

We help shape the sustainable science
of tomorrow and our future society
for the benefit of humankind.

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The Company's annual financial statements and consolidated accounts are included on pp. 24-29 and 32-80.

Biotage

For enhanced global health, today and tomorrow

Biotage is a global corporation whose products help speed up drug development and improve the efficiency of diagnostic testing and the analysis of environmental samples and more.

We develop and sell global market-leading platform solutions for chemical separation and the synthesis of new therapeutic substances. Our products are used in areas such as pharmaceutical research, development, and manufacturing as well as in patient, forensic, and environmental sample preparation prior to analysis. Our broad selection of effective, high-quality, user-friendly solutions streamlines workflows and reduces our customers' impact on the environment. Concern for the environment is a focal point of our business, and we're always actively working on reducing customer requirements for solvents and consumables during their use of our products.

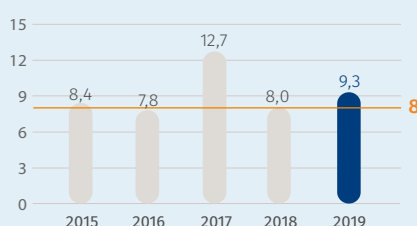
Separation involves, e.g., isolating substances from samples that contain a variety of chemical components or purifying samples to remove contaminants. Synthesizing new substances is a crucial step in the development of effective new drugs.

Financial summary	2019	2018
Net sales, SEK million	1,101.4	910.9
Gross profit, SEK million	685.4	556.6
Gross margin, %	62.2	61.1
Operating profit (EBIT), SEK million	208.1	172.5
Operating margin, %	18.9	18.9
Earnings per share, SEK*	2.87	2.59
Average number of employees	440	404

*before and after dilution

➔ Certain financial figures presented by Biotage are not defined in accordance with IFRS standards. Refer to pp. 78-79 for more information.

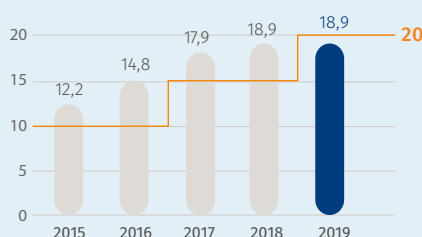
Organic growth, %



Organic growth

An organic growth rate of 9.3% was achieved in 2019. Over the last three years, the average organic growth rate was 10.0 percent.

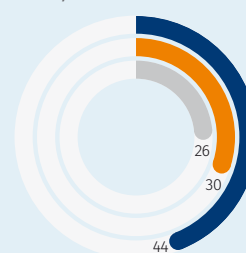
Operating margin, %



Operating margin


The operating margin in 2019 was 18.9%. Over the last three years, the average operating margin was 18.6 percent.

2019 sales by geographic market, %



Sales distribution

● Americas	44%
● APAC	30%
● EMEA	26%



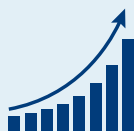
“Our broad selection of effective, high-quality, user-friendly solutions streamlines workflows and reduces our customers’ impact on the environment.”

Our product segments



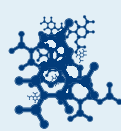
Organic Chemistry

Solutions for separating and synthesizing small molecule drugs and peptides. The solutions are primarily designed for the research and development of new drugs.



Scale-up

Industrial-scale separation solutions suitable for scale-up and production of, e.g., pharmaceuticals and food products.



Biomolecules

Solutions for separating biomolecules such as recombinant proteins, monoclonal antibodies, and other biologically-derived molecules. The solutions are primarily designed for the research and development of new drugs.



Analytical Chemistry

Separation solutions used to prepare samples for analysis. The solutions are primarily designed for use in patient and forensic sample preparation and environmental and food safety testing.

This is how Biotage creates value

We do our part for a more sustainable world, with respect for both the environment and human beings. With our innovative separation technology and green chemistry, we help our customers speed up their development of products and processes that make a positive difference on the environment.

This is Biotage

What we do

Biotage offers solutions for separating molecules and synthesizing chemical substances. Our solutions enable customers all around the world to speed up their drug development, improve their diagnostics, and streamline their research and development processes. Our customers include pharmaceutical companies, hospital laboratories, academic institutions, and government agencies performing environmental and food safety inspections.

Our values drive our business

Collaboration: A culture of one team, based on mutual respect and trust.

Accountability: A culture of continuous development and encouragement by honoring our commitments and responsibilities.

Result oriented: A culture of always solving customer needs, reaching financial results, and provide value for the benefit of humankind.

Entrepreneurial: A culture of innovation, empowerment and openness with the best people and always making decisions that are best for the company.

Trends in the marketplace and strategic priorities

In order to grow profitably and continue to be on the leading edge, we are constantly assessing new opportunities. We see a number of promising trends in the marketplace in the areas of digitalization, precision medicine, biological drugs, food safety, and environmental compliance.

We have identified a number of strategic priorities to help us achieve our goals and operate a successful business.



What we rely on



Financial resources

- Working capital of SEK 329 million.
- Operating cash flow of SEK 212 million.



Intellectual property resources

- An average of 7% of our annual sales reinvested in research and development, enabling us to continue to develop innovative products and solutions.



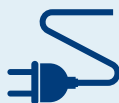
Human capital

- Ca 470 skilled, devoted employees



Social and relationship capital

- Global infrastructure, where around 95% of sales take place through direct partners
- Suppliers
- Partners



Natural resources

- 1,955 m³ of water consumption,
- 61.5 kWh of energy per 1,000 KGBP

The value we create

Our customers

- Reducing the environmental impact of our business
- Speeding up the research process
- Improving analytical throughput
- Streamlining and improving processes

Our employees

- Challenging, stimulating employment
- Skill development
- The opportunity to help save lives and have a positive impact on the environment and the community

The community

- Reduced environmental impact
- New drugs
- Effective diagnostics
- Ensuring the safety of food and water
- Rapid, reliable analyses of environmental to forensic samples and more
- Increasing employment opportunities

Our shareholders

- Increased shareholder value and improved returns
- Profitable growth

8

major new product launches in the past three years

15%

Average growth in the number of employees over the past three years

-7.2%

Solvents in Cardiff production, 2019

9.3%

2019 organic growth rate

18.6%

Average EBIT margin over the past 3 years



Record year and continued growth

I was very pleased to assume the position of CEO of Biotage in November 2019, a role that I feel really honored to hold.

Being able to work for such a benevolent international corporation that helps humankind is an honor, and I am impressed by the work that prior CEO Torben Jørgensen and his team have done to grow the company into what it is today. 2019 was a record year in all ways, with over SEK 1 billion in sales and strong profitability, with growth in all regions and product segments.

With the acquisition of PhyNexus, Inc. in 2019, we are also expanding our business into the rapidly growing area of biomolecules, and in 2020 Biotage plans to launch automated separation solutions for plasmids.

Today, the majority of the top selling drugs on the market are based on biomolecules, which makes it very exciting as Biotage establishes a presence in a new growth market with the express goal

“Together, we have built an innovative and effective organization with the financial strength that makes us flexible and well prepared for the future.”

of building a strong market position. In this way, we will become a more complete separation company, offering solutions within both traditional chemical substances and biomolecules while continuing to take advantage of our global direct sales force.

Well positioned for growth

Biotage is well positioned in relation to important market trends, customer needs, and areas of growth. My goal is to continue to develop our current operations, with increased investment in production capacity, personnel, and research and development, in this way, we will be able to continue to scale up the business. We intend to increase our collaboration with other global leaders and innovative stakeholders in our ecosystem that can complement and strengthen our company and our business model. This will allow us to broaden our product line, reinforce our position within our market niche of separation, and continue to supply world-class platform solutions.

Everything starts with the people in our company.

Our personnel are our greatest competitive advantage and are furthermore impossible to duplicate. Biotage has a fantastic group of co-workers, and at the end of the year, we had around 470 employees in the group, which is an increase of 15%. I believe that successful, sustainable companies that are built for the long haul have a foundation based on a corporate culture driven by meaning and purpose. At Biotage, we are very proud to work toward our vision of helping to create sustainable science that benefits society in the future. Over the past several years, our team has fine-tuned a corporate culture that embodies who we are and what we stand for. We have summarized this in the English slogan “CARE”: Collaboration, Accountability, Results-oriented, Entrepreneurial. This will continue to

guide our daily efforts in our global collaboration as a team to develop, supply, renew, and take responsibility - always taking our employees, stakeholders, and sustainable growth into account.

A lot of my work is based on successfully getting Biotage employees to grow professionally, feel a sense of responsibility, and enjoy their jobs. Along with our corporate culture and vision, this creates a sense of commitment, which I feel is crucial in order for us to enjoy continued success and profitability.

At Biotage, we've worked for a long time to reduce our environmental impact, and we're constantly developing new methods to help our customers shrink their environmental footprint, for example, by minimizing the amount of solvent needed for separation and sample preparation in the systems we sell. Concern for the environment and sustainability are the focal points of everything we do, and we try to be one of the leading players when it comes to sustainable chemistry. By doing this, we lay the groundwork to ensure our continued existence as a company with a sustainable long-term business model that makes a difference in the community. We're also making a large investment in manufacturing right now so we can reuse considerable amounts of solvent in our manufacturing processes and improve our methods of emissions measurement.

What makes our solutions really unique is the high degree of automation they offer and our world-class software, which makes them user-friendly. Their development is being pushed rapidly forward by digitalization in our markets. To continue our journey, we plan to invest heavily in digitalization to ensure that we continue to be on the leading edge and are able to respond to our customers' needs for effective, compliant, and reliable solutions. We're also taking a look at how digitalization can facilitate our efforts to work smarter and more sustainably in order to benefit our customers even more.

Contribute to a more sustainable world, focused on the environment and human beings.

In conclusion, I would also like to mention the fine recognition Biotage received in December 2019, the “2019 SwedenBIO Award”. This prize is awarded annually to companies who not only distinguish themselves through their accomplishments in research and development, but also benefit society. This recognition is a feather in the cap for our broad separation platform and our fantastic team of employees, who work diligently and effectively every day for our customers and communities. Leading a global company based in Sweden that is focused on human beings and the environment has a huge emotional meaning for me, and along with our incredible team, I look forward to continuing to build on our past successes in order to ensure that Biotage continues to be one of the finest life science companies in Sweden.

We are currently in a very challenging environment, where a focus on health, environment and safety is more important than ever, with the COVID-19 virus spreading through society. Everyone is affected by the viral disease, including Biotage. Many of our customers develop methods for the analysis and production of vaccines. We are proud to support the fight against this dangerous virus. Of course, our operations will also be affected and we see difficulties ahead in understanding the full effects, all depending on how long this fight will take. Despite this unwelcome challenge, I very much look forward to working with Biotage's employees to make the best of the situation and continue to deliver to the best of our ability.

Uppsala, Sweden, March 2020

Tomas Blomquist
CEO and Group Director

The environment and trends

To ensure that we meet the future needs of customers and are able to identify new business opportunities, we constantly monitor what's going on in the world around us. There are a number of trends out there today that affect our business and have an impact on our future growth.

Biological medicines


A large and growing proportion of the drugs that are developed and used today include biomolecules, molecules of a biological origin, as an active substance. Pharmaceutical products based on biomolecules are called biological drugs and contain, for example, proteins such as antibodies and hormones. These drugs use different pathways to attack and treat diseases compared to traditional small molecule drugs.

Within this market segment, we plan to launch several automated plasmid and protein chemical separation solutions targeted at the research market. For us, this is a way into a large, growing market that has the potential to introduce new types of treatment.

Precision medicine

Many healthcare institutions are currently undergoing changes in how they treat patients. Thanks to a constantly growing number of new diagnostic methods, an improved understanding of the underlying causes of various diseases, and new drugs based on the specific genetic make-up of individual patients, the runway has been cleared for precision medicine to take off. More focus is now being placed on a patient's ability to respond to treatment and the choice of a therapy can therefore be personalized. This is especially true for cancer care, where many options are now available for personalized treatment.

For our part, this development means a growing demand for chemical separation solutions to streamline the preparation of patient samples for analysis. In this way, we're contributing to more effective care that is personalized to take into account the specific needs of patients.



“Research and development staff at Biotage are working very actively to constantly reduce customers’ use of solvents and consumables.”

Environmental awareness - greener chemistry

Environmental awareness has been steadily increasing throughout the world, and over the past few years, there has been a clear trend toward customers making a conscious effort to reduce their environmental footprints. Research and development staff at Biotage are working very actively to constantly reduce customers’ use of solvents and consumables. Concern for the environment is one of the hallmarks of our business, which means that we not only do our part for a sustainable society, but also ensure that we make a meaningful impact. Through our research and development activities, we actively work on the development of methods that reduce the use of environmentally hazardous solvents in chromatographic separation. As communities continue to expand, demand has been increasing for environmental analyses. Biotage offers a wide variety of sample preparation solutions.

Digitalization

Digitalization has resulted in more streamlined work processes, increased automation, more effective management of data, and the ability to remotely control various types of equipment. As our customers become increasingly more digitally literate, they expect equipment with user-friendly software solutions, where it’s easy to enter instructions and other data.

This has encouraged us to streamline our customers’ workflows and create solutions where customers can remotely control equipment or enter instructions without needing to be physically present in the lab. Data can also be managed through cloud solutions, adding more flexibility and security. This gives us and our customers the option to continuously monitor the status of processes and equipment, optimizing maintenance and minimizing any disruption to operations. We develop solutions that allow us to perform specific equipment servicing and distribute remote software updates, which cuts back on travel, streamlines processes, and enables us to perform such servicing and updates based on the requests and needs of our customers.

Strategic priorities

Biotage has defined seven strategically important areas that are crucial to the company's future growth. This helps both in the short and the long run when it comes to setting strategic priorities and establishing a clear direction for the company.

7.4%

Research and development

Investment in research and development is very important for our long-term success as a company. We need to be market leaders on a global basis in the areas in which we compete and constantly launch new product lines and solutions that meet customers' needs and exceed their expectations. In 2019, we devoted 7.4 percent of our sales to research and development, collaborating to an increasing degree with academic researchers and other companies to develop world-class products.

Constant streamlining of production

Biotage is constantly working on streamlining its product manufacturing. One of the ways we achieve this is by increasing the level of automation in our manufacturing facilities and optimizing the use of contract manufacturing based on overall cost, flexibility, risk, and cash flow considerations. The goal is to increase the contribution each individual product makes to our gross margin. Furthermore, a part of our overall strategy is to constantly evaluate and implement new work procedures in order to improve manufacturing efficiency.

