee contributions are defined in the pension fund rules in terms of an age-related sliding scale of percentages of pay. Under Swiss law, the company guarantees the vested benefit amount as confirmed annually to members. Interest may be added to member balances at the discretion of the Board of Trustees. The risks linked to retirement benefits (disability and death) have been reinsured until 31 December 2021. The investment risk is not reinsured.

Retirement benefits are based on the accumulated retirement capital (made up of yearly contributions and the interest thereon), which can either be drawn as a life-long annuity or as a lump-sum payment or a combination of both. The Board of Trustees may adjust the annuity at its discretion subject to the plan's funded status including sufficient free funds as determined according to Swiss statutory valuation rules. Retirement benefits and related plan assets of plan participants with a retirement date on or before 31 December 2007 were transferred to an insurance company. The insurance company guarantees these retirement benefits and bears the investment, death and disability risks.

The employees of the Specialty Ingredients business in Switzerland were transferred to a separate legal entity in 2020, but continue to participate in Lonza's Swiss pension plan. The net defined benefit liability related to the employees of the Specialty Ingredients businesses is classified as held for sale at 31 December 2020.

Pension Plan in the UK

The Group operates two major plans in the UK which are closed to new entrants. In addition, both schemes are registered under UK legislation, are contracted out of the State Second Pension and are subject to the scheme funding requirements outlined in UK legislation. The plans are managed by corporate trustee bodies, which oversee investment strategy and general regulatory compliance. Both pension plans were closed to future accruals on 31 March 2020 where the active members became deferred members at that date, for which the Group recognized a past service credit of CHF 10 million. One of the two major pension plans is related to the Specialty Ingredients business and its net defined benefit liability is classified as held for sale at 31 December 2020 accordingly.

Pension Plans in the United States

Lonza currently sponsors three qualified defined-benefit pension plans in the United States. All of the defined-benefit pension plans are fully frozen with respect to future benefit accruals (with the exception of a small group of participants).

These pension plans are related to the Specialty Ingredients business and related liabilities are consequently classified as held for sale at 31 December 2020.

Million CHF	Defined benefit obligation	Fair value of plan assets	Net defined benefit liability
At 1 January 2019	**3,132**	**(2,664)**	**468**
Included in profit or loss [1]			
Current service cost	50	0	50
Past service cost	2	0	2
Interest expense / (income)	56	(48)	8
Included in other comprehensive income			
Actuarial loss / (gain) arising from:			
– Demographic assumptions	(50)	0	
– Financial assumptions	288	0	
– Experience adjustment	77	0	
Return on plan assets excluding interest income	0	(271)	
Remeasurements loss / (gain)	315	(271)	44
Effect of movements in exchange rates	1	1	2
Other			
Contributions paid:			
– Employers	0	(100)	(100)
– Plan participants	25	(25)	0
Benefits paid	(103)	103	0
At 31 December 2019	**3,478**	**(3,004)**	**474**
– Thereof present value of funded defined-benefit obligation	3,454		
– Thereof present value of unfunded defined-benefit obligation	24		
Included in profit or loss [2]			
Current service cost	57	0	57
Gains on settlements	(17)	7	(10)
Interest expense / (income)	38	(34)	4
Included in other comprehensive income			
Actuarial loss / (gain) arising from:			
– Demographic assumptions	(26)	0	
– Financial assumptions	216	0	
– Experience adjustment	52	0	
Return on plan assets excluding interest income	0	(211)	
Remeasurements loss / (gain)	242	(211)	31
Effect of movements in exchange rates	(93)	80	(13)
Other			
Contributions paid:			
– Employers	0	(103)	(103)
– Plan participants	28	(28)	0
Benefits paid	(103)	103	0
Reclassification to liabilities held for sale	(1,412)	1,250	(162)
At 31 December 2020	**2,218**	**(1,940)**	**278**
– Thereof present value of funded defined-benefit obligation	2,207		
– Thereof present value of unfunded defined-benefit obligation	11		

[1] Thereof service cost of CHF 10 million, past service cost of CHF 2 million and net interest expenses of CHF 5 million are presented as part of discontinued operations
[2] Thereof service cost of CHF 12 million, gains on settlements of CHF 1 million and net interest expenses of CHF 2 million are presented as part of discontinued operations

The defined-benefit pension plans are reported as follows in the consolidated balance sheet:

Million CHF	2020	2019
Defined benefit pension plan asset	2	10
Defined benefit pension plan liability	(280)	(484)
Defined benefit pension plan asset classified as held for sale	6	0
Defined benefit pension plan liability classified as held for sale	(168)	0

As a result of plan amendments of the UK plans in 2020 (the schemes were closed to future accruals on 31 March 2020 where the active members became deferred members at that date), the Group recognized a settlement gain of CHF 11 million (thereof CHF 1 million is presented as part of discontinued operations).

In addition, Lonza settled a pension plan in Germany, resulting in a settlement loss of CHF 1 million. The Group expects to pay CHF 41 million in contributions to defined-benefit pension plans of continuing operations in 2021.

The defined benefit obligation and plan assets are disaggregated by country as follows:

					2020[1]					2019
Million CHF	CH	US	UK	Rest of World	Total	CH	US	UK	Rest of World	Total
Present value of defined-benefit obligation	1,890	4	245	79	2,218	2,082	541	769	86	3,478
Fair value of plan assets	(1,711)	0	(191)	(38)	(1,940)	(1,831)	(446)	(690)	(37)	(3,004)
Total net defined-benefit liability	**179**	**4**	**54**	**41**	**278**	**251**	**95**	**79**	**49**	**474**

[1] The 2020 defined benefit liabilities and plan assets only include pension plans of continuing operations

The significant actuarial assumptions at the reporting date (expressed as weighted averages) were as follows:

			2020[1]			2019
In %	CH	US	UK	CH	US	UK
Discount rate	0.15	2.33	1.35	0.29	3.18	2.08
Future salary increases	1.00	0.00	n.a.	1.00	0.00	3.22
Future pension increases	n.a.	0.00	0.00	n.a.	0.00	2.33

[1] The 2020 assumptions are only related to pension plans of continuing operations

Assumptions regarding future mortality are based on actuarial advice in accordance with published statistics and experience in each territory[1]. These assumptions translate into an average life expectancy in years for a pensioner retiring at age 65:

			2020			2019
In years	CH	US	UK	CH	US	UK
Retiring at the end of the reporting period						
– Male	21.8	20.0	23.4	21.7	20.0	21.6
– Female	23.6	22.0	24.4	23.5	22.0	24.2
Retiring 20 years after the end of the reporting period						
– Male	23.3	22.0	24.7	23.3	22.0	23.3
– Female	25.1	24.0	25.9	25.0	24.0	25.9

[1] For the Pension Plan in Switzerland BVG 2015 mortality tables were applied

The sensitivity of the defined-benefit obligation to changes in the relevant actuarial assumptions is:

		31.12.2020[1]		31.12.2019	
Effect in million CHF	Change in assumption	Increase	Decrease	Increase	Decrease
Discount rate	0.25%	(88)	94	(131)	140
Future salary increases	0.25%	10	(10)	15	(15)
Life expectancy	1 year	87	(88)	131	(132)

[1] The 2020 sensitivity analyses include only net defined benefit liabilities associated with continuing operations

The above sensitivity analyses are based on a change in an assumption while keeping all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined-benefit obligation to significant actuarial assumptions the same method (present value of the defined-benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the pension liability recognized within the balance sheet.

The methods and types of assumptions used in preparing the sensitivity analyses did not change compared with the previous period.

At 31 December the weighted average duration of the defined-benefit obligation for the major plans as well as the Group in total is:

Million CHF	2020[1]	2019
Group	16.1	15.6
CH	15.2	15.4
UK	24.5	19.2
US	8.1	11.4

[1] The 2020 average durations for 2020 include only pension plans of continuing operations

Plan assets comprise:

				2020[1]				2019
Million CHF	Quoted	Unquoted	Total	%	Quoted	Unquoted	Total	%
Equity instruments	496	0	496	26	835	0	835	28
Debt instruments								
– Investment-grade (AAA to BBB)	721	0	721		1,160	0	1,160	
– Non-investment-grade (below BBB)	26	0	26		63	0	63	
	747	0	747	38	1,223	0	1,223	41
Real-estate	133	97	230	12	157	112	269	9
Cash and cash equivalents	65	0	65	3	104	0	104	3
Other	393	9	402	21	550	23	573	19
Total	**1,834**	**106**	**1,940**	**100**	**2,869**	**135**	**3,004**	**100**

[1] The 2020 plan assets only include pension plans of continuing operations

24.2 Post-Employment Medical Benefits

Lonza's post-employment medical benefit plans are not funded and are provided under defined-benefit plans. They consist of post-retirement healthcare benefits in the United States, such as drug coverage and other medical benefits, as well as limited death benefits.

The post-retirement healthcare plans are not open to new members and grandfathered participants must meet specific age/service requirements to participate.

These plans are solely related to the Specialty Ingredients business and are classified as held for sale at 31 December 2020 accordingly.

The movements in the defined-benefit obligation are as follows:

Million CHF	2020	2019
At 1 January	**25**	**28**
Included in profit or loss		
Current service cost	0	0
Past service credit	0	(1)
Interest expense	1	1
Included in other comprehensive income		
Actuarial loss / (gain) arising from:		
– Demographic assumptions	0	0
– Financial assumptions	1	1
– Experience adjustment	0	(2)
Total remeasurements loss / (gain)	1	(1)
Effect of movements in exchange rates	(2)	0
Other		
Contributions paid by:		
– Employers	0	0
– Plan participants	0	0
Benefits paid	(2)	(2)
Reclassification to liabilities held for sale	(23)	0
At 31 December	**0**	**25**

For the medical plan the same mortality assumptions are applied as for the pension plans in the United States (see note 24.1). In addition, the sensitivity analyses are based on the same methodology as for the pension plans.

In %	2020	2019
Discount rate	2.02	3.18
Medical-cost trend rate	6.80	6.60

The sensitivity of the defined-benefit obligation to changes in the relevant actuarial assumptions is:

		31.12.2020[1]		31.12.2019	
Effect in million CHF	Change in assumption	Increase	Decrease	Increase	Decrease
Discount rate	0.25%	n.a.	n.a.	(1)	1
Medical-cost trend rate	1.00%	n.a.	n.a.	1	(1)
Life expectancy	1 year	n.a.	n.a.	0	0

[1] Sensitivities for 2020 are not presented following the classification of the entire post-employment medical benefit liability as held for sale

For the medical plan the same mortality assumptions are applied as for the pension plans in the United States (see note 24.1). In addition, the sensitivity analyses are based on the same methodology as for the pension plans.

Note 25
Share-Based Payments

Long-Term Incentive Plan (LTIP)

History and Participation
The LTIP is an equity-based plan introduced in 2006 for the Executive Committee and senior managers.

Objective
The LTIP is designed to align the interests of participants with those of Lonza's shareholders and serves as a retention tool. LTIP participants are eligible to receive Lonza shares at the end of the vesting period, provided that certain challenging performance conditions are met at the end of the three-year performance period.

Equity Awards
Under the LTIP participants are awarded the right to receive a number of Lonza registered shares in the future. Depending on the job grade of the participant, the target equity award grant is between 10% and 150% of the annual base salary. The grant is awarded at target and the payout level ranges from 0% and 200% of target. The CEO and Executive Committee members have a target of 150% and 125% of base salary respectively with payout levels also ranging from 0% and 200% of target.

For any pro-ration treatment, as outlined in the relevant Plan Rules, the entire length of the three-year performance period is utilized. The LTIP plan design and target setting is determined at the beginning of the three-year performance period. For 2020 the plan design included minimum, target and stretch (maximum) goals.

The 2020 LTIP budget value for the Executive Committee was approved as submitted at the AGM 2020 and administered in accordance with this approval. Vesting is dependent on the achievement of the performance conditions and cannot exceed the 200% of target equity awards granted (the maximum level of award).

Restriction and Vesting
Participants only receive title and ownership of the shares after the completion of the relevant three-year vesting period and only if the performance metrics required for vesting are partially or fully met.

Vesting Performance Metrics
For the 2020 LTIP the performance metrics were CORE earnings per share (EPS) and return on invested capital (ROIC) with 50% weight for each measure.

With the payout value directly linked to these key financial metrics, these two measures focus on Lonza's financial performance that will drive the valuation and performance of Lonza. The overall value of the LTIP is ultimately driven by the share price at the time of vesting, further linking the LTIP to the interests of the shareholders.

Overview of Vesting Conditions for LTIP
The 2020 LTIP awards are subject to CORE EPS and ROIC performance measures, each with an equal weighting. The Nomination and Compensation Committee (NCC) deems these long-term performance measures appropriate to align the interests of the Executive Committee with Lonza's financial performance and in turn the interests of our Shareholders.

The respective performance targets at the threshold (50%), target (100%) and maximum (200%) payout levels were recommended by the NCC and approved by the Board of Directors in April 2020.

These financial performance targets for the 2022 year end are commercially sensitive at this time and will not be disclosed publicly until after the awards have vested.

CORE EPS Approved at AGM 2020 (LTIP 2020)
The 2020 LTIP award threshold performance level was determined to be a double digit percentage above the CORE EPS threshold performance level for the 2019 LTIP award. The maximum performance level was determined to be above the 2022 Mid-Term Guidance and is a double-digit percentage figure above threshold performance levels.

ROIC Approved at AGM 2020 (LTIP 2020)
This measure is a reflection of the effect of decisions taken by Executive Committee members and senior management over the course of the relevant LTIP performance period. The 2020 LTIP award threshold performance level was determined to be high single digit of the ROIC threshold performance level set for the 2019 LTIP award. The maximum performance level was determined to be above the 2022 Mid-Term Guidance and is a double-digit percentage figure above threshold performance levels.

Treatment of LTIP in Change of Control Situations
Under the LTIP rules, if a Change of Control occurs, all unvested granted shares shall immediately vest and the granted price shall be the price at which the shares are sold in the transaction resulting in the Change of Control.

Actual Performance and Payout for the LTIP 2018
Performance under the 2018 LTIP exceeded target performance levels for both CORE EPS and ROIC. This generated a 200% and 198% payout on each of these measures respectively. With a 50% weighting applied to the two performance measures, the total 2018 LTIP payout equaled 199%. See page 208 from Remuneration Report for full details on targets and target achievements.

Lonza Restricted Share Units Plan (LRSP)

Participation and Objective

The LRSP is an equity-based plan introduced in 2020. It was created as a tool to primarily support retention cases across the business in conjunction with key strategic projects. All employees above a grade 10 in the organization are eligible to be considered for an award. Executive Committee members may receive awards via the Executive Committee Appointments Policy only – see page 208 from the Remuneration Report for full details.

Equity Awards

Under the LRSP, participants are awarded the right to receive a number of Lonza registered shares in the future subject to continued employment with Lonza. The equity award level depends on the grade of the participant or the strategic importance of the project that the participant is working on. A two to five year vesting period will apply depending on the requirements.

Restriction and Vesting

Participants will only receive title and ownership of the shares after a relevant vesting period has elapsed and subject to sustained performance and continued employment over time.

Details of Long-Term Incentive Plans

	Grant Date	Share Price in CHF	Granted Equity Awards	Fair Value at Grant Date in CHF	Vesting Date
LTIP 2017	01 02 2017	180.90	106,578	19,279,960	31 01 2020
LTIP 2017 Capsugel	27 07 2017	233.10	76,641	17,865,017	31 01 2020
LTIP 2018	01 02 2018	258.90	106,893	27,674,598	31 01 2021
LTIP 2019	01 02 2019	261.90	110,026	28,815,809	31 01 2022
LTIP 2020	01 02 2020	396.20	70,985	28,124,257	31 01 2023
LRSP 2020 Plan 1	02 11 2020	554.80	2,062	1,143,998	02 11 2022
LRSP 2020 Plan 2	02 11 2020	554.80	2,062	1,143,998	02 11 2023

Vesting Conditions at Grant Date

	Market Price in CHF	Granted Equity Awards	Fair Value of Equity Awards in CHF	Expected EPS / RONOA / ROIC at Grant Date	Probability Minimum Targets	Volatility Employees	Total Probability	Total Cost at Grant Date in CHF
LTIP 2017 CORE RONOA	180.90	53,289	180.90	100%	100%	10%	90%	8,676,982
LTIP 2017 CORE EPS	180.90	53,289	180.90	100%	100%	10%	90%	8,676,982
LTIP 2017 Capsugel CORE RONOA	233.10	38,321	233.10	100%	100%	10%	90%	8,039,363
LTIP 2017 Capsugel CORE EPS	233.10	38,320	233.10	100%	100%	10%	90%	8,039,153
LTIP 2018 ROIC	258.90	53,447	258.90	120%	100%	10%	90%	14,944,423
LTIP 2018 CORE EPS	258.90	53,446	258.90	120%	100%	10%	90%	14,944,143
LTIP 2019 ROIC	261.90	55,013	261.90	115%	100%	10%	90%	14,912,181
LTIP 2019 CORE EPS	261.90	55,013	261.90	115%	100%	10%	90%	14,912,181
LTIP 2020 ROIC	396.20	35,492	396.20	100%	100%	10%	90%	12,655,737
LTIP 2020 CORE EPS	396.20	35,493	396.20	100%	100%	10%	90%	12,655,916

Development Within 2020 of the LTIP

	Equity awards outstanding 01 01 2020	Equity awards granted during 2020	Equity awards forfeited during 2020	Vested equity awards during 2020	Equity awards outstanding 31 12 2020
LTIP 2017	93,710	0	(48)	(93,662)	0
LTIP 2017 Capsugel	70,794	945	0	(71,739)	0
LTIP 2018	100,160	0	(7,422)	0	92,738
LTIP 2019	109,501	0	(11,234)	0	98,267
LTIP 2020	0	70,985	(6,357)	0	64,628
Total equity awards	**374,165**	**71,930**	**(25,061)**	**(165,401)**	**255,633**

Development Within 2019 of the LTIP

	Equity awards outstanding 01 01 2019	Equity awards granted during 2019	Equity awards forfeited during 2019	Vested equity awards during 2019	Equity awards outstanding 31 12 2019
LTIP 2016	98,525	0	(2,895)	(95,630)	0
LTIP 2017	102,975	0	(9,265)	0	93,710
LTIP 2017 Capsugel	70,794	0	0	0	70,794
LTIP 2018	106,257	0	(6,097)	0	100,160
LTIP 2019	0	110,026	(525)	0	109,501
Total equity awards	**378,551**	**110,026**	**(18,782)**	**(95,630)**	**374,165**

The fair value at grant date of the equity awards granted in 2020 for the LTIP was CHF 396.20 (2019: CHF 261.90) and for the two LRSP the fair value at grant date was CHF 554.80. The costs were calculated using the market price at grant date, including probabilities as per conditions of vesting. The amounts for equity awards are expensed on a straight-line basis over the vesting period, based on estimates of equity awards that will eventually vest.

Compensation of the Board of Directors

Objective and Market Benchmarking

In accordance with their respective duties and responsibilities, compensation levels for the Board of Directors are set at the median of the benchmarking peer group. The benchmarking peer group consists of Swiss companies of various sectors that are comparable in type of business, complexity of operations, size and global presence to Lonza. The Board of Directors regularly review the compensation of its members, including the Chairperson, based on a proposal by the Nominations and Compensation Committee and on advice from an independent advisor, including relevant benchmarking information.

Structure and Level of Compensation

The Chairperson of the Board of Directors and its Members receive their compensation as 50% in Lonza Group shares and 50% in cash. This was paid in quarterly installments during the 2020 financial year.

The number of shares granted for Board of Directors' compensation is based on the average closing share price of the last five business days of each quarter. Share restrictions lapse after three years from the grant date. Shares are eligible for a dividend. This structure of Board of Directors' compensation is closely aligned with our Shareholders' interests.

The members of the Board of Directors do not receive variable compensation. The members of the Board of Directors are reimbursed for travel and other related expenses associated with their responsibilities as members of the Board of Directors of Lonza.

The position and associated compensation of the Chairman of the Board of Directors and its members was approved by shareholders at the 2020 Annual General Meeting (AGM). This reflects compensation levels and structure which are unchanged compared to the previous year.

Compensation Components
For the period from the AGM 2020 to the AGM 2021, the members of the Board of Directors receive fixed gross compensation for Board of Directors' membership and additional compensation for Committee Chairperson and committee members as described in the table below.

The compensation of the Chairperson of the Board of Directors includes compensation as a member of the Innovation and Technology Committee of the Board of Directors.

Further, the compensation of the Committee Chairperson amounts to CHF 280,000 and includes the committee membership fee. In the case of multiple committee memberships, this attracts one committee membership fee only. The additional responsibilities of Vice-Chairperson and Lead Independent Director do not attract any additional fees.

Board of Directors

Compensation Board of Directors Annual General Meeting (AGM) 2020 to 2021 (excluding social security contributions)

In CHF	Base annual fee	Committee membership fee	Committee Chairperson fee
Chairperson of the Board of Directors [1]	600,000	–	–
Board of Directors Member [2]	200,000	40,000	80,000
	The additional responsibilities of Vice-Chairperson and Lead Independent Director [3] do not attract any additional fees		
Form of payout	50% in Lonza Group shares and 50% in cash. This is paid in quarterly installments during the 2020 financial year		

[1] The compensation of the Chairperson of the Board of Directors includes compensation as a member of the Innovation and Technology Committee of the Board of Directors
[2] The compensation for Committee Chairperson amounts to CHF 280,000 and includes the committee membership fee. In the case of multiple committee memberships, this attracts one committee membership fee only
[3] The roles and responsibilities of such Lead Independent Director are in line with sect. 19 para. 2 of the Swiss Code of Best Practice for Corporate Governance, requiring adequate control mechanisms, and commensurate to such position

Development of Compensation for Board of Directors in 2020

Grant Date	Total Number of Shares	Share Price in CHF	Fair Values of Shares	Cash[1] in CHF	Total in CHF	Blocked Until
31.03.2020	839	390.30	327,462	330,000	657,462	31.03.2023
30.06.2020	600	496.92	298,152	300,000	598,152	30.06.2023
30.09.2020	523	568.12	297,127	300,000	597,127	30.09.2023
31.12.2020	530	564.04	298,941	300,000	598,941	31.12.2023
Total	**2,492**	**490.24**	**1,221,682**	**1,230,000**	**2,451,682**	

[1] Excluding social security and withholding tax

The amount of CHF 2,451,682 was recognized as an expense in the year 2020.

Development of Compensation for Board of Directors in 2019

Grant Date	Total Number of Shares	Share Price in CHF	Fair Values of Shares	Cash[1] in CHF	Total in CHF	Blocked Until
31.03.2019 [1]	1,203	297.34	357,700	360,000	717,700	31.03.2022
30.06.2019	1,005	326.56	328,193	330,000	658,193	30.06.2022
30.09.2019	970	338.44	328,287	330,000	658,287	30.09.2022
31.12.2019	926	353.68	327,508	330,000	657,508	31.12.2022
Total	**4,104**	**326.92**	**1,341,687**	**1,350,000**	**2,691,687**	

[1] Excluding social security and withholding tax

The amount of CHF 2,691,687 was recognized as an expense in the year 2019.

Development of Compensation for Board of Directors in 2018

Grant Date	Total Number of Shares	Share Price in CHF	Fair Values of Shares	Cash[1] in CHF	Total in CHF	Blocked Until
31.03.2018	1,537	225.84	347,116	348,750	695,866	31.03.2021
30.06.2018	1,368	262.58	359,209	360,000	719,209	30.06.2021
30.09.2018	1,091	329.54	359,528	360,000	719,528	30.09.2021
31.12.2018	1,369	261.62	358,158	360,000	718,158	31.12.2021
Total	**5,365**	**265.43**	**1,424,011**	**1,428,750**	**2,852,761**	

[1] Excluding social security and withholding tax

The amount of CHF 2,862,338 was recognized as an expense in the year 2018.

Development of Compensation for Board of Directors in 2017

Grant Date	Total Number of Shares	Share Price in CHF	Fair Values of Shares	Cash[1] in CHF	Total in CHF	Blocked Until
31.03.2017	1,832	185.72	340,239	341,250	681,489	31.03.2020
30.06.2017	1,679	207.06	347,654	348,750	696,404	30.06.2020
30.09.2017	1,380	252.04	347,815	348,750	696,565	30.09.2020
31.12.2017	1,325	262.68	348,051	348,750	696,801	31.12.2020
Total	**6,216**	**222.61**	**1,383,759**	**1,387,500**	**2,771,259**	

[1] Excluding social security and withholding tax

The amount of CHF 2,771,259 was recognized as an expense in the year 2017.

Recognition in the Consolidated Financial Statements
All of the equity-settled share-based payments had an impact on the 2020 ''Profit before income taxes'' amounting to an expense of CHF 45 million (2019: CHF 56 million).

School in Suurpelto district, Espoo, Finland

Note 26
Changes in Shares and Share Capital Movements

Effect in CHF	31.12.2020	Change in Year	31.12.2019	Change in Year	31.12.2018
Total number of shares	**74,468,752**	**0**	**74,468,752**	**0**	**74,468,752**
Treasury shares					
Free shares	(185,680)	(5,730)	(179,950)	42,645	(222,595)
Total treasury shares	**(185,680)**	**(5,730)**	**(179,950)**	**42,645**	**(222,595)**
Total shares ranking for dividend at 31 December	**74,283,072**	**(5,730)**	**74,288,802**	**42,645**	**74,246,157**
Share capital movements					
Share Capital in CHF	**74,468,752**	**0**	**74,468,752**	**0**	**74,468,752**

The share capital on 31 December 2020 comprised 74,468,752 registered shares (2019: 74,468,752) with a par value of CHF 1 each, amounting to CHF 74,468,752 (2019: CHF 74,468,752).

Contingent Capital The share capital of Lonza Group Ltd may be increased through the issuance of a maximum of 7,500,000 fully paid in registered shares with a par value CHF 1 each up to a maximum aggregate amount of CHF 7,500,000.

Authorized Capital The Board of Directors shall be authorized to increase, at any time until 6 May 2021, the share capital of the Lonza Group Ltd through the issuance of a maximum of 7,500,000 fully paid in registered shares with a par value of CHF 1 each up to a maximum aggregate amount of CHF 7,500,000. The capital increases in the form of contingent capital and authorized capital may increase the share capital of Lonza Group Ltd by a maximum aggregate amount of CHF 7,500,000. The details and conditions are set out in Articles 4^{bis} to 4^{quater} of the Company's Articles of Association.

At 31 December 2020, Lonza Group Ltd had a fully paid in registered capital of CHF 74,468,752 and a contingent capital of CHF 7,500,000.

Reserves in the amount of CHF 37,234,376 (2019: CHF 37,234,376) included in the financial statements of the parent company cannot be distributed.

Dividend On 20 April 2020, at the Annual General Meeting, shareholders approved the distribution of a dividend of CHF 2.75 per share in respect of the 2019 financial year (financial year 2018: CHF 2.75). The dividend distribution totaled CHF 204 million (2019: CHF 204 million), equally recorded against the retained earnings (102 million) and the reserves from capital contribution of Lonza Group Ltd (102 million). A dividend payment per share of CHF 3.00 is proposed by the Board of Directors to be made after the 31 December 2020 balance sheet date, subject to approval by the shareholders at the Annual General Meeting on 6 May 2021.

Note 27
Earnings Per Share

	2020	2019
Weighted average number of outstanding shares (basic)		
Weighted average number of outstanding shares	74,403,508	74,109,308
Weighted average number of outstanding shares (diluted)		
Weighted average number of outstanding shares	74,403,508	74,109,308
– Adjustments for dilutive share units and shares	305,541	455,494
Weighted average number of shares for diluted earnings per share	74,709,049	74,564,802

	2020			2019		
Million CHF	Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total
Profit for the period (equity holders of the parent)	730	139	869	647	(2)	645
Basic earnings per share in CHF	**9.81**	**1.87**	**11.68**	**8.73**	**(0.03)**	**8.70**
Diluted earnings per share in CHF	**9.77**	**1.86**	**11.63**	**8.68**	**(0.03)**	**8.65**
Dividends paid for the period [1]			**204**			**204**
Dividends per share for the period in CHF			**2.75**			**2.75**
Dividends declared after the balance sheet date			**204**			**204**
Dividends per share declared after the balance sheet date in CHF			**2.75**			**2.75**

[1] Excluding dividends of CHF 2 million (2019: CHF 2 million) paid to minority shareholders of a subsidiary

Note 28
Related Parties

Identity of Related Parties
The Group has a related-party relationship with associates, joint ventures (see note 9 and 33), pension and other post-retirement plans (see note 24) as well as with the Board of Directors and the members of the Executive Committee.

