sartorius stedim biotech

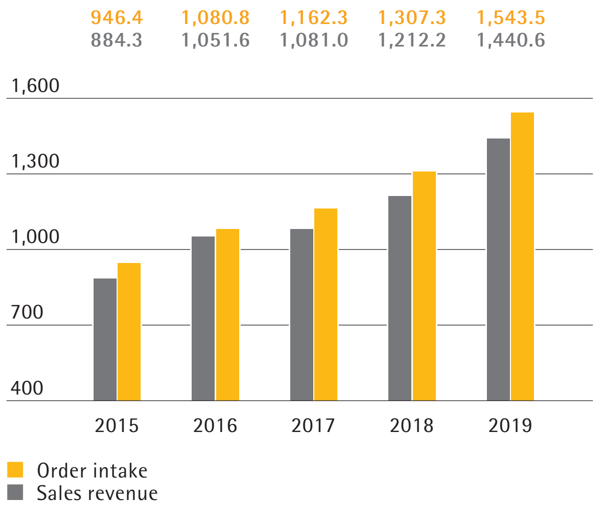
Sartorius Stedim Biotech

Universal Registration Document 2019

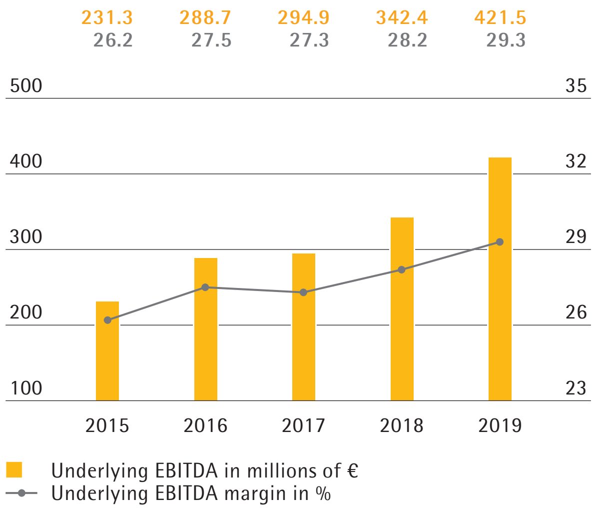
Including the Annual Financial Report

2019

Order Intake and Sales Revenue
€ in millions



Underlying EBITDA and Margin[1)]



Key Figures

All figures are given in millions of € according to IFRS, unless otherwise specified	**2019**	2018	2017	2016	2015
Order intake, sales revenue and earnings					
Order intake	1,543.5	1,307.3	1,162.3	1,080.8	946.4
Sales revenue	1,440.6	1,212.2	1,081.0	1,051.6	884.3
Underlying EBITDA[1, 2)]	421.5	342.4	294.9	288.7	231.3
Underlying EBITDA[1, 2)] as % of sales revenue	29.3	28.2	27.3	27.5	26.2
Net profit after non-controlling interest	234.6	208.1	161.1	153.7	118.0
Underlying net profit[1)] after non-controlling interest[2)]	262.9	219.3	180.4	176.6	139.3
Research and development costs	79.2	60.6	53.2	47.5	41.5
Financial data per share[3)]					
Earnings per share	2.54	2.26	1.75	1.67	1.28
Earnings per share (in €)[1, 4)]	2.85	2.38	1.96	1.92	1.51
Dividend per share (in €)	0.68[5)]	0.57	0.46	0.42	0.33
Balance sheet					
Balance sheet total	1,820.4	1,571.5	1,403.9	1,195.8	1,066.1
Equity	1,177.6	1.044.9	879.5	763.6	647.2
Equity ratio (in %)	64.7	66.5	62.6	63.9	60.7
Financials					
Capital expenditures[6)]	136.0	177.0	136.7	80.2	54.5
Capital expenditures as % of sales revenue[6)]	9.4	14.6	12.6	7.6	6.2
Depreciation and amortization	73.2	60.9	50.6	44.7	39.4
Cash flow from operating activities	310.1	227.3	174.7	156.7	142.8
Net debt[7)]	107.7	125.7	127.1	67.6	86.4
Ratio of net debt to underlying EBITDA[1, 2)]	0.3	0.4	0.4	0.2	0.4
Total number of employees as of December 31	**6,203**	5,637	5,092	4,725	4,202

1) Adjusted for extraordinary items
2) For more information on EBITDA, net profit and the underlying presentation, please refer to the Group Business Development chapter and to the Glossary.
3) 2015 adjusted for stock split; rounded values
4) Adjusted for extraordinary items, non-cash amortization acc. to IFRS 3 and fair value adjustments of hedging instruments, as well as the corresponding tax effects for each of these items.
5) Amount suggested by the Board of Directors (Conseil d'administration) and subject to approval by the Annual General Shareholders' Meeting.
6) Since 2019 and as a result of the change in IFRS 16 accounting principles, CAPEX has been based on cash flow instead of balance sheet computation; CAPEX restated for 2018: €176.5 million; CAPEX ratio restated for 2018: 14.6%
7) Net debt excludes the liability for the remaining purchase price for acquisitions; 2019: 72.5 million euros, 2018: 8.7 million euros, 2017: 46.5 million euros, 2016: 49.6 million euros, 2015: 47.5 million euros

Mission & Vision

Mission

We empower engineers to simplify and accelerate progress in bioprocessing. In this way, we enable new and better pharmaceuticals to be manufactured and help keep medications affordable.

Vision

As pioneers, we are a magnet and a dynamic platform for the leading experts in our field. We bring creative minds together for a common goal: technological breakthroughs that lead to better health for more people.

Universal Registration Document
2019

This Universal Registration Document has been filed on February 17, 2020, with the AMF, as competent authority under Regulation (EU) 2017/1129, without prior approval pursuant to Article 9 of the said regulation.

The Universal Registration Document may be used for the purposes of an offer to the public of securities or admission of securities to trading on a regulated market if completed by a securities note and, if applicable, a summary and any amendments to the Universal Registration Document. The whole is approved by the AMF in accordance with Regulation (EU) 2017/1129.

This Universal Registration Document incorporates by reference the preceding Reference Documents D.19-0060 filed on February 18, 2019, and D.18-0041 filed on February 20, 2018.

The following information is included by reference in the present Universal Registration Document :

- The year 2018 consolidated financial statements of Sartorius Stedim Biotech prepared using international accounting standards and the report of the statutory auditors relating to these statements, and the Group 2018 management report appearing on pages 90 to 137 and 18 to 56 respectively, of the Reference Document filed with the Autorité des Marchés Financiers on 19 February 2019, under the number D.19-0060.
- The year 2017 consolidated financial statements of Sartorius Stedim Biotech prepared using international accounting standards and the report of the statutory auditors relating to these statements, and the Group 2017 management report appearing on pages 114 to 161 and 18 to 78 respectively, of the Reference Document filed with the Autorité des Marchés Financiers on 20 February 2018, under the number D.18-0041.

The sections of these documents not included are not of interest to an investor, and are covered in another part of this Universal Registration Document.

Copies of the present Universal Registration Document can be obtained from the following:

- Sartorius Stedim Biotech S.A.
  Z.I. Les Paluds - Avenue de Jouques
  CS 91051 - 13781 Aubagne Cedex
- Group website: www.sartorius-stedim.com
- Autorité des Marchés Financiers website:
  www.amf-france.org

01 To Our Shareholders

02 Management Report

Throughout the Universal Registration Document, differences may be apparent as a result of rounding during addition.

Contents

To Our Shareholders

01

Chairman's Message

Dear Shareholders and Business Partners,

We have been experiencing an extraordinarily dynamic phase of development in life sciences, accompanied by exciting future prospects. Over the last two decades, biopharmaceutical drugs, particularly monoclonal antibodies, have rapidly evolved from medical novelties into widely established, reliable therapeutics. Still many serious diseases, such as cancer, rheumatism and Alzheimer's, cannot be cured or can be treated only to a limited extent. Yet medical knowledge continues to expand rapidly through the increasingly globalized scientific effort, and recent breakthroughs in gene and cell therapy promise further progress.

With innovative tools and technologies that cover key steps in medical drug production, Sartorius Stedim Biotech enables the biopharmaceutical industry to achieve relevant results faster, simplifying manufacturing and increasing its overall safety. In this way, we help to ensure that new scientific discoveries can be translated more quickly into effective patient care and that more people have access to better medicines.

This approach has also made us successful in 2019. Sartorius Stedim Biotech continued its dynamic development, closing the year with double-digit growth rates in both sales revenue and earnings. Due to strong demand across all product categories and geographies already at mid-year, we significantly raised our forecast after the first half of 2019. We even exceeded this forecast, with sales growth of 17.0% in constant currencies to around €1.44 billion, and an increase in profit margin by 1.1 percentage points to 29.3%. Mainly driven by economies of scale, operating profit rose by 23.1% to €421.5 million; order intake was up 16.2%. We are also pleased to report that we were again able to increase the number of employees significantly, to slightly over 6,200.

Regionally, Asia | Pacific led growth, reporting a strong gain of 23.9% in sales revenue to €353.8 million. This underscores the enormous growth potential of this region, where many previously underserved patients are now beginning to obtain access to state-of-the-art medical drugs. Especially China performed very strongly again. Sales revenue in the Americas grew yet again by double digits, up 17.1% to €511.6 million.

The EMEA region recorded a gain in sales revenue of 13.0% to €575.1 million, which is strong performance given the more mature markets and our already relatively high market share.

At the same time, we have strengthened and extended our position as a leading international technology partner for the biopharmaceutical industry. After expanding our production capacities, we are well prepared to fully meet the increasing demand of a rapidly growing market in the future.

Our considerably extended production lines for single-use bags and filters that went into operation in the last summer at our site in Yauco, Puerto Rico, give Sartorius Stedim Biotech the scope to supply customers in the Americas with an even broader product range directly from the region.

Moreover, we opened a new cleanroom for single-use bag manufacture at our headquarters in Aubagne, France. We geared up for further growth by establishing additional membrane casting capacity in Göttingen, Germany, and by opening a newly built, expanded facility for cell line development in Ulm, Germany.

Through the acquisition of a majority stake in the Israeli cell culture media developer and manufacturer Biological Industries, Sartorius is now operating its first own production facility for cell culture media and has significantly expanded its range of cell culture media. Next steps of the integration of this business into our Group will include building up further development and manufacturing capacities for such media.

As part of the broader transaction between Danaher and the Sartorius Group, we also signed an agreement in October 2019 to acquire parts of Danaher's life science portfolio. The portfolio offered for acquisition is an excellent strategic fit with the existing Sartorius Stedim Biotech offering, which would be significantly expanded in the area of downstream processing. The planned transaction is currently in the antitrust clearance process within the context of Danaher's acquisition of GE's Biopharma business. We expect this acquisition to be completed around the end of the first quarter of 2020.

The positive business development of our Group also resulted in a further rise in the price of Sartorius Stedim Biotech shares. Particularly in the first half of the year, the company's stock saw significant gains, reaching an all-time high of €149.20 on July 23, 2019. Shares closed the 2019 stock-market year at €147.70, up 69.1% year over year, strongly outperforming the relevant indices such as the CAC 40, SBF 120 and NASDAQ Biotechnology.

As in the past years, we plan to let our shareholders participate appropriately in the positive financial performance of the company: the Board of Directors will submit a proposal to the Annual General Shareholders' Meeting to raise dividends to €0.68 per share.

The future outlook for Sartorius Stedim Biotech continues to be very promising. We assume that the demand for biopharmaceutically manufactured drugs will continue to rise and so will the need for high-performance technologies and solutions for the production of biopharmaceuticals. According to our medium-term targets, we will increase our revenue between 2020 and 2025 to approximately €2.8 billion, with an earnings margin of around 30%. The Asian market, primarily China, will play an increasingly important role in the achievement of these targets.

For 2020, we expect further profitable growth as well. Sales revenue is expected to increase by about 11% to 14% in constant currencies. The underlying EBITDA margin remains projected to rise to approximately 29.5%. The company's capex ratio is set to further decrease to around 8%. The acquisition of parts of Danaher's life science portfolio is not yet included in the above figures. After the closing of this transaction, we will modify our guidance for 2020 accordingly.

The most important building block for the past and future success of Sartorius Stedim Biotech is our team. More than 6,200 staff members, including 566 new employees added worldwide in 2019, are dedicating their expertise and efforts to drive the progress of Sartorius Stedim Biotech. On behalf of the entire Board of Directors, I would like to express my sincere thanks for their willingness to always go the extra mile.

I would also like to thank you, our valued customers, business partners, and shareholders. Based on the trust you have placed in us throughout the year, you have contributed importantly to the positive development of Sartorius Stedim Biotech. We would be pleased if you would continue to accompany us in 2020 and beyond, and share the future success of our company.

Sincerely,

Joachim Kreuzburg

Chairman of the Board and CEO

Board of Directors

Board of Directors

The Board of Sartorius Stedim Biotech is the central management and supervisory entity of the company, and is composed of eight members. The directors are appointed for a three-year term.

Joachim Kreuzburg
Chairman | CEO

Pascale Boissel

Amélie Buton

Susan Dexter

René Fáber

Anne-Marie Graffin

Lothar Kappich

Henri Riey

Sartorius Stedim Biotech Shares

Facts about the Share[1)]

ISIN	FR0013154002
Liquidity provider	Gilbert Dupont
Stock exchange	Euronext Paris
Market segment	Local Securities - Compartment A (Large Caps)
Indexes	SBF 120; CAC All-Tradable, All Shares, Mid 60, Healthcare; STOXX Europe 600; MSCI France
Number of shares	92,180,190
thereof Sartorius AG	74.3%
thereof free float	25.7%
Voting rights	160,978,400
thereof Sartorius AG	85.0%
thereof free float	15.0%

1) As of December 31, 2019

Global Stock Markets Post Price Gains

The world's major stock markets started off 2019 with strong price gains in the first quarter. Despite a weakening global economy and economic policy conflicts, such as the customs and trade disputes between the USA and China, share prices continued to rise further. In particular, interest rate cuts by the U.S. Federal Reserve had a positive impact on stock markets. Supported by expansive monetary policy, the Dow Jones reached a new record high in the reporting year. The leading French stock index CAC 40 also soared in the fourth quarter, approaching its historical high, and closed the year under review at 5,978 points, up 26.4%. The SBF 120 and CAC Mid 60, home to Sartorius Stedim Biotech shares, increased 25.2% and 19.2%, respectively. The index relevant to the biotech industry, NASDAQ Biotechnology, registered a gain of 24.4%.

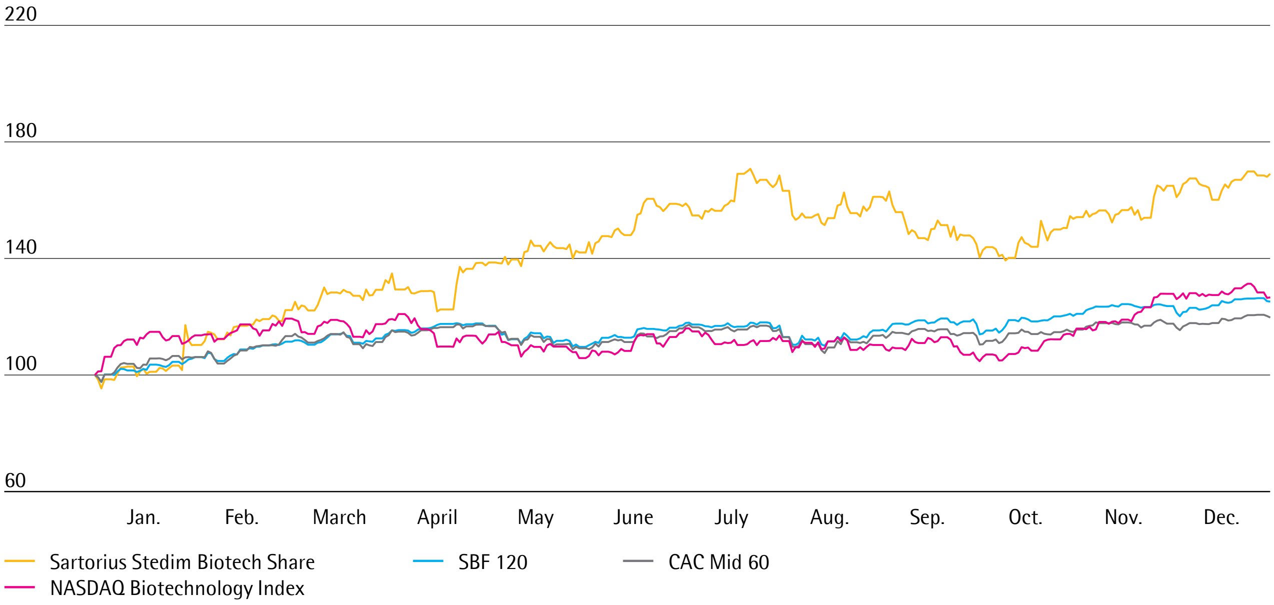
Sartorius Shares Rise Substantially

The Sartorius Stedim Biotech share price developed positively yet again. Contributing factors included better-than-expected business performance and raised guidance halfway through 2019, as well as the announcement of two acquisitions. Especially in the first half of the year, the shares saw significant gains and reached an all-time high of €149.20 on July 23, 2019. In the following months, the shares depreciated slightly, but recovered again after a strong fourth quarter, closing the 2019 stock-market year at €147.70 – up 69.1% year over year.

Sartorius Stedim Biotech Share in €[1)]
January 1, 2015, to December 31, 2019

[1)] January 1, 2015, to May 9, 2017, adjusted for stock split

Sartorius Stedim Biotech Share[1)] **in Comparison to the SBF 120, CAC Mid 60 and NASDAQ Biotechnology Index (indexed)**
January 1, 2019, to December 31, 2019



Investor Relations Activities

Sartorius Stedim Biotechs' investor relations activities follow the objective of making the current and future development of the company transparent for its stakeholders. To achieve this objective, Sartorius maintains an ongoing, open dialog with shareholders, potential investors and financial analysts.

Besides providing quarterly, first-half and annual reports, we inform the capital market and the interested public at quarterly teleconferences and in regularly published press releases about the current development of our business and other material events at the company. Moreover, Group management and our IR team were present for talks and factory tours with capital-market participants at our sites in Aubagne, France, and in Göttingen, Germany. Management and IR specialists also took part at conferences and roadshows in various financial centers.

All information and publications relating to our company and its shares are provided on our website at www.sartorius-stedim.com.

Analysts

The recommendations of financial analysts serve as a foundation for the decisions of private and institutional investors when investing in shares. Currently, eight institutions regularly prepare reports and updates on Sartorius Stedim Biotech shares.

Research Coverage

Date	Company	Recommen-dation	Target price in €
January 31, 2020	UBS	Hold	168.00
January 31, 2020	Société Génerale	Buy	189.00
January 30, 2020	J.P. Morgan	Buy	180.00
January 29, 2020	Janney	Hold	165.00
January 28, 2020	Oddo BHF	Buy	171.00
October 22, 2019	Intron Health	Buy	150.00
September 19, 2019	AlphaValue	Sell	121.00
October 23, 2018	Gilbert Dupont	Sell	119.00

Key Figures for Sartorius Stedim Biotech Share[1)]

		2019	2018	2017	2016	2015
Share price[2)] in €	Reporting date	147.70	87.35	60.29	59.97	58.90
	High	149.20	119.80	72.49	68.84	59.67
	Low	83.30	60.35	51.50	51.17	26.89
Dividends[3)] in €		0.68	0.57	0.46	0.42	0.33
Total dividends paid[3)] in millions of €		62.7	52.5	42.4	38.7	30.7
Payout ratio[3,4)] in %		23.8	24.0	23.5	21.9	22.1
Dividend yield[5)] in %		0.5	0.7	0.8	0.7	0.6
Market capitalization in millions of €		13,615.0	8,051.9	5,557.5	5,528.0	5,430.8
Average daily trading number of shares		63,935	80,140	52,753	46,752	44,115
Trading volume of shares in millions of €		2,037.8	1,874.9	818.2	714.2	485.2
CAC MID & SMALL (closing prices of the year)		13,494	11,337	14,456	11,848	11,054
SBF 120 (closing prices of the year)		4,704	3,756	4,251	3,836	3,664

1) For 2015, share prices, dividends and average daily trading number of shares adjusted for stock split; rounded values
2) Daily closing price
3) For 2019, amounts suggested by the Board of Directors and subject to approval by the Annual General Shareholders' Meeting
4) Based on the underlying net result
5) Dividends in relation to the corresponding closing prices of the year

Sources: Euronext; Bloomberg

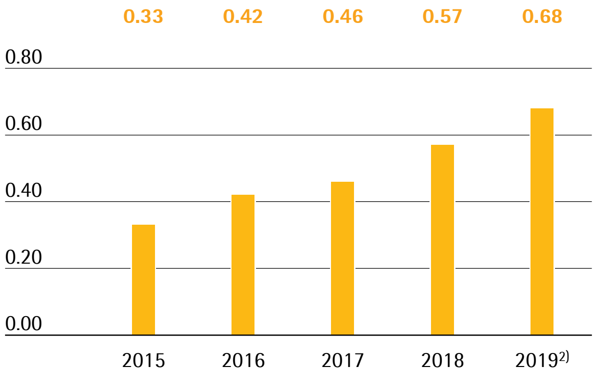
Dividends

Sartorius Stedim Biotech strives to enable its shareholders to participate adequately in the company's success and has continuously increased its dividend in recent years. In line with this objective, we basically follow the policy of paying out a relatively stable share of relevant net profit to our shareholders.

Relevant Net Profit

The Board of Directors will submit a proposal to the Annual General Shareholders' Meeting on March 24, 2020, to pay a dividend of €0.68 per share from the underlying net profit of €262.9 million for fiscal 2019, up from the previous year's figure of €0.57. If approved, the dividend would increase for the eleventh consecutive year, and the total profit distributed would rise by a considerable 19.3%, from €52.5 million the previous year to €62.7 million. The corresponding dividend payout ratio would be 23.8% compared with 24.0% in the previous year. In relation to the shares' closing price of €147.70 on December 31, 2019, the dividend yield would be 0.5% (previous year: 0.7%).

Dividends[1)]
in €



[1)] 2015 adjusted for stock split; rounded values

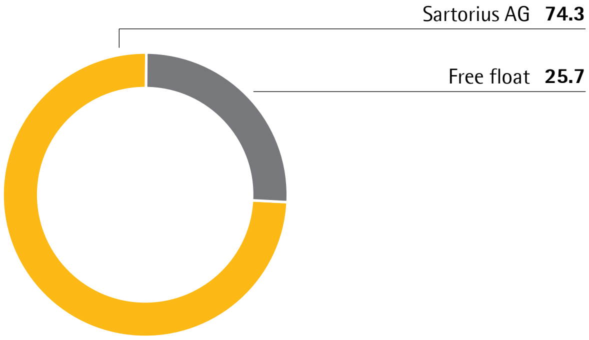
[2)] Amount suggested by the Board of Directors and subject to approval by the Annual General Shareholders' Meeting

Shareholder Structure

As a consequence of the stock split and the increase in the individual par value of the company's shares, Stedim Biotech S.A.'s issued capital amounted to €18.4 million as of December 31, 2019, and was divided into 92,180,190 shares, each with a calculated par value of €0.20. As some of the shares confer double voting rights, there were 160,978,400 voting rights total as of the reporting date.

As of December 31, 2019, Sartorius AG has held 74.3% of the Stedim Biotech S.A.'s share capital and 85.0% of the voting rights outstanding. The remaining 25.7% of Stedim Biotech S.A. shares are in free float, corresponding to 15.0% of the voting rights outstanding.

Shareholding Structure
in % of share capital



Management Report

02

Structure and Management of the Group

Group Legal Structure

Sartorius Stedim Biotech is a globally operating company with subsidiaries in more than 20 countries and more than 6,200 employees worldwide. The parent company of the Sartorius Stedim Biotech Group is Sartorius Stedim Biotech S.A., headquartered in Aubagne, France.

Sartorius Stedim Biotech S.A. is listed on the Euronext stock exchange in Paris. Approximately 74% of the share capital and around 85% of the voting rights of Sartorius Stedim Biotech S.A. are held by Sartorius AG.

Sartorius AG is a leading international provider of bioprocess and laboratory equipment and technology and is headquartered in Göttingen, Germany. It is listed on the German Stock Exchange and operates two divisions: the bioprocess business as a subgroup under its parent corporation Sartorius Stedim Biotech S.A., and the laboratory business as a further subgroup.

The consolidated financial statements of the Sartorius Stedim Biotech Group include Sartorius Stedim Biotech S.A. and all affiliates in which Sartorius Stedim Biotech S.A. has a controlling interest pursuant to IFRS 10.

Organization and Management of the Group

The Sartorius Stedim Biotech Group is largely organized by function on a worldwide basis. Accordingly, the respective management responsibilities are performed along the company's core functions across all sites and regions.

This global functional organization forms an effective platform for central strategic control and for fast, efficient collaboration and execution within the Group. It enables the company to realize its total solutions provider strategy and position itself effectively in respect of global customers.

The Board of Directors of Sartorius Stedim Biotech S.A. is composed of eight members, one executive director and seven non-executive directors.

Implementing the Group's various strategies and initiatives at the local level is the responsibility of the national affiliates.

The management bodies of the local companies run their organizations in accordance with applicable statutory provisions, articles of association, and rules of procedure, and in keeping with the principles of corporate governance that apply throughout the Sartorius Stedim Biotech Group worldwide. Please see details of the Board of Directors in the section "Corporate Governance."

Changes in the Group Portfolio

Sartorius Stedim Biotech acquired a majority stake in Biological Industries, an Israeli cell culture media developer and manufacturer. For approximately €45 million in cash, just over 50% of the shares of the company were taken over from its owners, Kibbutz Beit Haemek and the private equity fund Fortissimo Capital. An option to acquire a further 20% of the shares within three years was also agreed upon.

Biological Industries focuses on cell culture media, particularly for cell and gene therapy, regenerative medicine and other advanced therapies. Founded in 1981, the company currently employs approximately 130 people mainly at its headquarters close to Haifa, Israel. Sales revenue in 2019 totaled more than €20 million, with a double-digit underlying EBITDA margin.

In October 2019, Sartorius Stedim Biotech agreed to acquire parts of Danaher's Life Science portfolio as part of a broader transaction between Danaher and the Sartorius Group. The total purchase price is approximately $750 million in cash of which about a quarter will be allocated to the businesses purchased by Sartorius Stedim Biotech. The final purchase price allocation is subject to the closing process.

The businesses to be acquired by Sartorius Stedim Biotech had combined sales revenue of approximately $70 million in 2018 and strong double-digit profit margins. They employ approximately 110 people worldwide.

The proposed transaction is expected to be completed in the first quarter of 2020 and is subject to customary closing conditions and the successful acquisition of the GE Biopharma business by Danaher.

Financial Controlling and Key Performance Indicators

The Sartorius Stedim Biotech Group is managed using a number of key performance indicators, which are also decisive for determination of the variable remuneration component for the Executive Committee and managers.

The key management parameter that Sartorius Stedim Biotech uses to measure the development of its size is currency-adjusted growth of sales revenue.

The key performance measure for profitability is EBITDA adjusted for extraordinary items, i.e. underlying EBITDA, and the corresponding margin. For a definition of this term and more information on its presentation, see the Glossary on page 212.

Regarding the debt financing capacity of the Sartorius Stedim Biotech Group, a further key indicator is the ratio of net debt to underlying EBITDA for the last twelve months.

Moreover, the capex ratio, i.e. capital expenditures relative to sales revenue, represents a key control parameter.

The following financial and non-financial indicators are also reported on a regular basis:

- Order intake
- Underlying net profit | Earnings per share
- Net profit | Earnings per share
- Equity ratio
- Net working capital
- Net cash flow from operating activities
- Number of employees

The annual financial forecast published at the beginning of a fiscal year for the Group generally refers to the development of sales revenue and of underlying EBITDA margin. The expected capex ratio, as well as a directional forecast for the ratio of net debt to underlying EBITDA, is also indicated for the Group.

Business Model, Strategy and Goals

Market and Strategic Positioning

As a leading partner of the biopharmaceutical industry, we help our customers to develop their production processes and manufacture medications more efficiently. Our objective is to achieve scientific and technological progress in life sciences and in bioprocessing to enable more people to have access to advanced therapies and medicines.

We focus on this attractive market, which is characterized by strong growth momentum and long-term trends. Primary growth drivers are a growing world population and an increase in age-related diseases in industrialized countries. In addition, rising incomes in emerging countries are leading to improved access to healthcare and rising demand for medications. Medical advances are also driving the ongoing development and approval of new biopharmaceuticals as well as of emerging biosimilars, which are highly similar to established biologics already licensed, and account for a share of the biopharma market that is currently still small, but fast-growing. As a result of these factors, the volumes of biotech medications are steadily increasing and so is the demand for the appropriate production technologies. This market is largely independent of business cycles.

The maturity and intensity of competition in this still comparably young biopharmaceutical industry are successively increasing. In addition to achieving scientific success, our customers will find it more important, in view of mounting cost pressure on healthcare systems, to increase the efficiency of their research, development and manufacturing processes. We help them meet this challenge by further developing our product portfolio. One of the decisive success factors of Sartorius Stedim Biotech is to use technology in order to differentiate ourselves from our competitors. Our innovative power rests on three pillars: our own specialized product development, the integration of innovations through acquisitions, and alliances with partners in complementary fields.

Another competitive advantage of Sartorius Stedim Biotech is its broad understanding of applications, which is based on its clear focus on the sector. We are thoroughly familiar with our customers' entire added-value chains, especially the interactivity of the systems in these chains. All this makes us a strategic partner of these customers who drive forward innovations in bioprocess technology.

Products & Services

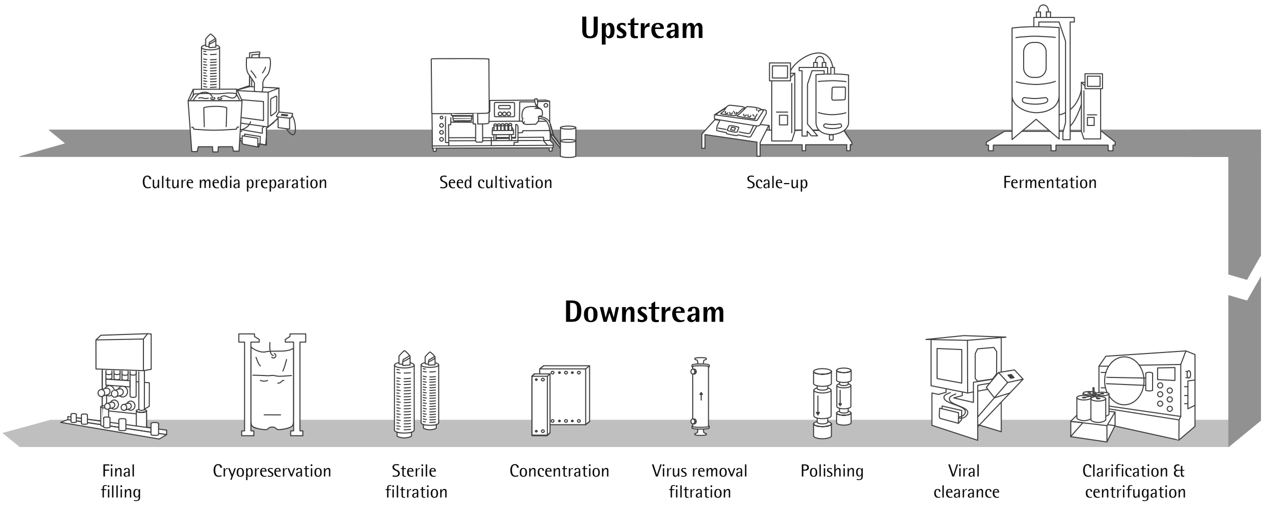
We offer a broad portfolio of products that focuses on all major steps in the manufacture of a biopharmaceutical, as well as in process development, as prerequisite procedures. Our technologies cover, inter alia, cell line technologies, cell culture media, bioreactors, and a wide range of products for separation, purification and concentration of biological intermediates and finished products, as well as solutions for their storage and transportation. Sartorius Stedim Biotech also offers data analytics software for modeling and optimizing processes of biopharmaceutical development and production. In its core technologies, the company has leading market positions with high double-digit market shares.

The breadth of our product portfolio sets us apart from our competitors. We provide customers with an entire production unit from a single source, as well as assist with preceding project planning, process integration and subsequent validation.

As an innovation leader, Sartorius Stedim Biotech is among the very first biopharmaceutical suppliers to have specialized in single-use technologies, which account for approximately three-quarters of the Group's sales revenue. Due to their cost advantages and their greater flexibility and safety compared with reusable technologies, the pharmaceutical industry is increasingly relying on single-use products. Particularly in pre-commercial production processes, single-use products have almost completely supplanted classic stainless steel components. Industry observers believe that market penetration is likely to continue as commercial production also increasingly moves toward single-use products. As a result, we generate a large share of sales from repeat business. The high approval requirements placed on our customers' products are also contributing to this growth. Because our customers' production processes must be validated by the health authorities responsible, the technological components initially used can be replaced only at considerable expense once they have been approved. The manufacturers of medications are therefore closely tied to the suppliers for the life cycle of a medication. Beyond this, our broad and stable customer base that we address through our specialized sales force, directly for the most part, also contributes to this favorable risk profile.

The strong strategic positioning of Sartorius Stedim Biotech and the above-average expansion of the sector are a good foundation for profitable growth in the future as well. Beyond realizing our organic development potential, we also aim to further expand the portfolio through complementary acquisitions and alliances.

Technologies for the entire added-value chain in biopharmaceutical production



Sartorius Stedim Biotech 2020 and 2025 Strategies

In 2011, Sartorius Stedim Biotech presented its strategy and targets for profitable growth up to 2020 according to which sales revenue is projected to increase in a range of around €1.5 to €1.6 billion with an underlying EBITDA margin of about 29% to 30%.

While the targets for 2020 still continue to apply unchanged, management extended its projected time horizon and announced its long-term targets for up to 2025. Accordingly, Sartorius Stedim Biotech plans to increase its revenue in the period of 2020 to 2025 to around €2.8 billion, given the high market dynamics and the company's strong strategic positioning. The underlying EBITDA margin is forecasted to increase to around 30%.

In these projections, management takes into account that any future acquisitions in the Group would initially be margin-dilutive and that no significant changes in key exchange rates would occur.

These targets are being implemented by various growth initiatives with the following focal points:

Expansion of the Product Portfolio

Sartorius Stedim Biotech offers a broad product portfolio that is continuously expanded in line with the value-added chain of the biopharmaceutical industry. Aside from our own research and development activities and strategic partnerships, acquisitions that are complementary to or extend our strengths appropriately will remain part of our strategy. We see opportunities in digital networking of products, for example, in the integration of software solutions for bioprocess production control, among others. Expansion into adjacent applications, such as regenerative medicine, is also conceivable. The focus of our efforts will be products that offer solutions to the challenges our customers face and that make our offering even more attractive from the customers' perspective.

Regional Growth Initiatives

North America and Asia are the key focal areas of our regional growth strategy.

North America is the world's largest market for bioprocess equipment. Yet because it is home to our main competitors, Sartorius Stedim Biotech has lower market share in this region than in Europe and Asia. Accordingly, the company is striving to gain additional market share, primarily by strengthening its sales and service capacities.

A further strategic focus is on China. This market offers sizable growth potential owing to rising private and public healthcare expenditures and the rapid development of regional biopharmaceutical plants. To benefit from the dynamic development of this market, Sartorius Stedim Biotech has already been investing heavily in its sales infrastructure and plans to expand production capacity levels there over the medium term.

Optimization of Work Processes

Sufficient production capacity and a powerful supply chain are an essential foundation of future growth. For this reason, in recent years Sartorius Stedim Biotech has substantially expanded its capacities for membranes, filters and single-use bags at various Group sites. Beyond this, implementation of a new ERP system based on Group-wide standardized business processes was completed in 2019.

Following these significant infrastructural expansions, our focus is increasingly shifting to optimization of our processes. Thus, we are driving forward digitalization and process automation in all parts of the company to further enhance the performance power of our supply chain and our customer contact interfaces. This also includes extending our activities in the areas of e-commerce, digital marketing and analytics.

Sector Conditions

Sartorius Stedim Biotech serves customers mainly in the biopharmaceutical industry, which makes its business particularly sensitive to the development of this industry.

Strong Growth in the Biopharmaceutical Market

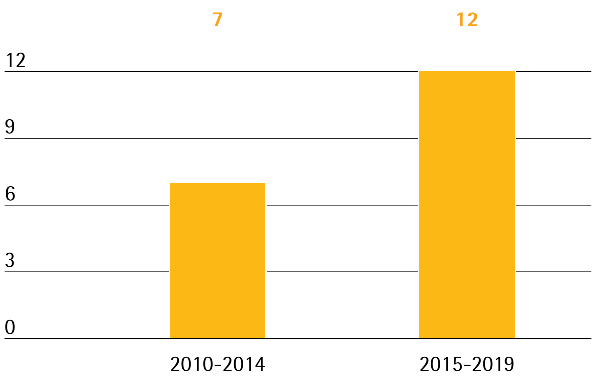
According to estimates from several market observers, the global pharmaceutical market showed positive development once again in 2019, with an increase of approximately 4% to 5%. Within this market, the segment for medications and vaccinations manufactured using biotech methods has grown faster than the rest of the pharmaceutical market for many years now. In 2019, the biopharmaceutical market was estimated at a volume of €235 billion, an increase of approximately 8% to 9% over the previous year. The steadily growing significance and acceptance of biologics is reflected in its increasing share of the sales revenue in the global pharmaceutical market and the development activities of the pharmaceutical industry. For example, biopharmaceutical compounds account for more than 40% of the R&D pipeline.

Manufacturers of biopharmaceutical development and production technologies were able to increase sales markedly in 2019. There was once again a dynamic rise in demand in emerging countries – especially China – where many commercial biopharmaceutical production facilities were erected in recent years to meet domestic demand. But there was also considerable investment in the United States and Europe, where the largest fermenter capacities are located.

Market growth fundamentally depends more on medium- to long-term trends than on short-term economic developments. In the process, significant impetus is provided by the world's rising demand for medications, and the approval and market introduction of innovative biopharmaceuticals. The expanded range of indications for approved medications and their further market penetration also contribute to growth. During the reporting year, the U.S. Food and Drug Administration (FDA) approved 11 new biologics.

A growing number of active substances manufactured using biotech production methods is being approved for the treatment of rare illnesses that have been untreatable thus far. There has been recent progress in cell and gene therapies: the United States and Europe granted market approval to two more therapies in 2019. The rising number of approved biopharmaceuticals as well as an increasing variety of therapy types and substance classes coupled with growing demand for medications are the main drivers for the worldwide increase in production capacities for biopharmaceuticals.

Average Number of New Approvals of Biotech Medications in the USA per Year



Biosimilars, or copycats of biopharmaceuticals whose patents have expired, are playing an increasingly important role in the biotechnology market. At an estimated €8 billion, their sales volume in 2019 was still comparatively small, but the market is expected to grow strongly during the years to come owing to the expiration of several patents for high-volume pharmaceuticals. Thus an average annual growth rate of around 30% is projected for this segment through 2022. Further progress was made in the reporting period through the approval and market launch of new biosimilars. In particular in the USA, where regulatory, patent law-related and marketing hurdles have resulted in comparatively slow market penetration of biosimilars, 9 medications were approved.

Single-Use Systems for Biopharmaceutical Production Continue to Gain Importance

Biotech production methods are much more complex and cost-intensive than traditional methods for producing medications. Consequently, manufacturers and suppliers are continually looking to develop more efficient technologies. Single-use products play a decisive role in this effort: they require significantly less capital expenditure, reduce costs for cleaning and validation and minimize downtime. They also offer greater flexibility in production and help accelerate time to market.

Owing to these advantages, single-use technologies are already an established part of many process steps. Single-use systems are primarily employed in pre-commercial development activities and production phases, and in small-batch manufacturing. It can be expected that single-use technologies will become increasingly popular for the production of high-volume commercial quantities. This is particularly relevant to the production of biotech drugs, whose clinical development takes place in single-use systems. Sartorius offers the sector's most extensive portfolio of single-use technologies, with scalable products for every step of manufacturing. The company is also actively helping the biopharmaceutical industry convert to these technologies in the production of medications.

Moderate Growth in the Global Laboratory Market

The global laboratory market reached a volume of €54 billion in the reporting year and is growing annually by 3% to 4.5%, according to estimates from several market observers. Market growth is related to the levels of research and development spending in the individual end markets, among other factors.

Laboratories from the pharmaceutical and biopharma industry are the leading customers for laboratory instruments and consumables. Against the backdrop of globally rising demand for medications, the industry is continuously investing in research to find new active substances, and in the laboratory equipment needed to perform this work. The focus is being placed on technologies related to process automation and innovative analytical instruments that are equipped with improved or new functionalities. Sales generated by key laboratory equipment companies with biopharma customers grew more strongly during the reporting year than did those with customers in other industries.

Research and quality-assurance labs in the chemical and food industry are another important customer group. This segment's demand for laboratory products depends in part on economic trends. Additional momentum could also be generated by regulatory changes, such as stricter requirements for quality-assurance tests in the food industry. During the reporting year, the economy of key business regions continued to slow. As a result, these end markets tended to generate modest growth.

Academic and public-sector research institutions also use laboratory instruments and consumables. Growth in demand is related to such factors as government budgets and funding programs, all of which can vary from one country to another. In the United States, the National Institute of Health (NIH) is the leading government agency for biomedical research and the largest agency that provides research funding around the world. The NIH's budget has constantly grown over the last six years. During the reporting year, it climbed by about 5.4% to €34 billion. The European Union is also planning to boost its funding programs for research and innovation starting in 2020. In recent years, China has sharply increased government R&D funding, a trend that has fueled dynamic growth in the laboratory market there. The country plans to continue increasing the share of research spending in GDP through 2020.

Competition

The primary means by which companies in the biotechnology market differentiate themselves from competitors are innovative process, and the quality and performance of their products. The biotechnology sector is constantly discovering new areas of application and expects suppliers to be equally fast-moving and creative in developing new equipment for the manufacture of biotech products. New suppliers, in particular, seek to capitalize on the opportunities inherent in this environment to gain a foothold in the market with carefully targeted niche products. The more established suppliers, meanwhile, are expanding their product range continuously.

We generate around 90% of our sales revenue from validated processes in which replacing products during the production cycle is very expensive, so we receive a high proportion of follow-up and repeat business. The particular strength of Sartorius Stedim Biotech lies in its integrated process solutions: we offer the broadest range in the industry, from drug discovery and development in the lab to commercial manufacture of the final product. Our strategic focus on single-use products gives us a further edge over the competition. Sartorius Stedim Biotech has leading positions on the global market for bioprocess filtration, fermentation, cell cultivation, fluid management and membrane chromatography.

Most of our competitors are multinationals based in the USA. Certain business units of Merck KGaA, Danaher Corp., General Electric Company and Thermo Fisher Scientific Inc. are among our main rivals in the bioprocess area; Thermo Fisher and Merck are key players in the laboratory field. We also face competition from smaller companies in individual segments. During the reporting year, Danaher announced the acquisition of General Electric's biopharmaceutical business. Regulatory approvals for the transaction are expected during the first quarter of 2020.

Sources: IQVIA Institute: The Global Use of Medicine in 2019 and Outlook to 2023, January 2019; Evaluate Pharma: World Preview 2019, Outlook to 2024, June 2019; BioPlan: 16th Annual Report and Survey of Biopharmaceutical Manufacturing Capacity and Production, April 2019; Frost & Sullivan: 2019 Mid-year Report: Forecast and Analysis of the Global Market for Laboratory Products, May 2019; BCC Research: Biosimilars: Global Markets, March 2018; Daedal Research: Global Biologics Market: Size, Trends & Forecasts, December 2019; www.fda.gov

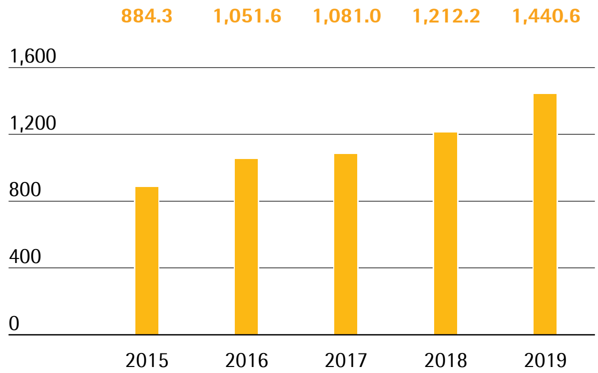
Group Business Development

Sales Revenue and Order Intake

In fiscal 2019, Sartorius Stedim Biotech continued on its growth track, with double-digit gains in sales revenue and order intake. This development was fueled by ongoing high demand across all regions and product categories and was based on very healthy end-market dynamics. The Group's sales revenue rose in constant currencies by 17.0% to €1,440.6 million (reported: +18.8%) and thus slightly more strongly than indicated in the company's guidance, which had been revised considerably upwards at mid-year 2019 to 12% to 16%. The consolidation of Biological Industries as of mid-December 2019 did not have a noteworthy effect on growth performance.

Order intake also rose significantly in the reporting period by 16.2% in constant currencies to €1,543.5 million. On a reported basis, this gain was 18.1%.

Sales Revenue 2015 to 2019
€ in millions

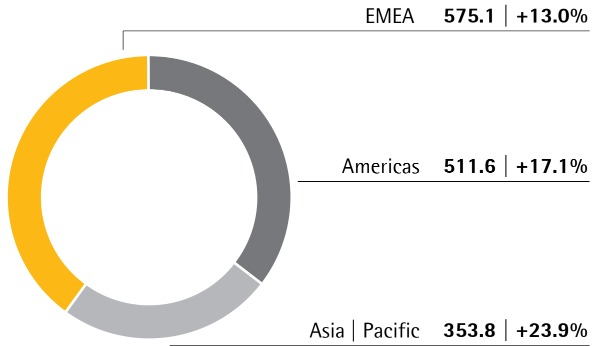


Sales Revenue and Order Intake

€ in millions	2019	2018	in % reported	in % const. fx
Sales Revenue	1,440.6	1,212.2	18.8	17.0
Order Intake	1,543.5	1,307.3	18.1	16.2

Geographically, all regions contributed to consolidated growth. EMEA, the region generating the highest revenue for the company with around 40% of its total sales, recorded a very solid gain of 13.0% to €575.1 million. In the Americas region, sales increased substantially against a strong prior-year base by 17.1% to €511.6 million, now representing around 35% of total revenue. The Asia | Pacific region, which accounted for around 25% of the Group's sales, developed very positively yet again and achieved the highest growth rates: sales clearly rose by double digits, 23.9%, to €353.8 million, fueled by dynamic project business. All growth rates are in constant currencies, unless otherwise stated.

Sales Revenue and Growth[1] by Region[2]
€ in millions unless otherwise specified



[1] In constant currencies
[2] Acc. to customers' location

Development of Costs and Earnings

In the reporting year, the cost of sales increased by 18.8% to €692.2 million. The cost of sales ratio remained unchanged at 48.1%.

Selling and distribution costs rose under-proportionately in comparison to sales growth, by 11.8% to €240.6 million. Consequently, the ratio of these costs to sales revenue decreased from 17.8% in 2018 to 16.7% in 2019.

Expenses for research and development increased year over year by 30.7% to €79.2 million. The ratio of R&D expenses to sales revenue was 5.5%, slightly above the prior-year level of 5.0%.

Concerning general administrative expenses, Sartorius Stedim Biotech reported an increase of 13.8% to €76.2 million. In relation to sales revenue, general administrative expenses decreased from 5.5% in the previous year to 5.3% in the reporting year.

At - €20.3 million, the balance of other operating income and expenses was significantly lower than the 2018 comparative figure of €13.5 million. These figures essentially comprise extraordinary items of -€16.8 million (previous year: €12.7 million) and were related to expenses incurred for various corporate projects and the implementation of new IT systems. The reason for the year-over-year decrease is that in 2018, extraordinary items as well as the balance of other operating income and expenses were strongly impacted by one-time income of €35.2 million resulting from the modification of the contract with the life science company Lonza in the area of cell culture media.

The absence of this non-recurring income in the reporting period is also reflected in the development of EBIT, which grew by 10.6% to €332.0 million against the backdrop of higher extraordinary expenses as well as depreciation and amortization. The EBIT margin fell to 23.0% (previous year: 24.8%).

The financial result was -€14.4 million in 2019 relative to -€15.7 million in 2018. This was essentially attributable to valuation effects related to foreign currency liabilities and hedging instruments.

In the reporting year, tax expenses of €81.4 million were higher than the prior-year total of €74.6 million. The company's tax rate was 25.6% compared with 26.2% in the year before.

In the reporting year, net profit attributable to shareholders of Sartorius Stedim Biotech S.A. amounted to €234.6 million, up from €208.1 million a year earlier.

Statement of Profit or Loss

€ in millions	**2019**	2018	in %
Sales revenue	1,440.6	1,212.2	18.8
Cost of sales	–692.2	–582.6	–18.8
Gross profit on sales	748.3	629.6	18.9
Selling and distribution costs	–240.6	–215.2	–11.8
Research and development costs	–79.2	–60.6	–30.7
General administrative expenses	–76.2	–67.0	–13.8
Other operating income and expenses	–20.3	13.5	–250.3
Earnings before interest and taxes (EBIT)	332.0	300.2	10.6
Financial income	6.9	5.3	28.4
Financial expenses	–21.3	–21.0	–1.2
Financial result	–14.4	–15.7	8.1
Profit before tax	317.6	284.5	11.6
Income taxes	–81.4	–74.6	–9.2
Net result	236.2	210.0	12.5
Attributable to:			
Equity holders of SSB S.A.	234.6	208.1	12.7
Non-controlling interest	1.6	1.9	–15.7

Earnings

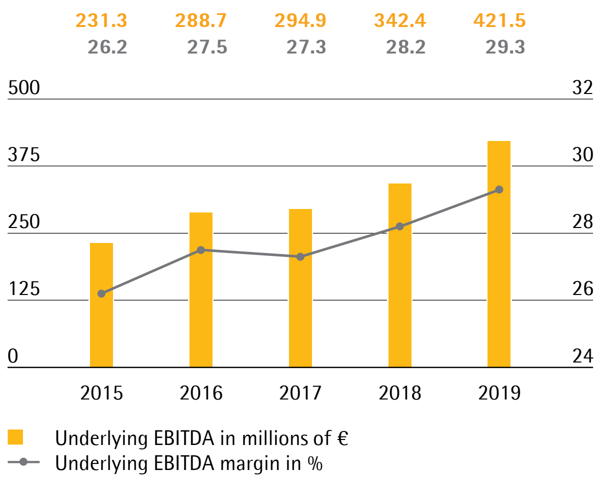
At the Sartorius Stedim Biotech Group, earnings before interest, taxes, depreciation and amortization (EBITDA) are used as the key profitability measure. To provide a complete and transparent picture of the Group's profitability, also in an international comparison, we report earnings adjusted for extraordinary items (underlying EBITDA). For more information about definitions, please refer to the Glossary on page 212. The underlying presentation is reconciled with the EBITDA key indicator (see Glossary) as follows:

Reconciliation between EBIT and Underlying EBITDA

€ in millions	**2019**	2018
EBIT	332.0	300.2
Extraordinary items	16.8	–12.7
Depreciation and amortization	72.7	54.9
Underlying EBITDA	421.5	342.4

In fiscal 2019, Sartorius Stedim Biotech increased its earnings significantly. Underlying EBITDA rose overproportionately relative to sales by 23.1% to €421.5 million. The Group's respective underlying EBITDA margin increased to 29.3% (2018: 28.2%), driven by economies of scale and despite a higher share of project business. Around half of a percentage point of the margin increase was attributable, as expected, to the IFRS 16 Standard to be applied for the first time in 2019.

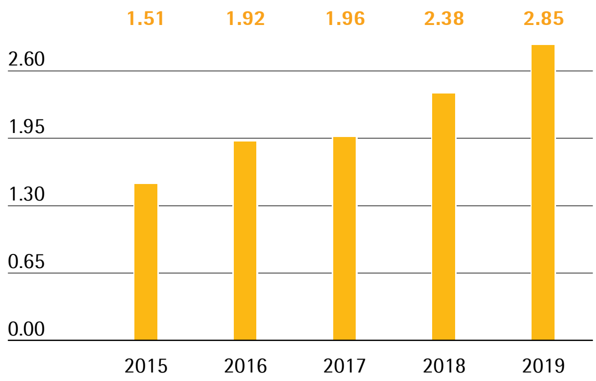
Underlying EBITDA and Margin[1)]



1) Adjusted for extraordinary items

The underlying net result after non-controlling interest for the Group rose strongly from €219.3 million a year ago to €262.9 million in fiscal 2019. This figure is the basis for calculating the profit to be appropriated and is computed by adjusting for extraordinary items, eliminating non-cash amortization of €13.8 million (previous year: €16.8 million), and is based on the normalized financial result (see Glossary), as well as the corresponding tax effects for each of these items. Underlying earnings per share surged by 19.9% from €2.38 a year earlier to €2.85.

Underlying Earnings per Share[1)2)]
in €



1) Excluding extraordinary items
2) 2015 adjusted for stock split; rounded values

€ in millions	**2019**	2018
EBIT (operating result)	**332.0**	**300.2**
Extraordinary items	16.8	–12.7
Amortization | IFRS 3	13.8	16.8
Normalized financial result[1)]	**–5.1**	**–5.3**
Normalized income tax (26%)[2)]	–92.9	–77.7
Underlying net result	**264.5**	**221.2**
Non-controlling interest	–1.6	–1.9
Underlying net result after non-controlling interest	**262.9**	**219.3**
Underlying earnings per share (in €)	2.85	2.38

1) Financial result excluding fair value adjustments of hedging instruments, as well as currency effects from foreign currency loans
2) Underlying income tax, based on the underlying profit before taxes and excluding non-cash amortization

See Glossary for the definitions of the totals listed above.

Research and Development

Activities in product R&D encompass both new and advanced in-house product developments in our own core technologies, as well as the integration of new products through collaborations and acquisitions.

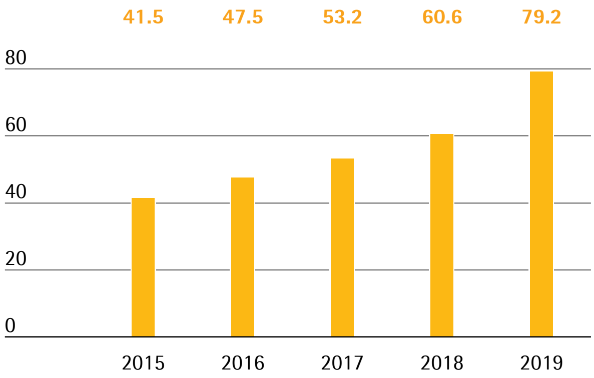
Development activities at Sartorius Stedim Biotech focus on technology areas such as membranes, which are the core component of our filter products; various technology platforms such as single-use containers and sensors; and control technologies for processes such as fermentation. Additional focal areas include developments in materials and components such as plastics, elastomers and intelligent polymers; expanded data analysis; and cell line development.

In the reporting period, Sartorius Stedim Biotech signed a cooperation agreement with Novasep for the development of a membrane-based chromatography system. Novasep is an established manufacturer of resin-based batch and continuous chromatography systems, and Sartorius Stedim Biotech offers innovative single-use solutions for membrane chromatography. The combination of Novasep's established chromatography platform and Sartorius` membrane solutions is intended to bring together the strengths of both technologies. The resulting system is designed to improve the efficiency of the purification step and strengthen the downstream positioning of Sartorius Stedim Biotech.

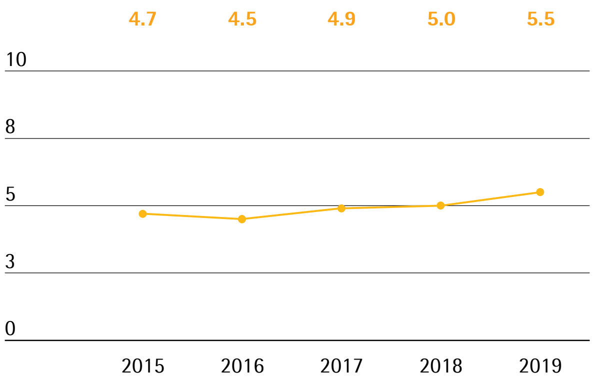
Our largest site for product development is Göttingen, Germany; other key sites are Aubagne, France; Guxhagen, Germany; Bangalore, India; Bohemia, New York, United States; Royston, United Kingdom; and Umeå, Sweden.

The Sartorius Stedim Biotech Group stepped up its research and development activities in the reporting year, increasing spending in this area by 30.7% to €79.2 million (previous year: €60.6 million). The ratio of R&D costs to sales revenue slightly increased to 5.5% compared to 5.0% a year earlier.

Research & Development Costs
€ in millions



Research & Development Ratio
In % of sales revenue



The International Financial Reporting Standards (IFRS) require that certain development costs be capitalized on the balance sheet and amortized over subsequent years. In the reporting year, these development investments amounted to €25.9 million compared with €22.8 million the year before. This amounts to a share of 24.6% (2018: 27.4%) of the Group's total R&D expenses. Regular depreciation related to capitalized development costs totaled €6.1 million in the reporting period (2018: €4.3 million). These expenses are disclosed in the cost of sales.

To protect our know-how, we pursue a targeted intellectual and industrial property rights policy. We systematically monitor compliance with these rights and review from a cost | benefit viewpoint whether it is necessary to continue to maintain individual rights.

The number of applications for intellectual property rights filed in 2019 totaled 108 compared with 125 in the previous year. As a result of the applications submitted in the past years, we were issued 222 patents and trademarks (previous year: 154). As of the balance sheet date, we had a total of 2,453 patents and trademarks in our portfolio (previous year: 2,245).

	2019	2018
Number of patent and trademark applications	108	125
Registered patents and trademarks	222	154

Capital Expenditures

Against the backdrop of strong organic growth, Sartorius Stedim Biotech made above-average investments in recent years in the development of new capacity. In 2019, capital expenditures were related, inter alia, to the expansion of the plant in Yauco, Puerto Rico, as well as to additional filter manufacturing capacities created at the site in Göttingen, Germany. Progress was made by completing and opening new production facilities at both sites. In the year-earlier period, Sartorius Stedim Biotech had acquired software-related assets from Sartorius AG after implementing major parts of a new ERP system. Due to this transaction, prior-year capital expenditures were temporarily elevated and were projected to decline in 2019. As expected, capital expenditures decreased from €176.5 million in 2018 to €136.0 million in the reporting year. The ratio of capital expenditures to sales revenue was 9.4% (previous year: 14.6%)[1], within the range of our forecast.

Detailed information on investment projects is provided on page 35.

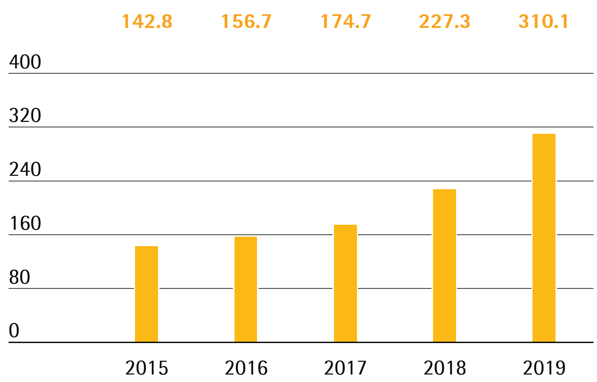
[1] As of 2019, CAPEX is based on cash flow instead of balance sheet computation; CAPEX ratio restated: 14.6%.

Net Worth and Financial Position

Cash Flow

In the reporting year, Sartorius Stedim Biotech significantly increased its net cash flow from operating activities again. This figure was €310.1 million relative to €227.3 million a year ago, which equates to growth of 36.4%. This development is essentially attributable to the increase in earnings and, among other things, to the sale of trade receivables in the amount of €27.5 million within the scope of a factoring program.

Net Cash Flow from Operating Activities
€ in millions



Net cash outflows from investing activities decreased by 23.0% to €136.0 million. Capital expenditures were related to, inter alia, the expansion of production capacities at our plant in Yauco, Puerto Rico, as well as the consolidation and expansion of the site in Göttingen, Germany. At both sites, new production facilities were completed and started up operations in the reporting period. In the year-earlier period, Sartorius Stedim Biotech had acquired software-related assets from Sartorius AG after implementing major parts of a new ERP system. Consequently, prior-year capital expenditures were temporarily elevated.

Due to acquisition-related expenditures of €48.9 million in connection with the takeover of a majority stake in Biological Industries, net cash flow from investing activities and acquisitions | divestitures decreased by 4.7% to -€184.9 million.