Targeting new market segments and customer groups

Identifying new market segments and customer groups and successfully serving them are important to our growth as a company. We are constantly on the job identifying new business opportunities and developing and introducing customized products based on our technology platforms.

Concern for the environment

Concern for the environment is vitally important in order for us to do our part and contribute to a sustainable society. Our environmental initiatives allow us to continue to make an impact in this area and be an attractive partner for our customers. We are constantly working on reducing the environmental impact of our manufacturing activities as well as minimizing the need for solvents and consumables during our customers' use of our products.



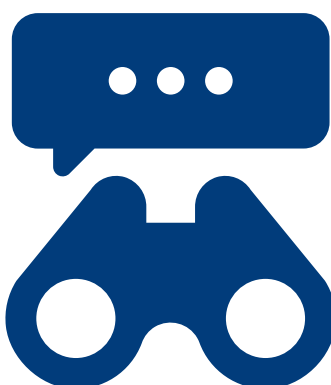
Strong market presence

Biotage needs to have a strong presence in our prioritized markets in order to promote close long-term customer relationships, improve our knowledge of local conditions, and enable us to adapt our products to customers' needs. We are working very actively to strategically improve our market presence by establishing new direct sales offices and reseller alliances, assessing the opportunities for mergers and acquisitions, and strengthening our existing sales organizations where needed. Our global infrastructure is primarily based on direct sales channels - around 95 percent of our sales are direct while only 5 percent are handled through distributors.

Aftermarket sales

Our long-term goal is for at least 60 percent of our sales to come from aftermarket products, which include consumables and services. The rationale for this is that aftermarket sales are more profitable than system sales, are less sensitive to economic cycles, and are generally less seasonal. To reach this goal, our plans include the launch of locally manufactured consumables in specific markets.

52%



Mergers and acquisitions

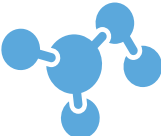
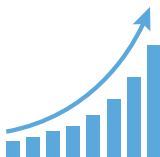

We are constantly evaluating potential acquisitions that can expand our product lines and strengthen our market position in both existing and related product segments. Thanks to our sound profitability, strong growth, and global organization, we have the resources needed to carry out an effective M&A strategy and continuously evaluate potential business combinations. For example, the acquisition of PhyNexus, completed in 2019, aligned with our growth strategy for the chemical separation market and allowed us to expand into new areas of application.



Our product segments

Biotage offers solutions for separating molecules and synthesizing chemical substances. Our business is divided into four product segments, where our products are employed in areas such as research, development, and drug manufacturing as well as in patient and forensic sample preparation and environmental and foodstuff sampling. Our product segments include Organic Chemistry, Biomolecules, Analytical Chemistry, and Scale-up (previously called Industrial Products).

Our products streamline our customers' research, development, and manufacturing by simplifying and automating their workflows and are known for their high quality, user-friendly software solutions and small environmental footprints. We work closely with our customers in order to gain a clear understanding of their needs and incorporate this insight into every step of the development process. In addition, in certain areas, we offer customized solutions in response to the specific challenges faced by customers. In all our markets, consumables, support, software, and service are included as a part of our overall product package, promoting close, long-lasting customer relationships.

Product segments	Our product lines	Markets	Customer groups
Organic Chemistry 	<p>Solutions for separating and synthesizing peptides and other chemical substances, so-called small molecules. The solutions are primarily designed for the research and development of new drugs.</p>	<p>Global market focused on the US, Europe, Japan, and China.</p>	<p>Primarily pharmaceutical and biotech companies, contract research organizations (CROs), and academic institutions.</p>
Scale-up 	<p>Industrial-scale separation solutions suitable for scale-up and production of, e.g., pharmaceuticals and food products.</p>	<p>Global market focused on the US, Europe, and Japan.</p>	<p>Primarily pharmaceutical companies and contract manufacturers.</p>
Biomolecules 	<p>Solutions for separating biomolecules, such as recombinant proteins, monoclonal antibodies, plasmids, and other biologically derived molecules and production of plasmids. The solutions are primarily designed for the research and development of new drugs.</p>	<p>Global market focused on the US, Europe, Japan, and China.</p>	<p>Primarily pharmaceutical and biotech companies, contract research organizations (CROs), and academic institutions.</p>
Analytical Chemistry 	<p>Separation solutions used to prepare samples for analysis. The solutions are primarily designed for use in patient and forensic sample preparation and environmental and food safety testing.</p>	<p>Global market focused on the US, Europe, Japan, and the Middle East.</p>	<p>Primarily commercial labs, CROs, hospitals, bioanalytical laboratories, food manufacturers, and labs performing, e.g., food safety or environmental analysis.</p>



Customer testimonial

Dr. Robert Lafe of California State University is developing new synthesis methods for the production of pharmaceutical substances. He is using Biotage automated separation solutions in his work.

"Since I acquired the Biotage® Selekt system for my lab, our research has really taken off. It's like night and day compared to how we worked in the past with traditional glass columns. Back then, the separations themselves could take several hours. Today, they take five to ten minutes," explains Dr. Lafe.

"In addition, the Selekt system takes up minimal lab space, and the equipment is easy to use, among other things, due to its integrated touch screen. The solid design makes it virtually indestructible," adds Dr. Lafe.



Organic Chemistry

Biotage offers a wide range of organic chemistry solutions that can be used in the early stages of drug development. This includes a number of different products for separating and chemically synthesizing small molecules and peptides. By automating and streamlining work processes, we accelerate the research and development process. Our separation solutions additionally minimize the need for consumables and solvents.

Small molecules are currently the group of active substances in widest use as the active substances of drugs. The term derives from the fact that the molecules are so small that they can easily pass through the intestinal wall and be absorbed into bodily fluids. These molecules are chemically manufactured by a process known as synthesis and are taken orally by patients.

Peptides are a type of short-chain protein and make up another group of active substances used in drugs. They are sometimes small enough to pass through the intestinal wall but distinguish themselves from small molecules by their structural similarity to biomolecules,

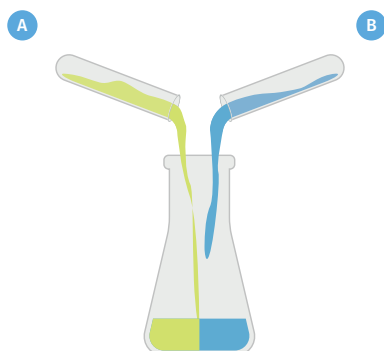
which are biologically-derived substances. In contrast to biomolecules, peptides can be synthetically manufactured by allowing amino acids to react with one another. Peptide therapeutics can either be administered as pills or injections.

Product segments

- Systems for microwave-assisted synthesis
- Systems for peptide synthesis
- Systems for separating small molecules and peptides (flash chromatography)
- Systems for evaporation (drying)

Product differentiation and competitive advantages

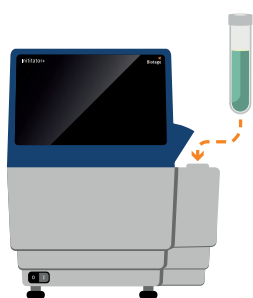
- Automated solutions designed for research and development
- Minimal need for consumables and solvents during use
- Facilitate rapid, controlled chemical reactions during synthesis
- High degree of reproducibility
- High specificity during separation
- User-friendly software
- Space-saving equipment
- High quality



This is what we help our customers with:

- Synthesis, separation, and evaporation of pharmaceutical substances

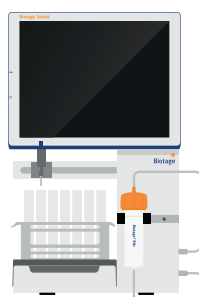
Various chemicals are used as the base materials in the chemical production of pharmaceutical substances. These can react with one another under specific pressure and temperature conditions to create new substances. In the example below, substance C is created when chemicals A and B react with one another.



1 Synthesis

production of the substance

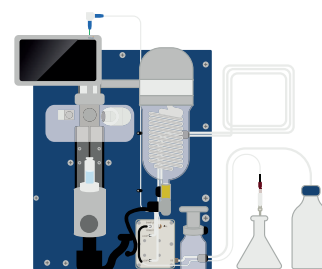
The two chemicals, A and B, are unable to react with one another without a little help. In this case, a solvent, heat, and additional chemicals, which serve as catalysts in the reaction, are needed. A Biotage synthesis system uses microwaves to rapidly and accurately generate the heat and energy needed to cause A and B to react with one another and form the new substance C.



2 Separation

purification of the substance

During the synthesis that yields the new substance C, by-products are also formed that must be removed before C can be used or studied. Substance C must therefore be purified, which is done through separation, where the substance from the synthesis step above is passed through a column containing a medium that separates substance C from the by-products. A Biotage separation system automates the entire separation process and yields a product that consists solely of the desired substance - in this case, C.



3 Evaporation

drying of the substance

After the separation, the new substance is dissolved in solvent. Before the substance can be used, the solvent must be removed. A Biotage evaporation system uses vacuum technology, heat, and centrifugation to quickly and safely dry the product.



Voilà, done!

The new substance, C, is now a solid and is ready for the next step in the development process of a new drug.

- 50% of net sales

- Market growing 4% annually

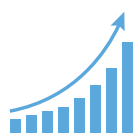
- No. 1 in flash purification with over 1,000 systems sold each year

- No. 1 or 2 in many geographic regions



Example of applications

At Biotage, small molecule purification is one of our strengths. Our equipment for flash chromatographic scale-up continues to help pharmaceutical companies and contract manufacturers develop and purify potential new substances, including in fast-growing areas such as oncology and high-potency drugs. There are many areas of application for our products. Our resins, for example, are used in a wide variety of medical devices as well as in the electronics industry. Another interesting application is the removal of metals. In a trial project together with Toshio Fujiwara from Nippon Shinyaku's Process Chemistry/Discovery Research Laboratories, our scavengers were used to remove metals from substances during a GLP- and cGMP-compliant manufacturing process. The objective was to remove metals, such as palladium, that are difficult to eliminate by any other methods, where the allowable amounts in drugs are strictly regulated by the authorities. Our scavengers are now the preferred choice for Toshio Fujiwara and his colleagues whenever they are working on a project in which the removal of palladium is a potential issue.



Scale-up

Biotage offers industrial-scale separation systems based on flash chromatography as well as consumables designed for scale-up and industrial manufacturing. With our products, customers can effectively remove unwanted substances from their products. This helps them produce clean, safe products and ensure compliance with statutory requirements. Our industrial-scale separation solutions can be customized based on customer needs and are primarily used by pharmaceutical and chemical companies and consumer goods manufacturers.

Biotage systems and consumables for industrial-scale flash chromatography work in the same way as the company's smaller, boutique flash chromatography products for research and development. When developing drugs in the lab, customers using our systems and consumables can therefore apply the same methods that they use to mass manufacture substances. This is because the work process is in principle the same - only the manufacturing scale differs.

Biotage is one of the few companies offering ready-made consumables for industrial-scale purification systems based on flash chromatography. These help customers achieve efficiency gains and improve product quality while cutting costs.

For example, pharmaceutical companies and contract manufacturers use our industrial-scale manufacturing solutions ahead of clinical trials as well as for small-scale commercial drug manufacturing.

Product segments

- Systems for industrial-scale separation of chemical substances
- Chemical media consumables

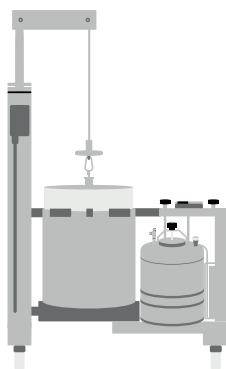
Product differentiation and competitive advantages

- Customized solutions designed for scale-up and production
- Minimal need for consumables and solvents
- High degree of reproducibility
- High specificity during separation
- Space-saving equipment
- High quality

This is what we help our customers with:

- Scale-up and industrial manufacturing of various substances

All **Biotage** industrial manufacturing solutions are used for large-scale separation of various substances. This can be, e.g., to remove traces of pesticide from citrus oil or to purify a drug from by-products or trace amounts of excipients left over from the manufacturing process.



1 Separation systems

Biotage systems and consumables for industrial-scale flash chromatography, Biotage® Flash 150 and Flash 400, work in the same way as the company's smaller, boutique flash chromatography research and development products.

2 Bulk consumables

We offer a line of “resins” to remove traces of unwanted substances from customers' products. A common area of application is the removal of excipients used in the manufacturing process: for example, the metal palladium, which is often used as a catalyst in drug manufacturing. Customers can use the products in several different ways. They can pack columns with resins and allow the liquid medium containing the substances that will be separated to pass through them. Our resins trap the unwanted substance. Alternatively, they can mix the consumables with the liquid medium that needs to be purified. The resins trap the unwanted substance so it can then be filtered out.

3 Customer-specific development

In the event a customer needs to separate a product in an area in which no ready-made resin or other consumable is available to solve the task, we can help the customer develop a customized solution to suit its needs. This is done in the form of a joint development project, where the goal is to develop a solution that can effectively remove the unwanted substance from the customer's product.

The company's products allow customers to effectively remove unwanted substances from their end products. This allows us to help our customers, e.g., satisfy regulatory requirements and offer consumers purer and safer end products.

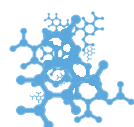
– 12% of net sales

– Double-digit growth

– One of the best Palladium Scavengers on the market

Dual Flow Chromatography (DFC)

The company's solutions are based on dual flow chromatography, where the sample containing the biomolecules of interest is passed back and forth through a column containing loosely packed particles. The particles are specifically designed to bind to the biomolecules that will be separated from the rest of the contents of the liquid medium. After the sample is passed through the column a number of times, the biomolecules can be released into another liquid medium and the separation is complete. DFC systems enable the automation of multiple parallel separation columns, which is currently a time-consuming, manual task.



Biomolecules

Biotage has offered products for the separation of biomolecules, i.e., proteins and other biologically-derived molecules, since 2019. Among other things, these biomolecules are used as active substances in the production of a large, growing number of so-called biological drugs. We will be launching automated biomolecule separation solutions primarily designed for pharmaceutical research.

In 2019, we acquired the San Jose based company PhyNexus Inc., a developer of customized research solutions for biomolecule separation. We will be launching several automated solutions based on their patented dual flow chromatography.

Plasmids, a type of short-chain DNA molecule, are used in the production of protein-based drugs to genetically modify bacteria so they can produce the proteins that are used as active substances in drugs. Examples of protein-based substances include various types

of antibodies and hormones. We offer solutions for separating both plasmids and proteins from bacterial cultures, covering the two most important areas in pharmaceutical research when it comes to biomolecule separation.