Transactions with Key Management Personnel
Board of Directors
In 2020 payments to acting members of the Board of Directors of Lonza Group Ltd totaled CHF 2.590 million [1] (2019: CHF 2.869 million [1]), 47.16% (2019: 46.77%) of which was received in the form of shares. The Director fees are paid 50% in cash and 50% in shares; the value of the employer's social security contributions is added to the cash payments. The value of the share-based fees is determined based on the average closing share price of the last five business days of each quarter. Shares are restricted for a period of three years from each award date and are eligible for a dividend from date of award.

Members of the Board of Directors and their immediate relatives control in 2020 46,209 (2019: 56,609) or 0.06% (2019: 0.08%) of the voting shares of Lonza Group Ltd. None of the Directors owns shares in the Group's subsidiaries or associates.

Executive Committee Compensation
The acting members of the Executive Committee received, for their contributions and time served in 2020, CHF 5.138 million [2] (2019: CHF 7.162 million [2]) in cash and additional benefits. Share-based compensation includes 7,397 LTIP shares and 4,124 LRSP (Lonza Restricted Share Unit Plan) shares granted (2019: 10,762 LTIP shares) and the value of share based STIP payments, equivalent to a total value of CHF 5.452 million (2019: CHF 2.819 million).

In 2020 termination benefits were paid out to the departing and former members of the Executive Committee according to their employment agreements equal to CHF 3.498 million (CHF 2.971 million in cash and in shares equivalent to a value of CHF 0.527 million). In 2019 termination benefits were paid out to the departing members of the Executive Committee according to their employment agreements equal to CHF 5.002 million (CHF 2.727 million in cash and in shares equivalent to a value of CHF 2.275 million).

[1] Including social security and withholding tax
[2] Including short-term incentive payout in March of the following year

The compensation for the Board of Directors and the Executive Committee (termination benefits included) was as follows:

Million CHF	2020	2019
Short-term benefits [1]	5.298	7.071
Post-employment benefits and other benefits [2]	1.208	1.618
Share-based payments [3]	6.674	4.160
Other compensation [4]	3.498	5.002
Total	**16.678**	**17.851**

[1] Including short-term incentive payout in March of the following year
[2] Including employer contribution for social security and pension funds
[3] Share based STIP and LTIP awards. Also, in line with the Executive Committee Appointments Policy, awards have been made to the CEO in 2020 under the Lonza Restricted Share Unit Plan (LRSP), to compensate for time-based equity awards which were forfeited when leaving the previous employer. This award was made in accordance with Article 23 (Supplementary Amount in the Event of Changes in the Executive Committee) of Lonza's Articles of Association. The award will vest after two and three-year periods, subject to continued employment, sustained performance and clawback, under the Clawback Policy
[4] Cash payment (including base salary, other benefits, short–term incentive and social security) and shares (LTIP) received by departed members of the Executive Committee during 2020 and 2019

Note 29
Financial Risk Management

29.1
Overall Risk Management Policy

Lonza is exposed in particular to credit and liquidity risk, as well as to risks from movements in foreign currency exchange rates, interest rates and market prices that affect its assets, liabilities, and forecasted transactions.

Lonza's overall risk management policy aims to limit these risks through operational and finance activities.

The Board of Directors has overall responsibility for the establishment and oversight of Lonza's risk management framework. Financial risk management is carried out by a central treasury department (Group Treasury). Group Treasury is responsible for implementing the policy, and identifies, evaluates and hedges financial risks in close cooperation with Lonza's business units. Group Treasury also has the sole responsibility for carrying out foreign exchange transactions and executing financial derivative transactions with third parties.

Lonza's risk management policies are established to identify and analyze the risks faced by Lonza, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and Lonza's activities. The Lonza Audit Committee oversees how management monitors compliance with Lonza's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by Lonza. The Lonza Audit Committee is assisted in its oversight role by Internal Audit (Lonza Audit Services). Internal Audit undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the Audit Committee.

29.2
Credit Risk

Credit risk is the risk of financial loss to Lonza if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and mainly arises from Lonza's receivables from customers.

Accounts Receivables

Lonza's exposure to credit risk is influenced mainly by the individual characteristics of each customer. Risk control assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. In monitoring customer credit risk, customers are grouped according to their credit characteristics, including geographic location, industry, and existence of previous financial difficulties.

Purchase limits are established for each customer, which are reviewed regularly. For customers domiciled in specific countries with high risk, Lonza has credit risk insurance covering the maximum exposure. The maximum credit risk is equal to the carrying amount of the respective assets. There are no commitments that could increase this exposure to more than the carrying amounts. In general, Lonza does not require collateral in respect of trade and other receivables, but uses credit insurance for country risk where appropriate.

Lonza has a history of low credit losses on accounts receivable. Credit losses that occurred in the past were primarily related to very few single customers. Furthermore, none of Lonza's businesses had a heightened exposure to credit losses in the past and based on Lonza's best estimate this is not expected to change in the foreseeable future.

Consequently, the bad debt allowance (see note 11) represents primarily the credit risk of specific customers.

Aging of Trade Receivables[1]

Million CHF	2020 Continuing business	2020 Discontinued operations	2019 Total Group
Not past due	627	157	562
Past due 1-30 days	40	18	125
Past due 31-120 days	31	3	60
Past due more than 120 days	31	4	28
Total	**729**	**182**	**775**

[1] Excluding allowances for credit losses (see note 11)

Financial Instruments and Cash Deposits

Financial Instruments and Cash Deposits Credit risk from balances with banks and financial institutions is managed by the Group's treasury department. Counterparty credit ratings are reviewed regularly. The carrying amount of financial assets represents the maximum credit exposure.

The maximum exposure to credit risk at the reporting date was as follows:

Million CHF	2020	2019
Financial assets at amortized cost		
Trade receivables, net	715	759
Other receivables	87	73
Accrued income (see note 3)	185	190
Current advances	0	2
Non-current loans and advances	162	72
Cash and cash equivalents	495	505
Total financial assets at amortized cost	**1,644**	**1,601**
Financial assets at fair value		
Derivative financial instruments		
– Currency-related instruments[1]	37	21
Contingent consideration from sale of business	14	20
Total financial assets at fair value	**51**	**41**
Total	**1,695**	**1,642**

[1] Included in 'Other receivables, prepaid expenses and accrued income' (see note 12)

29.3 Liquidity Risk

Liquidity risk is the risk that Lonza will not be able to meet its financial obligations as they fall due. Lonza's approach to managing liquidity is to ensure that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to Lonza's reputation. Group Treasury maintains flexibility in funding also using bilateral and syndicated credit lines. Lonza has concluded the following lines of credit: Committed credit lines of CHF 1,335 million (CHF 0 million used as of 31 December 2020), which are committed for up to five years and uncommitted credit lines of CHF 113 million (CHF 0 used as of 31 December 2020).

The table below analyses the Group's financial liabilities and derivative financial liabilities in relevant maturity groupings, based on the remaining period at the balance sheet date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows, including interest payments. Balances due within 12 months are equal to their carrying balances, as the impact of discounting is not significant.

Year ended
31 December 2020

Million CHF	Carrying Amount	Contractual Cash Flows[1]	Between 0 and 6 Months	Between 7 and 12 Months	Between 1 and 2 Years	Between 2 and 3 Years	Between 3 and 5 Years	Over 5 Years
Straight bond (2012-2022)	105	111	0	3	108	0	0	0
Straight bond (2015-2023)	175	181	0	2	2	177	0	0
Straight bond (2016-2021)	250	250	0	250	0	0	0	0
Straight bond (2017-2021)	125	125	0	125	0	0	0	0
Straight bond (2017-2024)	110	114	0	1	1	1	111	0
Straight bond (2020-2023)	299	308	3	0	3	302	0	0
Straight bond (2020-2026)	150	155	0	1	1	1	1	151
Euro bond (2020-2027)	535	596	9	0	9	9	17	552
German private placement	1,021	1,052	4	360	142	412	134	0
Term loan	612	628	1	1	3	3	620	0
Other debt due to banks and financial institutions	6	6	6	0	0	0	0	0
Other debt due to others	192	212	59	1	21	1	19	111
Total debt	**3,580**	**3,738**	**82**	**744**	**290**	**906**	**902**	**814**
Other non-current liabilities	212	266	0	0	31	29	51	155
– of which lease liabilities	210	264	0	0	29	29	51	155
Other current liabilities	691	698	683	15	0	0	0	0
– of which lease liabilities	24	31	16	15	0	0	0	0
Trade payables	308	308	308	0	0	0	0	0
Derivative financial instruments	29	29	4	0	0	9	16	0
Contingent consideration	28	29	0	4	4	17	4	0
Total financial liabilities	**4,848**	**5,068**	**1,077**	**763**	**325**	**961**	**973**	**969**

[1] Including interest payments

Year ended
31 December 2019

Million CHF	Carrying Amount	Contractual Cash Flows[1]	Between 0 and 6 Months	Between 7 and 12 Months	Between 1 and 2 Years	Between 2 and 3 Years	Between 3 and 5 Years	Over 5 Years
Straight bond (2012-2022)	105	115	0	3	3	109	0	0
Straight bond (2015-2020)	150	151	0	151	0	0	0	0
Straight bond (2015-2023)	175	183	0	2	2	2	177	0
Straight bond (2016-2021)	249	251	0	0	251	0	0	0
Straight bond (2017-2021)	125	125	0	0	125	0	0	0
Straight bond (2017-2024)	110	115	0	1	1	1	112	0
Syndicated loan (2019-2024)	137	150	1	1	1	1	146	0
German private placement	1,048	1,110	6	12	370	158	564	0
Term loan	1,212	1,301	8	551	16	16	513	197
Other debt due to banks and financial institutions	6	6	6	0	0	0	0	0
Other debt due to others	223	266	46	34	3	25	5	153
Total debt	**3,540**	**3,773**	**67**	**755**	**772**	**312**	**1,517**	**350**
Other non-current liabilities	265	327	0	0	75	31	51	170
- of which lease liabilities	219	280	0	0	31	28	51	170
Other current liabilities	733	767	750	17	0	0	0	0
- of which lease liabilities	25	34	17	17	0	0	0	0
Trade payables	453	453	453	0	0	0	0	0
Derivative financial instruments	26	26	8	0	0	8	10	0
Contingent consideration	30	30	0	2	5	4	18	1
Total financial liabilities	**5,047**	**5,376**	**1,278**	**774**	**852**	**355**	**1,596**	**521**

[1] Including interest payments

29.4
Market Risk

Market risk is the risk that changes in market prices will affect Lonza's income or the value of its holdings of financial instruments. Lonza is exposed to market risk from changes in currency exchange and interest rates. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return on risk. Lonza has established a treasury policy of which the objective is to reduce the volatility relating to these exposures. Lonza enters into various derivative transactions based on Lonza's treasury policy that establishes guidelines in areas such as counterparty exposure and hedging practices. Counterparties to agreements are major international financial institutions with at least investment grade rating. Positions are monitored using techniques such as market value and sensitivity analyses. All such transactions are carried out within the guidelines set by the Audit Committee.

Foreign Exchange Risk

The Group operates across the world and is exposed to movements in foreign currencies affecting the Group financial result and the value of Group equity. Foreign exchange risk arises because the amount of local currency paid or received for transactions denominated in foreign currencies may vary due to changes in exchange rates ("transaction exposures") and because the foreign currency denominated financial statements of the Group's foreign subsidiaries may vary upon consolidation into the Swiss-franc-denominated Group Financial Statements ("translation exposures"). Foreign exchange risks arise primarily on transactions that are denominated in USD, EUR and GBP.

In managing its exposure regarding the fluctuation in foreign currency exchange rates, Lonza has entered into a variety of currency swaps and forward contracts. These agreements generally include the exchange of one currency against another currency at a future date. Lonza adopts a policy of considering hedging for all the committed contractual exposure. The planned exposure is hedged within certain ranges. Hedge ratios are determined by the risk committee and depend on market expectation, risk bearing ability and risk appetite.

The table below shows the impact on post-tax profit if at 31 December a currency had strengthened (+) or weakened (–) versus the Swiss franc, with all other variables held constant as a result of the currency exposures outlined in the tables below:

		Post-tax Profit 2020		Post-tax Profit 2019	
Million CHF	Sensitivity	+	-	+	-
USD	+ / - 10%	1.3	(1.3)	18.3	(18.3)
EUR	+ / - 10%	7.2	(7.2)	20.0	(20.0)
GBP	+ / - 10%	1.3	(1.3)	5.2	(5.2)

The summary quantitative data relating to the Group's exposure to currency risks as reported to the management of the Group is as follows:

Year ended
31 December 2020

Million CHF	USD	GBP	EUR	SGD	DKK	Other	Total
Other investments	15	0	1	0	0	0	16
Non-current financial assets	3	0	14	0	0	0	17
Trade receivables, net	122	41	32	3	2	3	203
Other receivables, prepaid expenses and accrued income	19	27	2	3	0	0	51
Cash and cash equivalents	34	10	43	7	1	20	115
Non-current and current debt	(883)	0	(747)	0	0	0	(1,630)
Other non-current liabilities	(44)	0	0	(5)	0	0	(49)
Other current liabilities	3	(2)	(8)	(27)	0	(4)	(38)
Trade payables	(55)	(1)	(5)	(12)	0	0	(73)
Net group internal loans	1,641	(13)	346	0	0	0	1,974
Gross balance sheet exposure	**855**	**62**	**(322)**	**(31)**	**3**	**19**	**586**
Currency-related instruments	(869)	(48)	402	(24)	0	0	(539)
Net exposure	**(14)**	**14**	**80**	**(55)**	**3**	**19**	**47**

Year ended
31 December 2019

Million CHF	USD	GBP	EUR	SGD	DKK	Other	Total
Other investments	18	0	1	0	0	1	20
Non-current financial assets	3	0	20	0	0	0	23
Trade receivables, net	109	46	42	14	1	0	212
Other receivables, prepaid expenses and accrued income	14	18	4	3	0	4	43
Cash and cash equivalents	71	14	31	5	0	6	127
Assets held for sale	0	0	0	0	0	0	0
Non-current and current debt	(1,034)	0	(1,300)	0	0	0	(2,334)
Other non-current liabilities	(34)	0	0	(6)	0	(1)	(41)
Other current liabilities	(23)	(3)	(13)	(21)	0	0	(60)
Trade payables	(21)	(3)	(32)	(15)	0	(4)	(75)
Group internal loans	1,858	0	1,056	0	0	0	2,914
Gross balance sheet exposure	**961**	**72**	**(191)**	**(20)**	**1**	**6**	**829**
Currency-related instruments	(757)	(14)	416	0	0	0	(355)
Net exposure	**204**	**58**	**225**	**(20)**	**1**	**6**	**474**

The following exchange rates were applied during the year:

Balance Sheet Year-End Rates		2020	2019
EU	Euro	1.0829	1.0856
USA	Dollar	0.8813	0.9684
Great Britain	Pound Sterling	1.2035	1.2725
Singapore	Singapore Dollar	0.6665	0.7194
China	Renminbi	0.1347	0.1391

Income Statement Year-Average Rates		2020	2019
EU	Euro	1.0705	1.1124
USA	Dollar	0.9386	0.9938
Great Britain	Pound Sterling	1.2042	1.2689
Singapore	Singapore Dollar	0.6805	0.7285
China	Renminbi	0.1360	0.1439

Interest Rate

Risk arises from movements in interest rates which could affect the Group financial result or the value of Group equity. Changes in interest rates may cause variations in interest income and expense. In addition, they may affect the market value of certain financial assets, liabilities and hedging instruments. The primary objective of the Group's interest rate management is to protect the net interest result.

Lonza's policy is to manage interest cost using a mix of fixed and variable rate debt. Group policy is to maintain at least 50% of its borrowings in fixed-rate instruments. In order to manage this mix in a cost-efficient manner, Lonza enters into interest rate swaps and cross-currency interest rate swaps to exchange at specified intervals, the difference between fixed and variable interest amounts calculated by reference to a corresponding notional principal amount. Lonza adopts a policy of having one third of the debt on a short-term basis and two-thirds of the debt on a long-term basis. The mix between floating and fixed rates depends on the market view of Lonza.

Lonza's exposure to interest rate risk was as follows:

Million CHF	2020	2019
Net Debt (see note 15)	2,813	2,961
Net debt at fixed interest rates [1]	(2,531)	(2,313)
Interest risk exposure	282	648

[1] Including effects from cross currency interest rate swaps

If the interest rates had increased / decreased by 1% in 2020, with all other variables held constant, post-tax profit would have been CHF 2.5 million lower / higher (2019: CHF 5.8 million lower / higher).

29.5
Overview of Derivative Financial Instruments

The following table shows the contract or underlying principal amounts and fair values of derivative financial instruments by type of contract at 31 December 2020 and 2019. Contract or underlying principal amounts indicate the volume of business outstanding at the balance sheet date and do not represent amounts at risk. The fair values are determined by using the difference of the prices fixed in the outstanding derivative contracts from the actual market conditions which would have been applied at the year-end if we had to recover these trades.

Financial Instruments at Fair Value Through Profit or Loss

	Contract or underlying principal amount		Positive fair values		Negative fair values		Total net fair values	
Million CHF	2020	2019	2020	2019	2020	2019	2020	2019
Currency-related instruments								
– Forward foreign exchange rate contracts	75	68	1	1	0	0	1	1
– Currency swaps	1,508	1,429	36	20	(4)	(8)	32	12
Total currency-related instruments	**1,583**	**1,497**	**37**	**21**	**(4)**	**(8)**	**33**	**13**
Total financial instruments at fair value through profit or loss	**1,583**	**1,497**	**37**	**21**	**(4)**	**(8)**	**33**	**13**

Financial Instruments Effective for Hedge-Accounting Purposes

	Contract or underlying principal amount		Positive fair values		Negative fair values		Total net fair values	
Million CHF	2020	2019	2020	2019	2020	2019	2020	2019
Interest-related instruments								
– Interest rate swaps	388	426	0	0	(25)	(17)	(25)	(17)
Total interest-related instruments	**388**	**426**	**0**	**0**	**(25)**	**(17)**	**(25)**	**(17)**
Commodity-related instruments								
– Naphtha swap	0	6	0	0	0	(1)	0	(1)
– Propane swap	0	9	0	0	(0)	0	(0)	0
Total commodity-related instruments	**0**	**15**	**0**	**0**	**(0)**	**(1)**	**(0)**	**(1)**
Total financial instruments effective for hedge-accounting purposes	**388**	**441**	**0**	**0**	**(25)**	**(18)**	**(25)**	**(18)**

Offsetting of Financial Asset and Financial Liabilities

The Group enters into derivative transactions under International Swaps and Derivatives Association (ISDA) master netting agreements with the respective counterparties in order to mitigate counterparty risk. Under such agreements the amounts owed by each counterparty on a single day in respect of all transactions outstanding in the same currency are aggregated into a single net amount that is payable by one party to the other. The ISDA agreements do not meet the criteria for offsetting in the balance sheet as the Group does not have a currently enforceable right to offset recognized amounts, because the right to offset is only enforceable on the occurrence of future events, such as a default or other credit events.

The following table sets out the carrying value of derivative financial instruments and the amounts that are subject to master netting agreements.

	Assets		Liabilities	
Million CHF	2020	2019	2020	2019
Forward foreign exchange rate contracts	1	1	0	0
Currency swaps	36	20	(4)	(8)
Interest rate swaps	0	0	(25)	(17)
Commodity-related instruments	0	0	(0)	(1)
Carrying value of derivative financial instruments	**37**	**21**	**(29)**	**(26)**
Derivatives subject to master netting agreements	(5)	(10)	5	10
Net amount	**32**	**11**	**(24)**	**(16)**

Financial Instruments by Type/Currency

Million CHF	2020	2019
Forward foreign exchange rate contracts, currency swaps and FX options		
AUD	17	8
CAD	21	17
CNY	6	0
CZK	5	14
DKK	6	2
EUR	412	551
GBP	61	12
ILS	4	4
JPY	17	28
NZD	0	2
SGD	25	10
USD	1,009	849
Total currency related instruments	**1,583**	**1,497**
Commodity swap	0	15
Interest rate swap	388	426
Total financial instruments	**1,971**	**1,938**

Positive fair values of derivatives are included as part of “Other receivables, prepaid expenses and accrued income”. Negative fair values of derivatives are included as part of “Other current liabilities”. Hedge accounting was applied to cash flow hedges on highly probable payments in foreign currencies.

29.6 Financial Instruments Carried at Fair Value

The Group applied the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

				2020				2019
Million CHF	Level 1	Level 2	Level 3	Total for Value	Level 1	Level 2	Level 3	Total for Value
Assets								
Other investments	0	33	0	33	0	24	0	24
Derivative financial instruments	0	37	0	37	0	21	0	21
Contingent consideration related to sale of business	0	0	14	14	0	0	20	20
Liabilities								
Derivative financial instruments	0	(29)	0	(29)	0	(26)	0	(26)
Contingent consideration	0	0	(28)	(28)	0	0	(30)	(30)
Net assets and liabilities measured at fair value	**0**	**41**	**(14)**	**27**	**0**	**19**	**(10)**	**9**

In 2020 and 2019 there were no transfers between Level 1 and Level 2 fair value measurements. Details of the determination of Level 3 fair value measurements are set out below.

Contingent Consideration Arrangements Related to Sale of Business

Million CHF	2020	2019
At 1 January	**20**	**31**
Payments received	(6)	(7)
Gains and losses included in the income statement [1]	0	(3)
Currency translation effects	0	(1)
At 31 December	**14**	**20**

[1] Includes unwinding of discount of CHF 1 million for 2019

The agreement to sell the Peptides business includes a contingent consideration arrangement under which Lonza will receive a defined percentage of the net sales of the disposed business for the financial years 2017–2021 (estimated to be CHF 14 million at year-end 2020 exchange rates). Lonza's estimate of the net present value of these future payments is reflected as a receivable in the consolidated balance sheet as of 31 December 2020.

Contingent Consideration Arrangements

Million CHF	2020	2019
At 1 January	**30**	**30**
Payments made	(2)	0
At 31 December	**28**	**30**

Lonza is party to certain contingent consideration arrangements arising from business combinations. The fair values are determined considering the expected payments. The expected payments are determined by considering the possible scenarios of regulatory approvals and forecast sales, which are the most significant unobservable inputs. The estimated fair value would increase if the forecast sales were higher or if the likelihood of obtaining regulatory approval was higher. At 31 December 2020 the total potential payments under contingent consideration arrangements could be up to CHF 62 million (2019: CHF 73 million), primarily related to the Octane acquisition. The estimated future payments amount to CHF 28 million at 31 December 2020.

29.7
Carrying Amounts and Fair Values of Financial Instruments by Category

The carrying values less impairment provision of trade receivables are assumed to approximate to their fair values due to the short-term nature of trade receivables. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Group for similar financial instruments. The fair value of interest rate swaps is calculated as the present value of the estimated future cash flows. The fair value of forward foreign exchange contracts is determined using quoted forward exchange rates at the balance sheet date. The table below shows the carrying amounts and fair values of financial instruments by category.

Carrying Amounts and Fair Values of Financial Instruments by Category

At

December 2020

Million CHF	Financial instruments mandatorily at fair value through profit or loss	Fair value – hedging instruments	Financial assets at amortized cost	Financial liabilities at amortized cost	Carrying amount	Fair value
Other investments	33	0	0	0	33	33
Trade receivables, net	0	0	715	0	715	715
Other receivables	0	0	87	0	87	87
Accrued income	0	0	185	0	185	185
Non-current loans	0	0	162	0	162	162
Cash and cash equivalents	0	0	495	0	495	495
Contingent consideration from sale of business	14	0	0	0	14	14
Derivative financial instruments						
– Currency-related instruments	0	37	0	0	37	37
Total financial assets	**47**	**37**	**1,644**	**0**	**1,728**	**1,728**
Debt						
– Straight bonds [1]	0	0	0	1,749	1,749	1,834
– Other debt	0	0	0	1,831	1,831	1,831
Current liabilities	0	0	0	691	691	691
Non-current liabilities	0	0	0	212	212	212
Trade payables	0	0	0	308	308	308
Contingent consideration	28	0	0	0	28	28
Derivative financial instruments						
– Currency-related instruments	0	4	0	0	4	4
– Interest-related instruments	0	25	0	0	25	25
Total financial liabilities	**28**	**29**	**0**	**4,791**	**4,848**	**4,933**

[1] The fair value of straight bonds for disclosure purposes is Level 1 and is calculated based on the observable market prices of the debt instruments

At
December 2019

Million CHF	Financial instruments mandatorily at fair value through profit or loss	Fair value – hedging instruments	Financial assets at amortized cost	Financial liabilities at amortized cost	Carrying amount	Fair value
Other investments	24	0	0	0	24	24
Trade receivables, net	0	0	759	0	759	759
Other receivables	0	0	73	0	73	73
Accrued income	0	0	190	0	190	190
Current advances	0	0	2	0	2	2
Non-current loans	0	0	72	0	72	72
Cash and cash equivalents	0	0	505	0	505	505
Contingent consideration from sale of business	20	0	0	0	20	20
Derivative financial instruments						
- Currency-related instruments	0	21	0	0	21	21
Total financial assets	**44**	**21**	**1,601**	**0**	**1,666**	**1,666**
Debt						
– Straight bonds [1]	0	0	0	914	914	939
– Other debt	0	0	0	2,626	2,626	2,626
Current liabilities	0	0	0	733	733	733
Non-current liabilities	0	0	0	265	265	265
Trade payables	0	0	0	453	453	453
Contingent consideration	30	0	0	0	30	30
Derivative financial instruments						
– Currency-related instruments	0	8	0	0	8	8
– Interest-related instruments	0	17	0	0	17	17
– Commodity-related instruments	0	1	0	0	1	1
Total financial liabilities	**30**	**26**	**0**	**4,991**	**5,047**	**5,072**

[1] The fair value of straight bonds for disclosure purposes is Level 1 and is calculated based on the observable market prices of the debt instruments

29.8 Capital Management

The Board's policy is to maintain a strong capital base so as to retain investor, creditor and market confidence and to sustain future development of the business. The Board of Directors monitors both the demographic spread of shareholders and the return on capital, which Lonza defines as total shareholders' equity, excluding non-controlling interest, and the level of dividends to ordinary shareholders.

The Board seeks to maintain a balance between the higher returns that might be possible with higher levels of borrowing and the advantages and security afforded by a sound capital position. Lonza's target is to achieve a Return On Invested Capital (ROIC) in excess of 10% by 2022. In 2020, the return was 9.6% (2019 – restated: 9.2%, see further details in section Alternative Performance Measures). In comparison, the weighted average interest expense on interest-bearing borrowings (excluding liabilities with imputed interest) was 1.32% (2019: 1.64%).

From time to time, Lonza purchases its own shares on the market; the timing of these purchases depends on market prices. Primarily, the shares are intended to be used for issuing shares under Lonza's share programs. Lonza does not have a defined share buy-back plan. Neither Lonza Group Ltd nor any of its subsidiaries is subject to externally imposed capital requirements.

Note 30
Share Ownership of the Members of the Board of Directors and the Executive Committee

Board of Directors

Based on information available to Lonza, the members of the Board of Directors and parties closely associated with them held, as of 31 December 2020: 46,209 (2019: 56,609)[1] registered shares of Lonza Group Ltd and controlled 0.06% (2019: 0.08%) of the share capital.

None of the members of the Board of Directors or Executive Committee owns shares in the Group's subsidiaries or associates.