Net cash flow from financing activities, which includes payment of dividends of €53.5 million for fiscal 2018, totaled -€122.2 million compared to -€59.6 million in the previous year.

Cash Flow Statement
Summary

€ in millions	**2019**	2018
Cash flow from operating activities	310.1	227.3
Cash flow from investing activities and acquisitions	–184.9	–176.5
Cash flow from financing activities	–122.2	–59.6
Cash and cash equivalents	27.6	24.0
Gross debt	135.3	149.6
Net debt	107.7	125.7

Consolidated Statement of Financial Position

The balance sheet total of the Sartorius Stedim Biotech Group increased by €249.0 million to €1,820.4 million between year-end 2018 and the reporting date on December 31, 2019. This increase is predominantly attributable to higher carrying amounts of property, plant and equipment, growth-driven higher inventories, as well as the IFRS 16 Standard required to be applied for the first time as of 2019.

Non-current assets rose from €1,018.9 million in 2018 to €1,186.6 million in 2019, primarily due to investments in our production capacities.

Current assets amounted to €633.8 million compared with €552.5 million in the prior year. This increase was mainly driven by the buildup in working capital.

Key Working Capital Figures
in days

		2019	2018
Days inventories outstanding			
Inventories |	x 360	82	75
Sales revenue			
Days sales outstanding			
Trade receivables |	x 360	55	65
Sales revenue			
Days payables outstanding			
Trade payables |	x 360	49	46
Sales revenue			
Net working capital days			
Net working capital[1] |	x 360	88	94
Sales revenue			

[1] Sum of inventories and trade receivables less the trade payables

Equity of the Sartorius Stedim Biotech Group grew from €1,044.9 million in 2018 to €1,177.6 million in 2019. Upon application of IFRS 16, the equity ratio decreased slightly to 64.7% (December 31, 2018: 66.5%), but remained at a comfortable level.

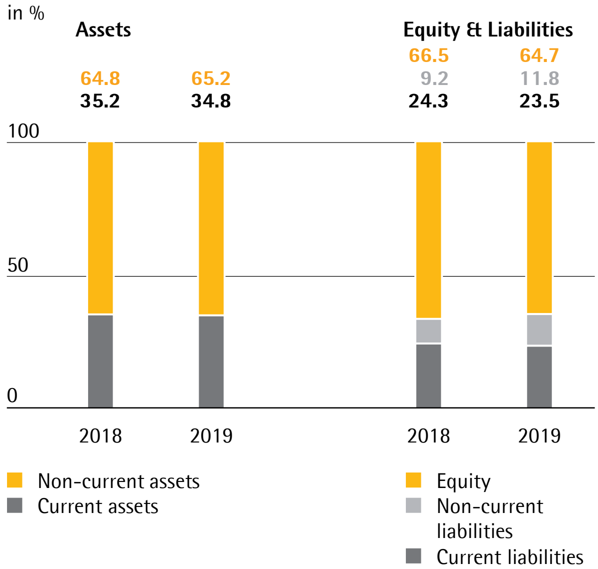
Current and non-current liabilities rose to €642.8 million, up from €526.6 million in the previous year.

Overall, gross debt, which is comprised of liabilities to banks and loans from Sartorius AG as well as of lease liabilities, decreased to €135.3 million as of December 31, 2019, compared with €149.6 million for the year ended December 31, 2018. Net debt as of the reporting date was €107.7 million relative to €125.7 million a year ago.

Calculation of Net Debt

€ in millions	2019	2018
Non-current		
Loans and borrowings	40.0	43.1
Lease liabilities	40.7	15.0
Current		
Loans and borrowings	43.5	89.8
Lease liabilities	11.1	1.7
Gross debt	135.3	149.6
Cash and cash equivalents	27.6	24.0
Net debt	107.7	125.7

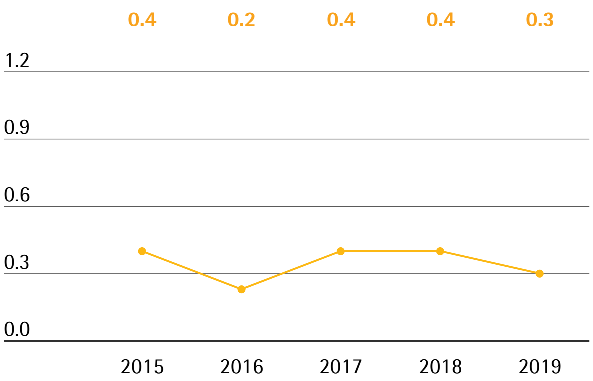
Balance Sheet Structure
in %



Ratio of Net Debt to Underlying EBITDA

Regarding the debt financing potential of the Sartorius Stedim Biotech Group, the ratio of net debt to underlying EBITDA represents a key management indicator. As of December 31, 2019, this ratio stood at 0.3, as expected, and was thus below previous year's level of 0.4.

Ratio of Net Debt[1] to Underlying EBITDA



1) The net debt excludes the liability for the remaining purchase price for acquisitions; 2019: €72.5 million, 2018: €8.7 million, 2017: €46.5 million, 2016: €49.6 million, 2015: €47.5 million, 2014: €42.8 million

Financing | Treasury

Sartorius Stedim Biotech covers its operational and strategic financing needs through a combination of operating cash flows and the assumption of short-, medium- and long-term financial liabilities.

The major pillar of the financing mix is a credit line with a volume of up to €310 million provided by the parent company Sartorius AG.

Furthermore, the Group has a long-term loan agreement with the Kreditanstalt für Wiederaufbau (KfW) for a current volume of €3.1 million relating to investments in production capacities, and diverse bilateral credit lines of approximately €35 million in total.

The above-mentioned financing comprises instruments with both fixed and variable interest.

As of December 31, 2019, the total volume of all available capital and guaranteed credit lines was €350 million. Of this amount, Sartorius Stedim Biotech had already drawn on €83.5 million, leaving available credit of €265.0 million at the end of 2019. On the whole, this ensures that all Group companies have sufficient funds to successfully finance their business operations and new capital expenditures.

We use hedging transactions to counteract the fluctuations in foreign-exchange rates to which the Group is exposed on account of its worldwide business operations. At the end of 2019, foreign-exchange contracts amounted to €120 million on a reported basis, with a market value of €0.4 million. Moreover, the currency risk associated with the financing of the announced acquisition of selected Danaher Life Science businesses was hedged by the purchase of currency options with a nominal amount of U.S. $180 million and a market value at year-end of €0.2 million.

Products and Sales

Sartorius Stedim Biotech sells products and services for the entire added-value chain in biopharmaceutical production and upstream process development. The portfolio includes cell lines, cell culture media, bioreactors, a wide range of products for separation, purification and concentration, and systems for the storage and transport of intermediate and finished biological products.

Acquisition Strengthens Cell Culture Media Business

With its acquisition of a majority stake in Biological Industries, Sartorius Stedim Biotech has significantly expanded its cell culture media offer and enhanced its product portfolio for customers in the advanced therapies market. Biological Industries concentrates on cell culture media in particular for cell and gene therapies, regenerative medicine and other innovative therapies. The company was founded in 1981 and currently employs 130 people, primarily at its main facility near Haifa, Israel, where the company is headquartered and its R&D and production are located. It also has sales locations in the USA, Europe and China.

New Products with a Focus on Automation

During the reporting year, Sartorius Stedim Biotech introduced a new generation of the automated microbioreactor system ambr® 15. This device controls up to 48 bioreactor cultures in disposable vessels in parallel. The system is used in biopharmaceutical labs for cell line development and process optimization. The second generation of the device offers enhanced hardware and software.

In addition, a special bioreactor was launched that is optimized for the production of cellular immune therapies, among other things.

Sartorius Stedim Biotech also updated its software for the multivariate data analysis of biopharmaceutical production processes. This software combines the extensive data sets that are generated at different points in the production process in a uniform system and enables them to be monitored, controlled and analyzed. The updated version offers improved user friendliness and accessibility, as well as time-saving analysis functions.

Sartorius Stedim Biotech introduced the new Sartocheck® 5 integrity testing device for testing and demonstrating the functional capability of filters. The new version offers additional options for electronic data acquisition and subsequent processing, such as the automatic transfer of test results to central databases.

Sales Activities Expanded

Sartorius Stedim Biotech markets its product portfolio directly through its own field sales representatives. Sales activities for key accounts are coordinated and supported by global key account management.

The company has expanded its direct sales in Asia | Pacific through the acquisition of a sales partner in Taiwan that has been selling products particularly from Sartorius Stedim Biotech since 2012.

Production and Supply Chain Management

Sartorius Stedim Biotech has a very well developed production network around the world. The largest production sites are located in Germany, France and Puerto Rico (U.S.). Sartorius Stedim Biotech also manufactures in the United Kingdom, Switzerland, Tunisia, India, the United States and, since 2018, in China.

Expansion of Production Capacity

During the reporting year, Sartorius Stedim Biotech started up operations at its expanded production facilities in Yauco, Puerto Rico. The U.S. market, in particular, is served by this plant. The site's considerably larger production capacities enable Sartorius Stedim Biotech to deliver an even broader spectrum of products to its American customers directly from the region.

Within about three years of construction, the production capacity for filters and single-use bags for biopharmaceutical production was more than doubled, and, for the first time, extensive capacity for the manufacture of filter membranes was established outside the company's primary German site in Göttingen. The facility in southwestern Puerto Rico offers about 190,000 square meters of space and is designed to accommodate further long-term growth: if needed, Sartorius Stedim Biotech can at least double its production capacity there.

In Göttingen, capacity for membrane modification was expanded, and an additional building for office and laboratory space was opened.

During the reporting year, staff moved into the development and production center for cell lines in Ulm, Germany. With 6,000 square meters of usable floor space, the new center offers twice the previously available capacity.

Sustainability

Sustainability information for the Sartorius Stedim Biotech Group is not reported. In accordance with the provisions of Article L.225-102-1 IV of the French commercial code, Sartorius Stedim Biotech is exempted from presenting this information, because it is included in the non-financial statement established and published by the controlling company, Sartorius AG, as per applicable German regulations.

Opportunity and Risk Report

Principles

Every business activity entails opportunities and risks, which have to be managed. The skill with which this is done goes a long way in determining the future development of a company's shareholder value.

It is not the task of risk management to eliminate all risks: rather, our approach is to intentionally take a certain measure of risk in our business activities in order to be successful in unlocking opportunities. However, in this endeavor, it is important to keep risks contained within acceptable limits and to control them carefully. Through appropriate guidelines, we ensure that risk assessments are taken into account in the decision-making processes from the very beginning.

Sartorius Stedim Biotech has decided to make the identification and the management of risks and opportunities a cross-functional component of Group management. In this context, Sartorius Stedim Biotech's risk management is integrated into the Sartorius Group organization. Our risk management organization reflects a global functional matrix organization in which individuals heading a functional area are each responsible for their own management of opportunities and risks. The Finance & Controlling department is responsible for the organization of the respective reporting process, including the further development of the Group's risk management system.

Managing Opportunities

Our opportunity management centers on the analysis of target markets and sector environments, as well as the assessment of trends, both of which give strong indications as to future business opportunities. The identification of the potential for development in this context is one of the key roles of the relevant managers and initially takes place at the local rather than the central level. The market-facing functions, such as marketing and product management in the individual divisions, play a leading role in this respect. The central Business Development unit supports these areas with market monitoring, data analysis and the implementation of strategic projects.

As part of strategy reviews, the members of the Board of Directors regularly meet with the managers that have operational responsibility to discuss short-, medium- and long-term opportunity potential for the various business areas. If the opportunities are short-term in nature, they are considered in annual budget planning. Medium- and longer-term opportunities are tracked systematically as part of strategic planning.

As a supplier for the pharmaceutical industry, Sartorius Stedim Biotech operates in a future-oriented and high-growth sector. The significant opportunities generated by the various market and technology trends are described in detail in the sections entitled "Sector Conditions" and "Outlook for the Sector" on pages 23 et seq. and pages 49 et seq., respectively.

Our assessments rank the company as one of the global market leaders in many subsegments and product areas. We believe the high quality of our products, our strong brand recognition and our established customer relationships give Sartorius Stedim Biotech strong opportunities to continue extending our market leadership. The corresponding strategies and the growth opportunities and initiatives based on them are discussed in the section on the strategy of the Group, which begins on page 20.

Risk Management

Organization

The overall responsibility for the maintenance of an effective risk management system ensuring comprehensive and consistent management of all material risks rests with the Audit Committee. The Finance & Controlling Department is responsible for coordinating and developing this system and for consolidated risk reporting, while the particular functional areas are responsible for identifying, analyzing and reporting individual risks. This includes the assessment of their potential impact and the decision-making on taking the appropriate countermeasures.

The Audit Committee monitors the effectiveness of the risk management system. Furthermore, while carrying out their statutory audit mandate for the annual financial statements and consolidated financial statements, the independent auditors examine whether the early warning system in place is capable of prompt identification of risks that could jeopardize the future of the company. Finally, the Internal Audit Department regularly reviews the risk management process and system.

Insurance

We have taken out insurance policies to cover a wide range of risks where possible and economically advisable. These insurance policies include coverage against product liability, property damage, business interruption, transport, material and pecuniary damages and other risks, and provide comprehensive coverage for legal costs. An independent department working in conjunction with an external insurance broker regularly reviews the nature and extent of our insurance protection and makes any adjustments as necessary.

When choosing our insurers, we particularly consider the credit rating of these entities as potential contractual partners, as well as aim to achieve a high degree of diversity in order to mitigate the related risks.

Risk Management System and Risk Reporting

Sartorius has implemented a global guideline (Risk Management Handbook), which includes definitions of the framework, structural organization, processes, risk reporting, and monitoring and controls of the effectiveness of the risk management system. The handbook is based on ISO 31000 "Risk Management - Guidelines" and the COSO (Committee of Sponsoring Organizations of the Treadway Commission) standard. There are also a number of other sources that contain stipulations for handling risks, including the articles of association and rules of procedure of the Group companies, and other internal guidelines. In 2019 the risk management process was adjusted and risk management software was implemented in order to further improve documentation needs.

The prescribed reporting process in the risk categories subsequently described establishes the rules for the ongoing review of and information on risk situations. If any specific risks are discernible, these are documented with respect to their assessment, probability of occurrence and measures to be taken to eliminate such risks or to mitigate their impact.

We have an urgent reporting procedure in place to ensure that when a new or emerging significant risk to our net worth, financial position and profitability is identified, the audit committee receives all of the necessary details without undue delay.

To classify risks appropriately, we have defined four main categories: external risks, operating risks, financial risks and compliance risks. Each main category is divided into several subcategories that are described in the following sections.

Furthermore we have defined a so-called risk matrix, that allocates the probability of occurrence and the potential impact to certain classes as follows:

Probability of Occurrence	
Remote	< 10%
Possible	10% - 50%
Probable	50% - 75%
Very likely	> 75%

Significance in millions of €	Impact on Earnings
Insignificant	< 10
Moderate	10 - 50
Significant	50 - 100
Critical	> 100

The combination of both elements leads to the following matrix that describes the overall significance of the respective risks for the Group:

> 75%	low	medium	high	high
50 - 75%	low	medium	medium	high
10 - 50%	low	medium	medium	medium
< 10%	low	low	medium	medium
Probability | Impact	< €10 million	€10 - 50 million	€50 - 100 million	> €100 million

External Risks

General Risks

The main risks in this area are those arising from natural catastrophes, especially the hurricane risk in Puerto Rico, and political developments in the United Kingdom or in the USA.

In principle, our ability to foresee and mitigate the direct and indirect effects of risks entailed by life in general is limited, but we proactively take measures, whenever feasible, to ensure that we can respond appropriately and at short notice or are insured against any damage entailed by such risks that include, for instance, natural catastrophes and their associated damage to commercially significant and critical infrastructure.

Our largest sites in Germany and France do not face major risks from natural catastrophes, while e.g. our production plant in Puerto Rico is exposed to the risk of severe hurricanes. We control this risk by applying high security standards to the buildings and explicitly consider this risk in our warehousing and production network strategy.

Political developments, such as the referendum on the United Kingdom's leaving the European Union ("Brexit") or changes in US foreign policy, can have an impact on the Group's business. Such developments may involve changes to the tax system or customs duties, as well as impacts on the exchange rate of the euro to the British pound or the U.S. dollar (for more on the subject of exchange rates, see the section below on Exchange Rate Risks).

In the U.K., we run various manufacturing and sales entities with a significant business volume. Any development that has a negative impact on the trading between the U.K. and other countries could therefore lead to a corresponding decrease in the Group's earnings. Further developments are being closely observed and certain measures like safety stocks have already been implemented.

Our affiliates in the US and China have business relations with the respective other country, therefore the implemented tariffs and trade barriers have a negative impact on our profitability. However, this impact is currently rather limited.

Business Cycle Risks

The nature of our various business areas means that Sartorius Stedim Biotech as a whole is insulated to a certain extent from the full force of wider cyclical effects. If economic developments prove more positive than expected, this, in turn, can additionally stimulate stronger growth.

Operational Risks and Opportunities

Our supply chain extends from procurement to production to sales and distribution. Problems within this workflow can have consequential effects, including delays in deliveries. The global supply chain management system we have instituted throughout our process chains largely minimizes the associated risks by analyzing and controlling all of the operations involved. The strongly international alignment of our organization opens up a whole series of opportunities too. The various risks and opportunities encountered within our supply chain are explained in detail below.

Procurement Risks and Opportunities

We purchase a wide range of raw materials, components, parts and services from suppliers and are consequently exposed to the risks of unexpected delivery bottlenecks and | or price increases.

Over the past years, we have implemented powerful tools and robust processes in our Materials Management unit to manage risks and critical materials. These means enable us to meet the needs of our customers with respect to delivery reliability and transparency. Important measures in this respect are to maintain security stock and to define alternative suppliers when feasible. We moreover conduct regular supplier reviews and also use early warning systems.

Risks from raw material prices play a rather subordinate role in our business. On the one hand, the proportion of raw materials in our production costs is comparatively low. On the other hand, we purchase a wide range of materials so that price increases for certain materials do not represent any significant impacts.

Opportunities can arise in the area of procurement when our growth enables us to increase order quantities and thereby strengthen our position with our suppliers, such as by receiving price discounts or preferential treatment as a "preferred customer." In addition, we maintain a list of preferred suppliers in order to enter into long-term business relationships with key suppliers to our mutual benefit.

Production Risks and Opportunities

Manufacturing a large proportion of our products ourselves, we bear the associated risks of capacity bottlenecks or overcapacity, production downtimes, excessive reject rates and high levels of tied-up working capital, as well as dependency on individual manufacturing sites.

Based on our core technology expertise, we manufacture products that involve a high level of vertical integration. Other products, such as reusable fermenters and bioreactors, are manufactured in collaboration with suppliers so that some of the production risks are transferred to external third parties.

We contain and reduce the risks relating to capacities by careful production planning, using versatile machines, semi-automated individual workstations and flextime work schedules, and by continuously monitoring production processes. Moreover, our global manufacturing network enables us to partially compensate for any capacity bottlenecks by shifting production to other regional plants and consequently reducing our dependency on individual local production plants. Furthermore, we have taken out policies for business interruption insurance to compensate for any possible losses due to production downtimes.

In certain production areas we are using easily flammable or explosive materials. Improper handling of those materials can lead to significant damage to property and business interruptions. We have implemented all necessary organizational and constructional measures in order to reduce these risks to the extent possible.

We consider it an opportunity that our investments in infrastructure and production resources have given us high flexibility in our manufacturing operations and that we are capable of meeting our customers' requirements and regulatory standards with respect to business continuity concepts. In addition, this approach ensures that our individual production sites can concentrate on specific manufacturing technologies and makes it possible to capitalize on the cost advantages offered by individual sites. Furthermore, continuous improvements in production, such as simplifying processes and increasing levels of automation, help drive manufacturing efficiency even higher.

Sales and Distribution Risks and Opportunities

The potential risks entailed to the variety of channels to sell and distribute our products around the world are unexpected changes in the demand structure, growing price pressure and non-compliance with supply agreements concluded with customers. We employ targeted market analyses to identify emerging demand trends in individual segments early on so that we have time to respond appropriately. Our technical innovations and the fact that a wide range of our products are used in validated production processes in the biopharmaceutical industry reduce our exposure to the risk of growing price pressure. We have reduced our risk exposure in the area of logistics in recent years by setting up and using central warehouses to optimize distribution logistics.

Opportunities arise in the area of sales and distribution when the increasing breadth of our product range puts us in a position to sell new products to existing customers. Our business relationships, most of which are established for the long term, and our global presence provide further opportunities.

Sartorius Stedim Biotech sources its key customers from the pharmaceutical, chemical and food industries. These customers are usually relatively large organizations that have been in existence for some time and have strong credit ratings. Accordingly, the Group has had low to zero credit losses over the past years, and its overall credit risk continues to be at a very low level. Most of our business areas have a highly diversified customer base, so the Group as a whole is not dependent on individual key accounts to any significant degree.

Competitive Risks and Opportunities

Sartorius Stedim Biotech has a leading competitive position in most of its markets. Some of our competitors are larger than us, and most share our status as a globally operating company. As we serve a large number of customers from highly regulated sectors like the pharmaceutical and food industries, and, the technology barriers to market entry are substantially high, we regard the probability of new competitors emerging within the short term as low.

The fact that many of our products are used in validated bioprocesses reduces the risk of losing significant market share within a short timeframe. At the same time, it is also more difficult for us to quickly force out the competition that serves customers in this area.

Changes in the competitive environment, for example, a further consolidation in the markets, can pose opportunities. We have been continuously making acquisitions in recent years to reinforce our market position and open up new potential synergies.

Quality Risks and Opportunities

The main risk encountered in this area is non-compliance with agreed quality criteria, which can lead to losses for our customers, or their customers, for which we may be made liable through compensation claims. Our customers use Sartorius Stedim Biotech products in a wide range of critical production processes, including the manufacture of pharmaceuticals, foods and chemicals, and in research and development laboratories.

We employ rigorous quality checks and advanced production methods and processes, such as cleanroom technology, to ensure that our products satisfy the most stringent quality standards and high regulatory requirements. These manufacturing methods and processes are subject to constant review under our continuous improvement processes, moreover, and are optimized as requirements evolve. Our successful completion of a host of annual audits by customers and implementation of quality systems compliant with ISO 9001 and, where applicable, with ISO 13485 document the high level of quality achieved in Sartorius products and processes. Irrespective of these measures, we also maintain significant insurance coverage against product liability risks. Sartorius Stedim Biotech has established a traceability system that enables us to recall an entire production batch immediately, if necessary, and minimize any adverse consequences in the event of defects being discovered in a product. Furthermore, we have installed a complaints management system to deal with customer requests and to ensure full documentation.

In the sectors we address, quality requirements are growing more and more stringent all the time, not least as a result of increasing requirements on protection of medical patients and on product safety by regulatory authorities. Increasing and changing requirements typically entail the risk that a new requirement might be overlooked or be difficult to achieve, but we regard this first and foremost as an opportunity that opens up new market prospects. The reason is that challenging quality demands represent a considerable barrier to entry for potential new competitors and provide stimulus for further technical innovation to which we actively respond. Moreover, we actively seek to draw up new requirements through our work on professional committees, membership in industry associations and standards committees, and are able to identify emerging requirements at an early stage and prepare ourselves accordingly.

R&D Risks and Opportunities

Main risks in this area may arise from development results that diverge from market needs and application requirements, and from exceeding planned development deadlines, since we devote a considerable share of our resources to research and development.

Our advanced project management, intensive R&D controlling and early involvement of our customers in the development process substantially limit these R&D risks. We ensure that product developments are always reviewed very promptly with regard to how well they meet the customers' needs so products can be adapted accordingly as needed. Patents and continuous tracking of the technologies and competitors relevant to us secure our technology and marketing position.

On the other hand, the R&D sphere also offers a number of potential opportunities. Our close collaboration with partners that rank among the global market leaders in their own fields opens up the opportunity for us to jointly develop products with an especially high level of innovation. In areas such as membrane technology and plastics technology, as well as sensorics and bioprocess engineering, the expertise of our own specialists puts us at the very forefront of global research and development, presenting us with an opportunity to turn this technical knowledge into potential sales and an even stronger position on the market. The combination of different innovative activities in a separate Corporate Research Department further enables us to identify and benefit from promising developments and emerging trends at universities, startups and at our customers' plants.

Acquisition Risks and Opportunities

The purchase and sale of companies or parts of companies entail a number of typical risks, such as incorrect valuation assumptions or insufficient usage of anticipated synergy effects. On the other hand, acquisitions also provide many opportunities, such as sales growth, extension of our product portfolio and development of new markets.

To prevent the risks, we take various measures, such as performing a standard due diligence review of important areas and carrying out comprehensive analysis of the market concerned. In addition, we involve external consultants and experts in the purchase or sales process as required. We especially focus on drafting transaction contracts so that they adequately counter such risks, especially by clauses assuring specific characteristics or by contractual warranty or guarantee provisions, as well as agreements on mechanisms for adjustment of the purchase price and on liability clauses.

Immediately after an acquisition has taken place, an integration phase is initiated in which any potential risks can likewise be detected as early as possible and prevented or minimized by taking the appropriate counteractions. In order to ensure an efficient integration process in the Group and to mitigate the related risks we have established a post-merger integration (PMI) office within the department of Business Process Management.

Personnel Risks and Opportunities

The main risk in this area is that we are not able to hire skilled staff needed for the planned growth of the company. As an innovative technology group, Sartorius Stedim Biotech employs a large percentage of highly qualified people. We counter the risks of a possible scarcity of required specialists, especially those in key positions, and of demographic change by offering performance-related remuneration models, targeted continuing professional development options, further attractive social benefits, continuous education and training for junior staff members within our organization, and interesting people development opportunities. The success of these measures is apparent in the low attrition rates of recent years. Moreover, employment contracts in certain cases contain a clause prohibiting any move to a direct competitor.

Opportunities for Sartorius Stedim Biotech primarily arise in that it can further qualify its staff by offering its own training courses and retain such staff over the long term, thus covering company needs for qualified personnel particularly well.

IT Risks and Opportunities

Since nearly all business processes of the Sartorius Stedim Biotech Group are supported by IT applications, systems failure or other impairment of the relevant IT systems or (cyber)attacks can considerably disrupt the smooth functioning of the companies` business processes and lead to manipulation or to uncontrolled loss or leakage of knowledge or data.

We minimize this risk by continuously investing in the setup and operation of secure IT systems and applications, and by continuously further developing and implementing our concepts and security measures based on the International Standard ISO 27001, Information Security Management System. In addition, we incorporate the results of regular audits and vulnerability assessments carried out by external companies specialized in IT security.

Protection of our data against misuse is ensured by specific authorization and authentication policies based on the assignment of rights, limited to a "need-to-know" basis for performing certain tasks; the application of such policies is reviewed at regular intervals.

We protect our systems against failure and data loss by regular data backups, recovery testing based on rolling disaster scenarios and risk-based use of redundant IT infrastructures. Multi-factor authentication solutions enable us to prevent malware threats.

We are convinced that the threat of cyberattacks is growing worldwide, both in number and intensity. This is why we are continuously extending and strengthening our activities: we are improving our efforts by further automating management of authorizations and reducing the potential for data misuse, among other measures. We inform our staff in a targeted way about possible threats and risks, involving our employees by providing them with simple but effective options for decentralized defense and reporting suspicious emails to IT for checking.

By extending our means for competent and fast response to cyberattacks including other IT security incidents, we supplement our organizational basis for running the Sartorius system and applications at the lowest possible risk across the entire landscape.

Financial Risks and Opportunities

The global nature of the Sartorius Stedim Biotech Group's operations means that its business activities are inevitably exposed to financial risks. The most significant of these are exchange rate risks, interest rate risks, liquidity risks and tax risks, all of which are described below and addressed in detail in the Notes to the Consolidated Financial Statements. Vice versa, certain financial risks, most notably exchange rate risks and interest rate risks, are balanced by opportunities of approximately equal magnitude.

Exchange Rate Risks

As a consequence of its global business activities, the Group is exposed to risks arising from foreign currency fluctuations. Since we generate around two-thirds of consolidated sales revenue in foreign currencies and, of this figure, approximately two-thirds of this total revenue in U.S. dollars or in currencies pegged to the U.S. dollar, we are positively or negatively impacted by currency effects, especially when converting the currencies of balance sheet items and profit or loss items, respectively. Besides the U.S. dollar, other key currencies are the South Korean won, the British pound, the Singapore dollar, the Japanese yen and the Chinese renminbi.

Our global production network thus enables us to offset the lion's share of sales revenues received in foreign currency within the Group against costs likewise incurred in foreign currency. For example, we manufacture many of our products for the North American market locally, and are not disadvantaged in competition with our U.S. rivals, insofar as this general currency risk is concerned. We continuously monitor the portion of our foreign currency sales revenue that remains after we have settled our costs, so-called net exposure.

In order to evaluate and steer the remaining risk based on the expected net exposure for the next 12 months and take into consideration hedging transactions already executed, we are continuously calculating our risk exposure with a cash flow at-risk model. We use this basis to decide on whether to use additional derivative financial instruments, especially spot, forward and swap transactions, to adjust for maximum loss. Hedging transactions are set up by one group of staff and monitored by another, separate group.

Interest Rate Risks and Opportunities

The main risk in this area is posed by changes in interest rates that can lead to higher payments. The major part of the financial instruments outstanding on the reporting date is subject to variable interest based on the market rate. However, the overall debt level of the Group and the resulting interest risk is very low. We monitor interest rate trends and our interest rate exposure constantly and have the facility to arrange for hedging transactions where we consider it necessary and economically advisable to do so for individual loans. As of December 31, 2019, we did not have any interest rate derivatives in our portfolio of financial instruments.

Liquidity Risks and Opportunities

The general risk is that Sartorius Stedim Biotech will not be able to pay its creditors. In order to minimize those liquidity risks and optimize liquidity allocation within the organization the Group's liquidity is managed centrally on the Sartorius Group level by using various long- and short-term debt instruments.

Sartorius Stedim Biotech is mainly using a €300 million credit line provided by Sartorius AG that can be accessed and repaid at short notice. Additionally, we have a number of bilateral working capital credit lines for individual Group companies in place and we have concluded cash pooling agreements between selected Group companies as the primary tool to manage liquidity within the Group.

Tax Risks

Sartorius Stedim Biotech is acting globally with its affiliates and consequently falls under numerous local tax laws and regulations. Changes in tax laws, jurisdiction or the interpretation of laws by the authorities in these countries can lead to additional tax expenses and payments and have an impact on tax positions in the statement of financial position and profit or loss.

We are controlling this risk by permanently monitoring and analyzing the fiscal framework with our central tax department which is supported by external experts in the concerned countries.

Compliance Risks

Regulatory Risks

Our role as a supplier to the biopharmaceutical industry and health care providers means that Sartorius Stedim Biotech can also be affected by underlying developments in these areas. The possibility of the regulatory authorities (FDA, EMA) adopting a more restrictive approach to the approval of new medications remains the principal source of risk in this context. Such a move would reduce the number of new pharmaceutical products to be marketed and would consequently downgrade future prospects for Sartorius Stedim Biotech over the medium term.

Environmental Risks

The main risk in this area is to cause environmental damage, e.g. by polluting the air or the ground with hazardous substances. Sartorius Stedim Biotech has established an environmental management system to minimize these risks. This management system has been certified for compliance with ISO 14001 at a number of the company's relatively large manufacturing sites. The respective company organizational units ensure at the particular sites that the laws and regulations relating to environmental protection are observed and that further technical possibilities for limiting environmental risks are identified on an ongoing basis.

The increasing importance of sustainability considerations in many industries represents an opportunity. That is why this aspect is becoming a key element in our supplier selection process for assessing the suitability of a particular company as a business partner.

Litigation Risks

Litigation risks for Sartorius Stedim Biotech can arise from pending or forthcoming legal disputes or from administrative proceedings. All judicial or extrajudicial disputes are attended to by the company's own attorneys and legal experts, who engage external lawyers as needed.

At present, there are no pending or discernible legal disputes or proceedings that lack any cost coverage allowances in the statement of financial position or that could have a substantial negative impact on Group.

Assessment of the Overall Risk Situation and Risk Outlook

Where feasible, we adopted countermeasures and | or arranged for balance sheet measures during the reporting year to cover all discernible risks within the Sartorius Stedim Biotech Group, and those of a defined probability of occurrence, that had the potential to damage our net worth, financial situation and profitability.

For the purposes of this report, we have assessed the probability of occurrence of the risks shown below and, in the adjacent columns, classify their particular significance for the entire Group.

Risk Category	Probability of Occurrence	Significance
External risks		
General risks	Possible	Moderate
Business cycle risks	Possible	Moderate
Operating risks		
Procurement risks	Remote	Significant
Production risks	Remote	Significant
Sales and distribution risks	Possible	Moderate
Competitive risks	Remote	Moderate
Quality risks	Remote	Significant
Research and development risks	Possible	Significant
Acquisition risks	Possible	Significant
Personnel risks	Possible	Moderate
IT risks	Possible	Significant
Financial risks		
Exchange rate risks	Probable	Moderate
Interest rate risks	Probable	Insignificant
Liquidity risks	Remote	Moderate
Tax risks	Possible	Moderate
Compliance risks		
Regulatory risks	Possible	Significant
Environmental risks	Remote	Moderate
Litigation risks	Possible	Moderate

After thorough analysis of the entire risk situation and according to our current review, there are no discernible risks at present that could jeopardize the continued existence of the Group.

Similarly, based on our current review, there are no discernible risks that could jeopardize the future existence of the Group. No material events of any nature occurred after the reporting date.

Internal Control Procedures

Introduction

The objectives defined by the Chairman for the internal control system of Sartorius Stedim Biotech are as follows:

– Prevent risks that would endanger the quality of the assets of Sartorius Stedim Biotech or even its existence;
– Ensure that the executive management activities, the transactions completed and the conduct of employees comply with the guidelines defined by executive management, applicable laws and regulations, the fundamental values, standards and internal rules of the business and the ethical codes and conventions of the healthcare industry;
– Ensure that accounting and financial information and management data provided to the executive management of the company accurately reflect the operations of Sartorius Stedim Biotech;
– Prevent risks arising from operations, errors or fraud, especially in the accounting and financial area.

Scope of Internal Control

The internal control system described covers the parent company and its affiliates.

Components of Internal Control

Environment for Internal Control

The core of any business is its people (their individual attributes, including integrity, ethical values and expertise) and the environment in which they operate. They are the engine that drives the organization and the foundation that supports the company.

Risk Assessment Process – Risk Mapping

The company must be aware of, and deal with, the risks it faces. It must set itself objectives and integrate them into its sales, production, marketing, financial and other activities so that the organization operates in concert. It must also establish mechanisms to identify, analyze and manage the related risks.

Control Activities

These control activities are undertaken at every level of the Group to ensure that internal control is efficient: checking the accuracy, completeness, authorization, validation and recording of transactions and ensuring that different people discharge different duties so as to reduce the risk of errors or fraud.

Information and Communication

The availability of accurate, reliable and complete information is essential both to achieve business objectives and to enable proper reporting to all parties concerned in compliance with the applicable laws and regulations.

Monitoring, Control and Management

Responsibilities and authorities must be defined and understood at all levels of a company for internal control to function effectively. Duties must be assigned in such a way that a person's work is always checked and approved by a different person. Where the size of the local unit concerned permits, responsibility for initiating, authorizing, recording and processing transactions must always be assigned to different individuals.

Unit management is responsible for maintaining internal checks and internal control at all times.

Internal Controlling Roles

Executive Management

The Chairman and Chief Executive Officer is responsible for the internal control system and management at all levels. He is also responsible for the development, operation, monitoring and management of the internal controlling systems and for providing the necessary assurances that these steps have been implemented.

Audit Committee

The Audit Committee is responsible for carrying out any necessary reviews and evaluations of the internal controlling procedures, including those relating to financial information, and also assists with the preparation of the Group's consolidated financial statements. For further information about the Audit Committee, see page 74.

Risk Management

The Sartorius Stedim Biotech Group is inevitably exposed to a wide variety of risks by the nature of its operations around the world. Accordingly, an internal risk management system has been set up to help identify, assess and manage these risks efficiently. Within this risk management system, an ad hoc committee comprised of representatives of different departments regularly studies current issues of risk management. This enables the committee to provide executive management with an overview of the risk to which the company is exposed, enabling it to take appropriate action when required.

Internal Auditing Department

The Internal Auditing Department is in charge of monitoring the effectiveness and suitability of risk management and the internal control system in Sartorius Stedim Biotech Group companies, as well as compliance of all activities and processes with internal and external rules and standards. It provides independent auditing and consulting services that focus primarily on compliance with all relevant legal provisions and the improvement of business processes at the company. To ensure the independence of the internal auditors, the Audit Committee receives, at least once a year, a report from the Internal Auditing Department on the work they have done (according to the audit plan established by this committee) and their findings with regard to Group affiliates.

Finance and Controlling Departments

The Finance and Controlling Departments track and monitor operations and projects to optimize the Group's profitability and cash flow, providing both internal and external stakeholders with reliable information.

These two departments define the Group's accounting rules and methods and its principle financial processes (five-year business plan, budget, etc.) as well as reporting tools, in order to monitor the day-to-day business.

Procedures for Preparing the Group Financial Statements and Other Accounting and Financial Information

The accounts of affiliates are prepared in accordance with the Group's accounting policies. The data is then adjusted, where necessary, to produce company accounts that comply with the applicable local legal and tax provisions. Integrated consolidation software is used both for management reporting purposes and to produce the Group financial statements.

Since 2013, the Group has decided to implement a hard close process as of November 30 in order to anticipate and improve the annual audit.

Accounting Standards

The consolidated financial statements are prepared in accordance with IFRS accounting standards as currently adopted by the European Union. The consolidated financial statements comply with accounting rules and methods as detailed in the Notes to the Consolidated Financial Statements.

Roles of the Group's Finance and Controlling Departments

The Finance and Controlling Departments check the quality of the reporting packages submitted by affiliates, focusing primarily on the following elements: checking corporate data and consolidated adjustments entered locally, inter-company eliminations, the accounting treatment of non-recurring transactions for the reporting period, and verifying principal movements between the opening and closing balance sheets to prepare the cash flow statement.

The Finance Department also verifies the results of procedures, including currency translation, intercompany eliminations, etc.

Key points of review include the preparation and validation of the statement of changes in shareholders' equity and the cash flow statement.

Financial Information and Reporting

The Group's rules and procedures in relation to financial reporting and accounting are set out in the Accounting and Reporting Manual. Application of and compliance with these principles, rules and procedures are the direct responsibility of the finance director of each affiliate. They must ensure that information provided via the Management Information System complies fully with all applicable disclosure requirements.

Executive Management reviews the effectiveness of the internal controlling of financial reporting regularly. In particular, it verifies that transactions have been recorded consistently, in accordance with IFRS international accounting standards as applied by the Group and as set out in the Accounting and Reporting Manual, in order to ensure the pertinence of transactions and assets recognized within the times set.

Internal Control in 2019

From an internal control perspective, the Group focused on the following this year:

Code of Conduct and Anti-Corruption Code

Employees can consult the Sartorius Code of Conduct and the Sartorius Anti-Corruption Code; initial trainings have been completed and implemented as a controlled operation.

These codes are subject to reviews and revisions as required by amended legislation. In addition, all employees of the company and of the Group are made aware of these codes and must ensure compliance with them on a daily basis.

Corporate Transactions

The company complies with the Recommendation of the Autorité des Marchés Financiers of November 3, 2010, and with the AFEP-MEDEF Code, as revised in June 2018. Thus, transactions involving the purchase or sale of the company's securities or financial instruments are prohibited during the periods between the date on which managers, persons considered managers under the law, and any person having regular or occasional access to privileged information are aware of precise information on the course of business or prospects that, if made public, could have a significant influence on the price and the date on which the information is made public.

In addition they are also prohibited for a period of:

- fifteen calendar days prior to the date of publication of the annual and semi-annual financial statements of the company,

- fifteen calendar days, preceding the date of publication of the quarterly information, this day included.

At the beginning of each calendar year, the company prepares and distributes a schedule setting out the periods during which trading in the company's securities is prohibited, specifying that the days indicated do not prejudge the existence of other closed periods resulting from the knowledge of specific information that directly or indirectly concerns the company, which, if it were made pubic, could have a significant influence on the share price of the company's shares.

In accordance with the recommendations of the AFEP-MEDEF Code and the Autorité des Marchés Financiers Recommendation No. 2010 - 07 of November 3, 2010, hedging transactions of any kind on the company's shares with regard to stock options are prohibited.

Mid-Term Prospects

The Group will continue to work on Internal Control issues by strengthening its approach to risk mapping and risk management. This process will be based on elements of the AMF Internal Control Reference Framework. In addition, the process of defining mandatory minimum standards of internal controls applying to all Group companies has been followed by publishing the Group Internal Controls Handbook and will be pursued further in 2020.

Forecast Report

Continued High Growth in the Biopharmaceutical Industry

Strong, long-term trends drive growth in the pharmaceutical industry, which is almost entirely independent of business cycles. Various market observers estimate the world's pharmaceutical market will grow between 3% and 6% annually during the period up to 2023. The biopharma segment of the pharmaceutical market, which has been enjoying particularly strong growth for years, will continue to outperform the market. For the period of 2019 to 2023, growth is expected to average between 8% and 9% annually. This would amount to an increase in market volume from the current level of €235 billion to €320 billion. The share of biological medications and vaccines in the total revenue generated by the global pharmaceutical market is expected to continue rising.

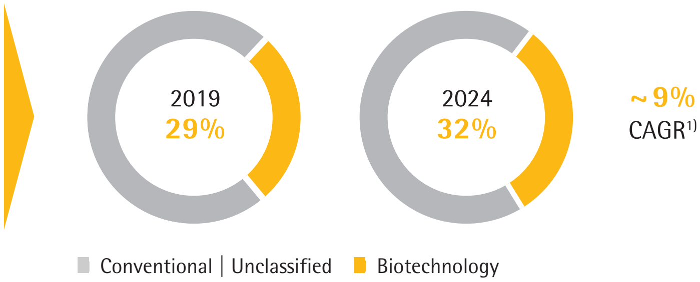
In the coming years, the most dynamic market will likely be China. Positive regulatory and political conditions, a constantly increasing number of local biotech companies and rising demand for advanced biopharmaceuticals have been fueling above-average growth for several years now. This trend could continue as a result of the huge amount of catch-up potential in the market and the improved availability of biotech medications. Considerable growth in the United States and Europe is also anticipated, driven in particular by a growing need for medications for aging societies, as well as the rising number of chronically ill and multi-morbid patients. In addition, more and more medications are being approved. For example, biopharmaceuticals are increasingly being used in yet-to-be fully explored therapeutic areas and in the treatment of rare diseases that have thus far been untreatable. Innovative types of therapy for regenerative medicine and new substance classes, such as antibody-drug conjugates (ADCs), are increasing the number and range of approved biopharmaceuticals, as well as necessitating investments in innovative production technologies.

This relatively young biopharmaceuticals segment is driving sector growth with its high innovative power, as reflected in the strong research and development pipelines. Of the estimated 10,000+ medications in R&D pipelines, more than 40% are based on biological manufacturing processes. These include more than 1,750 biosimilars and biobetters, which are generic versions of biologic agents with comparable or better efficacy or fewer side effects than the original compounds.

Biosimilars are contributing increasingly to the growth of the biotechnology market. Current estimates indicate that by 2022, the market could grow by an annual average of 30% and reach a volume of around €18 billion. The significantly lower prices of biosimilars, particularly in emerging and developing countries, are creating new, affordable therapy options and are expected to result in increased demand and rising manufacturing volume. The development of national production capacities to meet the growing demand for medications is receiving political support in these countries and is fueling the establishment of local biotech companies. The biosimilars market in industrialized countries is also likely to expand considerably in the coming years due to the expiration of patents for high-volume biopharmaceuticals and an increasing number of approved biosimilars. This is particularly the case in Europe, where generic medications have been widely used for many years and have been able to gain significant market share in some areas. In the United States, regulatory, patent and marketing challenges that have slowed development up to now could begin to ease.

Biopharma: A Growing Market

- Growing & aging population
- Increasing access to healthcare
- Strong R&D pipelines
- Emerging biosimilars market



[1)] Evaluate Pharma®: World Preview 2019, Outlook to 2024; June 2019; CAGR 2019 to 2024

The biopharmaceutical industry must meet a growing demand for medications while producing an increasing number of approved medications and new types of therapy. For these reasons, industry observers expect that worldwide bioreactor capacities will continue to expand in the years to come. At the same time, the industry faces rising cost pressure. This increases the significance of innovations for boosting flexibility and efficiency in biopharmaceutical research and production. In the future, the biopharmaceutical market will shift away from a low number of especially high-volume medications that account for a majority of total production volume towards an expanding range of products for smaller groups of patients. Technological progress leads to ongoing improvements in the productivity of biopharmaceutical manufacturing processes. Manufacturers will therefore, according to the research and consulting institute BioPlan, likely rely increasingly on single-use technologies for the commercial production of many new medications. Particularly in the case of relatively small batches, single-use technologies already ensure more cost-effective production than conventional stainless steel units. To master these challenges, more and more pharmaceutical companies are relying on digitalization and automation as well as innovative software solutions for controlling and optimizing their processes.

Laboratory Market Remains Stable while Macroeconomic Risks Increase

The market for laboratory instruments and consumables is expected to grow by about 3% to 4.5% annually in future years according to several market observers. The greatest demand is projected to continue to be generated in particular by the pharmaceutical and biopharma industry as a result of ongoing research into and approval of new medications, the high momentum of scientific and technological innovation and strong growth in China. For instance, Evaluate Pharma estimates that sector-specific research spending will climb annually by 3.0% during the period of 2018 to 2024.

Budget increases for academic and public-sector research institutions in some countries are expected to also act as a growth stimulant. On the other hand, the trade dispute between the United States and China or an unexpected slowdown in global economic growth could endanger demand in industrial end markets. Market observers continue to expect Asian countries like China and India to generate the highest growth rates. Stricter regulatory requirements in a range of industries are also stimulating increased demand for instruments used in sample analysis and quality control testing. Investments in laboratory infrastructure are becoming more attractive, particularly in China, as a result of improved protection of intellectual property rights and government-supported efforts to promote innovativeness in several key industries.

Sources: IQVIA Institute: The Global use of Medicine in 2019 and Outlook to 2023, January 2019; Evaluate Pharma: World Preview 2019, Outlook to 2024, June 2019; BioPlan: 16th Annual Report and Survey of Biopharmaceutical Manufacturing Capacity and Production, April 2019; Frost & Sullivan: 2019 Mid-year Report: Forecast and Analysis of the Global Market for Laboratory Products, May 2019; BCC Research: Biosimilars: Global Markets, March 2018; Daedal Research: Global Biologics Market: Size, Trends & Forecasts, December 2019

Future Business Development

Our 2020 guidance reflects the sector environment and economic trends, as well as the opportunities and risks outlined in this Annual Report. All forecasted figures are given in constant currencies. The entire guidance was derived using the same process as in the previous year.

Sartorius Stedim Biotech projects that it will increase Group sales in fiscal 2020 on the basis of constant currencies by around 11% to 14%, with Biological Industries acquired at the end of 2019 expected to contribute approx. 2 percentage point to this growth.

Regarding profitability, management forecasts that the company's underlying EBITDA margin will increase year over year from 29.3% to about 29.5%.

The ratio of capital expenditures to sales revenue is expected to be around 8%, down from the year-earlier figure of 9.4%.

With respect to financial position, management projects that the ratio of net debt to underlying EBITDA will be slightly below the previous year's level of 0.3 reported.

The above forecast does not consider the acquisition of parts of Danaher's life science portfolio, which was announced on October 21, 2019, and is currently undergoing antitrust clearance. Following the closing of the transaction, which is currently expected around the end of the first quarter of 2020, management will adjust its full-year guidance accordingly.

The guidance assumes an overall stable economic environment and intact supply chains.

Financial Statements of the Parent Company Sartorius Stedim Biotech S.A. as of December 31, 2019

Financial Statements of the Parent Company

Sartorius Stedim Biotech S.A. is the parent company of the Group. The company is a mixed holding Company. The company from now on is managing investments of the Group and reals estates for the French Companies.

In 2019, sales revenue generated at Sartorius Stedim Biotech S.A. was €K 2,116 relative to €K 1,999 in 2018. The operating profit is €K - 2,606 versus €K - 2,371 K in 2018. The net financing income totaled €K 58,925 versus €K 48,576 in 2018.

The net profit for 2019 is €K 56,834 compared to €K 49,521 in 2018.

Appropriation of the Net Profit

The ASM will suggest to appropriate the net profit of €56,834,137 for the reporting year of 2019. as follows:

– The following amount is to be added to this balance: Year-earlier profit carried forward: €31,324,481

– This would yield a distributable profit of €88,158,618

– Total amount of dividends to be disbursed to shareholders: €62,682,529

– Balance resulting from disbursement: €25,476,089

The remaining amount of €25,476,089 is to be carried out to the next year.

Dividends of the last three financial years (information updated as of 1st January 2019)

The table below makes the list of the amount of the dividend per share distributed, since 2016, as well as the tax provisions applicable.

Exercise	Dividend[1]	Amount eligible for the 40% abatment	Amount not eligible for the 40% abatment	Dividend per shares[1]
Dec. 31, 2018	52,540,761	52,540,761	0	0.57 €
Dec. 31, 2017	42,402,887	42,402,887	0	0.46 €
Dec. 31, 2016	38,713,209	38,713,209	0	0.42 €

[1] Prior deduction of social contribution on the dividend paid to physical person.

Proposition of dividend for the 2019 financial year

The Board of Directors has decided to propose to the 24th of March 2020 Annual Shareholders' Meeting a net dividend of 0.68 euros, per share for the 2019 financial year in comparison with €0.57 for 2018.

The dividends are distributed to the shareholders in ratio with the proportion of the capital held by each shareholder.

The dividend will be paid on 31 March 2020.

Dividend distribution policy

The company follows a policy of dividend distribution linked on one part to the Group's profit over the financial year concerned and on another one to the Group's predictable evolution and profitability.

The 26th of March 2019 Shareholders' Meeting voted a net dividend of 0.57 euro per share. The payment of the dividend was paid on 2 April 2019.

Dividends and interim dividends paid and unclaimed are prescribed after five years in favor of the State, from their date of payment (article 2277 of the Civil Code).

Elements likely to have an impact in the event of a public offer

Pursuant to article L. 225-100-3 of the French Commercial Code, an element is likely to have an impact in the event of a public offer: the first shareholder of Sartorius Stedim Biotech S.A. holds a significant percentage of its capital and voting rights.

Sartorius Stedim Biotech S.A. Share Capital

Share Capital as of December 31, 2019

As of 31 December 2019, the share capital amounts to eighteen million four hundred and thirty-six thousand thirty-eight euros (€18,436,038). It is divided into twenty two million one hundred and eighty thousand one hundred and ninety (92,180,190) shares worth twenty cents euros (€0,20) each, all fully subscribed and paid up (Heading I, Article 6 of the bylaws), all of which are entitled to the dividend for the financial year 2018, with the exception of shares held by the Company.

Date	Nature of the transaction	Share par value	Share capital increase	Share premium	Number of new shares	Number of shares after the transaction	Share capital after the transaction
Year 2013	Exercise of share subscription options	0.61	610.0	8,620.0	1,000.0	17,042,306	10,395,806.6
Year 2014	Exercise of share subscription options	0.61	9,541.6	134,834.0	15,642.0	17,057,948	10,405,348.2
Year 2014	Reduction of Capital: Cancellation of Treasury Shares	0.61	−1,036,213.1		−1,698,710.0	15,359,238	9,369,135.1
Year 2014	Increase of Capital: nominal value change	1.00	5,990,102.8			15,359,238	15,359,238.0
Year 2015	Exercise of share subscription options	1.00	8,000.0	174,880.0	8,000.0	15,367,238	15,367,238.0
Year 2016	Reduction of Capital: Cancellation of Treasury Shares	1.00	−1,642,095.0		−1,642,095.0	13,725,143	13,725,143.0
Year 2016	Increase of Capital: new actions created	1.00	1,638,222.0		1,638,222.0	15,363,365	15,363,365.0
Year 2016	Increase of Capital: nominal value change	0.20	3,072,673.0		3,072,673.0	92,180,190	18,436,038.0
Year 2017						92,180,190	18,436,038.0
Year 2018						92,180,190	18,436,038.0
Year 2019						92,180,190	18,436,038.0

Sartorius Stedim Biotech S.A. Shareholdings as of December 31, 2019

Situation of Sartorius Stedim Biotech S.A. Shareholdings

Shareholders	Shares	Voting rights
More than 50%	Sartorius AG	Sartorius AG
More than 10% but less than 50%	None	None
More than 5% but less than 10%	None	None

Over the past three years, the ownership of Sartorius Stedim Biotech share capital has been distributed as follows:

	December 31, 2017			December 31, 2018			**December 31, 2019**		
Shareholders	Number of shares	% of share capital	% of voting rights	Number of shares	% of share capital	% of voting rights	**Number of shares**	**% of share capital**	**% of voting rights**
Sartorius AG	68,450,400	74.3%	84.5%	68,450,400	74.3%	84.5%	68,450,400	74.3%	84.5%
Single voting rights									
Double voting rights	68,450,400	74.3%	84.5%	68,450,400	74.3%	84.5%	68,450,400	74.3%	84.5%
Single voting rights									
Double voting rights	0	0.0%	0.0%						
Total Sartorius Group	**68,450,400**	**74.3%**	**84.5%**	**68,450,400**	**74.3%**	**84.5%**	**68,450,400**	**74.3%**	**84.5%**
Treasury shares									
Personnel and other shareholders									
General public	23,729,790	25.7%	15.5%	23,729,790	25.7%	15.5%	23,729,790	25.7%	15.5%
Single voting rights	22,439,112	24.3%	13.9%	22,439,112	24.3%	13.9%	22,439,112	24.3%	13.9%
Double voting rights	1,290,678	1.4%	1.6%	1,290,678	1.4%	1.6%	1,290,678	1.4%	1.6%
Total shares	**92,180,190**	**100.0%**	**100.0%**	**92,180,190**	**100.0%**	**100.0%**	**92,180,190**	**100.0%**	**100.0%**

Legal Disclosure of Thresholds Crossed

No legal disclosure of thresholds crossed has been registered during the fiscal year under study.

	Shares	% Issued Capital	Voting rights	% Voting rights
Sartorius AG	68,450,400	74.30	68,450,400	84.56
Total Sartorius AG	**68,450,400**	**74.30**	**68,450,400**	**84.56**

Control of the Company as of December 31, 2019

Sartorius AG holds, directly or indirectly, 74.3% of the share capital and 84.5% of the outstanding voting rights. Treasury shares are without voting rights.

Staff Shareholdings

None

Treasury Shares Held by Sartorius Stedim Biotech S.A.

None

Unpaid Capital

None

Authorized but Unissued Capital

None

Securities Not Representative of the Share Capital

None

Authority granted by the Annual Shareholders' Meeting to the Board of Directors still valid.

DELEGATION GRANTED FOR INCREASE IN CAPITAL BY THE SHAREHOLDER'S MEETING TO THE BOARD OF DIRECTORS

Delegation of competence

Object - Duration	Limit	Use in 2019
Ability to issue shares and/or securities giving access to the share capital of the company and/or securities giving the right to the allotment of the debt instruments, with preferential subscription rights of the shareholders. Granted for a period of 26 months as from 03 April 2018	The limit is €2,000,000 corresponding to the maximum nominal amount of the increase of the share capital and to the maximal nominal amount of the debt instruments and €500,000,000 on the maximum overall limit of the maximum nominal amount of the debt instruments.	None
Ability to issue shares and/or securities giving access to the share capital of the company and/or securities giving the right of the allotment of debt instruments, without preferential subscription rights of the shareholders – through public offerings. Granted for a period of 26 months as from 03 April 2018	The limit is deducted on the overall limit of €2,000,000 (increase of the share capital) and on the overall limit of €500,000,000 (debt instruments).	None
Ability to issue shares and/or securities giving access to the share capital of the Company and/or securities giving the right to the allotment of debt instruments, without preferential subscription rights of the shareholders - through private placements as set forth in article L.411 - 2 II of the French Monetary and Financial Code. Granted for a period of 26 months as from 03 April 2018	The limit is deducted on the overall limit of €2,000,000 (increase of the share capital) and on the overall limit of €500,000,000 (debt instruments).	None
Ability to increase the number of shares and/or securities giving access to the share capital of the Company to be issued in the event of a share capital increase with or without preferential subscription rights of the shareholders. Granted for a period of 26 months as from 03 April 2018	The limit amount 15% of initial issue of shares. It is deducted on the overall limit of €2,000,000 (increase of the share capital	None
Ability to issue shares and/or securities giving access to the share capital of the Company, as consideration for securities tendered through public exchange offers initiated by the Company, without preferential subscription right of the shareholders. Granted for a period of 26 months as from 03 April 2018	The limit is deducted on the overall limit of €500,000,000 (increase of the share capital) and on the overall limit of € 2,000,000 (debt instruments).	None
Ability to increase the share capital through the capitalization of reserves, earnings or premiums or any other sum upon which capitalization would be permitted. Granted for a period of 26 months as from 03 April 2018	The limit is €2,000,000 (corresponding to the maximum nominal amount of the increase of the share capital); It is a independent limit.	None
Ability to issue shares and/or securities giving access to the share capital giving the right to the allotment of debt instruments, without preferential subscription rights of the shareholders and reserved for members of saving plans. Granted for a period of 26 months as from 03 April 2018	The limit is €2,000,000 corresponding to the maximum nominal amount of the increase of the share capital; it is an independent limit.	None

Other Securities Giving Access to the Share Capital

None

Stock Options

None

Share Capital Dilution

None

Share Subscription Options Granted to Each Senior Executive of the Company and Options Exercised by Them in Fiscal 2019

None

Share Subscription Options Granted to the Ten Top Non-senior Executive Beneficiaries and Options Exercised by Them in the 2019 Fiscal Year

None

Options Exercised During the Fiscal Year

All options have been exercised in 2015. The stock option plans are now expired.

Share Subscription Plan

The stock option plans are detailed in the tables below. The authority delegated to the Board of Directors for setting up a new plan has recently expired. The Board of Directors no longer has any such delegated authority to set up any new plan.

Share Subscription Warrants

Sartorius Stedim Biotech S.A. has not issued any share subscription warrants.

Pledging of Shares

No Sartorius Stedim Biotech S.A. shares were pledged.

Pledging of Assets

None

in €	2018	2017	2016	2015	2014
Dividend per share for the fiscal year	0.57	0.46	0.42	2.00	1.30
Number of shares	92,180,190	92,180,190	92,180,190	15,367,238	15,359,238
Dividend corrected per share[1)]	**0.57**	**0.46**	**2.52**	**2.00**	**1.30**

[1)] Compared to the number of shares as of December 31, 2016

Senior Executives

Information on Sartorius Stedim Biotech S.A. senior executives and a list of the positions they hold or have held over the past five years are included in the Corporate Governance report.

Directors' Fees

Directors' fees are calculated on an annual basis. The method of calculating these fees remains the same. It is as follows.

The directors receive directors' meeting attendance fees whose amount and allocation are established by the Board of Directors in consideration of the limits set by the ASM:

- Each Director receives a fixed remuneration of €25,000 per year, to be paid after the annual financial statements have been adopted by the Annual Shareholders' Meeting and which falls due for payment after the Annual Shareholders' Meeting. The chairman of the Board receives twice this amount. Furthermore, members of the Board receive a fee of €1,200 per meeting and reimbursement of its expenses in addition to the annual remuneration.

- For their membership of any committee each Director receives a lump-sum amount of €4,000 per full year of membership in addition to the fee of €1,200. Insofar as they hold the chair, instead of this, they receive a lump-sum amount of €8,000 per full year that they hold the chairperson in addition to the fee. The remuneration for the activities on any committee is due together with the remuneration under the terms of previous Subsection hereof.

- Any value-added tax is reimbursed by the corporation, insofar as the members of the Board are entitled to invoice the corporation separately for the value-added tax and they exercise this right.

- All these resolutions will not be applied for the Directors that got an executive top management activity at the group level. In this context, the executive corporate officers will not receive any remuneration for their membership.

A total of €249,353 is paid in directors' fees for 2019.

		Base | fixed salaries € in K	Annual incentive € in K	Long Term Incentive € in K	Other € in K	Stock options € in K	Departure Indemnity € in K	Directors' fees € in K
Total 2018	2,522.0	863.0	455.0	1,189.0	15.0	0.0	0.0	0.0
Total 2019	**2,735.0**	**888.0**	**495.0**	**1,337.0**	**15.0**	**0.0**	**0.0**	**0.0**
Joachim Kreuzburg[1] 2018	2,522.0	863.0	455.0	1,189.0	15.0	0.0	0.0	0.0
Joachim Kreuzburg[1] 2019	2,735.0	888.0	495.0	1,337.0	15.0	0.0	0.0	0.0

[1] For more details please refer to the Chapter Corporate Governance on pages 61 to 94.