Product segments

- Pipette tips for dual flow separation
- Systems for purifying plasmids (2020 launch)

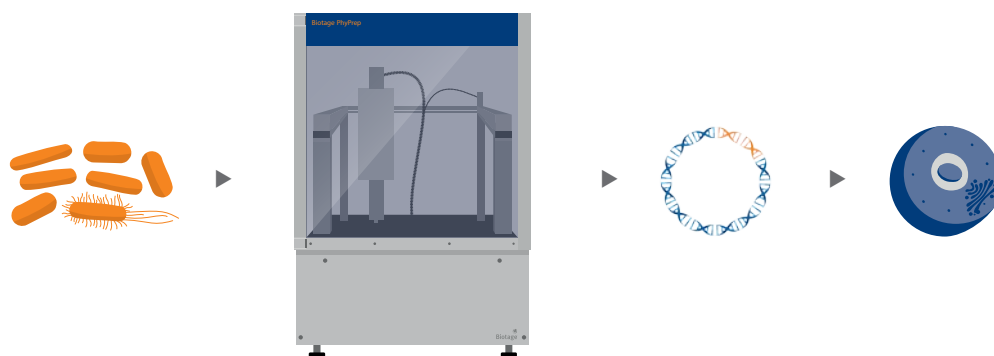
Product differentiation and competitive advantages

- Automated solutions designed for research
- High specificity
- High degree of reproducibility
- No risk of substance precipitation
- End products free of endotoxins
- User-friendly software
- Space-saving equipment
- High quality

This is what we help our customers with:

- Separation of plasmids and proteins

Bacterial cultures are used in the production of biological drugs that contain proteins as an active substance, where the bacteria produce the protein of interest. In this process, separation is needed on two occasions as is shown below.

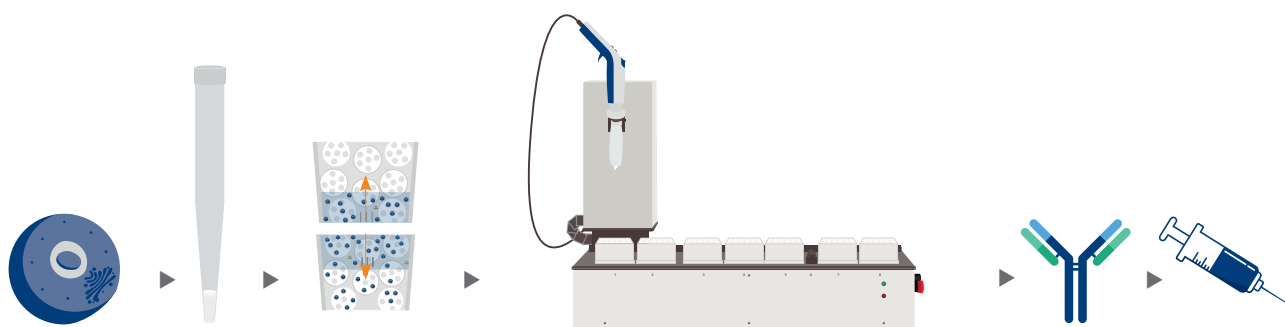


Separation of plasmids

isolating genetic material

Bacteria must be genetically modified in order to induce the bacteria to produce the desired protein. This is done by introducing plasmids, a type of short-chain DNA molecule, to the medium. The plasmids are then taken from other bacteria that already possess the genes coding for the desired protein

production. In this process, the plasmids must be isolated from the other contents of the original bacterial culture. This is done through separation, and the company's products simplify and streamline this process.



Separation of proteins

purification of the substance

After the plasmids are added to the bacterial culture, they begin to produce the protein that will serve as the base substance for the drug under development. The proteins that are produced end up in the same liquid medium as the bacteria. In order to separate and purify the specific proteins of interest, an additional separation process must be carried out. Biotage offers products that simplify and streamline the process for this.

– 3% of net sales

– Biotage expects to be the first company to offer an automated solution for endotoxin-free plasmid purification on a maxi, mega, and giga scale

– The plasmid DNA purification market is expected to grow 10% annually



Strategic collaboration project

In collaboration with Shimadzu, which manufactures different types of analytical equipment, we have developed a system for rapid detection and analysis of perfluoroalkyl substances (PFASs) in drinking water and other water sources. PFASs are a group of chemicals that were extensively used in the past in the production of water-repellent fabrics as well as in firefighting to help cut back on water consumption. However, PFASs have been shown to have serious health and environmental effects and are now banned, among other places, in Europe. As PFASs are extremely difficult to break down, they build up in the food chain, affecting animal and plant life and, ultimately, human health. Therefore, it is important to be able to analyze the presence of PFAS in drinking water, etc., in order to ensure that the water is safe for consumption. Our solution to this problem is based on a combination of Biotage® Extrahera, which automates sample preparation, and Shimadzu's analytical equipment for mass spectroscopy. Thanks to this collaboration, we can offer rapid, parallel detection of 62 different PFAS molecules.

Analytical Chemistry

Biotage offers a number of products to help customers prepare samples for analysis, such as, e.g., patient and forensic samples as well as environmental and food safety samples. We offer automated and customized systems for sample preparation as well as consumables specifically designed to isolate selected substances from samples.

Our solutions streamline and simplify processes, providing significant time savings for labs that perform a large number of analyses while minimizing our customers' need for consumables and solvents. Patient samples, such as blood work and urine samples, are often used to investigate diseases and assist in making diagnoses. The samples may be subject to a number of different analyses, but before any analysis is possible, the samples must usually first be prepared by isolating the substances of interest. This also applies to forensic samples, which may include traces of poison, performance-enhancing drugs, narcotics, etc.

Many different types of analyses are also performed in the environmental field, for example, to detect contaminants in the ground or water. Advanced solutions are needed in order to remove unwanted substances from samples before running an analysis.

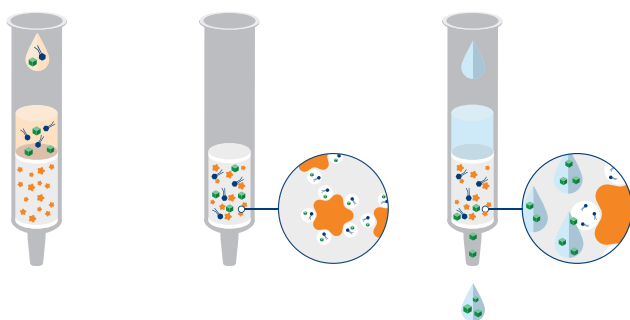
This pre-analysis sample preparation is often a time-consuming activity but is crucial to the quality of the ensuing analysis. The company's products provide customers with reliable consumables and automated systems that streamline their work.

Product segments

- Consumables for separation (Solid Phase Extraction and Supported Liquid Extraction)
- Systems for automated separation (Solid Phase Extraction)
- Systems for concentrating samples

Product differentiation and competitive advantages

- Automated and customized solutions
- High specificity during separation
- High degree of reproducibility
- User-friendly software
- Space-saving equipment
- High quality



This is what we help our customers with:

- Separation and sample concentration prior to analysis

Mass spectroscopy is a method often used to analyze the contents of different types of samples. In order for this type of analysis to be carried out, the sample must be prepared ahead of time by removing any unwanted substances. Different types of separation are used for this, depending on the substances to be analyzed.



1 Separation

Biotage offers many consumables and bundled methods specifically designed for the separation of various types of samples. Simply put, these can be described as advanced filters that isolate sample impurities, allowing only what you are interested in analyzing to pass through. The Biotage® Extrahera™ system allows the entire process to be automated. This leads to efficiency gains for labs that run a large number of analyses.



2 Concentrating the sample

In certain cases, the sample needs to be concentrated before it's analyzed. This is done with the Biotage TurboVap® evaporation system, which effectively removes excess solvent from the sample.



3 Analysis

After the company's products have been used for preparation, the samples can be analyzed. We do not offer any proprietary analytical instruments, relying on mass spectroscopy instruments supplied by other manufacturers. The results of the analysis can help a doctor to diagnose a patient or a food safety inspector to verify that food is fit for consumption or enable a police officer to confirm the presence of narcotics in an offender's bloodstream.

- 35% of net sales

- 4% market growth

- No. 1 in automated separation (SPE Disk Extraction systems) for wastewater analysis

2019, a year with record sales

The company's worldwide sales increased within all product segments in 2019 and exceeded SEK one billion for the first time. Today, thanks to a 75% increase in sales within the Organic Chemistry product segment over the past two years, we are now the global market leader for flash chromatography systems. Overall sales growth for the year ended up at around 9 percent, and we launched our first products for biomolecule separation.

In 2019, Biotage achieved a milestone, selling over 1,000 separation systems within the Organic Chemistry product segment, making us the largest supplier of flash chromatography systems in the world. Based on the 570 systems we sold within this segment in 2017, this corresponds to a 75% increase over the course of the last two years! A large part of this growth can be attributed to the fact that we established our own direct sales organizations in almost all our geographic markets. By working closely with customers and listening to their requests, we are able to constantly develop new high-performance products that meet customers' needs. Sales of systems and consumables for flash chromatography also increased within the Scale-up product segment. The growth was partially driven by increased demand from manufacturers of cannabis oil for medicinal use.

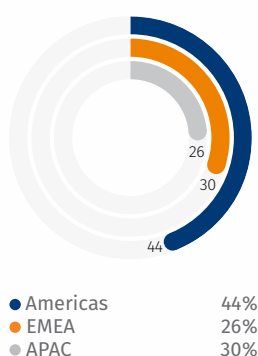
Within the Analytical Chemistry product segment, we have continued to reinforce our position, especially in the US, where we carried out initiatives to improve the stability of our sales organization. This has laid the foundation for improved management of our long-term customer relationships, which has already paid dividends in the form of increased sales. The demand for sample preparation solutions within

the Analytical Chemistry product segment has been growing for several reasons, including the collection of an increasing number of patient samples in the health-care field and an enhanced awareness of environmental concerns, which has resulted in more environmental analyses being performed.

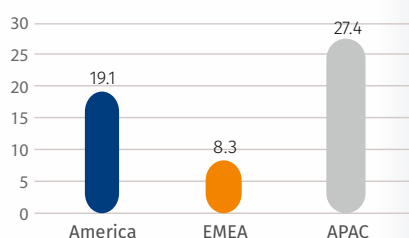
Following the 2019 acquisition of PhyNexus Inc., a developer of separation solutions for proteins and plasmids, Bio-molecules has become an important new product segment for Biotage. In 2019, the product line included Dual Flow separation columns, specifically in the form of pipette tips. In FY 2020, we plan to launch the first automated separation system for plasmids.

The lion's share of sales came from the US, but Asia has been gaining ground, and China accounted for 10 percent of our overall sales for the year. The sales growth we've achieved is the result of our enhanced local presence, which has allowed us to develop a keen understanding of markets. Among other things, the scale of our Analytical Chemistry solutions has been fine-tuned to the needs of many clinical labs in Chinese hospitals. These hospitals use our solutions to prepare tissue samples prior to biomarker analysis. This use case has the potential to double our sales of Biotage® Extrahera over the next few years.

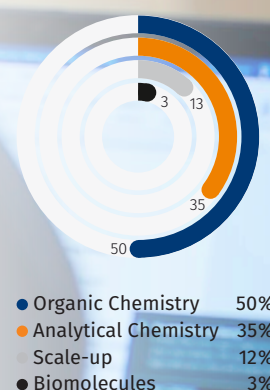
2019 sales distribution by geographic market, %



2019 sales growth by geographic market, %



2019 sales distribution by product segment, %



“Following the 2019 acquisition of Phynexus Inc., a developer of separation solutions for proteins and plasmids, Biomolecules has become an important new product segment for Biotage.”



Research and development

- the heart and soul of the company's business

Biotage has been successful throughout the world because we offer smart, leading-edge solutions to our customers. Our goal is to reinvest around 8-10 percent of our sales in research and development. In this way, we can continue to satisfy customers' needs and requirements, both today and in the future.


Successful research and development is crucial to our success as a company. We've created a cross-functional organization for our research and development, with broad-based skills in hardware, software, chemistry, and biochemistry. This breadth is needed in order for us to be able to identify new opportunities and quickly transform ideas and objectives into practical applications and solutions. The importance of our own employees cannot be understated. Moreover, we actively collaborate with other companies and academic institutions to further broaden our skills and ability to develop effective new solutions. This collaboration provides us with valuable insight into new business opportunities, along with a better understanding of how to adapt and integrate our products with existing products in order to streamline and enhance our customers' workflows. Green chemistry, in other words, chemistry that minimizes environmental impact, is an important focal area in our development of new products.

The software is the heart and soul of our equipment, and we always try to develop new user-friendly solutions that simplify things for our customers. The equipment should not only be easy to use, the software also needs to meet the regulatory requirements that our customers must comply with. Growing digitalization is creating new opportunities but also presenting new challenges when it comes to cybersecurity. For this reason, going forward, we will pay increasingly more attention to software development and digitalization.

We are constantly investigating new ideas and trends in the marketplace and cooperating with customers to ensure that the solutions we develop today continue to make sense tomorrow. For example, we're now looking into how we can incorporate robotic arms, similar to the ones used for assembly in the auto industry, into our equipment manufacturing in order to benefit from their precision. Another example is liquid carbon dioxide, which we've been investigating as an alternative chromatography solvent in order to minimize solvent usage during this process.

We develop solutions known for their

- High quality
- High efficiency
- High level of safety
- Environmental friendliness
- User-friendliness



“We are constantly investigating new ideas and trends in the marketplace and cooperating with customers to ensure that the solutions we develop today continue to make sense tomorrow.”

Employees

- Our most important resource

At Biotage, our employees are our most valuable resource, and we're constantly striving to be the best, most attractive employer possible. By being inclusive, offering opportunities for personal development, and caring about employees' health and well-being, we promote a dedicated workforce, which is crucial for continued success. In 2019, nearly 70 new employees were welcomed into our company. In addition, many existing employees have found new career opportunities within the Biotage group.

In recent years, Biotage has grown at a rapid pace, and in 2019 nearly 70 new employees were hired. Today, the company has around 470 employees - around half of them were hired within the last five years. We actively reach out to potential new employees, for example, students and other individuals with relevant skills, in order to lay the groundwork for future recruiting efforts. We also always try to hire from within the company in order to create career paths for current employees. Given the large number of new recruits we've added in recent years, we're extremely proud of the results we've delivered. To adapt to the expanded size of the organization, in 2019 we implemented a new global HR system with the objective of improving performance when it comes to corporate culture, values, and employee well-being in order to improve the cohesion and dedication of our workforce.