Executive Committee

The members of the Executive Committee and parties closely associated with them held, as of 31 December 2020: 14,262 (2019: 19,137) shares and controlled 0.02% (2019: 0.03%) of the share capital. The individual control rights are proportional to the holdings shown below.

Board of Directors

Numbers of shares	2020	2019
Albert M. Baehny	3,773	3,087
Patrick Aebischer[2]	n/a	1,523
Werner Bauer	26,485	26,194
Dorothée Deuring[3]	131	n/a
Angelica Kohlmann	870	598
Christoph Mäder	3,470	3,152
Barbara Richmond	3,462	4,340
Margot Scheltema[2]	n/a	10,241
Jürgen Steinemann	7,148	6,876
Olivier Verscheure	870	598
Total[4]	**46,209**	**56,609**

[1] Spouse, children below 18, any legal entities that they own or otherwise control, or any legal or natural person who is acting as their fiduciary
[2] Margot Scheltema and Patrick Aebischer did not stand for re-election at the AGM 2020
[3] Dorothée Deuring was appointed to the Board of Directors at the AGM 2020
[4] Moncef Slaoui was appointed to the Board of Directors at the AGM 2021, however due to further commitments he stepped down from the Board of Directors soon after appointment

Executive Committee[1]

Numbers of shares	2020	2019
Pierre-Alain Ruffieux[2]	0	n/a
Sven Abend[3]	n/a	5,000
Caroline Barth[4]	0	n/a
Rodolfo Savitzky	10,562	11,019
Stefan Stoffel	3,700	3,118
Total	**14,262**	**19,137**

[1] All Executive Committee members active prior to 1 January 2020 have met or are in line to meet the shareholding guidelines
[2] Pierre-Alain Ruffieux commenced employment on 1 November 2020
[3] Sven Abend stepped down from the Executive Committee during 2020
[4] Caroline Barth commenced employment on 1 May 2020

Note 31
Enterprise Risk Management

The Enterprise Risk Management (ERM) program is a critical platform for Lonza's global organization and business as it provides a mechanism and structure for prudently addressing risk responsibility and management in each and every organization. Lonza pursues a comprehensive risk management program as an essential element of sound corporate governance and is committed to continuously embedding risk management in its daily culture. Lonza's ERM process is performed in four steps:

- Step 1: Identification (through risk workshops with Executive Committee members and their leadership teams), assessment and assignment of risks
- Step 2: Consolidation, review and prioritization of risks
- Step 3: Presentation of consolidated risk overview to the Executive Committee and Board of Directors; and
- Step 4: Follow-up on high-priority risks. Through this process, Lonza has identified and focuses on 16 high-level thematic risk categories

Each identified risk category is assessed according to its probability of occurrence and its negative impact on the Group:

- Actions to mitigate the probability and / or impact have been identified to address every individual risks component within each category which are reviewed on a quarterly basis with assigned risk owners to assess the status
- The probability of occurrence is assessed for the period until year-end 2022, with a risk range from unlikely to highly probable
- Any potential negative effect of a risk is assessed according to its impact on the annual Group's EBIT, the Group's reputation and the Group's operations

Risks have been identified for each segment and for corporate functions, and they are tracked if they are continuing risks or if there is a year-on-year increase or decrease. The risk scenarios identified in 2020 were presented to the Executive Committee and to the Board of Directors at their meetings in November and December 2020, respectively. Financial risk management is disclosed in note 29.

Note 32
Events After Balance Sheet Date

The Consolidated Financial Statements for 2020 were approved for issue by the Board of Directors on 16 March 2021 and are subject to approval by the Annual General Meeting on 6 May 2021.

Following the approval by Lonza's Board of Directors, on 19 January 2021, Lonza announced an agreement with NextPharma for the sale of Lonza's Ploermel (FR) and Edinburgh (UK) sites, which employ 260 and 130 staff respectively. The agreement is subject to relevant conditions and regulatory approvals. Where applicable, both parties will consult with local Works Councils.

On 8 February 2021, Lonza announced that it has entered into a definitive agreement with Bain Capital and Cinven to acquire Lonza's Specialty Ingredients business and operations for an enterprise value of CHF 4.2 billion.

Note 33
Principal Subsidiaries and Joint Ventures

Selection criteria: CHF 10 million net sales 3rd Parties, CHF 10 million total assets 3rd parties or more than 30 FTE

Name	Town/Country	Currency[1]	Share Capital	Holding Direct	Holding Indirect
Arch Chemicals, Inc.	Richmond US	USD	1,000		100%
Arch Personal Care Products, L.P.	Camden County US	USD	1,000		100%
Arch Protection Chemicals Private Limited	Mumbai IN	INR	1,300,000		100%
Arch Treatment Technologies, Inc.	Richmond US	USD	n/a		100%[3]
Arch UK Biocides Limited	Castleford GB	GBP	1,644,236		100%
Arch Wood Protection (Aust) Pty Ltd	Trentham AU	AUD	80[2]		100%
Arch Wood Protection (NZ) Limited	Auckland NZ	NZD	6,099,999		100%
Arch Wood Protection (SA) Pty Ltd	Port Shepstone SA	ZAR	3'000		100%
Arch Wood Protection Canada Corp.	Mississauga CA	CAD	n/a		100%[3]
Arch Wood Protection, Inc.	Wilmington US	USD	100		100%
BacThera AG	Visp CH	CHF	11,000,000		50%
Bend Research, Inc.	Portland US	USD	n/a		100%[3]
BioAtrium AG	Visp CH	CHF	87,700,000		50%
Capsugel Belgium NV	Bornem BE	EUR	236,921,555[2]	99.9%[2]	0.1%[2]
Capsugel Brasil Importação e Distribuição de Insumos Farmacêuticos e Alimentos Ltda.	Rio de Janeiro BR	BRL	74,976,852		100%
Capsugel Canada Corp.	Vancouver CA	CAD	n/a		100%[3]
Capsugel de México, S. de R.L. de C.V.	Puebla ME	MXN	870,004,052		100%
Capsugel Distribucion, S. de R.L. de C.V.	Puebla ME	MXN	20,000,000		100%
Capsugel France SAS	Colmar FR	EUR	1,280,000		100%
Capsugel Healthcare Private Limited	Gurugram IN	INR	2,985,075,930		100%
Capsugel Japan Inc.	Sagamihara JP	JPY	100,000,000		100%
Capsugel Manufacturing, LLC	Wilmington US	USD	n/a		100%[3]
Capsugel Ploermel SAS	Ploërmel FR	EUR	42,674,272		100%
Capsugel, Inc.	Wilmington US	USD	10		100%
Hickson Ltd	Castleford GB	GBP	108,161,500		100%
Komec Helsen N.V.	Bornem BE	EUR	62,000		100%
LLC Capsugel	Domodedovo (Moscow Region) RU	RUB	150,000		100%
Lonza (China) Investments Co. Ltd.	Guangzhou CN	USD	84,000,000	100%	
Lonza (Thailand) Co., Ltd.	Bangkok TH	THB	170,000,000		100%
Lonza AG	Visp CH	CHF	60,000,000	100%	
Lonza America LLC	Wilmington US	USD	n/a		100%[3]
Lonza Biologics Inc.	Wilmington US	USD	1,000		100%
Lonza Biologics Ltd.	Guangzhou CN	USD	45,000,000		100%
Lonza Biologics plc	Slough GB	GBP	14,500,000		100%
Lonza Biologics Porriño S.L.	Porriño ES	EUR	10,295,797[2]		100%
Lonza Biologics Tuas Pte. Ltd.	Singapore SG	SGD USD	172,000,000 25,000,000		100%

Name	Town/Country	Currency[1]	Share Capital	Holding Direct	Holding Indirect
Lonza Bioscience SARL	Saint-Beauzire FR	EUR	8,848,695		100%
Lonza Bioscience Singapore Pte Ltd	Singapore SG	USD	1		100%
Lonza Biotec s.r.o.	Kourim CZ	CZK	282,100,000		100%
Lonza Chemicals Singapore Pte. Ltd.	Singapore SG	SGD	10,000		100%
Lonza Cologne GmbH	Cologne DE	EUR	1,502,000		100%
Lonza Consumer Health Inc.	Los Angeles US	USD	n/a		100%[3]
Lonza Copenhagen ApS	Vallensbaek-Strand DK	DKK	150,000		100%
Lonza Costa Rica, S.A.	Heredia CR	CRC	10,000		100%
Lonza do Brasil Especialidades Quimicas Ltda.	Sao Paolo BR	BRL	119,648,389	15.4%[2]	84.6%[2]
Lonza Finance International N.V.[4]	Bornem BE	EUR	43,061,500	100%	
Lonza Guangzhou Nansha Ltd	Guangzhou CN	USD	133,578,892		100%
Lonza Houston Inc.	Wilmington US	USD	290[2]		100%
Lonza India Private Limited	Mumbai IN	INR	23,458,580		99.9%[2]
Lonza Japan Ltd (Lonza Japan Kabushiki Kaisha)	Tokyo JP	JPY	100,000,000	100%	
Lonza KK	Tokyo JP	JPY	50,000,000	100%	
Lonza Microbial Control Asia Pacific Pte Ltd	Singapore SG	SGD	183,085		100%
Lonza Nanjing Ltd	Nanjing CN	USD	14,000,000		100%
Lonza Netherlands B.V.	Maastricht NL	EUR	2,115,232		100%
Lonza NZ Limited	New Plymouth NZ	NZD	1,000,000		100%
Lonza Rockland, Inc.	Wilmington US	USD	100		100%
Lonza Sales AG	Basel CH	CHF	2,000,000	100%	
Lonza Services AG	Basel CH	CHF	101,000	100%	
Lonza Shanghai International Trading Ltd.	Shanghai CN	USD	200,000		100%
Lonza Solutions AG	Visp CH	CHF	101,000	100%	
Lonza Suzhou Ltd.	Suzhou CN	USD	19,000,000		100%
Lonza Swiss Finanz AG[4]	Basel CH	CHF	100'000	100%	
Lonza Swiss Licences AG	Basel CH	CHF	100,000	100%	
Lonza Verviers SPRL	Verviers BE	EUR	18,750		100%
Lonza Walkersville, Inc.	Wilmington US	USD	10		100%
Lonza, LLC	Wilmington US	USD	n/a		100%[3]
Micro-Macinazione SA	Monteggio CH	CHF	1,000,000		100%
MW Encap Limited	London GB	GBP	301,000		100%
Octane Biotech, Inc.	Ontario CA	CAD	n/a		80%[3]
P.T. Capsugel Indonesia	Cibinong Bogor Jawa Barat IN	USD	59,300,769		100%
Powdersize, LLC	Wilmington US	USD	n/a		100%[3]
Suzhou Capsugel Limited	Suzhou CN	USD	29,700,000		75%
Xcelience, LLC	Wilmington US	USD	n/a		100%[3]
YOU Solutions Guangzhou Ltd.	Guangzhou CN	USD	6,021,108		100%

[1] Abbreviation of currencies in accordance with ISO standards
[2] Rounded amount
[3] No par value
[4] This entity does not meet above mentioned thresholds. It was included due to its significance for group financings

Statutory Auditor's Report

To the General Meeting of Lonza Group Ltd, Basel

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of Lonza Group Ltd and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2020 and the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of cash flows and consolidated statement of changes in equity for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2020, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law.

Basis for Opinion

We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISAs) and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Revenue recognition

Completeness and valuation of uncertain income tax items

Lonza Specialty Ingredients business: recorded as assets and liabilities held for sale and discontinued operations

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

KPMG

Revenue recognition

Key Audit Matter

The Group's recognition of revenue in a complete and accurate manner is exposed to various risks. There are two distinct risk factors that trigger revenue recognition as a key audit matter:

- custom manufacturing agreements in the Pharma & Biotech segment, and
- linkage of certain of management's incentive compensation to annual revenue targets.

Due to market dynamics, the relevance of long-term product supply agreements with the Group's Pharma & Biotech customers is significant. Under these agreements, the Group constructs and launches new or reworked suites dedicated to client specific manufacturing, which are owned and operated by the Group. Extending over multiple periods such agreements often combine milestone and upfront payments during a construction phase, the rendering of project management services and the delivery of goods. To a certain degree the identification and measurement of these different components as separable revenue streams and performance obligations is subject to management's judgment and interpretation of the customer contract.

This gives rise to the risk that revenue could be misstated due to the incorrect identification, separation and valuation of contractual components and related performance obligations, resulting in an inappropriate timing of revenue recognition.

Performance targets embedded in management's compensation incentive plans based on targeted results and achievement of such targets are partially contingent on the timing of revenue recognition. There is a risk of fraud in revenue recognition due to the incentives management may feel to achieve the targeted results.

Our response

For significant existing, new and amended customer manufacturing agreements in the Pharma & Biotech segment, we assessed the appropriateness of the identification, separation and valuation of contract elements and the timing of revenue recognition by making our own independent assessment. Furthermore, we challenged and assessed the qualification of performance obligations of significant new and amended contracts and their valuation by management.

As a response to the risk of fraud in revenue recognition, we performed sample testing of revenue recorded during the year and focused on revenue transactions taking place before and after year-end as well as deferred revenue transactions to determine that revenue is recognized in the correct period. We tested the accuracy of revenues recorded, based on inspection of customer acceptance certificates, shipping documents, delivery notes and cash receipts. Furthermore, we tested manual journal entries on a sample basis and controls over the recording of revenue in the relevant IT systems.

We also performed audit procedures to assess the adequacy and accuracy of the Group's revenue recognition disclosures, as presented in the Group's consolidated financial statements.

For further information on revenue recognition refer to the following:

- Note 1 Accounting Principles
- Note 3 Revenues

Completeness and valuation of uncertain income tax items

Key Audit Matter

The Group operates in a complex multinational tax environment giving rise to cross-border transactions and complex taxation arrangements being subject to various country specific tax laws. During the normal course of business local tax authorities may challenge financing arrangements between Group entities, transfer-pricing arrangements relating to the Group's manufacturing and supply chain and the ownership of intellectual property rights.

During 2020, the Group reorganized certain legal entities and initiated other measures in connection with its plans to divest its Specialty Ingredients business. This triggered certain income tax relevant transactions. These transactions required management to make certain assumptions and estimates related to the measurement and recognition of estimated income taxes.

The Group has also recognized provisions for other uncertain tax items, the estimation of which is subject to management's judgement.

Based on these complexities, uncertainties and management's judgment involved in estimating the income taxes, we identified the completeness and valuation of uncertain income taxes as a key audit matter.

Our response

Our audit approach included the use of local tax specialists in all key jurisdictions to evaluate tax provisions and potential exposures as of 31 December 2020.

In response to the initiated reorganization, we read and evaluated management's documentation, including information obtained by management from outside tax specialists that detailed the basis of the uncertain tax positions related to the planned disposal of the Specialty Ingredients business.

We obtained explanations from management regarding the known uncertain tax positions and analyzed correspondence with taxation authorities to identify uncertain tax positions. We assessed the adequacy of management's taxation provisions by considering country specific tax risks, transfer-pricing risks, compliance risks and potential penalties and fines. We critically reviewed and evaluated the judgements made by management in assessing the quantification and probability of significant exposures and the level of provision required for specific matters.

Furthermore, we evaluated whether uncertain income tax items were appropriately disclosed in the Group's consolidated financial statements.

For further information on income taxes refer to the following:

— Note 1 Accounting Principles

— Note 22 Taxes

KPMG

Lonza Specialty Ingredients business: reported as assets and liabilities held for sale and discontinued operations

Key Audit Matter

On 24 July 2020, the Group announced the planned divestment of its Specialty Ingredients business. The Group concluded that the Specialty Ingredients business is to be reported as assets and liabilities held for sale and discontinued operations in the consolidated financial statements.

The accounting for discontinued operations and assets and liabilities held for sale for the Specialty Ingredients business is complex and required significant management judgement with respect to the accurate and complete identification and recognition of expenses as well as the valuation of assets and liabilities attributable to the Specialty Ingredients business.

Based on these complexities, and the significance of the Specialty Ingredients business to the consolidated financial statements, we considered the accounting and presentation of discontinued operations and assets and liabilities held for sale to be a key audit matter.

Our response

We read the relevant minutes and management's documented accounting position analysis to assess the appropriateness of the accounting treatment as assets and liabilities held for sale and discontinued operations.

We performed inquiries with management to obtain an understanding of the planned disposal process as well as possible terms, contingencies and timeline of negotiating an agreement to sell the Specialty Ingredients business. We also read the signed agreement between the Group and the purchasers of the Specialty Ingredients business dated 8 February 2021.

We performed procedures to assess the valuation of the assets and liabilities reflected as held for sale and to assess the completeness and accuracy of the results presented as discontinued operations. Our audit procedures included, but were not limited to:

- reconciling the Specialty Ingredients business assets and liabilities classified as held for sale to the underlying segment reporting available in the Group's financial reporting systems;
- detailed testing of expenses on a sample basis, including disposal costs and income taxes allocated to the discontinued operations.

Furthermore, we evaluated whether the discontinued operations and assets and liabilities held for sale were appropriately presented and disclosed in the Group's consolidated financial statements.

For further information on assets and liabilities held for sale and discontinued operations refer to the following:

- Note 1 Accounting Principles
- Note 5 Business Combinations and Sale of Businesses

Other Information in the Annual Report

The Board of Directors is responsible for the other information in the annual report. The other information comprises all information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements of the company, the remuneration report and our auditor's reports thereon.

Our opinion on the consolidated financial statements does not cover the other information in the annual report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibility of the Board of Directors for the Consolidated Financial Statements

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, ISAs and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Swiss law, ISAs and Swiss Auditing Standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

— Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

— Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

— Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.

— Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

— Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

— Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report, unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

In accordance with article 728a para. 1 item 3 CO and the Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

KPMG AG

Michael Blume
Licensed Audit Expert
Auditor in Charge

Cyrill Kaufmann
Licensed Audit Expert

Zurich, 16 March 2021

Financial Statements of Lonza Group Ltd

Balance Sheet – Lonza Group Ltd

Assets[1]

CHF	Notes	2020	2019
Non-current assets			
Long-term financial assets:			
– from third parties		11,000,000	0
– from subsidiaries and associates	2.2	3,734,534,262	3,657,458,381
Investments	2.1	5,608,484,488	5,595,326,379
Property, plant and equipment		161,658	207,534
Prepaid expenses and accrued income:			
– from third parties		11,087,617	11,214,185
Total non-current assets		**9,365,268,025**	**9,264,206,479**
Current assets			
Cash and cash equivalents		193,619,331	48,487,475
Short term financial assets:			
– from third parties		0	2,077,288
– from subsidiaries and associates		861,749,761	256,103,811
Other short-term receivables:			
– from third parties		67	122,625
– from subsidiaries and associates		112,235,477	44,485,368
Prepaid expenses and accrued income:			
– from third parties		37,485,416	26,817,061
– from subsidiaries and associates		8,804,506	68,680,303
Total current assets		**1,213,894,558**	**446,773,931**
Total assets		**10,579,162,583**	**9,710,980,410**

[1] At 31 December

Liabilities and Shareholders' Equity [1]

CHF	Notes	2020	2019
Shareholders' equity			
Share capital	2.5	74,468,752	74,468,752
Legal capital reserves:			
– Reserves from capital contributions	2.6	2,575,394,015	2,677,762,695
Legal retained earnings reserves:			
– General legal retained earnings		37,234,376	37,234,376
Voluntary retained earnings:			
– Available earnings:			
– Profit brought forward		2,667,715,331	2,202,123,954
– Profit for the year		833,421,396	567,960,057
Treasury shares	2.7	(99,996,374)	(51,259,293)
Total shareholders' equity		**6,088,237,496**	**5,508,290,541**
Non-current liabilities			
Long-term interest-bearing liabilities:			
– to third parties	2.4	1,287,345,000	1,871,252,000
– to subsidiaries and associates		1,855,330,816	535,000,000
Long-term provisions:			
– to third parties		3,195,979	154,267
Derivatives financial liabilities:			
– to third parties		24,568,775	0
Total non-current liabilities		**3,170,440,570**	**2,406,406,267**
Current liabilities			
Trade accounts payables:			
– to third parties	2.3	4,508,600	8,171,782
– to subsidiaries and associates		19,819,363	192,137
Short-term interest-bearing liabilities:			
– to third parties	2.4	351,949,000	542,790,000
– to subsidiaries and associates		759,488,357	1,025,547,703
Short-term provisions:			
– to third parties		51,833,865	49,075,340
Accrued expenses and deferred income:			
– to third parties		111,628,207	156,716,986
– to subsidiaries and associates		21,257,125	13,789,654
Total current liabilities		**1,320,484,517**	**1,796,283,602**
Total liabilities		**4,490,925,087**	**4,202,689,869**
Total liabilities and shareholders' equity		**10,579,162,583**	**9,710,980,140**

[1] At 31 December

Income Statement – Lonza Group Ltd

CHF	Notes	2020	2019
Income			
Dividend income	2.8	863,803,307	411,312,800
Royalties income		177,653,255	182,690,629
Other financial income	2.9	125,315,967	170,337,180
Other operating income		7,086,711	6,698,818
Total income		**1,173,859,240**	**771,039,427**
Expenses			
Other financial expenses	2.10	128,253,579	92,781,701
Personnel expenses		33,414,606	45,903,900
Other operating expenses	2.11	60,322,058	28,609,929
Impairment losses on investments	2.8	115,312,706	2,008,791
Depreciation on equipment		111,015	136,779
Direct taxes		3,023,880	33,638,270
Total expenses		**340,437,844**	**203,079,370**
Profit for the year		**833,421,396**	**567,960,057**

Notes to the Financial Statements – Lonza Group Ltd

Note 1
Principles

1.1 General Aspects

These financial statements were prepared according to the provisions of the Swiss Law on Accounting and Financial Reporting (32nd title of the Swiss Code of Obligations). Where not prescribed by law, the significant accounting and valuation principles applied are described below.

1.2 Financial Assets

Financial assets include short- and long-term loans to subsidiaries and associates. Loans granted in foreign currencies are translated at the rate at the balance sheet date.

1.3 Treasury Shares

Treasury shares are recognized at acquisition cost and deducted from shareholders' equity at the time of acquisition. In case of a resale, the gain or loss is recognized through the shareholders' equity as increase or decrease of available earnings brought forward.

1.4 Share-based Payments

When treasury shares are used for share-based payment programs, the difference between the acquisition costs and any consideration paid by the employees at grant date is recognized as other financial expenses or income.

1.5 Short-/Long-Term Interest-Bearing Liabilities

Interest-bearing liabilities are recognized in the balance sheet at nominal value. Discounts and issue costs for bonds or syndicate loans are recognized as prepaid expenses and amortized on a straight-line basis over the principal's maturity period. Premiums are recognized as accrued expenses and amortized on a straight-line basis over the principal's maturity period.

1.6 Currency- and Interest-Related Instruments

Currency- and interest-related instruments with a short-term holding period are valued at their fair value as at the balance sheet date. A valuation adjustment reserve has not been accounted for.

1.7 Presentation of a Cash Flow Statement and Additional Disclosures in the Notes

As Lonza Group Ltd has prepared its consolidated financial statements in accordance with a recognized accounting standard (International Financial Reporting Standards – IFRS), it has decided to forgo presentation of a cash flow statement, information on interest-bearing liabilities and audit fees in the note disclosures as would be required by Swiss law.

Note 2
Information on Balance Sheet and Income Statement Items

2.1 Investments

Lonza Group Ltd holds the following direct subsidiaries as of 31 December 2020. For indirect principal subsidiaries, please see the list in note 33 to the Group's consolidated financial statements.

		Share Capital in CHF 1,000[1]		Direct Holding in %[1]	
		31.12.2020	31.12.2019	31.12.2020	31.12.2019
Aravis Venture 1, L.P.	Grand Cayman, Cayman Islands	0[3]	USD 58,824	0[3]	31%
Capsugel Belgium NV	Bornem BE	EUR 236,922	EUR 236,923	99.9%	99.9%
Capsugel Middle East Sàrl	Beirut LB	LPB 5,000	LPB 5,000	1%	1%
International School of Basel AG	Reinach, CH	CHF 20,525	CHF 20,525	1.6%	1.6%
Lonza AG	Visp, CH	CHF 60,000	CHF 60,000	100%	100%
Lonza Bioproducts AG	Basel, CH	CHF 100	CHF 100	100%	100%
Lonza do Brasil Especialidades Quimicas Ltda.	Sao Paulo, BR	BRL 119,648	BRL 119,649	15.4%	15.4%
Lonza Finance International NV	Bornem, NL	EUR 43,062	EUR 43,062	100%	100%
Lonza Group GmBH	Waldshut-Tienge, DE	EUR 25,000	EUR 25,000	0.4%	0.4%
Lonza Holdings NA Inc.	Wilmington, US	USD 5	USD 0[2]	100%	0%[2]
Lonza Holding Singapore Pte Ltd	Singapore, SG	USD 100,000	USD 100,000	100%	100%
Lonza (China) Investments Co. Ltd	Guangzhou, CN	USD 84,000	USD 84,000	100%	100%
Lonza Japan Ltd	Tokyo, JP	JPY 100,000	JPY 100,000	100%	100%
Lonza KK	Tokyo, JP	JPY 50,000	JPY 1	100%	100%
Lonza Licences AG	Basel, CH	CHF 100	CHF 100	100%	100%
Lonza Sales AG	Basel, CH	CHF 2,000	CHF 2,000	100%	100%
Lonza Services AG	Basel, CH	CHF 101	CHF 0[2]	100%	0%[2]
Lonza Solutions AG	Visp, CH	CHF 101	CHF 0[2]	100%	0%[2]
Lonza Swiss Finanz AG	Basel, CH	CHF 100	CHF 100	100%	100%
Lonza Swiss Licences AG	Basel, CH	CHF 100	CHF 100	100%	100%
Seed Fund Cycle-C3E (A), L.P.	Montreal, CA	CAD 42,000	CAD 42,000	2.4%	2.4%

[1] Rounded amount
[2] Entity was incorporated in 2020
[3] Entity was liquidated in 2020

In 2020, Lonza Group Ltd established the subsidiaries Lonza Services AG and Lonza Solutions AG in Switzerland. Lonza Group Ltd made capital contributions in 2020 to both Lonza Services AG and Lonza Solutions AG for CHF 14,296,608 and CHF 114,179,774 respectively.

2.2 Long-Term Financial Assets

Lonza Group Ltd issued subordination agreements of CHF 95 million (2019: CHF 95 million) on loans to subsidiaries and associates.

2.3 Trade Accounts Payables

Trade accounts payables include liabilities to personnel welfare institutions of CHF 236,267 at 31 December 2020 (2019: CHF 588,669).

2.4
Short-Term and Long-Term Interest-Bearing Liabilities

CHF	31.12.2020	31.12.2019
German Private Placement	351,949,000	0
Syndicated loan Facility A EUR 500 Mio	0	542,790,000
Total short-term interest-bearing liabilities	351,949,000	542,790,000

CHF	31.12.2020	31.12.2019
Long-term interest-bearing liabilities	1,287,345,000	1,871,252,000

Following the 2019 assignment of Lonza's investment grade credit rating by S&P (BBB+), Lonza refinanced and extended its syndicated Term and Revolving Bank Facilities Agreement effective 6 September 2019, as described below.

Term Loan
Lonza issued term loan tranches of EUR 500 million, USD 500 million and USD 200 million carrying floating interest rates and repayable in 2020, 2024 and 2025 respectively. This term loan effectively replaced the EUR 450 million and USD 489 million term loan tranches issued in 2017 with maturity dates in 2020 and 2022 and the bank loan of USD 200 million. The net proceeds received in 2019 totaled CHF 265 million.

In 2020, Lonza repaid the term loan tranche of EUR 500 million.

German Private Placement
The dual-currency German private placement (Schuldscheindarlehen) of EUR 700 million and USD 200 million tranches carry fixed and floating interest rates (LIBOR/EURIBOR + margin) respectively, and are repayable in 2021 (EUR 325 million), 2022 (USD 150 million), 2023 (EUR 375 million) and 2024 (USD 50 million). The single-tranche German private placement (Schuldscheindarlehen) of USD 100 million carry floating interest rates (LIBOR + margin) and is repayable in 2024.