Independent Auditors

The independent auditors for Sartorius Stedim Biotech S.A. are:

- KPMG S.A., represented by John Evans. Alternate auditor: Salustro Reydel.

- Deloitte & Associés, represented by Philippe Battisti.

Payment Terms for Trade Payables & Receivables

	Article D. 441 - 1st : Invoices received but not paid at the date of the end of the exercicze whose term has expired						Article D. 441 - 2nd: Invoices sent but not paid at the date of the end of the exercize whose term has expired					
	0 day (indicative)	1 à 30 days	31 at 60 days	61 at 90 days	91 days and after	Total	0 day (indica-tive)	1 à 30 days	31 at 60 days	61 at 90 days	91 days and after	Total
(A) Repartition of late payment												
Number of concerned invoices	6	10	6	2	10	34	2	1				3
Total Amount of concerned invoices (Including all taxes)	160,580	278,848	23,161	77,980	97,741	568,228	–15,609	– 211,004				–226,613
Percentage of Total amount of purchases including taxes for the exercize	3%	5%	0%	0%	3%	11%						
Percentage of sales including taxes for the exercize							1%	8%				9%
(B) Invoices excluded from (A) relating to disputed and and contentious Receivables non recorded												
Number of invoices excluded	0					0						
Total amount of excluded invoices including taxes	0					0						
(C) Reference payment terms used (Contractual or statutory period - article L. 441 - 6 or article L. 441 - 3 of Commerce Code)												
Payment terms used for the payment term calculation		Contractual time limit:		30 days				Contractual time limit:	30 days			
		Legal time limit:						Legal time limit:				

Five-Year Financial Results of the Parent Company Sartorius Stedim Biotech S.A.

€ in K	2015	2016	2017	2018	**2019**
Share capital at end of period					
Share capital (capital stock)	15,359	18,436	18,436	18,436	18,436
Number of shares outstanding	15,359,238	92,180,190	92,180,190	92,180,190	92,180,190
Transactions and financial performance					
Sales revenue (excl. VAT)	1,593	1,843	2,198	1,999	2,116
Profit before tax, employee profit sharing plan, amortization, depreciation and provision expenses (and reversals)	29,343	59,635	55,840	54,135	57,230
Income tax	–653	4,543	5,552	3,316	–443
Contribution to employee profit-sharing plan	0	0	0	0	0
Net profit	29,312	54,324	49,463	49,521	56,834
Dividends paid or proposal of dividend	19,967	30,734	38,713	42,403	52,541
Earnings per share					
EPS after tax and employee profit-sharing, but before amortization, depreciation and provision expenses	1.95	0.60	0.55	0.55	0.63
EPS after tax and employee profit-sharing, amortization, depreciation and provision expenses	1.91	0.59	0.54	0.54	0.62
Dividend per share	1.30	0.33	0.42	0.46	0.57
Personnel					
Workforce size	0	0	0	0	0
Personnel costs	0	0	0	0	0
Social security costs	0	0	0	0	0

Corporate Governance Report

03

The Board of Directors and its Committees

The Board of Directors

	Name	Mandate	Age	Independent[1)]	First appointement	Expiration of current mandate[2)]	Audit Committee member	Remunerations & Nominations Committee member
	Joachim KREUZBURG	Chairman and Chief Executive Officer	54		2007	2022		
	Pascal BOISSEL	Director	53	•	2019	2022	•	
	Amélie BUTON	Director representing employees	33		2019	2022		
	Susan DEXTER	Director	64	•	2015	2021		•
	René FÀBER	Director	44		2019	2022		
	Anne-Marie GRAFFIN	Director	58	•	2015	2021	•	•
	Lothar KAPPICH	Director	62		2017	2022	•	•
	Henri RIEY	Director	58	*)	2007	2022	•	•

1) In accordance with the recommendation N° 8 of the AFEP-MEDEF code

2) Directors are appointed until the date of the Annual General Shareholders' Meeting called to approve the financial statement of the previous fiscal year ending.

*) In accordance with the criteria exposed within the recommendation N°8.5.6 of the AFEP-MEDEF code, Mr. Riey lost his independency qualification on June 29th, 2019, date of the twelfth anniversary of his first appointment as director of the company.

The company is administered by a Board of Directors composed of eight members, three of whom are independent. The directors are appointed for a three-year period.

The organization of the works of the Board and its composition must be suited to the shareholding structure, to the size and the nature of the activity of Sartorius Stedim Biotech S.A. and the particular circumstances it can face.

Composition of the Board of Directors as of
31 December 2019:

For historical reasons due to the shareholding structure of the Company, the composition of the Board of Directors and its Committees reflected the search by our reference shareholder of a long lasting balance between the Directors representing these shareholders, the Independent Directors and the executives.

Our reference shareholder takes its own responsibility towards the other shareholders, direct and distinct from the Board of Directors' one. He takes particular care to avoid possible conflicts of interests in the transparency of the information provided to the market and to fairly take all interests into account.

The Board of Directors should consider what would be the desirable balance in its membership and that of the Committees it has stablished, in particular in the representation of women and men, nationalities and diversity of skills by taking measures appropriate to guarantee to the shareholders and to the market that its missions are carried out with the necessary independence and objectivity. It makes public in the Reference Document the objectives, methods and results of its politics on these subjects.

Joachim Kreuzburg

Chairman and Chief Executive Officer

Date of birth: 22 April 1965
Nationality: German

First appointment: 29 June 2007
Mandate renewed: 26 March 2019
Appointed until: date of the Annual General Shareholders' Meeting in 2022 to approve the financial statements for the fiscal year ending 31 December 2021

Number of Sartorius Stedim Biotech Shares held: 6

Other current directorships and positions
within the Group:

Chairman of the Executive Board (Vorstand) of Sartorius AG;
Chairman of the Supervisory Board of
Sartorius Stedim Biotech GmbH;
Managing Director of Sartorius Lab Holding GmbH;
Managing Director of
Sartorius Corporate Administration GmbH;
Managing Director of SWT Treuhand GmbH;
Managing Director of SI Weende-Verwaltungs-GmbH;
Managing Director of SI Grone 1 -Verwaltungs-GmbH;
Managing Director of SIV Grone 2 GmbH;
Managing Director of Sartorius Ventures GmbH;
Chairman of the Advisory Board of
LabTwin GmbH;
Member of the Board of Directors of
Essen Instruments, Inc.;
Chairman of the Board of Directors of
Sartorius North America Inc.;
Member of the Board of Directors of
Denver Instrument (Beijing) Co. Ltd.

Past directorships (held during the past five years) within the Group:

Vice Chairman of the Supervisory Board of Sartorius Stedim Biotech GmbH;
Managing Director of Sartorius Weighing Technology GmbH;
President of VL Finance S.A.S.;
President and Chairman of the Executive Committee of Sartorius Stedim FMT S.A.S;
Member of the Board of Directors of kSep Holdings, Inc.;
Member of the Board of Directors of ViroCyt, Inc.;
Chairman of the Board of Directors of Sartorius Stedim North America Inc.;
Member of the Board of Directors of IntelliCyt Corporation;
Chairman of the Board of Directors of Sartorius Stedim Filters Inc.;
Member of the Board of Directors of Sartorius Scientific Instruments (Beijing) Co. Ltd.;
Member of the Board of Directors of Sartorius Japan K.K.;
Member of the Board of Directors of Sartorius Stedim Japan K.K.;
Member of the Board of Directors of Sartorius Stedim Lab Ltd.;
Member of the Board of Directors of Sartorius Stedim BioOutsource Ltd.

Other current directorships and positions outside the Group:

Member of the Supervisory Board (Aufsichtsrat) of Carl Zeiss AG, Germany;
Vice Chairman of the Supervisory Board (Aufsichtsrat) of Ottobock SE & Co. KGaA, Germany;
Member of the Administrative Board (Verwaltungsrat) of Ottobock Management SE, Germany;
Member of the Economic Advisory Board (Wirtschaftsbeirat) of Norddeutsche Landesbank, Germany.

Past directorships (held during the past five years) outside the Group:

Chairman of the Advisory Board (Beirat) of Otto Bock Holding GmbH & Co. KG, Germany;
Member of the regional Advisory Board (Regionalbeirat) of Commerzbank AG, Germany.

Educational and professional background:

Diplom-Maschinenbau-Ingenieur, Dr. rer. pol. (University degree in mechanical engineering, doctorate in economics)

1992–1995	Research associate at the Institute for Solar Energy Research in Hamelin, Germany
1995–1999	Research associate at the Faculty of Economics and Management at the University of Hanover, Germany
Since 1 May 1999	Sartorius AG, Goettingen, Germany Most recent position before promotion to the Executive Board: Vice President, Finances and Investor Relations
Since 11 Nov. 2002	Member of the Executive Board of Sartorius AG, Goettingen, Germany
1 May 2003, to 10 Nov. 2005	Spokesman (Sprecher) of the Executive Board of Sartorius AG, Goettingen, Germany
Since 11 Nov. 2005	CEO and Executive Board Chairman of Sartorius AG, Goettingen, Germany; currently responsible for Group Strategy, Human Resources, Corporate Research, Legal Affairs & Compliance, Communications

Lothar Kappich

Non-executive member
Date of birth: 15 February 1957
Nationality: German

First appointment: 14 September 2017
Mandate renewed: 26 March 2019
Appointed until: the 2022 Annual General Shareholders' Meeting approving the financial statements for the fiscal year ending 31 December 2021

Number of Sartorius Stedim Biotech shares held: 1

Other current directorships and positions within the Group:

Chairman of the Supervisory Board of Sartorius AG.

Past directorships (held during the past five years) within the Group:

Member of the Supervisory Board of Sartorius AG.

Other current directorships and positions outside the Group:

None

Past directorships (held during the past five years) outside the Group:

Managing Director of ECE Projektmanagement GmbH & Co. KG, Germany.

Educational and professional background:

Doctorate (Dr. rer. pol.) in economics (subject of the doctoral dissertation: Theory of International Business Activity)

1988 - 1990	Controller in the Central Controlling Department from Schering AG in Berlin
1990 - 2017	ECE Projektmanagement G.m.b.H. & Co. KG in Hamburg, latest position Managing Director of ECE's HR & Corporate Services as well as Managing Director of numerous subsidiaries at the ECE group
2007 - 2017	Member of the Supervisory Board of Sartorius AG, Goettingen
Since 2017	Chairman of the Supervisory Board of Sartorius AG, Goettingen

René Fáber

Non-executive member
Date of birth: 18 July 1975
Nationality: Slovak

First appointment: 26 March 2019
Appointed until: the 2022 Annual General Shareholders' Meeting approving the financial statements for the fiscal year ending 31 December 2021

Number of Sartorius Stedim Biotech shares held: 1

Other current directorships and positions within the Group:

Member of the Executive Board of Sartorius AG;
Vice Chairman of the Supervisory Board of
Sartorius Stedim Biotech GmbH;
Member of the Bord of Directors of
Sartorius Korea Biotech Co., Ltd.;
Member of the Bord of Directors of
Sartorius Stedim Japan K.K.;
Member of the Bord of Directors of
Sartorius Stedim (Shanghai) Trading Co., Ltd.;
President and Chairman of the Executive Committee of Sartorius Stedim FMT S.A.S.

Past directorships (held during the past five years) within the Group:

Managing Director of Sartorius Stedim Biotech GmbH;
Managing Director of
Sartorius Stedim North America Holding GmbH.

Other current directorships and positions outside the Group:

None

Past directorships (held during the past five years) outside the Group:

None

Educational and professional background:

Master degree in chemistry at the Technical University in Bratislava, Slovakia

PhD in polymer chemistry at the Technical University of Munich, Germany

2001 - 2002	Scientist at French specialty chemical group Rhodia, Slovakia
2002 - 2004	Post-doctoral researcher at Vivascience
2004 - 2018	Various positions at Sartorius Group (esp. Sartorius Stedim Biotech GmbH, Germany)
2004 - 2006	Scientist R&D Membrane Modification
2006 - 2010	Director development and production of surface modified membranes
2010 - 2013	Vice President R&D Process Technologies
2012 - 2014	Value Creation Agent in Supplier Relationship Center of Roche and Genentech, San Francisco, USA
2014 - 2017	Vice President Marketing and Product Management Filtration Technologies
2016 - 2018	Key Account Manager Roche/Genentech
2017 - 2018	Vice President Marketing and Product Management Fermentation Technologies
2018	Head of Product Development, Bioprocess Solutions Division
Since 2019	Head of Bioprocess Solutions Division of Sartorius Group, Member of the Executive Board of Sartorius AG, Germany

Henri Riey

Non-executive member
Date of birth: 5 November 1961
Nationality: Monegasque

First appointment: 29 June 2007
Mandate renewed: 26 March 2019
Appointed until: date of the Annual General Shareholders' Meeting in 2022 to approve the financial statements for the fiscal year ending 31 December 2021

Number of Sartorius Stedim Biotech shares held: 6

Other current directorships and positions outside the Group:

President of Aidea;
President of Groupe HR S.A.S.;
Director and secretary-treasurer of The Princess Grace Foundation (Monaco)

Educational and professional background:

Diplôme Institut Supérieur de Gestion (France)
(degree earned at the French Higher Institute of Business Management "Institut supérieur de gestion")

1985–1988	Fund Manager at Paribas bank
1988–1996	Fund Manager, responsible for the European Equity Fund Management Team at Barclays Bank, France
1996–1999	Head of Research of Barclays Asset Management Europe
1999–2004	Executive Vice President of Barclays Asset Management; in charge of all fund management businesses
2004 - 2013	CFO of Hendyplan S.A.

Anne-Marie Graffin

Non-executive member
Independent Director
Date of birth: 3 May 1961
Nationality: French

First appointment: 7 April 2015
Mandate renewed: 03 April 2018
Appointed until: date of the Annual General Shareholders' Meeting in 2021 to approve the financial statements for the fiscal year ending 31 December 2020

Number of Sartorius Stedim Biotech shares held: 6

Other current directorships and positions outside the Group:

Member of the Supervisory Board of Valneva SE;
Member of the Supervisory Board of Nanobiotix S.A.;
Member of the Supervisory Board of M2Care S.A.S.;
Managing Director of SMAG Consulting SARL.

Past directorships (held during the past five years) outside the Group:

None

Educational and professional background:

Graduated from ESSEC (Ecole Supérieure des Sciences Economiques et Commerciales)

1984 - 1987	International Distillers and Vinters, France Products Manager
1988 - 1990	URGO Laboratories Marketing Manager
1991 - 1995	RoC S.A (Johnson & Johnson) - Head of International Marketing Group
1998 - 2000	Sanofi Pasteur MSD - France Products Manager Adults Vaccines
2001 - 2005	Sanofi Pasteur - Head of range then Europe Adults Vaccines Marketing Director
2006 - 2008	Sanofi Pasteur MSD - Executive Director Business Management
2009 - 2010	Sanofi Pasteur MSD - Vice President Business Management
Since 2011	Managing Director SMAG Consulting SARL - Advice Biotech and Medtech Strategy Management

Susan Dexter

Non-executive member
Independent Director
Date of birth: 11 October 1955
Nationality: American

First appointment: 7 April 2015
Mandate renewed: 03 April 2018
Appointed until: date of the Annual General Shareholders' Meeting in 2021 to approve the financial statements for the fiscal year ending 31 December 2020

Number of Sartorius Stedim Biotech shares held: 6

Other current directorships and positions outside the Group:

None

Past directorships (held during the past five years) outside the Group:

Kalon Biotherapeutics, College Station, Texas, USA - CMO;
BioSense Technologies, Woburn, Massachusetts, USA- Clinical diagnostic technology based on cellular impedence.

Educational and professional background:

Degrees and Certifications: BS in Immunology and Marketing (double major, honors), American University, Washington, D.C., USA

Harvard University Negotiation Course for Lawyers, Harvard University, Cambridge, Massachusetts, USA

Finance for non-financial Managers, Harvard University through Dow Chemical Company internal training program

1975 - 1980	University of Massachusetts Medical School, Research, mammalian cell culture, animal toxicology studies, basic research
1980 - 1986	Collaborative Research, Biotechnology Sales in emerging markets for bioprocessing supplements and raw materials for biomanufacturing
1986 - 1998	Celltech Biologics, Lonza Biologics, Business Development-bioprocessing and manufacturing of biotechnology based biotherapeutics
1998 - 2004	Collaborative BioAlliance, Dow Chemical Company (Dow Biotechnology Contract

	Manufacturing Services) - Vice President, Business Develoment for microbial fermentation services, technologies and implementation of single use bioprocessing technologies
2004 - 2008	Xcellerex, Inc. (now GE Healthcare), Chief Business Officer; CMO services using fully integrated single-use bio-processing technology, sales of single use bioprocessing technologies
Since 2008	Latham Biopharm Group, Managing Director; Due Diligence, Acting VP Business Development for multiple CMO's offering contract manufacturing services to the biotechnology life sciences industry, strategic consulting, single-use disposable technology implementation, project management and high-level business development and marketing, Advisor and speak for BioProcess International, Outsourced Pharma

Pascale Boissel

Non-executive member
Indendent Director
Date of birth: 15 October 1966
Nationality: French

First appointment: 26 March 2019
Appointed until: the 2022 Annual General Shareholders' Meeting approving the financial statements for the fiscal year ending 31 December 2021

Number of Sartorius Stedim Biotech shares held: 1

Other current directorships and positions outside the Group:

Member of the Board of Directors of Poxel S.A.

Past directorships (held during the past five years) outside the Group:

None

Educational and professional background:

Graduated from HEC (Ecole des hautes Etudes de Commerciales) : MBA in Finance & Audit

Graduated with a CPA diploma (diplôme d'expertise comptable & commissariat aux comptes)

2009 - 2012	IPSOGEN – Chief Financial Officer
2012 - 2016	BIOASTER Institute – Chief Financial Officer & Deputy Chief Executive Officer
2017 - 2018	ENYO PHARMA – Part time Chief Financial Officer
Since 2017	NOVADISCOVERY – Part time Chief Financial Officer

Amélie Buton

Non-executive member
Director representing the Employees
Date of birth: 20 April 1986
Nationality: French

First appointment: 26 September 2019
Appointed until: the 2022 Annual General Shareholders' Meeting approving the financial statements for the fiscal year ending 31 December 2021

Number of Sartorius Stedim Biotech shares held: 1

Other current directorships and positions outside the Group:

None

Past directorships (held during the past five years) outside the Group:

None

Educational and professional background:

Graduated from Keele University (UK) - Law degree

Graduated from University Paris X- Master European and International Law

Graduated from University Paris V- Master International Business Law

2009 - 2010	L'Oréal – Legal Counsel (Asia/Africa/Middle East, Pacific Zone) 2010 – 2017 Voisin Consulting Life Sciences – Legal Counsel
Since 2017	Sartorius Stedim Biotech – Regional Counsel

Registered Addresses

With regards to their social mandates, the members of the Board of Directors and of the General Management are domiciled at the Company's headquarters.

One Director representing employees since September 2019

One Director representing the employees is member of the Board of Directors. Ms Amélie Buton was appointed by the Work Council of the Company. She holds the duties of Regional Counsel. She was appointed in September 2019 for a 3 -year term. Like any new Director, the Director representing the employees followed an induction course intended to perfect her knowledge of the Company's organisation and activities, which involved in particular individual interviews with the Group's main senior managers.

As soon as she took up her office, Ms. Amélie Buton has been participating, as secretary, to the meetings of the Audit Comittee and the Remunerations and Nominations Committee.

Ms. Amélie Buton does not receive Directors' fees as a Director representing the employees. The components of her remuneration as an employee are not published.

Independent Directors

The Company being controlled by a majority shareholder, the portion of independent administrator board members should be at least a third of the Board. As of 31 December 2019, the Board of Directors of Sartorius Stedim Biotech S.A. is composed of 43% of independent members under the independence criteria defined by the APEF-MEDEF code.

Pursuant to the principles of good corporate governance, the independent members may not be principal shareholders, employees, former Group employees, suppliers or bankers of the Group or major customers, nor may they have any other link likely to impair their judgment.

In accordance with the internal rules of the Board of Directors and in application of the AFEP-MEDEF code, the independence of directors is assessed each year with respect to the following criteria.

An independent director:

- May not be an employee or senior executive employee or director of his or her parent company or of one of its consolidated companies and may not have been so during the five previous years (criterion 1);

– May not be a senior executive of a company in which the company directly or indirectly holds a director's position or in which an employee as such or a senior executive of the company (either currently or having been so for less than five years) holds a director's position (criterion 2);

– May not be a significant client, supplier, business banker or investment banker of the company or of its group, for which the company or its group represents a significant part of its business (criterion 3);

- May not have any close family ties with one of the senior executives (criterion 4);

- May not have been a statutory auditor of the company for the five past years (criterion 5);

May not have been a director of the company for more than twelve years (criterion 6).

In addition to the abovementioned criteria, the Board of Directors analyses other factors, such as the ability to understand the issues and risks, prior to making a decision on whether a director qualifies as independent.

- As part of the Assessment of the Board of Directors, the Board of Directors goes through all the criteria listed above and currently it states that it has three independent directors: Mrs. Pascale Boissel, Mrs. Susan Dexter, Mrs Anne-Marie Graffin.

	Not an employee or executive officer	No cross-directorships	No significant business relationships	No family links	Not a statutory auditory	First appointement	Not a director for over 12 years	Classification adopted
Joachim Kreuzburg	No	No	Yes	Yes	Yes	2007	Yes	Not independent
Pascale Boissel	Yes	Yes	Yes	Yes	Yes	2019	Yes	Independent
Henri Riey	Yes	Yes	Yes	Yes	Yes	2007	No[2]	Not Independent
René Fáber	No	Yes	Yes	Yes	Yes	2019	Yes	Not Independent
Susan Dexter	Yes	Yes	Yes[1]	Yes	Yes	2015	Yes	Independent
Anne-Marie Graffin	Yes	Yes	Yes	Yes	Yes	2015	Yes	Independent
Lothar Kappich	Yes	No	Yes	Yes	Yes	2017	Yes	Not independent
Amélie Buton	No	Yes	Yes	Yes	Yes	2019	Yes	Not independent

1) Particular attention was paid to the situation of Mrs. Susan Dexter, who holds a position at Latham Biopharm Group Inc., a company with whom Sartorius Stedim Biotech GmbH signed a consultancy agreement, which expired on December 31, 2017 and has not been renewed. The Board noted that the relation between these two companies were not significant in terms of their volume. In add ition, the possibility for Sartorius to use a panel of providers having similar expertise than Latham Biopharm Group, in a competitive context, rule s, out all relationship of dependence.

2) Mr Henri Riey first mandate as director of the company occured on June 29th, 2007. As a consequence, the criteria N°6 of the recommandation N°8 of the AFEP MEDEF code (not being a director of the company for more than twelve years) is not fulfilled anymore since June 29, 2019. Therefore, Mr Henri Riey correlatively lost his quality of independent director as of that date.

Balanced representation of women and men

Each year, the Board of Directors examines the desired balance in its composition and that of its committees, seeking in particular a balanced representation of men and women, and a wide diversity of skills and nationalities, reflecting as best it can both the highly technical and global nature of the company's business.

Specifically, as regards the thresold of 40% women to be reached under the provisions of Article L. 225 - 18 - 1 of the French Commercial Code, the Board of Directors has put significant effort into searching for skilled, independent and dedicated female directors with a proven level of expertise in biotechnologies or related industries. As of 31 December 2019, the Board of Directors of Sartorius Stedim Biotech S.A. is composed of 43% of women.

Assessment of the Board of Directors

The internal rules of the Board of Directors require that once a year the Board devotes an item on its agenda to discuss its functioning and ensures that a formal assessment is carried out. For this purpose, in December 2019, members of the Board completed a questionnaire on the following topics:

- the Board's composition;

- the mode and structure of governance;

- the effectiveness of the Board of Directors;

- the Board's working methods;

- the areas of competence of the Board's members;

- areas for improvement.

Consistent with last year's efficiency review, the results are satisfactory in terms of flow of information, active participation of each Board members, quality of the Committee's work. Those answers are reflecting the high quality teamwork of Board members and their convergence of views.

Board of Directors' internal rules

The Board of Directors has adopted a set of internal rules that defines and includes rules of operation for this body relating to its powers, members' attendance, operations requiring approval and prior validation with a certain number of triggering thresholds. The directors' charter is included in the Annexe and defines the rights and obligations of directors, in particular regarding the code of ethics and prevention of conflicts of interest. The Board of Directors updated their internal rules during the meeting that took place on February 2019, with the purpose of ensuring compliance with the latest legal, regulatory and statutory obligations applicable to the Compay, as well as the last update of the AFEP-MEDEF governance code of June 2018.

Staggering of the mandate terms

According to the APEF MEDEF governance code for listed companies, the staggering of terms should be organized in order to avoid renewing a group of mandates and to promote harmonious renewing of the directors' mandates. The afferent rule relating to staggering terms is respected, as such, on December 31, 2019 five expiring memberships were. considered, among of which three were renewed (M. Kreuzburg, M. Kappich and M. Riey), and two were subject to new nominations (Ms. Boissel and M. Fáber, as a replacement of Ms de Lassus and M. Lemaître, whose mandates expired).

Plurality of mandates

In accordance with the APEF MEDEF governance code for listed companies, an executive Director can't exercise more than two other mandates of Director in listed companies outside its group, including foreign companies. It should in addition collect the notice from the Board before accepting a new Director mandate in a listed company.

Moreover, an administrator can't exercise more than four other mandates in listed companies outside its group, including foreign companies. This recommendation is applied during the nomination or the renewal of the administrator's mandate.

Procedures established and followed by the Committes are set up within their respective internal regulations.

Committes' members are appointed by the Board of Directors. A special attention is paid by the Board of Directors to the nomination of renewal of the mandate of the Chairman of the Audit Committee, upon recommendation of the Remunerations and Nominations Committee.

Other Information

The Board of Directors met eight times during fiscal 2019.

The preparation and holding of the meetings of the Board of Directors and its Committees require significant availability and investment by the Directors. In 2019, the attendance rate at Board meetings was 97% on average. The individual attendance rate at Board andCommittee meetings is specified below.

The allocation of Directors' fees, based on the rate of attendance by each of the Directors at Board meetings and presence at the meetings of its various Committees, is described in page 89 of the present Universal registration Document.

	Board of Directors	Audit Committee	Remunerations and Nominations Committee
Joachim Kreuzburg	100%		
Pascale Boissel (from March 26, 2019)	100%	100%	
Amélie Buton (from September 26, 2019)	100%		
Susan Dexter	100%		
René Fáber (from March 26, 2019)	100%		
Anne-Marie Graffin	100%	100%	
Lothar Kappich	100%	100%	100%
Henri Riey	75%	100%	100%
Liliane de Lassus (until March 26, 2019)	100%	100%	100%
Bernard Lemaître (until March 26, 2019)	100%	100%	100%
AVERAGE 2019	**97%**	**100%**	**100%**

In accordance with the bylaws of Sartorius Stedim Biotech S.A. Company, each Director owns personally at least one share of the company.

All Directors fulfill the below mentioned thresholds with regards to numbers of mandates in listed companies:

- For the executive Directors: maximum of two mandates in companies not belonging to the group,

- For non-executive Directors: maximum of four mandated in companies not belonging to the group.

To the company's knowledge, within the last five years, no member of the Board of Directors:

- has been convicted of fraud during the last five years or has been subject to any official public investigation or sanction by statutory regulatory authorities;

- has been associated in his | her capacity of manager in any bankruptcy, receivership or liquidation for the past five years;

- has been disqualified by a court from acting in the capacity of a member of an administrative, management or supervisory body of an issuer or from acting in the capacity of a management executive or conducting the business of any issuer for the past five years.

To the company's knowledge, no family relationships exist among the members of the company's Board of Directors.

Furthermore, to the company's knowledge, there is no conflict of interest between any duty of the members of the Board of Directors and their private interests and | or other duties. A Director must inform the Board as soon as he | she is aware of any conflict of interests, or even the possibility of a potential conflict, and must refrain from any participation in discussions on the relevant subject matter and from voting on any associated resolutions.

To the company's knowledge, no settlement or agreement has been reached with shareholders, clients, suppliers or others to appoint a member of the Board of Directors.

To the company's knowledge, there is no service contract linking a Board member to the Sartorius Stedim Biotech Group and granting him or her benefits.

Measures taken to ensure that control is not done in an abusive way are the following:

- Three members of the Board of Directors out of seven are Independent Directors.

- Two independent members of the Board out of three are members of the Audit Committee, one of them being the Chairwoman of such committee.

- Two independent members of the Board out of three are members of the Remunerations and Nominations Committee.

Conditions for Preparation and Organization of the Work of the Board of Directors

Internal Rules and Regulations

The procedures governing the organization and functioning of the Board of Directors are defined by the Internal Rules and Regulations of the Board which is published on the website of Sartorius Stedim Biotech S.A. as of the publication of this particular report.

The Internal Rules and Regulations currently applicable has been adopted on 7 February 2019 with the purpose of ensuring compliance with the latest legal, regulatory and statutory obligations applicable to the Compay, as well as the last update of the AFEP-MEDEF governance code of June 2018.

The Board of Directors deals with all matters concerning the proper operation of the company and takes decisions on subjects that concern it.

Its Missions

The main missions of the Board of Directors are as follows:

- The Board of Directors shall define the company's strategic goals and assess them from an overall perspective at least once a year, as proposed by the CEO, and ensure that these goals are implemented. It shall also appoint the corporate officers responsible for managing the company in pursuit of this strategy and review all delegations of authority;

- The Board of Directors shall review the management of the Group and monitor the quality of information provided to shareholders and to the market through the financial statements or when material events occur, especially about the company's shareholdings;

- The Board of Directors is responsible for approving all strategic investment projects and any transaction, in particular acquisitions or disposals, likely to materially affect the company's results, the structure of its balance sheet or risk profile;

- The Board of Directors will beforehand decide for each significant transaction outside the scope of the announced strategy;

- The Board of Directors shall deliberate prior to making any changes to the management structure of the company, and shall be informed of the principal organizational changes;

- The Board of Directors shall examine the corporate and consolidated accounts and approve the management report and the sections of the annual report dealing with corporate governance and those setting out the company's policies with respect to remuneration and stock options;

- Although it is not a modification with a social purpose, the Board of Directors must seize the Shareholders' Meeting if the transaction concerns a preponderant share of the assets or the activities of the group;

- The Board of Directors shall convene annual shareholders' meetings and propose changes to the articles of association.

The missions mentioned above summarize the internal bylaws of the Board of Directors.

Activity Report of the Board of Directors for Fiscal 2019

The Board reviewed and approved the corporate and consolidated accounts for 2018.

The Board of Directors considered and debated on the following at its meetings:

- Strategic direction and major Group projects.
- The annual, half-year and quarterly financial statements.
- Budgets presented by executive management.
- Information on the financial structure and cash flow items.
- Significant off-balance sheet commitments.
- Risk indicators for the Group.
- .Stock market performance.
- Self-assessment of the Board members.
- Elements of remuneration due or attributed.
- Appointment of a Director representing the employees
- Renewal of the mandates of members of the Board of Directors
- Approval of several acquisitions projects

Information to be Provided to Directors

Before each Board Meeting, Directors receive a report on the agenda items that require prior consideration, in due time and following notification.

Preliminary figures of the annual and interim statements are generally sent to all Directors at least one week before the meeting of the Audit Committee, which is always held on the day of or on the day before the Board meeting.

In addition to Board meetings, the Chairman regularly informs the Directors of any event or development that may have a material impact on Group operations or on any information previously communicated to the Board.

The members of the Board of Directors receive a copy of each press release published by the Company. The Directors may, at any time, request further information from the Chairman of the Board, who shall assess the relevance of the request.

The Audit Committee and the Remuneration and Nominations Committee are responsible for studying and making preparations for the Board's main deliberations in order to improve the Board's efficiency.

Under no circumstances do these Committees relieve the Board which has the only legal power of decision nor are allowed to cause division within its college which is and stays responsible of the accomplishment of its missions. The Committees don't replace but are an emanation of the Board of Directors facilitating its work.

The Committees of the Board may consult, in the performance of their functions, any of the main company's executive members after having informed the Chairman of the Board of Directors and subject to reporting back to the Board.

The Committees of the Board may request external technical studies relating to matters within their competence, at the expense of the Company, after having informed the Chairman of the Board of Directors or the Board of Directors itself and subject to reporting back to the Board.

In the event the Committes solicit the services of external counsels (e.g. the Remuneration Committee for the purpose of gathering information related to systems and levels of remunerations applicable within the main markets), the Comittees shall ensure the objectiveness of the sought advice.

Each Board of Directors meeting is preceeded with at least one meeting of one of the two committees, depending on the addressed topics. The Committes remain accountable to the Board of Directors and address to them their position, advice and recommendations.

Procedures established and followed by the Committes are set up within their respective internal regulations.

Committes' members are appointed by the Board of Directors. A special attention is paid by the Board of Directors to the nomination of renewal of the mandate of the Chairman of the Audit Committee.

The Audit Committee

The Audit Committee assists the Board of Directors in areas relating to accounting policy, reporting, internal and external control, financial communication and management of the risks to which the company is exposed.

Audit Committee duties

Regarding accounting policy and internal control, the Audit Committee has the following duties:

- To proceed as soon as possible, and in any event prior to examination of the annual parent company financial statements and, where appropriate, the consolidated financial statements by the Board of Directors, with the review of all the financial, interim and annual parent company and, where appropriate, consolidated financial statements, including their notes and, where appropriate, the management report presented by the Board of Directors to the General Meeting of Shareholders called to approve the financial statements for the year ended and to present its observations to the Board of Directors. During the examination of the financial statements, the Committee pays particular attention to significant transactions that could have given rise to a conflict of interests;

- To ensure the pertinence of the selected methods and accounting procedures chosen by the company and to check their proper application;

- To check the accounting treatment of any significant transaction made by the company;

- To ensure that the internal procedures for data collection and control are sufficient to ensure the quality and reliability of the annual parent company financial statements and, where appropriate, the company's consolidated financial statements;

- To examine the scope of the consolidated companies and, where appropriate, the reasons for which any companies are not included.

Regarding external control, the Audit Committee has the following duties:

- To submit to the Board of Directors recommendations concerning the Statutory Auditors in view of their appointment or renewal by the General Meeting of Shareholders, to analyse and issue an opinion on the definition, extent and timetable of their assignment and their fees. For this purpose, the Committee steers the selection procedure for the Statutory Auditors and submits to the Board of Directors a recommendation on the Statutory Auditors proposed for appointment by the General Meeting of Shareholders. The Committee proposes to the Board the selection procedure and, in particular, whether a call for tender should be issued. It supervises the call for tender and approves the specifications and the selection of the companies consulted, taking care to select the "best bid" and not the "lowest bid";

- To ensure the independence of the Statutory Auditors.

Regarding risk analysis and prevention, the Audit Committee has the following duties:

- To analyse all disputes, including fiscal, that may have a significant impact on the parent company financial statements and, where appropriate, the company's consolidated financial statements, or its financial position;

- To examine the company's exposure to significant financial risks. The Committee examines the risks and significant off-balance sheet commitments and assesses the importance of malfunctions or weaknesses that it is made aware of and informs the Board, as appropriate;

- To review the conclusions of internal audit reports;

- To verify the satisfactory application of internal controls and information reporting procedures.

Regarding financial communication, the Audit Committee's duties include reviewing the company's financial communication projects relating to the annual and interim parent company financial statements, as well as quarterly sales.

Given the extent of its remit, the Audit Committee consults with the Statutory Auditors, but also with the Finance, Accounts and Treasury Directors. These meetings may be held, at the Committee's request, without the Company's executive bodies being present.

Composition of the Audit Committee

The Audit Committee comprises at least three members chosen by the Board of Directors for their accounting and finance expertise, of whom one must be an independent member.

The independence criteria retained by the Audit Committee's internal rules are based on those proposed by the recommendations of the AFEP MEDEF code and the Ethics code and adapted to suit the company's size, organization and means.

Audit Committee's internal rules

The Audit Committee has adopted a set of internal rules and a charter designed to provide a framework for its duties and operation and, in particular, to ensure the implementation and application of independence criteria for its members. It also includes the conditions for remuneration of the latter.

As of 31 December 2019, the Audit Committee has four members:

– Mrs. Pascale Boissel,
  Chairwoman of the Committee since March 26, 2019

– Mrs. Anne-Marie Graffin
– Mr. Lothar Kappich
– Mr. Henri Riey

The Chairwoman of the Audit Committee is independent.

The Chairman of the Board of Directors, who is also the CEO of the Group, is a permanent guest of the Audit Committee, but has no voting rights.

The Director representing the employees is also a guest of the Audit Committee and act as the secretary of the meetings.

The Audit Committee met five times during fiscal 2019.

Remunerations and Nominations Committee

Remunerations and Nominations Committee duties

The Remunerations and Nominations Committee's purpose is to assist the company's Board of Directors in setting the remuneration policy for corporate officers and, in particular, relating to incentive mechanisms (allocation of stock options and bonus shares) that the company may implement.

During the year, the Remunerations and Nominations Committee may consult all the company's executive members, after it has informed the Chairman of the Board of Directors, and must report on this to the Board.

The Remunerations and Nominations Committee's duties also include assisting the Board of Directors with the appointment of new Board members.

Composition of the Remunerations and Nominations Committee and functioning

As of 31 December 2019, the Remunerations and Nominations Committee has four members:

Mr. Lothar Kappich, appointed member of the Remunerations of Nominations Committee during the Board of Directors meeting that took place on October 10, 2017, was appointed Chairman of the Committee by its members during the meeting held on 15 February 2018. His mandate as Chairman of the Committee was renewed on March 26, 2019.

– Mrs. Anne-Marie Graffin
– Mrs. Susan Dexter
– Mr. Henri Riey

Two of the four members of the Remunerations and Nominations Committee are independent.

The Remunerations and Nominations Committee met once in fiscal 2019.

Report on Corporate Governance

1. Regulated Agreement

Continued agreement

The Company has decided to continue the services agreement between the Company and Sartorius AG, made effective retroactively since January 1st, 2015 and adopted by the Annual Shareholders meeting of April 4th, 2017, and covering the recharge of services of the Company's Officers.

Consequently, and in accordance with the provisions set out in Article L. 225 - 40 - 1 of the French Code of Commerce, the Company will proposed to its Board of Directors of February 6th, 2020 and further to its Annual Shareholders meeting of March 24th, 2020 to approve the continuation of the said agreement (as below detailed).

The said agreement contains the following modalities:

Nature: General assistance and administrative services

Purpose: formalization of the recharges between the Company and its parent company.

Amounts:

For Mr. Joachim Kreuzburg:

Year 2018: 674,216€

Year 2019: 582,804 €

For René Fàber:

Year 2019: 410,004€

This regulated agreement has been rejected by the Shareholders during the Annual Shareholders Meeting of March 26th, 2019.

New agreement as of 31 December 2019

The Company has decided to sign a new amendment to the services agreement between the Company and Sartorius AG, made effective retroactively since January 1st, 2015 and adopted by the Annual Shareholders meeting of April 4th, 2017, and covering the recharge of services of René Fàber.

The said agreement contains the following modalities:

Nature: General assistance and administrative services

Purpose: formalization of the recharges between the Company and its parent company.

Amounts:

For René Fàber:

Year 2019: 410,004€

Consequently, and in accordance with the provisions set out in Article L. 225 - 40 - 1 of the French Code of Commerce, the Company will proposed to its Board of Directors of February 6th, 2020 and further to its Annual Shareholders meeting of March 24th, 2020 to approve the said amendment.

2. Regulated commitments concerning Mr. Joachim Kreuzburg

There are certain commitments described in this section that are regarded as regulated under French Regulation.

Such commitments were subscribed by Sartorius AG in accordance with the global remuneration policy of the Group; 20% of their total amounts are re-charged to the Company.

These commitments were rejected by the Annual Shareholders meetings of March 26th, 2019 and April 3rd, 2018. They were nonetheless approved by the Board of Directors on February 7th, 2019 . They will be submitted to the approval of the Annual Shareholders meeting called on March 24th, 2020 to approve the financial statements for the fiscal year ending 31 December 2019.

These commitments subscribed by the German parent company comply with the German law.

Earlier departure severance

The service contract of Joachim Kreuzburg includes a severance pay cap of a maximum of two annual salaries to cover cases in which Sartorius AG Executive Board membership is terminated prematurely.

Non-competition clause

Joachim Kreuzburg has a post-contractual non-competition obligation, which is in accordance with German law. This obligation will last for two years after an Executive Board member has left the Group. During this time, if the non-competition clause is not waived or terminated, this Executive Board member may claim half of his most recent annual remuneration received from the company.

Pension commitments

Mr. Joachim Kreuzburg benefit from a supplementary pension scheme that is applicable under German Law. These commitments and their modalities are exhaustively described in the section Remuneration Report of this annual report.

Corporate Governance Code / AFEP MEDEF

Since fiscal 2008, the Sartorius Stedim Biotech S.A. Board of Directors decided to follow the AFEP-MEDEF recommendations, as revised in June 2018, as the reference code for corporate governance (see www.medef.fr).

The AFEP-MEDEF Corporate Governance Code (the "Code") defines a set of regulations for good and responsible corporate governance. It follows the "comply or explain" principle that is implemented in most countries of the European Union. If a listed company does not comply with a recommendation of this Code, it must explain this in its corporate governance report.

In accordance with article 27.1 of the Corporate Governance Code for listed companies in effect from the presented date (the "Code"); listed companies referring to the code are required to precisely identify, in their Universal Registration Document, the application of these recommendations. In case of non-application of one of these provisions, companies are required to provide a comprehensible, relevant and circumstantial explanation according to the rule "apply or explain". It is recommended by the AMF (recommendation n°2014-08 of 22 September 2014) that companies indicate in a specific table each recommendation that are not applied and the related explanations.

SPECIFIC TABLE ON RECOMMENDATIONS OF THE AFEP MEDEF CODE FOR THE GOVERNANCE OF LISTED COMPANIES

ARTICLE	DEVIATIONS OF THE PROVISIONS OF THE CODE	EXPLANATIONS
3.2	Disclosure of the option selected It is essential for the shareholders and third parties to be fully informed of the choice made between separation of the offices of Chairman and Chief Executive Officer and maintenance of these positions as a single office.	The Board of Directors has opted for the Chairman's functions meeting of the Board Committee and as Chief Executive Officer in order to simplify the company operational management and increase its effectiveness. This organization turned out to be a factor of efficient governance considering the organization of the Sartorius Stedim Biotech Group. Mr. Joachim Kreuzburg is Chairman of the Board and CEO of Sartorius AG mother company of the group. He is on one hand bound to the controlling shareholder and on the other hand very involved in the business affairs of the Group which he particularly knows and experienced. Also, the Board of Directors is proceeding to an annual evaluation of its functioning to identify the improvements that could be made. The result of the evaluation shows that this organization is well suited for the interests of the company.
10.3	Non-executive directors meeting It is recommended that the non-executive directors meet periodically without the executive or "in-house" directors. The internal rules of operation of the Board of Directors must provide for such a meeting once a year, at which time the evaluation of the Chairman's, Chief Executive Officer's and Deputy Chief Executive's respective performance shall be carried out, and the participants shall reflect on the future of the company's executive management.	Board meetings are organized in the presence of the executive members to maintain the same degree of information between the members of the Board and strengthen the open and transparent collective character. According to the Code AFEP-MEDEF planning that the non executive members have to meet annually without the presence of the executive or internal members, the internal rules of the Board mentions the possibility for the non executive members to organize this kind of meeting. The concerned Directors have duly been made aware of this possibility but did not express their wish to hold such a meeting during the past year. They will be reminded of such a possibility during the first Board of Directors Meeting that will occur for the next financial year.
15.1	Independent directors within the Audit Committee The proportion of independent directors on the audit committee (excluding the directors representing employee shareholders and directors representing employees, who are not taken into account) should be at least equal to two-thirds, and the committee should not include any executive director.	On December 31, 2019, 50% of the Audit Committee members are independent (i.e. two members out of four). This is the direct consequence of the loss of the status of independent of one of its member during the fiscal year ended on December 31, 2019 (Mr. Henri Riey). The Audit Committee is chaired by an independent administrator: Mrs. Pascale Boissel. In view of the high experience in finance topics of the members of the Audit Committee, and in particular of its chairwoman, the Board of Directors considers that the current composition ensures the efficiency of the work of the Committee. No executive director is sitting within the Audit Committee.
15.3	Examination deadline of the accounts between the Audit Committee and the Board The appointment or extension of the term of office of the audit committee's Chairman is proposed by the appointments/nominations committee, and should be specially reviewed by the Board.	For practical reasons, connected in particular to the presence within the Committee of a majority of nonresident members, the meetings of the Audit committee usually take place the same days as those of the Board of Directors. Taking into consideration this obligation, and in order to give to the Audit committee the possibility of achieving completely its missions, the internal rules of the Board mentions that any documents and useful information must be communicated to the Board by the Chairman and Chief Executive Officer upfront and in a sufficient delay. The files are like this transmitted to the members of the Audit Committee with a sufficient upstream delay and at the latest three days before every meeting of the Committee or of the Board allowing them to have a sufficient delay for the examination of the statements before these meetings. Therefore, each member of the said committee is spending the necessary time to examine each topic and is duly enabled to require such information if needed.

ARTICLE	DEVIATIONS OF THE PROVISIONS OF THE CODE	EXPLANATIONS
16/17	**THE COMMITTEE IN CHARGE OF REMUNERATIONS AND NOMINATIONS**	
16.1/17.1	Independent directors within the Remunerations and Nominations Committee It must mostly consist of independent directors It is recommended that the Chairman of the committee should be independent.	The Board of Directors decided to create a Remunerations and Nominations Committee. On December 31, 2019, 50% of the Remunerations and Nominations Committee members are independent (i.e. 2 members out of four). This is the direct consequence of the loss of the status of independent of one of its member during the fiscal year ended on December 31, 2019 (Mr. Henri Riey).. It is further mentioned that the Chairman and Chief Executive Officer of the Board is not a member of the committee. For historical reasons related to the company share options, the composition of the specialized committee was reflecting the research by our shareholder in order to reflect a balance between the directors representing the shareholders and the independent directors. Lothar Kappich has been appointed Chairman of the Remunerations an Nominations Committee of the Sartorius Stedim Biotech Group for management and coherency reasons: Although Mr. Lothar Kappich is non-independent, he is also the Chairman of the remunerations committee of the Sartorius Group AG
	It is recommended that one of its members should be an employee director	The director representing the employees, without being a member of the Remunerations and Nominations Committee, has been appointed by the Board of Director to attend the meetings as secretary. Discussions related to remunerations and advantages of Company's officers are therefore fully transparent and shared with the Director representing the employee.
19.	**ETHICAL RULES FOR DIRECTORS**	
	The director should be a shareholder personally and hold a fairly significant number of shares to the received Directors' fees: by default if he does hold the shares upon assuming his functions, he must use the acquired Directors' fees when acquired.	The Board of Directors has implemented these ethic principles within its internal regulations, in particular within the Director Charter, which is attached to the internal regulations. Beyond the application of Article L 225 - 25 of the French Code of Commerce, the Board of Directors has left until now the freedom to each director to invest significantly or not within the company.
21.	**TERMINATION OF EMPLOYMENT CONTRACT IN THE EVENT OF BECOMING A COMPANY OFFICER**	
21.1	When an employee is appointed as a company officer, it is recommended to terminate his or her employment contract with the company or with a company affiliated to the group, whether through contractual termination or resignation	This recommendation is not applied since there are no Company's officer under an employment contract with the company. According to German law, it is not necessary to change such an employment contract when a person becomes a Managing Director of the company he/she works for. It should also be considered that the Sartorius Stedim Biotech Group is controlled by a German majority shareholder, and the biggest group company is a German company; therefore, in this respect German rules and regulations are very common in the whole group and have to be observed at the respective group level.

24.	COMPENSATION OF COMPANY OFFICERS	
24.3.2	Annual variable compensation of executive officers The rules for fixing this compensation must be consistent with the annual review of the performances of the executive officers and the corporate strategy. They depend on the director's performance and the progress made by the company	Mr Joachim Kreuzburg is representing the Group Sartorius AG, his compensation policy is deliberated and decided at the level of the headquarter Sartorius AG. The performance action elements are detailed in the document reference within the parts of the corporate governance Report and the internal control within this Registration Document. It is also reminded that this variable compensation is exclusively allocated by Sartorius AG, and, as such, performance rules are decided under the German legislation, through applicable governance codes.
24.3.3	Company officers who are beneficiaries of stock options and/or performance shares must make a formal commitment not to engage in any hedging transactions in respect of their own risks with regard to options, shares resulting from the exercise of options or performance shares, and to respect this commitment until the end of the share retention period determined by the Board of Directors.	SSB's Company officer received its remuneration directly from Sartorius A.G., major shareholder of Sartorius Stedim Biotech. To such extent, no company officer of Sartorius Stedim Biotech is a beneficiary of stock options and/or performance shares, hence the absence of such commitment.
24.5.1	Departure of company officers It is not acceptable that directors whose company has failed or who have personally failed may receive benefits upon departure.	Severance payments for Joachim Kreuzburg are defined in the course of the remuneration program at the headquarter level Sartorius AG, and are capped. Further and detailed information related to these severance payments are available within the report on the remuneration of the Executive Director inserted in this Universal Registration Document.

Shareholders' Meeting

Convening

Annual (or Ordinary) General Shareholders' Meetings are those convened to take all decisions that do not result in a revision of the bylaws. Extraordinary General Shareholders' Meetings are those called to decide or authorize direct or indirect revisions to the bylaws. Special Meetings bring together the holders of a specific class of share to consider revisions to the rights of this class of share. Decisions made at the General Meetings are binding for all shareholders, even those who are absent, dissenting or legally incapable or incapacitated. General Meetings are convened by the Board of Directors or, by default, the independent auditors or a person thus empowered. General Meetings are held at the registered office or any other place stated in the notice of convocation. The forms and timescale of the notice of convocation are governed by French laws.

Agenda

The notices and letters of call shall indicate the indications required by the law, particularly the agenda, the company electronic address where written questions of Shareholders may be sent and, eventually the mention of the obligation to collect the opinion or the prior approval of the mass of securities Shareholders giving access to the share capital.

The meeting may only deliberate on the matters placed on the agenda. It may, however, remove one or more directors at any time.

One or more shareholders representing the percentage of share capital required by law may, under the conditions and time limits set forth by law, require the inclusion on the agenda of draft resolutions.

In accordance to the Articles R 225 - 71 to R 225 - 74 of the Commercial Code, requests made by the Shareholders to register draft resolutions on the agenda and written questions are sent to the Headquarters by registered letter with recorded delivery beginning on the publication of the Meeting announcement and until 25 days before the General Meeting, or in a delay of 20 days beginning on the publication of the Meeting announcement, when this one is published more than 45 days before the General Meeting (date of reception of the request by the company will be taken into account).

The request of a new item on the agenda must be motivated. The request to register draft resolutions is provided with the text of draft resolutions, which may have a short explanation of reasons. These requests are subject to justification of possession or representation of required Share capital, in accordance to regulatory rules).

Moreover, in accordance to the Articles L. 2323 - 67 paragraph 2 of the Labor Code, requests of draft resolutions made by the Work Council, to be added on the agenda, are sent in the next 10 days following the publication of the Meeting announcement..

If the meeting has been unable to make a valid decision due to a lack of the required quorum, the second meeting and, where appropriate, the second meeting adjourned are called at least ten days in advance in the same form as the first meeting.

Admission to Meetings — Powers

Every shareholder has the right to attend General Meetings and to participate in the discussions, in person or by proxy, regardless of the number of shares held, on simple proof of identity and the ownership of shares. The right to participate in a General Meeting is subject to the condition that the shares must be recorded, in the name of the shareholder or the shareholder's appointed broker, either in the nominative share accounts held by the company or in the bearer share accounts held by the authorized broker, by zero hours, Paris time, on the second working day prior to the meeting. The recording or registration of the shares in the bearer share accounts held by the authorized broker must be confirmed by a share certificate provided by the broker. This share certificate must be attached to the postal voting form, the proxy form or the application for an admission pass, issued in the name of the shareholder or on behalf of the shareholder represented by the appointed broker. A certificate must also be supplied to shareholders who wish to attend the General Meeting in person but who have not received an admission pass by zero hours, Paris time, on the second working day prior to the meeting.

A Shareholder may be represented by another Shareholder, his or her spouse or by the partner with who he or she signed a Civil Partnership. Furthermore, he or she may be represented by any other moral or physical person of his choice in accordance to the Articles L. 225-106 to -106-3 of the Commercial Code; in that aim, the representative must present valid proof of proxy.

The legal representatives of shareholders who are legally incapable or incapacitated and individuals representing corporate shareholders take part in meetings, whether or not they are shareholders.

All Shareholders may also have a postal voting, using a registration form and sent to the company according to the law and regulations; to be acceptable this registration must be received by the company three days before the date of the Meeting.

In case of remote voting using an electronic vote, or a proxy vote given by electronic signature, this vote is made according to the conditions of the current regulations.

All legal documents relative to legal information for shareholders are made available to them at the registered office of the company.

Delegation granted for increase in capital by the Shareholders' meeting to the Board of Directors

Delegation of competence

Object - Duration	Limit	Use in 2019
Ability to issue shares and/or securities giving access to the share capital of the company and/or securities giving the right to the allotment of the debt instruments, with preferential subscription rights of the shareholders. Granted for a period of 26 months as from 03 April 2018	The limit is €2,000,000 corresponding to the maximum nominal amount of the increase of the share capital and to the maximal nominal amount of the debt instruments and €500,000,000 on the maximum overall limit of the maximum nominal amount of the debt instruments.	None
Ability to issue shares and/or securities giving access to the share capital of the company and/or securities giving the right of the allotment of debt instruments, without preferential subscription rights of the shareholders – through public offerings. Granted for a period of 26 months as from 03 April 2018	The limit is deducted on the overall limit of €2,000,000 (increase of the share capital) and on the overall limit of €500,000,000 (debt instruments).	None
Ability to issue shares and/or securities giving access to the share capital of the Company and/or securities giving the right to the allotment of debt instruments, without preferential subscription rights of the shareholders - through private placements as set forth in article L.411-2 II of the French Monetary and Financial Code. Granted for a period of 26 months as from 03 April 2018	The limit is deducted on the overall limit of €2,000,000 (increase of the share capital) and on the overall limit of €500,000,000 (debt instruments).	None
Ability to increase the number of shares and/or securities giving access to the share capital of the Company to be issued in the event of a share capital increase with or without preferential subscription rights of the shareholders. Granted for a period of 26 months as from 03 April 2018	The limit amount 15% of initial issue of shares. It is deducted on the overall limit of €2,000,000 (increase of the share capital	None
Ability to issue shares and/or securities giving access to the share capital of the Company, as consideration for securities tendered through public exchange offers initiated by the Company, without preferential subscription right of the shareholders. Granted for a period of 26 months as from 03 April 2018	The limit is deducted on the overall limit of €500,000,000 (increase of the share capital) and on the overall limit of € 2,0000,000 (debt instruments).	None
Ability to increase the share capital through the capitalization of reserves, earnings or premiums or any other sum upon which capitalization would be permitted. Granted for a period of 26 months as from 03 April 2018	The limit is €2,000,000 (corresponding to the maximum nominal amount of the increase of the share capital); It is a independent limit.	None
Ability to issue shares and/or securities giving access to the share capital giving the right to the allotment of debt instruments, without preferential subscription rights of the shareholders and reserved for members of saving plans. Granted for a period of 26 months as from 03 April 2018	The limit is €2,000,000 corresponding to the maximum nominal amount of the increase of the share capital; it is an independent limit.	None

Remuneration of the Members of the Board

The purpose of this report is to present a detailed explanation of the information mentioned in the Article L. 225 - 37 - 3 I of the French commercial code concerning the remuneration due or awarded to the corporate officers for the 2019 financial year. This information will be subject to a resolution that will be proposed to the approval of the shareholders on March 24th, 2020.

In accordance with Article L225 - 37 - 2 of the French Commercial Code, the corporate officers' compensation policy, as described herein, will also be subject to a resolution to be proposed to the approval of the shareholders on March 24th, 2020.

Information about the Remuneration of the Directors who are members of the Executive Board of the major shareholder

The Executive Director, Joachim Kreuzburg, is at the same time Chairman of the Executive Board and René Fáber is member of the Executive Board of the major shareholder of Sartorius Stedim Biotech S.A. Both receive their fixed and variable remuneration from the major shareholder Sartorius AG. A portion of this remuneration is charged to Sartorius Stedim Biotech S.A., reflecting their roles as Executive Director and Director of the Company. A portion of both total remunerations is charged to the SSB Group for their management services based on their proportional work for Sartorius Stedim Biotech (please refer also to section "Related Parties" of the "Financial Statements and Notes"). This allocation key is applied to all components of their remuneration.

Remuneration of the Director who are chairman or member of the Executive Board of the major shareholder Sartorius AG (Joachim Kreuzburg, René Fáber)

General and Fixed Remuneration

The total amount of the remuneration of the chairman of the Executive Board of Sartorius AG, as well as for other members of this Executive Board, reflects the scope of the responsibilities of the member concerned, the member's personal performance, the company's economic situation and sustainable progress. In addition, this amount is benchmarked with those at peer companies and with the vertical remuneration structure within the company as well as at peer companies. Remuneration is comprised of both fixed non-performance-based components and of variable performance-based components, and is reviewed regularly to ensure that it remains appropriate. The variable performance-based remuneration components consist of those to be paid annually and of multi-year components intended to have a long-term incentive. Fixed non-performance-based remuneration is paid in the year in which it is granted. For 100% target achievement, the variable annual and long-term performance-based components generally represent at least half of total remuneration, which excludes pension commitments under a defined benefit plan as well as fringe benefits. The targets set for the performance-based remuneration refer to financial key figures of the Sartorius Group in which the Sartorius Stedim Biotech Group is fully consolidated. Specifically, Sartorius Stedim Biotech represents approx. 80% of the business and assets of the Sartorius Group. Therefore, the development of Sartorius Stedim Biotech has a significant influence on the financial results of the Sartorius Group and thus on the variable remuneration of Sartorius AG´s Executive Board members. However, all components of the remuneration described below refer to parameters and financial key figures of the Sartorius Group in total.

Variable Remuneration

The variable portion of this remuneration contains components that are paid annually (subordinate targets measured against sales revenue | order intake, underlying EBITDA and ratio of net debt to EBITDA) and components determined by multi-year assessment (measured against (i) consolidated net profit and (ii) the phantom stock plan).

The components to be annually paid and the elements determined by multi-year assessment each make up one half of the target achievement that is possible. A cap is provided for all variable components to be paid.

Of the total that can be awarded for 100% target achievement, the subordinate targets of the components to be annually paid are weighted within the components that are settled annually for the chairman of the Executive Board (Joachim Kreuzburg) as follows:

– sales revenue | order intake Group 30%;

– underlying EBITDA Group 40%;

– ratio of net debt to underlying EBITDA Group 30%.

Of the total that can be awarded for 100% target achievement, the subordinate targets of the components to be annually paid are weighted within the components that are settled annually for the member of the Executive Board responsible for the Bioprocess Solutions division (René Fáber) as follows:

- sales revenue | order intake Group 9%;

- underlying EBITDA Group 12%;

- ratio of net debt to underlying EBITDA Group 9%;

- sales revenue | order intake BPS division 30%;

- underlying EBITDA BPS division 40%;

The subordinate targets constituted by (i) consolidated net profit and (ii) the phantom stock plan as components determined by multi-year assessment are each weighted within the components with long-term incentive effect at 50%.

a) Annually paid variable remuneration

The portion of the variable remuneration that is to be paid annually depends on the degree to which the target is achieved, which the Supervisory Board of Sartorius AG defines by setting each individual subordinate target. Thus, target achievement is subdivided into the previously mentioned three subordinate targets, which are each separately paid.

Sales Revenue | Order Intake

If the degree of target achievement is below 90%, no remuneration is paid. If 90% is achieved, 50% of the sum awarded is paid out. Thereafter, payment increases linearly up to a target achievement of 104%, at which a maximum of 120% of the sum awarded is paid out. The degree of payment of 120% constitutes the cap for this subordinate target at the same time.

Underlying EBITDA

If the degree of target achievement is below 70%, no remuneration is paid. If 70% is achieved, 70% of the sum awarded is paid out. Thereafter, payment increases linearly up to a target achievement of 120%, at which a maximum of 120% of the sum awarded is paid out. The degree of payment of 120% constitutes the cap for this subordinate target at the same time.