Diversity and equal opportunity

Biotage believes that everyone has equal value and should be treated fairly. Diversity is becoming increasingly more important for global companies, where customers as well as suppliers come from far-ranging markets and a variety of cultural backgrounds. For this reason, we strive to obtain an even gender distribution, where employees have the broadest possible range of skills and experience, by hiring individuals with different ages and backgrounds, among other things.

The Code of Conduct, Equal Opportunity Policy, and local handbooks for each of our international markets contain guidelines that seek to ensure that all employees, regardless of gender, ethnicity, religion, or sexual preference, are provided with equal opportunities for growth and receive equal pay for equivalent work tasks. The Equal Opportunity Policy includes an equal opportunity plan that's revised each year. The goal of this action plan is not only to evaluate past years, but also to peer into the future and define any measures that need to be adopted in the upcoming period.

The Biotage Equal Pay Index

We try to the full extent possible to ensure equal pay for employees. As a part of this work, since 2019, we have carried out salary surveys based on the Equal Pay Index in Sweden. 2019's survey revealed that our performance was above average relative to other Swedish companies. Our goal is to carry out equivalent salary surveys in all countries where we have employees.

The Equal Pay Index is calculated on the basis of the weighted difference in median salary between the sexes. The index is adjusted to take into account the different requirements and roles that exist within the organization. A result under 100 indicates that women earn less than men, and a result over 100 indicates that women earn more

3.7%

Sick leave in Sweden during the year (2018, 2.0%, of which 2.8% consisted of prolonged sick leave absences)

8.1%

Employee turnover in the Biotage group (2018, 17.0%)

98.7

2019 Equal Pay Index. The average in Sweden was 95.6.

than men. The average for Sweden was 95.6 according to the most recent survey of the arbitration institute.

Health and safety

Biotage seeks to have a safe, healthy workplace environment, both when it comes to the physical as well as the psychosocial environment. We approach workplace environment issues in a systematic, structured manner, based on a company-wide workplace environment policy in accordance with international standards and local legislation. These initiatives include setting goals for the quality of the workplace environment and carrying out risk assessments. All of the company's policies include action plans for handling any infractions.

Any incidents related to the workplace environment or safety are reported. In 2019 only a small number of incidents occurred. For preventive purposes, "near-miss incidents" are reported internally, and action plans are drafted to prevent future incidents.

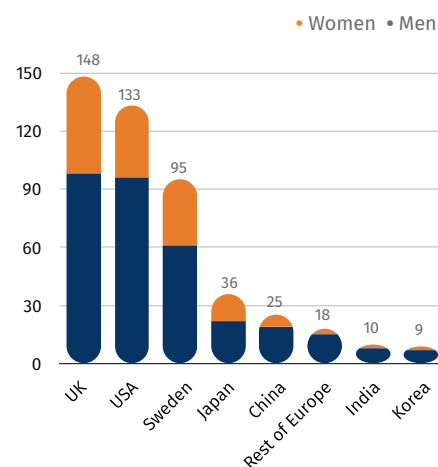
We have historically had a low level of sick leave. In 2019 sick leave in Sweden amounted to 3.7 percent (of which 2.8% consisted of prolonged sick leave absences).

Employee survey

In 2018 Biotage carried out its first employee survey in all countries where we have employees. The survey evaluates the company's workplace environment and performance and identifies areas for improvement. The next employee survey has been planned for 2020.

Motivational leadership

Biotage believes that good leadership is crucial in order for the company to be an attractive workplace with committed, dedicated employees. For this reason, we take our recruitment of senior managers very seriously, and all supervisors and senior managers have the opportunity to participate in professional training that is focused on leadership. An important part of leadership deals with supporting the development of employees and promoting an open, transparent corporate culture. Periodic, ongoing performance reviews provide employees with constructive feedback and clear goals for their work. Individualized career planning is also included, where the employee's goals and motivation are assessed in order to identify appropriate developmental steps.



Number of employees by geography and gender as of December 31, 2019



Lars Lindström

Title: Director of Sales and Marketing
Living in: Salem, New Hampshire
Born in: Linköping, Sweden
Education: Chemical Engineer
Employed since: 2016

Career opportunities in the Biotage group

How would you describe the career opportunities at Biotage?

Very good. There is a good understanding of the value of building networks within Biotage through this type of career development.

What was it that made you decide to take the step of changing your position and moving to the US?

Since I lived previously in the US, I have always been interested in returning there to work. Once I understood that there was a position available in the US organization that could be suitable for me, I talked to my boss and let him know that I was interested.

How did you learn of the position?

I heard from some colleagues at Biotage that it was open.

Were you encouraged to apply to the position?

My boss in Europe was very positive and supported my applying to the position and really gave me all the support I needed.

Lars Lindström was previously responsible for sales of Biotage Analytical Chemistry products in Europe. When he heard that a position was available, responsible for North American sales and marketing of environmental analysis products, he decided to apply. He got the job, and in May 2019 relocated over the "dam" to Salem, New Hampshire. We decided to ask Lars a few questions about career opportunities in the Biotage group.



Sustainability and social responsibility

In conducting its business, Biotage seeks to make a contribution toward improved global health, clearly respecting both the environment and human beings. Our solutions facilitate rapid, reliable diagnostics, the development of new medical treatments, and more. At the same time, we help ensure the safety of foodstuff and drinking water and simplify various types of environmental analyses.

Along with our suppliers, we strive to offer good working conditions and to respect human rights. Our vision is to be a leading supplier of solutions for green chemistry in the markets in which we compete.

We seek to have a positive influence and be a role model in the communities we serve. It is crucial for our long-term success that our products,

business strategy, and commercial goals correspond with our ambition to contribute to a more sustainable society. Our business is based on our ability to contribute to improved health throughout the world, and we are constantly working hard to reduce the environmental impact of both our own and our customers' activities. For example, we offer periodic, ongoing

software updates for existing products whenever new methods for reducing the consumption of solvents or other consumables are developed. Software updates also increase the lifespan of our systems, which in turn generates less waste. Moreover, we educate our customers on green chemistry to help facilitate their environmental initiatives. In addition to being a signatory

Environmental goals at Biotage

- Reduce the amount of waste generated in manufacturing
- Reduce the use of environmentally hazardous substances
- Increase manufacturing efficiency when it comes to the use of water and electricity
- The goals are monitored through internal audits within the scope of our environmental system as well as through the tracking of data reported on, e.g., waste and energy.

of the UN's Global Compact, which aims to encourage sustainable and socially responsible business activities, we support the ILO's fundamental conventions and the OECD's Guidelines for Multinational Enterprises. Our sustainability initiatives are governed by our Code of Conduct, our whistleblower policy, and our company policies and environmental goals. In order to lower the risk of improprieties, we have routines and procedures in place for all subsidiaries with clear rules regarding the jurisdiction and authorization procedure for payment approval.

Code of Conduct

The Biotage Code of Conduct contains guidelines specifying the responsibility the company has toward stakeholders. The Code of Conduct covers areas such as the environment, anti-corruption, financial reporting, human rights, and working conditions as well as equal opportunity, non-discrimination, organizational freedom, and opposition to child labor and forced labor. The CEO is responsible for ensuring that everyday work activities are performed in accordance with this code.

All employees have been educated about the Code of Conduct and certified that they have read it and been trained on it through a web-based program.

Policy concerning human rights

In addition to incorporating respect for human rights into the Code of Conduct, Biotage also has a policy that aims to lower the risk of modern slave trading or human trafficking within our business or any supply chain we may be associated with.

- We follow a procedure for identifying high-risk countries and potential activities that may pose a risk of human trafficking. All suppliers are assessed based on their geographic location and industry using the Global Risk Index and the US Department of Labor's List of Goods Produced by Child Labor or Forced Labor.
- We have a system called the Supplier Performance Management System that routinely monitors, inspects, and follows up on suppliers to ensure that they comply with the company's Code of Conduct.
- The contract with the supplier stipulates requirements for worker rights, health and safety, the environment, non-discrimination, and diversity.
- Suppliers who breach the Code of Conduct are held accountable. Our response to violations is determined on a case-by-case basis and is proportionate with the seriousness of the infringement. We have moreover identified a number of high-risk activities related to purchasing. In the event we are not able to verify that a supplier can meet the requirements, another supplier is chosen.

We offer internal training to help ensure that the human rights policy is complied with. For example, the training includes the early identification of risks within various corporate activities and departments, awareness of risks when purchasing or contracting with suppliers, available outside assistance in the area, and measures that should be adopted if a supplier does not comply with the company's policies on human rights.

In 2019 we increased the number of supplier audits and five audits were carried out.

Anti-corruption policy

Biotage has a zero-tolerance policy when it comes to corruption. Giving, offering, requesting, or receiving bribes are all forms of corruption, even if they're carried out indirectly via a third party. Gifts, influence, compensation, or personal favors may only be offered to third parties if they are of insignificant value and are consistent with prevailing practices. Corruption can occur in a variety of forms, including, e.g., offering money

or gifts, inflated commissions, fake consulting contracts, unauthorized rebates, or political or charitable donations. If abused, ordinary business practices may be interpreted as corrupt payments. In order to lower the risk of improprieties, we have routines and procedures in place for all subsidiaries with clear rules regarding the jurisdiction and authorization procedure for payment approval.

No cases of corruption within the Biotage group were reported during the year.

Whistleblowing

The group has a global whistleblower system, where employees, customers, and other business partners are given the opportunity to report any improprieties. All employees must be able to feel comfortable reporting anomalies, improprieties, or serious incidents related to the company without any fear of reprisal.

No violations were reported in 2019.

Analysis of the company's manufacturing-related sustainability risks

Biotage analyzes risks related to its business on an ongoing basis in order to minimize sustainability-related risks that could have a negative impact on the environment, the company's stakeholders, or society as a whole. In 2019 a review of risk analyses in relation to our internal manufacturing processes was carried out. Please refer to the table on p. 29 for a more detailed description of the company's risks.



The environmental impact of the company's manufacturing

The largest factory Biotage owns is located in Cardiff, Wales, where we are currently expanding our capacity by building a new manufacturing unit next to the existing plant. We strive to ensure that the facility complies with our strict requirements for smooth workflows, with the least possible impact on the environment.

In 2019 new systems and methods for emissions follow-up were implemented in Cardiff. This initiative was supported by an organizational realignment to facilitate more frequent internal audits and clearer responsibility for environmental issues. We also monitor the consumption of water, gas, and electricity, among other things. In 2016 the Cardiff factory was certified in accordance with ISO 14001, and manufacturing operations were relocated to Wales from Lund, Sweden in 2019 to take advantage of the planned capacity expansion there in 2020. The relocation also concentrates our expertise within polymer production, which should improve coordination. The goal is for all the company's manufacturing facilities to be compliant with ISO 14001 and ISO 9001.

Solvent consumption

To reduce the usage of solvents within the group, Biotage is constantly making changes to its manufacturing processes, for example, by reducing the number of cleaning steps where solvents are used. Furthermore, we are now investing in a system that enables us to reuse solvent from cleaning processes, which should help us drastically reduce solvent consumption. The usage of solvents in manufacturing increased by 9.3% in 2019 compared to 2018. This increase can be attributed to the fact that the production of silica- and polymer-based materials rose by 17.7 and 19.9 percent, respectively, on account of increased demand. Nonetheless, in relation to the production volumes of these products, manufacturing has become more efficient.

Energy consumption

The main environmental impact from manufacturing operations stems from energy consumption. In Cardiff energy consumption rose 11.1 percent over the prior year while at the same time the overall production value rose 11.1 percent. Thus, energy consumption remained unchanged relative to the production value. During the year, we have continued to invest in an expansion of our manufacturing capacity and production areas by adding new manufacturing equipment with better energy efficiency. For example, in 2019 our energy efficiency benefited from solar panels installed at our headquarters in Uppsala, Sweden. The panels generated solar power corresponding to 24% of the overall electricity consumption at our headquarters.

Air pollution emissions

To eliminate the emission of air pollutants, in 2019 Biotage installed scrubbers in Cardiff. Scrubber systems are devices that are used to purify the emissions from combustion reactions that produce particles or gases.

Waste

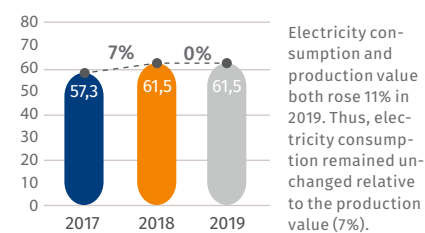
Biotage is actively working on reducing the overall amount of waste and increasing the proportion of waste that's recycled. In 2019 the amount of waste sorted as corrugated cardboard decreased by 35 percent, but other non-hazardous waste increased by 47 percent. During the year, the company's non-hazardous waste removal suppliers provided assurances that 100 percent of this waste would be recycled into energy.

Shipping

To minimize shipping-related environmental impact, as far as possible, Biotage uses ships and trucks instead of air transport. The majority of freight from Cardiff to customers in Europe is shipped by truck or by sea. Most shipments from Cardiff to the US and Asia are sent via sea freight. However, for some shipments, air freight is difficult to avoid due to either low production volumes, the high value of the goods, and/or time constraints. This applies not only to shipping within Europe, but also to the US and Asia.

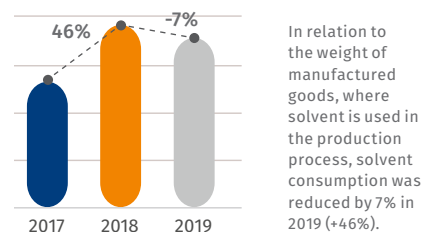
Electricity consumption¹

kWh per 1,000 KGBP



Solvent concentration¹

Amount of solvent per relevant unit of manufacturing weight



¹ Figures have been corrected for 2017-2018 due to errors in the basis for calculation.

Risk areas

The environment

Description of the risk and potential impact

Chemical spills in the lab environment and emission of chemicals into the run-off system

How Biotage remediates risk

Routine assessment of the business's environmental risks. We have routines and procedures in place for chemical processing as well as preventing effluence into the run-off system by, for example, sealing wells.



Corruption

Description of the risk and potential impact

Corruption and bribery: individuals acting wrongfully or criminally in order to derive financial or personal gain.

How Biotage remediates risk

Policy of zero tolerance for bribery and corruption, internal control mechanisms to prevent and discover irregularities, and anti-bribery and anti-corruption clauses in agreements with partners.