Syndicated Loan
Lonza signed a syndicated loan with a consortium of banks on the following terms: Credit facility of CHF 1,000 million equivalent, due 2024, at floating interest rates. This syndicated loan effectively replaced the syndicated loan signed in 2017. The facility was not used as of 31 December 2020 (2019: CHF 80 million and USD 65 million).

2.5
Share Capital and Authorized Capital

The share capital on 31 December 2020 comprised 74,468,752 registered shares (2019: 74,468,752) with a par value of CHF 1 each, amounting to CHF 74,468,752 (2019: CHF 74,468,752).

Contingent Capital
The share capital of Lonza Group Ltd may be increased through the issuance of a maximum of 7,500,000 fully paid-in registered shares with a par value of CHF 1 each up to a maximum aggregate amount of CHF 7,500,000.

Authorized Capital
The Board of Directors shall be authorized to increase, at any time until 6 May 2021, the share capital of the Company through the issuance of a maximum of 7,500,000 fully paid-in registered shares with a par value of CHF 1 each up to a maximum aggregate amount of CHF 7,500,000. The capital increases in the form of contingent capital and authorized capital may increase the share capital of Lonza Group Ltd by a maximum aggregate amount of CHF 7,500,000. The details and conditions are set out in Articles 4^{bis} to 4^{quater} of the **Company's Articles of Association.**

At 31 December 2020, Lonza Group Ltd had a fully paid-in registered capital of CHF 74,468,752 and a contingent capital of CHF 7,500,000.

Reserves in the amount of CHF 37,234,376 (2019: CHF 37,234,376) included in the financial statements cannot be distributed.

2.6
Reserves from Capital Contributions

CHF	2020
Reserves from Capital Contributions at 1.1.2019	2,882,051,469
Dividend payout April 2019	(204,288,774)
Reserves from Capital Contributions at 31.12.2019	**2,677,762,695**
Dividend payout May 2020	(102,368,680)
Reserves from Capital Contributions at 31.12.2020	**2,575,394,015**

2.7
Treasury Shares

CHF	Total shares	Average rate in CHF	Number of transactions
Treasury shares at 1.1.2019, weighted average price	**222,595**	**319.73**	
Acquisitions 2019	169,195	281.99	3
Distribution to board members	(4,547)	303.66	4
Distribution to LTIP share plans	(207,293)	279.30	3
Treasury shares at 31.12.2019, weighted average price	**179,950**	**284.85**	
Treasury shares at 1.1.2020, weighted average price	**179,950**	**284.85**	
Acquisitions 2020	287,373	489.58	18
Distribution to board members	(2,888)	447.62	4
Distribution to LTIP share plans	(278,755)	401,80	2
Treasury shares at 31.12.2020, weighted average price	**185,680**	**538.54**	

2.8
Dividend Income/Impairment Losses on Investments

Dividend income in 2020 includes a dividend distribution from Lonza Holding Singapore of USD 246,822,375 (2019: USD 192,000,000) and from Lonza (China) Investments Co. Ltd of USD 40,906,225, as well as a dividend distribution from Lonza AG of CHF 114,078,774 which was contributed as a capital increase in kind in Lonza Solutions AG. Furthermore, the dividend received from Lonza AG resulted in an impairment loss of the investment held in Lonza AG in the same amount as the dividend received.

2.9
Other Financial Income

Other financial income in 2020 includes interest income from loans to subsidiaries and associates of CHF 117,388,335 (2019: CHF 136,359,921).

2.10
Other Financial Expenses

CHF	31.12.2020	31.12.2019
Bank interest and fees	26,999,467	49,051,557
Interest on deposits subsidiaries	24,727,301	12,782,555
Amortization of discounts and issue costs	4,082,649	4,423,998
Loss on treasury shares	20,034,860	11,055,579
Net exchange rate loss	52,409,302	15,468,012
Total financial expenses	**128,253,579**	**92,781,701**

2.11
Other Operating Expenses

CHF	2020	2019
Consulting expenses	50,316,896	24,730,948
Administrative expenses	7,793,568	3,630,745
Other operating expenses	2,211,594	248,236
Total other operating expenses	**60,322,058**	**28,609,929**

Note 3
Other Information

3.1 Full-time Equivalents

At 31 December 2020, Lonza Group Ltd had 71 employees (2019: 80).

3.2 Contingent Liabilities, Guarantees and Pledges

At 31 December 2020, indemnity liabilities, guarantees and pledges in favor of third parties totaled CHF 1,940,405,315 (2019: CHF 1,101,407,478). The company is a member of the Lonza Group value-added-tax group in Switzerland and is thereby jointly and severally liable to the federal tax authorities for value-added-tax debts of the group.

3.3 Major Shareholders

In accordance with Art. 663c of the Swiss Code of Obligations: See Significant Shareholders section in the Corporate Governance Report.

3.4 Share Ownership of the Members of the Board of Directors and the Executive Committee

In accordance with Art. 663c para. 3 of the Swiss Code of Obligations: See note 30 in the Consolidated Financial Statements and the Remuneration Report.

3.5 Shares for Members of the Board and Granted Equity Awards for Employees

According to the share-based payments (see note 25), Lonza Group Ltd allocates treasury shares and equity awards as follows:

	2020		2019	
	Number of shares/ granted equity awards	Value in CHF 1	Number of shares/ granted equity awards	Value in CHF 1
Shares allocated to members of the Board of Directors	2,888	1,292,715	4,547	1,380,759
Granted equity awards allocated to members of the Executive Committee	9,880	4,568,522	16,562	4,337,588
Granted equity awards allocated to other employees	5,083	2,013,885	7,067	1,850,847
Total	**17,851**	**7,875,122**	**28,176**	**7,569,194**

In 2020 Lonza Group Ltd employed 3 members of the Executive Committee (2019: 2).

3.6 Significant Events after the Balance Sheet Date

There are no significant events after the balance sheet date which could impact the book value of the assets or liabilities or which should be disclosed.

Proposal of the Board of Directors

Concerning the Appropriation of Available Earnings and Reserves from Capital Contributions

CHF	2020
Available earnings brought forward	2,667,715,331
Profit for the year	833,421,396
Available earnings at the disposal of the Annual General Meeting	**3,501,136,727**
Payment of a dividend (out of available earnings brought forward) in 2020 of CHF 1.50 (2019: CHF 1.375) per share on the share capital eligible for dividend of CHF 74,283,072 (2019: 74,449,949)	(111,424,608)
Available earnings carry-forward	**3,389,712,119**

CHF	2020
Legal capital reserves qualified as reserves from capital contributions	2,575,394,015
Reserves from capital contributions	**2,575,394,015**
Payment of a dividend (out of reserves from capital contributions) in 2020 of CHF 1.50 (2019: CHF 1.375) per share on the share capital eligible for dividend of CHF 74,283,072 (2019: 74,449,949)	(111,424,608)
Available reserves from capital contributions carry-forward	**2,463,969,407**

CHF	2020
Proposed payment of a dividend out of available earnings brought forward	111,424,608
Proposed payment of a dividend out of reserves from capital contributions	111,424,608
Total proposed payment of a dividend	**222,849,216**

If the General Annual Meeting approves the above proposal for appropriation of available earnings and distribution of reserves from capital contribution, a dividend of total CHF 3.00 per share will be paid. 50% of such dividend will be paid out as repayment from reserves from capital contributions without deduction of Swiss withholding tax in accordance with Art. 5 para. 1^{bis} of the Federal Law on Withholding Tax. The other 50% of such dividend will be paid from available earnings. The last trading day with entitlement to receive the dividend is 7 May 2021. As from 10 May 2021 (ex-date), the shares will be traded ex-dividend. The dividend will be payable from 12 May 2021.

Statutory Auditor's Report

To the General Meeting of Lonza Group Ltd, Basel

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Lonza Group Ltd, which comprise the balance sheet as at 31 December 2020, and the income statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion the financial statements for the year ended 31 December 2020 comply with Swiss law and the company's articles of incorporation.

Basis for Opinion

We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the entity in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Report on Key Audit Matters based on the circular 1/2015 of the Federal Audit Oversight Authority

We have determined that there are no key audit matters to communicate in our report.

Responsibility of the Board of Directors for the Financial Statements

The Board of Directors is responsible for the preparation of the financial statements in accordance with the provisions of Swiss law and the company's articles of incorporation, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

KPMG

As part of an audit in accordance with Swiss law and Swiss Auditing Standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the entity to cease to continue as a going concern.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report, unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

In accordance with article 728a para. 1 item 3 CO and the Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

KPMG AG

Michael Blume
Licensed Audit Expert
Auditor in Charge

Cyrill Kaufmann
Licensed Audit Expert

Zurich, 16 March 2021

Alternative Performance Measures

The information included in the financial report includes certain Alternative Performance Measures (APMs) which are not accounting measures as defined by IFRS (non GAAP measures), in particular the CORE results, the (CORE) RONOA, the (CORE) ROIC and the Operational Free Cash Flow.

These APMs may not be comparable to similarly titled measures disclosed by other companies and should not be viewed in isolation or as alternatives to Lonza's consolidated financial position and financial results based on IFRS.

CORE Results

Lonza believes that disclosing CORE results of the Group's performance enhances the financial markets' understanding of the company because the CORE results enable better comparison across years. The CORE results concept, which is used in the internal management of the business, is based on the IFRS results, excluding the following adjustments:

- Amortization of intangible assets resulting from business combinations
- Impairments (including reversal of impairments) of intangible assets, property, plant & equipment, goodwill and assets held for sale
- Restructuring programs in excess of CHF 0.5 million
- Acquisition and integration costs related to business combinations
- Costs related to divestitures of businesses as well as disposal gains and losses
- Impacts from discontinued operations
- Environmental remediation costs related to divested / inactive sites as well as remediation projects in excess of CHF 10 million
- Defined benefit plan settlements and curtailments in excess of CHF 10 million
- Lonza's share of profit or loss from associates and joint ventures

Reconciliation of EBIT to EBITDA (Continuing Business)

Million CHF	2020	2019 (restated)[1]
Result from operating activities (EBIT)	**901**	**825**
Depreciation of property, plant and equipment	284	274
Amortization of intangible assets	169	166
Impairment and reversal of impairment on property, plant, equipment and intangibles	24	(1)
Earnings before interest, taxes and depreciation (EBITDA)	**1,378**	**1,264**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5 of the Group's consolidated financial statements)

Reconciliation of EBITDA to CORE EBITDA (Continuing Business)

Million CHF	2020	2019 (restated)[1]
Earnings before interest, taxes and depreciation (EBITDA)	**1,378**	**1,264**
Restructuring costs / income	22	8
Income / expense resulting from acquisition and divestitures	(5)	45
Environmental-related expenses	11	17
CORE EBITDA	**1,406**	**1,334**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5 of the Group's consolidated financial statements)

Operational Free Cash Flow

In 2020 and 2019, the development of operational free cash flow by component was as follows:

Components of Operational Free Cash Flow [1]

Million CHF	2020	2019
Earnings before interests, taxes and depreciation (EBITDA)	**1,656**	**1,489**
Change of operating net working capital [2]	(246)	(336)
Capital expenditures in tangible and intangible assets	(973)	(786)
Disposal of tangible and intangible assets	14	15
Change of other assets and liabilities [3]	262	17
Operational free cash flow (before acquisitions / disposals)	**713**	**399**
Acquisition of subsidiaries	(15)	(24)
Disposal of subsidiaries	7	620
Operational free cash flow	**705**	**995**

[1] Operational Cash Flow represents Lonza Group incl. Discontinued Operations
[2] Includes in 2020 non-cash amortization of current deferred income of CHF 43 million (2019: CHF 17 million), recognized in the income statement through EBITDA
[3] Includes in 2020 non-cash amortization of non-current deferred income of CHF 6 million (2019: CHF 9 million), recognized in the income statement through EBITDA

CORE Results

Reconciliation of IFRS Results to CORE Results 2020

Million CHF	IFRS Results	Amortization of intangible assets from acquisitions	Impairments [1]	Reversal of impairments	Restructuring costs/income	Income/ expense resulting from acquisition and divestures [2]	Environmental-related expenses	Other	CORE results
Sales	**4,508**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,508**
Cost of goods sold	(2,660)	0	4	0	0	0	11		(2,645)
Gross profit	**1,848**	**0**	**4**	**0**	**0**	**0**	**11**	**0**	**1,863**
Marketing and distribution	(235)	0	0	0	6	0	0	0	(229)
Research and development	(84)	0	0	0	6	0	0	0	(78)
Administration and general overheads	(610)	142	0	0	10	(5)	0	0	(463)
Other operating income	42	0	0	0	0	0	0	0	42
Other operating expenses	(60)	0	20	0	0	0	0	0	(40)
Result from operating activities (EBIT)	**901**	**142**	**24**	**0**	**22**	**(5)**	**11**	**0**	**1,095**
Financial income	12	0	0	0	0	0	0	0	12
Financial expenses	(106)	0	0	0	0	0	0	0	(106)
Net financial result	**(94)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**(94)**
Share of loss of associates/joint ventures	(4)	0	0	0	0	0	0	4	0
Profit before income taxes	**803**	**142**	**24**	**0**	**22**	**(5)**	**11**	**4**	**1,001**
Income taxes [3]	(71)	(12)	(2)	0	(2)	0	(1)	0	(88)
Profit from continuing operations	**732**	**130**	**22**	**0**	**20**	**(5)**	**10**	**4**	**913**
Profit / (loss) from discontinued operations, net of income taxes	139	12	13	(3)	3	33	3	4	204
Profit for the period	**871**	**142**	**35**	**(3)**	**23**	**28**	**13**	**8**	**1,117**
Non-controlling interests	(2)	0	0	0	0	0	0	0	(2)
Profit for the period, attributable to the equity holders of the parent	**869**	**142**	**35**	**(3)**	**23**	**28**	**13**	**8**	**1,115**
Number of Shares Basic	74,403,508								74,403,508
Number of Shares Diluted	74,709,049								74,709,049
Earnings per share for profit from continuing operations attributable to equity holders of the parent:									
Basic earnings per share – EPS basic (CHF)	**9.81**								**12.24**
Diluted earnings per share – EPS diluted (CHF)	**9.77**								**12.19**
Earnings per share for profit attributable to equity holders of the parent:									
Basic earnings per share – EPS basic (CHF)	**11.68**								**14.99**
Diluted earnings per share – EPS diluted (CHF)	**11.63**								**14.92**

[1] Impairment charges primarily relate to production assets in Nansha (Continuing business) and Visp/Kourim (discontinued operations)
[2] Discontinued operations:
– Mainly includes carve-out and divestiture costs related to Specialty Ingredients (CHF 35 million before taxes)
[3] Tax impact calculated based on the estimated average Group tax rate on continuing operations of: 8.8%

Reconciliation of IFRS Results to CORE Results 2019

Million CHF	IFRS results	Amortization of intangible assets from acquisitions	Impairments[2]	Reversal of impairments	Restructuring costs/income	Income/ expense resulting from acquisition and divestures[3]	Environmental-related expenses	Other	CORE results (restated)[1]
Sales	**4,207**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,207**
Cost of goods sold	(2,444)	0	0	(5)	3	0	17		(2,429)
Gross profit	**1,763**	**0**	**0**	**(5)**	**3**	**0**	**17**	**0**	**1,778**
Marketing and distribution	**(201)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**(201)**
Research and development	(76)	0	0	0	1	0	0	0	(75)
Administration and general overheads	(650)	150	0	0	5	45	0	0	(451)
Other operating income	47	0	0	0	0	0	0	0	47
Other operating expenses	(58)	0	3	0	0	0	0	0	(55)
Result from operating activities (EBIT)	**825**	**150**	**3**	**(5)**	**9**	**45**	**17**	**0**	**1,044**
Financial income	20	0	0	0	0	0	0	0	20
Financial expenses	(124)	0	0	0	0	5	0	0	(119)
Other investment income/(loss)	0	0	0	0	0	0	0	0	0
Net financial result	**(104)**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**(99)**
Share of profit / (loss) of associates / joint ventures	(2)	0	0	0	0	0	0	2	0
Gain on sale of assets held for sale	0	0	0	0	0	0	0	0	0
Profit before income taxes	**719**	**150**	**3**	**(5)**	**9**	**50**	**17**	**2**	**945**
Income taxes[4]	(71)	(15)	0	0	(1)	(5)	(2)	0	(94)
Profit from continuing operations	**648**	**135**	**3**	**(5)**	**8**	**45**	**15**	**2**	**851**
Profit / (loss) from discontinued operations, net of income taxes	(2)	17	10	(2)	20	121	3	0	167
Profit for the period	**646**	**152**	**13**	**(7)**	**28**	**166**	**18**	**2**	**1,018**
Non-controlling interests	(1)	0	0	0	0	0	0	0	(1)
Equity holders of the parent	**645**	**152**	**13**	**(7)**	**28**	**166**	**18**	**2**	**1,017**
Number of Shares Basic	74,109,308								74,109,308
Number of Shares Diluted	74,564,802								74,564,802
Earnings per share for profit from continuing operations attributable to equity holders of the parent:									
Basic earnings per share - EPS basic (CHF)	**8.73**								**11.47**
Diluted earnings per share - EPS diluted (CHF)	**8.68**								**11.40**
Earnings per share for profit attributable to equity holders of the parent:									
Basic earnings per share - EPS basic (CHF)	**8.70**								**13.72**
Diluted earnings per share - EPS diluted (CHF)	**8.65**								**13.64**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5 of the Group's consolidated financial statements)
[2] Impairment charges for discontinued operations relate to production assets in Visp and Kourim
[3] Income / expense resulting from acquisition and divestitures
Result from operating activities (EBIT):
– Integration cost resulting from the acquisition of Capsugel (CHF 43 Million) and other acquisitions
Net financial result:
– Negative impact from fair value adjustment on contingent purchase price consideration
Discontinued operations:
– Water Care related divestiture expenses
[4] Tax impact calculated based on the estimated average Group tax rate of: 9.9%

Results at Constant Exchange Rates (CER)

The tables below compare the 2020 financial results based on constant exchange rates (i.e. 2019 exchange rates) with the actual 2019 financial results.

Lonza Group

Million CHF	2020	2019 (restated)	Change in %
Sales	4,711	4,207	12.0
CORE EBITDA	1,456	1,334	9.1
CORE EBITDA margin in %	30.9	31.7	
CORE result from operating activities (EBIT)	1,133	1,044	8.5
CORE EBIT margin in %	**24.1**	**24.8**	

Pharma Biotech & Nutrition

Million CHF	2020	2019 (restated)	Change in %
Sales	4,675	4,167	12.2
CORE EBITDA	1,492	1,371	8.8
CORE EBITDA Margin in %	31.9	32.9	
CORE result from operating activities (EBIT)	1,217	1,125	8.2
CORE EBIT margin in %	**26.0**	**27.0**	

Corporate

Million CHF	2020	2019 (restated)	Change in %
Sales	36	40	(10.0)
CORE EBITDA	(36)	(37)	(2.7)
CORE result from operating activities (EBIT)	(84)	(81)	3.7

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5 of the Group's consolidated financial statements)

Specialty Ingredients Business (excluding Corporate/carve-out and divestiture costs directly attributable to LSI)

Sales	2020	2019 (restated)	Change in %
CORE EBITDA	1,751	1,693	3.4
CORE EBITDA Margin in %	355	302	17.5
	20.3	17.8	

Net Sales at Constant Exchange Rates

The tables below compare the disaggregated 2020 net sales of Pharma Biotech & Nutrition and Specialty Ingredients segments based on constant exchange rates (i.e. 2019 exchange rates) with the actual 2019 net sales.

Pharma Biotech & Nutrition

Million CHF	2020	2019	Change in %
Capsules & Health Ingredients	1,229	1,127	9.1
Small Molecules	706	655	7.8
Biologics	2,232	1,959	13.9
Cell & Gene	508	426	19.2
Total Pharma Biotech & Nutrition	**4,675**	**4,167**	**12.2**

Specialty Ingredients (excluding other revenues)

Million CHF	2020	2019	Change in %
Microbial Control Solutions	1,145	1,031	11.1
Specialty Chemical Services	606	662	(8.5)
Total Specialty Ingredients	**1,751**	**1,693**	**3.4**

Return on Invested Capital from Continuing Operations

Lonza's return on invested capital (ROIC) is defined as net operating profit after taxes (NOPAT) divided by the average invested capital of Lonza Group.

In 2020 and 2019, the development of ROIC by component was as follows:

Components of Net Operating Profit After Taxes for the Year Ended 31 December

Million CHF	2020	2019
CORE result from operating activities (CORE EBIT)	**1,095**	**1,044**
Amortization of acquisition-related intangibles assets	(142)	(150)
Share of result of associates / joint ventures	(4)	(2)
Net operating profit before taxes	**949**	**892**
Taxes [2]	(84)	(88)
Net operating profit after taxes (NOPAT)	865	804
Average invested capital	**9,019**	**8,788**
ROIC (in %)	**9.6**	**9.2**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5 of the Group's consolidated financial statements)
[2] Group tax rate on continuing operations of 8.8% for 2020 and 9.9% for 2019

The invested capital represents the average of the monthly balances of the following components:

Components of Average Invested Capital for the Year Ended 31 December

Million CHF	2020	2019 (restated) [1]
CORE net operating assets	**3,787**	**3,251**
Goodwill	3,066	3,182
Acquisition-related intangible assets	2,635	2,911
Other assets [2]	209	178
Net current and deferred tax liabilities	(678)	(734)
Average invested capital	**9,019**	**8,788**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5 of the Group's consolidated financial statements)
[2] Investments in associates / joint ventures and operating cash

(CORE) RONOA/NOA

Reconciliation of NOA to CORE NOA

Net operating assets (NOA) allow for an assessment of the Group's operating performance independently from financing activities.

NOA contains all operating assets (excluding Goodwill) less operating liabilities and is defined as property, plant and equipment, intangible assets, net working capital and long-term net operating assets minus operating liabilities

CORE NOA adjusts NOA for intangible assets acquired through a business combination.

Reconciliation of NOA to CORE NOA

Million CHF	2020	2019 (restated)[1]
Non-current operating assets excluding goodwill	6,260	5,901
Inventories	1,137	1,069
Trade receivables	761	569
Other operating receivables	310	271
Trade payables	(330)	(341)
Other operating liabilities	(1,727)	(1,303)
NOA	**6,411**	**6,166**
Acquisition-related intangible assets	(2,531)	(2,774)
CORE NOA	**3,880**	**3,392**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5 of the Group's consolidated financial statements)

Reconciliation of RONOA and CORE RONOA

RONOA is calculated by dividing the Group's EBIT by the NOA (average). CORE RONOA is calculated by dividing the Group's CORE EBIT by the CORE NOA (average).

Reconciliation of RONOA and CORE RONOA

Million CHF	2020	2019 (restated)[1]
NOA (average)[2]	6,423	6,162
EBIT	901	825
RONOA (in %)	**14.0**	**13.4**
CORE NOA (average)[2]	3,787	3,251
CORE EBIT	1,095	1,044
CORE RONOA (in %)	**28.9**	**32.1**

[1] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5 of the Group's consolidated financial statements)
[2] Calculated at historical monthly averages

Statement of Value Added

	Note[1]	2020 Million CHF	2020 %	2019[2] Million CHF	2019[2] %
Origin of value added					
Income from production		4,653		4,365	
Dividend earned		0		0	
Total income		**4,653**	**100.0**	**4,365**	**100.0**
Services bought from third parties					
Material costs	18	(938)		(923)	
Energy costs	18	(61)		(25)	
Other operating expenses excl. capital taxes		(611)		(658)	
Gross value added		**3,043**		**2,759**	
Depreciation on property, plant and equipment as well as amortization on intangibles, impairment/reversal of impairment	6, 7	(475)		(434)	
Income from application of the equity method	9	(4)		(2)	
Total net value added		**2,564**	**55.1**	**2,323**	**53.2**
Distribution of value added					
To staff:					
– Wages and salaries	19	1,211		1,065	
– Pensions	19	36		40	
– Other social security contributions	19	257		251	
– Other personnel expenses	19	139		119	
Total personnel cost		**1,643**	**64.1**	**1,475**	**63.5**
To public authorities					
– Income and capital taxes	22	95	3.7	96	4.1
To lenders:					
– Financial expenses, net	21.1, 21.2	94	3.7	104	4.5
To shareholders					
– Dividends paid[3]	27	206	8.0	206	8.9
To the company					
– Profit from continuing operations		730		647	
– Dividends paid	27	(204)	526	20.5	(204)	443	19.1
To non-controlling interests					
– Profit for the period		2		1	
– Dividends paid		(2)	0	0.0	(2)	(1)	0.0
Total			**2,564**	**100.0**		**2,323**	**100.0**
Distribution of value added per employee			CHF			CHF	
Wages and salaries			75,669			69,057	
Pensions			2,249			2,594	
Other social security contributions			16,058			16,275	
Other personnel expenses			8,685			7,716	
Total per employee			**102,662**			**95,643**	

[1] See the accompanying notes to the consolidated financial statements
[2] Prior year results restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5 of the Group's consolidated financial statement)
[3] Including dividend paid to non-controlling interest

Results from Continuing and Discontinued Operations[1]

Million CHF	Note[2]	2020 Continuing operations	2020 Discontinued Operations[5]	2020 Lonza Group as reported in 2020	2019 Continuing operations[3]	2019 Specialty Ingredients classified as Discontinued Operations[3]	2019 Lonza Group excl. Water Care[4]	2019 Water Care Discontinued Operations (as reported in 2019)	2019 Lonza Group incl. discontinued operations (as reported in 2019)
Sales	2	4,508	1,677	6,185	4,207	1,713	5,920	74	5,994
Cost of goods sold		(2,660)	(1,158)	(3,818)	(2,444)	(1,221)	(3,665)	(57)	(3,722)
Gross profit		**1,848**	**519**	**2,367**	**1,763**	**492**	**2,255**	**17**	**2,272**
Marketing and distribution		(235)	(107)	(342)	(201)	(112)	(313)	(12)	(325)
Research and development	23	(84)	(35)	(119)	(76)	(48)	(124)	(1)	(125)
Administration and general overheads[6]		(610)	(176)	(786)	(650)	(175)	(825)	(9)	(834)
Other operating income	20	42	26	68	47	19	66	0	66
Other operating expenses	20	(60)	(32)	(92)	(58)	(29)	(87)	0	(87)
Result from operating activities (EBIT)[7]		**901**	**195**	**1,096**	**825**	**147**	**972**	**(5)**	**967**
Financial income	21.1	12	3	15	20	2	22	0	22
Financial expenses	21.2	(106)	(11)	(117)	(124)	(18)	(142)	(1)	(143)
Net financial result		**(94)**	**(8)**	**(102)**	**(104)**	**(16)**	**(120)**	**(1)**	**(121)**
Share of loss of associates/joint ventures	8	(4)	(4)	(8)	(2)	(1)	(3)	0	(3)
Profit before income taxes		**803**	**183**	**986**	**719**	**130**	**849**	**(6)**	**843**
Income taxes	22	(71)	(44)	(115)	(71)	(15)	(86)	0	(86)
Profit from operating activities, net of taxes		**732**	**139**	**871**	**648**	**115**	**763**	**(6)**	**757**
Loss on sale of discontinued operations		0	0	0	0	0	0	(43)	(43)
Income tax on sale of discontinued operations		0	0	0	0	0	0	(68)	(68)
Profit & (loss) net of tax		**732**	**139**	**871**	**648**	**115**	**763**	**(117)**	**646**
Attributable to:									
Equity holders of the parent		730	139	869	647	115	763	(117)	645
Non-controlling interest		2	0	2	1	0	0	0	1
Profit for the period		**732**	**139**	**871**	**648**	**115**	**763**	**(117)**	**646**
Basic earnings per share (in CHF)	27	9.81	1.87	11.68	8.73	1.55	10.28	(1.58)	8.70
Diluted earnings per share (in CHF)	27	9.77	1.86	11.63	8.68	1.55	10.23	(1.58)	8.65

[1] For the year ended 31 December
[2] See the accompanying notes to the consolidated financial statements
[3] Restated to reflect the classification of the Specialty Ingredients business as discontinued operations (see note 5 of the Group's consolidated financial statements)
[4] Reported as continuing operations in 2019
[5] 2020 contains an operating expense (CHF 2 million) and an income tax gain (CHF 1 million) related to Water Care
[6] Includes the amortization of acquisition-related intangible assets (continuing operations 2020: CHF 142 million, 2019: CHF 150 million; discontinued operations: 2020: CHF 13 million, 2019: CHF 19 million)
[7] Result from operating activities (EBIT) excludes interest income and expenses as well as financial income and expenses that are not interest related (see note 21) and Lonza's share of profit / loss from associates and joint ventures

Remuneration

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Overpass at night, China

Letter from the Chairman of the Nomination and Compensation Committee

Christoph Mäder
Chairman of the Nomination and Compensation Committee

Dear Shareholder,

In my role as Chairman of the Nomination and Compensation Committee (NCC) and on behalf of its fellow members, I am pleased to introduce our 2020 Remuneration Report, which adheres to the Swiss Ordinance Against Excessive Compensation for stock exchange listed companies. In this report, we outline the current compensation policies and the decisions made in relation to 2020 compensation for the Executive Committee of Lonza.