Ratio of Net Debt to underlying EBITDA

No remuneration is paid if the ratio of net debt to underlying EBITDA achieved is below the lower limit defined. If this defined value is achieved, 50% of the sum awarded is paid out. Thereafter, payment increases linearly up to a target achievement of 120%, at which a maximum of 120% of the sum awarded is paid out. The degree of payment of 120% constitutes the cap for this subordinate target at the same time.

b) Variable remuneration
with multi-year components

On the one hand, components determined by multi-year assessment depend on the degree to which the target is achieved, which the Supervisory Board of Sartorius AG defines by setting the subordinate target constituted by consolidated net profit. On the other hand, these multi-year components depend on the value of the monetary sum ascribed to the Executive Board member at the beginning of each year.

Consolidated Net Profit

For this subordinate target, the basis for assessment is the consolidated net profit after non-controlling interest excluding amortization (amortization of the value of intangible assets, such as customer databases or patents, which results from purchase price allocation within the scope of business combinations pursuant to IFRS 3). Target achievement for assessing annual variable remuneration is based on the average taken over a period of three fiscal years, beginning with the present fiscal year.

To smooth the amounts to be paid out, a partial payment amounting to 50% of the target achievement for a fiscal year will be effected. Any overpayments as a result of these partial payments will be offset in the following year against other remuneration components (fixed or variable). No partial payment will be made in the year prior to an Executive Board member's resignation. Full account is thus taken of any negative results, and the effects thereof continue to have an impact on the remuneration of the Executive Board member concerned even after he or she has left the company. If a defined minimum value is attained, payment of the awarded sum will increase linearly from 0% to a maximum of 120% of the subordinate target achievement value defined by the Supervisory Board. The degree of payment of 120% constitutes the cap for this subordinate target at the same time.

Phantom Stock Plan

Through the issue of shadow shares, called phantom stocks, the Executive Board members are treated as if they were owners of a certain number of shares in Sartorius AG, without, however, being entitled to receive dividends. The development of the value of these phantom stocks are linked with the development of the Sartorius share; both increases and decreases in the share price are taken into account. Later, this phantom stock is valuated based on the share price at the time and its equivalent is paid out, provided that the associated conditions are met. Phantom stocks cannot be traded and does not entail any share subscription rights.

According to the Sartorius phantom stock plan, each Executive Board member is credited at the beginning of every year with phantom stock units valued at an agreed monetary sum. The value of these phantom stocks can be paid out only as an entire annual tranche. Payment can be requested, at the earliest, after a period of four years and no later than after eight years.

An Executive Board member is entitled to receive payment for phantom stock units only if the share price at the time of the payment request has appreciated at least 7.5% per year relative to the time the phantom stock was assigned or if the share price outperformed the TecDAX® as a comparative index. The phantom stock plan rules out subsequent changes to the parameters used for comparative stock valuation.

The amount to be paid is capped at a maximum of 2.5 times the share price at the time the phantom stocks were assigned, based in each case on the actual annual tranche concerned.

Assignment of this phantom stock and payment of its monetary equivalent depend on the mean value calculated from the average prices of the preference share in the closing auction of Xetra trading on the Frankfurt Stock Exchange over the last 20 days of trading of the previous year or over the last 20 days of trading prior to submission of the payment request. This serves to compensate for any short-term fluctuations in the share price.

Payment for phantom stocks is blocked for the four weeks preceding the scheduled publication date of quarterly and preliminary year-end results and for 20 days of trading on the stock exchange following the actual publication of quarterly and preliminary year-end results. These blackout periods are intended to prevent Executive Board members from profiting from potential insider knowledge.

Pension Commitments

According to the company's remuneration policy, Executive Board members of Sartorius AG receive performance-related benefit commitments under a defined benefit plan when reappointed for the first time. In addition to including a basic pension, these commitments provide for the Executive Board member to make his own contribution from his variable earnings and for the company to match this contribution by a bonus amount. An Executive Board member may choose to receive such defined benefits in the form of a monthly retirement pension for old age or as a one-time payment to cover the member's retirement pension for old age and invalidity as well as in the form of survivor's benefits for the surviving spouse and children of the decedent.

Beyond such commitments, Joachim Kreuzburg is additionally entitled under a former company pension scheme to receive performance-based retirement benefits based on the salary of a German federal civil servant classified as grade 10 of salary class B for ministry officials according to the Federal Civil Service Remuneration Act [Bundesbesoldungsgesetz]. Such benefits are paid in the form of a retirement pension for old age and invalidity as well as in the form of survivors' benefits for the surviving spouse and children of the decedent.

After a member has turned 65, this shall be considered the regular age limit at which this member shall automatically be entitled to receive all such benefits.

Other Remuneration Components

The remuneration system provides that the Supervisory Board of Sartorius AG at its discretion may grant an Executive Board member special compensation based on that member's exceptional performance.

Severance Caps

The service contracts include a severance pay cap of a maximum of two annual salaries to cover cases in which Sartorius AG Executive Board membership is terminated prematurely. Potential amounts have to be paid by Sartorius AG.

Non-competition Clause

All Executive Board members of Sartorius AG have a post-contractual non-competition obligation, which is in accordance with German law. This obligation will last for two years after an Executive Board member has left the Group. During this time, if the non-competition clause is not waived or terminated, this Executive Board member may claim half of his most recent annual remuneration received from the company. Other income of the Executive Board member during this two year period is deducted from this payment. It should be noted that this payment is paid by Sartorius AG. However, an allocation of this payment would be recharged by Sartorius AG to Sartorius Stedim Biotech S.A. at the date of its payment.

Fringe Benefits

The members of the Executive Board of Sartorius AG are each entitled to use a company car, reclaim expenses incurred on business travel and to be covered by accident insurance and D&O insurance as fringe benefits in addition to receiving the remuneration components mentioned. The D&O insurance provides for the application of a deductible or excess in the amount required by law.

Share-based Payment

The remuneration policy for Executive Board members of Sartorius AG does not provide for the transfer of Sartorius AG shares as compensation for members. An exception to this was made in December 2014 and December 2019 for Joachim Kreuzburg in connection with his third and fourth appointment as a member of the Executive Board and its Chairmann and CEO.

Consequently he holds now 100,000 shares of each class of shares out of his third appointment. The shares transferred are subject to a holding period that ended on November 10, 2019. The amount resulting since December 16, 2014, for the shares granted are to be spread as an employee benefits expense over the full vesting period and recognized as such in profit or loss. In fiscal 2019, an amount of €212 K (2018: €202 K) was accordingly recognized in the accounts of Sartorius Stedim Biotech.

The fourth term of Dr. Kreuzburg as a member and Chairman, as well as CEO, of the Executive Board of the company will expire on November 10, 2020. By resolution passed by the Supervisory Board on December 5, 2019, Dr. Kreuzburg was reappointed as a member and Chairman, as well as CEO, of the Executive Board of the company for the term from November 11, 2020, to November 10, 2025. Due to Dr. Kreuzburg's special achievements in developing the Sartorius Group since the start of his tenure on the Executive Board on November 11, 2002, the company wished to continue this successful collaboration with him. The new remuneration agreement therefore provides that 13,785 ordinary shares and 13,785 preference shares shall be transferred as a supplementary compensation component to Dr. Kreuzburg. This share-based payment is subject to the rules of IFRS 2 and is deemed to have been granted upon the resolution approved by the Supervisory Board on December 5, 2019. The following basic structure has been agreed upon: The transfer of the shares granted shall be effected at the time to be determined by Dr. Kreuzburg, but no earlier than on November 11, 2020. The shares granted shall be subject to a holding period that will end on November 10, 2024. Should Dr. Kreuzburg leave the company prior to November 11, 2022, at his own request, his entitlements to be granted said shares by transfer shall lapse in their entirety. If Dr. Kreuzburg leaves the company after November 11, 2022, and before November 11, 2024, at his own request, half of his entitlements to be granted said shares shall lapse. Shares already transferred and for which his entitlements have lapsed shall be returned to the company. This remuneration component is to be included in his total remuneration at fair value as of the grant date of these shares. This respective fair value is to be derived from the number of shares granted and the price of each class of share on the grant date and amounts to €5,000 K. Considering the conditions agreed, the amount resulting as of December 5, 2019, is to be spread as an employee benefits expense over the full vesting period of the plan and recognized as such in profit or loss. In fiscal 2019, an amount of €94 K was accordingly recognized as an employee benefits expense resulting from the grant of shares.

Information about the Remuneration of the Non-Executive Directors

The remuneration for non-executive board members is defined in the Board of Directors internal rules of Sartorius Stedim Biotech S.A. and comprises fixed remuneration, meeting Directors' fees and reimbursement of out-of-pocket expenses. Members also serving as a member of a committee of the Board receive higher fixed remuneration.

Tables Summarizing the Remuneration and Options and Shares Granted to Each Executive Board Member

Joachim Kreuzburg
(Chairman of the Board and Chief Executive Officer)

€ in K	**Year 2019**	Year 2018
Remuneration due	2,735	2,522
Valuation of options granted during the reporting period	0	0
Valuation of the performance of shares granted in previous years	0	0
Total	**2,735**	**2,522**

The amount cross-charged by the company Sartorius AG to the Sartorius Stedim Biotech Group concerning Joachim Kreuzburg is €1.166 K (2018: €1.348 K), the amount charged to Sartorius Stedim Biotech S.A. is submitted to the vote of the Annual Shareholders' Meeting in accordance with the AFEP-MEDEF code and amounted to €583 K (2018: €674 K).

Pension Commitments

in T€	Expected pension p. a.	Present value of obligation **31.12.2019**	31.12.2018	Service cost (IFRS) **2019**	2018
Dr. Joachim Kreuzburg	252	4,416	3,385	270	257
	252	**4,416**	**3,385**	**270**	**257**

Summary of the Remuneration for Each Executive Board Member

Joachim Kreuzburg[1)]
(Chairman of the Board and Chief Executive Officer)

€ in K	Year 2019 Amounts due	Year 2019 Amounts paid	Year 2018 Amounts due	Year 2018 Amounts paid
Fixed remuneration	888	888	863	863
Variable remuneration				
Annually paid	495	455	455	363
Long-term incentive	1,337	643	1,189	588
Exceptional remuneration				
Director's fees				
Benefits in kind[2)]	15	15	15	15
Total	**2,735**	**2,001**	**2,522**	**1,829**

[1)] Joachim Kreuzburg receives his salary from Sartorius AG for his duties performed for the entire Sartorius Group. His remuneration is determined annually by the Supervisory Board of Sartorius AG.
[2)] Company Car

Table on Directors' Meeting Fees and Other Remuneration Received by Non-executive Board Members

€ in K	Year 2019	Year 2018
Liliane de Lassus		
Director's fees	13.7	47.4
Other remuneration		
Bernard Lemaître		
Director's fees	13.7	47.4
Other remuneration		
Pascale Boissel		
Director's fees	37.3	0.0
Other remuneration		
Henri Riey		
Director's fees	46.4	50.2
Other remuneration		
Susan Dexter		
Director's fees	37.7	36.2
Other remuneration		
Anne-Marie Graffin		
Director's fees	45.5	36.2
Other remuneration		
Lothar Kappich		
Director's fees	55.0	51.4
Other remuneration		
René Fáber[1)]		
Director's fees	0.0	0.0
Other remuneration		
Total	**249.3**	**268.8**

[1)] René Fáber receives his salary from Sartorius AG for his duties performed for the entire Sartorius Group. His remuneration is determined annually by the Supervisory Board of Sartorius AG.

Performance Shares Available for Each Board Member

Performance shares available for each corporate officer

Performance shares available for each corporate officer[1]	Date of the plan	Number of shares available during the reporting period	Acquisition conditions
Joachim Kreuzburg		Not applicable	
René Fáber		Not applicable	
Liliane de Lassus		Not applicable	
Bernard Lemaître		Not applicable	
Lothar Kappich		Not applicable	
Henri Riey		Not applicable	
Susan Dexter		Not applicable	
Anne-Marie Graffin		Not applicable	
Total			

[1] The performance shares are bonus shares allocated to the Board members within the framework of the L225 - 197 - 1 articles and following of the commercial law, and which are subjected to additional requirements laid down by the recommendations AFEP/MEDEF of October 2008.

The performance shares are bonuses allocated pursuant to the provisions of Articles L225 - 197 - 1 and the following of French commercial law and according to the recommendations of the AFEP/MEDEF Code.

Performance Shares Granted to Board Members

There is no performance share program in place for the board members of Sartorius Stedim Biotech S.A.

The information provided in the table below refers to the phantom stock plan of Sartorius AG. This plan only relates to Joachim Kreuzburg who is Chairman of the Executive Board of Sartorius AG.

Performance shares granted by the AGM during the reporting period to any corporate officer by the issuer or any other company of the Group	Date of the plan	Number of shares granted during the year	Valuation of the shares according to the consolidated accounts methodology	Date of acquisition	Date of availability	Performance conditions
Joachim Kreuzburg		1,950	335	Jan. 1, 2019	Jan. 1, 2023	
René Fáber		934	160	Jan. 1, 2019	Jan. 1, 2023	
Liliane de Lassus						
Bernard Lemaître						
Lothar Kappich						
Henri Riey						
Susan Dexter						
Anne-Marie Graffin						
Total		**2,884**	**495**			

	2019 € in K	2018 € in K
Total	**1,026**	**743**
Phantom Stocks	495	239
Sartorius AG shares granted	531	504
Dr. Joachim Kreuzburg	**866**	**743**
Phantom Stocks	335	239
Sartorius AG shares granted	531	504
Dr. René Fáber	**160**	**0**
Phantom Stocks	160	0

	Number of phantom stock units	Subscription price in €	Fair value when granted on Jan. 1 of the particular year € in K	Fair value at year-end on Dec. 31, 2018 € in K	**Fair value at year-end on Dec. 31, 2019 € in K**	Paid out € in K	Change in fair value in 2019	Exercisable
Dr. Joachim Kreuzburg								
Tranche of phantom stock units for 2015	7,360	24.70	182	454	0	454	0	paid in 2019
Tranche of phantom stock units for 2016	3,484	57.41	200	359	500	0	141	no
Tranche of phantom stock units for 2017	2,950	70.51	208	281	520	0	239	no
Tranche of phantom stock units for 2018	2,685	80.32	216	239	493	0	254	no
Total tranches previous years	**16,479**		**806**	**1,333**	**1,513**	**454**	**634**	
Tranche of phantom stock units for 2019	1,950	113.78	222	0	335	0	113	no
Total	**18,429**		**1,028**	**1,333**	**1,848**	**454**	**747**	

Dr. René Fáber								
Tranche of phantom stock units for 2019	934	113,78	106	0	160	0	54	no
Total	**934**		**106**	**0**	**160**	**0**	**54**	

Stock Options Granted During the Reporting Period to the Board Members by the Issuer or Any Other Company of the Group

Not applicable

Stock Options Exercised During the Reporting Period by Each Board Member

Not applicable

Stock Options Granted | Historical Information

Not applicable

Stock Options Granted to the Top Ten Non-corporate Officers and Exercised by Them

Not applicable

Additional Information about the Executive Board Members

Corporate officer	Employment contract		Additional pension plan		Indemnities or compensation due with regard to termination of contracts or positions		Non-competition clause indemnities	
	Yes	No	Yes	No	Yes	No	Yes	No
Joachim Kreuzburg CEO and Chairman	[1]		[2]		3,600		900	

[1] Joachim Kreuzburg has a service contract (without social security components) with Sartorius AG for their duties performed as members of the Executive Board of the major shareholder Sartorius AG. This is standard practice in Germany. The contracts include a cap regarding potential severance payments at the maximum of a two years annual remuneration. Furthermore there is a post-contractual non-competition clause obligation, that will last for two years after an Executive Board member has left the Group. During this time, if the non-competition clause is not waived or terminated, this Executive Board member may claim half of his most recent annual remunera tion received from the company.

[2] Additionally there is a general pension plan in place at the Sartorius AG level for Joachim Kreuzburg. The level of the entitlement to benefits paid under this plan depends on his respective tenure.

Independent Auditors' Fees

Principal Independent Auditors

KPMG S.A.

480, avenue du Prado – CS 90021 – 13272 Marseille Cedex 08 – France

Represented by John Evans.

First commissioned by the Annual General Shareholders' Meeting on 7 April 2015.

Date commission expires: 2021 Annual General Shareholders' Meeting to approve the 2020 financial statements.

Member of the Compagnie régionale de Versailles.

Deloitte et Associés

7, boulevard Jacques Saadé - Quai de la Joliette – 13235 Marseille Cedex 2 – France

Represented by Philippe Battisti.

First commissioned by the Annual General Shareholders' Meeting on 19 May 2006.

Date commission expires: 2024 Annual General Shareholders' Meeting to approve the 2023 financial statements.

Member of the Compagnie régionale de Versailles.

Independent Auditors' Fees

€ in K		**2019**		KPMG 2018		**2019**		Deloitte 2018
Audit								
Independent audit, certification, parent company & consolidated financial statements								
Parent company	63	8.3%	61	7.4%	55	36.9%	54	37.2%
Subsidiaries	799	90.4%	754	92.0%	94	63.1%	91	62.8%
Services directly related to audit services								
Parent company								
Subsidiaries								
Subtotal	**862**	**98.6%**	**815**	**99.5%**	**149**	**100.0%**	**145**	**100.0%**
Other services								
Legal, tax, corporate	12	1.4%	5	0.5%	0	0.0%	0	0.0%
Information technology, other	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Subtotal	**12**	**1.4%**	**5**	**0.5%**	**0**	**0.0%**	**0**	**0.0%**
Total	**874**	**100.0%**	**820**	**100%**	**149**	**100.0%**	**145**	**100%**

Substitute Independent Auditors

SALUSTRO REYDEL

Tour Eqho - 2 avenue Gambetta - 92066 Paris La Défense Cedex

First commissioned by the Annual General Shareholders' Meeting on 7 April 2015.

Date commission expires: 2021 Annual General Shareholders' Meeting to approve the 2020 financial statements.

Member of the Compagnie régionale de Versailles.

Other				Total			
2019		2018		**2019**		2018	
				118	9.5%	115	10.2%
76	35.0%	60	37.8%	969	78.1%	905	80.6%
76	**35.0%**	**60**	**37.8%**	**1,087**	**87.6%**	**1020**	**90.8%**
117	53.5%	51	32.4%	129	10.4%	56	5.0%
25	11.5%	47	29.7%	25	2.0%	47	4.2%
142	**65.0%**	**98**	**62.2%**	**154**	**12.4%**	**103**	**9.2%**
218	**100.0%**	**158**	**100%**	**1,241**	**100.0%**	**1,123**	**100%**

Consolidated Financial Statements and Notes

04

Statement of Profit or Loss and Other Comprehensive Income

	Notes	**2019 12 months € in K**	2018 12 months € in K
Sales revenue	[9]	1,440,570	1,212,152
Cost of sales	[10]	–692,224	–582,589
Gross profit on sales		**748,345**	**629,563**
Selling and distribution costs	[10]	–240,586	–215,208
Research and development costs	[10]	–79,216	–60,616
General administrative expenses	[10]	–76,224	–67,004
Other operating income and expenses	[11]	–20,294	13,500
Earnings before interest and taxes (EBIT)		**332,025**	**300,234**
Financial income	[12]	6,867	5,349
Financial expenses	[12]	–21,287	–21,035
Financial result		**–14,419**	**–15,685**
Profit before tax		**317,606**	**284,549**
Income taxes	[13]	–81,424	–74,590
Net profit for the period		**236,182**	**209,959**
Attributable to:			
Equity holders of Sartorius Stedim Biotech		234,574	208,052
Non-controlling interest	[23]	1,608	1,907
Earnings per share (€)	[15]	2.54	2.26
Diluted earnings per share (€)	[15]	2.54	2.26

The Group has initially applied IFRS 16 as of January 1, 2019 using the modified retrospective method. Accordingly, the comparative figures of 2018 have not been adjusted.

Other Comprehensive Income

	Notes	**2019 12 months € in K**	2018 12 months € in K
Net profit for the period		236,182	209,959
Cash flow hedges	[37]	–3,159	–11,547
of which effective portion of changes in fair value		–5,580	–20,016
of which reclassified to profit or loss		2,421	8,469
Income tax on cash flow hedges	[20]	948	3,463
Foreign currency translation differences		9,167	6,433
Items that are or may be reclassified subsequently to profit or loss		**6,956**	**–1,651**
Remeasurements of the net defined benefit liabilities	[24]	–7,906	469
Income tax on remeasurements of the net defined benefits liabilities	[20]	2,284	–160
Items that will not be reclassified to profit or loss		**–5,622**	**309**
Other comprehensive income after tax		**1,334**	**–1,342**
Total comprehensive income		**237,516**	**208,617**
Attributable to:			
Equity holders of Sartorius Stedim Biotech		235,955	206,673
Non-controlling interest		1,561	1,943

Statement of Financial Position

	Notes	**Dec. 31, 2019 € in K**	Dec. 31, 2018 € in K
Non-current assets			
Goodwill	[16]	426,890	384,695
Other Intangible Assets	[16]	180,090	177,492
Property, plant and equipment	[17][18]	546,633	435,980
Financial Assets	[19]	15,079	5,644
Other Assets		586	632
Deferred tax assets	[20]	17,342	14,490
		1,186,619	**1,018,932**
Current assets			
Inventories	[21]	328,164	252,002
Trade receivables	[29]	220,831	220,231
Other financial assets	[30]	19,574	22,036
Current tax assets		10,966	12,950
Other assets		26,624	21,334
Cash and cash equivalents	[28]	27,643	23,975
		633,802	**552,529**
Total assets		**1,820,421**	**1,571,461**
Equity			
Equity attributable to SSB S.A. shareholders		**1,158,789**	**1,036,398**
Issued capital	[22]	18,436	18,436
Capital reserves		231,526	231,526
Retained earnings (including net profit)		908,827	786,436
Non-controlling interest	[23]	**18,840**	**8,476**
		1,177,629	**1,044,874**
Non-current liabilities			
Pension provisions	[24]	44,123	35,595
Other provisions	[25]	3,340	2,877
Loans and borrowings	[31]	40,000	43,125
Lease liabilities	[18]	40,698	14,976
Other financial liabilities	[32]	49,934	8,889
Deferred tax liabilities	[20]	37,353	39,150
		215,447	**144,612**
Current liabilities			
Provisions	[25]	10,612	12,283
Trade payables	[33]	196,573	154,568
Loans and borrowings	[31]	43,544	89,817
Lease liabilities	[18]	11,101	1,717
Other financial liabilities	[34]	40,680	14,312
Employee benefits		40,621	39,335
Current tax liabilities		49,234	33,070
Other liabilities		34,980	36,873
		427,345	**381,975**
Total equity and liabilities		**1,820,421**	**1,571,461**

The Group has initially applied IFRS 16 as of January 1, 2019 using the modified retrospective method. Accordingly, the comparative figures of 2018 have not been adjusted.

Statement of Cash Flows

	Notes	**2019 12 months € in K**	2018 12 months € in K
Profit before tax		317,606	284,549
Financial result	[12]	14,419	15,685
Depreciation | amortization of fixed assets	[16][17][18]	73,233	60,914
Gains from the disposal of fixed assets		0	0
Change in provisions	[24][25]	–3,548	2,361
Change in receivables and other assets	[29][30]	3,841	–21,604
Change in inventories	[21]	–66,009	–64,962
Change in liabilities (excl. loans and borrowings)	[32][33][34]	35,479	48,793
Income taxes paid	[13]	–65,328	–65,537
Other non-cash items		436	–32,909
Cash flow from operating activities		**310,129**	**227,289**
Capital expenditures	[16][17]	–135,973	–176,540
Proceeds from the disposal of fixed assets		0	0
Other payments		0	0
Cash flow from investing activities		**–135,974**	**–176,539**
Payments for acquisitions of consolidated subsidiaries and other business operations; net of cash acquired	[8]	–48,927	0
Cash flow from investing activities and acquisitions		**–184,901**	**–176,539**
Interest received	[12]	1,699	2,569
Interest paid and other financial charges	[12]	–10,528	–8,995
Dividends paid to:			
- Shareholders of Sartorius Stedim Biotech SA		–52,543	–42,403
- Non-controlling interest		–950	–783
Loans and borrowings repaid	[6][31]	–60,489	–22,811
Loans and borrowings raised	[6][31]	651	12,829
Cash flow from financing activities		**–122,159**	**–59,594**
Net increase | decrease in cash and cash equivalents		3,069	–8,844
Cash and cash equivalents at the beginning of the period		23,975	32,552
Change in scope of consolidation		0	0
Currency translation effects on cash and cash equivalents		598	268
Cash and cash equivalents at the end of the period		**27,643**	**23,975**

The Notes to the Consolidated Financial Statements are an integral part of these statements.

Statement of Changes in Equity

€ in K	Issued capital	Capital reserves	Hedging reserves	Pension reserves	Retained earnings	Foreign currency translation reserves	Group equity	Non-controlling interest	Total equity
Balance at Jan. 1, 2018	**18,436**	**231,526**	**11,449**	**–11,169**	**613,020**	**9,087**	**872,349**	**7,426**	**879,775**
Net profit for the period	0	0	0	0	208,052	0	208,052	1,907	209,959
Cash flow hedges	0	0	–11,547	0	0	0	–11,547	0	–11,547
Remeasurements of the net defined benefit liabilities	0	0	0	469	0	0	469	0	469
Foreign currency translation differences	0	0	0	0	0	6,396	6,396	37	6,433
Deferred taxes	0	0	3,463	–160	0	0	3,303	0	3,303
Other comprehensive income for the period	**0**	**0**	**–8,084**	**309**	**0**	**6,396**	**–1,379**	**37**	**–1,342**
Total comprehensive income	**0**	**0**	**–8,084**	**309**	**208,052**	**6,396**	**206,673**	**1,943**	**208,617**
Dividends	0	0	0	0	–42,403	0	–42,403	–783	–43,186
Other changes		0	0	0	–221	0	–221	–110	–331
Balance at Dec. 31, 2018	**18,436**	**231,526**	**3,365**	**–10,860**	**778,448**	**15,483**	**1,036,398**	**8,476**	**1,044,874**
Net profit for the period	0	0	0	0	234,574	0	234,574	1,608	236,182
Cash flow hedges	0	0	–3,159	0	0	0	–3,159	0	–3,159
Remeasurements of the net defined benefit liabilities	0	0	0	–7,906	0	0	–7,906	0	–7,906
Foreign currency translation differences	0	0	0	0	0	9,214	9,214	–47	9,167
Deferred taxes	0	0	948	2,284	0	0	3,232	0	3,232
Other comprehensive income for the period	**0**	**0**	**–2,211**	**–5,622**	**0**	**9,214**	**1,381**	**–47**	**1,334**
Total comprehensive income	**0**	**0**	**–2,211**	**–5,622**	**234,574**	**9,214**	**235,955**	**1,561**	**237,516**
Dividends	0	0	0	0	–52,543	0	–52,543	–950	–53,493
Purchase price liability Israel					–61,010		–61,010	0	–61,010
Changes in non-controlling interest	0	0	0	0	0	0	0	9,928	9,928
Other changes	0	0	0	0	–11	0	–11	–175	–187
Balance at December 31, 2019	**18,436**	**231,526**	**1,154**	**–16,482**	**899,458**	**24,697**	**1,158,788**	**18,840**	**1,177,629**

Notes to the Financial Statements

1. General Information

Sartorius Stedim Biotech is a leading international supplier of products and services that enable the biopharmaceutical industry to develop and manufacture drugs safely and efficiently. As a total solutions provider, Sartorius Stedim Biotech offers a portfolio covering nearly all steps of biopharmaceutical manufacture. The company focuses on single-use technologies and value-added services to meet the rapidly changing technology requirements of the industry it serves. With its own manufacturing and R&D sites in Europe, North America and Asia and an international network of sales companies, Sartorius Stedim Biotech has a global reach.

Headquartered in Aubagne, France, Sartorius Stedim Biotech S.A. is listed on the Euronext Paris (ISIN code: FR 0000053266).

Sartorius Stedim Biotech S.A.'s ultimate parent company is Sartorius AG, headquartered in Goettingen, Germany, and listed at several German stock exchanges (ISIN codes: 0007165607 ordinary shares, 0007165631 preference shares).

In compliance with the European Regulation 1606/2002 of July 19, 2002, requiring listed companies to use International Accounting Standards, the consolidated financial statements of the Sartorius Stedim Biotech Group for the year ended December 31, 2019, are compliant with the Standards and Interpretations IFRS and IFRIC of the IASB as adopted by the European Union, which are available at the following site:

https://ec.europa.eu/commission/index_fr.

The consolidated financial statements are prepared in euros. Unless otherwise specified, all amounts are disclosed in thousands of euros (abbreviated as € in K). In some cases, the sum of the figures given in this report may not precisely equal the stated totals and percentages may not be exact due to rounding.

These consolidated financial statements were approved by the Board of Directors on February 6, 2020 and will be submitted for approval by the Shareholders' Meeting on March 24, 2020.

2. Effects of New Financial Reporting Standards

The following major new accounting rules were applicable for the first time to the present consolidated financial statements of the Group:

- IFRS 16, Leases

This standard changes the accounting for leases. For detailed information on these changes and the initial application of IFRS 16, see note 18.

The following new accounting rules were applicable for the first time to the present financial statements and had no material impact on the presentation of the company's financial position and financial performance:

- Annual Improvements to IFRSs – Cycle 2015–2017 (issued in Dec. 2017), Amendments to IFRS 3, IFRS 11, IAS 12 and IAS 23

The amendments to IFRS 3 and IFRS 11 clarify the remeasurement of previously held interests in a business when an entity obtains control or joint control of a business that is a joint operation. The amendment to IAS 12 clarifies the applicability of the requirements regarding income tax consequences of dividends. The amendment to IAS 23 clarifies the treatment of any specific borrowing that remains outstanding after the related asset is ready for its intended use or sale.

- Amendments to IAS 19, Plan Amendment, Curtailment or Settlement

The amendments are applicable to plan amendments, curtailments or settlements. It is now mandatory that the current service cost and the net interest for the period after the remeasurement are determined using the assumptions used for the remeasurement. The amendment further includes clarifications regarding the effect of a plan amendment, curtailment or settlement on the requirements regarding the asset ceiling.

- Amendments to IAS 28, Long-term Interests in Associates and Joint Ventures

The amendment clarifies that an entity applies IFRS 9 to long-term interests in an associate or joint venture that form part of the net investment in the associate or joint venture but to which the equity method is not applied.

– Amendments to IFRS 9, Prepayment Features with Negative Compensation

The amendment to IFRS 9 amends existing requirements regarding termination rights with negative compensation features. Furthermore, a clarification regarding the accounting for a modification or exchange of a financial liability measured at amortised cost that does not result in the derecognition of the financial liability is included in the Basis for Conclusions. It clarifies that an entity recognises any adjustment to the amortised cost of the financial liability arising from a modification or exchange in profit or loss at the date of the modification or exchange.

– IFRIC 23, Uncertainty over Income Tax Treatments

IFRIC 23 clarifies how the recognition and measurement requirements of IAS 12 are applied where there is uncertainty over income tax treatments.

The following standards, interpretations and amendments were not yet applied to the consolidated financial statements of the reporting year as they had not yet been adopted by the EU or their application was not mandatory for 2019:

Standard | Interpretation	Title	Applicable for financial years from[1]	Endorsement by the EU Commission
IFRS 14	Regulatory Deferral Accounts	January 1, 2016	No
Amendments to IAS 1 and IAS 8	Definition of Material	January 1, 2020	Yes
Various Standards / Framework	Amendments to References to the Conceptual Framework in IFRS Standards	January 1, 2020	Yes
Amendments to IFRS 3	Definition of a Business	January 1, 2020	No
Amendments to IFRS 9, IAS 39 and IFRS 7	Interest Rate Benchmark Reform	January 1, 2020	Yes
IFRS 17	Insurance Contracts	January 1, 2021	No
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture	n/a	No

[1] These are required to be applied once they are endorsed by the EU Commission.
The dates mentioned above are those required by the standard themselves (IASB effective dates).

3. Significant Accounting Policies

Basis of Preparation

The consolidated financial statements of the Group are based on the principle of the historical cost of acquisition, construction or production, with the exception of the items reflected at fair value, such as derivative financial instruments.

Consolidation

The consolidated financial statements of the Sartorius Stedim Biotech Group include the annual financial statements of all companies, which are controlled directly or indirectly by Sartorius Stedim Biotech S.A. In terms of IFRS 10, Consolidated Financial Statements, the Group Sartorius Stedim Biotech controls an entity when it is exposed to, 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.

Such entities are included in the consolidated financial statements from the time when Sartorius Stedim Biotech S.A. or its subsidiaries obtain such control until the date on which control ceases.

Subsidiaries have been included on the basis of their annual financial statements for the same reporting period as the parent company, using uniform Group recognition and measurement methods.

All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated on consolidation.

Business Combinations

Business combinations are accounted according to the acquisition method. The identifiable assets acquired and liabilities assumed are generally recorded at fair value on the date of acquisition.

For significant acquisitions, the purchase price allocation is carried out with assistance from independent third-party valuation specialists. The valuations are based on the information available at the acquisition date.

The Group determines goodwill at the acquisition date as:

- the fair value of the consideration transferred; and
- the amount recognized for any non-controlling interest in the acquiree; and
- if the business combination is carried out in stages, the fair value of any previously held equity interest in the acquiree; less
- the net recognized amount for the identifiable assets acquired and liabilities assumed.

When the difference is negative, the purchase gain is recognized immediately in income. Expenses directly related to business combinations are recorded in the profit or loss as they are incurred.

Foreign Currency Transactions

The presentation currency of the consolidated financial statements of the Sartorius Stedim Biotech Group is the euro (financial statements presented in thousands of euros). In the financial statements of each company, transactions denominated in foreign currencies have been translated into the functional currency of the subsidiary at the exchange rate applicable on the date of the transaction. Monetary assets and debts denominated in a foreign currency have been translated at the exchange rate on the balance sheet date. Rate gains and losses have been recognized in profit or loss for the period.

Translation of financial statements prepared in foreign currencies

Subsidiaries' financial statements prepared in foreign currencies have been translated pursuant to IAS 21, The Effects of Changes in Foreign Exchange Rates, in accordance with the concept of a functional currency. Foreign subsidiaries have been regarded as independent subdivisions of the Sartorius Stedim Biotech Group. The assets (including goodwill) and liabilities of the entities that have a functional currency different from the presentation currency are translated at the exchange rate prevailing at the balance sheet date. The incomes, expenses, and cash flows of these entities have been translated using the average rate for the year, to the extent that this rate represents an approximate value of exchange rates used as of the date of the transaction in the absence of significant fluctuations. Resulting translation differences are recognized in other comprehensive income.

For long-term loans for which settlement is neither planned nor likely in the foreseeable future, the Group applies the principle of "net investment in a foreign operation." Exchange differences resulting from these loans are recognized in other comprehensive income in accordance with IAS 21.32.

The exchange rates for major currencies against the euro were considered as follows:

	Year-end exchange rates		Average exchange rates	
For 1 €	**2019**	2018	**2019**	2018
USD	1.12340	1.14500	1.11956	1.18129
GBP	0.85080	0.89453	0.87787	0.88465
JPY	121.94000	125.85000	122.01949	130.40242
CHF	1.08540	1.12690	1.11255	1.15517
INR	80.18700	79.72980	78.84689	80.69389
KRW	1296.28000	1277.93000	1305.50569	1299.12464
CNY	7.82050	7.87510	7.73613	7.80666

4. Use of Judgments and Estimates

During the preparation of consolidated financial statements, management uses estimates and assumptions based on their best knowledge of the current and future situation. However, actual results may differ from these estimates. These estimates and assumptions are revised on a regular basis, and the impact of changes in estimates is recognized prospectively.

In addition, Group management exercises its judgment in defining the accounting treatment of specific transactions when the existing Standards and Interpretations do not specifically treat the accounting problems concerned.

Assumptions and estimates primarily concern the following topics:

Business Combinations

The accounting for business combinations requires that the assets acquired and liabilities assumed be recorded at their respective fair values on the date the Group obtains control. The application of the acquisition method requires estimates and assumptions to be made, especially concerning the fair values of the acquired intangible assets, property, plant and equipment and the liabilities assumed at the acquisition date, and the useful lives of the acquired intangible assets, property, plant and equipment.

These measurements are based to a large extent on anticipated cash flows. If actual cash flows vary from those used in calculating fair values, this may materially affect the Group's future results of operations.

Impairment of Assets

The book values (carrying amounts) of property, plant and equipment and intangible assets are subject to impairment testing if there is an indication of impairment and at least once a year for assets with an indefinite useful life or not yet available for use in accordance with IAS 36, Impairment of Assets. When an asset is tested, the recoverable amount of the asset is estimated. The recoverable amount of an asset or a cash-generating unit (CGU) is the higher of its fair value – less costs to sell the asset or its CGU – and its value in use. In the event the individual asset's recoverable amount cannot be estimated, the recoverable amount of the asset's CGU is estimated.

If the estimated recoverable amount of an asset (or a CGU) goes below its book value (carrying amount), this carrying amount is reduced to the recoverable amount (impairment allocated in priority to goodwill).

If the causes of the asset impairment are removed, the book value of the asset (or the CGU) is credited to the newly estimated recoverable amount. However, the book value increase is limited to the value that the asset (or CGU) would have had if no asset impairment loss had been recognized in previous financial years.

The calculation of the value in use is generally based on discounted cash flow methods using cash flow projections up to five years. These projections take into account past experience and represent management's best estimate about future sales revenue and cost developments. Cash flows after the planning period are extrapolated using individual growth rates. Key assumptions on which management has based its determination of the value in use include estimated growth rates, weighted average cost of capital and tax rates. These estimates can have a material impact on the respective values and ultimately the amount of any impairment.

Intangible Assets

The capitalization of self-constructed intangible assets also includes a significant level of judgment, e.g. the evaluation of feasibility of a development project, the expected market prospects and the determination of useful lives.

Employee Benefits – Pension Provisions

Obligations for pension and other post-employment benefits are determined in accordance with actuarial valuations. These valuations rely on key assumptions including discount rates, expected salary increases and mortality rates. The discount rate assumptions are determined by reference to yields on high-quality corporate bonds of appropriate duration and currency at the end of the reporting period.

Due to changing market and economic conditions the underlying key assumptions may differ from actual developments and may lead to significant changes in pension and other post-employment benefit obligations.

Such differences are recognized in other comprehensive income in the period in which they occur. For a sensitivity analysis, see note 24, Pension and Employee Benefits Provisions.

Provisions, Contingent Liabilities and Contingent Assets

Provisions are recognized for legal or constructive obligations that exist as of the balance sheet date. To determine the amount of the obligations, certain estimates and assumptions have to be applied, including the determination of the probability and the amount of future outflows of resources. Typically, significant estimates are involved in the determination of provisions related to onerous contracts, warranty costs, asset retirement obligations and legal proceedings.

Income Taxes

The Group operates in various tax jurisdictions and therefore has to determine tax positions under respective local tax laws and tax authorities' views which can be complex and subject to different interpretations of taxpayers and local tax authorities. Deferred tax assets have to be recognized for all deductible temporary differences and unused tax losses to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences and unused tax losses can be utilized. As future developments are uncertain and partly beyond management's control, assumptions are necessary to estimate future taxable profits as well as the period in which deferred tax assets will be recovered.

Estimates are revised in the period in which there is sufficient evidence to revise the assumption. If management considers it probable that all or a portion of a deferred tax asset cannot be realized, the corresponding amount is not recorded as an asset.

Fair Value Measurement

A number of the Group's accounting policies and disclosures may require the measurement of fair values, for both financial and non-financial assets and liabilities, including Level 3 fair values (unobservable inputs).

If third party information, such as broker quotes or pricing services, is used to measure fair values, then management assesses the evidence obtained from the third parties to support the conclusion that these valuations meet the requirements of IFRS, including the level in the fair value hierarchy in which the valuations should be classified.

When measuring the fair value of an asset or a liability, the Group uses observable market data as far as possible. If the inputs used to measure the fair value of an asset or a liability fall into different levels of the fair value hierarchy, then the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

5. Operating Segments

According to IFRS 8, Operating Segments the identification of reportable operating segments is based on the "management approach"; i.e. the segments are defined analogously to the internal financial reporting of an entity. Therefore, an area of activity is to be considered an operating segment if its business activities may result in revenues and expenses, its operating results are regularly reviewed by the entity's chief operating decision maker (= the Executive Members of the Board of Directors) and discrete financial information is available in its internal reporting. Internal control and reporting within Sartorius Stedim Biotech is based on the approach of operating as a "total solution provider" for its customers. Accordingly, there is only one single segment to be identified for Sartorius Stedim Biotech, driven by the product and customer perspective: Biopharm.

The key performance indicator of the operating segment of the Sartorius Stedim Biotech Group is the so-called "underlying EBITDA", as the board monitors this performance measure at a consolidated level and they believe this measure is relevant to an understanding of the Group's financial performance.

EBITDA corresponds to earnings before interest, taxes, depreciation and amortization; "underlying EBITDA" means EBITDA adjusted for extraordinary items. In this connection, extraordinary items are expenses and income that are of an exceptional or a one-time nature and accordingly distort the sustainable profitability of a segment and have a material impact on the net worth, financial position and earnings of the Group. Examples of such items are restructuring expenses, large Group projects as well as proceeds or losses from the disposal, sale or other transfer of financial assets or of property, plant and equipment, provided that these are not of a recurrent nature.

Underlying EBITDA is not a defined performance measure in IFRS. The Group's definition of underlying EBITDA may not be comparable with similarly titled performance measures and disclosures by other entities.

Segment assets and segment liabilities are not analyzed on a regular basis to the chief operating decision maker and are therefore not part of the segment report.

			Biopharm			Group
€ in K	**2019**	2018	Change	**2019**	2018	Change
Sales revenue	1,440,570	1,212,152	19%	1,440,570	1,212,152	19%
Underlying EBITDA	421,504	342,430	23%	421,504	342,430	23%
as a % of sales revenue	29.3%	28.2%		29.3%	28.2%	
EBIT	332,025	300,234	11%	332,025	300,234	11%
as a % of sales revenue	23.0%	24.8%		23.0%	24.8%	

Reconciliation of Segment Profit or Loss:

€ in K	**2019**	2018
Underlying EBITDA of the segment	421,504	342,430
Depreciation and amortization	−72,712	−54,918
Extraordinary effects	−16,767	12,722
EBIT	**332,025**	**300,234**
Financial result	−14,419	−15,685
Profit before tax	**317,606**	**284,549**

Supplementary Information by Region

To provide additional information required by IFRS 8, the table below presents the supplementary information by geographical region. The key figures for non-current assets of the geographical areas refer to the company location, whereas sales revenue is reported according to the customer's location.

The non-current assets correspond to property, plant and equipment as well as to intangible assets (including goodwill).

The amount of sales revenue with a single customer does not exceed 5% of the consolidated sales revenue (2019 and 2018).

		Sales revenue		Non-current assets
€ in K	**2019**	2018	**2019**	2018
EMEA	575,122	508,241	927,986	816,639
thereof Germany	151,667	144,602	391,369	340,599
thereof France	68,153	54,977	334,920	331,371
Americas	511,647	422,625	189,106	159,484
thereof USA	477,905	396,509	189,106	159,484
Asia | Pacific	353,801	281,286	36,521	22,044
thereof China	106,819	83,904	2,807	1,474
thereof South Korea	82,678	72,824	13,962	7,502
Group	**1,440,570**	**1,212,152**	**1,153,613**	**998,167**

6. Statement of Cash Flows

The statement of cash flows shows the impact of cash inflows and outflows on the cash and cash equivalents of the Group. The cash flows are classified by operating, investing and financing activities according to IAS 7 (Statement of Cash Flows).

In this context cash equivalents are assets that can be converted into cash within a short maturity (generally less than three months). The amount considered in the statement of cash flows is equal to the amount of cash and cash equivalents in the statement of financial position.

The following table summarizes the development of the liabilities arising from financing activities during the reporting period:

	Balance at Dec. 31, 2017 € in K	cash flows	Currency effects	other non-cash changes	Balance at Dec. 31, 2018 ¤ in K
Loans and borrowings	142,183	–9,229	–12	0	132,943
Lease liabilities	17,487	–754	–40	0	16,693
Liability for phantom units in connection with the AllPure acquisition	5,282	0	250	3,206	8,739
Total financial liabilities from financing activities	**164,952**	**–9,982**	**198**	**3,206**	**158,375**

	Balance at Dec. 31, 2018 € in K	Initial Application of IFRS 16	cash flows	Currency effects	other non-cash changes	**Balance at Dec. 31, 2019 € in K**
Loans and borrowings	132,943	0	–49,576	8	169	83,545
Lease liabilities	16,693	32,510	–10,262	271	12,587	51,799
Liability for acquisition of non-controlling interests in Biological Industries		0	0	0	61,010	61,010
Liability for phantom units in connection with the AllPure acquisition	8,739	0	0	168	2,610	11,517
Total financial liabilities from financing activities	**158,375**	**32,510**	**–59,838**	**447**	**76,376**	**207,871**

7. Scope of Consolidation

The 2019 financial statements of the following entities:

- TAP Biosystems (PHC) Ltd., UK
- TAP Biosystems Ltd., UK
- Distribo GmbH, Germany
- Beit Haemek Import and Marketing Agricultural Cooperative Society Ltd., Israel
- Biological Industries USA Inc., US
- BI Shanghai Co. Ltd., China
- Biological Industries Hong Kong Ltd., Hong Kong

were not included in the scope of consolidation, because the figures were of minor importance for assessing the financial position of the Group.

The sales revenue and total assets of the non-consolidated companies are below 1% of the Group figures.

The financial statements of the following companies have been included in the Group financial statements:

	Ownership in %
EMEA	
Sartorius Stedim Biotech S.A., Aubagne, France	Parent company
Sartorius Stedim Belgium N.V., Brussels, Belgium	100
Sartorius Stedim Nordic Oy, Helsinki, Finland	100
Sartorius Stedim Biotech GmbH, Goettingen, Germany	100
Sartorius Stedim Plastics GmbH, Goettingen, Germany	100
Sartorius Stedim North America Holding GmbH, Goettingen, Germany	100
Sartorius Stedim Systems GmbH, Guxhagen, Germany	100
Sartorius Stedim Cellca GmbH, Ulm, Germany	100
Sartorius Stedim UK Ltd., Epsom, UK	100
Sartorius Stedim BioOutsource Ltd., Glasgow, UK	100
Sartorius Stedim Lab Ltd., Stonehouse, UK	100
TAP Biosystems Group Ltd., Royston, UK	100
TAP ESOP Management Ltd., Royston, UK	100
The Automation Partnership Cambridge Ltd., Royston, UK	100
Sartorius Stedim FMT S.A.S., Aubagne, France	100
Sartorius Stedim France S.A.S., Aubagne, France	100
Sartorius Stedim Aseptics S.A.S., Lourdes, France	100
Sartorius Stedim Ireland Ltd., Dublin, Ireland	100
Sartorius Israel Ltd., Kibbutz Beit Haemek, Israel[2]	51
Biological Industries Israel Beit Haemek Ltd., Kibbutz Beit Haemek, Israel[1]	50
Sartorius Stedim Italy S.r.l., Florence, Italy	100
Sartorius Stedim Netherlands B.V., Amersfoort, Netherlands	100
Sartorius Stedim Austria GmbH, Vienna, Austria	100
Sartorius Stedim Poland sp. z.o.o., Kostrzyn, Poland	100
LLC Sartorius Stedim RUS, St. Petersburg, Russia	100
Sartorius Stedim Data Analytics AB, Umeå, Sweden	100
Sartorius Stedim Switzerland AG, Tagelswangen, Switzerland	100
Sartorius Stedim Spain S.A., Madrid, Spain	100
Sartorius Stedim Hungaria Kft., Budapest, Hungary	100
Sartorius Stedim Bioprocess S.A.R.L., M'Hamdia, Tunisia	100
Americas	
Sartorius Stedim Filters Inc., Yauco, Puerto Rico	100
Sartorius Stedim North America Inc., Dover, Delaware, USA	100
Asia | Pacific	
Sartorius Stedim Australia Pty. Ltd., Dandenong South, Victoria, Australia	100
Sartorius Stedim Biotech (Beijing) Co. Ltd., Beijing, China	100
Sartorius Stedim (Shanghai) Trading Co. Ltd., Shanghai, China	100
Sartorius Stedim India Pvt. Ltd., Bangalore, India	100
Sartorius Stedim Japan K.K., Tokyo, Japan	100
Sartorius Korea Biotech Co. Ltd., Seoul, South Korea	69
Sartorius Stedim Malaysia Sdn. Bhd., Kuala Lumpur, Malaysia	100
Sartorius Stedim Singapore Pte. Ltd., Singapore, Singapore	100
Sartonets Taiwan Inc., New Taipei City, Taiwan	100

[1] Control due to contractual arrangements.
[2] Sartorius Israel Ltd. is an associate of the Group that was acquired in the course of the acquisition of Biological Industries in December 2019 (see note 8). Due to contractual agreements, the Group does neither control nor jointly control the entity. The associate is accounted for applying the equity method.

Besides Sartorius Israel Ltd., there are no associates or joint ventures included in the scope of consolidation, i.e. all other companies are consolidated in full. The ownership rate equals the share in voting rights.

8. Business Combinations

Acquisition of Biological Industries

On December 15, 2019, the Group acquired slightly more than 50% of the shares of the Israeli cell culture media developer and manufacturer Biological Industries. In the course of the transaction, the Group obtained control based on contractual agreements.

Biological Industries focuses on cell culture media, particularly for cell and gene therapy, regenerative medicine and other advanced therapies. Founded in 1981, the company currently employs approximately 130 people mainly at its headquarters, R&D and manufacturing site close to Haifa, Israel, and at sales locations in the USA, Europe and China.

The purchase price for the acquired shares equals approximately 47.6 million euros and was fully paid in cash. The directly attributable acquisition-related cost amounted to 0.3 million euros and were recognized in other expenses.

Due to the short time period between the closing of the business combination and the authorization of the consolidated financial statements, the full difference between the consideration transferred and the net assets acquired before their fair value measurement is provisionally presented as goodwill. The exception is the investment of Biological Industries in Sartorius Israel Ltd. which is classified as an associate in accordance with IAS 28. The fair value of this 51% shareholding has been provisionally determined to amount to about 6.9 million euros and is included in line "other assets" in the table below. Non-controlling interests are measured at their proportionate share of the net assets.

The following table presents the preliminary purchase price allocation:	Preliminary fair values on the acquisition date € in K
Property, plant and equipment	5,201
Inventories	4,982
Trade receivables	5,121
Other assets	8,323
Cash and cash equivalents	3,209
Loans and borrowings	–345
Other liabilities	–6,637
Net assets acquired	**19,855**
Non-controlling interests (50%)	**9,927**
Purchase price	**47,571**
Goodwill	**37,644**

It is expected that the final purchase price allocation will result in additional intangible assets, especially for technologies and customer relations. Any resulting goodwill is expected not to be deductible for tax purposes. Besides being attributable to the synergies realized by the acquiree's access to the Group's global sales and distribution network, the resulting goodwill is expected to reflect the expansion of the Group's product offering towards biopharmaceutical customers.

In the course of the acquisition, the holder of the non-controlling interest was granted a right to sell its remaining shares in several tranches until 2027. For the obligation to purchase own equity interests, the Group recognized financial liabilities amounting to 61.0 million euros against equity. On the other hand, the Group has the right to purchase additional 20% of the shares exercisable within a three-year period from the acquisition.

Due to the fact that the acquisition date was close to the end of the reporting period, the amounts of revenue and profit or loss of the acquiree included in the consolidated financial statements are not material.

Acquisition of Sartonets Taiwan

On September 27, 2019, the Group acquired 100% of the shares of Sartonets Taiwan Inc. The company is an importer, distributor and maintenance service provider of medical devices, bioprocess and laboratory products in Chinese Republic of Taiwan ("Taiwan"). The total consideration transferred amounts to 5.8 million euros and was fully paid in cash. The directly attributable acquisition-related cost amounted to 0.2 million euros and were recognized in other expenses. The net assets acquired amount to about 2.5 million euros. The leading intangible asset identified is a customer relationship which is measured at its acquisition date fair value of 2 million euros. The resulting goodwill amounts to 3.2 million euros.

Had the acquisition date of both acquisitions been at the beginning of the reporting period, the revenue and net result of the combined entity would amount to 1,466 million euros and 237 million euros, respectively.

Notes to the Statement of Profit or Loss

9. Sales Revenue

Revenue recognition follows IFRS 15, Revenue from Contracts with Customers. The standard defines a comprehensive model to determine when to recognize revenue and in which amount. The revenues from contracts with customers according to IFRS 15 are disaggregated into geographical regions (see Segment Report, note 5).

The Group produces and sells instruments and consumables for customers in the Biopharm segment. The Group satisfies its performance obligations depending on the goods to be transferred and the promised services. The far majority of the revenues from sales of products is recognized at a point in time when the customer obtains control over the goods. This is typically the case when the significant risks and rewards of ownership of the goods are transferred to the customer. Therefore, the point in time may vary depending on the agreement with the individual customer.

For complex products that require installation at the customer's site, revenue is recognized upon formal customer acceptance. To a low extent, revenue is recognized over time in the customer-specific project business. In these cases, revenue is recognized according to the project progress which is measured based on the percentage of costs to date compared to the total estimated contract costs. The amount of actual costs incurred to date reflects the progress and the transfer of control to the customer appropriately as the Group has a right to a reimbursement of cost to date plus an appropriate margin, if the project is cancelled by the customer without cause.

Revenue from services is generally recognized when the services are performed or have been performed. When the services are performed continuously over a period of time, the Group recognizes the related revenue over time. In this case, revenue is generally recognized pro rata temporis in relation to the total contract period. Product sales are typically accompanied by the legally required warranty. Any material extended warranties are accounted for as separate performance obligations.

According to the general payment terms, customer payments are due in the short-term, typically within 30 days. To some extent, the Group obtains advance payments, e.g. to avoid credit risks. Therefore, the Group regularly has contract liabilities (payments received on account of orders). In addition, the Group recognizes contract liabilities in connection with service contracts (deferred revenues) when customers pay in advance.

There are no material effects from contracts with significant financing components. The Group uses the practical expedient regarding the existence of a significant financing component. This means that a financing component is only taken into consideration when the length of time between the transfer of goods or services and the receipt of consideration is expected to exceed one year and the effect is material. As of December 31, 2019, the Group has refund liabilities in the amount of 4,740 k euros as a result from incentive agreements with customers (2018: €5,755 k).

The aggregate amount of the transaction price allocated to the performance obligations that are unsatisfied (or partially unsatisfied) at the end of the reporting period (orders on hand) amounts to 606.9 million euros (2018: €489.0 million). The Group expects that these unsatisfied performance obligations will be satisfied to a large extent in 2020.

There were no extraordinary changes in the carrying amounts of the contract liabilities and contract assets in the reporting period. Revenue in the amount of 51,244 k euros was recognized in the reporting period that was included in the contract liability balance at the beginning of the reporting period (2018: €41,182 k).

The balances of trade receivables and contract assets are presented in note 29. For details on the impairments on trade receivables and contract assets recognized in the reporting period see note 40. The following table presents the balances of the Group's contract liabilities.

	Line item in statement of financial position	**Carrying amount as of December 31, 2019**	Carrying amount as of December 31, 2018
		€ in k	€ in k
Deferred revenue	Other liabilities	14,138	16,235
Payments received on account of orders	Trade payables	80,574	51,000
Contract liabilities (total)		**94,712**	**67,234**

10. Functional Costs

The statement of profit or loss has been presented according to the "cost of sales format", i.e. expenses have been allocated to the relevant functions production, sales & marketing, research & development and general administration.

Expenses relating to cross-functional initiatives or projects are assigned to the respective functional costs based on an appropriate allocation principle.

The caption "cost of sales" includes the costs of products sold and the acquisition costs of merchandise sold. In addition to directly attributable expenses, such as raw materials and supplies, employee benefits expense and energy expenses, cost of sales also includes overhead, which can be allocated to the manufacturing area, and the corresponding depreciation and amortization.

The selling and distribution costs pertain, in particular, to the costs of the sales and marketing function, distribution and market research.

Research and development costs comprise the costs of research and product and process development, unless they are recognized as assets.

The item "general administrative expenses" mainly includes employee benefits expense and the cost of materials of the general administrative area.

All profit and loss items that cannot be allocated to one of the mentioned functional areas are recognized as other income and expenses. This includes essentially effects from translation of transactions in foreign currencies, sale of fixed assets, allowances on trade receivables and reorganization and other non-recurring expenses. Income from grants related to income is recognized as other income, when there is reasonable assurance that the conditions attached to the grants are complied with and the grants will be received. They are recognized systematically as income over the period in which the related costs are recorded.

Operating expenses by nature are presented in the Profit or Loss Statement by nature in note 14.

The material expense and personnel cost are as follows:

Raw Materials and Supplies

This caption consists of the following:

	2019 12 months € in K	2018 12 months € in K
Purchases consumed	284,819	237,889
Cost of purchased services	68,305	54,079
Total	**353,124**	**291,968**

Personnel Cost

This caption can be broken down as follows:

	2019 12 months € in K	2018 12 months € in K
Wages and salaries	315,649	274,115
Social security	70,020	59,877
Expenses for retirement benefits and pensions	7,527	6,861
Total	**393,195**	**340,853**

11. Other Operating Income and Expenses

	2019 12 months € in K	2018 12 months € in K
Currency translation gains	7,649	10,392
Extraordinary income	0	35,248
Income from the decrease in allowances for bad debts	982	475
Income from release of provisions and liabilities	601	353
Income from grants	1,005	4,235
Other income	5,390	1,921
Other operating income	**15,627**	**52,624**
Currency translation losses	–7,641	–10,403
Extraordinary expenses	–16,767	–22,526
Allowances for bad debts	–3,662	–2,041
Other expenses	–7,851	–4,153
Other operating expenses	**–35,921**	**–39,124**
Total other operating income and expenses	**–20,294**	**13,500**

The item reported as income from grants discloses the grants for expenses (essentially related to research and development projects).

Extraordinary items amounted to €–16.8 million (net) (previous year: €12.7 million). The extraordinary income in the prior year refers mainly to the derecognition of the liability for the acquisition of the cell culture media business as a consequence of the modified cooperation agreement with Lonza; extraordinary expenses essentially cover one-time expenses for strategic Group projects and integration and acquisition-related items.

12. Financial Result

	2019 12 months € in K	2018 12 months € in K
Interest and similar income	336	385
- of which from affiliated companies	213	126
Income from derivative financial instruments	3,662	2,798
Other financial income	2,869	2,167
Financial income	**6,867**	**5,349**
Interest and similar expenses	–3,861	–3,344
- of which from affiliated companies	–1,091	–1,378
Expenses for derivative financial instruments	–8,424	–5,779
Interest expense for pensions	–747	–649
Other financial expenses	–8,255	–11,263
Financial expenses	**–21,287**	**–21,035**
Total	**–14,419**	**–15,685**

The other financial income (expenses) include mainly foreign exchange gains (losses) in connection with bank deposits and loans and liabilities denominated in foreign currencies. Furthermore, in 2019 an increase in the liability for the phantom units in AllPure has been posted with an amount of approx. €2.5 million (2018: €3 million) (see note 32).

The interest expenses to affiliated companies are in connection with the loan granted by the Group's ultimate parent Sartorius AG (see also chapter 43).

13. Income Taxes

	2019 12 months € in K	2018 12 months € in K
Current income taxes	–83,417	–78,330
Deferred taxes	1,994	3,740
Total	**–81,424**	**–74,590**

Current income taxes are determined based on the respective local taxable income of the period and local tax rules. In addition, current income taxes include adjustments for uncertain tax payments or tax refunds for periods not yet assessed. Changes in deferred tax assets and liabilities are included in income taxes except for changes recognized in other comprehensive income or equity.

Income taxes in France are calculated at 33.33% of the estimated taxable profit for the year. For Germany, a rate of approx. 30% was applied to the taxable income.

Income generated outside France and Germany is taxed at rates applicable in the corresponding country.

Considering the French and German average tax rates and the impact of other tax legislations, the expected tax rate for the Sartorius Stedim Biotech Group is roughly 26% (26% in 2018). The following table describes the difference between the expected tax expense and the income tax expenses reported for the particular financial year.