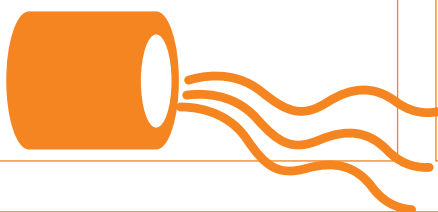
Employees: skills

Description of the risk and potential impact

Lack of appropriate skills. The recruitment and retention of qualified, skilled workers is crucial in order to carry out the group's business strategies.

How Biotage remediates risk

Annual performance reviews that set goals and monitor the progress of each employee, along with individual career planning sessions. Biotage actively works to maintain an attractive workplace environment providing employees with opportunities for personal growth and development. We also actively recruit new employees in order to find the right mix of skills.



Employees: health and safety

Description of the risk and potential impact

The risk that employees are injured or harmed in a production accident or as a by-product of the psychosocial workplace environment.

How Biotage remediates risk

Routine assessment of the business's environmental risks. The company has routines and procedures in place for chemical processing and we carry out annual risk assessments of our work and manufacturing processes.

Breach of the Code of Conduct in a Biotage business or the supply chain

Description of the risk and potential impact

The risk that employees, suppliers, or subcontractors do not comply with the Biotage Code of Conduct with respect to the environment, working conditions, human rights, anti-corruption, or other areas.

How Biotage remediates risk

Training of company personnel, the Code of Conduct, supplier agreements, and a global whistleblower system. Biotage has also introduced the "Biotage Group Modern Slavery and Human Trafficking Statement," which details the process for identifying individual risks and risk areas and discusses the internal allocation of responsibilities, inspection, monitoring, and training.

The Share

Biotage shares were listed on NASDAQ Stockholm's Mid Cap list and traded under the name Biotage AB (BIOT.ST) during 2019. The number of shares outstanding on December 31, 2019 was 65,201,784 (64,714,447). Based on the closing price on December 30, 2019, the Company's market cap amounted to SEK 8,085 (7,054) million.

Price development

The share price increased by 14 percent from SEK 109.2 to SEK 124.0 in 2019. The highest closing price in 2019 was SEK 137.0 on March 13. The lowest closing price was SEK 95.2 on October 29. In 2019, 34.3 (36.4) million shares were traded at a market value of SEK 3,908 (3,802) million. The turnover rate for the year was 53 (56) percent.

Shareholders¹⁾

On December 31, 2019, the number of known shareholders in Biotage was 7,430 (7,561). The 15 largest owners accounted for 42.4 (41.7) percent of the total capital and votes. Foreign owners accounted for 50.6 (51.4) percent of the total capital and votes. The highest proportion of foreign ownership was in Norway, the US, France and the UK.

¹⁾Source: Monitor, Modular Finance

Authorization to issue shares

At the 2019 AGM, as at the 2018 AGM, the Board was authorized to adopt an issue of shares and/or convertibles on one or more occasions. On January 15, 2019, the Board decided to exercise the authorization to issue shares as part of the consideration for the acquisition of PhyNexus, Inc. Following the issue, the number of Biotage shares increased from 64,714,447 to 65,201,784, resulting in dilution of about 0.7 percent for existing shareholders.

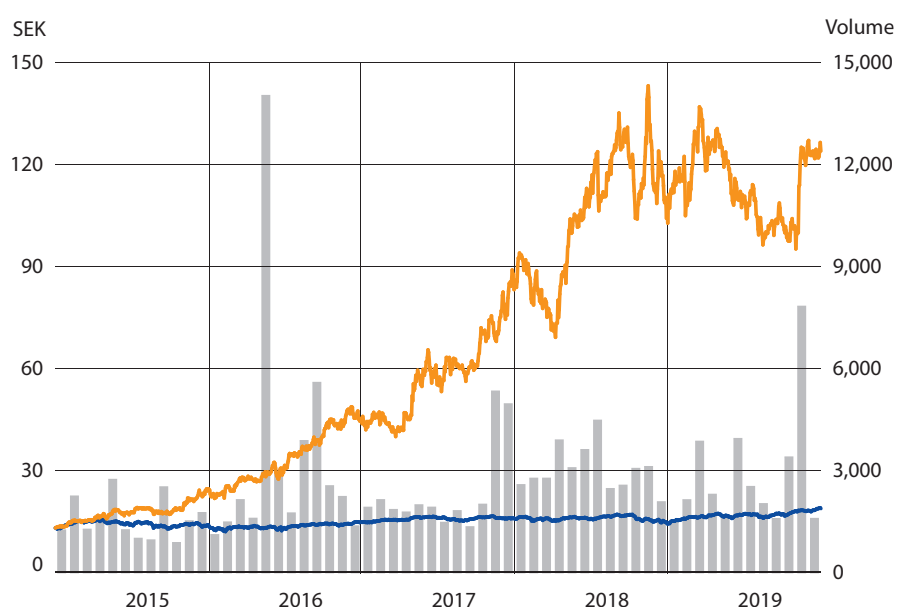
Dividend policy and dividends

The Biotage dividend policy requires at least 50 percent of earnings per share after tax to be distributed to shareholders. Last year a dividend of SEK 1.50 per share was distributed. The profit per share amounted to

SEK 2.87 (2.59). Biotage's Board of Directors communicated in the Year End Report for 2019 that they would propose the Annual General Meeting to resolve on a dividend of SEK 1.60 per share. Taking into consideration the great uncertainty in society as a result of the corona pandemic (COVID-19) the Board of Directors resolved for precautionary reasons to withdraw the SEK 1.60 per share dividend proposal and to propose that no dividend is paid. If the situation so allows, the Board may consider convening an extra general meeting later in 2019 for purposes of passing a resolution on 2019 dividend.

Change in price per share and volume

• Biotage • OMX Stockholm_PI • Volume of shares traded in thousands



Source: WebfinancialGroup

Ownership categories, December 31, 2019

Owner	Number of shares	Share of capital and votes, %
Foreign institutional owners	18,928,714	29.0
Swedish institutional owners	17,178,149	26.3
Private individuals in Sweden	11,530,465	17.7
Other	7,723,316	11.9
Anonymous ownership	9,841,140	15.1
Total	65,201,784	100.0

15 largest known owners, December 31, 2019

Owner	Number of shares	Share of capital and votes, %
Swedbank Robur Fonder	5,099,741	7.8
ODIN Fonder	3,620,000	5.6
Vind AS	2,990,762	4.6
Fourth Swedish National Pension Fund	2,042,249	3.1
Lannebo Fonder	2,035,824	3.1
Invesco	2,013,047	3.1
Handelsbanken Fonder	1,968,000	3.0
Montanaro	1,716,000	2.6
Didner & Gerge Fonder	1,313,102	2.0
Groupama Asset Management	1,138,114	1.7
Dimensional Fund Advisors	869,050	1.3
Third Swedish National Pension Fund	855,937	1.3
Berenberg Funds	683,281	1.0
BlackRock	666,870	1.0
Fonds de Réserve pour les Retraites	650,000	1.0
Total	27,661,977	42.4

Shareholders grouped by size, December 31, 2019

Number of shares per owner	Number of known shareholders	Share of capital and votes, %
1-1,000	6,132	1.9
1,001-10,000	1,002	5.0
10,001-100,000	218	9.9
100,001-500,000	57	20.7
500,001-1,000,000	11	10.7
1,000,001-	10	36.7
Anonymous ownership	0	15.1
Total	7,430	100.0

Source: Monitor, Modular Finance

Board of Directors' Report

About the Company

Biotage develops and sells world-leading solutions for separation and synthesis of new substances. The products are used in areas such as pharmaceutical research, development and manufacturing, and patient, forensic and environmental sample preparation for analysis. The Company's broad range of efficient, high-quality and intuitive solutions enables customers to streamline their workflows and reduce their environmental impact. Environmental consideration is a key driver for the Company in its constant quest to reduce usage of solvents and consumables when Biotage products are used.

Biotage AB, headquartered in Uppsala, Sweden, is the Parent Company of the Group and has wholly-owned subsidiaries in Sweden, the United Kingdom, Germany, France, Italy, the United States, Japan, China, South Korea and India. The Biotage share is listed on Nasdaq Stockholm.

Summary of business activities in 2019

Biotage set a new sales record in 2019, with sales passing the SEK 1 billion mark. Average organic growth for the most recent three-year period is 10.0 percent, which is higher than the Company's growth target of 8 percent. All geographical regions show growth. The United States remains the largest market, with 44 (42) percent of net sales. APAC accounted for 30 (29) and EMEA 26 (29)

The single largest product area Purification continues to lead the way with increased sales. The number of Flash purification systems sold is increasing, largely due to sale successes in China. The Scale-up product area, previously Industrial Products, is also developing well. Demand has been uneven over time, but with a larger customer base and expanded areas of application, there is a basis for more stable sales.

During the year, Biotage continued to invest in the semi-automated sample preparation system Extrahera™, which is an important Analytical Chemistry product. In early 2020, Biotage announced the launch of new software requested by parts of the market that require full traceability and connectivity to their own IT systems. The launch increases the area of application for Extrahera and brings in new customer groups.

In January 2019, Biotage finalized the acquisition of the US company PhyNexus, Inc. The process of integrating the company and further developing existing products and products under development continued during the year. In 2020, Biotage plans to launch PhyNexus's automated separations solutions for plasmids. This will create additional breadth in the product range for separation and purification and will take Biotage into the important and growing area of biomolecules. Biotage will then become a more comprehensive separation company offering solutions for both traditional chemical substances and biomolecules.

Biotage is growing with profitability. Operating profit (EBIT) increased by 21 percent and the operating margin was 18.9 percent. The average operating margin for the most recent three-year period has increased to 18.6 (17.2). The target is an average of 20 percent over a three-year period

The gross margin was 62.2 percent, which is above the Company's strategic target of 60 percent, Biotage works constantly to improve efficiency at the production facility in Cardiff, Wales. Efficiency improvements continued in 2019, with larger production volumes and focused efforts to achieve a higher degree of production automation.

Tomas Blomquist took over as President & CEO of Biotage on November 6. His immediate predecessor Torben Jørgensen was elected as new Chairman of the Board at an EGM on November 7, 2019.

Earnings and cash flow

The Group's net sales increased by 20.9 percent to SEK 1,101.4 (910.9) million. At comparable exchange rates and adjusted for acquisitions, net sales increased by 9.3 percent. The gross margin increased to 62.2 (61.1) percent. Profitability was favored by higher volumes and a more profitable product mix, with aftermarket products increasing to 52 (49) percent of sales, and systems accounting for 48 (51) percent. Continued streamlining of production and more favorable currency exchange rates than in the previous year also had a positive effect on profitability.

Operating expenses were SEK 477.3 (384.1) million. The higher figure is mainly due to sales expenses increasing by SEK 60.1 million to SEK 316.7 (256.7) million as a result of sales organization expansion, which is a key part of the Company's investments in continued growth, and exchange differences on translation of foreign operations to SEK. Administrative expenses increased by SEK 11.9 million to SEK 82.0 (70.2) million. The increase consists mainly of costs related to the acquisition of PhyNexus, recruitment costs and costs for both the previous and the new CEO, which are reported on an ongoing basis during an overlap period from September 2019 to April 2020. Research and development costs increased by SEK 12.7 million to SEK 78.6 (65.9) million. The increase is attributable to the acquired operations in the US and the effects of capitalization and amortization of expenses for development projects that qualify for capitalization. Other operating items, consisting mainly of currency effects on operating liabilities and receivables and SEK -3.4 (-1.7) million as a share of the profit/loss of the associate Chreto, amounted to SEK 0.1 (8.6) million for the year, which had a negative net effect of SEK 8.5 million on operating profit between the years.

Operating profit increased by 20.7 percent to SEK 208.1 (172.5) million, corresponding to an operating margin (EBIT) of 18.9 (18.9) percent. Net financial items amounted to SEK 3.9 (3.8) million. Tax expense recognized for the year increased by 16.5 million to SEK 25.2 (8.7) million and was affected by changes in the carrying amounts of loss carryforwards. Profit after tax was SEK 186.8 (167.6) million, an increase of SEK 19.2 million or 11.5 percent. Cash flow from operating activities increased by SEK 56.8 million to SEK 211.8 (155.0) million. SEK 21.1 million of the increase is attributable to the introduction of IFRS 16. The year's cash flow from changes in working capital for the year is negative, mainly due to increased sales with more capital tied up in inventories and trade receivables.

Balance sheet items and financial position

The Group's cash & cash equivalents totaled SEK 185.9 (177.0) million on December 31, 2019. Interest-bearing liabilities include borrowings of SEK 109.6 (109.4) million under a credit facility arranged for the acquisition of Horizon Technology, Inc. in 2018 and lease liabilities of SEK 59.3 (-) million in accordance with IFRS 16. Net debt, which also includes an estimated additional consideration of SEK 84.9 (-) million for the acquisition of PhyNexus, amounted to SEK 69.2 (-67.6) million. A dividend of SEK 97.8 (90.6) million was paid to shareholders during the year.

The Group's goodwill amounted to SEK 315.9 (186.1) million on December 31. The increase is due the acquisition of PhyNexus, Inc.

in January 2019. Other goodwill is attributable to the acquisition of Horizon Technology, Inc. in 2018, the acquisitions of MIP Technologies AB in 2010 and two product lines from Caliper Life Sciences, Inc. in the same year. Other intangible assets amounted to SEK 260.0 (192.7) million, with capitalized development costs accounting for SEK 105.5 (101.2) million of the figure. The increase is mainly related to identified surplus values of acquired assets in PhyNexus. See note 26 on page 76.

Equity amounted to SEK 875.5 (702.2) million on December 31. The main changes in equity during the year are as follows: net profit SEK 186.8 (167.6) million, dividend to shareholders SEK -97.8 (-90.6) million, currency hedges and exchange differences on translation of foreign subsidiaries SEK 25.6 (16.5) million and the new share issue in connection with the acquisition of PhyNexus SEK 58.6 (-) million.

Investments, depreciation and amortization

Investments amounted to SEK 85.7 (178.4) million, with the net effect of the acquisition of shares in PhyNexus accounting for SEK 39.5 million of the figure. Depreciation, amortization and impairment amounted to SEK 74.4 (39.4) million, SEK 21.1 (-) of which was attributable to IFRS 16. Capitalized development costs accounted for SEK 26.5 (24.0) million of the investments and SEK 22.2 (17.3) million of depreciation, amortization and impairment.