We are thankful for the active engagement and time with our shareholders, the financial regulators and proxy advisors in 2020. It helps to ensure we continue our open and transparent dialogue. Our discussions covered matters relating to changes to the Executive Committee and overall Company developments.

2020 Committee Activities

To support retention and shareholder alignment throughout Lonza, the Board approved the implementation of the Lonza Restricted Share Units Plan (LRSP). This plan was put in place for wider employees of Lonza to support competitive remuneration packages, to allow us to attract the best talent and to aid retention throughout special strategic projects. It was determined that the LRSP will also be utilized within our Executive Compensation Appointments Policy only, whereby awards can be made to compensate for cash or equity awards forgone at the previous employer, where evidence is provided. Adopting such a scheme allows us to be agile in attracting top executive talent to Lonza. Further details can be found on page 204 (Executive Compensation Appointments Policy) and page 208 (An overview of the LRSP).

With our Market Benchmarking peer group last reviewed in 2017, we sought to review the peer groups again in 2020 to ensure they remain fit for purpose. Following the review, a number of adjustments were made to the primary and secondary peer groups. These changes can be found on page 203. Using our revised peer groups, market benchmarking for our Executive Committee was conducted towards the end of 2020. It was determined that no change would be made to Executive Committee base salary levels. Further detail can be found in the Annual General Meeting 2021 invitation.

Lonza has established Environment, Social and Governance (ESG) reporting, as outlined in our latest 2020 Sustainability Report. The NCC has had meaningful discussion this year on how such measures should be incorporated into the compensation system for Executive Committee members. Fundamentally, the measures should align to overall sustainability strategy and be clearly defined, focused and measurable. Our Senior Management within the Lonza Operations Function already have key governance targets (including safety) incorporated into its performance measures within the Short-term Incentive Plan (STIP). The NCC commits to implementing ESG performance measures for the Executive Committee for the 2022 performance year.

Changes to the Executive Committee During 2020

Our Executive Committee went through a number of changes in 2020. The first was the appointment of Caroline Barth as Chief Human Resources Officer (CHRO) in May. Sven Abend then stepped down as Chief Operating Officer and Head of Lonza Specialty Ingredients (LSI) and formally left Lonza at the end of October in order to take on an external appointment. Due to the ongoing progress to carve out the LSI segment, the Board and the NCC determined that the role no longer be part of the Group Executive Committee. Finally, Pierre-Alain Ruffieux was appointed as the new Chief Executive Officer (CEO) at the beginning of November. Albert Baehny stepped down from the CEO *ad interim* role at the end of October and continued with his role as Chairman of the Board of Directors throughout 2020.

All compensation decisions relating to the appointments and terminations were made in line with our Executive Compensation Appointment and Termination Policies outlined on page 204.

2020 Performance Outcomes

In the context where for many organizations 2020 has been an extreme challenge, Lonza presents strong 2020 performance outcomes which have benefitted the public, shareholders and our employees. The Committee determined that the 2020 STIP and 2018 – 2020 LTIP performance targets, performance outcomes and in turn payout levels, did not need to be adjusted to reflect the impact of the pandemic. As such, performance outcomes were measured against the predetermined and originally set performance targets.

The strong full-year 2020 Group results led to above target 2020 performance outcomes. This reflects strong performance across both Lonza segments, with both the Pharma Biotech & Nutrition businesses and the Specialty Ingredients business achieving above target performance outcomes. The Lonza Group performance outcomes against all three performance targets (sales, CORE EBITDA and operational free cash flow) resulted in the STIP paying out at 187% of target for the Executive Committee. Overall Group performance in 2020 also had an impact on the 2018 LTIP, which vested at the beginning of 2021 at 199% of target, as a result of strong CORE EPS and ROIC performance over the 2018–2020 three-year performance period. The NCC determined that no downwards adjustment to the payout levels be applied.

No change has been made to our Board fees for 2020. A full overview of our Board fee structure can be found on page 213. In line with the best practices under the Swiss Code of Best Practice for Corporate Governance, the Board established the role of Lead Independent Director during Albert Baehny's tenure as CEO *ad interim*.

On behalf of the Nominations and Compensation Committee, I thank our shareholders for the continued dialogue during 2020. The NCC personally thanks Albert Baehny for his commitment and service in the CEO *ad interim* role. He provided leadership and acted as a constant in the build up to the appointment of our new CEO. We respectfully ask for your endorsement of this 2020 Remuneration Report and approval of Executive Compensation that will be put forward to you at the 2021 Lonza Annual General Meeting.

Yours faithfully,

Christoph Mäder
Chairman of the Nomination and Compensation Committee

At a Glance

Lonza's approach to compensation is designed to attract and retain talent with competitive compensation programs. Our compensation programs are performance-based, linking employee rewards with company and individual performance. Executive compensation is aligned with the short-term and long-term objectives of the wider business; results are measured based on achievement of specific short and long-term objectives.

Our performance objectives are defined to achieve a balance between short-term and long-term outcomes. We encourage strategic decisions that drive competitive advantage but discourage executives from taking unnecessary or excessive risks that may threaten the financial health, reputation or sustainability of the Company.

2020 Executive Committee Compensation Policy Table

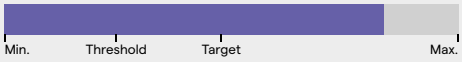
Base Salary	Benefits	Short-term Incentive Plan (STIP)	Long-term Incentive Plan (LTIP)	Lonza Restricted Share Unit Plan (LRSP)	Shareholding Guidelines
Fixed amount paid in return for the day-to-day duties and responsibilities performed	Post-employment and other benefits to complement Lonza's total compensation offering	Short-term variable compensation component, rewards for annual company and individual performance	Long-term variable compensation component, rewards for long-term company performance. Aligns interests of the Executive with Shareholders	Additional variable compensation element, used as a vehicle to support the Executive Committee Appointments Policy. Awarded solely in cases where an Executive forgoes certain compensation at their previous employer	Shareholding guidelines to align interests of the Executive with Shareholders
Vehicle					
100% cash	Pension and other benefits such as company car and expense allowances and insurances	100% cash; or 50% cash and 50% equity, (until shareholding guidelines are met)	100% vesting subject to a three-year performance period	100% equity subject to a two to five-year time-based vesting period	
Levels					
Consideration for • experience of individual; • direct role responsibilities; and • market levels observed at companies in the relevant industry to Lonza	Aligned with companywide and country specific benefits policies	Target levels: • CEO – 100% of salary • Other EC – 75% of salary Min. = 0% of target Threshold = 50% of target Max. = 200% of target	Target levels: • CEO – 150% of salary • Other EC – 125% of salary Min. = 0% of target Threshold = 50% of target Max. = 200% of target	Levels set at less than forgone awards, considering, but not limited to, previous employer variables such as historical company performance, volatility and the equity instrument	• CEO – 300% of salary • Other EC – 200% of salary To be accumulated over 5 years
Performance Measures					
		May be a mix of financial and individual measures, typically with weighting of 80% and 20% respectively 2020 was based on 100% financial measures 50% CORE EBITDA [1] 31.25% Lonza sales 18.75% Operating free cash flow	50% CORE EPS [1] 50% ROIC	Sustained performance in role Continued employment	

[1] CORE results exclude exceptional expenses and income related to e.g. restructuring, environmental-remediation, acquisitions and divestitures, impairments and amortization of acquisition-related intangible assets, which can differ significantly from year to year

2020 STIP and LTIP Outcomes

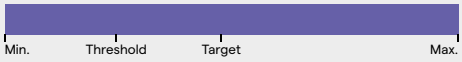
2020 Short-term Incentive Plan

CORE EBITDA 50%[1]



175% of Target

Lonza Sales 31.25%[1]



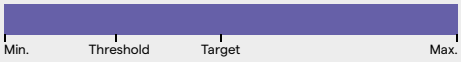
200% of Target

Operational Free Cash Flow 18.75%[1]

200% of Target

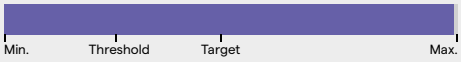
2018—2020 Long-term Incentive Plan

CORE EPS 50%



200% of Target

ROIC 50%



198% of Target

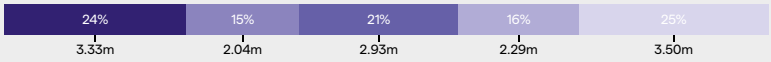
[1] Includes 10% CORE EBITDA, 6.25% Lonza Sales and 3.75% operational free cash flow distributed from 20% individual performance element

2020 Total Remuneration Paymix (CHF)

Highest Paid Member of the Executive Committee[1]

3.62m

All Executive Committee



14.09m

Total Fixed STIP LTIP LRSP[1] Other Compensation[2]

[1] Lonza Restricted Share Unit Plan (LRSP) awards are separate from typical total compensation and are awarded only in cases where a new Executive Committee member forgoes cash or equity at their previous employer. See page 211 for details of the LRSP award made to the new CEO
[2] Cash payment (including base salary, other benefits, short–term incentive and social security) and shares (LTIP) received by departed members of the Executive Committee during 2020

Board of Directors

Compensation Board of Directors Annual General Meeting (AGM) 2020 to 2021 (excluding social security contributions)

In CHF	Base annual fee	Committee membership fee	Committee Chairperson fee
Chairperson of the Board of Directors[1]	600,000	–	–
Board of Directors Member[2]	200,000	40,000	80,000
	The additional responsibilities of Vice-Chairperson and Lead Independent Director[3] do not attract any additional fees		
Form of payout	50% in Lonza Group shares and 50% in cash. This is paid in quarterly installments during the 2020 financial year		

[1] The compensation of the Chairperson of the Board of Directors includes compensation as a member of the Innovation and Technology Committee of the Board of Directors. For details on the compensation received for the role of CEO *ad interim* during 2020 please see page 210
[2] The compensation for Committee Chairpersons amounts to CHF 280,000 and includes the committee membership fee. In the case of multiple committee memberships, this attracts one committee membership fee only
[3] The roles and responsibilities of such Lead Independent Director are in line with sect. 19 para. 2 of the Swiss Code of Best Practice for Corporate Governance, requiring adequate control mechanisms, and commensurate to such position

Compensation Governance

Rules in the Articles of Association

Lonza's Articles of Association contain rules regarding the approval of compensation by the Shareholders' Meeting (Article 22), the supplementary amount in the event of changes in the Executive Committee (Article 23), compensation of the members of the Board of Directors and the Executive Committee, including the principles applicable to performance-related compensation (Article 24), the agreements with members of the Board of Directors and the Executive Committee (Article 25) and loans to members of the Board of Directors and the Executive Committee (Article 27).

Responsibilities of Board of Directors

As outlined in the Organizational Regulations (Article 2.8), the Board of Directors takes decisions on the following matters:

1 The determination of the compensation for the members of the Board of Directors in accordance with the Articles of Association, subject to approval of the compensation of the Board by the Shareholders' Meeting pursuant to the Articles of Association
2 The proposals to the Shareholders' Meeting regarding approval of the compensation of the Board of Directors and the Executive Committee; and
3 The preparation of the Remuneration Report

Responsibilities of the Nominations and Compensation Committee

The Nomination and Compensation Committee (NCC) has the following roles and responsibilities as outlined in the Nomination and Compensation Committee Charter:

1 To recommend and review compensation policies and plans for approval by the full Board of Directors
2 To review periodically and make recommendations to the Board of Directors regarding any variable incentive and the extent to which the plans meet their objectives
3 To advise the Board of Directors on the compensation of its members, to evaluate the performance of the CEO on a regular basis and to determine his/her compensation based on performance and subject to approval of the compensation of the Executive Committee by the Shareholders' Meeting pursuant to the Articles of Association
4 To review and approve the compensation proposals for members of the Executive Committee subject to approval by the Shareholders' Meeting pursuant to the Articles of Association
5 To recommend to the Board of Directors proposals to be submitted to the Annual Shareholders' Meeting for approval regarding total amounts of compensation of the Board and the Executive Committee pursuant to the Articles of Association
6 To support the Board of Directors in preparing the Remuneration Report
7 To inform the Board of Directors about compensation policies and programs as well as benchmark compensation of key peer companies; and
8 To inform the Board of Directors about the terms of employment for the members of the Executive Committee

The NCC continuously reviews the aspects of executive compensation and compliance with good governance standards and also in light of continuous growth, transformation of the Company and inclusion in the Swiss Market Index (SMI) in 2020.

Shareholders' Meeting

The Shareholders' Meeting approves annually the compensation of the Board of Directors and the Executive Committee in accordance with Article 22 of Lonza's Articles of Association.

External Advisors

Lonza continues to engage with external advisors on an ad hoc basis as required. In 2020, the Committee was provided with external market insight from Willis Towers Watson (WTW)[1], Agnès Blust Consulting (ABC)[1], Mercer[1] and Blesi & Papa[1] reflecting a total cost of approximately CHF 80,000. The CHRO and the relevant HR specialists prepare the NCC meeting materials and provide the related materials for such meetings. These individuals have an advisory function without voting rights.

Market Benchmarking

Lonza reviews total compensation for the Executive Committee, wider employees and Board of Directors, through regular benchmarking versus the market, to ensure levels remain competitive to support the retention and attraction of talent.

The total compensation (base salary, variable incentives, pension and other benefits) for Executive Committee members in particular is benchmarked every two to three years against a relevant industry peer group.

The Committee conducted a review of the benchmarking peer groups. Following this review, the Committee determined a number of adjustments to the primary and secondary peer groups to ensure they were fit for future purpose. The primary peer group now contains European pharmaceutical / chemical sector businesses of similar size. This peer group continues to serve as the essential reference point. An additional secondary peer group of European pharmaceutical / chemical sector businesses of varying size has been added, this allows us to obtain insight on those relevant industry companies which are larger than Lonza, through a secondary reference lens. The Swiss and the US secondary peer groups have been refreshed to include more relevant peers. These secondary peer groups are used as reference points only.

Benchmarking Peer Group Example

Primary peer group	Secondary peer group
• European life/chemical sector businesses of similar size[1]	• European life/chemical sector businesses of varying size[2] • Swiss companies in wider industries[3] • US life science companies[4] • US chemical companies[5]

[1] Akzo Nobel NV, Evonik Industries AG, Johnson Matthey Plc, Reckitt Benckiser Group Plc, Symrise AG, BASF SE, Givaudan SA, Koninklijke DSM NV, Satorious AG, Synthomer Plc, AstraZeneca Plc, Grifols SA, LANXESS AG, Siegfried Holding AG, Teva Pharmaceutical Industries Ltd, Beiersdorf AG, H. Lundbeck A/S, Merck KGaA, Sika AG, UCB SA, Clariant AG, Henkel AG & Co. KGaA, Novo Nordisk A/S, Smith & Nephew Plc, Umicore, Covestro AG, Hikma Pharmaceuticals Plc, Novozymes A/S, Solvay SA, Vifor Pharma AG, Croda International Plc, Ipsen SA, QIAGEN NV, Sonova Holding AG, Wacker Chemie AG

[2] Akzo Nobel NV, Arkema SA, AstraZeneca Plc, BASF SE, Bayer AG, Beiersdorf AG, Clariant AG, Covestro AG, Croda International Plc, Elementis Plc, Evonik Industries AG, Givaudan SA, GlaxoSmithKline Plc, Grifols SA, H. Lundbeck A/S, Henkel AG & Co. KGaA, Hikma Pharmaceuticals Plc, Ipsen SA, Johnson Matthey Plc, Koninklijke DSM NV, LANXESS AG, Merck KGaA, Novartis AG, Novo Nordisk A/S, Novozymes A/S, QIAGEN NV, Reckitt Benckiser Group Plc, Roche Holding AG, Sanofi, Satorious AG, Siegfried Holding AG, Sika AG, Smith & Nephew Plc, Solvay SA, Sonova Holding AG, Symrise AG, Synthomer Plc, Teva Pharmaceutical Industries Limited, UCB SA, Umicore, Vifor Pharma AG, Wacker Chemie AG

[3] Alcon, Inc., Aryzta AG, Autoneum Holding AG, Barry Callebaut AG, Bucher Industries AG, Dufry AG, Emmi AG, Forbo Holding AG, Geberit AG, Georg Fischer AG, Implenia AG, Logitech International S.A., OC Oerlikon Corp. AG, Pargesa Holding SA, SGS SA, Siegfried Holding AG, Sika AG, Sonova Holding AG, Sulzer AG

[4] 3M Company, Agilent Technologies, Inc., Alexion Pharmaceuticals, Inc., Align Technology, Inc., Allergan Plc, Avantor, Inc., Baxter International Inc., Becton, Dickinson and Company, BioMarin Pharmaceutical Inc., Bio-Rad Laboratories, Inc., Boston Scientific Corporation, Bristol-Myers Squibb Company, Catalent, Inc., Charles River Laboratories International, Inc., DENTSPLY SIRONA Inc., Elanco Animal Health, Inc., Eli Lilly and Company, Illumina, Inc., Incyte Corporation, IQVIA Holdings, Inc., Mettler-Toledo International Inc., Mylan N.V., PerkinElmer, Inc., Perrigo Company Plc, PRA Health Sciences, Inc., Regeneron Pharmaceuticals, Inc., Stryker Corporation, Syneos Health, Inc., The Cooper Companies, Inc., Thermo Fisher Scientific Inc., Vertex Pharmaceuticals Incorporated, Waters Corporation, West Pharmaceutical Services, Inc., Zimmer Biomet Holdings, Inc., Zoetis Inc.

[5] Albemarle Corporation, Ashland Global Holdings, Inc., Cabot Corporation, Celanese Corporation, CF Industries Holdings, Inc., Coty Inc., Danaher Corporation, DuPont de Nemours, Inc., Eastman Chemical Company, Ecolab Inc., FMC Corporation, H.B. Fuller Company, Huntsman Corporation, International Flavors & Fragrances Inc., New Market Corporation, Olin Corporation, PolyOne Corporation, PPG Industries, Inc., RPM International Inc., The Chemours Co., The Estee Lauder Companies, Inc., The Sherwin-Williams Company, W. R. Grace & Co., Westlake Chemical Corporation

A total compensation market benchmarking exercise was subsequently conducted using the revised primary and secondary peer groups.

Following this exercise, it was determined that no changes be made to current base salary levels for all Executive Committee members. Details of this can be found in the Annual General Meeting 2021 invitation.

[1] WTW and Mercer have further consulting arrangements with Lonza Human Resources. ABC and Blesi & Papa have no other consulting arrangements

Executive Committee Appointments Policy

In line with mandatory Swiss law, Lonza does not give any 'golden handshakes'. Total compensation for an incoming Executive Committee member will be directly aligned with the Executive Committee compensation policy (outlined on page 200). The Committee will also consider making equity (LRSP or LTIP) or cash awards in lieu of compensation that the individual has forfeited at their previous employer, as a result of accepting the Lonza appointment.

The time horizon, vehicle and value of any award will be directly informed by the details of the awards being forfeited. In such cases, award levels will be less than the level of the awards being forfeited at the previous employer. Details of any such buyout award for Executive Committee members will be disclosed at the time of grant, in the relevant Remuneration Report.

Executive Committee Termination Policy

The below provisions are in line with the employment agreements for all Executive Committee members.

Compensation in Case of Termination

Termination type	Treatment of compensation
Death, disability and retirement	• Payment of base salary and benefits over the 12-month notice period, except in the case of retirement. In the case of death, this is paid out to the next of kin
Termination by the Company Without Cause	• Pro-rata STIP payment relating to year of termination, measured up to the end of the notice period (payout subject to shareholder vote at the relevant Annual General Meeting) • Unvested LTIP awards will be pro-rated, based on number of months employed (including the notice period) during the 36-month performance period (this applies to all outstanding LTIP awards) • Unvested LRSP awards will be pro-rated, based on number of months employed (including the notice period) during the relevant vesting period
Resignation by the Executive	• Payment of base salary and benefits over the 12-month notice period • No entitlement to STIP award with respect to the plan year in which employment is terminated, except if both of the following occur: I. Termination is after 31 December of the plan year; and II. Executive was not released from their obligation to work • All unvested LTIP / LRSP awards will lapse
Termination by the Company for Cause	• Payment of base salary and benefits over the 12-month notice period • No entitlement to STIP award relating to plan year in which employment is terminated • All unvested LTIP / LRSP awards will lapse
Change of Control [1]	• Payment of base salary and benefits up to point of transaction if moving to new entity following transaction or up to the end of the notice period, if terminated by the Company without cause • Within 18 months following a change of control, a STIP payment will be made on a pro-rata basis reflecting the period up to the end of the notice period. The payment will also be based on actual (to the extent that it may be determined) or presumed achievement and, if to the extent that the executive is released from an obligation to work, target achievement (100%) will be assumed • Unvested LTIP / LRSP awards shall vest immediately and the granted price shall be the price at which the shares are sold in the transaction resulting in the Change of Control

[1] If employment is terminated by the Company without cause or an Executive Committee member terminates the employment due to good reason, as outlined in employment contract

Non-Compete Clause

Under the terms of the employment agreement of the Executive Committee, members whose employment is terminated agree that they will not, for a period of six months following the end of the notice period, be partially or fully employed by any entity that materially competes with the Company or any of its business segments. In case of a breach of the non-competition clause, the executive shall pay damages to the Company. As compensation for the period of non-competition, the executive will receive a monthly consideration equal to the executive's last monthly base salary minus any new income the executive earns in the relevant month. The Company may elect to fully or partially release the departing Executive Committee member from this non-competition obligation no later than ten months prior to the end of the notice period. This non-compete clause is a standard feature aligning with Swiss Employment Laws.

Clawback

The Lonza Clawback Policy, enhanced in 2018, applies to Executive Committee members and covers all new and outstanding variable compensation including STIP, LTIP and LRSP awards. It allows Lonza to recover any relevant compensation from Executive Committee members in instances of gross misconduct, material misstatement of performance and error in calculation of performance, for example.

Shareholding Guidelines

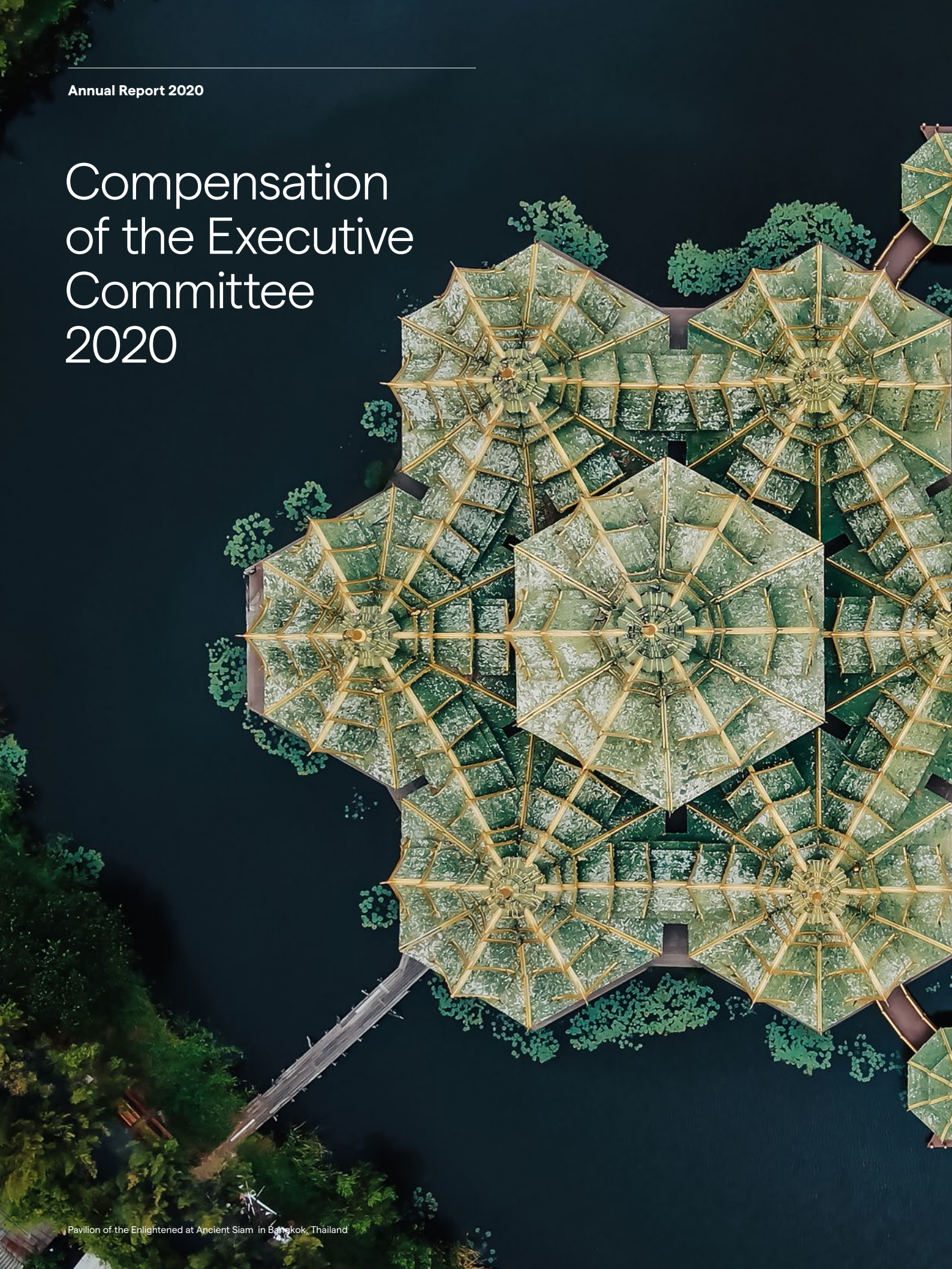
The Committee feels strongly that Executive Committee members and other senior managers should have a defined Lonza shareholding to strengthen their alignment with our Shareholders' interests. Lonza operates a minimum shareholding guideline for the Executive Committee and other senior managers. The below minimum shareholding levels are to be achieved within the specified five-year period which begins on the date of commencing the relevant role. Progress towards achieving the guideline levels is measured in January of each calendar year.

Shareholding Guidelines

CEO	300% of base salary
Other Executive Committee members	200% of base salary
Other senior managers	Annual LTIP grant value

The NCC periodically reviews the minimum shareholding requirements. No changes were made to these levels during 2020.