	2019 12 months € in K	2018 12 months € in K
Expected tax rate	26%	26%
Expected tax expense	–82,578	–73,983
Differences from the Group average income tax rate	9,654	9,771
Permanent differences	–6,415	–11,172
Tax-free income and other tax exemptions	3,430	1,222
Unrecognized tax losses and deductible temporary differences	–1,641	–832
Taxes for previous years	–3,096	1,436
Withholding and similar taxes	–321	–404
Other	–457	–628
Total	**–81,424**	**–74,590**
Effective tax rate	–25.6%	–26.2%

14. Profit or Loss Statement by Nature

	2019 12 months € in K	2018 12 months € in K
Sales revenue	**1,440,570**	**1,212,152**
Purchases consumed	–284,819	–237,889
Cost of purchased services	–68,305	–54,079
Personnel costs	–393,195	–340,853
Amortization and depreciation	–73,233	–60,914
Other operating costs	–288,993	–218,183
Subtotal	**–1,108,544**	**–911,918**
Operating profit (EBIT)	**332,025**	**300,234**
Financial income I expenses	–14,419	–15,685
Income tax	–81,424	–74,590
Non-controlling interest	–1,608	–1,907
Net profit after non-controlling interest	**234,574**	**208,052**

15. Earnings per Share

According to IAS 33, the earnings per share must be determined as follows: The basic earnings per share (basic EPS) are calculated on the basis of the weighted average number of ordinary shares during the period.

	2019	2018
Net profit after tax (€ in K)	236,182	209,959
Group net profit after tax (€ in K)	234,574	208,052
Earnings per share (€)	2.54	2.26
Diluted earnings per share (€)	2.54	2.26
Number of shares (statutory level)	92,180,190	92,180,190
Treasury shares	–3,225	–3,416
Weighted average number of shares used in earnings per share calculation	**92,176,965**	**92,176,774**
Weighted average number of shares used in diluted earnings per share calculation	**92,176,965**	**92,176,774**

Notes to the Individual Balance Sheet Items

16. Goodwill and Other Intangible Assets

Goodwill

	Goodwill € in K
Gross book values at Jan. 1, 2018	**386,045**
Currency translation	–1,350
Business combinations	0
Gross book values at Dec. 31, 2018	**384,695**
Impairment losses at Jan. 1, 2018	**0**
Currency translation	0
Impairment losses	0
Impairment losses at Dec. 31, 2018	**0**
Net book values at Dec. 31, 2018	**384,695**

	Goodwill € in K
Gross book values at Jan. 1, 2019	**384,695**
Currency translation	1,309
Business combinations	40,886
Gross book values at Dec. 31, 2019	**426,890**
Impairment losses at Jan. 1, 2019	**0**
Currency translation	0
Impairment losses	0
Impairment losses at Dec. 31, 2019	**0**
Net book values at Dec. 31, 2019	**426,890**

The caption reported as goodwill in the amount of €426,890 K is the capitalized difference in assets resulting from business combinations. According to IAS 36, goodwill acquired in a business combination may not be amortized, but rather, must be tested annually for impairment and as soon as there is any indication of asset impairment. The increase recorded in 2019 concerns the acquisitions of Biological Industries and Sartonets Taiwan (see note 8).

For the purpose of impairment testing, goodwill must be allocated to each of the acquirer's cash-generating units (CGUs) that are expected to benefit from the synergies of the combination. The CGU represents the lowest level within the entity at which goodwill is monitored for internal management purposes and may not be larger than a segment. Sartorius Stedim Biotech Group follows the strategy to be a total solution provider for its customers. Because of the various interdependencies within the business, the lowest level at which goodwill is monitored is that of the Biopharm segment. Therefore, the acquired goodwill is allocated to this group of CGU's.

As in 2018, the impairment test conducted for 2019 measures the recoverable amount on the basis of the value in use of the particular cash-generating unit (Biopharm segment). The cash flow forecasts consider previous experiences and are generally based on Group management's forecasts for a period of four years. The calculations were based on a terminal year growth rate of 2.5% for the years after 2023. This rate is derived from market expectations, which forecast significant growth rates for the targeted biopharmaceutical market. The major growth driver for the Sartorius Stedim Biotech Group will be the aging and increase in population and the improved access to drugs in the emerging markets as well as the ongoing paradigm shift from reusable products to single-use products utilized in bio manufacturing by the biopharmaceutical industry.

The discount rates applied correspond to the weighted capital cost rates and were recognized as follows:

	2019		2018	
	Before tax	**After tax**	Before tax	After tax
Biopharm segment	9.0%	7.3%	8.9%	7.2%

In 2019, our impairment test did not result in recognition of impairment losses. In this context, various sensitivity analyses based on realistic variations of the assumptions disclosed above did not result in an impairment either. The following variations would theoretically represent the "break-even point":

	2019	2018
Discount rates	24.4%	22.9%
Terminal growth rate	–45.7%	–29.6%
Cash flows	–78.9%	–78.5%

Intangible Assets

	Patents, licenses and similar rights € in K	Brand name € in K	Customer relationships € in K	Capitalized development costs € in K	Payments on account € in K	Total € in K
Gross book values at Jan. 1, 2018	**89,051**	**11,906**	**135,300**	**85,924**	**36**	**322,216**
Currency translation	246	–32	172	–52	1	335
Business combinations	0	0	0	0	0	0
Acquisitions	20,443	0	0	22,839	19	43,301
Disposals	–11,010	0	–11,804	–1,089	0	–23,902
Transfers	363	0	0	0	0	363
Gross book values at Dec. 31, 2018	**99,094**	**11,874**	**123,669**	**107,622**	**55**	**342,313**
Amortization and impairment losses at Jan. 1, 2018	**–33,792**	**–160**	**–77,372**	**–37,986**	**0**	**–149,310**
Currency translation	–444	1	–41	28	0	–455
Amortization and impairment losses	–11,519	–152	–13,991	–4,341	0	–30,004
Disposals	8,183	0	5,680	1,089	0	14,952
Transfers	–3	0	0	0	0	–3
Amortization and impairment losses at Dec. 31, 2018	**–37,576**	**–311**	**–85,724**	**–41,210**	**0**	**–164,821**
Net book values at Dec. 31, 2018	**61,518**	**11,563**	**37,944**	**66,412**	**55**	**177,492**

	Patents, licenses and similar rights € in K	Brand name € in K	Customer relationships € in K	Capitalized development costs € in K	Payments on account € in K	**Total € in K**
Gross book values at Jan. 1, 2019	**99,094**	**11,874**	**123,669**	**107,622**	**55**	**342,313**
Currency translation	986	–5	808	754	0	2,543
Business combinations	0	0	2,000	0	0	2,000
Acquisitions	382	0	0	25,868	0	26,250
Disposals	–176	0	0	0	–20	–195
Transfers	43	0	0	0	–36	7
Gross book values at Dec. 31, 2019	**100,328**	**11,869**	**126,476**	**134,244**	**0**	**372,917**
Amortization and impairment losses at Jan. 1, 2019	**–37,576**	**–311**	**–85,724**	**–41,210**	**0**	**–164,821**
Currency translation	–773	–8	–569	–186	0	–1,537
Amortization and impairment losses	–8,960	–73	–8,504	–9,059	0	–26,595
Disposals	164	0	0	0	0	164
Transfers	–33	0	0	–4	0	–38
Amortization and impairment losses at Dec. 31, 2019	**–47,178**	**–392**	**–94,797**	**–50,459**	**0**	**–192,827**
Net book values at Dec. 31, 2019	**53,150**	**11,477**	**31,679**	**83,785**	**0**	**180,090**

Intangible assets acquired are recorded at cost less the accumulated, regular amortization that is calculated according to the straight-line method and any impairment loss. The useful life of an intangible asset is the period during which the Group expects to use the asset.

Amortization of intangible assets is generally based on the following estimated useful lives:

Software	2 to 5 years
Capitalized R&D expenses	4 to 6 years
Customer relations and technologies	5 to 15 years
Brand name	5 years to indefinite

Costs incurred within the scope of the development of new products and methods were capitalized as internally generated intangible assets if the following criteria were met:

- The technical feasibility of completing the intangible assets so that it will be available for use or sale;
- The intention to complete the intangible asset and use or sell it;
- The ability to use or sell the intangible asset;
- The demonstration of how the intangible asset will generate probable future economic benefits;
- The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset;
- The ability to measure reliably the expenditure attributable to the intangible asset during its development.

The capitalized development costs essentially cover the costs that were allocated to the staff involved in R&D, raw materials and supplies, outside services and directly attributable overhead. Intangible assets generated internally are amortized on a straight line basis over their useful lives, which generally do not exceed six years.

If an internally generated intangible asset may not be recognized, the development costs are expensed in the period in which they are incurred. Costs for research activities are reported as expenses in the period in which they are incurred.

The Stedim brand name acquired in 2007 is considered to have an indefinite useful life and is therefore not amortized. There is no foreseeable limit to the period over which the brand name is expected to generate net cash inflows for the Group. The brand name is tested annually for impairment at the level of the "Biopharm segment" cash-generating unit (CGU).

In 2019, the development costs of €25,868 K were recognized as assets (€22,839 K in 2018).

Amortization of intangible assets is allocated to the corresponding functions in the statement of profit or loss. For capitalized development costs, amortization is disclosed in the line "cost of sales".

As a consequence of the modified agreement with Lonza in the cell culture media business, the related intangible assets (technology and customer relationships) have been recognized as disposals in the prior period.

In 2019, impairments were recognized in the amount of €2.9 million relating mainly to capitalized devlopment expenses. The impairments in 2018 of €5.8 million relate mainly to technologies and customer relationships.

17. Property, Plant and Equipment

	Land, buildings and improvements € in K	Technical machinery and equipment € in K	Factory and office equipment and other equipment € in K	Payments on account and construction in progress € in K	Total € in K
Gross book values at Jan. 1, 2018	**176,538**	**161,862**	**88,603**	**103,179**	**530,183**
Currency translation	386	–302	445	3,709	4,238
Business combinations	0	0	0	0	0
Acquisitions	20,018	11,247	9,137	93,242	133,644
Disposals	–3,643	–7,316	–9,959	–299	–21,218
Transfers	6,035	11,899	852	–19,113	–326
Gross book values at Dec. 31, 2018	**199,335**	**177,390**	**89,078**	**180,718**	**646,521**
Depreciation at Jan. 1, 2018	**–57,921**	**–87,641**	**–53,327**	**1**	**–198,888**
Currency translation	35	–242	–133	0	–341
Depreciation	–8,490	–13,443	–8,980	0	–30,913
Disposals	3,320	6,712	9,257	0	19,290
Transfers	–11	72	250	0	311
Depreciation at Dec. 31, 2018	**–63,067**	**–94,542**	**–52,933**	**1**	**–210,540**
Net book values at Dec. 31, 2018	**136,268**	**82,849**	**36,146**	**180,719**	**435,980**

	Land, buildings and improvements € in K	Technical machinery and equipment € in K	Factory and office equipment and other equipment € in K	Payments on account and construction in progress € in K	**Total € in K**
Gross book values at Jan. 1, 2019	**199,335**	**177,390**	**89,078**	**180,718**	**646,520**
Less assets held under finance leases (IAS 17)	–19,397	0	–234	0	–19,631
Gross book values at Jan. 1, 2019 (excl. leases)	**179,937**	**177,390**	**88,844**	**180,718**	**626,889**
Currency translation	1,139	1,372	412	2,323	5,247
Business combinations	3,020	1,429	480	0	4,929
Acquisitions	36,651	22,092	16,475	28,006	103,224
Disposals	1,003	–3,794	–2,149	–24	–4,964
Transfers	106,767	13,488	10,717	–130,979	–7
Gross book values at Dec. 31, 2019	**328,518**	**211,978**	**114,778**	**80,044.1**	**735,319**
Depreciation at Jan. 1, 2019	**–63,067**	**–94,542**	**–52,933**	**1**	**–210,540**
Less depreciation related to finance leases (IAS 17)	4,939	0	94	0	5,033
Depreciation at Jan. 1, 2019 (excl. leases)	**–58,128**	**–94,541**	**–52,839**	**1**	**–205,507**
Currency translation	–407	–739	–273	1	–1,418
Depreciation	–10,199	–14,912	–10,697	–167	–35,975
Disposals	–1,008	3,728	1,842	0	4,562
Transfers	–141	1,633	–1,454	0	38
Depreciation at Dec. 31, 2019	**–69,884**	**–104,830.4**	**–63,420**	**–165.3**	**–238,300**
Net book values at Dec. 31, 2019	**258,634**	**107,148**	**51,358**	**79,879**	**497,019**
Net book values at Dec. 31, 2019 of right-of-use assets	**43,503**	**2,152**	**3,959**	**0**	**49,614**
Total property, plant and equipment at Dec. 31, 2019	**302,137**	**109,300**	**55,317**	**79,879**	**546,633**

The "Property, plant and equipment" caption in the statement of financial position includes right-of-use assets according to IFRS 16 (see note 18). Property, plant and equipment is recorded at cost and depreciated over the estimated useful life using the straight line method. Tangible assets are subject to impairment tests whenever there are indicators of impairment.

Depreciation of fixed assets is based on the following periods of useful life:

Buildings	15 to 50 years
Machinery	5 to 15 years
Factory and office equipment	3 to 13 years

Depreciation is included in the statement of profit or loss according to use of the assets in the cost of sales, selling and distribution costs, research and development costs, general administrative expenses and other operating expenses.

Borrowing costs are expensed as incurred unless they are directly attributable to the acquisition, construction or production of a qualifying asset and are therefore part of the cost of that asset. A qualifying asset is defined as an asset that takes a substantial period of time (six to twelve months) to get ready for its intended use.

Grants related to assets are deducted from the cost of the related asset.

In 2019, as for fiscal 2018, there were no significant impairment losses to be recognized with regard to property, plant and equipment.

18. Leases

Lease accounting in 2019 according to IFRS 16

A lease is a contract, or part of a contract, that conveys the right to use an asset for a period of time in exchange for consideration. For the financing structure of the Group, leases are not of high relevance. The main considerations in relation to leases are therefore generally of a practical nature, for example, with regard to the management of IT hardware or the fleet management. Accordingly, leases of IT hardware and cars represent the major part of the Group's lease contracts. The lease term of such leases is generally fixed and extends typically over 3 to 5 years. However, those leases of the Group in which the lessor is a related party that is an entity controlled by the ultimate parent, Sartorius AG, are generally of a short-term nature providing both contract parties with operational flexibility. Furthermore, at some sites, the Group has long-term leases of buildings. The lease contracts are managed by the local management and may contain extension options which are included in the lease term according to IFRS 16 when the Group is reasonably certain that the option will be exercised. The Group does not act as a lessor to a material extent.

IFRS 16 introduces a standardized accounting model according to which leases are generally to be recognized on the lessee's balance sheet. A lessee recognizes a right-of-use asset representing its right to use a lease asset, as well as a liability resulting from the lease, which represents its obligation to make lease payments. There are exemptions for short-term leases and leases of low-value assets.

The Group makes use of the exemptions for short-term leases and leases of low-value assets and recognizes the corresponding lease payments as an expense generally on a straight-line basis over the particular lease term. Accordingly, no right-of-use assets and no lease liabilities are recognized for these leases. Furthermore, no right-of-use assets and no liabilities are recognized for leases between Group entities. The Group does not apply the standard to leases of intangible assets.

In the statement of financial position, the Group presents the right-of-use assets according to the nature of the underlying lease assets within "Property, plant and equipment." The right-of-use assets are recognized at cost less accumulated depreciation and any impairments. The cost of the right-of-use assets comprises the present value of the future lease payments, any payments paid upon or before commencement of the lease, any initial direct costs, and costs for dismantling or removing the lease asset. The right-of-use assets are typically depreciated over the lease term. If the transfer of legal ownership of the lease asset is planned at the end of the lease term, the right-of-use asset is depreciated over the economic useful life of the lease asset. In the statement of profit or loss, depreciation is recognized within functional costs.

The lease liabilities are presented separately on the face of the statement of financial position. Lease liabilities are initially recognized at an amount equal to the present value of the future lease payments. The lease payments do generally not include any payments in relation to non-lease components. In general, the incremental borrowing rate of the Group specific to the respective country, currency and lease term is used for discounting. Subsequently, the carrying amount of the lease liabilities is increased by the interest expenses and reduced by the lease payments. Interest expenses are reported in the financial result and, to the extent they are paid, in the financing section of the cash flow statement.

Accounting for the lessor is comparable to that of the previous standard IAS 17; i.e., lessors continue to classify leases as finance or operating leases. The transition method and the effects from the initial application of IFRS 16 on the consolidated financial statements for the period 2019 are described below.

Initial Application of IFRS 16, Leases in 2019

The Group has initially applied IFRS 16 in the 2019 reporting period. Accordingly, the date of initial application is January 1, 2019. In accordance with IFRS 16, the Group applies this standard using the modified retrospective transition approach. Therefore, the cumulative effect of initially applying the standard is recognized on January 1, 2019. There was no material transition effect to be recognized in retained earnings. In line with the transition regulations, the Group does not adjust the prior-year figures. The significant accounting policies and disclosures for the comparative period are disclosed separately at the end of this notes section.

The Group is mainly affected by the new standard in its role as a lessee as its lessor activities are not material. For leases that were previously classified as operating leases under IAS 17, the Group recognized a lease liability on January 1, 2019. The liabilities were measured at the present value of the remaining lease payments discounted using the respective incremental borrowing rate of the Group as of the date of initial application. The weighted average incremental borrowing rate was 2.1%. On the same date, for each of these leases, a right-of-use asset was recognized at an amount equal to the corresponding lease liability, adjusted for any prepaid or deferred lease payments. At the date of initial application, initial direct costs were not taken into consideration when the right-of-use assets were measured. Furthermore, the Group did not perform an impairment review but relied on its assessment of whether a lease was onerous in accordance with IAS 37 immediately before the date of initial application of IFRS 16. On this basis, no adjustments were necessary on the date of initial application.

No lease liabilities and no right-of-use assets were recognized in the course of the initial application of IFRS 16 for short-term leases and leases of low value assets that were previously classified as operating leases. Instead, in accordance with this standard, the lease payments for these leases are recognized as an expense on a straight-line basis over the lease term. Regardless of their original lease term, leases for which the remaining lease term did not exceed 12 months from the date of initial application onwards were generally not considered lease liabilities and right-of-use assets. Accounting for such leases follows the general accounting rule for short-term leases. The remaining lease terms of the leases were determined based on the knowledge of the Group as of January 1, 2019.

For leases that were previously classified as finance leases and, thus, already reflected on the Group's statement of financial position, the carrying amounts of the corresponding assets and liabilities as of December 31, 2018 were considered as carrying amounts of the right-of-use assets and lease liabilities at the date of initial application of IFRS 16 without any adjustments.

In the course of the transition to IFRS 16, right-of-use assets of €47 million (including €15 million related to leases previously classified as finance leases), as well as lease liabilities of €49 million (including €17 million related to leases previously classified as finance leases) were recognized as of January 1, 2019. As expected, the new standard led to an increase in total assets of about €32 million on the date of initial application. This corresponds to a reduction in the equity ratio of a little more than one percentage point.

Based on the financial commitments from operating leases according to IAS 17 as of December 31, 2018, reconciliation with the opening balance of the lease liabilities as of January 1, 2019, is presented in the table below.

€ in millions	
Financial obligations from operating lease commitments according to IAS 17 as of December 31, 2018	**42**
- of which short-term leases	–2
- of which leases of low value assets	–1
Other	–5
Relevant financial obligations from operating leases (undiscounted)	**34**
Discounting	–2
Relevant financial obligations from operating leases (discounted)	**32**
Carrying amount of lease liabilities from finance leases in accordance with IAS 17 as of December 31, 2018	17
Carrying amount of lease liabilities in accordance with IFRS 16 as of January 1, 2019	**49**

As of December 31, 2019, lease liabilities stood at €52 million. This includes lease liabilities from finance leases existing as of December 31, 2018, amounting to €16 million. The maturities of the future lease payments are presented in section 39. The composition of the right-of-use assets included in "Property, plant and equipment" as of the date of initial application as well as of December 31, 2019, and the main changes during the period are presented in the table below. Assets of around €14 million related to finance leases that already existed as of December 31, 2018, are included in these right-of-use assets reported as of December 31, 2019.

	Land, buildings and improvements € in K	Technical machinery and equipment € in K	Factory and office equipment and other equipment € in K	**Total € in K**
Gross book values at Jan. 1, 2019	**47,060**	**2,078**	**3,003**	**52,142**
Currency translation	660	25	41	725
Business combinations	389	201	74	665
Additions	8,567	720	2,732	12,018
Disposals	–670	0	–177	–846
Transfers	0	0	0	0
Gross book values at Dec. 31, 2019	**56,006**	**3,025**	**5,673**	**64,704**
Depreciation at Jan. 1, 2019	**–4,939**	**0**	**–94**	**–5,033**
Currency translation	–127	–7	–10	–144
Depreciation	–8,107	–865	–1,691	–10,663
Disposals	670	0	80	750
Transfers	0	0	0	0
Depreciation at Dec. 31, 2019	**–12,504**	**–873**	**–1,714**	**–15,090**
Net book values at Dec. 31, 2019	**43,503**	**2,152**	**3,959**	**49,614**

The interest expenses presented in the financial result, the total cash outflows for the existing leases and the expenses that were recognized for short-term leases and leases of low value assets during the reporting period are presented in the table below. No material expenses were recognized for variable lease payments in the reporting period.

	2019 12 months € in K
Interest expenses for leases	2,065
Expenses for leases of low value assets	699
Expenses for short-term leases	2,614
Total cash-outflow for leases	15,640

Lease accounting in 2018 according to IAS 17

Following the transition approach described above, IAS 17 is the standard applied for lease accounting in 2018. According to IAS 17, a lessee as well as a lessor classify a lease as either an operating or a finance lease. A finance lease is a lease that transfers substantially all the risks and rewards incidental to ownership of an asset. All other leases are designated as operating leases.

When the Group is a lessee in a finance lease, the amount equal to the fair value of the leased property, or if lower, the present value of the minimum lease payments is recognized as an asset on the balance sheet and simultaneously recognized as a financial liability. The minimum lease payments essentially consist of the finance charge and the reduction of the outstanding liability, which are measured according to the effective interest method. A leased asset is depreciated on a straight-line basis over the period of its expected useful life or over the shorter lease term.

For an operating lease, the lease instalments to be paid by the lessee are recognized as expenses over the lease term and the lease payments received by the lessor are recognized as income, respectively. The leased asset continues to be recognized on the lessor's balance sheet as property, plant and equipment.

Capitalized property, plant and equipment for assets held under finance leases amounted to €14,599 K in 2018. The cost of acquisition of these assets totaled €19,631 K. In 2018 rental payments amounting to €14.0 million were made for assets leased under operating leases.

The Group's financial obligations from operating lease commitments (future minimum lease payments under non-cancellable leases), were as follows:

	Dec. 31, 2018 € in K
Operate leases	
- due within one year	11,434
- due within 2 to 5 years	22,145
- due thereafter	8,813

19. Investments in Associates

In December 2019, the Group obtained control over Biological Industries. For details regarding this business combination see note 8. Biological Industries owns a shareholding of 51% in Sartorius Israel Ltd. that is located in Kibbutz Beit Haemek, Israel. Due to contractual agreements, Sartorius Israel is ultimately controlled by Sartorius AG via subsidiaries that are not part of Sartorius Stedim Biotech Group. The Group therefore concluded that it has significant influence according to IAS 28 over Sartorius Israel Ltd., despite owning more than half of the shares.

The Group measures its investment in Sartorius Israel Ltd. applying the equity accounting method. The Group did not obtain dividends from Sartorius Israel Ltd. in 2019. As the acquisition of Biological Industries was closed on December 15, 2019, the purchase price allocation has not been finalized when the consolidated financial statements were authorized for issue. On a preliminary basis, the fair value of the investment in Sartorius Israel Ltd. amounts to €6.9 million at the date of acquisition. No equity accounting adjustments were made for the short time period between the date of acquisition and the balance sheet date. The investment is reported under Financial Assets (non-current) in the statement of financial position.

20. Deferred Tax

	Deferred Tax Assets		Deferred Tax Liabilities	
	Dec. 31, 2019 € in K	Dec. 31, 2018 € in K	**Dec. 31, 2019 € in K**	Dec. 31, 2018 € in K
Intangible assets	0	1,066	39,887	37,746
Tangible assets	0	0	5,299	5,865
Inventory	11,667	10,236	0	0
Receivables and other current assets	2,118	230	0	640
Provisions	7,966	6,384	0	0
Liabilities	6,272	5,391	1,446	1,866
Gross amount	**28,022**	**23,307**	**46,633**	**46,117**
Carry forward of taxable losses	0	0	0	0
Tax on undistributed earnings of subsidiaries	0	0	1,400	1,850
Offset	–10,680	–8,817	–10,680	–8,817
Net amount	**17,342**	**14,490**	**37,353**	**39,150**
Change	**2,852**	**3,501**	**1,797**	**3,837**
thereof recognized in profit or loss	**1,822**	**3,450**	**172**	**291**

Deferred tax assets or liabilities are determined based on temporary differences between the carrying amounts and the tax basis of assets and liabilities (except in special cases provided by IAS 12) including loss carry forwards and tax credits. Measurement is based on the tax rates expected to be effective in the period in which an asset is realized or a liability is settled.

For this purpose, the tax rates and tax rules are used which have been enacted or substantively enacted at the reporting date. Deferred tax assets are recognized for deductible temporary differences and tax losses and unused tax credits only to the extent that it is probable that the Group will have future taxable income against which they can be charged.

Deferred Tax Assets

On the balance sheet date, the Group had unused tax loss amounts carried forward of €11.4 million to be deducted from future taxable profits (€11.6 million in 2018). Like in 2018 no deferred tax asset was reported on these losses because of the lack of visibility of future taxable profits.

Deferred tax assets in the amount of €0.0 million (€0.1 million) relate to companies that reported losses in this year under review or in the earlier reporting year.

Deferred Tax Liabilities

The deferred tax liabilities in connection with intangible assets refer to assets acquired in business combinations and consequently are mainly linked to customer relationships and technologies.

The Group did not record deferred tax liabilities on approx. €815 million (€658 million) in cumulative undistributed earnings of subsidiaries because these earnings are intended to be reinvested in these operations. When the dividends are paid out, an amount of 5% of the dividends will be taxed under the French and German taxation rules and, if applicable, with withholding tax. Furthermore, additional income tax consequences could arise in the case of an intermediate holding company.

In fiscal 2019, as in the previous years, the tax effect from hedging instruments, and the deferred tax assets from the recognition of the remeasurements of defined benefit liabilities (assets) were recognized in other comprehensive income. The income taxes recognized in other comprehensive income are disclosed as follows in the table:

€ in K	**2019**	2018
Cash flow hedges	948	3,463
Remeasurements of the net defined benefit obligations	2,284	–160
Total	**3,232**	**3,303**

The change in deferred tax assets and liabilities can be reconciled as follows:

€ in K	Deferred Tax Assets	Deferred Tax Liabilities
Balance at Jan. 1, 2018	10,989	42,987
Currency translation	137	–159
Change in the scope of consolidation	0	0
Recognized in profit or loss	3,450	–291
Recognized in other comprehensive income	–85	–3,388
Balance at Dec. 31, 2018	**14,490**	**39,150**

€ in K	**Deferred Tax Assets**	**Deferred Tax Liabilities**
Balance at January 1, 2019	**14,490**	**39,150**
Currency translation	–107	71
Change in the scope of consolidation	1	400
Recognized in profit or loss	1,822	–172
Recognized in other comprehensive income	1,136	–2,096
Balance at December 31, 2019	**17,342**	**37,353**

21. Inventories

	Dec. 31, 2019 € in K	Dec. 31, 2018 € in K
Raw materials and supplies	81,254	68,318
Work in progress	103,925	71,985
Finished goods and merchandise	140,342	108,520
Payments on account	2,643	3,179
Total	**328,164**	**252,002**

	Dec. 31, 2019 € in K	Dec. 31, 2018 € in K
Gross amount inventories	344,930	269,013
Write-downs	–16,766	–17,011
Net Amount Inventories	**328,164**	**252,002**

Raw materials and supplies, including merchandise, are reported under "Inventories" at average cost. In principle, finished goods and work in progress are reported at cost of conversion. This cost includes direct costs, which can be allocated to these materials, and the appropriate portion of production and materials handling overhead, general administrative expenses and fixed assets at normal depreciation and | or amortization rates, based on the normal production capacity, provided that these expenses are caused by production.

Inventories must be valued at the lower amount of cost and the net realizable value. The net realizable value represents the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary for marketing, sales and distribution. Where inventory risks exist, such as the risk of reduced shelf life as a result of storage periods or limited usability, inventories are marked down accordingly.

22. Issued Capital

Sartorius Stedim Biotech S.A. share capital consists of 92,180,190 shares with a par value of 0.20 €.

As of December 31, 2018, and December 31, 2019, there were no dilutive instruments. Shares registered in the name of the same owner for at least four years benefit from a double voting right.

	Dec. 31, 2019	Dec. 31, 2018
Number of shares at the beginning of the period	92,180,190	92,180,190
Number of shares at the end of the period	**92,180,190**	**92,180,190**
Nominal value per share (in €)	0.20	0.20
Issued capital amount (€ in K)	**18,436**	**18,436**

Dividends

The Board of Directors will submit a proposal to the Annual General Shareholders' Meeting for payment of a dividend for the year ended December 31, 2019, as follows: payment of a net dividend of €0.68 per share (2018: €0.57), i.e., a total disbursement of 62,680,336.00€ (excluding treasury shares; 2018: 52,540,761.00€).

23. Non-Controlling Interest

The non-controlling interests recognized in the statement of financial position amounting to €18,840 K relate to the subsidiaries Sartorius Korea Biotech and Biological Industries. The Group's interest in Sartorius Korea Biotech is 69%, the remaining 31% are subject to an exercisable call option. The purchase price for this non-controlling interest is variable and depends on the future performance of the entity. The Group's interest of slightly more than 50% Biological Industries was acquired in December 2019 (see note 8 for details regarding this entity).

Key Figures

	Dec. 31, 2019 € in K	Dec. 31, 2018 € in K
Sartorius Korea Biotech Co. Ltd.		
Sales revenue	72,737	63,111
Net result	5,271	6,150
Total assets	44,049	36,225
Attributed profit or loss	1,634	1,907

There are no significant restrictions on the Group's ability to access or use the assets or settle the liabilities of the mentioned entity.

24. Pension and Employee Benefits Provisions

Pension Obligations

Pension provisions and similar obligations are recognized in the consolidated financial statements of Sartorius Stedim Biotech Group in accordance with actuarial principles. IAS 19, Employee Benefits, stipulates the Projected Unit Credit Method as the method of measurement. In addition to known pensions and life expectancies, this expected cash value method takes into account future salary and pension increases.

All remeasurements of the net defined benefit liability are recognized in other comprehensive income (pension reserves) in accordance with the standard IAS 19.

Defined Contribution Plans

Most of the Sartorius Stedim Biotech Group companies make payments under defined contributions plans, primarily related to government-run pension plans. In 2019, the total expense recognized for the defined contribution plans amounted to €22,830 K (2018: €20,807 K).

Defined Benefit Plans

The remeasurements of defined benefit liabilities (asset) are shown in other comprehensive income according to the standard IAS 19. The actuarial losses, which were transferred to the pension reserves, essentially resulted from a change in the discount rate and totaled €–7,906 K (€469 K in 2018).

An amount of €28,545 K relates in particular to pension provisions for retirement pension plans in Germany. These provisions totaled €24,441 K in 2018 and primarily relate to direct commitments under defined benefit pension plans. Under these commitments, the employees earn benefits for each year of service rendered to the company. The benefits earned depend on the salary level and the age of the respective employees. The pension benefits are generally not funded with assets.

The assumed discount rates reflect the interest rates payable on the reporting date for high-quality corporate bonds with matching maturities and denominated in the relevant currencies (mainly Euro). If such corporate bonds are not available with matching long-term maturities or are insufficiently available, their matching interest rates are determined by extrapolation.

Measurement of the post-employment benefit obligations is based on the following actuarial assumptions:

For Germany:

in %	**Dec. 31, 2019**	Dec. 31, 2018
Discount rate	0.89	1.81
Future salary increases	3.00	3.00
Future pension increases	2.00	2.00

With regard to the assumptions for mortality and disability the tables "Richttafeln (RT) 2018 G" by Klaus Heubeck were applied.

For France:

in %	**Dec. 31, 2019**	Dec. 31, 2018
Discount rate	0.70	1.80
Future salary increases	**2.00**	2.00
Future pension increases	2.00	2.00

The amounts reported in the statement of profit or loss and other comprehensive income consist of the following:

	2019 € in K	2018 € in K
Current service cost	–2,240	–1,978
Past service cost	394	485
Net interest expenses	–591	–531
Components of defined benefit costs recognized in profit or loss	**–2,437**	**–2,023**
Return on plan assets (excl. interest)	12	56
Remeasurements	–7,918	413
Components of defined benefit costs recognized in other comprehensive income	**–7,906**	**469**
Total	**–10,344**	**–1,554**

In the statement of profit or loss, the current service cost is disclosed according to the assignment of employees to the respective functions.

The amount included in the consolidated statement of financial position arising from the Group's obligation in respect of defined benefit plans is as follows:

	Dec. 31, 2019 € in K	Dec. 31, 2018 € in K
Present value of the obligations	57,861	46,459
Fair value of the plan assets	–13,739	–10,865
Net Liability	**44,123**	**35,595**

The present value of the defined benefit obligation developed as follows:

	2019 € in K	2018 € in K
Present value of the obligations as of Jan. 1	**46,459**	**43,752**
Current service cost	2,240	1,978
Past service cost	–394	–485
Interest cost	747	649
Remeasurements	7,916	–548
Foreign currency translation differences	428	386
Retirement benefits paid in the reporting year	–1,220	–1,011
Employee contributions	357	261
Contributions by plan participants	1,286	1,466
Other changes	42	14
Present value of the obligations as of Dec. 31	**57,861**	**46,459**

The remeasurements of defined benefit liability (asset) can be allocated as follows:

	2019 € in K	2018 € in K
Experience adjustments	626	367
Changes in demographic assumptions	–408	306
Changes in financial assumptions	7,698	–1,221
Total	**7,916**	**–548**

Plan Assets

	2019 € in K	2018 € in K
Plan assets as of Jan. 1	**10,865**	**8,306**
Interest income	156	118
Return on plan assets (excl. interest)	12	56
Remeasurements	−2	−136
Group contribution & payments	−946	−887
Foreign currency translation differences	283	279
Employee contributions	357	261
Employer contributions	1,729	1,402
Contributions by plan participants	1,286	1,466
Other changes	0	0
Plan assets as of Dec. 31	**13,739**	**10,865**

Composition of Plan Assets

The plan assets do primarily refer to insurance contracts in Germany and Switzerland, there are no major equity or debt investments included. The subsidiary in South Korea has deposited an amount of €3.6 million (€2.4 million in 2018) to local banks as cash and cash equivalents.

Sensitivity Analysis

An increase | decrease of the actuarial assumptions would have the following impacts on the defined benefit obligations (a positive sign (+) means an increase of the obligation):

2018:

€ in K		
Demographic assumptions		
Life expectancy	+1 year	−1 year
Effect	1,053	−1,052
Financial assumptions		
Discount rate	+100 bps	−100 bps
Effect	−6,389	8,171
Future salary increases	+50 bps	−50 bps
Effect	938	−861
Future pension increases	+25 bps	−25 bps
Effect	1,020	−972

2019:

€ in K		
Demographic assumptions		
Life expectancy	+1 year	−1 year
Effect	2,393	−2,333
Financial assumptions		
Discount rate	+100 bps	−100 bps
Effect	−7,508	8,671
Future salary increases	+50 bps	−50 bps
Effect	2,327	−2,157
Future pension increases	+25 bps	−25 bps
Effect	2,242	−2,139

The sensitivity analysis presented above might not be representative of the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another. Furthermore, the present value of the defined benefit obligation has been calculated using the same method that was applied in calculating the defined benefit obligation liability recognized in the statement of financial position (projected unit credit method).

Maturity Analysis

The undiscounted cash flows from defined benefits obligations can be allocated to maturities as follows:

	Dec. 31, 2019 € in K	Dec. 31, 2018 € in K
<1 year	1,968	1,664
1 - 5 years	9,000	8,336
6 - 10 years	14,404	12,430
>10 years	86,825	73,605
Total	**112,196**	**96,035**

The weighted average duration of the defined benefit obligations is 16.9 years (2018: 16.6 years).

25. Other Provisions

A provision is recognized when a present legal or constructive obligation to third parties arising from past events has been incurred, an outflow of resources is probable and the amount of the obligation can be reasonably estimated. The amount recognized as a provision represents the best estimate of the obligation at the closing date.

Restructuring provisions are set up in connection with programs that materially change the scope of business performed by a segment or business unit or the manner in which business is conducted. In most cases, restructuring expenses include termination benefits and compensation payments due to the termination of agreements with suppliers and dealers. Restructuring provisions are recognized when the Group has a detailed formal plan that has either commenced implementation or been announced.

Other Non-current Provisions

	Payments to employees on early retirement plan € in K	Other € in K	Total € in K
Balance at Jan. 1, 2018	2,173	930	3,103
Currency translation	0	9	9
Consumption	–1,124	–41	–1,165
Additions	824	105	929
Balance at Dec. 31, 2018	**1,873**	**1,004**	**2,877**

	Payments to employees on early retirement plan € in K	Other € in K	**Total € in K**
Balance at Jan. 1, 2019	1,873	1,004	2,877
Currency translation	0	6	6
Consumption	–953	–48	–1,001
Additions	945	589	1,534
Balance at Dec. 31, 2019	**1,865**	**1,475**	**3,340**

The non-current provisions comprise mainly provisions for partial retirement and employee anniversary bonuses (included in the item "other"). These obligations arise mainly in German Group companies. The partial retirement plans allow employees to work part-time for 3 - 5 years before their actual retirement.

According to IAS 19 these obligations are treated as severance payments to be earned in future periods and are therefore recognized in profit or loss over the respective period of service. Actuarial gains and losses, as well as past service costs, on these obligations are recognized as income or expense.

Non-current provisions are reported at their present value on the reporting date. The discount rate for employees on the early retirement plan is 0.0% (2018: 0.1%).

Current Provisions

During financial 2018 and 2019, the current provisions developed as follows:

	Warranties € in K	Other € in K	Total € in K
Balance at Jan. 1, 2018	4,824	4,735	9,558
Currency translation	4	–14	–9
Consumption	–934	–1,045	–1,980
Release	–2,550	–649	–3,199
Additions	5,021	2,892	7,913
Balance at Dec. 31, 2018	**6,364**	**5,919**	**12,283**

	Warranties € in K	Other € in K	**Total € in K**
Balance at Jan. 1, 2019	6,364	5,919	12,283
Currency translation	50	13	63
Consumption	–108	–1,136	–1,244
Release	–3,101	–2,873	–5,974
Additions	2,072	3,412	5,484
Balance at Dec. 31, 2019	**5,277**	**5,335**	**10,612**

Warranty provisions contain expenses for replacement deliveries and repairs. Specific risks are recognized when the occurrence is more likely than not. General warranty risks are considered on the basis of experiences in the past. The other provisions contain mainly onerous contracts and uncertain liabilities to employees.

26. Other Financial Obligations | Contingent Assets and Liabilities

As was the case in the previous years there are no significant contingent liabilities or contingent assets to be reported.

Financial Instruments | Financial Risks

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. The following sections give an overview of the impact of financial instruments on the financial statements of the Sartorius Stedim Biotech Group and provide additional information on the balance sheet items, which contain financial instruments.

Financial assets of the Group mainly include cash and cash equivalents, trade and loan receivables and derivative financial instruments with a positive fair value.

Financial liabilities of the Group mainly comprise loans borrowed from Sartorius AG, trade payables, lease liabilities and derivative financial instruments with a negative fair value. The financial liabilities other than derivative financial instruments are measured at amortized cost.

27. Financial Instruments: Significant Accounting Policies

IFRS 9 includes guidelines for classification and measurement of financial instruments, including a model of expected credit losses for the calculation of impairments of financial assets, as well as guidelines for hedge accounting. This standard also contains guidance for recognition and derecognition of financial instruments.

Under IFRS 9, the classification and measurement approach for financial assets reflects both the entity's business model (held-to-collect, held-to-collect-and-sell, other) within the scope of which assets are held and the contractual cash flow characteristics (so-called "SPPI" criterion, solely payments of principal and interest). There were no reclassifications of financial instruments during the reporting period.

With regard to the impairment of financial assets, IFRS 9 includes a so-called expected-loss model. Financial assets are generally regarded as credit-impaired when there are objective indications that cast doubt about the full collection of the cash flows of the respective financial assets. With regard to the financial assets of the Group, the simplified approach which is applied to trade receivables is especially of relevance.

Besides trade receivables, cash and cash equivalents are the most material financial assets on the Group's statement of financial position as of the reporting date, December 31, 2019. No impairment is recognized for these financial assets due to materiality considerations.

As on the last balance sheet date, for the remaining financial assets that are measured at amortized cost, no impairment is recognized as of December 31, 2019, for the 12-month expected credit losses, given the Group's immaterial historical losses.

Derivatives are measured at fair value determined according to the mark-to-market method in which recognized mathematical methods are used. The fair values are based on the market data available at the time the value of these derivatives is calculated and reflect the estimates of the market conditions at the end of the year. Those instruments that are not designated as hedging instruments and for which no hedge accounting is applied, are categorized as held for trading. Changes of the fair values of derivative financial instruments are either recognized in profit or loss or, in case of hedging relationships, in other comprehensive income.

The Group applies the hedge accounting rules of IFRS 9. The Group uses forward transactions to hedge cash flow risks that result from changes in foreign exchange rates in relation to sales of products and the procurement of materials, and designates only the spot element of the hedging instrument.

28. Cash and Cash Equivalents

The Group considers all highly liquid investments with less than three months maturity from the date of acquisition to be cash equivalents. This mainly includes checks, cash on hand and deposits in banks. Cash and cash equivalents are measured at cost. For purposes of the consolidated cash flow statement, cash and cash equivalents include cash and cash equivalents as defined above. As of December 31, 2019, cash and cash equivalents amounted to €27,643 K (2018: €23,975 K).

29. Current Trade Receivables | Other Receivables

	Dec. 31, 2019 € in K	Dec. 31, 2018 € in K
Trade receivables from third parties	195,408	204,931
Amounts due from customers for contract work*	8,530	3,902
Receivables from subsidiaries of the Sartorius AG Group	16,893	11,399
Trade receivables	**220,831**	**220,231**

*Contract assets according to IFRS 15.

The book values of trade receivables and other receivables are representative of their fair value considering the maturity date and the credit risks. The contract assets are recognized in connection with customer-specific construction contracts that meet the requirements for revenue recognition over time according to IFRS 15 (see section 9). The amount of trade receivables presented as of December 31, 2019 is reduced by €27.5 million as result of a sale of trade receivables because substantially all risks and rewards in relation to the financial assets sold were transferred to the buyer. The "Receivables from subsidiaries of the Sartorius AG Group" item refers to other companies of the Sartorius Group (please refer to section 43).

Impairment losses on trade and other receivables are recognized using separate allowance accounts. For details on the determination of the impairment allowances see section 40.

30. Other Financial Assets

	Dec. 31, 2019 € in K	Dec. 31, 2018 € in K
Derivative financial instruments	1,277	2,824
Other financial assets	18,297	19,212
Current financial assets	**19,574**	**22,036**

The amount shown as derivative financial instruments represents the fair value of foreign currency hedging instruments, mainly forward contracts (for details refer to section 37).

Other financial assets are measured at amortized cost using the effective interest method less any impairment losses. The item "Other financial assets" includes loan receivables to other entities of the Sartorius AG Group in the amount of €10,391 K (2018: €2,588 K).

31. Loans and Borrowings

	Balance at Dec. 31, 2019 € in K	**of which current Dec. 31, 2019 € in K**	Balance at Dec. 31, 2018 € in K	of which current Dec. 31, 2018 € in K
Liabilities to banks	31,857	31,857	38,278	35,153
Loans from Sartorius AG	49,602	9,602	94,501	54,501
Other loans from Sartorius Group companies	2,086	2,086	163	163
Total loans and borrowings	**83,544**	**43,544**	**132,942**	**89,817**

Sartorius Stedim Biotech Group has signed a loan agreement with its parent company Sartorius AG which secures the financing of the Sartorius Stedim Biotech Group over the long term.

The credit volume of this agreement is approx. 310 million euros and the interest rate is variable with a credit margin based on arms'-length principles.

The non-current loans and borrowings do not include liabilities in connection with acquisitions which are presented in the caption "other non-current liabilities"

32. Other Non-current Liabilities

	Dec. 31, 2019 € in K	Dec. 31, 2018 € in K
Other liabilities	49,934	8,889
Total	**49,934**	**8,889**

The other non-current liabilities mainly include the liabilities in connection with the possible acquisition of the non-controlling interests in Biological Industries due to the put options of the current holder amounting to €41.3 mn (see note 8 for details) as well as the non-current portion of the liability for phantom units that was incurred in connection with the acquisition of the non-controlling interests in the company AllPure Technologies, LLC (€5.8 mn).

The non-current portion of the liability in relation to AllPure depends on the future sales and is due 2022 at the latest. Considering the ongoing positive development, the expected payments are determined by considering future revenue at an annual growth rate of about 20% on average applied to a higher base achieved in the reporting period. Due to the sales achieved in the reporting period and the reassessment of the expectations, the total liability has been increased by about €2.5 million. The effect is recognized in profit or loss. The portion of the liability that is due in 2020 is reported under "Other current financial liabilities" as of December 31, 2019 (see note 34). An increase (decrease) of the sales revenue by 10% in each of the following years would lead to an increase (decrease) of the liability by €0.6 million (€0.6 million).

33. Trade Payables

	Dec. 31, 2019 € in K	Dec. 31, 2018 € in K
Payments received on account of orders*	80,574	51,000
Trade payables to third parties	106,156	86,187
Payables to participations	193	6
Payables to subsidiaries of the Sartorius AG Group	9,651	17,375
Total	**196,573**	**154,568**

*Contract liabilities according to IFRS 15.

34. Other Current Financial Liabilities

	Dec. 31, 2019 € in K	Dec. 31, 2018 € in K
Derivative financial instruments	667	1,346
Other liabilities	40,013	12,966
Total	**40,680**	**14,312**

The derivative financial instruments refer to the fair values of foreign currency hedging transactions such as forward contracts (mainly related to the US$).

"Other liabilities" as of December 31, 2019 include the current portion of the liabilities in connection with the possible acquisition of the non-controlling interests in Biological Industries (€19.7 mn) as well as the AllPure phantom units (€5.7 mn, see note 32).

35. Carrying Amounts and Fair Values of Financial Instruments according to Categories

The following table shows the carrying amounts and fair values of financial assets and liabilities by category of financial instrument according to IFRS 9 as of December 31, 2019, and as of December 31, 2018:

	Category acc. to IFRS 9	Carrying amount Dec. 31, 2019 € in K	Fair value Dec. 31, 2019 € in K	Carrying amount Dec. 31, 2018 € in K	Fair value Dec. 31, 2018 € in K
Investments in non-consolidated subsidiaries and associates	n/a	7,734	7,734	109	109
Financial assets	Equity instruments at fair value through profit or loss	50	50	50	50
Financial assets	Debt instruments at fair value through profit or loss	864	864	671	671
Financial assets	Measured at amortized cost	6,431	6,431	4,814	4,814
Financial assets (non-current)		**15,079**	**15,079**	**5,644**	**5,644**
Amounts due from customers for contract work	n/a	8,530	8,530	3,902	3,902
Trade receivables	Measured at fair value through other comprehensive income	24,586	24,586	0	0
Trade receivables	Measured at amortized cost	187,715	187,715	216,330	216,330
Trade receivables		**220,831**	**220,831**	**220,231**	**220,231**
Receivables and other assets	Measured at amortized cost	18,297	18,297	19,212	19,212
Derivative financial instruments designated as hedging instruments*	n/a	1,110	1,110	2,824	2,824
Derivative financial instruments	Held for trading	167	167	0	0
Other financial assets (current)		**19,574**	**19,574**	**22,036**	**22,036**
Cash and cash equivalents	**Measured at amortized cost**	**27,643**	**27,643**	**23,975**	**23,975**
Loans and borrowings	**Financial liabilities at cost**	**83,544**	**83,609**	**132,942**	**133,175**
Trade payables	Financial liabilities at cost	116,000	116,000	103,568	103,568
Trade payables | payments received for orders	n/a	80,574	80,574	51,000	51,000
Trade payables		**196,573**	**196,573**	**154,568**	**154,568**
Derivative financial instruments designated as hedging instruments*	n/a	667	667	1,346	1,346
Other financial liabilities	Financial liabilities at cost	89,947	89,793	21,855	21,326
Other financial liabilities		**90,614**	**90,460**	**23,201**	**22,672**

*The amounts include the non-designated part of the contracts.

The fair values of the financial instruments were determined on the basis of the market information available on the reporting date and are to be allocated to one of the three levels of the fair value hierarchy in accordance with IFRS 13.

Level 1 financial instruments are measured on the basis of prices quoted on active markets for identical assets and liabilities. In Level 2, financial instruments are measured on the basis of input factors which are derivable from observable market data or on the basis of market prices for similar instruments. Level 3 financial instruments are measured on the basis of input factors that cannot be derived from observable market data.

The financial instruments to be recognized at fair value on the reporting date are mainly derivatives in the form of forward contracts. They were measured on the basis of their quoted exchange rates and market yield curves (Level 2).

The fair values to be disclosed for financial liabilities recognized at amortized cost, especially liabilities to banks, were measured on the basis of the market interest rate, taking the current indicative credit spreads into account (Level 2).

The fair values of the remaining financial assets and liabilities to be disclosed approximate the carrying amounts on account of their predominantly short-term maturity. The maximum credit loss risk is reflected by the carrying amounts of the financial assets recognized in the Statement of Financial Position.

The Group recognizes transfers between the levels of the fair value hierarchies at the end of the reporting period during which a change has occurred. In the current reporting period, there were no transfers between the levels.

36. Net Gains and Losses from Financial Instruments

The net gains and losses of the various categories of financial instruments are presented in the following table:

Categories according to IFRS 9	**2019 12 months € in K**	2018 12 months € in K
Financial assets measured at amortized cost	–1,693	2,771
Financial assets and liabilities measured at fair value through profit or loss	–590	552
Financial liabilities measured at amortized cost	–3,660	–12,733

The net result from financial assets measured at amortized cost mainly includes the effects of currency translation and changes in allowances.

The net result from financial assets and liabilities measured at fair value through profit or loss predominantly comprises changes in the fair value of derivative financial instruments as well as interest income and interest expenses for these financial instruments.

The net result from liabilities measured at amortized cost mainly comprises the effects of foreign currency translation and the increase of the liability in connection with the AllPure phantom units (see note 32).

Total interest income and expenses for financial assets and liabilities that are not measured at fair value through profit or loss were as follows:

	2019 12 months € in K	2018 12 months € in K
Interest income	506	463
Interest expenses	–4,882	–4,563

Capital and Financial Risk Management

Capital Risk Management

In the Sartorius Stedim Biotech Group, capital is managed in order to maximize earnings of those participating in the company by optimizing the ratio of equity to liabilities. Furthermore, we ensure that all Group companies operate under the premise of the going-concern principle.

The financial liabilities detailed above are regarded as managed capital and, furthermore, so are the cash and cash equivalents as well as equity capital.

Goals of Financial Risk Management

The Treasury Department of the Sartorius Stedim Biotech Group is centrally focused in Sartorius Corporate Administration GmbH, a subsidiary of Sartorius AG. This centralized Treasury Department performs services for all companies of the Sartorius Group, including the Sartorius Stedim Biotech Group, and coordinates access to national and international financial markets. In addition, the Treasury Department monitors and controls financial risks by internal risk reporting, which analyzes risks according to their degree and scope. Essentially, these risks entail currency, interest rate and liquidity risks as well as credit risks.

The Sartorius Stedim Biotech Group strives to minimize the impact of currency and interest rate risks using appropriate derivative financial instruments. Hedging transactions and their controlling are carried out by different staff members. Moreover, the Group's Internal Auditing Department regularly monitors the use of such financial instruments. Trading with derivative financial instruments is done for hedging purposes only.

37. Management of Exchange Rate Risks and Hedge Accounting

The Group is exposed to currency risks as more than one third of sales revenue is generated in U.S. dollars or currencies linked to the U.S. dollar and, to a lesser extent, in other foreign currencies. At the same time, the Group is able to compensate the major part of the revenues denominated in foreign currencies with costs incurred in the same currencies due its global production network. The share of revenues generated in foreign currencies that exceeds such costs, the so-called net currency exposure, is hedged with derivative financial instruments to a large extent (generally 70% to 80%). The Group generally follows a rolling hedging strategy of up to 12 months in advance. Also, the hedging measures are reviewed at regular intervals in order to adapt them to currency fluctuations.

For currency hedging, forward contracts are used. Forward contracts secure the right, and simultaneously create the obligation, to sell an established foreign currency amount on the exercise date at a specific exchange rate against the euro, independently of the exchange rate actually valid on this date. The profit or loss resulting from the difference between the current and the previously established exchange rate is recognized as income or expense in the statement of profit or loss.

At the balance sheet date, forward contracts have been carried out in an amount of $120 million (2018: $137 million) to hedge against the risk of fluctuation in the EUR | USD exchange rate. This amount covers roughly half of the expected net exposure for the U.S. dollar within the period of 12 months. Furthermore, other foreign currencies have been hedged in smaller volumes.

Moreover, the currency risk associated with the financing of the announced acquisition of selected Danaher Life Science businesses was hedged by the purchase of currency options with a nominal amount of $180 million. The fair value of the derivatives as of December 31, 2019 amounts to €166

The following table shows the forward transactions as of the balance sheet date:

Dec. 31, 2018	Currency	Volume	Maturity	**Fair value € in K**
Forward contract	USD	137,000	2019	1,599
	USD	**137,000**		**1,599**
Forward contract	JPY	1,050,000	2019	–308
	JPY	**1,050,000**		**–308**
Forward contract	CHF	3,000	2019	4
	CHF	**3,000**		**4**
Forward contract	GBP	3,500	2019	18
	GBP	**3,500**		**18**
Forward contract	CAD	8,000	2019	165
	CAD	**8,000**		**165**

Dec. 31, 2019	Currency	Volume	Maturity	**Fair value € in K**
Forward contract	USD	120,000	2020	335
	USD	**120,000**		**335**
Forward contract	JPY	1,400,000	2020	151
	JPY	**1,400,000**		**151**
Forward contract	AUD	4,000	2020	–44
	AUD	**4,000**		**–44**
Forward contract	GBP	1,500	2020	8
	GBP	**1,500**		**8**
Forward contract	SEK	9,000	2020	–5
	SEK	**9,000**		**–5**

Derivative financial instruments are measured at the time of acquisition at cost and at fair value on subsequent balance sheet dates. The changes in value of the derivative financial instruments are generally recognized in the statement of profit or loss on the reporting date. If the derivative financial instruments serve to hedge against cash flow risk arising from exchange rate risks and a qualified hedging relationship exists based on the criteria of IFRS 9, the valuation adjustments of the effective portion of the instrument are recognized in other comprehensive income (cumulative amount in 2019: €1.6 million; 2018: €4.8 million).

Only the spot element of the forward contracts used to hedge the cash flow risks is designated as hedging instrument. The amounts recognized in equity are included in the profit or loss in the period in which the hedged transactions affect profit or loss. The changes of the hedging reserves are explained below as well as in the statement of changes in equity. The non-designated or ineffective portion of the hedging instruments is recognized within the financial result in profit or loss.

The economic relationship between hedging instrument and hedged item and the effectiveness of the hedge relationship is determined based on consistency of the significant contractual features of the transactions ("Critical Terms Match"). In this regard, the Group performs a qualitative assessment. Hedge ineffectiveness may possibly arise when the timing of future transactions deviates from the original assumptions or the credit risk of the counterparties of the hedging instrument changes.

The following table presents the effects of the hedging instruments related to exchange rate risks on the financial psition and performance of the Group:

Currency	Carrying amount (asset) as of Dec. 31, 2018	Carrying amount (liability) as of Dec. 31, 2018	Hedge ratio	Change in value of hedging instru-ments	Change in value of hedged item	Nominal amount	Maturity: 1 - 6 months	Maturity: 7 - 12 months	Average exercise price
	€ in K	€ in K		€ in K	€ in K	in K of respective currency			
USD	5,554	661	100%	4,893	4,893	137,000	100,000	37,000	1.14
CHF	5	0	100%	5	5	3,000	3,000	0	1.13
CAD	194	0	100%	194	194	8,000	6,000	2,000	1.52
JPY	0	302	100%	–302	–302	1,050,000	600,000	450,000	130.33
GBP	16	0	100%	16	16	3,500	3,500	0	0.90

Currency	Carrying amount (asset) as of Dec. 31, 2019	Carrying amount (liability) as of Dec. 31, 2019	Hedge ratio	Change in value of hedging instrum-ents	Change in value of hedged item	Nominal amount	Maturity: 1 - 6 months	Maturity: 7 - 12 months	Average exercise price
	€ in K	€ in K		€ in K	€ in K	in K of respective currency			
USD	1,346	188	100%	1,535	1,535	120,000	85,000	35,000	1.13
JPY	151	0	100%	151	151	1,400,000	1,400,000	0	120.44
GBP	7	0	100%	7	7	1,500	1,500	0	0.85
SEK	0	5	100%	–5	–5	9,000	9,000	0	10.44
AUD	0	40	100%	–40	–40	4,000	4,000	0	1.63

Hedging instruments that have a positive fair value are shown in the line item “financial assets (non-current)” or “other financial assets (current)” in the statement of financial position. Hedging instruments that have a negative fair value are shown in the line item “other financial liabilities (non-current)” or “other financial liabilities (current)” in the statement of financial position.

The amounts that are recognized in the reporting period in connection with the cash flow hedges in other comprehensive income as well as those amounts that were reclassified from other comprehensive income to profit or loss (in the line item "sales revenue") are presented in the statement of other comprehensive income and the statement of changes in equity.

If the U.S. dollar would have depreciated 10% against the euro, the other comprehensive income would have increased by €9.6 million (2018: increase by €10.7 million), the impact on the result would have been - €3.4 million (2018: +€1.6 million). Vice versa, if the U.S. dollar would have appreciated 10% against the euro, the resulting impact on the result would have been €15.8 million (2018: - €2.0 million) and on the other comprehensive income - €11.8 million (2018: - €13.1 million).

38. Interest Risk Management

Sartorius Stedim Biotech is mainly financed through its parent company Sartorius AG. This major loan is taken out at variable interest rates; therefore the Group continues to be exposed to interest rate risks. To control the interest risk, an appropriate ratio between fixed and variable loans is maintained. As of December 31, 2019, the Group has no open interest rate derivative contracts to hedge the risk of increasing interest rates.

As of December 31, 2019 the raised loans with variable interest rates amount to approx. €50 million.

If the market interest rate had been 1.0 percentage point higher, the interest expenses in the statement of profit or loss would have been €0.5 million (2018: €0.95 million) higher.

With regard to a decrease in interest rates a base interest rate of 0% has been considered. The impact on the financial result would have been +€0.5 million (2018: +€0.9 million).

39. Liquidity Risk Management

The maturity of the financial liabilities excluding derivative financial instruments shows the following pattern:

	Carrying amount Dec. 31, 2018 € in K	Cash Flow Dec. 31, 2018 € in K	< 1 year € in K	1 - 5 years € in K	> 5 years € in K
Loans and borrowings	132,942	133,191	89,997	43,194	0
Finance Leases	16,693	33,100	1,988	9,374	21,738
Trade payables	103,568	103,568	103,568	0	0
Other liabilities (excluding derivatives)	21,855	22,208	17,515	4,542	150
Financial Liabilities	**275,059**	**292,068**	**213,069**	**57,111**	**21,888**

	Carrying amount Dec. 31, 2019 € in K	**Cash Flow Dec. 31, 2019 € in K**	< 1 year € in K	1 - 5 years € in K	> 5 years € in K
Loans and borrowings	83,544	83,613	43,613	40,000	0
Finance Leases	51,799	67,091	12,139	27,000	27,952
Trade payables	116,000	116,000	116,000	0	0
Other liabilities (excluding derivatives)	89,947	91,471	40,013	34,882	16,575
Financial Liabilities	**341,290**	**358,176**	**211,766**	**101,883**	**44,527**

The cash flows shown in the above tables include the undiscounted expected payments in connection with the respective financial liabilities including the associated interest payments based on the interest rates as of the balance sheet date.

The loans and borrowings include the loan raised from the parent company Sartorius AG. The other liabilities include the liability for the phantom units in AllPure as well as the liabilities in connection with the possible acquisition of the non-controlling interests in Biological Industries.