Research and development

The Company's strategy for research and development is market-driven. Development of innovative products is an important competitive instrument and a way of creating opportunities for continued growth. Efforts are largely aimed at developing new products by improving existing technology and adding new functionality. In the short term, the continuing development of system platforms and new applications for existing products are key growth drivers. The Company's long-term target is a level of investment in research and development of about 10 percent of sales. This investment level was 7.4 (7.4) percent in 2019. Capitalization amounted to SEK 26.5 (24.0) million. About one-tenth of the research and development budget is allocated to innovative research on new concepts, and Biotage collaborates with academic research groups within this framework.

Intellectual property rights

Biotage uses its intellectual property rights as a commercial instrument to create competitive advantages. Patent protection is sought for strategically important results, including processes, synthesis and analysis methods, products and applications. In addition to filing patent applications, the Company seeks to register its intellectual property rights in the form of design protection and trademarks. Biotage regularly evaluates its own portfolio of intellectual property rights on a cost-benefit basis. Biotage actively monitors the external environment and third-party intellectual property rights to ensure the Company does not infringe on the rights of others and other parties do not infringe on the rights of the Company. Biotage currently has 223 (140) granted patents and 48 (56) patent applications, divided into 65 (52) patent families. During the year, 24 (4) new patents were granted and 1 (5) new patent applications was submitted.

Personnel

The Group had 464 (405) employees at the end of the year. The increase during the year is mainly explained by increased staffing in the sales force and the acquisition of PhyNexus. Within the framework of the Group's systematic work environment management, Biotage performs risk analyses and annual reviews to ensure a good physical and social work environment. Biotage has had relatively low sick leave over the years. Sick leave for all employees in the Swedish companies was 3.7 (2.0) percent, with long-term sick leave accounting for 2.8 percent of the figure. Sick leave (including long-term sick leave) for all employees in the UK company was 4.2 (4.2) percent. The Company invests in fitness activities and is prepared to act quickly and take measures should an employee suffer ill-health. In addition to its Work Environment Policy, the Company has a Code of Conduct, an Alcohol and Drug

Policy, an Anti-corruption policy, a Policy on Sexual and Other Harassment and a whistleblowing procedure. All of the policies include action plans for handling any breaches of the guidelines. The Equal Opportunities and Discrimination Policy is regularly updated. Biotage conducts annual salary analyses in order to ensure equal pay as far as possible.

Biotage Sweden AB has a collective agreement with Innovation and Chemical Industries in Sweden. Other companies in the Group comply with prevailing local regulations and guidelines. The Company applies an individual, performance-based and market-related pay structure.

Environment

Biotage production has a low environmental impact, as the Company does not employ any processing processes within manufacturing processes. The Company's production consists primarily of assembly and installation of components, and is conducted in compliance with the European Union's RoHS Directive. The environmental impact of Biotage operations is primarily related to freight and transportation. To reduce this impact, Biotage endeavors to switch from air to sea transport where possible and to optimize packaging by measures such as increasing the number of products in each package and buying packaging material and components locally if it can.

The main environmental impact of production activities is from the use of energy, although production is not electricity-intensive. The production facility in Cardiff also generates waste in the form of solvents used in the production process. The Company's aim is to regularly replace these solvents, where possible, with others that have a lower environmental impact. Most of the solvents that are used are recycled. At the Cardiff facility, waste is also generated in the form of packaging materials from incoming goods, which are sorted and sent for recycling where possible. The environment is also an important aspect of product development. Ensuring that an environmental approach is an integral part of new product design helps minimize the environmental impact of the Company's own production and product use in customers' own operations.

In 2013, Biotage set up environmental management systems as part of the program to obtain ISO 14001 certification. The Cardiff facility, where most of the Company's own production takes place, was awarded ISO 14001 certification in 2016. As part of the ISO 14001 program, Biotage is monitoring a number of important parameters that affect the Company's environmental performance. In 2019, there was an increase in material for recycling, but also in the quantity of waste, as a result of higher production volumes. During the year, the company's non-hazardous waste removal supplier provided assurances that 100 percent of this waste is recycled for energy.

Risks

Biotage operations are associated with risks in certain areas.

Customers and market

The Company has a broad customer base in several different sectors. The fact that no customer accounts for more than five percent of sales reduces the risk of variations in demand arising from fluctuations in certain sectors or customer-specific circumstances. New or less expensive products from competitors could affect the Company's market position. Biotage seeks to establish the broadest possible areas of use for its products and to have sufficient customer segments to ensure that each customer's proportion of sales is kept to a minimum. In recent years, Biotage has worked to broaden its customer base to areas of application in food and the environment, and now also biomolecules, following the acquisition of PhyNexus.

Products and technologies

The Company's broad product portfolio reduces sensitivity to product lifecycles and economic fluctuations. New biotechnology takes a relatively long time to establish, and Biotage is unable to guarantee that others will not develop products based on new technologies, which would reduce the competitiveness of the Company's products or make them redundant.

Production

Production of systems is handled by contract manufacturers in Sweden and the United States. Production also takes place at the Company's own facility in Cardiff, Wales, in Salem, New Hampshire and, after the acquisition of PhyNexus in January 2019, in San Jose, California. Consumables are produced at the Cardiff, Salem and San Jose facilities. All production facilities have the capacity to increase production at short notice. Dependence on external production capacity could increase the risk of delays or non-delivery, although this risk is considered minimal. Biotage has special staff who closely monitor how suppliers discharge their obligations in terms of quality and delivery times. In cases where Biotage enters into large call-off contracts, under which the Company commits to purchase certain volumes over a certain period, there is a risk of loss if sales do not meet the expectations on which the contracts are based. The UK's exit from the EU could have an adverse effect on Biotage operations in Wales, depending on what trade deals are agreed between the countries. Biotage has prepared for any transitional problems by building up inventories of selected products in strategically selected locations.

Personnel

Biotage has a large number of highly skilled, committed and motivated employees, who have developed strong customer relationships. Recruiting and retaining qualified staff is a prerequisite for pursuing the Group's business strategies. Biotage offers its employees competitive employment conditions, scope for input into the Group's products and services, some control over their own duties, and opportunities for personal development through initial training, continuing training and career planning.

Competitors

Competition in the Company's market is intense and Biotage often finds itself competing against large, well-established companies with vast financial and industrial resources at their disposal. It is not inconceivable that this competition could lead to lower market shares and reduced profitability for Biotage in the future. Biotage endeavors to maintain a strong market presence and to outperform its competitors in focusing on customer needs.

External risks

The Company's operations are exposed to risks associated with the effects of external factors and events. The main external risks include macroeconomic changes, political decisions on bilateral trade agreements, taxes, duties and other regulatory changes. By their very nature, external risks are out of the Company's control. Biotage endeavors to minimize this type of risk through business intelligence and access to the resources and expertise that will enable the Company to respond quickly when it needs to adapt to changes in the external environment.

Intellectual property rights

Biotage is dependent on non-patentable business secrets, know-how and continuing technological inventions, and on the ability to obtain and maintain patents to protect its technologies and products. Biotage continuously applies for patent protection for the methods and products it develops. Should the Company be unsuccessful in protecting its patents, business secrets, know-how or technologies, or have insufficient protection against competitors, the Company's competitive position could be undermined and the value of its existing and future products could be adversely affected. Should a party claim that the Company has infringed its intellectual property rights, the Company would be obliged to pay damages if the party were considered to have valid grounds for its claim against Biotage in a court of law. The Company might also need to initiate proceedings to defend its intellectual property rights. Even if Biotage were to win a case, the process would be time-consuming and costly, and would also take up much of management's time and attention. Biotage endeavors to monitor the development of new products and methods

in the external environment as far as possible, and to maintain good technical and legal expertise within its organization. There were no ongoing disputes when this annual report was issued.

Financial risks

Financial risks include currency risk, interest rate risk, credit risk, liquidity risk and refinancing risk. Currency risk is the most significant financial risk for Biotage, while interest risk and credit risk are less of a priority.

The Group's operating income is exposed to foreign currencies to a greater extent than its operating expenses. Exchange rate movements may shift the relationship between income and expenses and affect the Group's profitability. In order to reduce currency risk, some of the net flows have forward cover. In the long term, currency risk could be reduced if the Group relocated parts of its activities, although this might involve costs and loss of expertise. In addition, the Parent Company has invested in subsidiaries, notably in the US, UK, China and Japan. As a result of these investments, the Group's equity is affected by exchange rate movements in relation to these countries' currencies.

Liquidity risk is primarily the risk of Biotage being unable to convert a financial asset sufficiently quickly at a market price, and incurring unforeseen losses if cash funds need to be released. The Company's financial position and liquidity are satisfactory, with an equity ratio of 66 (70) percent and cash and cash equivalents of SEK 185.9 (177.0) million on the reporting date. Liabilities to credit institutions were SEK 109.6 (109.4) million. The cash flow statements show a satisfactory positive cash flow from operating activities, providing reasonable assurance that the obligations associated with the current scope of operations can be fulfilled, and also taking into account the loan facility of up to SEK 150 million arranged in connection with the acquisition of Horizon Technology in 2018. Consequently, Biotage does not currently have any tangible liquidity or financing risks that would leave the Group dependent on credit facilities or capital contributions for its expansion, with decision-making falling outside its control. Biotage addresses these risks in the long term by focusing strongly on operating profit, financial position and cash flow from operating activities. This will create the conditions for long-term organic growth and confidence among shareholders and lenders.

A description of the Group's financial risks and risk management is presented on pages 52-55.

Parent Company

The Group's Parent Company, Biotage AB, has wholly-owned subsidiaries in Sweden, the US, the UK, Germany, France, Italy, Japan, China, South Korea and India. The Parent Company is responsible for Group management, strategic business development and administrative functions at Group and subsidiary level.

The Parent Company's net sales amounted to SEK 2.9 (2.5) million. Operating expenses were SEK 27.2 (24.4) million. Operating profit/loss was SEK -24.4 (-21.9) million. The Parent Company's net financial items were SEK 195.9 (92.3) million, SEK 42.2 (-) million of which is attributable to the reversal of previously impaired intra-group receivables and a currency gain on restructuring in the Group. The remaining amount is related to exchange gains on translation of the Group's assets and liabilities.

Profit after financial items amounted to SEK 171.5 (70.7) million. Recognized tax was SEK 27.7 (14.9) million and was positively affected in the previous year and negatively in the current year by changes in the carrying amounts of tax loss carryforwards. Investments in intangible assets amounted to SEK 2.1 (2.0) million. The Parent Company's cash and bank balances were SEK 0.6 (2.1) million on December 31.

Acquisitions

The acquisition of PhyNexus was finalized on January 15. The purchase consideration was approximately USD 21.4 million, which corresponds to about SEK 191.3 million based on a transaction date SEK/USD exchange rate of 8.93. USD 4.8 million (SEK 43.3 million) was paid in cash and USD 6.6 million (SEK 58.6 million) was settled in newly

issued Biotage shares on the acquisition date. The remaining USD 10.0 million (SEK 89.3 million) consists of contingent consideration based on future results.

Share issue and authorization

At the 2019 AGM, the Board was authorized to adopt an issue of shares and/or convertibles on one or more occasions. On January 15, 2019 the Board decided to exercise an identical authorization from the 2018 AGM to issue shares as part of the consideration for the acquisition of PhyNexus, Inc. See also "The Biotage share" below.

The Biotage share

Biotage had 64,714,447 shares outstanding at the start of 2019. On January 15, 2019, the Board decided to issue shares as part of the purchase consideration for the acquisition of PhyNexus. The issue increased the number of Biotage shares from 64,714,447 to 65,201,784, resulting in dilution of 0.7 percent for existing shareholders. Each of the Company's shares gives the right to one vote, and the articles of association do not contain any restrictions on the number of shares a shareholder may vote at general meetings. There are no restrictions on transferability of shares. Shareholders Ann-Charlotte Bergström, Eva Forsberg, Lena Westergren, Jonas Lenman, Ove Mattsson and Susanne Wetterlin have concluded an agreement whereby they adopt, by concerted exercise of the voting rights they hold, a lasting common policy towards the management of the Company. The Company is not aware of any agreements between shareholders in this regard.

Sustainability reporting

As required by Chapter 6, Section 11, of the Annual Accounts Act, Biotage AB prepares a statutory sustainability report. The sustainability report is included in the annual report on pages 24-29.

Corporate governance

Biotage has prepared a Corporate Governance Report in accordance with the provisions and implementation guidelines contained in Swedish legislation and the Swedish Corporate Governance Code. The report has been prepared separately from the annual report. The report and related auditors' report are available on the Group's website at www.biotage.com together with other information about corporate governance within Biotage.

Guidelines for remuneration of senior executives

Current principles and guidelines for remuneration of senior executives adopted by the 2019 AGM are described in note 1 on pages 58-60.

The Board's proposed guidelines for remuneration of senior executives to be presented for adoption at the 2020 annual general meeting

The Board proposes that the annual general meeting adopt the following guidelines for remuneration of senior executives (CEO and other members of Group management). If a Board member performs work for Biotage, in addition to Board work, payment of consulting fees or other remuneration may be made for such work. The guidelines apply to agreed remuneration, and amendments to already agreed remuneration, after adoption of the guidelines by the 2020 AGM. The guidelines do not include remuneration decided by the meeting.

Guidelines for promoting the Company's business strategy, long-term interests and sustainability

The Company's business strategy, in brief, is to develop innovative and effective solutions for chemical separation and synthesis. The strategy for operating a successful business and achieving the Company's financial targets has seven focus areas: (i) investment in research and development, (ii) access to new market segments and customer groups, (iii) an increased share of aftermarket sales, (iv) a stronger market presence, (v) continuous production efficiency measures, (vi) improvement of environmental performance, and (vii) acquisitions. Further information about the Company's business strategy can be found at www.biotage.com.

Successful implementation of the business strategy and safeguarding of the Company's long-term interests, including its sustainability, are dependent on the ability to recruit and retain qualified employees. This requires the Company to be able to offer competitive remuneration. These guidelines enable senior executives to be offered competitive total remuneration.

The Board of Directors has proposed that the 2020 Annual General Meeting adopt a long-term incentive program, but as this will be decided by the meeting, it is not covered by these guidelines. The program includes the CEO and other senior executives of the Company. The performance criteria used to assess the outcome of the program have a clear link to the business strategy and therefore to the Company's long-term value creation, including its sustainability. These performance criteria currently include targets for the development of organic growth, share price and operating profit, measured over the duration of the program. The program also sets out a recommendation on a certain holding period.

The purpose of variable cash compensation covered by these guidelines is to promote the Company's business strategy and long-term interests, including its sustainability.