Compensation of the Executive Committee 2020



Pavilion of the Enlightened at Ancient Siam in Bangkok, Thailand

Base Salary

Objective and overview	• Paid as a fixed amount in return for the performed day-to-day duties and responsibilities • Base salary forms the basis of total compensation • Paid out in cash, and reviewed annually, taking into consideration the responsibilities of the position, the personal performance of the Executive Committee member and base salary increases made across the Company
2020 implementation	• No changes to base salary were made for existing Executive Committee members during 2020 • Base salary for those appointed to the Executive Committee during 2020, was set taking into account the experience of individual, direct role responsibilities and market levels observed at relevant companies to Lonza

Benefits

Objective and overview	• Complements the total compensation offering on a country or market specific basis • Includes pension and other benefits such as company car allowance, expense allowance, life and health insurance
2020 implementation	• Administered in 2020 in line with company-wide pension and benefits policies

Short-term Incentive Plan (STIP)

Objective and overview	• A component of variable compensation, it provides the potential for an annual incentive payment based on performance of the Group and the executive versus annual targets • STIP performance conditions are defined for each financial year ahead of the relevant annual bonus cycle based on the company's short-term objectives, and may be a mix of financial and individual measures, typically with a weighting of 80% and 20% respectively • The NCC can apply judgement to determine the mix of financial and individual measures in any given year
Levels	• **CEO**: 100% of base salary at-target • **Other Executive Committee members**: 75% of base salary at-target • Minimum payout is 0% of target levels • Maximum payout up to 200% of target levels
Payout method	• 100% in cash if shareholding guidelines have been met. See page 205 for details • 50% cash and 50% Lonza Group shares until shareholding guidelines are met
2020 performance conditions and payout	• The 2020 STIP for Executive Committee members was based on 100% financial performance measures with the financial performance results derived from the audited 2020 financial results:

		2020 Group performance targets and outcomes			[2]2020 Achievement (% of target)
	Weighting	Target	Maximum	Actual	
CORE EBITDA [1]	50%	1,669	1,745	1,728	175%
Lonza Sales [1]	31.25%	6,093	6,282	6,340	200%
Operational free cash flow [1]	18.75%	377	481	654	200%
Total	100%	–	–	–	187%

[1] Includes 10% CORE EBITDA, 5% Lonza Sales and 5% operational free cash flow distributed from 20% individual measures
[2] Reflects adjusted figures in relation to IFRS 16 and acquisitions made during the period

- The 2020 STIP will be paid to the eligible Executive Committee members in May 2021 subject to Shareholder approval at the Lonza Group 2021 Annual General Meeting

Long-term Incentive Plan (LTIP)

Objective and overview

- Part of the variable compensation component, the LTIP has been designed to align the interests of participants with those of Lonza's Shareholders. It also contributes towards the offering of a competitive total reward package
- Executive Committee members are awarded the conditional right to receive a number of Lonza shares in the future, provided that certain performance conditions are achieved over a three-year performance period
- The LTIP plan design and performance targets are determined at the beginning of each three-year performance period

Levels

- **CEO**: 150% of base salary at target
- **Other Executive Committee members**: 125% of base salary at target
- Minimum payout is 0% of target levels
- Maximum payout is up to 200% of target levels

Payout ranges

Payout ranges from 0% to 200% of target opportunity levels

Performance	Payout (% of target)
Minimum	0%
Threshold	50%
Target	100%
Maximum	200%

2018 LTIP award – performance conditions and payout

The 2018 LTIP award was granted in 2018 and vested in early 2021 following a three-year performance period and the achievement of the below financial performance metrics:

			2018–2020 LTIP performance		2020
	Weighting	Target	Maximum	Actual	Achievement (% of target)
CORE EPS (earnings per share)	50%	12.80	14.10	14.28	200%
ROIC (return on invested capital)	50%	8.70%	9.60%	9.58%	198%
Total	–	–	–	–	199%

2020 LTIP award

Overview
The 2020 LTIP budget value for the Executive Committee was approved by the Board of Directors and submitted to the Annual General Meeting 2020. Following shareholder approval at this meeting, the awards were subsequently administered. Similar to previous years, the 2020 LTIP awards include minimum, threshold, target and stretch goals, as outlined above.

Performance measures and target setting
The 2020 LTIP awards are subject to CORE EPS and ROIC performance measures, each with an equal weighting. These long-term performance measures remain appropriate to measure the long-term performance of Lonza. They align the interests of the Executive Committee with Lonza's financial performance and in turn the interests of our shareholders. The respective performance targets at the threshold (50%), target (100%) and maximum (200%) payout levels were recommended by the Committee and approved by the Board of Directors in April 2020. These financial performance targets for the 2022 year end are commercially sensitive at this time and will not be disclosed publicly until after the awards have vested.

CORE EPS
The 2020 LTIP award threshold performance level was determined to be 116% of the CORE EPS threshold performance level for the 2019 LTIP award. The maximum performance level was determined to be above the 2022 Mid-Term Guidance and is a double-digit percentage figure above threshold performance levels.

Return on invested capital (ROIC)
ROIC is defined as adjusted net operating profit after tax divided by invested capital. This measures the return the company generates on its investments, both organic and inorganic expansion. The measure is a reflection of the effect of decisions taken by Executive Committee members and senior management over the course of the relevant LTIP performance period. The 2020 LTIP award threshold performance level was determined to be 108% of the ROIC threshold performance level for the 2019 LTIP award. The maximum performance level was determined to be above the 2022 Mid-Term Guidance and is a double-digit percentage figure above threshold performance levels.

Lonza Restricted Share Plan (LRSP)

Objective and overview

- An additional variable compensation element, to be used as a vehicle to support the Executive Committee appointments policy only. Awards may be made upon joining Lonza if it is necessary to replace cash, time-based restricted shares or share options forgone at a previous employer
- Awards are subject to continued employment and sustained performance in role
- Two to five-year time-based vesting period, depending on the structure of the forgone compensation

Levels

- Levels set less than forgone awards, considering, but not limited to, previous employer variables such as historical company performance, volatility and the equity instrument

Payout method

- 100% equity following a two to five-year time-based vesting period

Highest Compensation Paid to a Member of the Executive Committee

The table below shows the breakdown of compensation for Pierre-Alain Ruffieux, the new CEO, as the highest-paid Executive Committee member in 2020. The compensation and variable long-term compensation budgets are based on shareholders' approval during the Annual General Meeting 2020.

Million CHF	2020	2019
Fixed compensation		
Base salary [1]	0.150	1.200
Post-employment benefits / other benefits [2]	0.209	0.518
Variable compensation		
Short-term incentive (cash) [3]	0.000	1.227
LTIP (grant value) [4]	0.975	1.800
LRSP (grant value) [5]	2.288	n/a
Total	**3.622**	**4.745**

[1] 2020 base salary reflects levels for the new CEO, Pierre-Alain Ruffieux, for the period 1 November to 31 December 2020. 2019 reflects compensation for Mr. Ridinger and includes both (1) amounts received in the capacity of Chief Executive Officer and Executive Committee member up to and including 28 February 2019 and (2) amounts received in relation to the contractual notice period in 2019, 1 March 2019 – 31 December 2019
[2] Social security and pension fund as well as company car and health insurance. The social security and pension fund amounts disclosed on this line represent the full costs of the employer contributions for 2020 and 2019. The table shows the fair value of the other benefits
[3] Under the STIP Plan Rules, Pierre-Alain Ruffieux was ineligible to receive a STIP 2020 award
[4] The fair value in 2020 and 2019 was calculated using base salary and market value at grant date (31 January 2020 / 2019). It is possible that the eventual value at vesting will be higher or lower (or even zero). To account for the previous CEO's departure, the 2019 LTIP award reflects a pro-rated level, as per the LTIP Plan Rules
[5] In line with the Executive Committee Appointments Policy (see page 204), awards have been made in 2020 under the Lonza Restricted Share Unit Plan (LRSP), to compensate for time-based equity awards which were forfeited when leaving the previous employer. This award was made in accordance with Article 23 (Supplementary Amount in the Event of Changes in the Executive Committee) of Lonza's Articles of Association. The fair value at grant was calculated using the three trading day average closing share price prior to the grant date. The award will vest after two and three-year periods, subject to continued employment, sustained performance and clawback, under the Clawback Policy. See page 205 for full details on the award

Aggregate Compensation of the Executive Committee [1]

The table below shows the aggregated breakdown of all compensation provided to Executive Committee members in 2020 and 2019.

Million CHF	2020	2019
Fixed compensation		
Base salary [2]	2.264	3.071
Post-employment benefits / other benefits [3]	1.069	1.442
Variable compensation		
Short-term incentive (cash) [4,5]	1.804	2.650
Short-term incentive (shares) [6]	0.234	n/a
LTIP (grant value) [7]	2.931	2.818
LRSP (grant value) [8]	2.288	n/a
Other compensation [9]	3.498	5.002
Total	**14.088**	**14.983**

[1] 5.42 members in 2020 and 5.17 members in 2019. Sven Abend stepped down from the Executive Committee on 17 July 2020 and formally left Lonza on 31 October 2020. Caroline Barth and Pierre-Alain Ruffieux became Executive Committee members effective 1 May and 1 November 2020 respectively. Albert Baehny continued in the role of CEO *ad interim* until 31 October 2020
[2] Base salary levels paid for the periods when individuals sat on the Executive Committee during 2020 and 2019
[3] Social security, pension fund and other benefits. The social security and pension fund amounts disclosed on this line represent the full costs of the employer contributions for 2020 and 2019. The table shows the fair value of the other benefits as well as compensation for unused vacation days during past years as a member of the Executive Committee
[4] The STIP achievement for 2020 was 187.0% (2019: 102.0%) and will be paid out in May 2021 subject to shareholder approval at the 2021 AGM
[5] All Executive Committee members active prior to 1 January 2020 met the minimum shareholding requirement policy in 2020 (see page 205)
[6] For those Executive Committee members who are yet to reach the minimum shareholding, the 2020 STIP will be paid out as 50% cash and 50% shares
[7] The fair value in 2020 and 2019 was calculated using the market value at grant date 31 January 2020 and 31 January 2019 respectively. It is possible that the eventual value at vesting will be higher or lower (or even zero)
[8] In line with the Executive Committee Appointments Policy (see page 204), awards have been made in 2020 under the Lonza Restricted Share Unit Plan (LRSP), to compensate for time-based equity awards which were forfeited when leaving the previous employer. This award was made in accordance with Article 23 (Supplementary Amount in the Event of Changes in the Executive Committee) of Lonza's Articles of Association. The fair value at grant was calculated using the three trading day average closing share price prior to the grant date. The award will vest after two and three-year periods, subject to continued employment, sustained performance and clawback, under the Clawback Policy. See page 205 for full details on the award
[9] Cash payment (including base salary, other benefits, short–term incentive and social security) and shares (LTIP) received by departed members of the Executive Committee during 2020 and 2019

The aggregate base salary levels decreased by 26%, despite no change to base salary levels in 2020. With the number of Executive Committee members remaining broadly constant year on year (5.42 Executive Committee members for 2020 and 5.17 for 2019), the difference was a result of a number of Executive Committee member changes, including appointments and departures during the year. 2020 aggregated base salary levels shown in the table reflect the time when the individuals sat on the Executive Committee during 2020.

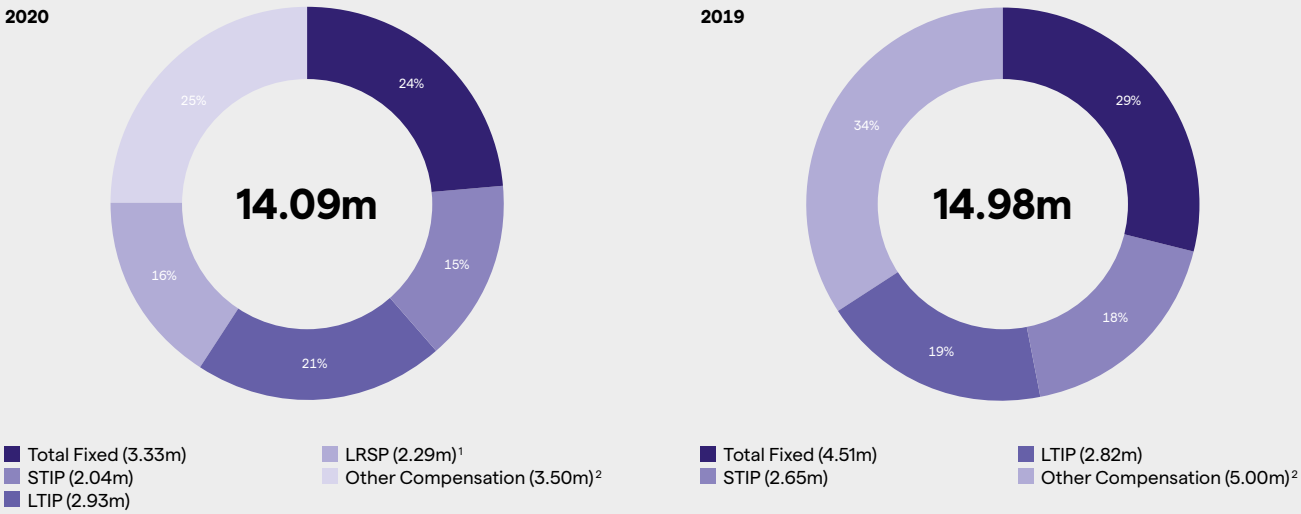
The proposed STIP payments for 2020 are reflective of the 2020 Group financial performance versus the performance targets set, as outlined on page 207 of this report. The performance outcomes result in a proposed payout of 187% of target levels. Despite this higher performance outcome compared to 2019, the aggregated proposed STIP payout levels for 2020 represent a decrease in total payout levels compared to 2019. This is primarily as a result of Executive Committee member changes made during the year, which led to payouts as per the plan rules.

The 2020 LTIP grant value reflects an increase in aggregate levels compared to 2019, albeit there was no change to policy levels during 2020. The difference in value is driven primarily by the changes to the Executive Committee during the year.

Albert Baehny continued to adopt the role of CEO *ad interim* during 2020, until the newly appointed CEO was appointed on 1 November 2020. During his period as CEO *ad interim*, Albert Baehny continued to receive the equivalent of CHF 400,000 per annum (i.e. CHF 333,333 for the period from 1 January to 31 October 2020) with no other benefits (in particular no pension), in addition to the CHF 600,000 per annum fee received for the role as Chairman of the Board of Directors. Albert Baehny's CEO *ad interim* base salary is included in the Aggregate Compensation of the Executive Committee table above for the period 1 January to 31 October 2020. Detail on compensation for the role of Chairperson of the Board of Directors can be found on page 213.

No loans or credits were outstanding as of 31 December 2020. During 2020, no payments (or waiver of claims) were made to current or departed Executive Committee members, nor to persons closely linked to them. No member of the Executive Committee benefits materially from any contract between a Lonza company and a third party.

Pay Mix: Fixed versus Performance Related Pay (CHF)



[1] Lonza Restricted Share Unit Plan (LRSP) awards are separate from typical total compensation and are awarded only in cases where a new Executive Committee member forgoes cash or equity at their previous employer. See page 211 for details of the LRSP award made to the new CEO

[2] Cash payment (including base salary, other benefits, short–term incentive and social security) and shares (LTIP) received by departed members of the Executive Committee during 2020 and 2019

Appointments to the Executive Committee in 2020

Pierre-Alain Ruffieux was appointed as the new CEO on 1 November 2020. The Committee determined his compensation in line with the Compensation Policy for Executive Committee members. Base salary levels were set at CHF 900,000 per annum and STIP and LTIP target levels were set at 100% and 150% of base salary, respectively. Pension and other benefits offering are consistent with the Executive Committee Benefits Policy. In line with the Executive Committee Appointments Policy (see page 204), an award has been made in 2020 under the Lonza Restricted Share Unit Plan (LRSP), to compensate for time-based equity awards which were forfeited when leaving the previous employer. The LRSP award has a grant value of CHF 2,288,000 which is less than the value of the awards forfeited. This was made in accordance with Article 23 (Supplementary Amount in the Event of Changes in the Executive Committee) of Lonza's Articles of Association. 50% of the award will vest after two years and the remaining 50% will vest after three years to align with the previous vesting schedule of the forfeited time-based equity awards. The full award is subject to continued employment, sustained individual performance and clawback, under the Clawback Policy outlined on page 205.

Caroline Barth, was appointed to the role of CHRO and Executive Committee member on 1 May 2020. Total compensation was set in line with the Executive Committee Compensation Policy.

All relevant pro-rated compensation levels for both Pierre-Alain Ruffieux and Caroline Barth are included in the aggregated compensation table on page 209.

Payment to Departed Executive Committee Members in 2020

Sven Abend stepped down as Chief Operating Officer and Head of Lonza Specialty Ingredients (LSI) on 17 July 2020 and formally left Lonza on 31 October 2020, in order to take on an external appointment. Base salary, benefits, STIP and LTIP were treated in line with contractual arrangements and Plan Rules.

In line with the contractual obligations, payment in lieu of outstanding vacation and base salary and benefits from 1 January to 30 November 2020 were paid to Marc Funk. STIP and LTIP were treated in line with the relevant Plan Rules.

No payments (or waiver of claims) were made to former Executive Committee members in 2020.

Compensation of the Board of Directors 2020

Policy

Objective and Market Benchmarking
In accordance with their respective duties and responsibilities, compensation levels for the Board of Directors are set at the median of the benchmarking peer group. The benchmarking peer group consists of Swiss companies of various sectors that are comparable in type of business, complexity of operations, size and global presence to Lonza. The Board of Directors regularly reviews the compensation of its members, including the Chairperson, based on a proposal by the Nominations and Compensation Committee, including relevant benchmarking information.

Structure and Level of Compensation
The Chairperson of the Board of Directors and its Members receive their compensation as 50% in Lonza Group shares and 50% in cash. This was paid in quarterly installments during the 2020 financial year.

The number of shares granted for Board of Directors' compensation is based on the average closing share price of the last five business days of each quarter. Share restrictions lapse after three years from the grant date. Shares are eligible for a dividend. This structure of Board of Directors' compensation is closely aligned with our Shareholders' interests.

The members of the Board of Directors do not receive variable compensation. The members of the Board of Directors are reimbursed for travel and other related expenses associated with their responsibilities as members of the Board of Directors of Lonza.

The position and associated compensation of the Chairperson of the Board of Directors and its members was approved by shareholders at the 2020 Annual General Meeting (AGM). This reflects compensation levels and structure which are unchanged compared to the previous year.

Compensation Components
For the period from the AGM 2020 to the AGM 2021, the members of the Board of Directors receive fixed gross compensation for Board of Directors' membership and additional compensation for Committee Chairpersons and committee members as described in the table below.

The compensation of the Chairperson of the Board of Directors includes compensation as a member of the Innovation and Technology Committee of the Board of Directors.

Further, the compensation of the Committee Chairpersons amounts to CHF 280,000 and includes the committee membership fee. In the case of multiple committee memberships, this attracts one committee membership fee only. The additional responsibilities of Lead Independent Director do not attract any additional fees.

Board of Directors

Compensation Board of Directors Annual General Meeting (AGM) 2020 to 2021 (excluding social security contributions)

In CHF	Base annual fee	Committee membership fee	Committee Chairman fee
Chairperson of the Board of Directors [1]	600,000	–	–
Board of Directors Member [2]	200,000	40,000	80,000
	The additional responsibilities of Vice-Chairperson and Lead Independent Director [3] do not attract any additional fees		
Form of payout	50% in Lonza Group shares and 50% in cash. This is paid in quarterly installments during the 2020 financial year		

[1] The compensation of the Chairperson of the Board of Directors includes compensation as a member of the Innovation and Technology Committee of the Board of Directors
[2] The compensation for Committee Chairpersons amounts to CHF 280,000 and includes the committee membership fee. In the case of multiple committee memberships, this attracts one committee membership fee only
[3] The roles and responsibilities of such Lead Independent Director are in line with sect. 19 para. 2 of the Swiss Code of Best Practice for Corporate Governance, requiring adequate control mechanisms, and commensurate to such position

Implementation

The Board of Director compensation approved by shareholders reflects the July to June period (12 months) following each AGM. As such, any year-on-year change for this period impacts the financial years within which this period falls. An increase in Board of Directors' compensation was approved by shareholders at the 2019 AGM, for the period July 2019 to June 2020. As a result, an increase in compensation levels is observed between the 2019 and 2020 financial years. Compensation levels for the 2020 to 2021 AGM period remain unchanged.

No loans or credits were outstanding as of 31 December 2020. During 2020, no payments (or waiver of claims) were made to current or former Board members nor to persons closely linked to them. No member of the Board of Directors benefits materially from any contract between a Lonza company and a third party.

For a full review of the historical development of compensation for the Board of Directors, see note 25 in the Lonza Group consolidated financial statements.

Board of Directors' Compensation

	2020					2019				
In CHF	Net cash payment	Number of shares	Value of Shares [1]	Social Security and Taxes [2]	Total [3]	Net cash payment	Number of shares	Value of Shares [1]	Social Security and Taxes [2]	Total [3]
Albert M. Baehny [4]	271,882	606	298,921	56,356	627,099	272,599	914	299,487	54,802	626,888
Patrick Aebischer [6]	31,837	89	34,737	6,326	72,900	125,125	425	139,251	27,970	292,346
Werner Bauer [5]	122,827	269	134,073	24,346	281,246	109,593	363	118,943	20,814	249,350
Dorothée Deuring [5,7]	93,207	193	104,410	21,956	219,573	n/a	n/a	n/a	n/a	n/a
Angelica Kohlmann	106,415	241	118,914	25,182	250,511	106,743	363	118,943	24,525	250,211
Christoph Mäder [5]	124,279	282	139,147	29,269	292,695	124,659	425	139,251	28,508	292,418
Barbara Richmond	60,239	241	118,914	94,018	273,172	60,234	363	118,943	91,283	270,459
Margot Scheltema [6]	18,959	89	34,737	30,041	83,737	75,771	425	139,251	120,229	335,251
Jürgen Steinemann	65,039	241	118,914	54,961	238,914	65,034	363	118,943	54,966	238,943
Olivier Verscheure	51,454	241	118,914	80,142	250,511	51,777	363	118,943	79,491	250,211
Total [8]	**946,078**	**2,492**	**1,221,682**	**422,599**	**2,590,358**	**1,004,480**	**4,104**	**1,341,687**	**522,461**	**2,686,628**

[1] The fair values were calculated using the average closing share price of the last five business days of each quarter, see note 25 in the Financial Report
[2] The social security amounts disclosed in this column represent the full costs of the employer and employee social security contributions and withholding tax
[3] Total compensation amounts refer to gross payments, including social security and withholding tax, except where stated otherwise
[4] This compensation includes Albert Baehny's committee membership. Albert Baehny is also a member of the Innovation and Technology Committee. He received a total of CHF 978,016 in 2020, comprising CHF 298,921 shares and CHF 679,095 cash, for the role of Chairman of the Board of Directors and CEO *ad interim*
[5] Dorothée Deuring, Christoph Mäder and Werner Bauer are Chairpersons of a Board of Directors' Committee
[6] Margot Scheltema and Patrick Aebischer did not stand for re-election at the AGM 2020
[7] Dorothée Deuring was appointed to the Board of Directors at the AGM 2020
[8] Moncef Slaoui was appointed to the Board of Directors at the AGM 2021, however due to further commitments he stepped down from the Board of Directors soon after appointment. Moncef Slaoui received no compensation from Lonza for this period

Share Ownership of the Members of the Board of Directors and the Executive Committee

Board of Directors

Based on information available to Lonza, the members of the Board of Directors and parties closely associated with them held, as of 31 December 2020: 46,209 (2019: 56,609)[1] registered shares of Lonza Group Ltd and controlled 0.06% (2019: 0.08%) of the share capital.

None of the members of the Board of Directors or Executive Committee owns shares in the Group's subsidiaries or associates.

Executive Committee

The members of the Executive Committee and parties closely associated with them held, as of 31 December 2020: 14,262 (2019: 19,137) shares and controlled 0.02% (2019: 0.03%) of the share capital. The individual control rights are proportional to the holdings shown below.

Board of Directors

Numbers of shares	2020	2019
Albert M. Baehny	3,773	3,087
Patrick Aebischer[2]	n/a	1,523
Werner Bauer	26,485	26,194
Dorothée Deuring[3]	131	n/a
Angelica Kohlmann	870	598
Christoph Mäder	3,470	3,152
Barbara Richmond	3,462	4,340
Margot Scheltema[2]	n/a	10,241
Jürgen Steinemann	7,148	6,876
Olivier Verscheure	870	598
Total[4]	**46,209**	**56,609**

[1] Spouse, children below 18, any legal entities that they own or otherwise control, or any legal or natural person who is acting as their fiduciary
[2] Margot Scheltema and Patrick Aebischer did not stand for re-election at the AGM 2020
[3] Dorothée Deuring was appointed to the Board of Directors at the AGM 2020
[4] Moncef Slaoui was appointed to the Board of Directors at the AGM 2021, however due to further commitments he stepped down from the Board of Directors soon after appointment

Executive Committee[1]

Numbers of shares	2020	2019
Pierre-Alain Ruffieux[2]	0	n/a
Sven Abend[3]	n/a	5,000
Caroline Barth[4]	0	n/a
Rodolfo Savitzky	10,562	11,019
Stefan Stoffel	3,700	3,118
Total	**14,262**	**19,137**

[1] All Executive Committee members active prior to 1 January 2020 have met or are in line to meet the shareholding guidelines
[2] Pierre-Alain Ruffieux commenced employment on 1 November 2020
[3] Sven Abend stepped down from the Executive Committee during 2020, leaving Lonza on 31 October 2020
[4] Caroline Barth commenced employment on 1 May 2020

Report of the Statutory Auditor

To the General Meeting of Lonza Group Ltd, Basel

We have audited the accompanying remuneration report of Lonza Group Ltd for the year ended 31 December 2020. The audit was limited to the information according to articles 14 – 16 of the Ordinance against Excessive compensation in Stock Exchange Listed Companies (Ordinance) contained in the sections “Highest Compensation Paid to a Member of the Executive Committee”, “Aggregate Compensation of the Executive Committee”, “Payment to Departed Executive Committee Members in 2020” and “Compensation of the Board of Directors 2020 - Implementation” of the remuneration report.

Responsibility of the Board of Directors
The Board of Directors is responsible for the preparation and overall fair presentation of the remuneration report in accordance with Swiss law and the Ordinance against Excessive compensation in Stock Exchange Listed Companies (Ordinance). The Board of Directors is also responsible for designing the remuneration system and defining individual remuneration packages.

Auditor's Responsibility
Our responsibility is to express an opinion on the accompanying remuneration report. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the remuneration report complies with Swiss law and articles 14 – 16 of the Ordinance.

An audit involves performing procedures to obtain audit evidence on the disclosures made in the remuneration report with regard to compensation, loans and credits in accordance with articles 14 – 16 of the Ordinance. The procedures selected depend on the auditor’s judgment, including the assessment of the risks of material misstatements in the remuneration report, whether due to fraud or error. This audit also includes evaluating the reasonableness of the methods applied to value components of remuneration, as well as assessing the overall presentation of the remuneration report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion
In our opinion, the remuneration report for the year ended 31 December 2020 of Lonza Group Ltd complies with Swiss law and articles 14 – 16 of the Ordinance.

KPMG AG

Michael Blume
Licensed Audit Expert
Auditor in Charge

Cyrill Kaufmann
Licensed Audit Expert

Zurich, 16 March 2021

Corporate Governance

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Circular lake pedestrians in Taihu Lake, China

Group Structure and Shareholders

Lonza Board of Directors

Audit and Compliance Committee (ACC)	**Nomination and Compensation Committee** (NCC)	**Innovation and Technology Committee** (ITC)

The Chairperson of the Board of Directors takes responsibility for all sustainability related issues

Lonza Executive Committee (EC)[1]

Pierre-Alain Ruffieux Chief Executive Officer (CEO)[2]	**Rodolfo J. Savitzky** Chief Financial Officer (CFO)	**Stefan Stoffel** Chief Operating Officer (COO) LPBN	**Caroline Barth** Chief Human Resources Officer (CHRO)

Lonza

Lonza Pharma Biotech & Nutrition (LPBN)	**Lonza Specialty Ingredients** (LSI)[3]	**Corporate Functions**
Global Business Service Organization		

[1] Sven Abend was Chief Operating Officer (COO) Specialty Ingredients from January 2016 until July 2020
[2] Albert M. Baehny was Chief Executive Officer (CEO) *ad interim* from November 2019 until November 2020
[3] In February 2021, Lonza signed an agreement to divest the Specialty Ingredients segment to Bain Capital and Cinven. The transaction is expected to close in H2 2021

Operational Group Structure

Segments
In 2020, Lonza's activities were organized in the following two segments:

The Pharma Biotech & Nutrition segment includes:

- Biologics
- Small Molecules
- Cell & Gene Technologies
- Bioscience
- Capsules & Health Ingredients

The Specialty Ingredients segment includes[1]:

- Microbial Control Solutions
- Specialty Chemical Services

Corporate Functions
Corporate Functions include Human Resources, Finance & Controlling, Tax, Treasury, Corporate Development, Procurement, Quality, Environment, Health and Safety, Corporate Communications, Investor Relations, Legal / Ethics & Compliance / IP, Engineering, IT, Internal Audit, Insurance and Real Estate Management.