The following tables illustrate the liquidity analysis for derivative financial instruments based on undiscounted cash flows:

	Carrying amount Dec. 31, 2018 € in K	Cash Flow Dec. 31, 2018 € in K	< 1 year € in K	1 - 5 years € in K	> 5 years € in K
Gross fulfilment					
Forward contracts	**1,344**	**1,344**	**1,344**	**0**	**0**
Payment obligation		42,177	42,177	0	0
Payment claim		−40,833	−40,833	0	0
Derivatives	**1,344**	**1,344**	**1,344**	**0**	**0**

	Carrying amount Dec. 31, 2019 € in K	**Cash Flow Dec. 31, 2019 € in K**	< 1 year € in K	1 - 5 years € in K	> 5 years € in K
Gross fulfilment					
Forward contracts	**667**	**667**	**667**	**0**	**0**
Payment obligation		47,705	47,705		
Payment claim		−47,038	−47,038		
Derivatives	**667**	**667**	**667**	**0**	**0**

The Group controls liquidity risks by maintaining credit lines and additional facilities with banks, by continuously tracking the forecasted and actual cash flows and by managing the maturity profiles of financial assets and liabilities. It is not expected that the cash outflows will occur at significantly different times or at significantly different amounts.

The table below provides an overview of the credit lines available on the reporting date:

	Credit line at Dec. 31, 2018	< 1 year € in K	1 - 5 years € in K	> 5 years € in K	Interest rate	Credit line used at Dec. 31, 2018	Credit line unused as of Dec. 31, 2018
Loan from Sartorius AG	309,601	0	309,601	0	Variable	94,500	215,101
Bilateral loans	6,250	3,125	3,125	0	fix	6,250	0
Bilateral credit line	23,163	23,163	0	0	Variable	16,750	6,413
Total	**339,014**	**26,288**	**312,726**	**0**		**117,500**	**221,514**

	Credit line at Dec. 31, 2019	< 1 year € in K	1 - 5 years € in K	> 5 years € in K	Interest rate	**Credit line used at Dec. 31, 2019**	**Credit line unused as of Dec. 31, 2019**
Loan from Sartorius AG	309,602	0	309,602	0	Variable	49,602	260,000
Bilateral loans	3,125	3,125	0	0	fix	3,125	0
Bilateral credit line	35,163	35,163	0	0	Variable	30,817	4,346
Total	**347,890**	**38,288**	**309,602**	**0**		**83,544**	**264,346**

40. Credit Risk Management

Credit risk is the risk of financial loss to the Group if a counterparty to a financial instrument fails to meet its contractual obligations. Credit risk arises principally from cash and cash equivalents and trade receivables. In addition to that, the Group is exposed to credit risks arising from derivative financial instruments with positive fair values and, to a low extent, from contractual cash flows from debt securities.

Credit risk is controlled centrally for the Group by the Treasury Management unit. For counterparties such as banks and financial institutions the creditworthiness is continuously monitored in order to recognize increases in credit risks at an early stage. If no new information is obtained, the Group assumes that the related financial assets still have a low credit risk.

Customers are assigned risk limits that principally depend on the business volume, past experience and the financial position of the customer. Compliance with the limits is regularly reviewed by the management responsible. In some cases, the Group receives advance payments in order to avoid credit risks. There are no significant concentrations of credit risks from individual customers or regions.

For some trade receivables the Group may have collateral such as guarantees that can be used within the contractual agreements in case the counterparty does not meet its contractual payment obligations.

Impairment of Trade Receivables and Contract Assets

The impairment model of IFRS 9, recognition of expected credit losses, is of particular relevance for the Group's trade receivables and contract assets according to IFRS 15. The Group applies the simplified approach according to IFRS 9 to trade receivables and contract assets. Accordingly, lifetime expected credit losses are recognized for these assets. The starting point of the impairment model is an analysis of the actual historical credit loss rates. These are adjusted, taking into consideration forward-looking information and the effects of current changes in the macroeconomic environment, if significant. Due to the immaterial level of historical credit losses the Group currently determines the expected credit losses for the Group's portfolio of trade receivables as a whole. However, historical loss rates are analyzed regularly in more detail in order to apply different loss rates to different portfolios, where appropriate.

The contract assets are related to projects for typical customers of the Group. Therefore, it is assumed that the loss rates applied to trade receivables are appropriate approximations for the loss rates of the contract assets. Accordingly, there is no further differentiation between trade receivables and contract assets.

On this basis, the allowances for trade receivables and contract assets were determined as follows as of December 31, 2019and as of December 31, 2018:

December 31, 2019 **€ in K**	Not due	1 – 30 days overdue	31 – 60 days overdue	61 - 90 days overdue	More than 90 days overdue	**Total**
Gross carrying amount of trade receivables	152,326	22,384	15,954	7,189	20,673	218,527
Gross carrying amount of contract assets	8,530	0	0	0	0	8,530
Impairment loss allowance	82	12	523	158	5,452	6,226
December 31, 2018 **€ in K**	Not due	1 – 30 days overdue	31 – 60 days overdue	61 - 90 days overdue	More than 90 days overdue	**Total**
Gross carrying amount of trade receivables	133,707	39,781	17,502	6,115	22,843	219,947
Gross carrying amount of contract assets	3,902	0	0	0	0	3,902
Impairment loss allowance	77	24	49	280	3,188	3,617

The expected credit losses are determined based on a loss rate of 0.05%. In addition, impairments are determined on the basis of individual assessments. Days overdue are one essential criterion in this context.

A default is generally presumed when there is no reasonable expectation of recovering a financial asset. In such a case, the respective receivables are derecognized.

The movements in the allowance for impairment in respect of trade receivables and contract assets are presented below:

	2019 12 months € in K	2018 12 months € in K
Valuation allowance at the beginning of the year	–3,617	–2,111
Increase during the year	–3,662	–2,041
Derecognition and consumption	103	39
Recoveries of amounts previously impaired	981	474
Foreign currency translation differences	–10	23
Business combinations	–22	0
Valuation allowance at the end of the year	**–6,226**	**–3,617**

Impairment of Other Financial Assets

Besides trade receivables, cash and cash equivalents are the most material financial assets on the Group's statement of financial position as of the reporting date, December 31, 2019. The expected credit losses are monitored at regular intervals. Due to the high creditworthiness of the counterparties and the short maturities, the impairment which would have to be recognized for these financial assets is immaterial. Therefore, no impairment is recognized for cash and cash equivalents.

For the other financial assets measured at amortized cost no impairment is recognized as of December 31, 2019 for the twelve months expected credit losses due to immaterial historical credit losses. In the event of a significant increase in credit risk, which is generally presumed when a payment is more than 30 days past due, the lifetime expected credit losses are recognized for the respective financial asset. A default is generally presumed when there is no reasonable expectation of recovering a financial asset. This is generally presumed when payments are more than 90 days past due. As of the reporting date, there are no indications of increases in credit risk to a material extent. The carrying amounts of the financial assets reflect the maximum credit loss for these assets at the end of the reporting period.

41. Other Risks Associated with Financial Instruments

As of the reporting date, the Sartorius Stedim Biotech Group has not been exposed to the risk of volatility in share prices.

42. Share-based Payments

On the level of Sartorius Stedim Biotech's majority shareholder Sartorius AG, share-based payments exist in the form of so-called phantom stock units. Under this plan the respective board member is granted a certain number of phantom stocks each year that represent an agreed amount of money. The exercise of these stocks is not possible before four years and is depending on certain requirements regarding the performance of the Sartorius AG shares.

When the stocks are paid out the amount is based on the share price at the exercise date. The payment is capped at an amount of 2.5 times the share price at the time these virtual options were granted. For further details please refer to the Remuneration Report.

The fair value of the phantom stock units is disclosed as follows:

	Number of phantom stock units	Subscription price in €	Fair value when granted on Jan. 1 of the particular year € in K	**Fair value at year-end on Dec. 31, 2019 € in K**	Paid out € in K	Exercisable
Tranche of phantom stock units for 2015	7,360	24.70	182	**0**	454	paid in 2019
Tranche of phantom stock units for 2016	3,484	57.41	200	**500**	0	no
Tranche of phantom stock units for 2017	2,950	70.51	208	**520**	0	no
Tranche of phantom stock units for 2018	2,685	80.32	216	**493**	0	no
Tranche of phantom stock units for 2019	1,950	113.78	222	335	0	no
Total	**18,429**			**1,848**	**454**	

Other Disclosures

The consolidated financial statements were prepared on a going concern basis.

Material Events after the Reporting Date

No material events occurred after the reporting date.

Number of Employees

The average workforce employed during the year 2019 was 5,991 (5,412 in 2018).

43. Related Parties

General

The majority shareholder of Sartorius Stedim Biotech S.A. is Sartorius AG, which holds a controlling stake in the company of 74.3% in equity capital – and 84.5% of the voting rights. The Sartorius Group itself is organized in two divisions: Bioprocess Solutions (mainly run by the Sartorius Stedim Biotech Group) and Lab Products & Services (mainly run by the other companies of Sartorius Group). This structure leads to the fact that the Group holds two subsidiaries in most of the countries and these companies partially share space, staff and other resources. Furthermore, the German group companies carry out various central functions and accordingly deliver services to the worldwide entities (e.g. IT support). The company Sartorius Corporate Administration GmbH, a 100% subsidiary of Sartorius AG has incorporated numerous Group functions like Group Finance, HR, IT, Investor Relations and Legal. These services are charged within the Group and to a significant extent also to Sartorius Stedim Biotech.

The described structures lead to various relations and transactions with related parties. Transactions between Sartorius Stedim Biotech S.A. and its subsidiaries (presented in note 7) have been eliminated on consolidation and are not disclosed under this Note. Details of transactions between the Group and other related parties, belonging to the Sartorius Group, are disclosed below.

Sales, Purchases and Commissions

In certain business areas members of the Sartorius Group act as contract manufacturers for the Sartorius Stedim Biotech Group and vice versa. The respective transactions are carried out at arms' length principles and are disclosed in the table below as "sales revenue" and "purchases".

	Sales revenue 2019 € in K	**Purchases 2019 € in K**
Related parties of Sartorius Group	**83,025**	**11,458**
	Sales revenue 2018 € in K	**Purchases 2018 € in K**
Related parties of Sartorius Group	72,221	7,061

Certain product groups of the Sartorius Stedim Biotech portfolio are sold through the sales force of other Sartorius entities. For the arranging of the sale the Sartorius Stedim Biotech Group has paid commissions in the amount of €0.4 million (€0.4 million in 2018). These commissions are typically calculated as a percentage of the generated sales revenue.

Management Fees and Other Shareholder Costs

The Executive Board of Sartorius AG, the German parent company of Sartorius Stedim Biotech, is to a large extent also managing Sartorius Stedim Biotech Group. Two of Sartorius Stedim Biotech S.A.'s board members are also members of the Sartorius AG Executive Board. For their services to Sartorius Stedim Biotech a portion of the remuneration is charged to Sartorius Stedim Biotech S.A. (€1.0 million in 2019; €1.3 million in 2018) and charged to Sartorius Stedim Biotech GmbH (€1.2 million in 2019; €1.6 million in 2018).

Other shareholder functions like Group Financial Reporting, Compliance and Investor Relations are performed by the above mentioned Sartorius Corporate Administration GmbH in Germany. These services have been charged to Sartorius Stedim Biotech S.A. in the amount of €1.2 million (2018: €0.8 million).

Shareholder Loan

As described in note 31 the Sartorius Stedim Biotech Group has raised a loan from its parent company Sartorius AG with a credit volume of approx. €310 million and a current utilization of approx. €50 million (2018: €95 million). The interest charged is based on a variable interest rate plus an arms'-length credit margin.

Administration Charges and Shared Costs

As described above the companies in most of the countries share certain functions and costs. The underlying contracts include mainly agreements to share office space and central administrative functions, such as accounting and controlling, human resource management and IT. In this respect, the relevant companies charge rent, salaries, social security costs and other expenses for such services, as well as a prorated profit margin for the services they provide.

The most significant contract in this context is the one between Sartorius Stedim Biotech GmbH, Germany, and Sartorius Corporate Administration GmbH. This company provides all central service and administrative functions to Sartorius Stedim Biotech GmbH and other Group companies. The calculation for services fees typically includes a surcharge of 3% on total costs. 3% is a surcharge compliant with arm´s length principles for routine tasks, following OECD and EU guidelines. In 2019, services for approx. €56.6 million were provided to Sartorius Stedim Biotech GmbH (€53.4 million in 2018). This amount covers the following functions:

- Marketing Communication, e-Business, Business Development

- Environment, Health & Security, Factory Maintenance

- Finance, Human Resources, Information Technology

- Central Services & General Organization.

Compensation of Key Management Personnel

In 2018 and 2019, the Executive Board Management received the following remuneration:

	Total € in K	Short-term benefits € in K	Post-employment benefits € in K	Other long-term benefits € in K	Termination benefits € in K	Share-based payments € in K
2019[1)]	**2,735**	**1,398**	**270**	**201**	**0**	**866**
2018[1)]	2,522	1,333	257	189	0	743

[1)] For more information please refer to the chapter Corporate Governance (See pages 61 to 94)

Statutory Auditors' Report on the Consolidated Financial Statements

This is a translation into English of the statutory auditors' report on the consolidated financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users.

This statutory auditors' report includes information required by European regulation and French law, such as information about the appointment of the statutory auditors or verification of the information concerning the Group presented in the management report.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France

For the year ended 31 December 2019

To the Shareholders of SARTORIUS STEDIM BIOTECH S.A.,

Opinion

In compliance with the assignment entrusted to us by your shareholders' meetings, we have audited the accompanying consolidated financial statements of SARTORIUS STEDIM BIOTECH S.A. for the year ended 31 December 2019.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at 31 December 2019 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

Independence

We conducted our audit engagement in compliance with independence rules applicable to us, for the period from 1 January 2019 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No 537/2014 or in the French Code of ethics (code de déontologie) for statutory auditors.

Emphasis of Matter

We draw attention to the following matter described in Note 18 to the consolidated financial statements which sets out the change of accounting method relating to the application of IFRS 16 "Leases" as of January 1, 2019. Our opinion is not modified in respect of this matter.

Justification of Assessments – Key Audit Matters

In accordance with the requirements of Articles L.823-9 and R.823-7 of the French Commercial Code (code de commerce) relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period, as well as how we addressed those risks.

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 specific items of the consolidated financial statements.

Goodwill valuation – Impairment test

Identified risk

As of 31 December 31 2019, goodwill amounts to 426.9 M€, or 23.4% of total consolidated assets.

As described in Note 5 to the consolidated financial statements, SARTORIUS STEDIM BIOTECH is an "integrated solution provider" for its customers, and as a result there is only one operating segment from a product and customer perspective: "Biopharm ". In addition, as indicated in Note 16 to the consolidated financial statements, because of the interdependence of the market in which your group operates, the lowest level at which goodwill can be allocated is the Biopharm segment. The goodwill has therefore been fully allocated to the Cash Generating Units (C.G.U.) corresponding to the Biopharm segment.

Goodwill is subject to an annual impairment test and whenever there are indicators of impairment in accordance with the methods and assumptions described in Notes 3 and 16 to the consolidated financial statements. In particular, in view of what has been described above, the impairment test is carried out at the level of the Biopharm segment.

We considered that the determination of the value of goodwill is a key point of our audit given its significance in the consolidated financial statements of your group, and because the determination of the recoverable amount taken into account in the impairment test on the basis of the value in use of the C.G.U. requires the use of estimates and assumptions (including future cash flows, perpetual revenue growth rates and the discount rate) that require significant management judgment.

Responses obtained during our audit

We obtained the impairment test from the C.G.U. group corresponding to the Biopharm segment as well as the forecasts underlying the calculation (4-year plan).

We reviewed the compliance of the company's methodology in accordance with applicable accounting standards.

We also performed a critical analysis of how the company has implemented this methodology, including the following procedures:

- Assess the reasonableness of the key assumptions used to determine the cash flow of the Biopharm segment as well as that used for the perpetual growth rate;

- Assess, with the support of our valuation specialists, the discount rate used by management. We compared this rate with our own estimates and analysed its various constituent components;

- Check the arithmetical accuracy of the impairment test performed by your group.

We have also obtained and assessed the sensitivity analyses carried out by management, as shown in Note 16 of the notes to the consolidated financial statements. As a result, we were able to verify that only an extremely large change in the main assumptions could lead to the recognition of an impairment of goodwill.

Lastly, we verified the appropriateness of the information provided in Notes 3 and 16 to the consolidated financial statements.

Specific verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by laws and regulations of the information given in the Group's management report of the Board of Directors.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

Report on Other Legal and Regulatory Requirements

Appointment of the Statutory Auditors

We were appointed as statutory auditors of SARTORIUS STEDIM BIOTECH S.A. by the annual general meeting held on 7 April 7 2015 for KPMG S.A. and on 19 May 2006 for Deloitte & Associés.

As at 31 December 2019, KPMG S.A. was in its 5th year of the audit mandate without interruption and Deloitte & Associés was in its 14th year.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union and for such internal control as management 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, management is responsible for assessing the Company'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 it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors

Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Objectives and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional 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 specified in Article L.823-10-1 of the French Commercial Code (code de commerce), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- Identifies and assesses the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his 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.

- Obtains 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 internal control. Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the consolidated financial statements. Assesses the appropriateness of management's 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 Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein.

- Evaluates the overall presentation of the consolidated financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtains 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. The statutory auditor is responsible for the direction, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed on these consolidated financial statements.

Report to the Audit Committee

We submit a report to the Audit Committee which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period and which are therefore the key audit matters, that we are required to describe in this audit report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) N° 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L.822-10 to L.822-14 of the French Commercial Code (code de commerce) and in the French Code of Ethics (code de déontologie) for statutory auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Marseille, 7 February 2020

The Statutory Auditors

French original signed by

KPMG Audit A division of KPMG S.A.	Deloitte & Associés
John Evans	Philippe Battisti

Annual Financial Statements of Sartorius Stedim Biotech S.A. and Notes

05

Annual Financial Statements

Parent Company Balance Sheet: Assets (in thousands of €)

	Gross at Dec. 31, 2018	Depreciation, amortization and provisions Dec. 31, 2019	Net at Dec. 31, 2019	Net at Dec. 31, 2018
Intangible assets	552	–145	407	435
Property, plant and equipment	20,482	–12,832	7,649	7,155
Financial investments	128,931	0	128,931	128,749
Total non-current assets	**149,964**	**–12,978**	**136,986**	**136,339**
Inventories and work in progress	0	0	0	0
Trade receivables to third parties	227	0	227	0
Other receivables	87,009	0	87,009	66,066
Deposits and cash equivalents	106		106	62
Total current assets	**87,341**	**0**	**87,341**	**66,128**
Prepaid expenses	197		197	231
Currency translation adjustment	0		0	482
Total assets	**237,503**	**–12,978**	**224,525**	**203,180**

Parent Company Balance Sheet: Equity and Liabilities (in thousands of €)

	At Dec. 31, 2019	At Dec. 31, 2018
Share capital	18,436	18,436
Share premium	12,609	12,609
Reserves	2,434	2,434
Retained earnings carried forward	31,325	34,346
Profit for the period	56,834	49,521
Regulated provisions	4,088	4,088
Total equity	**125,726**	**121,434**
Provisions for liabilities and charges	0	482
Total provisions for liabilities and charges	**0**	**482**
Loans and borrowings	0	0
Trade payables	918	881
Tax and social charges payable	156	63
Liabilities for non-current assets	181	313
Other liabilities	97,544	79,705
Total liabilities	**98,799**	**80,963**
Currency translation adjustment	0	301
Total equity and liabilities	**224,525**	**203,180**

Parent Company: Income Statement (in thousands of €)

	At Dec. 31, 2019	At Dec. 31, 2018
Sales revenue	2,116	1,999
Inventory movements	0	0
Capitalized production costs	0	0
Depreciation or amortization reversals	482	0
Other operating income and expense reallocation	6	1,490
Purchases consumed	0	0
External charges for services	–3,626	–3,775
Tax and duties	–487	–411
Personnel costs	0	0
Additions to amortization, depreciation and provision	–839	–816
Other operating expenses	–259	–857
Operating profit (EBIT)	**(2,606)**	**(2,371)**
Net financing income | (expense)	58,925	48,576
Profit | (loss) from ordinary activities	**56,319**	**46,205**
Exceptional income | (expense)	72	0
Income tax	443	3,316
Net profit | (loss)	**56,834**	**49,521**

1. Materiel Events during the Year

None

2. Materiel Events after the Reporting date

None

3. Accounting Principles and Methods

The parent company's financial statements for the year ended December 31, 2019, were prepared and presented in accordance with French accounting rules in compliance with the principles of prudence, reporting on distinct financial years and the presumption of going concern.

The annual financial statements have been prepared in accordance with the clauses of the CRC Regulation 2014-03 of September 8, 2014 on the French chart of accounts.

Sartorius Stedim Biotech S.A. is listed in Compartment A of the Euronext Paris Stock Exchange (ISIN FR code 0000053266) and also prepares consolidated financial statements in accordance with IFRS standards, as adopted by the European Union on December 31, 2019. Sartorius Stedim Biotech S.A. is consolidated by Sartorius A.G.

3.1. Non-current Assets

Non-current intangible and tangible assets are valued at their acquisition costs, excluding costs incurred for their acquisition.

For intangible assets and property, plant and equipment, the Company applied the French Regulation CRC No. 2002-10, recodified by Article 2-4 of Regulation CRC No. 2004-06 relative to the amortization, depreciation and impairment of assets according to the "Component approach."

3.1.1. Intangible Assets

The following is thus valuated under this heading: incorporation costs, patents and software.

All these assets are amortized on a straight-line basis using the following indicative useful lives:

– Incorporation costs: One to five years

– Software: One to three years

– Patents: Twenty years

– Leasehold: Eighteen years
(Based on the period of use).

As part of the implementation of integrated software, the direct labor costs concerned are included in the amount capitalized as cost, as a function of the time elapsed.

Intangible assets are valued at acquisition cost less amortization and impairments reported, on an ongoing basis.

3.1.2. Property, Plant and Equipment

Property, plant and equipment (PPE) are recognized at their acquisition value, including the installation cost of these assets.

Depreciation is calculated over the standard and economic life of the assets using the straight-line method.

All these non-current assets are depreciated on a straight-line basis using the following indicative periods of use:

- Buildings: Twenty to forty years
- Improvements, fixtures and fittings: Ten to fifteen years
- Plant and equipment: Four to ten years
- Office and IT equipment: Three to five years
- Motor vehicles: Four to five years

Property, plant and equipment are valued at acquisition cost less depreciation and impairments reported, on an ongoing basis.

3.1.3. Financial Investments

Investments relate mainly to shareholdings in subsidiaries and other treasury shares held within the scope of the share buyback program; they are recorded at their acquisition cost, including fees linked to their acquisition.

An impairment provision may be recorded to take into account, in particular, either the stock exchange price or the underlying assets of these subsidiaries, their financial position and their prospects.

Shareholdings in subsidiaries are subject to impairment tests.

3.2. Receivables and Payables

Receivables and payables are recorded at their nominal value.

Receivables whose collection is doubtful are subject to a provision for doubtful debts.

4. Non-Current Assets (in thousands of €)

4.1. Intangible Assets

Gross values	At Dec. 31, 2018	**Increase in 2019**	**Decrease in 2019**	**At Dec. 31, 2019**
Incorporation costs	4	0	0	4
Patents	0	0	0	0
Software, licenses	0	0	0	0
Business goodwill	548	0	0	548
Intangible assets in progress	0	0	0	0
Total	**552**	**0**	**0**	**552**
Amortization and depreciation	118	28	0	146
Net amount	**434**	**–28**	**0**	**406**

4.2. Property, Plant and Equipment

Gross values	At Dec. 31, 2018	**Increase in 2019**	**Decrease in 2019**	**At Dec. 31, 2019**
Land	496	0	0	496
Buildings	15,715	43	0	15,758
Plant and equipment	0	0	0	0
Other	2,272	807	0	3,079
Property, plant and equipment in progress	693	456	0	1,149
Total	**19,176**	**1,305**	**0**	**20,481**

Amortization and depreciation	At Dec. 31, 2018	**Addition**	**Release**	**At Dec. 31, 2019**
Buildings	10,904	477	0	11,381
Plant and equipment	0	0	0	0
Other	1,117	334	0	1,451
Total	**12,022**	**810**	**0**	**12,832**
Property, plant and equipment, net	**7,154**	**495**	**0**	**7,649**

The increase in tangible assets includes fixtures and fittings for a net amount of €850 K and assets under construction for an amount of €456 K.

4.3. Financial Investments

Investments	At Dec. 31, 2018	Increase in 2019	Decrease in 2019	At Dec. 31, 2019
Shareholdings	127,977	0	0	127,977
Write-down of shareholdings	0	0	0	0
Deposits and guarantees	135	0	–25	110
Treasury shares	637	207	0	844
Write-down of treasury shares	0	0	0	0
Other non-current assets	0	0	0	0
Total	**128,749**	**207**	**–25**	**128,930**

The following is included under "Financial investments":

- 99.99% of the share capital of Sartorius Stedim Bioprocess SARL, a Tunisian company;

- 100% of the share capital of Sartorius Stedim Biotech GmbH, a company governed by German law, following the merger of the Sartorius and the Stedim Groups in June 2007;

- 100% of the share capital of Sartorius Stedim Aseptics S.A.S., a French company acquired in 2004;

- 100% of the share capital of Sartorius Stedim FMT S.A.S., a French company created in connection with the Contribution Assets transfer in 2013;

- Other investments: €1.0 K.

The amount now corresponds to the share of Sartorius Stedim Biotech in the Russian company Sartorius Stedim RUS.

A new liquidity contract between the entity Sartorius Stedim Biotech S.A. and the brokerage company Gilbert Dupont began the 20th of April 2018. Therefore, Sartorius Stedim Biotech helds 3,225 shares of SSB S.A. in portfolio at the closing.

5. Trade Receivables (in thousands of €)

Maturity of Receivables at Year-end (in thousands of €)

Type of receivable	Net amount	Less than 1 year	More than 1 year
Deposits and guarantees	953	953	
Non-current assets	**953**	**953**	**0**
Advance payments on account	0	0	0
Trade receivables	227	227	0
Personnel	0	0	0
Social security	0	0	0
Taxes and duties	3,921	3,921	0
Group	83,083	83,083	0
Other receivables	5	5	0
Current assets	**87,235**	**87,235**	**0**
Prepaid expenses	197	197	0
Total receivables	**88,385**	**88,385**	**0**

The "Group" item for receivables from Group subsidiaries (€83,083 K) relates to current account cash advances provided to Sartorius Stedim France, Sartorius Stedim Aseptics, Sartorius Stedim FMT and Sartorius Stedim Bioprocess Tunisia.

The "Taxes and duties" (€3,921 K) captions primarily includes the net tax receivable relating to the tax grouping system.

6. Maturity of Liabilities at Year-end (in thousands of €)

Type of liability	Net amount	Less than 1 year	Between 1 and 5 years	More than 5 years
Loans and borrowings from credit institutions				
Originally less than 2 years	0	0	0	0
Originally more than 2 years	0	0	0	0
Current bank overdrafts and accrued interest	0	0	0	0
Trade payables	917	917	0	0
- including bills of exchange	*0*	*0*	*0*	*0*
Advances and payments on account for orders	0	0	0	0
Tax and social security payable	156	156	0	0
Liabilities for non-current assets	181	181	0	0
Group and associates	97,295	97,295	0	0
Other	249	249	0	0
Total liabilities	**98,799**	**98,799**	**0**	**0**

The "Group" item for liabilities from Group subsidiaries (€97,295 K) relates to cash-pooling liabilities and current account cash advances provided by Sartorius AG, Sartorus Stedim Biotech GmbH, Sartorius Stedim France S.A.S., Sartorius Stedim FMT S.A.S. and Sartorius Stedim Aseptics S.A.S.

Accrued expenses included in these accounts represented €530 K and concerned the following items:

Type of expense	**At Dec. 31, 2019**
Accrued banking charges	0
Suppliers' invoices to be received	530
Paid vacation including social charges	0
Bonuses, including social charges and profit sharing	0
Social security payable	0
Taxes payable	0
Employee profit sharing	0
Total charges payable	**530**

7. Parent Company Statement of Changes in Equity (in thousands of €)

7.1. Equity

At December 31, 2018, the share capital was €18,436 K, comprising 92,180,190 shares of a €0.20 par value.

At December 31, 2019, the share capital is €18,436 K, comprising 92,180,190 shares of a €0.20 par value.

The Annual General Shareholders' Meeting on March 2019, the 26th, approved the appropriation of the net profit for the year of €49,521 K, as follows:

- Allocation to the retained earnings carried forward: - €3,021 K

- Paid into the legal reserves: None

A dividend total of €52,543 K, or a net dividend per share of €0.57, was paid.

	Appropriation of profit in 2018			Movements 2019		**Equity before appropriation of profit in 2019**
	Before	Changes	After	Increases	Decreases	**Total**
Number of shares:	92,180,190		92,180,190			**92,180,190**
Share capital	18,436		18,436			**18,436**
Share premium	0		0			**0**
Merger premium	12,609		12,609			**12,609**
Legal reserve	1,844		1,844			**1,844**
Other reserves	591		591			**591**
Balance carried forward	34,346	–3,021	31,325			**31,325**
Dividends paid	0	52,543	52,543		(52,543)	**0**
Net profit to be appropriated	49,521	(49,521)	0			**0**
Profit for the reporting year			0	56,834		**56,834**
Regulated provisions	4,088		4,088			**4,088**
Total	**121,435**	**0**	**121,435**	**56,834**	**–52,543**	**125,726**

7.2. Stock Options

None

8. Risks and Provisions (in thousands of €)

8.1. Provisions

Type of provision	Provisions at Dec. 31, 2018	Additions 2019	Releases 2019	**Provisions at Dec. 31, 2019**
Regulated provisions				
Accelerated amortization and depreciation	4,088	0	0	4,088
Subtotal (1)	**4,088**	**0**	**0**	**4,088**
Provisions for liabilities and charges				
Exchange risk	482	0	–482	0
Other costs	0	0	0	0
Taxation	0	0	0	0
Subtotal (2)	**482**	**0**	**–482**	**0**
Grand Total = (1) + (2)	**4,570**	**0**	**–482**	**4,088**

8.2. Market Risk Exposure

Operating Cash Flow risks

At December 31, 2019, there are no impacts on net amount in foreign currency in current assets and liabilities.

Current and Future Tax Position (in thousands of €)

As of January 1, 2008, the company chose to adopt the French tax integration regime within the framework of a tax group. The lead company of this group is Sartorius Stedim Biotech S.A. The other member companies of this tax integration group for tax relief are Sartorius Stedim Aseptics S.A.S., Sartorius Stedim France S.A.S. and Sartorius Stedim FMT S.A.S.

The member companies report income tax as if there were no integration tax regime. The parent corporation benefits from tax relief related to consolidating the gains and losses of the other members companies.

For 2019, the net impact according to the consolidation rules of the French tax integration regime for tax relief is an income of €443 K. Taking into grount the tax credits not yet, compensated, the company SSB holds a receivable from the State of €836 K.

9. Operating Income (in thousands of €)

9.1. Sales Revenue by Operating Segment

Operating segment	At Dec. 31, 2019	%	At Dec. 31, 2018	%
Services	2,116	100%	1,999	100%
Total	**2,116**	**100%**	**1,999**	**100%**

9.2. Sales Revenue by Geographical Region

Geographical region	At Dec. 31, 2019	%	At Dec. 31, 2018	%
France	**2,116**	**100%**	**1,999**	**100%**
Export	**0**		**0**	**0%**
EU and other countries	0		0	
North American continent	0		0	
Total	**2,116**	**100%**	**1,999**	**100%**

The Sale revenue corresponds to the rent invoiced to the entity Sartorius Stedim FMT S.A.S. for the use of premises located in Aubagne within its operational activity.

10. Breakdown of Income Tax (in thousands of €)

	At Dec. 31, 2019			At Dec. 31, 2018		
	Profit before tax	**Income tax charge**	**Profit after tax**	Profit before tax	Income tax charge	Profit after tax
Gross taxable income	56,391	0	56,391	46,205	0	46,205
Exceptional income | (expense)		0	0	0	0	0
French tax integration relief	0	443	443	0	3,316	3,316
Net taxable income	**56,391**	**443**	**56,834**	**46,205**	**3,316**	**49,521**

11. Information on Directors' Remuneration

Remuneration allocated and paid to members of the Board of Directors as directors' meeting fees amounted to €268.8 K. These fees related to the 2018 fiscal year and were paid in 2019.

No meeting fees were paid by Sartorius Stedim Biotech S.A. to the general management of the company in fiscal 2019. A Part of the Executive Board's remuneration has been recharged by Sartorius AG to Sartorius Stedim Biotech S.A. for an amount of €993 K.

12. Off-Balance Sheet Commitments (in thousands of €)

Type of commitment	Comment	**At Dec. 31, 2019**	At Dec. 31, 2018
Commitments given			
Guarantees for bilateral credit lines		**0**	0
Guarantees for currency hedging contracts		**0**	0
Commitments from renting / leasing		**0**	0
Commitments received			
Contractual loan capacity from credit institutions		0	0

The commitments in connection with the lease are summarized in the following table:

Leasing	< 1 year € in K	1 - 5 years € in K	> 5 years € in K	Total	Buy-back value
Tangible Assets					
Buildings and Improvments	274	496	0	770	0
Total	**274**	**496**	**0**	**770**	

Leasing	Historical value	Payments for the Year	Cumulatives Payments	Depreciation for the Year	Cumulative Depreciation
Tangible Assets					
Buildings and Improvments	2,391	280	1,780	251	929
Total	**2,391**	**280**	**1,780**	**251**	**929**

The building has been operational from the 1^{st} of January 2015.

13. Information on Related Parties (in thousands of €)

Affiliates are its parent company, Sartorius AG, and the companies owned by Sartorius Stedim Biotech S.A., and are Sartorius Stedim FMT S.A.S., Sartorius Stedim Bioprocess SARL, Sartorius Stedim Aseptics S.A.S. and Sartorius Stedim Biotech GmbH.

The company Sartorius Stedim Biotech S.A. is consolidated in the financial statements of Sartorius AG, Otto-Brenner-Strasse 20, 37079 Goettingen (Germany).

In the following, you will find the table of the main amounts with the related parties:

Items	**At Dec. 31, 2019**	At Dec. 31, 2018
Investments	127,977	127,977
Trade receivables	227	0
Other receivables	83,083	64,282
Trade payables	0	0
Other liabilities	97,295	79,322
Income from investments	60,000	49,007
Other financial income	150	336
Finance expense	1,445	939

In the following, you will find the table of subsidiaries and shareholdings:

At Dec. 31, 2019	Share capital	Reserves, share premium and retained earnings before appropriation	Ownership in %	Book value of shares held		Loans outstanding and advances granted	Changes in deposits and pledges	Sales (ex-VAT) - for the financial year	Net profit	Dividends received
				Gross	Net					
Sartorius Stedim Biotech GmbH			**100.00%**							
(Euros)	6.000	539,318		79,949	79,949	−81,984	0	658,843	228,661	60.000
Sartorius Stedim FMT S.A.S.			**100.00%**							
(Euros)	42,940	4,897		42,940	42,940	7,142	0	214,876	8,038	0
Sartorius Stedim Bioprocess SARL			**99.99%**							
(Dinars)	5,950	11,195						88,989	8,799	0
(Euros)				3,132	3,132	7,870	0	27,116	2,771	0
Sartorius Stedim RUS			**100.00%**							
(Rubles)	8.000	87,412						629,337	49,120	0
(Euros)	114	1,250		109	109	0	0	8,375	712	0
Sartorius Stedim Aseptics S.A.S.			**100.00%**							
(Euros)	448	5,145		1,848	1,848	8,070	0	13,515	3,287	0

At Dec. 31, 2018	Share capital	Reserves, share premium and retained earnings before appropriation	Ownership in %	Book value of shares held		Loans outstanding and advances granted	Changes in deposits and pledges	Sales (ex-VAT) - for the financial year	Net profit	Dividends received
				Gross	Net					
Sartorius Stedim Biotech GmbH			**100.00%**							
(Euros)	6.000	370,416		79,949	79,949	−46,029	0	559,070	121,563	45.000
Sartorius Stedim FMT S.A.S.			**100.00%**							
(Euros)	42,940	−7,597		42,940	42,940	−2,885	0	173,918	859	0
Sartorius Stedim Bioprocess SARL			**99.99%**							
(Dinars)	5,950	779						78,366	2,534	3,462
(Euros)				3,132	3,132	5,832	0	25,173	814	1,007
Sartorius Stedim RUS			**100.00%**						*	
(Rubles)	8.000	38,292						321,051	32,738	0
(Euros)	100	480		109	109	0	0	4,027	411	0
Sartorius Stedim Aseptics S.A.S.			**100.00%**							
(Euros)	448	5,145		1,848	1,848	−6,999	0	13,515	3,971	3.000

The previous list contains only information on transactions in Company shares received in accordance with the Article 19 MAR (Operations realized by Executive Directors). Therefore, we are not aware of all transactions whose cumulative trade volumes have remined below the notification threshold of €20,000 per calendar year.

Statutory Auditors' Report on the Financial Statements

This is a translation into English of the statutory auditors' report on the financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users.

This statutory auditors' report includes information required by European regulation and French law, such as information about the appointment of the statutory auditors or verification of the management report and other documents provided to shareholders.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

For the year ended 31 December 2019

To the Shareholders of SARTORIUS STEDIM BIOTECH S.A.,

Opinion

In compliance with the assignment entrusted to us by your shareholders' meetings, we have audited the accompanying financial statements of SARTORIUS STEDIM BIOTECH S.A. for the year ended 31 December 2019.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company as at 31 December 2019 and of the results of its operations for the year then ended in accordance with French accounting principles.

The audit opinion expressed above is consistent with our report to the Audit Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the Statutory Auditors' Responsibilities for the Audit of the Financial Statements section of our report.

Independence

We conducted our audit engagement in compliance with independence rules applicable to us, for the period from 1 January 2019 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No 537/2014 or in the French Code of ethics (code de déontologie) for statutory auditors.

Justification of Assessments - Key Audit Matters

In accordance with the requirements of Articles L.823-9 and R.823-7 of the French Commercial Code (code de commerce) relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, concerned the appropriateness of the accounting principles applied, the reasonableness of the significant estimates used and the overall presentation of the accounts.

We determined that there were no key audit matter to report.

Specific verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by French law and regulations. ations required by French law and regulations.

Information given in the management report and in the other documents with respect to the financial position and the financial statements provided to the Shareholders

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the management report of the Board of Directors and in the other documents with respect to the financial position and the financial statements provided to Shareholders.

We attest the fair presentation and the consistency with the financial statements of the information relating to payment terms, required under Article D.441-4 of the French Commercial Code (Code de commerce).

Report on corporate governance

We attest that the Board of Directors' report on corporate governance sets out the information required by Articles L.225-37-3 and L.225-37-4 of the French Commercial Code.

Concerning the information given in accordance with the requirements of Article L.225-37-3 of the French Commercial Code (code de commerce) relating to remunerations and benefits received by the directors and any other commitments made in their favour, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements and, where applicable, with the information obtained by your company from controlled companies. Based on this work, we attest the accuracy and fair presentation of this information.

Other informations

In accordance with French law, we have verified that the required information concerning the purchase of investments and controlling interests and the identity of the shareholders and holders of the voting rights has been properly disclosed in the management report.

Report on Other Legal and Regulatory Requirements

Appointment of the Statutory Auditors

We were appointed as statutory auditors of Sartorus Stedim Biotech S.A. by the annual general meeting held on 7 April 2015 for KPMG S.A. and on 19 May 2006 for Deloitte & Associés.

As at 31 December 2019, KPMG S.A. was in its 5th year of the audit mandate without interruption and Deloitte & Associés was in its 14th year.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with French accounting principles and for such internal control as management 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, management is responsible for assessing the Company'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 it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The financial statements were approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Financial Statements

Objectives and audit approach

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional 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.

As specified in Article L.823-10-1 of the French Commercial Code (code de commerce), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- Identifies and assesses the risks of material misstatement of the financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his 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.

- Obtains 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 internal control.
- Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the financial statements.
- Assesses the appropriateness of management's 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 Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein.
- Evaluates the overall presentation of the financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

Report to the Audit Committee

We submit a report to the Audit Committee which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) N° 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L.822-10 to L.822-14 of the French Commercial Code (code de commerce) and in the French Code of Ethics (code de déontologie) for statutory auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Marseille, 7 February 2020

The Statutory Auditors

French original signed by

KPMG Audit Division of KPMG S.A.	Deloitte & AssociésA
John Evans	Philippe Battisti

Supplementary Information

06

Other Information of a Legal Nature

General Information on the Issuer

Corporate Name

The corporate name of the company is:
"Sartorius Stedim Biotech".

In all legal deeds and documents issued by the company, this is always preceded or followed by the words "société anonyme" or the abbreviation "S.A." and a statement of the share capital (Company bylaws, Article 1).

Registered Office

The registered office is in Aubagne (13400), France,
Z.I. Les Paluds, avenue de Jouques.
Phone number: +33 (0)4 42 84 56 00.

This office may be transferred to another location in the same "département" [French county or state] or an adjacent county or state by simple decision of the Board of Directors subject to ratification by the next Annual General Shareholders' Meeting and anywhere else in France by a decision taken by an Extraordinary General Shareholders' Meeting.

If the Board of Directors decides to transfer the registered office, it is authorized to revise the bylaws as a result (Company bylaws, Article 4).

Legal Form and Applicable Law

The company is a public limited liability company or joint stock company [société anonyme], subject to the French legislation, particularly to the French Commercial Code.

Date of Incorporation – Duration

The company was incorporated on September 28, 1978, as a "société anonyme." The company's duration is for 99 years, effective upon registration in the French trade and commercial register ("registre du commerce et des sociétés"), unless subject to dissolution or extension provided by the present company bylaws (Article 5).

Corporate Purpose

In France and abroad, the company's purpose is:

- to purchase, develop, administrate and manage a portfolio of equity security, securities, voting rights and other social rights in all companies regardless of their activity and this, by all means including by way of setting up of new companies, contribution in kind of any types of social rights, subscription rights, mergers, purchases of other social rights or incorporation of companies;

- to manage, conduct and coordinate the activities of its subsidiaries and affiliates; when applicable, to provide to said companies all services of an administrative, financial, accounting and legal nature and any opinion and advise or to order any studies or researches that are necessary for their development or growth;

- and more generally, all financial, commercial, industrial, personal and real property operations linked, directly or indirectly, to the above-mentioned corporate purpose or to all other complementary, related or similar purposes, which may promote the development or accomplishment thereof (Company bylaws, , Article 2).

Trade and Commercial Register – APE Code

The company is registered with the "registre du commerce et des sociétés" of Marseille, under the number RCS B 314 093 352. Its economic activity code (APE) is 6420Z (Holding company activity).

Inspection of Legal Documents at the Registered Office of the Company

The Universal Registration Document may be viewed at the registered office of the company, on its website and on the website of the AMF. During the validity of the present Universal Registration Document, the bylaws, the Statutory Auditors' reports and the financial statements of the last three fiscal years, although with reports, mails and other documents, historical financial information of the company and its subsidiaries of the last three fiscal year, evaluation and declarations made by an expert, when these documents are statutory and any other statutory document, can be found at the registered office.

Financial Year

The financial year, also referred to as fiscal year, covers a period of twelve months, beginning on January 1 and ending on December 31 of each year (Company bylaws, Article 7).

Share capital

As of 31 December 2019, the share capital of the Company amounts to €18,436,038, divided in 92,180,190 shares of €0.20 fully paid; 74.3% of which are held by Sartorius AG.

Specific Clauses in the Company Bylaws

Form of Shares

Shares may be in nominative or bearer form according to the shareholder's choice. These shares are entitled to be recorded in an account in accordance with French law (Company bylaws, Article 10).

Appropriation of Profits

The income statement that summarizes the income and expenses of the reporting year discloses by difference, after deduction of amortization, depreciation and provisions, the profit for said reporting year. At least 5% must be deducted from the annual profit reduced, where appropriate, by prior losses, to set up the legal reserve. This deduction ceases to be obligatory when the legal reserve amounts to one tenth of the share capital. This obligatory deduction resumes when, for whatever reason, the legal reserve falls below this one tenth. The distributable profit comprises the profit for the reporting year less prior losses and amounts transferred to reserves, pursuant to French laws and the company bylaws, and increased by profit brought forward. This profit is distributed among all shareholders in proportion to the number of shares each one holds. The Annual General Shareholders' Meeting may decide to distribute amounts taken from reserves available to it by expressly indicating the reserve from which the transfers are made. However, dividends are disbursed by way of priority from the annual profit for the reporting year. Except for a reduction in capital, no distribution may be made to shareholders when the equity falls below, or would consequently fall below, the amount of the capital together with the reserves that French laws or the company bylaws do not permit to distribute. Revaluation surplus is not distributable. It may be incorporated in full or part into the company's capital. However, after transferring the amounts to the reserves, pursuant to French law, the Annual General Shareholders' Meeting may transfer any amount it considers necessary to all available reserves, ordinary or extraordinary reserves, or carry it forward.

Shareholders' Meetings (Company's bylaws, extract of article 22)

Convening

Annual (or Ordinary) General Shareholders' Meetings are those convened to take all decisions that do not result in a revision of the bylaws. Extraordinary General Shareholders' Meetings are those called to decide or authorize direct or indirect revisions to the bylaws. Special Meetings bring together the holders of a specific class of share to consider revisions to the rights of this class of share. Decisions made at the General Meetings are binding for all shareholders, even those who are absent, dissenting or legally incapable or incapacitated. General Meetings are convened by the Board of Directors or, by default, the independent auditors or a person thus empowered. General Meetings are held at the registered office or any other place stated in the notice of convocation. The forms and timescale of the notice of convocation are governed by French laws.

Agenda

The notices and letters of call shall indicate the indications required by the law, particularly the agenda, the company electronic address where written questions of Shareholders may be sent and, eventually the mention of the obligation to collect the opinion or the prior approval of the mass of securities Shareholders giving access to the share capital.

The meeting may only deliberate on the matters placed on the agenda. It may, however, remove one or more directors at any time.

One or more shareholders representing the percentage of share capital required by law may, under the conditions and time limits set forth by law, require the inclusion on the agenda of draft resolutions.

In accordance to the Articles R 225-71 to R 225-74 of the Commercial Code, requests made by the Shareholders to register draft resolutions on the agenda and written questions are sent to the Headquarters by registered letter with recorded delivery beginning on the publication of the Meeting announcement and until 25 days before the General Meeting, or in a delay of 20 days beginning on the publication of the Meeting announcement, when this one is published more than 45 days before the General Meeting (date of reception of the request by the company will be taken into account).

The request of a new item on the agenda must be motivated. The request to register draft resolutions is provided with the text of draft resolutions, which may have a short explanation of reasons. These requests are subject to justification of possession or representation of required Share capital, in accordance to regulatory rules

If the meeting has been unable to make a valid decision due to a lack of the required quorum, the second meeting and, where appropriate, the second meeting adjourned are called at least ten days in advance in the same form as the first meeting

Admission to Meetings – Powers

Every shareholder has the right to attend General Meetings and to participate in the discussions, in person or by proxy, regardless of the number of shares held, on simple proof of identity and the ownership of shares. The right to participate in a General Meeting is subject to the condition that the shares must be recorded, in the name of the shareholder or the shareholder's appointed broker, either in the nominative share accounts held by the company or in the bearer share accounts held by the authorized broker, by zero hours, Paris time, on the second working day prior to the meeting. The recording or registration of the shares in the bearer share accounts held by the authorized broker must be confirmed by a share certificate provided by the broker. This share certificate must be attached to the postal voting form, the proxy form or the application for an admission pass, issued in the name of the shareholder or on behalf of the shareholder represented by the appointed broker. A certificate must also be supplied to shareholders who wish to attend the General Meeting in person but who have not received an admission pass by zero hours, Paris time, on the second working day prior to the meeting.

A Shareholder may be represented by another Shareholder, his or her spouse or by the partner with who he or she signed a Civil Partnership. Furthermore, he or she may be represented by any other moral or physical person of his choice in accordance to the Articles L. 225-106 to -106-3 of the Commercial Code; in that aim, the representative must present valid proof of proxy.

The legal representatives of shareholders who are legally incapable or incapacitated and individuals representing corporate shareholders take part in meetings, whether or not they are shareholders.

All Shareholders may also have a postal voting, using a registration form and sent to the company according to the law and regulations; to be acceptable this registration must be received by the company three days before the date of the Meeting.

In case of remote voting using an electronic vote, or a proxy vote given by electronic signature, this vote is made according to the conditions of the current regulations.

All legal documents relative to legal information for shareholders are made available to them at the registered office of the company.

Board of Directors
(Company bylaws, extract of Article 15)

1. Subject to legal exemptions, the Company is directed by a Board of Directors composed of a minimum of three members and a maximum of eighteen.

The composition of the Board of Directors is made with a balance number of men and women.

2. During the duration of the company's existence, directors shall be appointed or renewed in office by the ordinary general meeting. However, in case of merger, directors may be appointed by the extra-ordinary general meeting deciding on the transaction.

3. Each director must, during his entire term of office, own at least one share.

4. Directors have a term of office of three years.

Directors' duties shall cease at the end of the ordinary general meeting deciding on the accounts of the financial year elapsed, held in the year when the term of office of the director concerned expires.

Directors may be renewed in office. They may be removed from office at any time by the ordinary general meeting.

5. No person may be appointed director if, having reached the age of 75, his appointment would result in more than one third of the members of the board of directors exceeding that age. If that proportion is exceeded, the oldest director shall automatically be deemed to have resigned at the end of the ordinary general meeting approving the accounts of the financial year when exceeded.

6. Directors may be individuals or legal entities. Directors who are legal entities are required, upon their appointment, to appoint a permanent representative who is subject to the same conditions and obligations and who incurs the same liability as though personally a director, without prejudice to the several liability of the legal entity represented.

When the legal entity who is a director terminates the mandate given to its permanent representative, it shall promptly notify the Company, by registered letter, of its decision as well as the identity of its new permanent representative. The same applies in the event of death or resignation of the permanent representative.

7. If one or more directors' seats become vacant between two general meetings due to death or resignation, the board of directors may proceed to make appointments on an interim basis so as to fill the seats on the Board. These appointments must be made within three months of the vacancy, when the number of directors has fallen below the minimum under the articles of association but without falling below the statutory minimum.

Interim appointments made in this manner by the Board are subject to ratification by the next ordinary general meeting. Failing ratification, the decisions taken or the acts accomplished shall nonetheless remain valid.

When the number of directors falls below the statutory minimum, the directors remaining in office are required to immediately call an ordinary meeting so as to fill the vacant seats on the Board.

A director appointed in replacement of another shall only remain in office for the remaining term of office of his predecessor.

8. Directors who are individuals cannot concomitantly hold more than five seats on the board of directors or supervisory boards of sociétés anonymes having their registered office in metropolitan France, subject to the exceptions provided by law.

9. A Company employee may not be appointed a director unless his employment agreement corresponds to effective employment. He shall not lose the benefit of his employment agreement. The number of directors bound to the Company by an employment agreement may not exceed one third of the directors in office.

10. In accordance with the applicable law, there shall be one director representing employees when the number of directors is equal to or less than 12. The director representing employees is:

- elected by the employees of the company and its direct or indirect subsidiaries which have their registered office located in France under the conditions provided in this article, or

- appointed by the trade union organisation that obtained the most votes during the first round of the elections mentioned in Articles L. 2122-1 et L. 2122-4 of the French Labour Code in the Company and its direct or indirect subsidiaries which have their registered office located on France, or

- appointed by the works council.

When the number of directors is more than 12, a second director representing employees is:

- elected by the employees of the company and its direct or indirect subsidiaries which have their registered office located in France, or

- appointed by the trade union organisation that obtained the most votes during the first round of the elections mentioned in Articles L2122-1 et L2122-4 of the French Labour Code in the Company and its direct or indirect subsidiaries, of which the registered offices are located in France, or

- appointed by the works council; or

- appointed by the European works committee.

The absence of the appointment of one or more directors representing employees in application of the applicable law and the present constitution shall not entail the invalidity of the deliberations of the board of directors.

11. Directors representing employees are not included in the minimum number and maximum number of directors specified in Articles L.225-17 and L.225-18-1 of the French Commercial Code.

12. Directors representing employees must have an employment contract with the Company or with one of its direct or indirect subsidiaries which have their registered office located in France predating their appointment by at least two years and relating to an actual employment.

13. Directors representing employees are elected for 3 years. The term of office of the director thus appointed shall end during the ordinary shareholder's Meeting of the closing of the accounts, held the year of the end of the term of the office.

14. The termination of the employment contract shall end the office of the directors representing employees.

Directors representing employees may not be dismissed other than for fault in the performance of their office by order of the judge of the Tribunal de Grande Instance territorially competent, ruling by way of summary proceedings at the request of the majority of the members of the board of directors.

15. In the event of vacancy of an office of a director representing employees due to death, resignation, dismissal, breach of employment contract or for any reason whatsoever, the vacant office shall be filled pursuant to Article L.225 - 34 of the French commercial code.

Organization and management of the Board of Directors (Company bylaws, Article 16)

1. The Board of Directors elects a Chairman from among its members who are individuals and determines his remuneration. It sets the duration of the Chairman's term of office, which may not exceed his office as director.

2. No person may be appointed Chairman of the Board of Directors if over the age of 75. If the Chairman in office exceeds that age, he shall be deemed to have automatically resigned.

3. The Chairman represents the Board of Directors. He organizes and directs its work, and reports on it to the general meeting. He ensures the proper operation of the Company's decision-making bodies and ensures, in particular, that the directors are themselves in a position to fulfill their duties.

4. In case of absence or impediment affecting the Chairman, the Board of Directors appoints an acting Chairman of the meeting.

5. The Board of Directors appoints a secretary who may be chosen, either from among the directors or outside them. The secretary shall be replaced by simple decision of the Board.

Meetings and decisions of the Board (Company bylaws, Article 17)

1. The Board of Directors meets, upon the call of its Chairman, as often as required by the interest of the Company. However, directors representing at least one third of the members of the Board of Directors may, by precisely indicating the meeting's agenda, call a Board if it has not met within the last two months.

The CEO, if not chairing the Board of Directors, may request the Chairman to call a Board meeting with a specified agenda.

2. The meeting shall take place at the registered office or in any other location indicated in the notice of call. The call to meeting, indicating the agenda, should be sent at least 7 days beforehand by letter, telegram, telex or fax. The call may be verbal and the meeting may be held immediately if all of the directors are in agreement.

3. For the Board of Directors to validly deliberate, at least one half of the directors are required to be present or represented.

The Board's decisions are taken at a majority of the members present or represented.

The acting Chairman has a casting vote.

4. An attendance sheet shall be held and signed by directors participating in the Board meeting.

5. The internal regulations established by the Board of Directors may provide that directors participating in a Board meeting by videoconference in accordance with the applicable regulations are deemed present for the purposes of calculating quorum and majority.

This provision shall not apply for the adoption of the following decisions:

- appointment, remuneration, removal of the Chairman, CEO and Executive Vice Presidents;

- closing of annual accounts, consolidated accounts and preparation of management report and report on the management of the group.

6. The Board of Directors' deliberations are recorded in minutes held in accordance with the applicable laws. The minutes are signed by the acting Chairman and by one or two directors.

Copies or excerpts of the minutes of the Board of Directors' deliberations shall be validly certified by the Chairman or by the CEO.

Powers of the Board of Directors

1. The Board of Directors determines the Company's business guidelines and ensures that they are implemented. Subject to the powers expressly granted by law to shareholders' meetings and within the limit of its corporate objects, it deals with any matter relating to the proper running of the Company and by its deliberations governs the affairs of the company.

In its dealings with third parties, the Company is bound even by acts of the Board of Directors that are outside its corporate purpose, unless it can prove that the third party knew that that act was ultra vires or could not reasonably have been unaware thereof in view of the circumstances, it being specified that mere publication of the articles of association does not suffice to establish proof thereof.

2. The Board of Directors shall carry out any controls and verifications it deems appropriate.

Each director shall receive the information necessary to the performance of his duties and may obtain all documents he considers useful from the General Management.

3. The Board of Directors may give all delegations of authority to the representatives of its choice within the limit of its authority under the law and under these articles of association.

The Board may decide on the creation of review committees in charge of studying the issues that the Board or its Chairman submits to it.

General Management
(Company bylaws, Article 19)

Mode of operation

In accordance with Article L. 225-51-1 of the Commercial Code, the Company's General Management is ensured, under his responsibility, either by the Chairman of the Board of Directors or by any other individual appointed by the Board of Directors with the title of CEO.

The choice between these two modes of operation of General Management is made by the Board of Directors. The Board's decision concerning the choice of mode of operation of General Management is taken by majority vote of the directors present or represented. Shareholders and third parties are informed of the choice made by the Board of Directors under the conditions set forth by the applicable regulations.

The Board of Directors may modify the option chosen at any time.

A change in the mode of operation of General Management shall not entail any modification of the articles of association.

Depending on the mode of exercise chosen by the Board of Directors, the Chairman or a CEO shall ensure, under his responsibility, the General Management of the Company.

The CEO is appointed by the Board of Directors, which sets the duration of his term of office, determines his remuneration and, as applicable, the restrictions on his powers.

For the performance of his duties, the CEO must be under the age of 75. When this age limit is exceeded during the course of his term of office, the CEO shall be deemed to have automatically resigned and a new CEO shall be appointed.

The CEO may be removed from office at any time by the Board of Directors. Removal of a CEO who is not also the chairman may give rise to damages if decided without valid cause.

Powers of the CEO

The CEO is vested with the broadest powers to act in all circumstances in the name of the Company. The CEO shall exercise these powers within the limit of the corporate objects, and subject to the powers expressly granted by law to shareholders' meetings and to the Board of Directors.

The CEO represents the Company in its dealings with third parties. The Company is bound even by those acts of the CEO that are outside its corporate objects, unless it can prove that the third party knew that that act was ultra vires or could not reasonably have been unaware thereof in view of the circumstances, it being specified that mere publication of the articles of association does not suffice to establish proof thereof.

Executive Vice Presidents

Upon the motion of the CEO, whether this position is filled by the Chairman of the Board of Directors or by another person, the Board of Directors may name one or more individuals with responsibility for assisting the CEO with the title of Executive Vice Presidents.

The maximum number of Executive Vice Presidents may not exceed five.

In agreement with the CEO, the Board of Directors shall determine the scope and the extent of the powers granted to the Executive Vice Presidents and set their remuneration.

As regards third parties, the Executive Vice Presidents or the Executive Vice Presidents have the same powers as the CEO.

Upon the cessation of his duties or in case of impediment affecting the CEO, the Executive Vice Presidents shall retain, unless otherwise decided by the Board of Directors, their office and authority until the appointment of a new CEO.

The CEO may be removed from office at any time by the Board of Directors. Removal of a CEO who is not also the chairman may give rise to damages if decided without valid cause.

Conditions for the Exercise of Voting Rights – Majority Quorum

At Annual and Extraordinary General Meetings, the quorum is calculated on the basis of the shares comprising the share capital and, in Special Meetings, on the basis of all the shares of the class concerned, net of shares not entitled to voting rights by virtue of the law.

In the event of postal voting, only the forms received by the company prior to the meeting will be considered when calculating the quorum, under the conditions and timeframe set by the decree.

The right to vote conferred to shares is proportional to the capital they represent. With an equal par value, every share in capital or income right carries the right to one vote.

In the event that the shares are pledged, the voting right is exercised by the holder of the securities. The issuing company may not validly vote with shares subscribed, acquired or taken in pledge by it; these shares are not taken into account to calculate the quorum.

The voting takes place and the votes are cast by show of hands, or by those sitting and standing, or by roll call, as decided by the officers of the meeting.

Further Information on Voting Rights

There is no limit in the bylaws on voting rights.

A double voting right is conferred to the holders of registered shares that are fully paid up and that have been registered in the name of the same holder for at least four years.

In the event of conversion to bearer form, the converted share immediately forfeits its double voting right. In the event of a capital increase by incorporation of reserves, profits or share premium, this double voting right applies to new shares issued and allocated free of charge to a shareholder on the basis of existing shares that already carry this right. This revision to the bylaws was unanimously passed by the General Shareholders' Meeting in an extraordinary session on August 24, 1994. It may be cancelled by a General Shareholders' Meeting convened in an extraordinary session and after ratification by a Special Meeting of the beneficiary shareholders.

As of December 31, 2019, there were 68,844,424 shares with a double voting right out of a total of 92,180,190 shares. Thus, the total voting rights are 161,024,614.