Types of remuneration

Remuneration shall be market-based and comprise a fixed annual salary, variable cash compensation, retirement benefits, other benefits and termination benefits. The AGM may also – irrespective of these guidelines – decide on, for example, equity and share-based payments.

Fulfilment of the criteria for payment of variable cash compensation will be measured over a period of one year and payment may not exceed a certain percentage (see below) of the fixed annual salary.

CEO

The Company's CEO receives a fixed annual salary and variable cash compensation under the terms of his employment contract. Retirement benefits, including health insurance, will be defined contribution. Variable cash compensation will not be pensionable. In accordance with the contract, the Company makes a pension provision corresponding to 30 percent of the CEO's fixed annual salary. In addition to the fixed annual salary, the CEO receives variable cash compensation of up to 100 percent of his fixed annual salary every year. The variable component of cash compensation is based on the Company's achievement of certain predetermined and measurable criteria, which may be financial or non-financial and may also include individualized quantitative or qualitative targets. The criteria must be designed in such a way as to promote the Company's business strategy and long-term interests, including its sustainability, by, for example, having a clear link to the business strategy or stimulating the CEO's long-term performance.

Other senior executives

This group consists of two individuals, who report directly to the CEO. All members of executive management receive a fixed annual salary which is in line with market salaries and variable cash compensation of up to 40 percent of the fixed annual salary every year. 75 percent of variable cash compensation is based on the Company's achievement of certain predetermined and measurable criteria, which may be financial or non-financial. The remaining 25 percent is based on predetermined targets related to personal performance, which consist of predetermined and measurable quantitative or qualitative targets. The criteria must be designed in such a way as to promote the Company's business strategy and long-term interests, including its sustainability, by, for example, having a clear link to the business strategy or stimulating the executive's long-term performance.

Retirement benefits, including health insurance, will be defined contribution unless the executive is covered by a defined-benefit pension under the provisions of a compulsory collective agreement. Variable cash compensation will be pensionable subject to the provisions of a compulsory collective agreement applicable to the

executive. Contributions for defined-contribution pensions will be up to 30 percent of the fixed annual salary.

Variable compensation and performance criteria

Variable cash compensation is linked to certain predetermined and measurable criteria as described above. After the measurement period for achievement of the criteria for payment of variable cash compensation, the extent to which the criteria have been achieved shall be assessed and determined. The Remuneration Committee is responsible for assessment of the CEO's variable cash compensation. The CEO is responsible for assessment of variable cash compensation for other executives. Assessment of financial targets must be based on the latest financial information published by the Company.

Derogation from the guidelines

The Board may decide to temporarily derogate from these guidelines, in whole or in part, if it believes that there are specific reasons to do so in a particular case, and a derogation is necessary to safeguard the Company's long-term interests, including its sustainability, or to ensure the Company's financial viability. As mentioned above, one of the Remuneration Committee's tasks is to prepare the Board's decisions on matters concerning remuneration, which includes decisions on derogations from the guidelines.

Other benefits

Senior executives may be awarded other customary benefits such as a company car, occupational health care and life insurance. These benefits may amount to a maximum value corresponding to 7 percent of the fixed annual salary.

Termination benefits

For termination initiated by the Company, the period of notice will be up to six months. The fixed salary during the period of notice and termination benefits may not together exceed an amount corresponding to the fixed salary for eighteen months for the CEO and other senior executives. For termination initiated by the senior executive, the period of notice will be up to six months, with no entitlement to termination benefits.

In addition, compensation for any obligation under a non-compete clause may be paid. Such payment is to compensate for any loss of income but will only be paid to the extent that the former executive is not entitled to termination benefits. Payment shall be based on the fixed cash salary on the termination date, subject to the provisions of any compulsory collective agreement, and shall be paid in the period during which the non-compete clause applies, but not more than 12 months after termination of employment.

Salary and terms of employment for employees

Salaries and terms of employment for the Company's employees have been taken into account in the preparation of these remuneration guidelines by including information about employees' total income, components of remuneration and the increase and growth rate over time in the support material provided to the Remuneration Committee and the Board for their evaluation of whether the guidelines and limitations set out here are reasonable.

The decision-making process to establish, review and implement the guidelines

The Board has appointed a Remuneration Committee. The Committee's tasks include preparing the Board's decisions on proposals for guidelines for remuneration of senior executives. The Board of Directors shall prepare proposals for new guidelines at least every four years and submit the proposal for adoption at the AGM. The guidelines shall apply until new guidelines have been adopted by the AGM. The Remuneration Committee shall also monitor and evaluate programs for variable compensation for executive management, the application of guidelines for remuneration of senior executives, and current remuneration structures and levels in the Company. Members of the Remuneration Committee, apart from Torben Jørgensen, are independent of the Company and its management. When the Board is considering and deciding on remuneration related matters, the CEO and other members of executive management are not present insofar as they are affected by the matters.

Previously decided remuneration

There is no previously decided remuneration that is not yet due for payment. A description of remuneration can be found in note 1.

Remuneration in 2019

For information on remuneration of senior executives in 2019, see note 1.

Significant events after the end of the fiscal year

For significant events after the end of the fiscal year see Note 29.

Proposed appropriation of profit

The annual general meeting has the following amounts from the Parent Company at its disposal (SEK):

Share premium reserve	57,970,173
Retained earnings	338,530,270
Profit for the year	143,821,157
Total	540,321,600

The Board of Directors and CEO propose that the amounts be distributed as follows:

Carried forward	540,321,600
Total	540,321,600

Taking into consideration the substantial uncertainties in society following the corona pandemic (COVID-19), the Board resolved for precautionary reasons to reconsider its previously communicated dividend proposal and resolved to withdraw the SEK 1.60 per share dividend proposal and instead propose that no dividend is paid out.

The earnings and financial position of the Group and the Parent Company are presented in the Group's statement of comprehensive income, statement of financial position and statement of cash flows, the Parent Company's income statement, balance sheet and statement of cash flows, the statements of changes in equity and the accounting policies and notes which follow.

Five years in summary

Key figures and ratios	2019	2018	2017	2016	2015
<i>Group</i>					
Net sales, SEK thousands	1,101,373	910,896	748,147	667,912	610,534
Growth in net sales, %	20.9	21.8	12.0	9.4	24.5
Gross profit, SEK thousands	685,410	556,626	456,664	385,813	342,568
Gross margin, %	62.2	61.1	61.0	57.8	56.1
Operating margin, %	18.9	18.9	17.9	14.8	12.2
Profit margin, %	19.5	19.4	18.6	13.8	12.5
Profit before tax, SEK thousands	211,992	176,289	136,260	92,401	76,190
Total assets, SEK thousands	1,335,687	1,003,203	757,201	695,196	668,832
Equity/assets ratio, %	65.5	69.8	80.4	81.0	81.7
Capital expenditure, SEK thousands	85,676 ³⁾	178,411 ²⁾	37,804	68,161	32,126
Average number of employees	440	404	335	308	293
Return on equity, %	23.7	25.6	23.7	16.7	12.8
Return on capital employed, %	23.2	25.2	23.3	18.1	14.3
Return on total assets, %	18.4	20.3	18.8	14.7	11.9
Key figures and ratios					
Earnings, SEK/share	2.87	2.59	2.14	1.43	1.13
Earnings after dilution, SEK/share	2.87	2.59	2.14	1.43	1.13
Dividend, SEK/share ¹⁾	–	1.50	1.40	1.25	0.75
Stock market price at end of period, SEK/share	124.0	109.00	84.00	46.00	24.60
Equity, SEK/share	13.43	10.84	9.40	8.70	8.45
Equity after dilution, SEK/share	13.43	10.84	9.40	8.70	8.45
P/E ratio, times	43.2	42.1	39.3	32.2	21.7
P/S ratio, times	7.3	7.7	7.3	4.5	2.6
Cash flow from operations, SEK/share	3.25	2.40	2.61	2.15	1.86
Weighted average number of shares, thousands	65,182	64,714	64,714	64,714	64,714
Weighted average number of shares after dilution, thousands	65,182	64,714	64,714	64,714	64,714
Total number of shares outstanding at end of the period, thousands	65,202	64,714	64,714	64,714	64,714
Total number of shares outstanding after dilution at end of the period, thousands	65,202	64,714	64,714	64,714	64,714

¹⁾ Amounts refer to dividends paid for each year. The Board recommends that no dividend is paid for the fiscal year 2019.

²⁾ SEK 131.2 million relates to the acquisition of Horizon Technology, Inc.

³⁾ SEK 39.5 million relates to the acquisition of PhyNexus, Inc.

Consolidated Statement of Comprehensive Income

Amounts in SEK thousands	Note	2019	2018
Net sales	3	1,101,373	910,896
Cost of sales	1,2,4,5,6	-415,963	-354,270
Gross profit		685,410	556,626
Distribution costs	1,2,5,6	-316,721	-256,670
Administrative expenses	1,2,4,5,6	-82,029	-70,165
Research & development expenses	1,2,5,6	-78,643	-65,925
Other operating income	7	2,802	16,396
Other operating expenses		-2,699	-7,784
Total operating expenses		-477,290	-384,148
Operating profit		208,120	172,478
Finance income	8	6,809	6,126
Finance costs	8	-2,937	-2,315
Net financial items		3,872	3,811
Profit before tax		211,992	176,289
Income tax	9	-25,172	-8,662
Profit/loss for the year		186,820	167,627
Other comprehensive income			
<i>Items that may be reclassified to profit or loss for the year:</i>			
Exchange differences on translation of foreign subsidiaries		25,198	16,623
Cash flow hedges		460	-81
Total other comprehensive income		25,658	16,542
Total comprehensive income for the year		212,478	184,169
Profit/loss for the year attributable to owners of the Parent		186,820	167,627
Total comprehensive income attributable to owners of the Parent		212,478	184,169
Average number of shares outstanding		65,182,133	64,714,447
Average number of shares outstanding after dilution		65,182,133	64,714,447
Ordinary shares outstanding at the reporting date		65,201,784	64,714,447
Earnings per share		SEK 2.87	SEK 2.59
Earnings per share after dilution		SEK 2.87	SEK 2.59

Quarterly overview Amounts in SEK thousands	2019				2018			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Net sales	288,594	282,663	282,099	248,018	234,574	232,204	236,071	208,048
Cost of sales	-109,705	-105,031	-106,221	-95,005	-90,534	-90,815	-91,678	-81,242
Gross profit	178,889	177,632	175,877	153,012	144,040	141,389	144,392	126,805
Gross margin	62.0%	62.8%	62.3%	61.7%	61.4%	60.9%	61.2%	61.0%
Operating expenses	-141,027	-113,302	-119,795	-103,165	-108,303	-96,250	-94,381	-85,214
Operating profit	37,861	64,330	56,082	49,847	35,737	45,139	50,011	41,591
Net financial items	-6,162	8,791	-1,068	2,311	-290	-1,846	1,903	4,044
Profit before tax	31,699	73,121	55,014	52,158	35,448	43,293	51,914	45,635
Tax	-13,206	-6,486	-837	-4,643	-8,120	735	-495	-782
Profit/loss for the period	18,493	66,635	54,177	47,515	27,327	44,027	51,419	44,853

Consolidated Statement of Financial Position

Amounts in SEK thousands	Note	12/31/2019	12/31/2018
ASSETS			
Non-current assets			
Property, plant & equipment	10	53,385	48,630
Right-of-use assets	10	58,868	-
Goodwill	11	315,869	186,055
Other intangible assets	12	260,047	192,654
Investments in associates	13	14,615	17,368
Deferred tax asset	23	44,335	62,205
Other non-current receivables	14,19	1,999	1,853
Total non-current assets		749,118	508,765
Current assets			
Inventories	15	173,760	132,338
Trade and other receivables	16,19	226,943	185,080
Cash and cash equivalents	19	185,867	177,020
Total current assets		586,569	494,438
Total assets		1,335,687	1,003,203
EQUITY AND LIABILITIES			
Capital and reserves attributable to owners of the parent	17		
Share capital		90,630	89,953
Reserves		3,751	-79,877
Retained earnings		781,121	692,104
Total equity		875,503	702,180
Non-current liabilities			
Liabilities to credit institutions	18,19	109,550	109,400
Lease liabilities		38,097	-
Other financial liabilities	19,20,21	68,782	1,201
Deferred tax liabilities	23	28,884	14,780
Non-current provisions	22	2,599	2,245
Total non-current liabilities		247,912	127,625
Current liabilities			
Trade and other payables	19,24	166,624	166,721
Other financial liabilities	19,21	17,369	385
Tax liabilities		3,544	3,132
Lease liabilities		21,231	-
Current provisions	22	3,504	3,159
Total current liabilities		212,272	173,397
Total equity and liabilities		1,335,687	1,003,203

Consolidated statement of changes in equity

Amounts in SEK thousands	Share capital	Other paid-in capital	Translation reserve	Hedging reserve	Retained earnings	Total equity
Opening balance January 1, 2018	89,953	-	-96,494	76	615,077	608,611
Changes in equity in 2018						
Profit/loss for the year	-	-	-	-	167,627	167,627
<i>Other comprehensive income:</i>						
Cash flow hedges	-	-	-	-81	-	-81
Exchange differences on translation of foreign subsidiaries	-	-	16,623	-	-	16,623
Total comprehensive income	-	-	16,623	-81	167,627	184,169
Transactions with owners of the Parent						
Dividend to shareholders of the Parent	-	-	-	-	-90,600	-90,600
Closing balance December 31, 2018	89,953	-	-79,871	-5	692,104	702,180
Changes in equity in 2019						
Profit/loss for the year	-	-	-	-	186,820	186,820
<i>Other comprehensive income:</i>						
Cash flow hedges	-	-	-	460	-	460
Exchange differences on translation of foreign subsidiaries	-	-	25,198	-	-	25,198
Total comprehensive income	-	-	25,198	460	186,820	212,478
Transactions with owners of the Parent						
New share issue	677	57,970	-	-	-	58,648
Dividend to shareholders of the Parent	-	-	-	-	-97,803	-97,803
Closing balance December 31, 2019	90,630	57,970	-54,673	454	781,121	875,503