Global Business Services Organization
Our Global Business Services Organization (GBSO) supports our segments, operational units and corporate functions with transactional services in finance and HR. The GBSO focuses on standardization and automation of processes to drive productivity and higher quality services. Service delivery through the GBSO is centralized in Manchester (UK) to support EMEA markets and in San José (CR) for the Americas.

Holding Company and Listed Companies
Lonza Group Ltd, with our registered office in Basel (CH), is the ultimate parent company of the Lonza Group. With the exception of Lonza Group Ltd, no equity securities of a company belonging to the Lonza Group are listed. Please refer to the Shares and Participation Certificates section, page 221, for information on the listed shares, the stock exchanges on which Lonza Group Ltd is listed and the market capitalization.

Principal Subsidiaries and Joint Ventures
The principal subsidiaries and joint ventures of the Lonza Group are shown in note 33, Principal Subsidiaries and Joint Ventures, page 166.

Significant Shareholders

According to disclosure notifications filed with Lonza, the following shareholders held more than 3% of the Lonza share capital as of 31 December 2020:

BlackRock, Inc., New York, NY (USA) 9.67%

The current significant shareholders as well as further disclosure notifications registered in 2020 can be found at the SIX Swiss Exchange disclosure platform.

Cross-Shareholdings

Lonza Group Ltd has not entered into any cross-shareholdings.

[1] In February 2021, Lonza signed an agreement to divest the Specialty Ingredients segment to Bain Capital and Cinven. The transaction is expected to close in H2 2021

Capital Structure

Share Capital

As of 31 December 2020, Lonza's share capital amounted to CHF 74,468,752 fully paid-in and divided into 74,468,752 registered shares with a par value of CHF 1 each.

Shareholder Structure

	31.12.2020		31.12.2019	
	Shareholders in %	Shares in %	Shareholders in %	Shares in %
Switzerland	90.75	17.88	89.86	17.68
United Kingdom	0.45	20.16	0.61	21.63
USA	1.30	10.81	1.78	8.97
Others	7.50	7.22	7.74	6.37
Shares in transit		43.68		45.11
Treasury shares without voting rights		0.25		0.24
Total	**100**	**100**	**100**	**100**
Total number of shares		74,468,752		74,468,752

Share Register

	31.12.2020	31.12.2019
Registered shareholders	26,510	18,829
Registered shares with voting rights	31,542,413	29,157,623
Share distribution		
1 - 100	17,825	10,239
101 – 1,000	7,471	7,356
1,001 – 10,000	971	982
10,001 – 100,000	192	207
100,001 – 1,000,000	46	42
Over 1,000,000	5	3
Total registered shareholders	**26,510**	**18,829**

Authorized and Conditional Capital

The Board of Directors is authorized to increase, at any time until 6 May 2021, the share capital of Lonza through the issuance of a maximum of 7,500,000 fully paid-in registered shares with a par value of CHF 1 each up to a maximum aggregate amount of CHF 7,500,000. This authorized capital was created by the Annual General Meeting held on 18 April 2019. The additional terms and conditions of the authorized capital (including the group of beneficiaries who have the right to subscribe for this additional capital) are set out in Article 4ter of the Lonza Articles of Association.

Conditional Capital: Lonza's share capital may be increased through the issuance of a maximum of 7,500,000 fully paid-in registered shares with a par value of CHF 1 each up to a maximum aggregate amount of CHF 7,500,000. This conditional capital was created by the Annual General Meeting on 25 April 2017. The additional terms and conditions of the conditional capital (including the group of beneficiaries who have the right to subscribe for this additional capital) are set out in Article 4bis of the Lonza Articles of Association.

According to Article 4^{quater} of the Lonza Articles of Association, the capital increases in the form of conditional capital and authorized capital may increase Lonza's share capital only by a maximum aggregate amount of CHF 7,500,000, which equates to ≈10 % of the existing share capital.

Changes in Capital

	2020	2019	2018	2017
Share capital in CHF	74,468,752	74,468,752	74,468,752	74,468,752
Registered shares	74,468,752	74,468,752	74,468,752	74,468,752
Par value in CHF / share	1	1	1	1

Shares and Participation Certificates

Lonza registered shares, with a par value of CHF 1 each, are listed on the SIX Swiss Exchange (SIX), with secondary listing on the SGX Singapore Exchange. In Switzerland, they have been included in the Swiss Market Index (SMI) since 3 May 2017.

Lonza has not issued any participation certificates ("Partizipationscheine", non-voting shares).

Stock Exchange Listing / Trading:
SIX Swiss Exchange
SGX Singapore Exchange

Common Stock Symbols:
Bloomberg LONN SW
Reuters LONN.S
Six Swiss Exchange LONN
SGX Singapore Exchange O6Z

Security Number:
Valor 001384101
ISIN CH0013841017

On 31 December 2020, Lonza had a market capitalization of CHF 42,357 million (2019: CHF 26,175 million).

Profit-Sharing Certificates

Lonza has not issued any non-voting equity security ("Genussscheine", profit-sharing certificates).

Limitations on Transferability and Nominee Registrations

Purchasers of registered shares declaring that they have acquired these shares in their own name and for their own account will be entered without limitation as shareholders with voting rights in the share register. Persons who do not declare to have acquired the respective shares in their own name and for their own account are considered "nominees" and will be entered with voting rights in the share register up to a maximum of 2% of the share capital, unless the actually entitled persons are revealed. The details are set out in Article 6 of the Lonza Articles of Association. This requirement ensures compliance with applicable anti-money laundering laws, but is not meant to serve as takeover defense. This restriction may only be removed by a resolution of the Shareholders' Meeting with a quorum in accordance with Swiss law.

Convertible Bonds

Neither Lonza Group Ltd nor any of its subsidiaries has outstanding convertible bonds.

Options

As of 31 December 2020, no options or warrants to acquire shares issued by or on behalf of Lonza Group Ltd were outstanding.

Board of Directors

The Board of Directors is currently made up of 8 members.

Name	Nationality	Year of birth	Year of initial appointment	Expiration of current term of office	Independence
Albert M. Baehny	Swiss	1952	2017	2021	Independent; CEO *ad interim* until November 2020
Patrick Aebischer [1]	Swiss	1954	2008	2020	Independent
Werner Bauer	Swiss	1950	2013	2021	Independent
Dorothée Deuring [2]	Austrian	1968	2020	2021	Independent
Angelica Kohlmann	German-Brazilian	1960	2018	2021	Independent
Christoph Mäder	Swiss	1959	2016	2021	Independent (Lead Independent Director since 12 November 2019)
Barbara Richmond	British	1960	2014	2021	Independent
Margot Scheltema [1]	Dutch	1954	2012	2020	Independent
Moncef Slaoui [2, 3]	Moroccan, Belgian, US-American	1959	2020	2020	Independent
Jürgen Steinemann	German	1958	2014	2021	Independent
Olivier Verscheure	Belgian	1972	2018	2021	Independent

[1] Patrick Aebischer and Margot Scheltema did not stand for re-election at the AGM 2020. Since the AGM 2020, both are no longer members of the Board of Directors
[2] On 28 April 2020, Dorothée Deuring and Moncef Slaoui were newly elected as members of the Board of Directors
[3] On 18 May 2020, Moncef Slaoui stepped down from his position as a member of the Board of Directors

Since Albert M. Baehny was appointed CEO *ad interim* on 12 November 2019, Lonza's Board of Directors elected Christoph Mäder as Lead Independent Director in accordance with Article 19 of the Swiss Code of Best Practice for Corporate Governance to ensure adequate control mechanisms are in place. Christoph Mäder has been a member of Lonza's Board of Directors and Nomination and Compensation Committee since 2016 and the Chairman of the Nomination and Compensation Committee since 2018. Christoph Mäder is an experienced board member as well as an Executive with extensive experience in mergers & acquisitions, capital markets transactions, industry regulation and governance. In accordance with Article 19 of the Swiss Code of Best Practice for Corporate Governance, the Lead Independent Director is entitled to convene and chair meetings of the Board of Directors on his own, if necessary. On 1 November 2020, Albert M. Baehny's appointment as CEO *ad interim* ended and Pierre-Alain Ruffieux commenced his appointment as CEO.

Since 2017, Dr Patrick Aebischer has been a Senior Partner and Member of the Investment Advisory Committee of NanoDimension Management Limited. In 2017, Lonza decided to commit to a limited investment in a venture fund managed by NanoDimension Management Limited. Dr Aebischer abstained from voting on this item. The indirect business relations between Lonza and Dr Aebischer resulting from said commitment are considered comparatively minor relative to Lonza Group Operations. Pursuant to the principles set forth in the preceding paragraph, Dr Aebischer is considered independent.

Limitation of Number of Mandates

According to Article 26 of Lonza's Articles of Association, no member of the Board of Directors may hold more than:

- Eight additional mandates in listed and non-listed companies, out of which not more than four mandates may be in listed companies
- Ten mandates in associations, charitable foundations, trusts and employee welfare foundations.

The Chairperson of the Board of Directors may not hold more than eight additional mandates in listed and non-listed companies, out of which no more than three may be in listed companies.

Mandates are mandates in the supreme governing body of a legal entity that is required to be registered in the commercial register or a comparable foreign register. Mandates in different legal entities that are under joint control or in the same beneficial ownership are deemed to be a single mandate. Mandates in companies that are controlled by Lonza or that control Lonza are not subject to the limitation set forth above. No member of the Board of Directors may hold more than five mandates at the request of Lonza or companies controlled by it.

All Board members comply with the provisions regarding their mandates. This is verified by Lonza on a regular basis.

Elections and Terms of Office

Each member of the Board of Directors is individually elected by the Annual General Meeting for a term of office of one year until the end of the next Annual General Meeting. Board members may not serve more than nine complete terms of office on the Board of Directors. If deemed in the best interest of the Company, the Board of Directors can extend this limit. The Chairperson of the Board of Directors is elected by the Shareholders' Meeting. The Vice-Chairperson is appointed by the Board of Directors. The members of the Nomination and Compensation Committee are elected by the Shareholders' Meeting on an annual basis. The members of the other Board Committees are appointed by the Board of Directors. The Chairperson of the Board Committees are nominated by the members of the respective Board Committees, except the Chairperson of the Nomination and Compensation Committee that is elected by the Board of Directors in corpore.

Internal Organizational Structure

The Board of Directors consists of the Chairperson, the Vice-Chairperson and the other Board members. In accordance with Lonza's Articles of Association, the number of members must be at least five. The members of the Board of Directors sat on the following committees in 2020:

Name	Audit and Compliance Committee	Nomination and Compensation Committee	Innovation and Technology Committee
Albert M. Baehny			Member
Patrick Aebischer [1]			Chairman
Werner Bauer [2]			Chairman
Angelica Kohlmann		Member	Member
Christoph Mäder		Chairman	
Barbara Richmond	Member		
Margot Scheltema [1]	Chairperson		
Jürgen Steinemann	Member	Member	
Olivier Verscheure			Member
Dorothée Deuring [2]	Chairperson		
Moncef Slaoui [3]			

[1] Patrick Aebischer and Margot Scheltema did not stand for re-election at the AGM 2020
[2] After the AGM 2020, Dorothée Deuring took on responsibilities as Chairperson of the Audit and Compliance Committee and Werner Bauer took on responsibilities as Chairman of the Innovation and Technology Committee
[3] On 18 May 2020, Moncef Slaoui stepped down from his position as a member of the Board of Directors

The Board of Directors strives to select the committee members based on their professional background and experience.

Audit and Compliance Committee

The Audit and Compliance Committee meets and consults regularly with the Executive Committee, Lonza Audit Services and the independent external auditors to review the scope and results of their work and their performance, according to the Audit and Compliance Committee Charter.

Among other responsibilities, the Audit and Compliance Committee reviews (i) the external auditors' independence, (ii) the systems of internal control and financial reporting, (iii) the risk management system, (iv) compliance with laws, regulations and policies and (v) Lonza's financial statements and results (including releases). The Audit and Compliance Committee is empowered to decide the tasks assigned to it and regularly informs the full Board of Directors on all matters discussed and decided in its meetings. The members of the ACC benefit from their broad professional backgrounds and experience as finance director, Chief Financial Officer (CFO) and Chief Executive Officer (CEO) for their committee work. Internal and external auditors have full and free access to the Audit and Compliance Committee. The Lonza Audit Services are overseen by the Audit and Compliance Committee and have a direct reporting line to the Chairperson of the Audit and Compliance Committee.

Nomination and Compensation Committee

The Nomination and Compensation Committee is entrusted with responsibilities that include the review and recommendation of compensation policies and plans (e.g. incentive compensation and equity plans) and the compensation of the members of the Executive Committee. This committee also makes an assessment to ensure that the area of nomination and compensation is in compliance with the standards set forth in the associated charter. Further, the Nomination and Compensation Committee evaluates potential members of the Board of Directors. The Nomination and Compensation Committee is empowered to decide the tasks assigned to it and regularly informs the full Board of Directors on matters discussed in its meetings and submits proposals for Board decision in accordance with the Nomination and Compensation Committee Charter.

Innovation and Technology Committee

The Innovation and Technology Committee monitors potential technology breakthroughs, supports management in driving innovation projects and provides and facilitates contacts, e.g. with academia and research institutions. With regard to the tasks assigned to it, the Innovation and Technology Committee regularly informs the full Board of Directors on all matters discussed and decided in its meetings, in accordance with the Innovation and Technology Committee Charter.

Number of Meetings, Duration and Attendance

Name	Board of Directors	Audit and Compliance Committee	Nomination and Compensation Committee	Innovation and Technology Committee
Number of meetings	7	5	6	5
Average duration	6 hrs	3 hrs	2.5 hrs	2.5 hrs
Overall attendance	100%	100%	100%	100%

The Regulations Governing Internal Organization and Board Committees set out in detail the powers and responsibilities of the Board of Directors, its Committees and the Executive Committee. The Board Committees provide support to the Board of Directors in their respective areas of responsibility. The Board of Directors meets with all members of the Executive Committee at each ordinary Board meeting for business updates and decisions to be taken. The CEO is a permanent guest of the Innovation and Technology Committee and is regularly invited to the meetings of the Nomination and Compensation Committee. The CFO attends all meetings of the Audit and Compliance Committee.

Attendance[1]

Name	Board of Directors	Audit and Compliance Committee	Nomination and Compensation Committee	Innovation and Technology Committee
Meeting Total	**7**	**5**	**6**	**5**
Albert M. Baehny	7			5
Patrick Aebischer[2]	3			2
Werner Bauer	7			5
Angelica Kohlmann	7		6	5
Christoph Mäder	7		6	
Barbara Richmond	7	5		
Margot Scheltema[2]	3	2		
Jürgen Steinemann	7	5	6	
Olivier Verscheure	7			5
Dorothée Deuring[3]	4	3		

[1] On 18 May 2020, Moncef Slaoui stepped down from his position as a member of the Board of Directors
[2] Patrick Aebischer and Margot Scheltema did not stand for re-election at the AGM 2020
[3] Dorothée Deuring was appointed as member of the Board of Directors at the AGM 2020. Subsequently, she was appointed as Chairperson of the Audit and Compliance Committee

Areas of Responsibility

In accordance with the law and the Lonza Articles of Association, the Board of Directors is the supreme governance body of the Group. The Board of Directors is responsible for the tasks assigned to it according to (i) Article 18 of the Lonza Articles of Association and (ii) the Regulations Governing Internal Organization and Board Committees (Article 2.8). The Board of Directors defines the strategic direction and is responsible for the ultimate management of Lonza as well as the supervision of the persons entrusted with Group management. It is responsible for issuing the necessary instructions especially with regard to compliance with the law, the Articles of Association, and the regulations and directives. In compliance with the law and the Articles of Association, the Board of Directors has – with the exception of non-delegable and inalienable duties – delegated the management of the company to the Executive Committee. The Board of Directors commits itself to maintaining the highest standards of integrity and transparency in its governance of Lonza. On an annual basis, the Board undertakes a self-assessment process. The aim is to achieve continuous improvement in the functioning of the Board.

All sustainability-related matters are with the Chairperson of the Board of Directors. Sustainability includes environmental, social, and governance-related matters of importance for Lonza and its stakeholders. A Sustainability Council headed by the Lonza Group General Counsel and Company Secretary manages all material identified topics and is responsible for the sustainability reporting. Lonza's Sustainability Report is discussed by the Nomination and Compensation Committee and the Audit and Compliance Committee in accordance with Lonza's financial reporting and is ultimately approved by the Board of Directors.

Information and Control Instruments

The Board of Directors ensures that it receives sufficient information from the Executive Committee to perform its supervisory duty and to make the decisions that are reserved for the Board of Directors through several means discussed below.

Board Information

The Regulations Governing Internal Organization and Board Committees require the CEO to ensure that the Executive Committee is informed about business activities of the Group, and together with the Chairperson – inform the Board of Directors on the business activities of the Group and keep the Board of Directors constantly informed on all important business transactions and issues. In addition, during Board meetings, each member of the Board may request information from the other members of the Board, as well as from the members of the Executive Committee present on all affairs of the Company and the Group. Outside of Board meetings, each member of the Board may request from the members of the Executive Committee information concerning the course of business of the Company and the Group.

Regular Reports to the Board
In addition to the documents required to pass resolutions, the Board of Directors receives the following reports:

- Monthly reports on the sales and earnings performance of the Group structured by segments
- Reports on the cash flows, debt and debt-equity ratio, plus other relevant key figures for the Group on a quarterly basis
- Qualitative assessments of the segments on a quarterly basis
- Reports of the external audit for the full-year results and procedures performed on the half-year results (through the Audit and Compliance Committee)
- In cases involving extraordinary events of considerable commercial relevance, the Board of Directors receives direct, immediate information
- Risk assessment reports submitted at least once per year; they are designed to provide the Board with a consistent, Group-wide perspective of key risks.

Internal Audit
The Board of Directors, through the Audit and Compliance Committee, is supported by Lonza Audit Services. The Lonza Audit Services group comprised nine authorized internal audit positions in 2020, reviewing financial, operational and information technology related activities of the entire Lonza Group with a risk-based audit program. The team continually evaluates the adequacy and effectiveness of the system of internal controls as well as compliance with company policies and procedures, and they recommend appropriate actions to correct deficiencies identified.

In 2020, they delivered ten internal audit reports to the Audit and Compliance Committee. Given the COVID-19 pandemic, the Lonza Audit Services group transitioned to virtual/remote auditing for all areas and activities enabling an effective audit off-site. However, a combination of temporarily reduced resources in the Lonza Audit Services group and redeployment of some of these resources, in agreement with the Audit and Compliance Committee to support priority projects of the Lonza Group, resulted in a lower number of audits than originally planned.

Internal Control System
Lonza has implemented a financial control framework, in accordance with the requirements of the Swiss law, comprising relevant policies, procedures and controls.

It provides the Group's management and Board of Directors a reasonable degree of assurance that business processes are performed efficiently and effectively, in compliance with policies and laws, assets are safeguarded and financial statements are reliable.

Compliance Instruments
In addition to the above-mentioned control instruments, Lonza has implemented various other measures to improve compliance within the Group. The implementation of these measures is supervised by the Audit and Compliance Committee. One of these measures is the issuance of a Code of Conduct that expresses Lonza's core principles and values in regard to professional business behavior and provides assistance in recognizing, understanding and complying with the laws and ethical standards that govern Lonza's business activities.

The Code of Conduct is available to all employees and information about it has been widely circulated within the Group. Lonza employees have to pass iComply tests in online training courses, dealing with topics such as those addressed by the Code of Conduct, in particular antibribery, competition law and conflicts of interest. In addition to these measures, Lonza offers a "whistleblower" hotline (known as "Lonza Ethics Hotline"), which is operated by an external company. Cases disclosed through the "whistleblower" hotline are ultimately reported to the Audit and Compliance Committee. Lonza periodically reviews and updates its policies to address changes in laws and regulations and strengthen compliance.

Risk Assessment
The Board of Directors carries out risk assessments on a minimum of an annual basis. The objective of the risk assessments is to make the principal risks to which Lonza is exposed more transparent and to improve risk mitigation. In its risk assessment for 2020, the Board of Directors identified inter alia commercial, operational and cybersecurity risks for which corresponding risk mitigation measures have been adopted.

Aerial scene in night, with road and traffic , Hong Kong

CVs Board of Directors

Members of the Board of Directors as of 31 Dec 2020

Albert M. Baehny

Nationality: Swiss
Year of birth: 1952

Chairman of the Board of Directors of Lonza Group Ltd (since 2018), Independent member of the Board of Directors of Lonza Group Ltd (since April 2017).

On 12 November 2019, Albert M. Baehny took on the responsibilities as CEO *ad interim* until his successor, Pierre-Alain Ruffieux, assumed the position on 1 November 2020.

Albert M. Baehny holds a degree in biology from the University of Fribourg (CH).

Current Activities and Functions

Public Company Boards

- Member of the Board of Directors of Investis Group Holding SA (since 2016)
- Chairman of the Board of Directors of Geberit AG (since 2011)

Former Activities and Functions

- CEO *ad interim* of Lonza Group Ltd (2019–2020)
- CEO of Geberit Group (2005–2014)
- Head of Group Division Marketing and Sales Europe for Geberit Group (2003–2004)
- Senior Vice-President at Wacker Chemie AG (2001–2002)
- Various Marketing, Sales, Strategic Planning and Global Management Positions with:
  - Vantico (2000–2001)
  - Ciba-Geigy / Ciba Specialty Chemicals (1994–2000)
  - Dow Chemicals Europe (1981–1993)
  - Serono-Hypolab (1979–1981)

Christoph Mäder

Nationality: Swiss
Year of birth: 1959

Vice-Chairman of the Board of Directors of Lonza Group Ltd (since April 2020); Independent member of the Board of Directors of Lonza Group Ltd (since April 2016).

On 12 November 2019, Christoph Mäder was appointed Lead Independent Director by the Board.

Christoph Mäder holds a Master's degree in law from the University of Basel (CH) and is admitted to the Swiss Bar.

Current Activities and Functions

Public Company Boards

- Member of the Board of EMS Chemie Holding AG (since 2018)
- Member of the Board of Directors Baloise Holding AG (since 2019)

Further Appointments

- President of Economiesuisse (since 2020)
- Member of the Board of Directors Assivalor AG (since 2019)
- Member of the Advisory Board of Accenture Switzerland (since 2019)
- Partner at the law firm Becker-Gurini-Hanhart-Vogt (since 2019)
- Member of the Council of Schweizer Jugend forscht (since 2018)
- Member of the Advisory Board of Vereinigung Schweizerischer Unternehmen in Deutschland (since 2016)
- Member of the Advisory Board of Loeba GmbH (since 2014)

Former Activities and Functions

- Member of the Group Executive Committee of Syngenta (2000–2018)
- Member of the Board Committee of economiesuisse (2008–2019)
- Vice-Chairman of economiesuisse (2011–2017)
- Member of the Executive Board of the Business and Industry Advisory Committee (BIAC) for the Organization for Economic Co-operation and Development (OECD) (2012–2016)
- Member of the Board of scienceindustries (2006–2018)
- Member of the Board of the Basel Chamber of Commerce (2002–2018)
- Head of Legal & Public Affairs for Novartis Crop Protection AG (1999–2000)
- Senior Corporate Counsel for Novartis International AG (1992–1998)

Werner Bauer

Nationality: Swiss
Year of birth: 1950

Independent member of the Board of Directors of Lonza Group Ltd (since April 2013).

Werner Bauer holds a diploma and PhD in chemical engineering from the University of Erlangen-Nürnberg (DE). He has received several scientific honors, among others the BioAlps Award 2011 and Honorary Senator from the Technical University of Munich (DE).

Current Activities and Functions

Public Company Boards

- Member of the Board of Directors of SIG Combibloc Group AG (since 2018)
- Vice-Chairman of the Board of Directors of Givaudan SA (since 2014)

Further Appointments

- Member of the Board of Directors of the Urs Bühler Innovation Fund (since 2019)
- Vice-Chairman of the Supervisory Board of Bertelsmann SE & Co. KGaA (since 2012)
- Chairman of the Board of Trustees of the Bertelsmann Foundation (since 2003)

Former Activities and Functions

- Member of the Supervisory Board of GEA Group AG (2011–2018)
- Chairman of the Supervisory Board of Nestlé Deutschland AG (2007–2017)
- Executive Vice-President of Nestlé SA, Head of Innovation, Technology, Research and Development (2007–2013)
- Executive Vice-President of Nestlé SA, Head of Technical, Production, Environment, Research & Development (2002–2007)
- Various managerial positions of increasing responsibility at Nestlé (1990–2002)
- Chairman of the Board of Directors of Galderma Pharma SA (2011–2014)
- Member of the Board of Directors of L'OREAL, France (2005–2012)
- Member of the Board of Directors of Alcon Inc., Switzerland (2002–2010)
- Director of the Fraunhofer Institute for Food Technology & Packaging and Professor in Bioprocess Technology at Technical University Munich (DE) (1985–1990)
- Professor of Chemical Engineering at the Technical University of Hamburg (DE) (1980–1985)

Dorothée Deuring

Nationality: Austrian
Year of birth: 1968

Independent member of the Board of Directors of Lonza Group Ltd (since April 2020).

Non-Executive Director and Corporate Finance Adviser, who brings more than 25 years of experience in the fields of manufacturing, biotech, pharmaceuticals and banking. Ms Deuring currently serves on the board of several companies including Axpo, Bilfinger and Elementis. Her Board memberships span the energy, plant engineering, chemical and biopharmaceutical sectors. She received her Master of Science in Chemistry from Université Louis Pasteur, Strasbourg in 1994. In 1996 she received her Master in Business Administration from INSEAD, Fontainebleau (FR).

Current Activities and Functions

Public Company Board Mandates

- Member of the Board of Directors, Member of the Audit Committee of Axpo Holding AG (since 2017)
- Member of the Board of Directors, Member of the Audit and Remuneration Committees of Elementis PLC (since 2017)
- Supervisory Board Member, Member of the Audit Committee of Bilfinger SE (since 2016)

Further Mandate

- Member of the Board of Directors of PIQUR Therapeutics AG (since 2019)

Activity

- Independent Corporate Finance Adviser (since 2014)

Former Activities and Functions

- Member of the Board of Directors of Selecta AG (2020)
- Supervisory Board Member (Beirat) of Röchling Group SE & Co. KG (2016–2019)
- Head of Corporate Advisory Group Europe, Managing Director Wealth Management Division of UBS AG (2011–2014)
- Managing Director Investment Banking, Head Healthcare and Chemicals M&A of Bankhaus Sal. Oppenheim Jr & Cie (2007–2009)
- Vice Director, Corporate Finance, Mergers & Acquisitions; Vice Director, Diagnostics Division, Business Development for F. Hoffman-La Roche AG (2003–2007)
- Founder, Owner Manager and Board Member of CoCap AG (1998–2003)
- Consultant of McKinsey & Company (1997–1998)
- Managing Director of K. Deuring & Co (1993–1997)

Angelica Kohlmann

Nationality: German-Brazilian
Year of birth: 1960

Independent member of the Board of Directors of Lonza Group Ltd (since May 2018).