The Annual General Shareholders' Meeting is held at least once a year, within six months of the year end, to consider the financial statements of that year, subject to an extension of this timeframe by a legal decision. The Annual General Shareholders' Meeting may only validly deliberate, upon the first convocation, if the shareholders present – represented or voting by post – hold at least one quarter of the shares with a right to vote. No quorum is required upon the second convocation. The meeting decides on the basis of the majority of votes held by shareholders present or represented, including shareholders voting by post.

Shareholders' agreement

None

Crossing Legal Thresholds

Any shareholder whose shareholdings cross the legal thresholds defined by French law, either upwards or downwards, must declare said crossing by notification of the Autorité des Marchés Financiers, pursuant to the law in force. The bylaws of the company do not provide for any additional threshold declarations.

Identification of Shareholders

Within the legal and regulatory framework, the company is authorized to seek the identity of bearer shareholders.

Payment of Dividends

The Annual General Shareholders' Meeting has the power to give every shareholder, for all or part of a dividend payable, the option of receiving this dividend in shares, as provided by French law, or in cash.

The terms of the payment of the dividend in cash are set by the General Meeting or, by default, the Board of Directors. Cash dividends must be paid within a maximum of nine months after the end of the reporting year, unless this timeframe is extended by legal authorization. However, this profit may be distributed as an interim dividend prior to the approval of the annual financial statements when a balance sheet prepared during or at the end of a financial year and certified by the independent auditors discloses that the company has realized a profit since the close of the previous financial year, after recognition of the necessary amortization, depreciation and provisions, as well as after deduction, where relevant, of prior losses and amounts to be transferred to the reserves, as required by French laws or the company bylaws. These interim dividends may not exceed the profit thus defined. No reimbursement of dividends may be required from shareholders unless the distribution was made in violation of legal provisions and the company determines that the beneficiaries were aware of the illegality of this distribution at the time it occurred or could not ignore this nature of the dividends. Where this occurs, the shares in reimbursement are time-barred three years after the payment of these dividends. Dividends not collected within five years of their payment are time-barred (Company bylaws, Article 25).

Financial score

None

Other Information on the Assets, Financial Position and Results for the Group

Major Contracts

Several service agreements were entered into between entities of the divisions of the Sartorius Group and Sartorius Stedim Biotech Group, in order to enable the entities from both divisions to benefit from certain general administrative services under the same terms.

Among these service agreements, the service agreement with the highest volume and importance is in place between Sartorius Stedim Biotech GmbH and Sartorius Corporate Administration GmbH, a 100% subsidiary of Sartorius AG. Sartorius Corporate Administration GmbH provides general administrative services to Sartorius Stedim Biotech and the other entities of the Sartorius Group. Such services include, among others, accounting, treasury management, payroll accounting for human resources, IT systems and legal services. Sartorius Corporate Administration GmbH invoices its services on the basis of the internal and external costs incurred plus a margin of 3%. The services invoiced by Sartorius Corporate Administration GmbH to Sartorius Stedim Biotech GmbH in 2019 totalled €56.6 million against €53.8 million in 2018.

Apart from the above-mentioned service agreements, there are no other contracts with material obligations or commitments that have been concluded outside the ordinary course of the company's business or to which a member of the Sartorius Stedim Biotech Group is a party.

The strategy of the Sales and Marketing organization within the Sartorius Stedim Biotech Group towards customers is to create valuable long-term relationships. Therefore, for example, key account management endeavors to conclude long-term framework contracts with customers. As a total solution provider, Sartorius Stedim Biotech strives to use such contracts to cover the entire product portfolio of Sartorius Stedim Biotech that fits into the validated processes of the customer.

Special Report of the Statutory Auditors on Related Party Agreements

This is a translation into English of the statutory auditors' Special report on related party agreements and commitments of the Company issued in French and it is provided solely for the convenience of English speaking users.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

For the year ended 31 December 2019

To the Shareholders of SARTORIUS STEDIM BIOTECH S.A.,

We are required to inform you, on the basis of the information provided to us, of the terms and conditions of those agreements indicated to us, or that we may have identified in the performance of our engagement. We are not required to comment as to whether they are beneficial or appropriate or to ascertain the existence of any such agreements. It is your responsibility, in accordance with article R. 225-31 of the French Commercial Code ('Code de Commerce'), to evaluate the benefits resulting from these agreements prior to their approval.

In addition, we are required, where applicable, to inform you in accordance with article R. 225-31 of the French Commercial Code concerning the implementation, during the year, of the agreements already approved by the General meeting of shareholders.

We performed those procedures which we considered necessary to comply with professional guidance issued by the French national auditing body ('Compagnie nationale des commissaires aux comptes') relating to this type of engagement. These procedures consisted in verifying that the information provided to us is consistent with the documentation from which it has been extracted.

AGREEMENTS SUBMITTED FOR APPROVAL BY THE GENERAL MEETING OF SHAREHOLDERS

Agreements authorized and concluded during the previous accounting period

We hereby inform you that we have not been advised of any agreements authorized and concluded during the previous accounting period to be submitted to the General meeting of shareholders for their approval in accordance with article L. 225-38 of the French Commercial Code.

Agreements not subject to prior authorization

In accordance with articles L. 225-42 and L.823-12 of the French Commercial Code, we hereby inform you that the following agreement was not subject to prior authorization by your Board of Directors.

It is our responsibility to inform you of the circumstances in which the authorization procedure has not been followed.

- General Assistance and Administrative Services Agreement

  - With the company, Sartorius AG (SAG) 74.3% shareholder of the company Sartorius Stedim Biotech S.A. (SSB S.A.)

  - Person concerned: Mr René Faber (Member of the Board of Directors of SSB S.A. and member of the Executive Committee of SAG).

  - Nature and purpose: general assistance and administrative services agreement signed on 15 February 2018 for an indefinite duration. This agreement covers the recharging by SAG to SSB S.A. of a part of the remuneration of Mr René Faber in respect of the services he performs and provides within the company.

  - Details: the recharge of the said services of the person concerned is calculated using an allocation based on work performed and time spent by the executive for the benefit of SSB S.A.

The amounts invoiced (excluding tax) by SAG to SSB S.A. for the years ended 31 December 2019 is detailed below:

Year end 2019: €. 410 004

This agreement was not subject to prior authorization by your Board of Directors due to an omission.

It should be noted that during its meeting of February 6, 2020, your Board of Directors decided to authorize a posteriori this agreement.

Agreements from prior years not approved by the General meeting of the shareholders

We hereby inform you that the following agreements, authorized and concluded during the year ended 31 December 2018, which were mentioned in our special report on related party agreements and commitments for the year ended 31 December 2018 and which were not approved by the General meeting of shareholders approving the financial statements for the year ended 31 December 2018.

- General Assistance and Administrative Services Agreement
  - With the company, Sartorius AG (SAG) 74.3% shareholder of the company Sartorius Stedim Biotech S.A. (SSB S.A.)
  - Person concerned: Mr Joachim Kreuzburg (Chairman and Chief Executive Officer of SSB SA and Chief Executive Officer of the Executive Committee of SAG).
  - Nature and purpose: general assistance and administrative services agreement signed on 15 February 2018 with retrospective effect commencing 1 January 2015 for an indefinite duration. This agreement covers the recharging by SAG to SSB S.A. of a part of the remuneration of Mr Joachim Kreuzburg in respect of the services he performs and provides within the company.
  - Details: the recharge of the said services of the person concerned is calculated using an allocation based on work performed and time spent by the executive for the benefit of SSB S.A.

  The amounts invoiced (excluding tax) by SAG to SSB S.A. for the years ended 31 December 2017 and 2018 are detailed below:

  Year end 2019: €. 582 804

  Year end 2018: €. 674 216

- Regulated commitments concerning Mr Joachim Kreuzburg
  - With the company Sartorius AG (SAG 74. 3% shareholder of Sartorius Stedim Biotech S.A. (SSB S.A.).
  - Person concerned: Mr Joachim Kreuzburg (Chairman and Chief Executive Officer of SSB S.A. and Chief Executive Officer of the Executive Committee of SAG)
  - Nature and purpose: commitments relating to early departure indemnities, a non-competition clause and supplementary retirement commitments were taken out by SAG for the benefit of Mr Joachim Kreuzburg.
  - Details: the details of these commitments are as follows:

  <u>Early departure indemnity cap:</u>

  In the event of an early departure, at the initiative of the company, of Mr Joachim Kreuzburg from his executive function on the Executive Committee of SAG, the amount of the departure indemnity that falls due will be limited to a maximum amount corresponding to two years of remuneration.

  <u>Non-competition clause</u>

  For two years following the complete termination of his functions within the group SAG, Mr Joachim Kreuzburg will be obliged to comply with a non-competition clause compensated by an indemnity equal to one half of his last annual remuneration, if not waived or terminated.

  <u>Supplementary retirement commitments</u>

  Mr Joachim Kreuzburg benefits from a supplementary retirement scheme in compliance with German law requirements.

In accordance with the Sartorius group overall remuneration policy, these commitments will be recharged to Sartorius Stedim Biotech S.A. upon their occurrence for 20% of their amount.

AGREEMENTS ALREADY APPROVED BY THE GENERAL MEETING OF SHAREHOLDERS

Agreements and commitments approved in previous financial years, which continued during the past year

We hereby inform you that we have not been advised of any agreements already approved by the General meeting of shareholders and continued during the previous financial year.

Marseille, 7 February 2020

The Statutory Auditors

French original signed by

KPMG Audit A division of KPMG S.A.	Deloitte & Associés
John Evans	Philippe Battisti

Resolutions Submitted to the Annual Combined Shareholders' Meeting on March 24, 2020

RESOLUTIONS SUBMITTED TO THE ORDINARY SHAREHOLDERS' MEETING

First resolution

(Approval of financial statements for the year ended 31 december 2019 and discharge to all Directors)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to Ordinary Shareholders' Meetings, after having considered the annual financial statements for the year ended 31 December 2019, the report of the Board of Directors and the Report of the statutory auditors concerning these financial statements, approved the financial statements for the year ended 31 December 2019, which disclosed a net profit of €56,834,137as presented, and the transactions reflected in these financial statements or summarized in these reports.

As a result, the Shareholders' Meeting grants full and unreserved discharge to the Directors for the execution of their management duties for said reporting year.

The Shareholder's Meeting asserts that no overall expenses referred to in article 39, 4° of the general tax code were noted.

Second resolution

(Approval of the consolidated financial statements for the year ended 31 December 2019)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to Ordinary Shareholders' Meetings has, after having considered the corporate consolidated accounts for the year ended 31 December 2019, the report of the Board of Directors and the report of statutory auditors concerning these consolidated accounts, approved the consolidated financial statements for the year ended 31 December 2019, which disclosed a net profit of €236,182,400 as presented, and the transactions reflected in these financial statements or summarized in these reports.

Third resolution

(Assignment of the financial result for the financial year ended 31 December 2019)

The Annual Shareholders' meeting, in accordance with the quorum and majority requirements applicable to Ordinary Shareholders' Meetings, has decided to assign as follows, the income for the year ended 31 December 2019:

- Income of the year : €56,834,137
- Year-earlier profit carried forward: €31,324,481
- Distributable profit: €88,158,618
- Total amount of dividends to be disbursed to shareholders(*): €62,682,529
- Balance resulting from disbursement: €25,476,089

(*) The amount of dividends was calculated on the basis of the total number of shares as of December 31, 2019 (92,180,190 shares).

Each share of the company with a nominal value of €0,20 will entitle its holder to a payment of a net dividend valued at €0,68.

The dividend will be paid as from 31st march, 2020.

The Shareholders' Meeting notes that for individual shareholders domiciled for tax purposes in France, dividends received are subject, pursuant to Article 200 A, 1 A 1° of the French General Tax Code, to a single flat-rate withholding tax of 12.8%, at the shareholder's option, such income may be taxed at the progressive income tax rate. In the latter case, dividends are eligible for the 40% allowance referred to in Articles 158 3 2° and 243 bis of the French General Tax Code. In both cases, when dividends are paid, they are subject to a non-taxable withholding tax at the rate of 12.8% as an advance payment of income tax, which is deducted from the final tax due.

However, in accordance with the third paragraph of Article 117 quater of the French General Tax Code, individuals belonging to a tax household whose reference tax income is less than 50,000 euros for single, divorced or widowed taxpayers or €75,000 for taxpayers subject to joint taxation, may request exemption from this 12.8% withholding tax under the conditions provided for in Article 242 quater of the French General Tax Code.

In addition, for individual shareholders domiciled in France for tax purposes, social security contributions are applied in all cases to dividends paid of 17.2%.

The Shareholders' meeting acknowledges, pursuant to Article 243bis of the French general tax code, that the dividends paid for the last three financial years are the following:

Exercise	Dividend[1)]	Amount eligible for the 40% abatment	Amount not eligible for the 40% abatment	Dividend per shares[1)]
2018	52,540,761	52,540,761	0	0.57€
2017	42,402,887	42,402,887	0	0.46 €
2016	38,713,209	38,713,209	0	0.42 €

[1)] Prior deduction of social contribution on the dividend paid to physical person.

Fourth resolution

(Approval of regulated agreements and commitments covered by Article L.225 - 38 and subsequent of the French Commercial Code)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to Ordinary Shareholders' Meetings, after having considered the report of the Board of Directors and the special report of the Statutory Auditors concerning regulated agreements and commitments as referred in Articles L.225 - 38 and subsequent of the French commercial code:

- takes notice of the conclusions of said report and approves the regulated agreement concluded in 2019 between the Company and Sartorius AG covering the recharge of services of René Fáber performed to the benefit of Sartoris Stedim Biotech S.A., which is mentioned in the special report of the Statutory Auditors;

- takes notice of the conclusions of said report and approves the regulated agreement concluded in fiscal years prior to 2019 with execution continuing in 2019 between the Company and Sartorius AG covering the recharge of services of Joachim Kreuzburg performed to the benefit of Sartoris Stedim Biotech S.A., which is mentioned in the special report of the Statutory Auditors

- takes notice of the conclusions of said report and approves the regulated commitments which are mentioned in such a special report, taken by Sartorius AG to the benefit of Mr Joachim Kreuzburg, relating to a non-competition clause, an earlier departure severance, and a supplementary pension scheme

The Shareholders' Meeting takes note, pursuant to the provisions of the Article L. 225 - 40 of the French commercial code, that the shares of Sartorius AG, shareholders who have interest to the regulated agreement and commitments mentioned in the special report, are not taken into account for the calculation of the majority.

Fifth resolution

(Setting of the annual Directors' fees)

The Shareholder's Meeting, in accordance with the quorum and majority requirements applicable to Ordinary Shareholders' Meetings, approves the annual Director's fees allocated for the 2019 financial year and the followings years to come, until the Shareholders' Meeting decides otherwise, amounting to €249,353.

The Shareholders' Meeting grants full powers to the Board of Directors for allowing such Directors' fees among its members, in whole or in part, and on such terms as it may determine.

Sixth resolution

(Approval of the information mentioned in the Article L.225 - 37 - 3 I of the French commercial code concerning the remuneration due or awarded to the corporate officers for the 2019 financial year)

The Shareholders' Meeting, pursuant to the article L.225 - 100 II of the French commercial code, in accordance with the quorum and majority requirements applicable to Ordinary Shareholders' Meetings, and after having considered the corporate governance report of the Board of Directors, approves the information mentioned in the Article L.225 - 37 - 3 I of the French commercial code concerning the remuneration due or awarded to the corporate officers for the 2019 financial year as described in the corporate governance report of the Board of Directors.

Seventh resolution

(Approval of the fixed, variable and extraordinary components of the remuneration and the benefits of all kinds due or awarded to the Chairman of the Board and Chief Executive Officer for the 2019 financial year)

The Shareholders' Meeting, pursuant to the article L. 225 - 100 III of the French commercial code, in accordance with the quorum and majority requirements applicable to Ordinary Shareholders' Meetings, and after having considered the corporate governance report of the Board of Directors, approves the fixed, variable and extraordinary components of the remuneration and the benefits of all kinds due or awarded to Mr. Joachim Kreuzburg, Chairman of the Board and Chief Executive Officer, for the 2019 financial year.

Eighth resolution

(Approval of the corporate officers' compensation policy)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to Ordinary Shareholders' Meetings, after having considered the corporate governance report of the Board of Directors, pursuant to the article L. 225 - 37 - 2 of the French commercial code, approves the corporate officers' compensation ploicy as described in the corporate governance report of the Board of Directors.

Ninth resolution

(Authorization granted to the Board of Directors to enable the Company to trade in its own shares)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to Ordinary Shareholders' Meetings, having considered the report of the Board of directors, in compliance with the provisions of articles L. 225 - 209 et seq. of the French commercial Code, the directly applicable provisions of the European Commission regulation no. 2273/2003 of 22nd December 2003, the General regulation of the Autorité des marchés financiers (AMF – Financial market authority), and the market practices accepted by the AMF:

1. authorizes the Board of directors, having the right to sub-delegate in compliance with applicable laws and regulations, to make the Company acquire, hold, or transfer, on one or more occasions, shares of the Company in connection with the implementation of a share buyback program subject to the provisions of Articles L. 225 - 209 et seq. of the French commercial Code;

2. decides that the acquisition, sale or transfer of such shares may be effected by any means on the market or over-the-counter, including through the acquisition of blocks of shares; these means include the use of any derivative financial instrument traded on a regulated market or over-the-counter or the delivery of shares as a result of the issuance of securities giving access to the Company's capital through conversion, exchange, redemption, exercise of a warrant or in any other manner either directly or through an investment service provider; the maximum share of the capital acquired or transferred in blocks may reach the entire program; these transactions may be carried out at any time, including during periods of public offer on the capital of the Company, in compliance with the regulations in force;

3. decides that the share buyback program will have, in order of priority, the following objectives:

– to promote liquidity and stimulate the market price of the Company's shares under a liquidity contract in accordance with the AMAFI Code of Ethics recognized by the AMF;

– the cancellation of all or part of the shares thus purchased, within the maximum legal limit of 10% of the total number of shares composing the capital, for a period of twenty-four (24) months, pursuant to the eighteenth (18th) resolution of this general meeting and subject to the adoption of the eighteenth (18th) resolution;

– the delivery of shares (for exchange, payment or otherwise) in the context of external growth, merger, demerger or contributions;

– the delivery of shares upon the exercise of rights attached to securities giving access to the capital by redemption, conversion, exchange, exercise of a warrant or in any other manner;

– the delivery of share to its corporate officers and employees as well as those of companies affiliated to it, under the conditions and in the terms provided for by law, particularly in the context of stock option plan, free granting plan of issued or to be issued shares or company or inter-companies saving plans;

- the conservation of the shares for purposes of patrimonial and financial management.

4. decides that the terms and conditions of the share buyback program are the followings:

- duration of the program: a maximum of 18 months, starting from the date of the present Shareholders' Meeting and expiring on the date when any Shareholders' Meeting of the Company adopts a new share buyback program or, alternatively, on September 24, 2021;

- maximum redemption percentage: 0.10% of the share capital, i.e. 92,180 shares on the basis of 92,180,190 shares making up the share capital at the date of this Shareholders' Meeting; being specified that this limit applies to an amount of the share capital of the Company, which may be adjusted by the Board of Directors to take account of transactions affecting the share capital after the date of the present Shareholders' Meeting, the acquisitions made by the Company can not in any case cause it to hold, directly or indirectly through its subsidiaries, more than 10% of its share capital;

- when the shares are acquired in order to encourage the liquidity of the Company's shares under the conditions defined by the AMF's general regulations, the number of shares taken into account for the calculation of this limit will correspond to the number shares purchased net of the number of shares resold during the term of the authorization;

- maximum unit purchase price (excluding fees and commissions): €250, i.e. a maximum theoretical amount allocated to the share buyback program of €23 045 000 on the basis of the maximum percentage of 0.10%, excluding trading costs, the maximum theoretical amount will be adjusted by the Board of Directors to take into account transactions affecting the share capital after the date of this Shareholders' Meeting.

5. decides that the dividends attached to the treasury shares of the Company shall be affected to the retained earnings account;

6. grants all necessary powers to the Board of directors, with right to sub-delegate in compliance with applicable laws and regulations, to implement this authorization and in particular to establish the terms and conditions of the share buy-back program in compliance with applicable laws and with the present resolution, and notably to proceed, as the case may be, with any adjustment required by transactions on the share capital; to place any purchase order on the stock market; to enter any agreement, notably for the keeping of registers of sale and purchase of shares, to make any and all declarations to the AMF and any other organization, to carry out all formalities, and more generally, to take all appropriate measures.

7. this delegation invalids, in the future, the delegation granted by the shareholders' general meeting of April 3, 2018 in its fortieth (14th) resolution.

Tenth resolution

(*Proxy to carry out formalities)*

The Shareholders' Meeting gives full authority to the bearer of an original, a copy or an extract of the minutes from the present Annual Shareholders' Meeting to accomplish each necessary procedure.

RESOLUTIONS SUBMITTED TO THE EXTRAORDINARY SHAREHOLDERS' MEETING

Eleventh resolution

(Delegation of authority granted to the Board of directors to issue shares and/or securities giving access to the share capital of the Company and/or securities giving the right to the allotment of debt instruments, with preferential subscription rights of the shareholders)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to the extraordinary shareholders' meetings, having considered the Board of directors' report and the Statutory Auditors' special report and after having acknowledged that the share capital has been fully paid-up, and in accordance with the provisions of articles L. 225 - 129 to L. 225 - 129 - 6, L. 225 - 132 to L. 225 - 134 and L. 228 - 91 to L. 228 - 93 of the French Commercial Code:

1. delegates its authority to the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, to proceed, in one or several times, in France or abroad, in the proportion and at the times it considers appropriate, with preferential subscription rights of the shareholders maintained, through public offerings by the Company, with the issuance of (i) shares of the Company, other than preference shares (ii) and/or securities of any

kind whatsoever, other than securities giving the right to the issuance of preference shares, giving access to the share capital of the Company, in new or existing shares, (iii) and/or securities giving the right to the allotment of debt instruments, for valuable consideration or free of consideration, governed by articles L. 228 - 91 et seq. of the French Commercial Code;

2. delegates its authority to the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, to proceed with, in one or several times, in France or abroad, in the proportion and at the times it considers appropriate, in euro or in any other currency or monetary unit established by reference to a basket of currencies, with preferential subscription rights of the shareholders maintained, (i) the issuance of securities giving access to the share capital of companies in which the Company holds directly or indirectly more than half of the share capital and/or (ii) the issuance of securities giving access to the share capital of any company which directly or indirectly holds more than half of the Company's share capital, subject to the authorization by the competent body of the companies referred to in (i) and (ii) above;

3. sets the following limits to the amounts of the issuances that may be carried out pursuant to the present delegation of authority:

a/ the nominal amount of the share capital increase or share capital increases that may be carried out immediately or in the future pursuant to this delegation of authority, shall not exceed a maximum amount of four millions euros (€4,000,000.00), or the equivalent value of this amount as at the date of the issuance decision, not including the nominal value of the shares to be issued, if applicable, pursuant to the adjustments made in order to protect the rights of the holders of securities giving access to the Company's share capital, in accordance with applicable law and regulations as well as contractual provisions, it being specified that the limits of the nominal amount of the capital increases, with or without preferential subscription rights of the shareholders, set from the twelfth (12th) to the seventeenth (17th) resolutions submitted to this Shareholders' Meeting shall be deducted from this overall limit;

b/ the nominal value of the debt instruments that may be issued pursuant to this delegation of authority shall not exceed a maximum amount of five hundred millions euros (€500,000,000.00), or the equivalent value of this amount as at the date of the issuance decision, it being specified that (i) this amount does not include any above-par reimbursement premium, if any were provided for and (ii) the limits of issuance of debt instruments set in the twelfth (12th) to the seventeenth (17th) resolutions submitted to this Shareholders' Meeting shall be deducted from this overall limit;

4. decides that the subscription of the shares and securities of the Company above may be made either in cash or by way of set-off;

5. decides that the Company's shareholders will have a preferential right to subscribe for the issuance or issuances of shares and/or securities that the Board of directors may decide pursuant to this delegation of authority on an irreducible basis in proportion of the number of shares then owned by them;

6. acknowledges that the Board of directors may grant Shareholders additional preferential rights by introducing a reducible subscription right exercisable in proportion to Shareholders' existing preferential rights and within the limits of their requests;

7. acknowledges that this delegation of authority automatically entails, to the benefit of the holders of securities which may be issued pursuant to this delegation of authority, an express waiver by the shareholders of the Company of their preferential subscription rights in respect of the shares to which securities may give access immediately or in the future;

8. acknowledges that, pursuant to article L. 225 - 134 of the French Commercial Code, if irreducible, and, if applicable, reducible subscriptions do not absorb the entirety of the issuance of the shares or the securities giving access to the share capital of the Company, the Board of directors may use, on the conditions provided by law and in the order as it shall determine, any or all of the options listed below:

– to limit the capital increase to the amount of the subscriptions, provided that said amount equals at least three quarters of the amount of the issuance decided upon;

– to freely allocate some or all the unsubscribed shares or securities giving access to the share capital of the Company;

– to offer all or part of the unsubscribed shares or securities giving access to the share capital of the Company to the public on French market or abroad;

9. decides that any issuance of warrants giving entitlement to subscribe for the Company's shares may also be made by way of free allocations to the owners

of existing shares, it being specified that the Board of directors may decide that fractional allotment rights will be neither negotiable nor transferable and that the corresponding securities will be sold;

10. acknowledges that the Board of directors shall report on the use made by it of such delegation of authority to the next ordinary shareholders' meeting in accordance with applicable laws and regulations;

11. grants the Board of directors any necessary powers, with the right to sub-delegate in accordance with applicable law and regulations, to implement this delegation of authority and, in particular:

- decide the share capital increase and determine the nature of the shares and/or the securities to be issued;

- decide the amount of the share capital increase, the issue price of the shares and/or securities to be issued and, if applicable, the amount of the issue premium;

- determine the dates, the terms and conditions of the share capital increase, the characteristics of the shares and/or securities to be issued, in addition, in the case of bonds or other debt instruments, determine whether or not they are subordinated and, if so, their level of subordination, in accordance with the provisions of article L. 228 - 97 of the French Commercial Code, set their interest rate (interest rate which may be fixed or variable, or zero-coupon or indexed), specify any circumstances of compulsory or optional suspension or cancellation of interest payments, stipulate their term (fixed or perpetual) and the possibility of a reduction or increase in their nominal value, and set the other terms of issuance, including the granting of guarantees or security interests, and of amortization, including the possibility of redemption by delivery of Company assets; if necessary, such securities may be accompanied by warrants entitling their holders to the allotment, acquisition or subscription of bonds or other debt instruments as defined by the market authorities (for example, due to their redemption or remuneration terms or other rights such as indexation or option rights); and amend, during the term of the relevant shares and/or the securities, the above terms, in compliance with the applicable formalities;

- determine the means of payment of the shares and/or of the securities giving access or that may give access to the share capital of the Company to be issued immediately or in the future;

- set, where necessary, the terms for the exercise of rights, such as rights to conversion, exchange or redemption as the case may be, including by delivery of Company assets such as shares and/or securities already issued by the Company, attached to the shares and/or securities giving access or that may give access to the share capital of the Company to be issued immediately or in the future and, in particular, the period, which may be retrospective, from which dividends will be payable on the new shares, as well as all other terms and conditions of the completion of the share capital increase(s);

- set the terms under which the Company will have, if necessary, at any time or during fixed periods, the right to purchase or exchange on the stock exchange or off-market securities giving access to the share capital of the Company issued or to be issued immediately or in the future with the purpose of canceling such securities or not, taking into account the applicable legal provisions;

- determine the conditions under which, in accordance with applicable law, the allotment rights of holders of securities giving access to shares may be temporarily suspended;

- at its own discretion, charge the costs of capital increases against the premium arising thereon and deduct from this premium the sums necessary to increase the legal reserve;

- determine and make all adjustments to take account of the impact of transactions involving the share capital of the Company, in particular a change in the nominal value of the share, increase in share capital by incorporation of reserves, free allocation of shares, stock split or reverse stock split, distribution of dividends, reserves or premiums or of any other assets, redemption of capital or any other transaction affecting shareholders' equity or the share capital, and set all other terms enabling, where necessary, the rights of holders of securities giving access to the share capital of the Company to be preserved;

- duly record completion of each capital increase carried out pursuant to this delegation of authority and make the necessary amendments to the articles of association of the Company; and

- generally, enter into all agreements, in particular to ensure completion of the proposed issues, take all measures and accomplish all formalities required for the issuance, listing and financial administration of shares and/or securities issued under this delegation of authority and the exercise of the rights attached thereto.

12. notes that this delegation invalids, in the future, the delegation granted by the general meeting of April 3, 2018 in its fifteenth (15th) resolution.

This delegation of authority is granted for a period of twenty-six (26) months as of the date of this Shareholders' Meeting.

Twelfth resolution

(Delegation of authority granted to the Board of directors to issue shares and/or securities giving or capable of giving access to the share capital of the Company and/or securities giving the right to the allotment of debt instruments, without preferential subscription rights of the shareholders, through public offerings)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to the extraordinary shareholders' meetings, having considered the Board of directors' report and the Statutory Auditors' special report and after having acknowledged that the share capital has been fully paid-up, and in accordance with the provisions of articles L. 225 - 129 trough L. 225 - 129 - 6, L. 225 - 134 through L. 225 - 136 and L. 228 - 91 through L. 228 - 93 of the French Commercial Code:

1. delegates its authority to the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, to proceed, in one or several times, in France or abroad, in the proportion and at the times it considers appropriate, with the issuance through one or several public offering(s) by the Company, other than public offers addressed exclusively to qualified investors or to a restricted circle of investors as defined in the article L. 411 - 2 of the French Monetary and Financial Code and submitted to this general meeting in its thirteenth (13th) resolution, of (i) shares, other than preference shares, and/or (ii) securities of any kind whatsoever, other than securities giving the right to the issuance of preference shares, giving access to the share capital of the Company, in new or existing shares, and/or (iii) securities giving the right to the allotment of debt instruments, for valuable consideration or free of consideration, governed by articles L. 228 - 91 et seq. of the French Commercial Code;

2. delegates its authority to the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, to proceed in one or several times, in France or abroad, in the proportion and at the times it considers appropriate, through public offerings, with the issuance through one or several public offering(s) by the Company, other than public offers addressed exclusively to qualified investors or to a restricted circle of investors as defined in the article L. 411 - 2 of the French Monetary and Financial Code and submitted to this general meeting in its thirteenth (13th) resolution, of shares and/or of securities giving or capable of giving access to the share capital of the Company following the issuance by the companies that the Company holds directly or indirectly more than half of the share capital or by any company which directly or indirectly holds more than half of the Company's share capital, of securities giving or capable of giving access to the share capital of the Company; this delegation of authority automatically entails an express waiver by the shareholders of their preferential subscription rights in respect of the shares and/or the securities giving or capable of giving access to the share capital of the Company to which these securities may give access;

3. delegates its authority to the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, to proceed, through one or several public offering(s) by the Company, other than public offers addressed exclusively to qualified investors or to a restricted circle of investors as defined in the article L. 411 - 2 of the French Monetary and Financial Code and submitted to this general meeting in its thirteenth (13th) resolution, in one or several times, in France or abroad, in the proportion and at the times it considers appropriate, in euro or in any other currency or monetary unit established by reference to a basket of currencies, with the issuance of (i) securities giving access to the share capital of companies in which the Company holds directly or indirectly more than half of the share capital and/or (ii) securities giving access to the share capital of any company which directly or indirectly holds more than half of the Company's share capital, subject to the authorization by the competent body of the companies referred to in (i) and (ii) above;

4. sets the following limits to the amounts of the issuances that may be carried out pursuant to this delegation of authority:

a/ the nominal value of the share capital increase or share capital increases that may be carried out immediately or in the future pursuant to this delegation of authority shall not exceed a maximum amount of four millions euros (€4,000 000.00), or the equivalent value of this amount as at the date of the issuance decision, not including the nominal value of the shares to be issued, if applicable, pursuant to the adjustments made in order to protect the rights of the holders of securities giving access to the Company's share capital, in accordance with applicable law and regulations as well as contractual provisions, it being specified that the nominal value of the share capital increases carried out pursuant to this delegation of authority shall be deducted from the overall limit set in paragraph 3.a/ of the eleventh (11th) resolution submitted to this Shareholders' Meeting;

b/ the nominal value of the debt instruments that may be issued immediately or pursuant to this delegation of authority shall not exceed a maximum amount of five hundred millions euros (€500,000,000.00), or the equivalent value of this amount as at the date of the issuance decision, it being specified that (i) this amount does not include any above-par reimbursement premium, if any were provided for and (ii) the nominal value of the debt instruments shall be deducted from the overall limit set in paragraph 3.b/ of the eleventh (11th) resolution submitted to this Shareholders' Meeting;

5. decides that the subscription of the shares and securities of the Company above may be made either in cash or by way of set-off;

6. decides to waive the shareholders' preferential subscription rights on the shares and/or securities which may be issued pursuant to this delegation of authority, it being specified that the Board of directors may grant shareholders a priority subscription period, in respect of all or part of the issuance of shares and/or securities giving access to the share capital of the Company for such period and on such terms as it shall determine in accordance with the provisions of article L. 225 - 135 paragraph 5 of the French Commercial Code, this priority subscription period shall not give rise to the creation of negotiable rights, shall be exercised in proportion to the number of shares owned by each shareholder and may be exercised, as the Board of directors considers appropriate, on a reducible and irreducible basis, it being specified that shares and/or securities not subscribed for in said manner will be the subject to a public offering in France or abroad;

7. acknowledges that this delegation of authority automatically entails, to the benefit of the holders of securities giving or capable of giving access to the share capital of the Company, which may be issued pursuant to this delegation of authority, an express waiver by the shareholders of their preferential subscription rights in respect of the shares to which securities may give access immediately or in the future;

8. acknowledges that, pursuant to article L. 225 - 134 of the French Commercial Code, if the subscriptions, including when applicable, the subscriptions made by the shareholders of the Company, do not absorb the entirety of the issuance, the Board of directors may use, on the conditions provided by law and in the order as it shall determine, any or all of the options listed below:

- to limit the share capital increase to the amount of the subscriptions received, provided that said amount equals at least three quarters of the amount of the issuance decided upon;

- to freely allocate some or all the unsubscribed shares or securities;

9. acknowledges that pursuant to article L. 225 - 136 of the French Commercial Code:

- the issue price of the shares to be issued shall be at least equal to the minimum set forth by applicable law and regulations as at the date of the issuance decision;

- the issue price of the securities giving or capable of giving access to the share capital of the Company to be issued shares shall be such that the amount collected by the Company immediately, increased if applicable, by the amount which could be collected later on by the Company shall be, for each share issued consequently to the issue of these securities, at least equal to the amount set forth in the paragraph above;

10. acknowledges that the Board of directors shall report on the use made by it of such delegation of authority to the next ordinary shareholders' meeting in accordance with applicable laws and regulations;

11. The Shareholders' Meeting grants the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, with all powers to implement this delegation of authority and, in particular:

- decide to increase the share capital and determine the nature of the shares and/or the securities to be issued;

- decide the amount of the capital increase, the issue price of the shares and/or securities to be issued and, if applicable, the amount of the issue premium;

– determine the dates, terms and conditions of the capital increase or increases, the characteristics of the shares and/or securities to be issued; in addition, in the case of bonds or other debt instruments, determine whether or not they are subordinated and, if so, their level of subordination, in accordance with the provisions of article L. 228-97 of the French Commercial Code, set their interest rate (interest rate which may be fixed or variable, or zero-coupon or indexed), specify any circumstances of compulsory or optional suspension or cancellation of interest payments, stipulate their term (fixed or perpetual) and the possibility of a reduction or increase in their nominal value, and set the other terms of issuance, including the granting of guarantees or security interests, and of amortization, including the possibility of redemption by delivery of Company assets; if necessary, such securities may be accompanied by warrants entitling their holders to the allotment, acquisition or subscription of bonds or other debt instruments as defined by the market authorities (for example, due to their redemption or remuneration terms or other rights such as indexation or option rights); and amend, during the term of the shares and/or the securities in question, the above terms, in compliance with the applicable formalities;

– determine the means of payment of the shares and/or of the securities giving or capable of giving access to the share capital of the Company to be issued immediately or in the future;

– set, where necessary, the terms for the exercise of rights, such as rights to conversion, exchange or redemption as the case may be, including by delivery of Company assets such as shares or securities already issued by the Company, attached to the shares and/or securities giving access to the share capital of the Company to be issued immediately or in the future and, in particular, the period, which may be retrospective, from which dividends will be payable on the new shares, as well as all other terms and conditions of the completion of the share capital increase(s);

– set the terms under which the Company will have, if necessary, at any time or during fixed periods, the right to purchase or exchange on the stock exchange or off-market securities giving access to the share capital of the Company issued or to be issued immediately or in the future with the purpose of canceling such securities or not, taking into account the applicable legal provisions;

– determine the conditions under which, in accordance with applicable law, the allotment rights of holders of securities giving access to shares may be temporarily suspended;

– at its own discretion, charge the costs of capital increases against the premium arising thereon and deduct from this premium the sums necessary to increase the legal reserve;

– determine and make all adjustments to take account of the impact of transactions involving the share capital of the Company, in particular a change in the nominal value of the share, increase in share capital by incorporation of reserves, free allocation of shares, stock split or reverse stock split, distribution of dividends, reserves or premiums or of any other assets, redemption of capital or any other transaction affecting shareholders' equity or the share capital, and set all other terms enabling, where necessary, the rights of holders of securities giving access to the share capital of the Company;

– duly record completion of each capital increase carried out pursuant to this delegation of authority and make the necessary amendments to the articles of association of the Company; and

– generally, enter into all agreements, in particular to ensure completion of the proposed issues, take all measures and accomplish all formalities required for the issuance, listing and financial administration of shares and/or securities issued under this delegation of authority and the exercise of the rights attached thereto.

12. notes that this delegation invalids, in the future, the delegation granted by the shareholders' general meeting of April 3, 2018 in its sixtieth (16th) resolution.

This delegation of authority is granted for a period of twenty-six (26) months as of the date of this Shareholders' Meeting.

Thirteenth resolution

(Delegation of authority granted to the Board of directors to issue shares and/or securities giving or capable of giving access to the share capital of the Company and/or the issuance of securities giving the right to the allotment of debt instruments, without the preferential subscription rights of the shareholders, through public offers addressed exclusively to qualified investors or to a restricted circle of investors as defined in the article L. 411-2 of the French Monetary and Financial Code)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to the extraordinary shareholders' meetings, having considered the Board of directors' report and the Statutory Auditors' special report and noted that the share capital has been fully paid-up, and in accordance, on the one hand, with the provisions of articles L. 225 - 129, L. 225 - 129 - 2, L. 225 - 134 through L. 225 - 136 and L. 228 - 91 through L. 228 - 93 of the French Commercial Code, and, in the other hand, with those of article L. 411 - 2 of the French Monetary and Financial Code :

1. delegates its authority to the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, to proceed, under public offers addressed exclusively to qualified investors or to a restricted circle of investors referred to in article L. 411 - 2 of the French Monetary and Financial Code, in one or several times, in France or abroad, in the proportion and at the times it considers appropriate, under the conditions and maximum limits determined by laws and regulations, with the issuance through one or several public offer(s) addressed exclusively to qualified investors or to a restricted circle of investors as defined in the article L. 411 - 2 of the French Monetary and Financial Code of (i) the issuance of shares, other than preference shares, and/or of securities of any kind whatsoever, other than securities giving the right to the issuance of preference shares, giving or capable of giving access to the share capital of the Company, in new or existing shares, and/or (ii) the issuance of securities which are equity securities giving access to other equity securities or giving the right to the allotment of debt instruments, for valuable consideration or free of consideration, governed by articles L. 228 - 91 et seq. of the French Commercial Code;

2. delegates its authority to the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, to proceed, through one or several public offer(s) addressed exclusively to qualified investors or to a restricted circle of investors referred to in article L. 411 - 2 of the French Monetary and Financial Code, in one or several times, in France or abroad, in the proportion and at the times it considers appropriate, under the conditions and maximum limits determined by laws and regulations, with the issuance of shares and/or securities giving or capable of giving access to the share capital of the Company to issue after the issuance, by the companies in which the Company holds directly or indirectly more than half of the share capital or by any company that holds directly or indirectly more than half of the share capital, of securities giving or capable of giving access to the share capital of the Company; this decision shall automatically entails, to the benefits of the holders of the securities that may be issued by the above companies, an express waiver by shareholders of their preferential subscription rights in respect of the shares or securities giving or capable of giving access to the capital of the Company to which these securities entitle;

3. delegates its authority to the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, to proceed, through one or several public offer(s) addressed exclusively to qualified investors or to a restricted circle of investors referred to in article L. 411 - 2 of the French Monetary and Financial Code, in one or several times, in France or abroad, in the proportion and at the times it considers appropriate, under the conditions and maximum limits determined by laws and regulations, with the issuance of (i) securities giving or capable of giving access to the share capital of companies in which the Company holds directly or indirectly more than half of the share capital and/or (ii) securities giving or capable of giving access to the share capital of any company which directly or indirectly holds more than half of the Company's share capital, subject to the authorization by the competent body of the companies referred to in (i) and (ii) above;

4. sets the following limits to the amounts of the issuances that may be carried out pursuant to this delegation of authority:

a/ the nominal value of the share capital increase or share capital increases that may be carried out immediately or in the future pursuant to this delegation of authority shall not exceed a maximum amount of four million euros (€4,000,000.00)] or the equivalent value of this amount as at the date of the issuance decision, not including the nominal value of the shares to be issued, if applicable, pursuant to the adjustments made, in order to protect the rights of the holders of securities giving access to the Company's share capital, in accordance with applicable law and regulations as well as contractual provisions, it being specified that the nominal amount of either the capital increase or the share capital increases made under this delegation shall be deducted from the overall limit set in paragraph 3.a/ of the eleventh (11th) resolution submitted to this Shareholders' Meeting;

b/ the nominal value of the debt instruments that may be issued pursuant to this delegation of authority shall not exceed a maximum amount of five hundred million euros (€500,000,000.00) or the equivalent value of this amount as at the date of the issuance decision, it being specified, that (i) this amount does not include any above-par reimbursement premium, if any were provided for and (ii) the nominal amount of debt instruments shall be deducted from the overall limit set in the paragraph 3.b/ of the eleventh (11th) resolution submitted to this Shareholders' Meeting;

5. decides that the subscription of the shares and securities of the Company above may be made either in cash or by way of set-off;

6. decides to waive the preferential subscription rights of the shareholders of the Company on shares and/or securities that may be issued pursuant to this delegation of authority;

7. acknowledges that this delegation of authority automatically entails, to the benefit of the holders of securities giving or capable of giving access to the capital of the Company which may be issued pursuant to this delegation of authority, an express waiver by the shareholders of the Company of their preferential subscription rights in respect of the shares to which securities may give access immediately or in the future;

8. acknowledges that, pursuant to article L. 225 - 134 of the French Commercial Code, if subscriptions, including, when appropriate, the subscriptions of the shareholders of the Company, do not absorb the entirety of the issuance, the Board of directors may use, on the conditions provided by law and in the order as it shall determine, any or all of the options listed below:

- to limit the share capital increase to the amount of the subscription, provided that said amount equals at least three quarters of the amount of the issuance decided upon;

- to freely allocate some or all the unsubscribed shares or securities giving access to the share capital of the Company;

9. acknowledges that, pursuant to article L. 225 - 136 of the French Commercial Code:

- the issue price of shares issued directly shall be at least equal to the minimum stipulated by the laws and regulations applicable on the date of the issuance decision,

- the issue price of securities giving or capable of giving access to the share capital of the Company will be such that the sum received immediately by the Company, increased, if applicable, by that likely to be subsequently received by it for each share issued as a result of the issuance of these securities, shall be at least equal to the minimum subscription price referred to in the preceding paragraph;

10. acknowledges that the Board of directors shall report on the use made by it of such delegation of authority to the next ordinary shareholders' meeting in accordance with applicable laws and regulations;

11. grants the Board of directors any necessary powers, with the right to sub-delegate in accordance with applicable law and regulations, to implement this delegation of authority and, in particular:

- decide the share capital increase and determine the nature of the shares and/or the securities to be issued;

- decide the amount of the share capital increase, the issue price of the shares and/or securities to be issued and, if applicable, the amount of the issue premium;

- determine the dates, terms and conditions of the capital increase or increases, the characteristics of the shares and/or securities to be issued; in addition, in the case of bonds or other debt instruments, determine whether or not they are subordinated and, if so, their level of subordination, in accordance with the provisions of article L. 228 - 97 of the French Commercial Code, set their interest rate (interest rate which may be fixed or variable, or zero-coupon or indexed), specify any circumstances of compulsory or optional suspension or cancellation of interest payments, stipulate their term (fixed or perpetual) and the possibility of a reduction or increase in their nominal value, and set the other terms of issuance, including the granting of guarantees or security interests, and of amortization, including the possibility of redemption by delivery of Company assets; if necessary, such securities may be accompanied by warrants entitling their holders to the allotment, acquisition or subscription of bonds or other debt instruments as defined by the market authorities (for example, due to their redemption or remuneration terms or other rights such as indexation or option rights), and amend, during the term of the shares and/or the securities in question, the above terms, in compliance with the applicable formalities;

- determine the means of payment of the shares and/or of the securities giving or capable of giving access to the share capital of the Company to be issued immediately or in the future;

- set, where necessary, the terms for the exercise of rights, such as rights to conversion, exchange or redemption as the case may be, including by delivery of Company assets such as shares or securities already issued by the Company, attached to the shares and/or securities giving access to the share capital of the Company to be issued immediately or in the future and, in particular, the period, which may be retrospective, from which dividends will be payable on the new shares, as well as all other terms and conditions of the completion of the share capital increase(s);

- set the terms under which the Company will have, if necessary, at any time or during fixed periods, the right to purchase or exchange on the stock exchange or off-market securities giving access to the share capital of the Company issued or to be issued immediately or in the future with the purpose of cancelling such securities or not, taking into account the applicable legal provisions;

- determine the conditions under which, in accordance with applicable law, the allotment rights of holders of securities giving or capable of giving access to shares may be temporarily suspended;

- at its own discretion, charge the costs of capital increases against the premium arising thereon and deduct from this premium the sums necessary to increase the legal reserve;

- determine and make all adjustments to take account of the impact of transactions involving the share capital of the Company, in particular a change in the nominal value of the share, increase in share capital by incorporation of reserves, free allocation of shares, stock split or reverse stock split, distribution of dividends, reserves or premiums or of any other assets, redemption of capital or any other transaction affecting shareholders' equity or the share capital, and set all other terms enabling, where necessary, the rights of holders of securities giving access to the share capital of the Company to be preserved;

- duly record completion of each capital increase carried out pursuant to this delegation of authority and make the necessary amendments to the articles of association of the Company; and

- generally, enter into all agreements, in particular to ensure completion of the proposed issues, take all measures and accomplish all formalities required for the issuance, listing and financial administration of shares and/or securities issued under this delegation of authority and the exercise of the rights attached thereto.

12. notes that this delegation invalids, in the future, the delegation granted by the shareholders' general meeting of April 3, 2018 in its seventeenth (17th) resolution.

This delegation of authority is granted for a period of twenty-six (26) months as of the date of this Shareholders' Meeting.

Fourteenth resolution

(Delegation of authority to the Board of directors to increase the number of shares and/or securities giving or capable of giving access to the share capital of the Company to be issued in case of share capital increase, with or without preferential subscription rights of the shareholders)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to the extraordinary shareholders' meetings, having considered the Board of directors' report and the Statutory Auditors' special report, in accordance with the provisions of articles L. 225-135-1 and R. 225-118 of the French Commercial Code:

1. delegates its authority to the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, to decide, for each of the issuances made pursuant to the eleventh (11th) to thirteenth (13th) resolutions, to increase the number of shares and/or securities giving or capable of giving access to the capital of the Company to be issued in case of share capital increase of the Company with or without preferential rights of shareholders at the same price as the price for the initial issuance and within the time and limits provided by law and regulations and market practices in the day of the issuance decision, and to this day for a period of thirty (30) calendar days from the closing of the subscription and within the limit of fifteen percent [15%] of the initial issue, particularly in order to grant an over-allotment option, provided that the release of shares and/or other securities issued under this delegation of authority may be made either in cash or by way of compensation of receivables, certain due and payable held upon the Company;

2. decides that the nominal value of any share capital increases decided pursuant to this delegation of authority shall be deducted from the amount of the fixed overall limit in paragraph 3.a/ of the eleventh (11th) resolution of this Shareholders' Meeting.

3. decides that the Board of directors may not, without prior authorization granted by the Shareholders' Meeting, use this delegation as from the filing by a third party of a public tender offer on the Company's securities until the end of the offer period.

4. notes that this delegation invalids, in the future, the delegation granted by the general meeting of April 3, 2018 in its eighteenth (18th) resolution.

This delegation of authority is granted for a period of twenty-six (26) months as of the date of this Shareholders' Meeting.

Fifteenth resolution

(Delegation of authority granted to the Board of directors to decide to issue shares and/or securities giving or capable of giving access to the share capital of the Company as consideration for contributions in kind in shares and/or securities giving or capable of giving access to capital, without preferential subscription rights of shareholders)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to extraordinary shareholders' meetings, having considered the Board of directors' report and the Statutory Auditors' special report, in accordance with the provisions of articles L. 225-129 et seq., L. 225-147 and L. 228-91 to L. 228-93 of the French Commercial Code:

1. delegates its authority to the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, to decide, in one or several times, in the proportion and at the times it considers appropriate, on the report of the contributions statutory auditor referred to in article L. 225-147 of the French Commercial Code, the issuance of shares, excluding preference shares and / or securities of any kind whatsoever, excluding securities giving or capable of giving entitlement to preference shares, giving or capable of giving access to the share capital of the Company, whether new or existing shares, in consideration for contributions in kind granted to the Company and consisting of shares and/or securities giving or capable of giving access to the capital when the provisions of article L. 225-148 of the French Commercial Code are not applicable;

2. decides that the nominal amount of any share capital increases that may be realized immediately or in the future under this delegation of authority may not exceed ten percent (10%) of the share capital of the Company at the moment of the capital increase, it is being specified, that the nominal amount or the capital increases made under this delegation of authority shall be deducted from the overall limit set in paragraph 3.a/ of the eleventh (11th) resolution submitted to this Shareholders' Meeting;

3. decides that the securities giving or capable of giving access to the capital of the Company issued may consist of debt securities or be associated with the issuance of such securities or enable their issuance as intermediate securities, it is being specified, firstly, that the nominal amount of debt securities that may be issued pursuant this delegation of authority may not exceed the sum of five hundred millions euros (€500,000,000.00) or the equivalent value of the amount on the date of the issuance decision, and, secondly, the nominal amount of debt securities shall be deducted from the overall limit set in paragraph 3.b/ of the eleventh (11th) resolution of this shareholders' meeting;

4. decides to waive the preferential subscription rights of the shareholders of the Company on shares and/or securities giving or capable of giving access to the share capital of the Company that may be issued pursuant to this delegation to the holders of shares and/or securities, subject of the above contributions in kind;

5. notes that this delegation of authority automatically entails, to the benefit of the holders of securities giving or capable of giving access to the share capital of the Company and which may be issued pursuant to this delegation of authority, an express waiver by the shareholders of the Company of their preferential subscription rights in respect of the shares to which securities may give access immediately or in the future;

6. grants the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, with all powers to implement this delegation of authority and, in particular:

- decide to increase the share capital of the Company in consideration of the above contributions in kind and determine the nature of the shares and/or securities to be issued;

- set the list of shares and/or securities contributed, approve the valuation of contributions in kind, establish the terms for the issuance of shares and/or securities remunerating these contributions, and if necessary, the amount of the cash payment to be made, approve the granting of particular advantages, and reduce, if the contributors consent, the valuation of contributions in kind or the compensation of particular advantages;

- determine the issuance procedures and characteristics of the securities remunerating contributions in kind and make all adjustments to take into account the impact of transactions on the share capital of the Company, in particular a change in the nominal value of the share, increase in share capital by incorporation of reserves, free allocation of shares, stock split or reverse stock split, distribution of dividends, reserves or premiums or of any other assets, redemption of capital or any other transaction affecting shareholders' equity or the share capital, and set all other terms enabling, where necessary, the rights of holders of securities giving access to the share capital of the Company to be preserved;

- at its own discretion, charge the costs of capital increases against the premium arising thereon and deduct from this premium the sums necessary to increase the legal reserve;

- duly record completion of each capital increase carried out pursuant to this delegation of authority and make the necessary amendments to the articles of association of the Company; and

- generally, enter into all agreements, in particular to ensure completion of the proposed issues, take all measures and accomplish all formalities required for the issuance, listing and financial administration of shares and/or securities issued under this delegation of authority and the exercise of the rights attached thereto.

7. notes that this delegation invalids, in the future, the delegation granted by the Shareholders general meeting of April 3, 2018 in its nineteenth (19th) resolution.

This delegation of authority is granted for a period of twenty-six (26) months as of the date of this Shareholders' Meeting.

Sixteenth resolution

(Delegation of authority granted to the Board of directors to increase the share capital of the Company through the capitalization of reserves, earnings or premiums or any other sum upon which capitalization would be permitted)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to the ordinary shareholders' meetings, having considered the Board of directors' report and in accordance with the provisions of articles L. 225 - 129 to L. 225 - 129 - 6 and L. 225 - 130 of the French Commercial Code:

1. delegates its authority to the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, to proceed with, in one or several times, in the proportion and at the times it considers appropriate, the increase of the share capital of the Company by the incorporation of share premiums, reserves, earnings or other amounts that may be converted into capital successively or simultaneously in accordance with applicable law and the articles of association, by freely allocating new shares and/or by increasing the nominal value of existing shares, or through a combination of the two procedures according to the terms that it will set;

2. resolves that the nominal amount of the share capital increase or share capital increases that may be carried out immediately or in the future pursuant to this delegation of authority shall not exceed a maximum amount of four millions euros (€4,000,000.00) it being specified that this nominal amount is a limit separate from the overall limit set in paragraph 3.a/ of the eleventh (11th) resolution submitted to this Shareholders' Meeting.

3. grants the Board of directors any necessary power, with the right to sub-delegate in accordance with applicable law and regulations, to implement this delegation of authority and, in particular:

- determine the amount and nature of sums to be incorporated into the capital, set the number of new shares to be issued and/or the amount by which the nominal value of the existing shares is to be increased and decide the date, which may be retrospective, from which the new shares will be entitled for dividend or the increase in the nominal value of the existing shares will take effect;

- decide, in the event of shares to be issued:

- that fractional rights will not be negotiable and that the corresponding shares will be sold, the proceeds of such sale being allocated to the holders of the rights on terms specified in the law and regulations;

- make all adjustments to take account of the impact of transactions involving the share capital of the Company, in particular a change in the nominal value of the share, increase in share capital by incorporation of reserves, free allocation of shares, stock split or reverse stock split, distribution of dividends, reserves or premiums or of any other assets, redemption of capital or any other transaction affecting shareholders' equity or the share capital, and set all other terms enabling, where necessary, the rights of holders of securities giving access to the share capital of the Company to be preserved;

- at its own discretion, charge, if any, the costs of capital increases against available reserves arising thereon and deduct from this amount the sums necessary to increase the legal reserve;

- duly record completion of each capital increase carried out pursuant to this delegation of authority and make the necessary amendments to the articles of association of the Company; and

- generally, enter into all agreements, in particular to ensure completion of the proposed issues, take all measures and accomplish all formalities required for the issuance, listing and financial administration of shares and/or securities issued under this delegation of authority and the exercise of the rights attached thereto.

4. notes that this delegation invalids, in the future, the delegation granted by the Shareholders general meeting of April 3, 2018 in its twentieth (20th) resolution.

This delegation of authority is granted for a period of twenty-six (26) months as of the date of this Shareholders' Meeting.

Seventeeth resolution

(Delegation of authority granted to the Board of directors to issue shares and/or securities giving or capable of giving access to the share capital of the Company, reserved for members of company savings plan, without preferential subscription rights of the shareholders)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to extraordinary shareholders' meetings, having considered the Board of directors' report and the Statutory Auditors' special report, and in accordance with the provisions of articles L. 225 - 129 et seq. and articles L. 225 - 138 and L. 225 - 138 - 1 of the French Commercial Code and with articles L. 3332 - 1 et seq. of the French Labor Code:

1. delegates its authority to the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, to proceed with, in one or several times, in the proportion and at the times it considers appropriate, the issuance of shares, other than preference shares, and/or of securities of any kind whatsoever, other than securities giving the right to the issuance of preference shares, giving or capable of giving access to the share capital of the Company, in new or existing shares, reserved for members of company savings plans or any other plan for whose members a capital increase may be reserved on equivalent terms under article L. 3332 - 18 of the French Labor Code, implemented within a French or foreign entity or group of entities falling within the scope of the Company's consolidated or combined financial statements pursuant to articles L. 3344 - 1 and L. 3344 - 2 of the French Labor Code, it being specified that the payment of the shares and/or securities may be subscribed either in cash or by way of compensation of receivables, certain due and payable held upon the Company, either by the incorporation of the reserves, the benefits or the premiums to the share capital in the event of free share allocation as the result of the discount and/or the abundance;

2. decides that the nominal amount of the share capital increase or share capital increases that may be carried out immediately or in the future pursuant to this delegation of authority shall not exceed a maximum amount of four millions euros (€4,000,000.00), it being specified that this maximum is separate from the overall limit set in paragraph 3.a/ of the eleventh (11th) resolution submitted to this Shareholders' Meeting;

3. decides to waive the preferential subscription rights of shareholders of the Company with respect to the shares and/or the securities giving access to the share capital of the Company which may be issued pursuant to this delegation of authority, in favor of the beneficiaries defined in paragraph 1 above, and notes that this delegation of authority automatically entails, to the benefit of the holders of securities which may be issued pursuant to this delegation of authority, an express waiver by the shareholders of the Company of their preferential subscription rights in respect of the shares to which securities may give access immediately or in the future;

4. decides that the issue price of the shares and/or securities giving or capable of giving access to the share capital of the Company will be set in accordance with articles L. 3332 - 18 et seq. of the French Labor Code, provided that, the discount set shall not be lower than twenty per cent (20%) of the average quoted price of the Company's share on the regulated market Euronext Paris over the twenty (20) trading days preceding the date of the decision setting the opening date of the subscription period reserved for

the members of company savings plans, nor exceed twenty per cent (20%) of this average; however the Shareholders' Meeting expressly authorizes the Board of directors to reduce or cancel the aforementioned discount, as it considers appropriate, in particular in order to take into consideration the international accounting standards, or, inter alia, locally applicable legal, accounting, tax or social provisions in the countries of certain beneficiaries, the Board of directors may also substitute all or part of the discount by granting shares and/or securities giving access to the share capital of the Company pursuant to the provisions below;

5. authorizes the Board of directors, according to this delegation of authority, to freely allot shares and/or securities giving access immediately or in the future to share capital of the Company to the members of company savings plans to replace in part or all of the discount and/or, if applicable the abundance, it being specified that the total advantage resulting from this allocation in relation with the discount and/or the abundance may not exceed the legal and regulatory limits;

6. grants the Board of directors any necessary power, with the right to sub-delegate in accordance with applicable law and regulations, to implement this delegation of authority and, in particular:

- establish in accordance with the law a list of companies or groups of companies for which the beneficiaries indicated in paragraph 1 above may subscribe for the shares and/or securities giving or capable of giving access to the capital of the Company thereby issued and who may be freely allotted shares and/or securities giving or capable of giving access to the capital of the Company;

- decide that subscriptions for the shares and/or securities may be made directly by beneficiaries belonging to an entity or group savings plan, or via dedicated mutual funds or other vehicles or entities permitted under the applicable law and regulations;

- determine the conditions, in particular as regards length of service, that must be met by the beneficiaries of the new shares or securities that may be issued by the capital increases made according to this resolution;

- set the opening and closing dates for subscriptions of the shares and/or securities;

- set the amounts of the issuances to be made under the present delegation of authority and in particular determine the issue price, terms and conditions of subscription, payment, delivery and date of entitlement to dividends of the shares and/or the securities, which may be retrospective, rules for reduction in the event of oversubscription and any other terms and conditions of the issues, subject to applicable legal and regulatory limits;

- provide for the possibility to proceed, according to the conditions it shall determine, as the case may be, with any adjustments required in accordance with the legal and regulatory provisions;

- in the case of an issue of new shares, charge any amounts required to pay up said shares against reserves, profits, or share premium;

- at its own discretion, charge the costs of capital increases against the premium arising thereon and deduct from this premium the sums necessary to increase the legal reserve;

- duly record completion of each capital increase carried out pursuant to this delegation of authority and make the necessary amendments to the articles of association of the Company; and

- generally, enter into all agreements, in particular to ensure completion of the proposed issues, take all measures and accomplish all formalities required for the issuance, listing and financial administration of shares and/or securities issued under this delegation of authority and the exercise of the rights attached thereto.

7. notes that this delegation invalids, in the future, the delegation granted by the general meeting of April 3, 2018 in its twenty-first (21st) resolution.

Eighteenth resolution

(Delegation of authority granted to the Board of directors to reduce the capital in accordance with Article L. 225 - 2019 of the French Commercial Code)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to extraordinary shareholders' meetings, having considered the Board of directors' report and the Statutory Auditors' special report, in accordance with the corporate law provisions, and in particular with Article L. 225 - 209 of the French Commercial Code:

1. delegates its authority to the Board of directors, with the right to sub-delegate in accordance with applicable law and regulations, to reduce the social capital, in one or several times and at any time as it

deems appropriate, through the cancellation of shares that the Company owns or shall buy pursuant to the implementation of the share buyback program authorized in this general meeting in its ninth (9th) resolution or any later resolution with the same object within the maximum limit of 10% of the capital of the Company and by periods of twenty-four (24) months, and to proceed in the corresponding proportions at a capital reduction, it being specified that this limit shall be adjusted, if necessary, in order to take into account the operations that would affect it after this general meeting;

2. gives the broadest powers to the board of director, with the right to sub-delegate in accordance with applicable law and regulations, to adopt the terms and conditions of the share buyback, charge the difference between the accounting value of the cancelled shares and their nominal value against reserves or share premium, or to amend the Bylaws subsequently to this authorization and to accomplish any necessary procedure.

This delegation of authority is granted for a period of eighteen (18) months as of the date of this Shareholders' Meeting.

Nineteeth resolution

(Delegation of authority granted to the Board of directors to grant free new or existing shares to the benefit of employees or corporate officers, in the limit of 10% of the capital)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to extraordinary shareholders' meetings, having considered the Board of directors' report and the Statutory Auditors' special report, in accordance with Article L. 225 - 197 - 1 of the French Commercial Code:

1. delegates its authority to proceed, to the benefit of the employees that it shall determine and/or the corporate officers of the Company or of any susbisiary company under the provision of the Article L. 225 - 197 - 2 of the French Commercial Code it shall decide, with a granting of free new or existing shares;

2. decides that the granting of shares pursuant to this authorization shall not exceed a number of existing or new shares representing a percentage greater than 10% of the Company's share capital calculated on the attribution date, subject to any adjustments that may be made in accordance with the applicable laws and regulations and, where applicable, to preserve the rights of holders of securities or other rights giving access to the capital;

3. decides that the granting of free shares to their beneficiaries shall be definitive after a period of vesting of one (1) year and that the period of retention of the shares by the beneficiaries is set to one (1) year;

however, in case of disability of the beneficiary meeting the conditions provided in Article L. 225 - 197 - 1 of the French Commercial Code, the definitive vesting of the shares shall occur before the end of the period of vesting. The shares shall be freely transferable from their delivery;

4. decides that the board of directors shall proceed with the granting of free shares and shall determine, in particular:

- the identity of the beneficiaries and the number of shares allotted to each of them; and

- the conditions and criteria of the granting of the shares that shall mandatorily apply to the employees and/or the corporate officers beneficiaries;

5. acknowledges that this delegation of authority automatically entails, to the benefit of the beneficiaries, an express waiver by the shareholders of the Company of their preferential subscription rights in respect of the shares that would be issued under this resolution;

6. grants any necessary power to the board of directors, with the right to sub-delegate in accordance with applicable law and regulations, to implement this authorization, in the conditions set out above and within the limits provided by the law in force and, in particular, to determine, if necessary, the terms and conditions of the issuances that would be carried out under this authorization and the moment of the enjoyment of the new shares, to acknowledge the achievement of the capital increases, to amend the Bylaws subsequently, and, generally, to accomplish any necessary procedure for the issuance, the quotation and the financial service of the shares issued under the present resolution, and to accomplish any useful procedure under the law and regulations in force;

The board of directors shall give notice to the general meeting each year, in the legal and regulatory conditions, in particular pursuant to Article L. 225 - 197 - 4 of the French Commercial Code, of the operations carried out under this resolution.

This delegation of authority is granted for a period of thirty-eight (38) months as of the date of this Shareholders' Meeting.

Twentieth resolution

(Compliance upgrade of the Bylaws; subsequent amendment of Article 15 of the Bylaws)

The Shareholders' Meeting, in accordance with the quorum and majority requirements applicable to Extraordinary Shareholders' Meetings, having considered the report of the Board of directors,

1. acknowledges that the Law n°2019 - 486 of May 22, 2019 related to the economic growth and the transformation of businesses has amended the threshold beyond which the Company must nominate a second director representing the employees, and reduced it from 12 to 8;

2. decides, therefore, to upgrade the Bylaws of the Company in order to ensure its compliance with the Law n°2019 - 486 of May 22, 2019 related to the economic growth and the transformation of businesses;

3. decides, therefore, the amendment of Article 15 of the Bylaws, as followed:

"Article 15 : Board of directors

[Unchanged]

15.8 Directors representing employees

15.8.1 In accordance with the applicable law, when the number of directors is equal to or less than 8, one director representing employees is

- elected by the employees of the company and its direct or indirect subsidiaries which have their registered office located in France under the conditions provided in this article, or

- appointed by the trade union organisation that obtained the most votes during the first round of the elections mentioned in Articles L. 2122 - 1 and L. 2122 - 4 of the French Labour Code in the Company and its direct or indirect subsidiaries which have their registered office located on France, or

- appointed by the Work Council of the Company.

When the number of directors is more than 8, a second director representing employees is :

- elected by the employees of the company and its direct or indirect subsidiaries which have their registered office located in France under the conditions provided in this article, or

- appointed by the trade union organisation that obtained the most votes during the first round of the elections mentioned in Articles L. 2122 - 1 and L. 2122 - 4 of the French Labour Code in the Company and its direct or indirect subsidiaries which have their registered office located on France, or

- appointed by the Work and Economic Committee of the Company

The absence of the appointment of one or more directors representing employees in application of the applicable law and the present constitution shall not entail the invalidity of the deliberations of the board of directors.

[Remainder of the Article unchanged]"

Twenty-first resolution

(Proxy to carry out formalities)

The Shareholders' Meeting gives full authority to the bearer of an original, a copy or an extract of the minutes from the present Annual Shareholders' Meeting to accomplish each necessary procedure.

Report of the Board of Directors

BOARD OF DIRECTORS' REPORT ON RESOLUTIONS SUBMITTED TO THE ANNUAL GENERAL SHAREHOLDERS' MEETING ON 24 MARCH 2020.

Dear Shareholders,

We have convened you to an Ordinary and Extraordinay General Shareholders' Meeting to be held on 24 March 2020, at 13.30pm, at the Company's headquarters Z.I. Les Paluds, Avenue de Jouques, 13400 Aubagne, in order to deliberate on the twenty-one resolutions whose purpose is described and commented below.

The purpose of this report is to present a general explanation of the draft resolutions proposed by the Board of Directors.

Please note that the description of the Company's activity required by the law is included in the management report and the universal registration document related to 2019 financial year.

For further information, the management report and the auditors reports will be presented at the Shareholders' meeting.

The documentation of the Shareholder's meeting, in particular the management report, the universal registraton document and the auditors reports will be provided under the conditions set forth by the applicable law.

RESOLUTIONS SUBMITTED TO THE ORDINARY SHAREHOLDERS MEETING

Approval of the annual financial statements and the consolidated financial statements for the year ended 31 December 2019 (Resolutions n°1 and n°2)

In the first resolution, we submit to your approval the Sartorius Stedim Biotech SA's financial statements for the year ended on 31 December 2019 which resulted in a net profit of €56,834,137 and to discharge all directors.

Please note the absence of expenditures referred to in article 39.4 of the general tax code.

In the second resolution, we submit to your approval the consolidated financial statements for the year ended 31 December 2019 which resulted in a net profit of €236,182,400 .

The detailed financial statements are included in the Universal registration Document available on the Company's website www.sartorius-france.fr.

Allocation of the financial result for the year ended 31 December 2019 (Resolution n°3)

The annual accounts for the financial year ending 31 December 2019 show a net profit of €56,834,137, to which is added the previous retained earnings of €31,324,481, resulting in a distributable profit of €88,158,618.

We propose that you allocate this distributable profit by distributing €62,682,529 as dividends and allocating the balance, i.e. €25,476,089, to the "Retained earnings" account.

The amount of the proposed dividend has been calculated on the basis of the number of shares entitled to dividends as of December 31, 2019, i.e. 92 180 190. Thus, each share with a par value of €0.20 would give rise to the payment of a net dividend of €0,68.

The dividend will be paid as from March 31st, 2020.

We would like to inform you that for individual shareholders who are tax residents in France, dividends received are subject, pursuant to Article 200 A, 1 A 1° of the French General Tax Code, to a single flat-rate withholding tax of 12.8%. At the shareholder's option, this income may be taxed at the progressive rate of income tax. In the latter case, the dividends are eligible for the 40% deduction mentioned in Articles 158 3 2° and 243 bis of the French General Tax Code. In both cases, when dividends are paid, they are subject to a non-discharging withholding tax at the source at the rate of 12.8%, as an interim income tax chargeable against the tax definitively due.

However, in accordance with the third paragraph of Article 117 quater of the French General Tax Code, individuals belonging to a tax household whose taxable income is less than 50,000 euros for single, divorced or widowed taxpayers or 75,000 euros for taxpayers subject to joint taxation, may request exemption from this 12.8% withholding tax under the conditions provided for in Article 242 quater of the French General Tax Code.

In addition, for individual shareholders who are tax residents of France, social security contributions are applied in all cases on the amount of dividends paid, up to a maximum of 17.2%.

Pursuant to the provisions of Article 243 bis of the French General Tax Code, we hereby inform you that the amounts distributed for the last three financial years were as follows::

Exercise	Dividend	Amount eligible for the 40% abatment	Amount not eligible for the 40% abatment	Dividend per shares[1]
2018	52,540,761	52,540,761	0.€	0.57€
2017	42,402,887	42,402,887	0 €	0.46€
2016	38,713,209	38,713,209	0 €	0.42€

[1] Prior deduction of social contribution on the dividend paid to physical person

Ratification and approval of regulated agreements and commitments (Resolution n° 4)

We submit to your approval the regulated agreements and commitments referred to in Articles L. 225 - 38 et seq. of the French Commercial Code, as described in the special report of the statutory auditors, and in particular:

– the regulated agreement concluded in 2019 between the Company and Sartorius AG covering the recharge of services of René Fáber performed to the benefit of Sartoris Stedim Biotech S.A.;

– the regulated agreement concluded in fiscal years prior to 2019 with execution continuing in 2019 between the Company and Sartorius AG covering the recharge of services of Joachim Kreuzburg performed to the benefit of Sartoris Stedim Biotech S.A

– the regulated commitments taken by Sartorius AG to the benefit of Mr Joachim Kreuzburg, relating to a non-competition clause, an earlier departure severance, and a supplementary pension scheme

We invite you to take note of the statutory auditors' special report on regulated agreements and commitments, which will be read to you at the general meeting and which are made available to you in the manner and within the time limits provided for by law . These documents are available on the Company's website (www.sartorius-france.fr).

In accordance with the provisions of Article L. 225 - 40 of the French Commercial Code, the shareholders interested in these agreements and commitments will not take part in the vote on these resolutions. The shares held by the interested parties will not be taken into account for the calculation of the majority but will be taken into account for the calculation of the quorum.

Setting of the annual Directors' fees (Resolution 5)

We submit to your approval the overall annual amount of allocated to the Directors at €249,353for the financial year ending December 31, 2019, as well as for each of the subsequent financial years, until a decision is made to the contrary.

The Board of Directors shall have full power to allocate all or in part of such fees among its members on such terms and conditions as it shall determine.

The Board of Directors shall have full power to allocate all or in part of such fees among its members on such terms and conditions as it shall determine.Approval of the elements and information relating to the compensation of corporate officers for the financial year ended December 31, 2019 and to the compensation policy for such officers (Resolutions 6 to 8)

In accordance with the applicable law, the Board of Directors has prepared its report on corporate governance which will be presented to the General Meeting of March 24, 2020. This document contains in particular all the information required by article L. 225 - 37 - 3 I of the French Commercial Code, details of the elements comprising the compensation of the Chairman and Chief Executive Officer for the financial year ending December 31, 2019, as well as the compensation policy for the Company's corporate officers.

We invite you to take note of the Board of Directors' report on corporate governance, which will be read to you at the General Meeting and which is made available to you in the manner and within the time limits provided for by law and regulations. It is available on the Company's website (www.sartorius-france.fr).

In this context, we submit to your approval:

– in the sixth resolution, in accordance with the provisions of article L. 225 - 100 II of the French Commercial Code, on the information mentioned in I of article L. 225 - 37 - 3 of the French Commercial

Code as described in the Board of Directors' report on corporate governance;

- in the seventh resolution, in accordance with the provisions of article L. 225 - 100 III of the Commercial Code, on the fixed, variable and exceptional components of the remuneration and benefits of any kind due or allocated to Mr. Joachim Kreuzburg, Chairman of the Board and Chief Executive Officer, for the financial year ended December 31, 2019, as described in the Board of Directors' report on corporate governance;

in the eighth resolution, in accordance with the provisions of article L. 225 - 37 - 2 of the French Commercial Code, on the compensation policy for corporate officers as described in the Board of Directors' report on corporate governance.

Authorization granted to the Board of Directors to enable the company to trade in its own shares (Resolutions 9)

We remind you that the General Meeting of March 26, 2019, in its fourteenth resolution, set up a share buyback program for a period of 18 months. The purpose of this program was to promote liquidity and stimulate the market price of the Company's shares under a liquidity contract, within the limit of 0.10% of the share capital and for a maximum buyback price of €150 per share.

We invite you to renew this share buyback program and therefore we submit to your approval the authorization granted to the Board of Directors to enable the Company to acquire, hold, or transfer, its own shares, during a period of 18 months from the general meeting of 24 March 2020, up to a limit of 0.10% of the share capital.

The purpose of the share buyback program would be to promote liquidity and stimulate the market price of the Company's shares under a liquidity contract that complies with the code of ethics of the French Association of Financial Market ("Association Française des Marchés Financiers") recognized by the French Financial Market Authority ("Autorité des Marchés Financiers – AMF").

The share buyback program would have, in order of priority, the following objectives:

- to promote liquidity and stimulate the price of the Company's shares under a liquidity contract that complies with the ethical charter of the French Association of Financial Market ("Association Française des Marchés Financiers") recognized by the French Financial Market Authority ("Autorité des Marchés Financiers – AMF");

- the cancellation of all or part of the shares thus purchased, within the maximum legal limit of 10% of the total number of shares composing the capital, for a period of twenty-four (24) months, pursuant to the eighteenth (18th) resolution of this general meeting and subject to the adoption of the eighteenth (18th) resolution;

- the delivery of shares (for exchange, payment or otherwise) in the context of external growth, merger, demerger or contributions;

- the delivery of shares upon the exercise of rights attached to securities giving access to the capital by redemption, conversion, exchange, exercise of a warrant or in any other manner;

- the delivery of share to its corporate officers and employees as well as those of companies affiliated to it, under the conditions and in the terms provided for by law, particularly in the context of stock option plan, free granting plan of issued or to be issued shares or company or inter-companies saving plans;

- the conservation of the shares for purposes of patrimonial and financial management.

The terms and conditions of the share buyback program would be as follows :

Duration of the program: a maximum of 18 months, starting from the date of this General Meeting and expiring either on the day on which any General Meeting of the Company adopts a new share buyback program or, alternatively, on September 24, 2021;

Maximum redemption percentage allowed : 0.10% of the share capital, i.e. 92,180 shares on the basis of 92,180,190 shares comprising the share capital as of the date of this Shareholders' Meeting; being specified that this limit applies to an amount of the Company's share capital which will be adjusted, if necessary, by the Board of Directors to take into account transactions affecting the share capital subsequent to this Shareholders' Meeting, and that the acquisitions made by the Company may not, under any circumstances, result in the Company holding, directly or indirectly through its subsidiaries, more than 10% of its share capital;

when the shares are acquired in order to promote the liquidity of the Company's shares under the conditions defined by the general regulations of French Financial Market Authority (Autorité des Marchés Financiers)., the number of shares taken into account for the calculation of this limit shall correspond to the number of shares purchased less the number of shares resold during the term of the authorization;

Maximum unit purchase price (excluding fees and commissions) : €250, i.e. a maximum theoretical amount allocated to the share buyback program of €23,045,000 on the basis of the maximum percentage of 0.10%, excluding trading fees, the maximum theoretical amount will be adjusted, if necessary, by the Board of Directors to take into account transactions affecting the share capital subsequent to this general meeting.

The dividends from those shares would be allocated to the retained earnings account.

We also propose that you grant full powers to the Board of Directors, with the option of sub-delegation under the conditions provided for by law and regulations, to implement this authorization, and in particular to determine the terms and conditions of the share buyback program in accordance with the law and this resolution, and, in particular, make any adjustments related to capital transactions, place any stock market orders, enter into any agreements, in particular for the keeping of registers of purchases and sales of shares, make any declarations to the French Financial Market Authority ("Autorité des Marchés Financiers") and any other body, complete any formalities and, in general, do whatever is necessary.

This authorization would render ineffective for the future the authorization granted by the Shareholders' Meeting of March 26, 2019 in its fourteenth (14th) resolution.

Proxy to carry out formalities (Resolution 10)

The Shareholders' Meeting gives full authority to the bearer of an original, a copy or an extract of the minutes from the present Annual Shareholders' Meeting to accomplish each necessary formalities.

RESOLUTIONS SUBMITTED TO THE EXTRAORDINARY SHAREHOLDERS MEETING

Delegation of authority granted to the Board of Directors for the purpose of deciding to issue shares and/or securities giving or capable of giving access to the Company's share capital and/or securities giving entitlement to the allocation of debt securities, with maintenance of the shareholders' preferential subscription right (Resolution 11)

We submit to your approval the delegation to the Board of Directors, with the right to sub-delegate in accordance with applicable law and regulations, in accordance with the provisions of articles L.225 - 129 to L.225 - 129 - 6, L.225 - 132 to L.225 - 134 and L. 228 - 91 and L. 228 - 93 of the French Commercial Code, of your authority to decide, on one or more occasions, in the proportions and at the times it considers appropriate, both in France and abroad, to issue, with shareholders' preferential subscription rights maintained, (i) shares in the Company, excluding preference shares, (ii) and/or securities of any kind whatsoever, excluding securities giving or that may give entitlement to preference shares, giving or that may give access to the Company's share capital, whether new or existing shares, (iii) and/or securities giving entitlement to the allocation of debt securities, whether for payment or free of charge, governed by Articles L. 228 - 91 and seq. of the French Commercial Code.

The Board of Directors, with the right to sub-delegate under in accordance with applicable law and regulations, may also decide, on one or more occasions, in France or abroad, in the proportions and at the times it sees fit, either in euros or in any other currency or monetary unit established by reference to several currencies, with shareholders' preferential subscription rights being maintained, (i) the issuance of securities giving or capable of giving access to the share capital of any company in which the Company directly or indirectly owns more than half of the share capital and/or (ii) the issue of securities giving or capable of giving access to the share capital of any company that directly or indirectly owns more than half of the company's share capital, subject to the authorization of the competent body of the companies referred to in (i) and (ii) above concerned.

The nominal amount of the capital increase(s) that may be carried out immediately or in the future pursuant to this delegation of authority may not exceed a maximum amount of four million euros (€4,000,000), or the equivalent value of this amount on the date of the decision to issue, not taking into account the par value of the shares to be issued, if any, in respect of adjustments to be made, in accordance with applicable laws and regulations and any applicable contractual provisions, to preserve the rights of the holders of securities giving or that may give access to the Company's share capital. The ceilings for increases in the Company's share capital, with or without shareholders' preferential subscription rights, stipulated under the terms of the twelfth (12th) to seventeenth (17th) resolutions submitted for approval by the Shareholders' General Meeting of March 24, 2020, described below, will be deducted from this overall ceiling.

In addition, the nominal amount of the securities that may be issued pursuant to this delegation of authority may not exceed a maximum amount of five hundred million euros (€500,000,000.00), or the equivalent value of this amount on the date of the issuance decision. This amount does not include the redemption premium(s) above par that would be provided for, if applicable. The ceilings for the issuance of debt securities stipulated in the twelfth (12th) to seventeenth (17th) resolutions submitted for the approval of the General Meeting of 24 March 2020, described below, will be deducted from this overall ceiling.

The funds resulting from the possible use of this delegation will be entirely dedicated to the operational development of the Company and will be used to finance the growth of its business, promote its development and make operational investments.

Subscriptions of the shares and securities of the Company above may be made either in cash or by way of set-off.

The issuance of shares and/or securities likely to be decided by the Board of Directors in accordance with this delegation of authority shall be reserved in preference to the Company's shareholders, who may subscribe to these possible issues on an irreducible basis in proportion to the number of shares then owned by them.

The Board of Directors shall have the power to institute an additional subscription right subject to reduction, which shall be exercised in proportion to the subscription rights available to the company's shareholders and within the limit of their requests.

This delegation of authority would automatically entail an express waiver by the company's shareholders of their pre-emptive right to subscribe for the shares to which these securities give or may give access to the company's share capital and which may be issued pursuant to this delegation of authority, in favor of the holders of securities giving or that may give access to the company's share capital and which may be issued by virtue of this delegation of authority.

If subscriptions by way of irrevocable entitlement and, where applicable, subscriptions subject to reduction, have not absorbed the entire issue of shares or securities giving or capable of giving access to the Company's share capital, the Board of Directors may use, under the conditions provided for by law and in the order that it shall determine, one and/or other of the following options:

- to limit the capital increase to the amount of the subscriptions, provided that this reaches at least three-quarters of the amount of the issuance decided;

- to freely allocate some or all of the unsubscribed the shares or securities giving access to the Company's share capital;

- to offer all or part of the unsubscribed shares or securities giving access to the share capital of the Company to the public on French market or abroad;

Any issuance of warrants to subscribe for the Company's shares on the basis of this delegation could be carried out by way of a subscription offer, but also by free allocation to owners of existing shares, it being specified that the Board of Directors will have the power to decide that the allocation rights forming fractional shares will not be negotiable and that the corresponding securities will be sold.

If this resolution is adopted, the Board of Directors will have to report to the next ordinary shareholders' meeting, in accordance with the law and regulations, on the use made of this delegation of authority.

We also invite you to give full powers to the Board of Directors, with the right to sub-delegate in accordance with applicable law and regulations, in order to implement this delegation of authority, and in particular:

- decide on the capital increase and determine the nature of the shares and/or securities to be issued;

- decide on the amount of the capital increase, the issue price of the shares and/or securities to be issued and the amount of the premium that may, if applicable, be attached to the issue in accordance with the terms and conditions provided for by law and regulations;

- determine the dates, terms and conditions of the capital increase(s), the characteristics of the shares and/or securities to be issued; decide, in addition, in the case of bonds or other debt securities, whether or not they are subordinated and, if so, their subordination ranking, in accordance with the provisions of Article L. 228 - 97 of the French Commercial Code, set their interest rate (in particular fixed or variable rate interest or zero coupon or indexed interest) and provide, where applicable, for mandatory or optional cases of suspension or non-payment of interest, provide for their term (fixed or indefinite), the possibility of reducing or increasing the nominal value of the shares and/or securities and the other terms of issue, including the granting of guarantees or sureties, and of redemption, including redemption by delivery of company assets; where applicable, these shares and/or securities may be accompanied by warrants giving the right to the allotment, acquisition or subscription of bonds or other debt securities, or provide for the possibility for the company to issue debt securities (assimilated or not) in payment of interest whose payment has been suspended by the company, or take the form of complex bonds within the meaning of the stock market authorities (for example, because of their terms of repayment or remuneration or other rights such as indexation or option rights); modify, during the life of the shares and/or securities concerned, the terms and conditions referred to above, in compliance with the applicable formalities;

- determine the method for paying up the shares and/or securities giving or that may give access to the company's share capital to be issued immediately or in the future;

- set, if applicable, the terms and conditions for exercising rights, where applicable, rights to conversion, exchange, redemption, including by delivery of Company assets such as shares and/or securities already issued by the Company, attached to the shares and/or securities giving or that may give access to the Company's share capital to be issued immediately or in the future and, in particular, set the date, even retroactively, from which the new shares will carry dividend rights, as well as all other terms and conditions for carrying out the capital increase(s);

- set the terms and conditions under which the Company shall have the option of purchasing or exchanging, on or off the market, at any time or during specified periods, the securities issued or to be issued immediately or in the future that give or may give access to the Company's share capital, with a view to cancelling them or not, taking into account the legal provisions in force;

- provide for the possibility of suspending the exercise of the rights attached to the securities issued in accordance with the legal provisions in force;

- at its sole initiative, charge the costs of the capital increase against the amount of the related premiums and deduct from this amount the sums necessary to fund the legal reserve;

- make any adjustments to take into account the impact of transactions affecting the Company's share capital, in particular in the event of a change in the par value of the share, capital increase by capitalisation of reserves, free allocation of shares, stock split or reverse stock split, distribution of reserves or any other assets, amortisation of capital, or any other transaction affecting shareholders' equity, and set the terms and conditions under which the rights of holders of securities giving or potentially giving access to the Company's share capital will be preserved, where applicable;

- record the completion of each capital increase decided pursuant to this delegation of authority and make the corresponding amendments to the Company's Articles of Association; and

- in general, enter into any and all agreements, in particular in order to successfully complete the planned issues, take all measures and carry out all formalities required for the issue, listing and financial servicing of the shares and/or securities issued pursuant to this delegation of authority and for the exercise of the rights attached thereto.

This delegation would render ineffective for the future the delegation granted by the Extraordinary Shareholders' Meeting of April 3, 2018 in its fifteenth (15th) resolution.

This delegation of authority would be granted for a period of twenty-six (26) months as from the Shareholders' Meeting of March 24, 2020.

Delegation of authority granted to the Board of Directors to decide to issue shares and/or securities giving or capable of giving access to the Company's share capital and/or to issue securities entitling their holders to the allocation of debt securities, with cancellation of the shareholders' preferential subscription right, through public offerings (Resolutions 12 and 13)

In accordance with the provisions of Articles L.225-129 and seq. and L.228-91 and seq. of the French Commercial Code, we invite you to delegate the following powers to the Board of Directors , your authority to decide, on one or more occasions, in France or abroad, in the proportions and at the times it deems appropriate, through one or more public offering(s) of the Company, including public offers addressed exclusively to qualified investors or to a restricted circle of investors as defined in the article L. 411-2 of the French Monetary and Financial Code, the issuance of the following financial securities:

- shares, other than preference shares, and/or securities, excluding securities giving access to preference shares, giving access to existing or future shares of the Company or to securities entitling their holders, whether for consideration or free of charge, to the allocation of debt securities governed by Articles L. 228-91 and seq. of the French Commercial Code.

- shares and/or securities giving or capable of giving access to the Company's share capital to be issued the issue by companies in which the Company directly or indirectly owns more than half of the share capital or by any company that directly or indirectly owns more than half of the Company's share capital, of securities giving or capable of giving access to the Company's share capital; these delegations of authority would automatically entail an express waiver by the shareholders of their preferential subscription rights in respect of the shares and/or the securities giving or capable of giving access to the share capital of the Company to which these securities may give access;

- securities giving or that may give access to the share capital of companies of which the company directly or indirectly owns more than half of the share capital and/or (ii) the issue of securities giving or that may give access to the share capital of any company that directly or indirectly owns more than half of the company's share capital, subject to the authorization of the competent body of the companies referred to in (i) and (ii) above concerned.

The nominal amount of the capital increase(s) that may be carried out immediately or in the future pursuant to these delegations of authority may not exceed a maximum amount of four million euros (€4,000,000.00), or the equivalent value of this amount on the date of the issuance decision, not taking into account the par value of the shares to be issued, if any, in respect of adjustments to be made, in accordance with the applicable laws and regulations and any applicable contractual provisions, to preserve the rights of the holders of securities giving or that may give access to the Company's share capital. The nominal amount of the share capital increase(s) carried out pursuant to this delegation of authority will be deducted from the overall ceiling provided for in paragraph 3.a) of the eleventh (11th) resolution described above.

In addition, the nominal amount of the debt securities that may be issued immediately or in the future pursuant to this delegation of authority may not exceed a maximum amount of [five hundred million euros (€500,000.000.00)], or the equivalent value of this amount on the date of the issuance decision, it being specified that (i) this amount does not include the redemption premium(s) above par that would be provided for, if applicable, and (ii) the nominal amount of the debt securities will be deducted from the overall limit provided for in paragraph 3.b) of the eleventh (11th) resolution described above.

Subscriptions for shares or securities giving access to the Company's share capital or debt securities may be made either in cash or by offsetting debts.

The purpose of these resolutions is to provide the Company with all the flexibility necessary to rapidly realize financing opportunities and to be able to open, if necessary, depending on market conditions, its capital to outside investors.

Consequently, we propose that you waive your preferential subscription rights to the shares and/or securities that may be issued pursuant to these delegations of authority, while leaving it to the Board of Directors, in application of Article L. 225-135 paragraph 5 of the French Commercial Code, the right to grant the Company's shareholders, during a period and on terms and conditions that it will determine in accordance with applicable laws and regulations and for all or part of an issue carried out, a priority subscription period that does not give rise to the creation of negotiable rights, which must be exercised in proportion to the number of shares owned by each shareholder and which may be supplemented by a reducible subscription, it being specified that the shares and/or securities not subscribed for within the said priority period may be the subject of a public offering in France or abroad.

These delegations of authority would automatically entail an express waiver by the Company's shareholders, in favor of the holders of securities giving or that may give access to the Company's share capital that may be issued pursuant to this delegation of authority, of their preferential subscription rights to the shares to which these securities give immediate or future entitlement.

If the subscriptions, including, as the case may be, those of the Company's shareholders, have not absorbed the entire issue, the Board of Directors may use, under the conditions provided for by law and in the order it shall determine, one and/or other of the following options:

- to limit the amount of the operation to the amount of subscriptions received on condition that it reaches at least three-quarters of the issue decided,

- to freely allocate some or all of the unsubscribed shares and/or securities.

The issue price of the shares to be issued directly would be at least equal to the minimum provided for by the laws and regulations applicable on the date of the issuance decision. The issue price of the securities giving or that may give access to the Company's share capital would be such that the amount received immediately by the Company, plus, where applicable, the amount that may be received subsequently by the Company, for each share issued as a result of the issue of these securities, would be at least equal to the subscription price of the shares issued directly.

If these resolutions are adopted, the Board of Directors shall report to the next ordinary shareholders' meeting, in accordance with the applicable law and regulations, on the use made of this delegation of authority.

We also propose that you grant full powers to the Board of Directors, with the option to sub-delegate such powers in accordance with the law and regulations, to implement this delegation of authority, and in particular to:

- decide on the capital increase and determine the nature of the shares and/or securities to be issued;

- decide on the amount of the capital increase, the issue price of the shares and/or securities to be issued and the amount of the premium that may, if applicable, be attached to the issue;

- determine the dates, terms and conditions of the capital increase(s), the characteristics of the shares and/or securities to be issued; decide, in addition, in the case of bonds or other debt securities, whether or not they are subordinated and, if so, their subordination ranking, in accordance with the provisions of Article L. 228-97 of the French Commercial Code, set their interest rate (in particular fixed or variable rate interest or zero coupon or indexed interest) and provide, where applicable, for mandatory or optional cases of suspension or non-payment of interest, provide for their term (fixed or indefinite), the possibility of reducing or increasing the nominal value of the shares and/or securities and the other terms of issue, including the granting of guarantees or sureties, and of redemption, including redemption by delivery of company assets; where applicable, these shares and/or securities may be accompanied by warrants giving the right to the allotment, acquisition or subscription of bonds or other debt securities, or provide for the possibility for the company to issue debt securities (assimilated or not) in payment of interest whose payment has been suspended by the company, or take the form of complex bonds within the meaning of the stock market authorities (for example, because of their terms of repayment or remuneration or other rights such as indexation or option rights); modify, during the life of the shares and/or securities concerned, the terms and conditions referred to above, in compliance with the applicable formalities;

- determine the method of paying up the shares and/or securities giving or that may give access to the Company's share capital, whether immediately or in the future;

- set, if applicable, the terms and conditions for exercising rights, where applicable, rights to conversion, exchange, redemption, including by delivery of company assets such as shares and/or securities already issued by the company, attached to the shares and/or securities giving or that may give access to the company's share capital to be issued immediately or in the future and, in particular, set the date, even retroactively, from which the new shares will carry dividend rights, as well as all other terms and conditions for carrying out the capital increase(s);

- set the terms and conditions under which the Company will have the option to purchase or exchange on or off the market, at any time or during specified periods, the securities giving or that may give access to the Company's share capital issued or to be issued immediately or in the future with a view to cancelling them or not, taking into account the legal provisions in force;

- provide for the possibility of suspending the exercise of the rights attached to the securities issued in accordance with the legal provisions in force;

- at its sole initiative, charge the costs of the capital increase against the amount of the related premiums and deduct from this amount the sums necessary to fund the legal reserve;

- make any adjustments to take into account the impact of transactions affecting the Company's share capital, in particular in the event of a change in the par value of the share, capital increase by capitalisation of reserves, free allocation of shares, stock split or reverse stock split, distribution of reserves or any other assets, amortisation of capital, or any other transaction affecting shareholders' equity, and set the terms and conditions under which the rights of holders of securities giving or potentially giving access to the Company's share capital will be preserved, where applicable;

- record the completion of each capital increase decided pursuant to this delegation of authority and make the corresponding amendments to the Company's Articles of Association; and

- in general, enter into any and all agreements, in particular in order to successfully complete the planned issues, take all measures and carry out all formalities necessary for the issue, listing and financial servicing of the shares and/or securities issued pursuant to this delegation of authority and for the exercise of the rights attached thereto.

These delegations would render ineffective for the future the delegations granted by the Extraordinary Shareholders' Meeting of April 3, 2018 in its sixteenth (16th) and seventeenth (17th) resolutions.

Finally, these delegations of authority would be granted for a term of twenty-six (26) months as from the Shareholders' meeting of March 24, 2020.

Delegation of authority granted to the Board of Directors to increase the number of shares and/or securities giving or that may give access to the Company's share capital to be issued in the event of a capital increase, with or without shareholders' preferential subscription rights (Resolution 14)

We invite you to delegate to the Board of Directors, pursuant to Articles L.225 - 135 - 1 and R.225 - 118 of the French Commercial Code, your authority to increase the number of shares and/or securities giving or capable of giving access to the capital of the Company to be issued with or without preferential subscription rights decided pursuant to the [eleventh (11th) to thirteenth (13th)] resolutions presented above, at the same price as that used for the initial issuance and within the time and limits provided for by law and regulations as well as market practices in the day of the issuance decision, for a period of thirty (30) calendar days from the closing of the subscription, up to a maximum of 15% of the initial issue.

The shares and/or other securities issued pursuant to this delegation of authority may be paid up either in cash or by way of set-off.

This delegation of authority would enable the Board of Directors to increase the volume of the capital increase and to set the parameters as close as possible to investors' demand in accordance with the Company's interests.

The nominal amount of the share capital increase(s) decided pursuant to this delegation of authority will be deducted from the amount of the overall ceiling set forth in paragraph 3.a/ of the eleventh (11th) resolution set forth above.

The Board of Directors may not use this delegation of authority from the date of filing by a third party of a public offer for the Company's securities until the end of the offer period, unless the Shareholders' Meeting has given its prior authorization to do so.

This delegation would render ineffective for the future the delegation granted by the Extraordinary Shareholders' Meeting of April 3, 2018 in its eighteenth (18th) resolution.

This delegation of authority would be granted for a period of twenty-six (26) months as from the date of the Shareholders' Meeting of March 24, 2020.

Delegation of authority granted to the Board of directors to decide to issue shares and/or securities giving or capable of giving access to the share capital of the Company as consideration for contributions in kind in shares and/or securities giving or capable of giving access to capital, without preferential subscription rights of shareholders (Resolution 15)

We invite you to delegate to the Board of Directors, pursuant to the provisions of articles L. 225 - 129 and seq., L. 225 - 147 and L. 228 - 91 to L. 228 - 93 of the French Commercial Code, your authority to decide, on one or more occasions, in the proportions and at the times it deems appropriate, on the issue, on the basis of the report of the contribution auditors mentioned in article L. 225 - 147 of the French Commercial Code, of shares, excluding preference shares, and/or securities of any kind whatsoever, excluding securities giving or that may give entitlement to preference shares, giving or that may give access to the company's share capital, whether new or existing shares, in order to remunerate contributions in kind granted to the company and consisting of shares and/or securities giving or that may give access to the share capital, when the provisions of article L. 225 - 148 of the French Commercial Code are not applicable.

The nominal amount of the capital increases that may be carried out immediately or in the future pursuant to this delegation of authority may not exceed [10]% of the Company's share capital on the date of the capital increase, it being specified that the nominal amount of the capital increase(s) carried out pursuant to this delegation of authority shall be deducted from the overall ceiling provided for in paragraph 3.a/ of the eleventh (11th) resolution of the Shareholders' Meeting of March 24, 2020.

The securities giving or that may give access to the Company's share capital thus issued may, in particular, consist of debt securities or be associated with the issue of such securities, or allow the issue of such securities as intermediate securities, it being specified, on the one hand, that the nominal amount of the debt securities that may be issued under this delegation of authority may not exceed the sum of [five hundred million euros (€500,000,000.00)] or the equivalent value of this amount on the date of the decision to issue, and, secondly, the nominal amount of the debt securities will be deducted from the overall ceiling provided for in paragraph 3.b/ of the eleventh (11th) resolution of the Shareholders' Meeting of 24 March 2020.

This resolution would enable the Company's senior management to be granted the necessary resources to enable the rapid issuance of financial securities in the context of external growth transactions and to promote the expansion of the Company and its group.

This delegation of authority would automatically entail an express waiver by the Company's shareholders of their preferential subscription rights to the shares to which these securities may give immediate or future entitlement, in favor of the holders of securities giving or that may give access to the Company's share capital and that may be issued pursuant to this delegation of authority.

We propose that you grant the Board of Directors full powers, with the option of sub-delegation under the conditions set by law and regulations, to implement this delegation of authority, and in particular to:

- decide to increase the company's share capital in consideration for the above-mentioned contributions in kind and determine the nature of the shares and/or securities to be issued ;

- establish the list of shares and/or securities contributed, approve the valuation of the contributions in kind, set the terms and conditions of the issue of shares and/or securities in consideration for such contributions, as well as, if applicable, the amount of the balancing payment to be made, approve the granting of special benefits, and reduce, if the contributors agree, the valuation of the contributions in kind or the consideration for special benefits;

- determine the characteristics of the securities remunerating the contributions in kind and make any adjustments intended to take into account the impact of transactions on the Company's capital, in particular in the event of a change in the par value of the share, a capital increase by capitalisation of reserves, or the allocation of free shares, share splits or reverse splits, distribution of reserves or any other assets, amortization of capital, or any other transaction affecting shareholders' equity, and set the terms and conditions for preserving the rights of holders of securities giving or that may give access to the Company's share capital, where applicable;

- at its sole initiative, charge the costs of the capital increase against the amount of the related premiums and deduct from this amount the sums necessary to fund the legal reserve;

- record the completion of each capital increase decided pursuant to this delegation of authority and make the corresponding amendments to the Company's Articles of Association; and

- in general, enter into any and all agreements, in particular in order to successfully complete the planned issues, take all measures and decisions and carry out all formalities required for the issue, listing and financial servicing of the shares and/or securities issued pursuant to this delegation of authority and for the exercise of the rights attached thereto.

This delegation would render ineffective for the future the delegation granted by the Extraordinary Shareholders' Meeting of April 3, 2018 in its nineteenth (19th) resolution.

This delegation of authority would be granted for a period of twenty-six (26) months as from the General Meeting of March 24, 2020.

Delegation of authority granted to the Board of directors to increase the share capital of the Company through the capitalization of reserves, earnings or premiums or any other sum upon which capitalization would be permitted (Resolution 16)

We propose that you delegate to the Board of Directors, with the option of sub-delegation under the conditions laid down by law and regulations, pursuant to the provisions of Articles L.225-129 to L. 225-129-6 and L. 225-130 of the French Commercial Code, your authority to decide, on one or more occasions, in the proportions and at the times it deems appropriate, to increase the Company's share capital by successive or simultaneous capitalisation of all or part of the reserves, profits and share premiums, merger or contribution or any other sum whose capitalization is permitted by law and the articles of association, in the form of the creation and free allocation of shares and/or an increase in the nominal value of existing shares or through a combination of the two procedures according to the terms that it will set.

This delegation would enable the Company to increase its share capital using its own resources and would give the Board of Directors additional flexibility in the implementation of the Company's strategy.

The nominal amount of the share capital increase(s) that may be carried out immediately or in the future pursuant to this delegation of authority may not exceed a maximum amount of four million euros (€4,000,000.00), it being specified that the nominal amount stipulated above constitutes a ceiling that is autonomous and distinct from the overall ceiling stipulated in paragraph 3.a/ of the eleventh (11th) resolution submitted to the Shareholders' Meeting of 24 March 2020 described above.

We invite you to give full powers to the Board of Directors, with the right to sub-delegate in accordance with applicable law and regulations, in order to implement this delegation of authority, and in particular:

- determine the nature and amount of the sums to be incorporated into the share capital, set the number of new shares to be issued and/or the amount by which the par value of the existing shares making up the share capital will be increased, set the date, even retroactively, as from which the new shares will be entitled to dividends or the date on which the increase in par value will take effect;

decide, in the case of shares to be issued :

- that the rights forming fractional shares will not be negotiable or transferable and that the corresponding shares will be sold, the proceeds of the sale being allocated to the holders of the rights under the conditions provided for by law and regulations;

- to make all adjustments to take into account the impact of transactions on the Company's share capital, in particular in the event of a change in the par value of the share, capital increase by capitalisation of reserves, free allocation of shares, stock split or reverse stock split, distribution of reserves or any other assets, amortisation of capital, or any other transaction affecting shareholders' equity, and to set the terms and conditions according to which the holders of securities that give or may give access to the Company's share capital will be protected, where applicable.

- at its sole initiative, charge, if necessary, to one or more available reserve accounts, the amount of the expenses relating to the corresponding capital increase and deduct from this amount the sums necessary to endow the legal reserve;

- record the completion of each capital increase decided pursuant to this delegation of authority and make the corresponding amendments to the Company's Articles of Association; and

- in general, enter into any agreement, in particular in order to successfully complete the planned issues, take all measures and carry out all formalities and declarations required for the issue, listing and financial servicing of the shares issued pursuant to this delegation of authority as well as for the exercise of the rights attached thereto.

This delegation would invalid, in the future, the delegation granted by the Shareholders' Meeting of April 3, 2018 in its twentieth (20th) resolution.

This delegation of authority would be granted for a period of twenty-six (26) months as from the date of the Shareholders' Meeting of March 24, 2020.

Delegation of authority granted to the Board of directors to issue shares and/or securities giving or capable of giving access to the share capital of the Company, reserved for members of company savings plan, without preferential subscription rights of the shareholders (Resolution 17)

Several requests for delegation of authority to increase the share capital in cash have just been proposed to you. Pursuant we applicable law, we are required to propose a capital increase reserved for the Company's employees. Indeed, the legislator wanted to require companies that carry out capital increases in cash to decide on the opening of their capital to their employees and to the employees of companies related to them.

We do not believe that this method is the most appropriate and the company has, in fact, put in place tools to retain and motivate its employees.

For these reasons, we invite you to reject the resolution referred to in this paragraph.

Nevertheless, in the event that you do not wish to follow our recommendations, we inform you that in this resolution, your authority would be delegated to the Board of Directors for the purpose of deciding, in one or several times, in the proportion and at the times that it considers appropriate, to issue shares, excluding preference shares, and/or securities of any kind whatsoever, with the exception of securities giving or that may give entitlement to preference shares, giving or that may give access to the company's share capital, whether new or existing shares, to the benefit of members of one or more company savings plans, or any other plan to whose members Article L. 3332-18 of the French Labour Code would allow a capital increase to be reserved under equivalent conditions set up within a French or foreign company or group of companies falling within the scope of consolidation or combination of the company's accounts pursuant to Articles L. 3344-1 and L. 3344-2 of the French Labor Code, it being specified that the shares and/or securities subscribed for may be paid up either in cash, or by offsetting against certain, liquid and due claims held against the Company, or by capitalization of reserves, profits or share premiums in the event of a free allocation of shares under the discount and/or the employer's contribution.

The amount of the capital increase(s) that may be carried out immediately or in the future pursuant to this delegation of authority may not exceed a maximum amount of four million euros (€4,000,000.00), it being specified that this ceiling is autonomous and distinct from the overall ceiling set in paragraph 3.a/ of the eleventh (11th) resolution presented to the Shareholders' Meeting of March 24, 2020 and described above.

The issue price of the shares and/or securities giving or that may give access to the Company's share capital would be determined under the conditions set forth in Articles L. 3332-18 and seq. of the French Labor Code and may not be more than twenty percent (20%) lower than the average opening price of the share on the Euronext Paris market over the twenty (20) trading days preceding the date of the decision setting the opening date of the subscription period for the capital increase reserved for members of a company savings plan, nor more than twenty percent (20%) higher than this average. If it deems it appropriate, in particular in order to take into account new international accounting provisions or the legal, accounting, tax and social security regimes applicable in the countries of residence of certain beneficiaries, the Board of Directors may reduce or eliminate the aforementioned discount, within the legal and regulatory limits. The Board of Directors could also replace all or part of the discount by the allocation of shares and/or securities giving access to the company's share capital pursuant to the provisions below.

The Board of Directors, under the terms of this delegation of authority, may proceed with the free allocation of shares and/or other securities giving immediate or future access to the company's shares in substitution for all or part of the discount and/or, where applicable, the employer's contribution, it being understood that the total benefit resulting from this allocation by way of discount and/or employer's contribution may not exceed the legal and regulatory limits.

In addition, full powers would be given to the Board of Directors, with the option of sub-delegation under the conditions laid down by law and regulations, to implement this delegation of authority, and in particular:

- draw up, in accordance with the law, a list of the companies or groups of companies whose beneficiaries indicated in paragraph 1 above may subscribe to the shares and/or securities giving or that may give access to the company's share capital thus issued and benefit, where applicable, from the shares and/or securities giving or that may give access to the company's share capital allocated free of charge;

- decide that subscriptions for shares and/or securities may be made directly by beneficiaries who are members of a company savings plan, or through the intermediary of company mutual funds or other structures or entities permitted by applicable legal and regulatory provisions;

- determine the conditions, in particular seniority conditions, to be met by the beneficiaries of the new shares or securities that may be issued in connection with the capital increases covered by this resolution;

- set the opening and closing dates for subscriptions to the shares and/or securities;

- set the amounts of the issues that will be carried out pursuant to this delegation of authority and, in particular, set the issue prices, dates, deadlines, terms and conditions of subscription, payment, delivery and dividend rights of the shares and/or securities, even retroactively, the reduction rules applicable in the event of oversubscription, as well as the other terms and conditions of the issues, within the legal and regulatory limits in force;

- provide for the right to make any adjustments required in accordance with the legal and regulatory provisions, in accordance with the terms and conditions that it shall determine;

- in the event of the issue of new shares, charge, if applicable, the sums necessary to pay up the said shares against reserves, profits or share premiums;

- at its sole initiative, charge the costs of the capital increase against the amount of the related premiums and deduct from this amount the sums necessary to fund the legal reserve;

- record the capital increase(s) carried out pursuant to this delegation of authority and amend the Company's Articles of Association accordingly; and

- in general, enter into any and all agreements, in particular in order to successfully complete the planned issues, take all measures and decisions and carry out all formalities necessary for the issue, listing and financial servicing of the shares and/or securities issued pursuant to this delegation of authority and the exercise of the rights attached thereto.

This delegation would invalid for the future [the delegation granted by the Extraordinary Shareholders' Meeting of April 3, 2018 in its twenty-first (21st) resolution.

This delegation of authority is granted for a period of twenty-six (26) months as from the date of the Shareholders' Meeting of March 24, 2020.

Delegation of authority granted to the Board of directors to reduce the capital by cancelling shares acquired under buyback program (Resolution18)

We invite you to authorize the Board of Directors, pursuant to Articles L. 225 - 209 and seq. of the French Commercial Code, with the right to sub-delegate in accordance with applicable law and regulation, to reduce the social capital, in one or several times and at any time as it deems appropriate, through the cancellation of shares that the Company owns or shall buy pursuant to the implementation of the share buyback program authorized in this general meeting in its ninth (9th) resolution or any later resolution with the same object within the maximum limit of 10% of the capital of the Company and by periods of twenty-four (24) months, and to proceed in the corresponding proportions at a capital reduction, it being specified that this limit shall be adjusted, if necessary, in order to take into account the operations that would affect it after the Shareholders' meeting of March 24, 2020.

The purpose of this delegation is to provide the Board of Directors with an additional option in the conduct of its financial strategy and would enable it to ensure the preservation of your rights, particularly in periods of high financial volatility.

We also propose that you grant the Board of Directors the broadest powers, with the option to subdelegate such powers in accordance with the law, to set the terms and conditions for the cancellation of shares, to allocate the difference between the book value of the cancelled shares and their par value to any reserve or additional paid-in capital accounts, to make the amendments to the bylaws resulting from this authorization and to carry out all necessary formalities.

This delegation would be valid for a period of eighteen (18) months as from the Shareholders' Meeting of March 24, 2020.

Delegation of authority granted to the Board of directors to grant free new or existing shares to the benefit of employees or corporate officers, in the limit of 10% of the capital (Resolution 19)

We invite you to authorize the Board of Directors, pursuant to article L. 225 - 197 - 1 et seq. of the Commercial Code, to make a free allocation of existing or new shares of the Company, on one or more occasions, to the benefit of such members of staff as it may determine from among the eligible employees and corporate officers of the Company and of companies or groupings related to it under the conditions set out in article L. 225 - 197 - 2 of the Commercial Code.

This authorization would enable the Board of Directors to benefit from an attractive scheme to attract and retain employees and corporate officers, to give them additional motivation and consequently to promote the success of the Company.

The grants of shares made pursuant to this authorization may not relate to a number of existing or new shares representing a percentage greater than 10% of the Company's share capital calculated on the attribution date, subject to any adjustments that may be made in accordance with applicable laws and regulations and, as the case may be, to preserve the rights of holders of securities or other rights giving access to the share capital.

We also propose that you set the duration of the vesting period, at the end of which the allocation of shares to their beneficiaries would be definitive, and the duration of the period of retention of the shares at one year.

However, in the case of disability of the beneficiary meeting the conditions set by Article L. 225 - 197 - 1 of the French Commercial Code, the shares would be definitively allocated before the end of the vesting period. The shares would be freely transferable as from their delivery.

The Board of Directors would proceed with the free allocation of shares and would determine in particular :

- the identity of the beneficiaries and the number of shares allocated to each of them; and

- the conditions and criteria for the allocation of the shares to which the beneficiary employees and/or corporate officers will be compulsorily subject.

This authorization would automatically entail, in favor of the beneficiaries, an express waiver by the shareholders of their preferential subscription rights to the shares that would be issued pursuant to this resolution.

We also propose that you grant the Board of Directors full powers, with the option to sub-delegate such powers in accordance with the legal and regulatory conditions, to implement this authorization, under the above conditions and within the limits authorized by the laws and regulations in force and, in particular, to set, where applicable, the terms and conditions of the issues that would be carried out under this authorization and the dividend entitlement date of the new shares, record the completion of the capital increases, amend the Articles of Association accordingly, and more generally, complete all formalities required for the issue, listing and financial servicing of the securities issued under this resolution and do all that is useful and necessary within the framework of the laws and regulations in force.

The Board of Directors would inform the General Meeting each year, in accordance with the legal and regulatory conditions, in particular article L. 225 - 197 - 4 of the Commercial Code, of the transactions carried out under this resolution.

This delegation would be valid for a period of thirty-eight (38) months from the Shareholders' meeting of March 24, 2020.

Compliance upgrade of the Bylaws; subsequent amendment of Article 15 of the Bylaws (Resolution 20)

Law no. 2019 - 486 of May 22, 2019 relating to the growth and transformation of companies has modified the threshold of directors above which the Company must appoint a second director representing employees to reduce it from 12 to 8. The Company's bylaws should therefore be amended to bring them into compliance with this legislative change.

Thus, we propose that you bring the Company's bylaws into compliance with the Law no. 2019 - 486 of May 22, 2019 and amend the Article 15 of the bylaws as followed:

"Article 15 : Board of directors

[Unchanged]

15.8 Directors representing employees

15.8.1 In accordance with the applicable law, when the number of directors is equal to or less than 8, one director representing employees is:

- elected by the employees of the company and its direct or indirect subsidiaries which have their registered office located in France under the conditions provided in this article, or

- appointed by the trade union organisation that obtained the most votes during the first round of the elections mentioned in Articles L. 2122 - 1 and L. 2122 - 4 of the French Labour Code in the Company and its direct or indirect subsidiaries which have their registered office located on France, or

- appointed by the Work Council of the Company.

When the number of directors is more than 8, a second director representing employees is:

- elected by the employees of the company and its direct or indirect subsidiaries which have their registered office located in France under the conditions provided in this article, or

- appointed by the trade union organisation that obtained the most votes during the first round of the elections mentioned in Articles L. 2122 - 1 and L. 2122 - 4 of the French Labour Code in the Company and its direct or indirect subsidiaries which have their registered office located on France, or

- appointed by the Work and Economic Committee of the Company

The absence of the appointment of one or more directors representing employees in application of the applicable law and the present constitution shall not entail the invalidity of the deliberations of the board of directors.

[Remainder of the Article unchanged]"

Proxy to carry out formalities (Resolution 21)

The Shareholders' Meeting gives full authority to the bearer of an original, a copy or an extract of the minutes from the present Annual Shareholders' Meeting to accomplish each necessary procedure.

We hope that the different proposals made in this report will meet your approval and that you will agree to vote in favor of the corresponding resolutions.

The Board of Directors
represented by its Chairman
Mr Joachim Kreuzburg

Information on the URD and the Annual Financial Report

Declaration of Responsibility for the Universal Registration Document and the 2019 Annual Financial Report

I hereby certify, after having taken all reasonable measures to this effect, that the information contained in the present Universal Registration Document is, to the best of my knowledge, in accordance with the facts and makes no omission likely to affect its import.

I certify, to the best of my knowledge, that the financial statements have been prepared in accordance with applicable accounting standards and give a fair view of the assets, liabilities and financial position and profit or loss of the company and all the activities included in the consolidation, and that the management report enclosed presents a fair review of the development and performance of the business and financial position of the company and of all the activities included in the consolidation as well as a description of the main risks and uncertainties to which they are exposed.

I have received a completion letter from the auditors stating that they have audited the information contained in this Universal Registration Document about the financial position and financial statements and that they have read this document in its entirety.

February 17, 2020

Joachim Kreuzburg
Chairman of the Board and CEO

Table of Reconciliation

In order to facilitate understanding of the present document concerning the presentation of Sartorius Stedim Biotech S.A., the table below has, on the left, the headings from Note 1 of European Regulation No. 809/2004 of April 29, 2004, of the European Commission and in the column on the right, the corresponding pages of the present document.

Glossary

Industrial | Product-specific Terms

Biopharmaceuticals

Biopharmaceuticals, or biologics, are pharmaceutical drugs manufactured in or extracted from biological sources.

Bioreactor

In English-speaking countries, a bioreactor is used as a vessel for cultivating animal or human cells in a culture medium. In non-English-speaking countries, this term is also used synonymously with "fermentor" that is a system in which microorganisms (bacteria, yeast, fungi) multiply. In any case, these vessels are used to obtain cells, parts of these or one of their metabolites.

Downstream processing

Collective term for the various steps that follow fermentation or cell cultivation in the production of biopharmaceuticals; for example separation, purification and concentration

EMA – European Medicines Agency

European Union agency for the evaluation of medicinal products.

FDA – Food and Drug Administration

U.S. governmental agency responsible for monitoring foods and biotechnological, medical, veterinary and pharmaceutical products.

Fermentation

Technical process used to produce or transform intra- or extracellular substances with the help of microorganisms

Fluid management technologies

Technologies and systems for use in handling sensitive biological liquids; for example single-use bags for the preparation, storage and transport of biopharmaceutical solutions, intermediates and final bulk products

Membrane chromatography

Selective separation of mixtures of substances by adsorption to specifically modified membranes (membrane adsorbers) in a flowing system

Membrane

Thin film or foil made of polymers;because of its porous structure, this film is used as core component for all filtration applications.

Monoclonal antibodies

Synthetic antibodies that are increasingly being used in medical diagnosis and treatment

Purification

An important step in downstream processing

Single-use technologies

Technologies and products for a single use, providing significant time and cost savings; for example disposable filters or bags

Upstream processing

Upstream processing is defined as the entire process from early cell isolation and cultivation, to cell banking and culture expansion of cells until final harvesting. It refers to the part of the bioprocess in which cells or cell lines are grown in bioreactors (see bioreactor).

Validation

Systematic checking of essential steps and facilities in research and development and in production, including testing pharmaceuticals, to ensure that the products manufactured can be made reliably and reproducibly in the desired quality

Business | Economic Terms

Amortization

Amortization relates exclusively to potential reductions in the value of goodwill and the allocation of the purchase price to intangible assets acquired as carried out in accordance with IFRS 3.

Cash flow

Cash balance of inflows and outflows of funds, representing the operating activities of an organization. Alternativ: Difference between the available cash at the beginning of an accounting period and that at the end of the period

Derivative financial instruments

Instruments for hedging against the risks of changes in market prices in foreign currencies

EBIT

Earnings before interest and taxes

EBIT margin

Ratio of EBIT (see EBIT) to sales revenue

EBITDA

Earnings before interest, taxes, depreciation and amortization.

EBITDA margin

Ratio of EBITDA (see EBITDA) to sales revenue

Extraordinary items

Extraordinary items essentially cover one-time expenses for corporate projects and integration and acquisition related items.

Fixed assets

Sum of intangible assets, property, plant and equipment and financial assets

Free float

Shares of a public company that are freely available to the investing public

Goodwill

Difference between the price paid for a company or business and its net assets. Goodwill is a form of intangible asset.

Investment rate

Ratio of capital expenditures to sales revenue

Normalized financial result

Financial result excluding fair value adjustments of hedging instruments, as well as currency effects from foreign currency loans

Normalized income tax

Underlying income tax, based on the underlying profit before taxes and non-cash amortization

Order intake

All customer orders which were legally concluded during the respective reporting period

Supply chain management

Setup and coordinated control of integrated flows of materials, information and finances (supply chains) over the entire value-added process

Treasury

Short- and medium-term liquidity management

Underlying EBITDA

EBITDA (see EBITDA) adjusted for extraordinary items (see extraordinary items)

Underlying EBITDA margin

Ratio of operating EBITDA (see underlying EBITDA) to sales revenue

Underlying (consolidated) net profit

Profit adjusted for extraordinary items, non-cash amortization and based on the normalized financial result (see normalized financial result) as well as the corresponding tax effects for each of these items.

A Local Presence Worldwide

Sales
Production | Production and Sales

EMEA | Africa

Dublin, Ireland
Royston, UK
Stonehouse, UK
Epsom, UK
Glasgow, UK
Brussels, Belgium
Aubagne, France
Lourdes, France
Florence, Italy
Madrid, Spain
Barcelona, Spain

Helsinki, Finland
Malmo, Sweden
Umeå, Sweden
St. Petersburg, Russia
Goettingen, Germany
Guxhagen, Germany
Laupheim, Germany
Poznan, Poland
Budapest, Hungary
Vienna, Austria
Tagelswangen, Switzerland
Mohamdia, Tunisia

Asia | Pacific

Beijing, China
Shanghai, China
Seoul, South Korea
Tokyo, Japan
Hanoi, Vietnam
Bangalore, India
Kuala Lumpur, Malaysia
Singapore, Singapore
Melbourne, Australia

Financial Schedule

Annual Shareholders' Meeting in Aubagne, France	March 24, 2020
Payment of dividends[1)]	March 31, 2020
Publication of first-quarter figures for 2020	April 21, 2020
Publication of first-half figures for 2020	July 21, 2020
Publication of nine-month figures for 2020	October 20, 2020
Publication of preliminary figures for fiscal 2020	January 2021
Annual Shareholders' Meeting in Aubagne, France	March, 2021
Publication of first-quarter figures for 2021	April 2021

[1)] Subject to approval by the Annual Shareholders' Meeting

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