Angelica Kohlmann holds a MD and doctorate in medicine from Hamburg University (DE).

Current Activities and Functions
- Member International Advisory Board IE University and Business School, Madrid (since 2017)
- Chairperson Board of Directors, Bloom Diagnostics AG (since 2014)
- Chairperson Board of Directors, Kohlmann & Co AG (since 2013)
- International investor in biotech and tech, based in Switzerland (since 2014)
- Board Observer Teralytics AG (since 2017)
- Chairperson of the Advisory Board Peter Drucker Society Europe / Global Peter Drucker Forum, Vienna (since 2009)

Former Activities and Functions
- Member Advisory Board UBS Unique (2017–2018)
- Director Trinnacle Fund Ltd (2016–2017)
- Member Board of Directors Teralytics AG (2013–2016)
- Founder & CEO Ifitech GmbH, Germany (2010–2017)
- International investor in biotech and tech, based in Germany (2000–2013)
- International consultant for strategy, management, investments and restructuring (1992–1999)
- Head global restructuring Behringwerke AG, Germany (1990–1992)
- Member Board Staff Hoechst AG, Germany (1988–1990)
- International Marketing Group Leader at Behringwerke AG (1986–1988)
- MD Anderson Cancer Center, Houston and Memorial Sloan Kettering Cancer Center, New York, USA – various cancer research functions

Barbara Richmond

Nationality: British
Year of birth: 1960

Independent member of the Board of Directors of Lonza Group Ltd (since April 2014).

Barbara Richmond holds a first-class degree in management science from the University of Manchester Institute of Science and Technology in England. Barbara Richmond has substantial knowledge as a financial expert, demonstrated by her roles as Chief Financial Officer for various companies. She is a Fellow of the Institute of Chartered Accountants in England and Wales.

Current Activities and Functions
Public Company Boards
- Group CFO of Redrow plc (since 2010)

Former Activities and Functions
- Group CFO of Inchcape plc (2006–2009)
- Non-Executive Director and Audit Committee Chair of Scarborough Building Society until its merger with The Skipton Building Society (2005–2009)
- Non-Executive Director, Senior Independent Director and Audit Committee Chair of Carclo Group plc (2000–2006)
- Group CFO of Croda International plc (1997–2006) with dual role as Group CFO and President of Active Ingredients and Industrial Chemicals from 2002 to 2006
- Group CFO of Whessoe plc in 1993 (1993–1997)
- Various financial roles in Alstom Group SA (1987–1992)
- Auditor and management consultant for Arthur Andersen (1981–1984)

Jürgen Steinemann

Nationality: German
Year of birth: 1958

Independent member of the Board of Directors of Lonza Group Ltd (since April 2014). Jürgen Steinemann holds a degree in Economics and Business Management from the European Business School in Wiesbaden (DE), London (UK) and Paris (FR).

Current Activities and Functions

Public Company Boards

- Member of the Board of Directors of Barry Callebaut AG (since 2015)
- Chairman of the Supervisory Board of Metro AG (since 2015)

Further Appointments

- Investor in food and agro businesses
- Managing Director of JBS Holding GmbH (since 2017)
- Chairman of the Supervisory Board of Bankiva B.V. (since 2017)
- Member of the Advisory Board of Tower Brook Capital Partners LP (since 2017)
- Member of the Supervisory Board of Big Dutchman AG (since 2015)

Former Activities and Functions

- Chief Executive Officer of Barry Callebaut Ltd (2009–2015)
- Member of the Board of the Swiss-American Chamber of Commerce (2011–2015)
- Member of the Executive Board and Chief Operating Officer of Nutreco (2001–2009)
- Chief Executive Officer of Loders Croklaan (1999–2001)
- Various senior positions in business-to-business marketing and sales with the former Eridania Béghin-Say Group, ultimately in the «Corporate Plan et Stratégie» unit at the head office in Paris (1990–1998)

Olivier Verscheure

Nationality: Belgian
Year of birth: 1972

Independent member of the Board of Directors of Lonza Group Ltd (since May 2018).

Olivier Verscheure holds a PhD in computer science from the Swiss Federal Institute of Technology, Lausanne (CH) (EPFL, July 1999).

Current Activities and Functions

- Expert in the Strategy Working Group on Data, Computing and Digital Research Infrastructures in the State Secretariat for Education, Research and Innovation (SERI) (since 2019)
- Member of the Foundation Council of SWITCH (since 2019)
- Founder and Executive Director of the Swiss Data Science Center, a joint venture between EPFL and ETH Zürich (since 2016)
- Member of the Executive Committee of Personalized Health and Related Technologies (PHRT), an ETH Domain Strategic Focus Area (since 2017)
- Co-academic Director, Certificate of Advanced Studies (CAS), Data Science and Management, HEC Lausanne and EPFL (since 2018)

Former Activities and Functions

- Lab Program Director and Senior Research Manager at IBM Research Ireland (2010 – 2016)
- Research Manager and Senior Member of the Research Staff at the IBM T.J. Watson Research Center (1999 – 2010)

Former Members of the Board of Directors in 2020[1]

Patrick Aebischer

Nationality: Swiss
Year of birth: 1954

Vice-Chairman of the Board of Directors of Lonza Group Ltd (April 2014 until April 2020), Independent member of the Board of Directors of Lonza Group Ltd (March 2008 until April 2020).

Patrick Aebischer holds a doctorate in medicine from the University of Geneva (CH). He has received numerous honors, including the Robert Bing Prize of the Swiss Academy of Medicine and the Pfizer Foundation Prize for Clinical Neurosciences.

Current Activities and Functions

Public Company Boards

- Member of the Board of Directors of Logitech SA (since 2016)
- Member of the Board of Directors of Nestlé SA (since 2015)

Further Appointments

- Chairman of the Board of Directors of Arctos SA (since 2019)
- Senior Partner of NanoDimension Management Limited (since 2017)
- Scientific technical committee member of the Italian Institute of Technology (since 2015)
- Chairman of the Novartis Venture Fund (since 2014)
- Member of the Singapore Biomedical Sciences International Advisory Council (since 2013)
- Chairman of the Board of Amazentis SA (since 2007)
- Professor of Neurosciences, Swiss Federal Institute of Technology Lausanne (EPFL) (since 2000)

Former Activities and Functions

- Senate member of the Deutsches Zentrum für Neurodegenerative Erkrankungen (DZNE) (2016–2019)
- Representative of the EPFL on the boards of various Swiss foundations
- President of the Swiss Federal Institute of Technology of Lausanne (EPFL) (2000–2016)
- Member of the Foundation Board of the World Economic Forum (2013–2016)

Margot Scheltema

Nationality: Dutch
Year of birth: 1954

Margot Scheltema holds a doctorate in international law from the University of Amsterdam and a Master of International Affairs (MIA) from Columbia University in New York (USA). Margot Scheltema has substantial knowledge as a finance, corporate governance and risk management expert, demonstrated by her operative roles in finance and management and supervisory roles in the financial sector (bank, central bank, insurance and pension funds).

Current Activities and Functions

- NEDAP (NE Director) NV (since 2018)

Further Appointments

- Vice-chair of the Supervisory Board of the Dutch Central Bank (since 2015) (financial institution)
- Member of the Central Plan Committee Dutch Planning Bureau (since 2014)
- Chair of the Monitoring Committee of the Dutch Pension Fund Code (since 2014)
- Council to the Enterprise Chamber of the Amsterdam Court of Appeal (since 2013)
- Member of the Supervisory Board of Warmtebedrijf Rotterdam (since 2011)
- Member of the Supervisory Board of TNT Express (since 2011)

Former Activities and Functions

- Vice-Chair of the Supervisory Board of Triodos Bank (2006–2015)
- Member of the Supervisory Board of ASR NV (2008–2015)
- External Member of the Audit Committee of the Dutch pension fund ABP (2010 to July 2014) (financial institution)
- Member of the Supervisory Board of the Rijksmuseum (2007–2015)
- Member of the AFM External Reporting Committee (2006–2012)
- Finance Director of Shell Nederland BV (2004–2008)
- Various managerial positions in finance within the Shell Group (1985–2004) including Senior M&A Adviser for Shell Oil Products Latin America

[1] Information tracked until the end of the term of employment with Lonza

Dr Moncef Slaoui

Nationality: Moroccan, Belgian, US-American
Year of birth: 1959

Independent member of the Board of Directors of Lonza Group Ltd (April 2020 until May 2020).

Dr Moncef Slaoui has extensive experience from his career with GlaxoSmithKline spanning nearly 30 years. In this time, he held a number of leadership positions, including Member of the Board of GSK PLC, Chairman of Pharmaceutical R&D, and Chairman of Global Vaccines. Currently, Dr Slaoui is partner at Medicxi, a venture capital firm specializing in seed, Series A, early stage and late stage life sciences investments. He also sits on various biotechnology companies' boards. Dr Slaoui received his Ph.D. in Molecular Biology and Immunology from Brussels University in 1983. He later received an accelerated Master of Business Administration from IMD in Lausanne (CH) in 1998.

Current Activities and Functions

Further Mandates

- Chairman of Monopteros (A Medicxi Company) (since 2018)
- Chairman of Divide & Conquer (A Medicxi Company) (since 2017)
- Chairman of Sutrovax (since 2017)
- Chairman Galvani Bioelectronics (since 2016)
- Chairman of Clasado (since 2017)

Activity

- Partner at Medicxi (since 2017)

Former Activities and Functions

- Independent Member of the Board of Directors of Moderna (2017–2020)
- Member of the Advisory Board of the Qatar Foundation (2009–2020)
- Member of the Board of Directors of International AIDS Vaccines Initiatives (2015–2017)
- Member of the Board of GSK PLC (2006–2017)
- Chairman, Global Vaccines of GSK PLC (2009–2017)
- Chairman, Global Research & Development of GSK PLC (2006–2015)
- Various leadership roles in Research & Development including Worldwide Business Development & External Alliances (1988–2003)

Executive Committee

The members of the Executive Committee are appointed by the Board of Directors. Lonza's Executive Committee performs the duties assigned to it by the Board of Directors under the terms of the Regulations Governing Internal Organization and Board Committees. It is responsible for managing Lonza worldwide and for implementing policies and strategies as defined by the Board of Directors. The Executive Committee supports and coordinates the activities of the segments, the corporate functions and the global business service organization. The Executive Committee is also responsible for leadership development.

Members of the Executive Committee

Name	Nationality	Year of Birth	Function
Pierre-Alain Ruffieux	Swiss	1969	Chief Executive Officer (since November 2020)
Albert M. Baehny	Swiss	1952	Chief Executive Officer *ad interim* (until November 2020)
Rodolfo J. Savitzky	Swiss / Mexican	1962	Chief Financial Officer
Caroline Barth	British	1972	Chief Human Resources Officer (since May 2020)
Stefan Stoffel	Swiss	1966	Chief Operating Officer Pharma & Biotech Segment
Sven Abend	German	1968	Chief Operating Officer Specialty Ingredients Segment (until July 2020)

On 12 November 2019, Albert M. Baehny took on the additional responsibility of Chief Executive Officer on an *ad interim* basis until his successor, Pierre-Alain Ruffieux, assumed the position on 1 November 2020. To ensure continuing good corporate governance, Lonza appointed Christoph Mäder as Lead Independent Director in accordance with Article 19 of the Swiss Code of Best Practice for Corporate Governance. Christoph Mäder has been a member of Lonza's Board of Directors and Nomination and Compensation Committee since 2016 and the Chairman of the Nomination and Compensation Committee since 2018. Christoph Mäder is an experienced board member as well as an executive with extensive experience in mergers & acquisitions, capital markets transactions, industry regulation and governance. In accordance with Article 19 of the Swiss Code of Best Practice for Corporate Governance, the Lead Independent Director is entitled to convene and chair meetings of the Board of Directors on his own, if necessary.

Limitation of Number of Mandates
According to Article 26 of the Lonza Articles of Association, no member of the Executive Committee may hold more than:

- One additional mandate in a listed company
- Two additional mandates in non-listed companies
- Ten mandates in associations, charitable foundations, trusts and employee welfare foundations.

Mandates are mandates in the supreme governing body of a legal entity that is required to be registered in the commercial register or a comparable foreign register. Mandates in different legal entities that are under joint control or in the same beneficial ownership are deemed to be a single mandate. Mandates in companies that are controlled by Lonza or that control Lonza are not subject to the limitation set forth above; no member of the Executive Committee may hold more than five mandates at the request of Lonza or companies controlled by it.

Management Contracts

Lonza Group Ltd has not entered into management contracts with companies or natural persons not belonging to the Group.

CVs Executive Committee

Members of the Executive Commitee as of 31 Dec 2020

Pierre-Alain Ruffieux, PhD

Nationality: Swiss
Year of birth: 1969

Chief Executive Officer (CEO) and Member of the Executive Committee (since November 2020).

Pierre-Alain Ruffieux holds a doctorate in Biotechnology and a master's degree in Chemical Engineering and Biotechnology from the Swiss Federal Institute of Technology (EPFL), Lausanne (CH).

Former Activities and Functions

- Head of Global Pharma Technical Operations & Member Pharma Executive Team, F. Hoffmann-La Roche (2017–2020)
- Head of Quality and Compliance, Global Pharma Technical Operations, F. Hoffmann-La Roche (2015–2017)
- Head of Quality, Pharmaceutical Division & Member Pharmaceutical Executive Committee, Novartis Pharmaceuticals (2012–2015)
- Head of Global Pharma Technical Operations & Biologics Quality Assurance, Novartis Pharmaceuticals (2010–2012)
- Global Head of Quality for Biopharmaceutical, Novartis Pharmaceuticals (2009–2010)
- Various positions in technical development and manufacturing at Novartis Pharmaceuticals & Sandoz, Novartis Group (2003–2009)
- Various positions in technical development and manufacturing at Serono (now Merck Serono) (1998–2003)

Rodolfo J. Savitzky

Nationality: Swiss / Mexican
Year of birth: 1962

Chief Financial Officer (CFO) and Member of the Executive Committee (since October 2016).

Rodolfo J. Savitzky holds a degree in Industrial and Systems Engineering from the Tecnológico de Monterrey (MX) and an MBA in Finance and Economics from the University of Chicago (USA).

Former Activities and Functions

- Vice-President Controller, Lonza Pharma & Biotech (2015–2016)
- Division CFO, Novartis Animal Health (2011–2015)
- Business Unit Head of Finance, Novartis Animal Health (2006–2011)
- Head of Strategic Planning and Analysis, Novartis Pharmaceuticals (2004–2005)
- Head of Business Planning and Analysis, Novartis Pharmaceuticals (2003)
- Head of Finance Ophthalmics Business Unit, Novartis Pharmaceuticals (2002)
- Various positions at P&G (1984–2001)

Caroline Barth

Nationality: British
Year of birth: 1972

Chief Human Resources Officer (CHRO) and Member of the Executive Committee (since May 2020).

Caroline Barth holds a degree in European Business Studies from the University of Sunderland (UK) and an MBA from The Open University (BE).

Former Activities and Functions

- Global Head of Human Resources, Pharma, Novartis Pharma AG (2016–2020)
- Global Head Pharma Strategy, Novartis, Pharma AG (2019)
- Global Head of Human Resources, Pharma Manufacturing and Quality, Novartis Pharma AG (2014–2016)
- Global Head of Human Resources, Central & Eastern Europe, Novartis Pharma AG (2013–2014)
- VP, Human Resources Canada Pharma & Corporate HR Leader, Novartis Pharma AG (2010–2013)
- Head of Talent Management, Organizational Development & Staffing, Europe, Novartis Pharma AG (2008–2010)
- Head of Human Resources Global IT, Novartis Pharma AG (2006–2008)
- Human Resources Integration Leader, Novartis Pharma AG (2004–2006)
- HR Communications Leader, EMEA & APAC, Cisco Systems (2001–2003)
- HR Generalist, Emerging Markets, Cisco Systems (1997–2001)

Stefan Stoffel

Nationality: Swiss
Year of birth: 1966

Chief Operating Officer (COO) Pharma & Biotech Segment and Member of the Executive Committee (since March 2019).

Stefan Stoffel holds a Bachelor's degree in engineering from Lucerne University of Applied Sciences and Arts.

Former Activities and Functions

- Head of Lonza Pharma & Biotech Strategic Growth Investments and Ibex® Solutions (2016–2019)
- Head of Lonza Pharma & Biotech Operations (2013–2016)
- General Manager of Lonza Chemical Operations Business Unit (2010–2013)
- Head of Lonza's Small Molecules Exclusive Synthesis Business Unit (2009–2010)
- Head of Operations for Lonza's Small Molecules Exclusive Synthesis Business Unit (2007–2009)
- Various positions at Lonza in Engineering & Maintenance, Technical Management, Production and Operations Management for Lonza AG and Lonza Inc. (1991–2007)

Former Members of the Executive Commitee in 2020[1]

Sven Abend

Nationality: German
Year of birth: 1968

Chief Operating Officer (COO) Specialty Ingredients Segment (January 2016 until July 2020) and Member of the Executive Committee (July 2014 until July 2020).

Sven Abend holds a Ph.D. in chemistry from the Christian-Albrechts-Universität in Kiel and a post-doctorate from the Department of Physics & Astronomy at the University of New York in Stony Brook (USA).

Former Activities and Functions

- CEO of Kolb Ltd in Hedingen (CH) (2012–2014)
- Business Manager for Kolb's divisions focusing on specialty surfactants and custom manufacturing (2010–2012)
- Several senior positions in Global Product Management and ultimately as Director of Corporate Key Account Management at Cognis GmbH in Germany (2003–2010)
- Project Scientist for the R&D Home & Personal Care business at Unilever in the UK (2000–2003)

Albert M. Baehny

Nationality: Swiss
Year of birth: 1952

Please see CV in Board of Directors section / page 228.

[1] Information tracked until the end of the term of employment with Lonza

Compensation, Shareholdings and Loans

Details of Board and Executive Committee compensation are contained in the Remuneration Report, respectively on page 212 and 206.

Shareholders' Participation Rights

Voting-Rights Restrictions and Representation

Only persons with valid entries in the share register are recognized as shareholders or usufructuaries. A shareholder may only be represented at the Annual General Meeting by a legal representative, another shareholder entitled to vote or the independent proxy. Persons who do not declare to have acquired their shares in their own name and for their own account are considered "nominees" and will only be entered with voting rights in the share register up to a maximum of 2% of the share capital, unless the entitled persons are revealed. The details are set out in Article 6 of the Lonza Articles of Association. This requirement ensures compliance with applicable anti-money laundering laws, but is not meant to serve as takeover defense. This restriction may only be removed by a resolution of a Shareholders' Meeting with a quorum in accordance with Swiss law. Each share has the right to one vote and is entitled to dividend. The shares held by Lonza are not entitled to vote at the Annual General Meeting and bear no dividend. Lonza may use an electronic voting system for all the resolutions to be taken at its Annual General Meeting. The Lonza Articles of Association do not contain any other rules on electronic participation in the Shareholders' Meeting, nor specific rules on the issue of instructions to the independent proxy.

Statutory Quora

Except as otherwise stipulated by law, an absolute majority of the votes represented at the Annual General Meeting is required for resolutions and elections. For certain important matters such as a change of the company purpose and domicile, the dissolution of the company without liquidation, and certain matters relating to capital changes, Article 704 of the Swiss Code of Obligations requires at least two-thirds of the voting rights represented and an absolute majority of the nominal value of shares represented.

Convocation of Shareholders' Meetings

Ordinary Shareholders' Meetings are called in accordance with the law and the Lonza Articles of Association.

Extraordinary Shareholders' Meetings must be called upon resolution of a Shareholders' Meeting or if demanded by one or more shareholders representing at least 5% of the share capital. Lonza posts the invitation to shareholders at least 20 days before the Annual General Meeting and publishes it on its website, as well as in the Swiss Official Gazette of Commerce.

Agenda

One or more shareholders representing together shares with a par value of CHF 100,000 may request an item to be included in the agenda of a Shareholders' Meeting. The request to include an item must be submitted in writing at least 40 days before the meeting, stating the item to be included and the motions.

Entry in the Share Register

Purchasers of Lonza shares may submit a request to be entered, without limitation, as shareholders with voting rights in the share register, provided they expressly declare that they have acquired these shares in their own name and on their own account. Special rules exist for persons who do not expressly declare in the entry application that they hold the shares on their own account (nominees) – see Limitations on Transferability and Nominee Registrations, page 221. There are no special rules in the Lonza Articles of Association concerning a deadline for entry in the share register. The share register will be closed this year on 22 April 2021 at 5:00 pm CEST.

Changes of Control and Defense Measures

Duty to Make an Offer

According to the Swiss Federal Act on Financial Infrastructures and Market Conduct in Securities and Derivatives Trading (Financial Market Infrastructure Act, FMIA), an investor who acquires more than 33⅓% of all voting rights (directly, indirectly or in concert with third parties) whether they are exercisable or not, is required to submit a takeover offer for all shares outstanding. No special opting-out or opting-up dispositions are contained in the Lonza Articles of Association.

Clauses on Change of Control

The employment agreements of the Executive Committee members contain certain clauses on change of control, which are outlined in the Compensation of the Executive Committee section of the Remuneration Report. In addition, Lonza's Long-Term Incentive Plan (LTIP) provides that unvested awards / blocked shares unconditionally vest upon change of control (see Compensation of the Executive Committee section of the Remuneration Report, page 206).

Auditors

Duration of the Mandate and Term of Office of the Auditor in Charge

The independent auditor, KPMG Ltd, Räffelstrasse 28, 8045 Zurich, Switzerland, has held the mandate as the external statutory auditor of Lonza Group Ltd and the Group since 1999. The external statutory auditor is elected at the Annual General Meeting for a term of one year. The criteria for selection of external auditors include independence, quality, reputation and cost of services. Michael Blume from KPMG Ltd has been the auditor in charge since April 2014. Lonza's Audit and Compliance Committee, together with KPMG ensure that the auditor in charge is rotated at least every seven years. A new auditor in charge has been nominated for the financial year 2021. The Board of Directors proposes that KPMG Ltd be re-elected as auditor for the 2021 business year.

Auditing Fees and Additional Fees

The fees for professional services paid to KPMG Ltd. for the years under audit ended 31 December 2020 and 2019 are as follows:

Million CHF	2020	2019
Audit services	4,833	5,186
Audit-related services		
– Assurance - transaction related	3,401	2,356
– Assurance - other	1,027	0,658
– Non-statutory audits		
Tax services	0,133	0,040
Other services	3,873	0,059
Total	13,266	8,299

Audit services are provided as required by law and include the audit of the consolidated financial statement of Lonza Group Ltd as well as the required statutory audits of Lonza Group entities.

Audit-related services include other assurance and accounting services provided by the independent auditors but which may not exclusively be provided by the statutory auditor. These services go beyond the legal requirements and may include, inter alia, other attestation services, comfort letters, audits in connection with non-recurring transactions, consents and consultations, as well as audit services related to the performance of historical carve-out audits of the Specialty Ingredients business.

Tax services represent tax compliance, assistance with historical tax matters, and other related services.

Other services in 2020 primarily relate to vendor due diligence procedures and reporting for which an independent report is to be issued related to the planned divestment of the Specialty Ingredients business and further provision of accounting and reporting guidance, as well as, trainings in finance and relevant regulations.

Supervisory and Control Instruments vis-à-vis the Auditors

The Audit and Compliance Committee is responsible for evaluating the performance and independence of the external auditors on behalf of the Board of Directors. This evaluation occurs at least once a year. The criteria applied for the assessment include professional competence, sufficiency of resources, the ability to provide effective and practical recommendations and coordination of the external auditors with the Audit and Compliance Committee and senior management. In the reporting year, KPMG Ltd attended five Audit and Compliance Committee meetings. In those meetings, the external auditors presented the 2020 audit strategy and their 2020 results.

The Comprehensive Auditor's Report to the Board of Directors prepared by KPMG summarizes the reports presented to the Audit and Compliance Committee throughout the year.

Within the annual approved budget, there is an amount permissible for non-audit services that the external auditors may perform. Within the scope of the approved and budgeted amount, the Chief Financial Officer can delegate non-audit-related mandates to the external auditors, subject to all applicable auditor independence regulations. The Board of Directors has determined the rotation interval for the auditor in charge to be at least every seven years, as defined by the Swiss Code of Obligations.

The Audit and Compliance Committee reviews Lonza's financial reporting process on behalf of the Board of Directors. Lonza's management is responsible for preparing the financial statements and the reporting process, including the system of internal controls. The Audit and Compliance Committee is also responsible for overseeing the conduct of the activities by Lonza management and the external auditors.

The external auditor, KPMG Ltd, is responsible for expressing an opinion on the accounting records and the financial statements prepared in accordance with Swiss law and the Lonza Articles of Association. KPMG Ltd is also responsible for expressing an opinion on the consolidated financial statements (balance sheet, income statement, statement of comprehensive income, cash flow statement, statement of changes in equity and notes) prepared in accordance with the International Financial Reporting Standards (IFRS), which is issued by the International Accounting Standards Board (IASB), and with Swiss law. KPMG also audited the Lonza Remuneration Report 2020 with respect to the information required by Articles 14 to 16 of the Swiss Ordinance Against Excessive Compensation in Stock-Exchange-Listed Companies.

Information Policy and Key Reporting Dates

Lonza pursues a proactive and professional communication policy. Lonza publishes price-sensitive information in accordance with the obligation to disclose price-sensitive facts as required by the SIX Swiss Exchange. Ad hoc notices are made available on Lonza's news site. Additionally, Lonza's website provides a news and subscription service that allows interested parties to receive, via e-mail distribution, free and timely notification of price-sensitive facts.

Corporate Communications and Investor Relations report directly to the Chief Executive Officer. On basic matters of general corporate policy, Corporate Communications and Investor Relations receive their directives from the Executive Committee. Lonza makes the Annual Report, the Half-Year Results and Full-Year Results available to all interested parties as a PDF download.

The invitation to the Annual General Meeting is published on our website, and in the Swiss Official Gazette of Commerce. It is also sent by mail to the shareholders entered in the share register. Our website is regularly updated and provides relevant information such as share-price development, news releases and presentations. Media conferences and analyst meetings in 2020 took place in SIX ConventionPoint, Zurich and by conference call. Lonza manages an annual program of investor meetings. Shareholders, potential investors and financial analysts are also welcomed at our headquarters in Basel, Switzerland.

Anticipated Key Reporting Dates

The list of all corporate events of special interest is subject to change during the year as dates are adjusted and added. Updated information is found on the Investor Relations page of our website or on page 19 of the Annual Report.

Legal Disclaimer

Forward-Looking Statements

Forward-looking statements contained herein are qualified in their entirety as there are certain factors that could cause results to differ materially from those anticipated. Any statements contained herein that are not statements of historical fact (including statements containing the words "outlook," "guidance," "believes," "plans," "anticipates," "expects," "estimates" and similar expressions) should be considered to be forward-looking statements. Investors are cautioned that all forward-looking statements involve risks and uncertainty.

There are a number of important factors that could cause actual results or events to differ materially from those indicated by such forward-looking statements, including the timing and strength of new product offerings; pricing strategies of competitors; the company's ability to continue to receive adequate products from its vendors on acceptable terms, or at all, and to continue to obtain sufficient financing to meet its liquidity needs; difficulty to maintain relationships with employees, customers and other business partners; and changes in the political, social and regulatory framework in which the company operates, or in economic or technological trends or conditions, including currency fluctuations, inflation and consumer confidence, on a global, regional or national basis.

In particular, the assumptions underlying the Outlook 2021 and Mid-Term Guidance 2023 herein may not prove to be correct. The statements in the section on Outlook 2021 and Mid-Term Guidance 2023 constitute forward-looking statements and are not guarantees of future financial performance.

Lonza's actual results of operations could deviate materially from those set forth in the section on Outlook 2021 and Mid-Term Guidance 2023 as a result of the factors described above or other factors. Investors should not place undue reliance on the statements in the section on Outlook 2021 and Mid-Term Guidance 2023. Except as otherwise required by law, Lonza disclaims any intention or obligation to update any forward-looking statements as a result of developments occurring after this presentation was published.

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