Consolidated Statement of Cash Flows

Amounts in SEK thousands	Note	2019	2018
Operating activities			
Profit before tax		211,992	176,289
Adjustments for non-cash items		76,501	27,684
		288,493	203,974
Income tax paid		-9,925	-9,314
Cash flow from operating activities before changes in working capital		278,568	194,659
<i>Cash flow from changes in working capital:</i>			
Increase (-)/decrease (+) in inventories		-25,497	-21,416
Increase (-)/decrease (+) in current receivables		-32,001	-30,020
Increase (+)/decrease (-) in other liabilities		-9,264	11,781
Cash flow from operating activities		211,807	155,005
Investing activities			
Acquisition of intangible assets	12	-29,941	-34,179
Acquisition of property, plant and equipment	10	-15,513	-12,979
Acquisition of financial assets	13,14	-687	-1,437
Acquisition of companies and product lines	26	-39,536	-129,816
Cash flow from investing activities		-85,676	-178,411
Financing activities			
Dividend to shareholders		-97,803	-90,600
Proceeds from borrowings		40,000	109,942
Repayment of borrowings		-61,402	-
Cash flow from financing activities		-119,205	19,342
Cash flow for the year		6,926	-4,064
Cash and cash equivalents at beginning of year		177,020	174,263
Exchange differences		1,921	6,821
Cash and cash equivalents at end of year		185,867	177,020
Additional disclosures			
<i>Adjustments for non-cash items:</i>			
Depreciation and impairment	6	74,372	39,412
Other items	25	2,129	-11,727
Total		76,501	27,684
Interest received		765	630
Interest paid		2,860	-1,738

Income Statement, Parent

Amounts in SEK thousands	Note	2019	2018
Net sales	3	2,880	2,537
Administrative expenses	1,2,4,5,6	-24,016	-21,998
Research & development expenses	2,6	-3,284	-2,467
Other operating income	7	59	17
Operating expenses, net		-27,240	-24,448
Operating profit		-24,361	-21,911
<i>Profit/loss from financial investments:</i>			
Interest income, receivables from Group companies		221	216
Profit/loss from investments in Group companies		42,238	–
Interest and similar expenses		-1,797	-1,613
Currency effects		3,272	3,335
Group contributions received		151,959	90,645
Net financial items	8	195,893	92,584
Profit/loss after financial items		171,532	70,673
Income tax	9,23	-27,711	-14,872
Profit/loss for the year		143,821	55,801

Statement of Comprehensive Income, Parent

Amounts in SEK thousands	Note	2019	2018
Profit/loss for the year		143,821	55,801
Other comprehensive income			
Items that may be reclassified to profit or loss for the year:		–	–
Comprehensive income for the year		143,821	55,801

Balance Sheet, Parent

Amounts in SEK thousands	Note	12/31/2019	12/31/2018
ASSETS			
Non-current assets			
<i>Intangible assets</i>			
Patents and licenses	12	11,808	10,983
<i>Financial assets</i>			
Investments in Group companies	26	472,103	471,922
Receivables from Group companies	28	145,369	169,378
Investments in associates	13	19,284	19,284
Deferred tax asset	23	5,912	33,623
		642,669	694,207
Total non-current assets		654,476	705,190
Current assets			
<i>Current receivables</i>			
Receivables from Group companies	28	93,970	73,783
Other receivables	16	981	2,616
Prepayments and accrued income	16	1,195	2,389
		96,146	78,788
Cash and bank balances		619	2,111
Total current assets		96,766	80,899
Total assets		751,242	786,088
EQUITY, PROVISIONS AND LIABILITIES			
Equity			
<i>Restricted equity</i>			
Share capital		90,630	89,953
<i>Unrestricted equity</i>	17		
Other paid-in capital		57,970	-
Retained earnings		338,530	380,532
Profit/loss for the year		143,821	55,801
		540,322	436,333
Total equity		630,952	526,286
<i>Non-current liabilities</i>			
Liabilities to credit institutions	18	110,000	110,000
<i>Current liabilities</i>			
Trade payables	24	1,598	1,717
Liabilities to Group companies	28	229	139,974
Other current liabilities	24	229	71
Accruals and deferred income	24	8,234	8,041
		10,290	149,802
Total equity and liabilities		751,242	786,088

Statement of Changes in Equity, Parent

Amounts in SEK thousands	Share capital	Retained earnings	Total equity
Opening balance January 1, 2018	89,953	471,133	561,086
Changes in equity in 2018			
Profit/loss for the year	–	55,801	55,801
Total comprehensive income	–	55,801	55,801
<i>Owner transactions:</i>			
Dividend to shareholders of the Parent	–	-90,600	-90,600
Closing balance December 31, 2018	89,953	436,333	526,286
Changes in equity in 2019			
Profit/loss for the year	–	143,821	143,821
Total comprehensive income	–	143,821	143,821
<i>Owner transactions:</i>			
New share issue	677	57,970	58,647
Dividend to shareholders of the Parent	–	-97,803	-97,803
Closing balance December 31, 2019	90,630	540,322	630,952

Statement of Cash Flows, Parent

Amounts in SEK thousands	Note	2019	2018
Operating activities			
Profit/loss after financial items		171,532	70,673
Adjustments for non-cash items	25	-151,062	-89,545
		20,470	-18,872
Income tax paid		–	–
Cash flow from operating activities before changes in working capital		20,470	-18,872
<i>Cash flow from changes in working capital:</i>			
Increase (-)/decrease (+) in other current receivables		-17,358	-86,517
Increase (+)/decrease (-) in other liabilities		12,446	90,195
Cash flow from operating activities		15,558	-15,194
Investing activities			
Acquisition of subsidiaries	26	-182	-1,524
Acquisition of intangible assets	12	-1,721	-2,030
Cash flow from investing activities		-1,903	-3,554
Cash flow from financing activities			
Proceeds from borrowings		–	110,000
New share issue		58,647	–
Change in non-current receivables		24,009	–
Dividend to shareholders of the Parent		-97,803	-90,600
Cash flow from financing activities		-15,147	19,400
Cash flow for the year		-1,492	652
Cash and cash equivalents at beginning of year		2,111	1,459
Cash and cash equivalents at end of year		619	2,111
Additional disclosures:			
<i>Adjustments for non-cash items:</i>			
Depreciation and impairment	6,26	897	1,100
Group contributions		-151,959	-90,645
Total		-151,062	-89,545
Interest received		266	216
Interest paid		-1,797	-1,613

Summary of Significant Accounting and Measurement Policies for the Group and Parent Company

Contents

1. **Introductory information**
2. **Basis of preparation**
3. **Consolidation and business combinations**
4. **Segment reporting**
5. **Foreign currency translation**
6. **Items in the consolidated statement of financial position**
7. **Items in the consolidated income statement**
8. **The Parent Company's accounting policies**
9. **Financial risks and the Group's risk management**
10. **Significant accounting estimates**

1 Introductory information

The consolidated annual financial statements and the Parent Company's annual financial statements for the fiscal year ending December 31, 2019 were approved by the Board and CEO for publication on April 28, 2020 and will be presented for adoption at the annual general meeting on June 4, 2020.

The consolidated financial statements include the Parent Company Biotage AB (the Company) and its subsidiaries, which together are referred to as the Group or Biotage. The Parent Company is a Swedish public limited liability company. The address of the registered office is Vimpelgatan 5, 753 41 Uppsala, and this is where the Group's management and central functions are located. The Company's shares are listed on Nasdaq Stockholm.

Biotage offers effective separation technology, from analysis to industrial scale, and high-quality solutions for analytical chemistry in everything from research to commercial analytical laboratories. Users of Biotage products include government agencies, academic institutions and the pharmaceutical and food industries. Biotage had 464 employees at the end of 2019 and net sales of SEK1,101 million for the year. The Group has offices in Sweden, the United States, the United Kingdom, China, Japan, South Korea and India.

2 Basis of preparation

Statement of compliance with reporting standards

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), as adopted by the European Union, and effective for periods beginning on or after January 1, 2019. The Group also applies the Swedish Annual Accounts Act and the Swedish Financial Reporting Board's recommendation RFR 1, *Supplementary Accounting Rules for Groups*. Differences between accounting policies for the Parent Company and the Group are described in Section 8. The accounting policies have been applied consistently to all periods presented in the consolidated financial statements and to the financial statements of companies in the Biotage Group.

New and amended standards and interpretations applicable in 2019

Apart from IFRS 16, which is described below, no new or amended standards and interpretations from the IASB and IFRS have had any material effect on the Group's financial reports.

IFRS 16 Leases

The transition to IFRS 16 meant that a lease liability and a corresponding right-of-use asset of SEK 65 million were recognized on January 1, 2019. See also notes 10 and 12. The new application is described below under 6.4 Leases.

New and amended standards and interpretations not yet effective

It is management's assessment that no new or amended standards and interpretations are likely to have any material effect on the Group's financial reports in the period of initial application.

Functional currency and presentation currency

The financial statements are reported in Swedish kronor (SEK), which is the Parent Company's functional currency and the presentation currency for the Group's financial reporting. Unless otherwise stated, amounts are reported in SEK thousands.

Basis of measurement

Assets and liabilities are measured at cost, apart from certain financial assets and liabilities which are measured at fair value.

Use of accounting estimates

Preparation of financial statements in accordance with IFRS, Swedish legislation and generally accepted accounting principles requires management to make critical judgments, accounting estimates and assumptions which affect the application of the accounting policies. These accounting estimates take into account internal and external circumstances and the Group's goals and strategic plans. If the actual outcome differs from these accounting estimates, this may have an effect on the Group's future financial position and performance.

Accounting estimates and assessments are regularly reviewed. Changes in accounting estimates are recognized in the period of the change if the change only affects that period. Changes are recognized in the period of the change and future periods if the change affects both. Information about complex areas that require a high degree of estimation or where accounting estimates are of key significance to the consolidated financial statements can be found in Section 10, Significant accounting estimates.

Classification

Non-current assets, liabilities and provisions are essentially amounts that are expected to be recovered or paid more than 12 months after the reporting date. Current assets, liabilities and provisions are amounts expected to be recovered or settled within 12 months of the reporting date. Investments in financial instruments to manage temporary excess liquidity are classified as cash & cash equivalents if they have an original maturity of three months or less. Financial instruments with an original maturity of over three months are classified as other short-term investments.

3 Consolidation and business combinations

Consolidation

The consolidated financial statements comprise the Parent Company and its subsidiaries. The financial statements of companies included in the consolidated financial statements relate to the same period and are prepared using the Group's accounting policies. All intra-group balances, income, expenses, gains and losses arising from transactions between consolidated companies are eliminated in their entirety.

The results of operations of a subsidiary are included in the consolidated financial statements from the date of acquisition, which is the date on which the Parent Company obtains control, until the date on which control ceases. Control exists when the Parent Company is exposed, or has rights, to variable returns from its involvement with an investee and has the ability to affect those returns through its power over the investee. The Group's structure is shown in note 26.

Business combinations

The consolidated financial statements have been prepared using the acquisition method. The purchase consideration consists of the fair value of assets acquired and liabilities incurred by Biotage to the former owners and the fair value of the shares issued by the Group. Contingent consideration is a liability incurred by Biotage to former owners and is recognized at the acquisition-date fair value and included in the cost of acquisition. Subsequent changes in fair value are recognized in the income statement. The fair value of identifiable acquired assets, liabilities and contingent liabilities is determined at the acquisition date. Financial assets and financial liabilities (e.g., contingent consideration), which are subsequently measured at fair value through profit or loss are initially recognized at fair value. Identifiable assets and liabilities also include assets, liabilities and provisions (including obligations and claims from external parties) which are not recognized in the balance sheet of the acquiree. For business combinations where the total of the purchase consideration transferred, any non-controlling interests, and the acquisition-date fair value of the acquirer's previous equity interest in the acquiree, exceeds the acquisition-date fair value of identifiable net assets, the difference is reported as goodwill in the statement of financial position. If on acquisition of a subsidiary the fair value of acquired assets, liabilities and contingent liabilities is higher than cost, the surplus is recognized immediately in the income statement. Acquisition costs are recognized in the income statement in the period in which they are incurred.

Reporting of associates

Associates are partly-owned entities over which the Group has significant influence, being the power to participate in financial and operating policy, but not control. This normally corresponds to a shareholding of between 20 and 50 percent of the votes. Investments in associates are reported in the consolidated accounts using the equity method. The equity method means that the carrying amount of shares in associates corresponds to the Group's share of the associates' equity and any goodwill and fair value adjustments recognized on the acquisition date. The share of associates' profit and loss, adjusted for recognized fair value changes, is reported under other operating income and expenses in the consolidated income statement.

4 Segment reporting

Segment information is required to be presented using a management approach, and operating segments are identified on the basis of internal reporting to the chief operating decision-maker, which for Biotage is the Group's CEO. In the internal reporting system used by the CEO to review operating results and make decisions about the allocation of resources, financial information is presented for the Group as a whole. Consequently, the Group consists of one operating segment, and for this reason Biotage does not report separate segment information. In accordance with IFRS 8 Operating Segments, disclosures of revenue by geographic market are provided, see note 3, and distribution of non-current assets by country, see note 12.

5 Foreign currency translation

Functional currency and presentation currency

Items in the individual financial statements of each Group entity are presented in the currency used in the area in which the entity oper-

ates (its functional currency). The consolidated financial statements are presented in SEK, which is the Parent Company's functional currency.

Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Exchange gains and losses arising on settlement of these transactions and on translation of foreign currency monetary assets and liabilities using the closing rate are recognized in profit or loss.

Foreign currency receivables and liabilities are translated to SEK at the closing rate. Unrealized exchange gains and losses on operating receivables and liabilities are recognized in operating profit or loss, while unrealized exchange gains and losses on financial assets and liabilities are recognized in net financial items.

A monetary item receivable from or payable to a foreign operation, for which settlement is neither planned nor likely to occur in the foreseeable future, is a part of the Company's net investment in that foreign operation. Exchange differences arising on the translation of such monetary items are recognized in other comprehensive income.

Group companies

The results and financial position of Group companies (none of which has a functional currency that is the currency of a hyperinflationary economy) are translated into the Group's presentation currency using the following procedures:

- (i) assets and liabilities are translated at the closing rate;
- (ii) income and expenses are translated at the average exchange rate for the reporting period. On consolidation, exchange differences arising from the translation of the net investment in foreign operations and the translation of borrowings and other currency instruments designated as hedges of such investments are accounted for in other comprehensive income. When a foreign operation is disposed of, these exchange differences are recognized in the income statement as part of the gain or loss on sale.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the acquiree.

6 Items in the consolidated statement of financial position

6.1 Intangible assets

Intangible assets are recognized at cost less accumulated amortization and impairment. The useful life of each intangible asset is determined and amortization is applied on a straight-line basis over the useful life. Intangible assets with an indefinite useful life are not amortized; instead, they are tested for impairment when the annual financial statements are prepared or when there is an indication of a decline in value. The useful life of goodwill is generally assumed to be indefinite. The useful life of the Company's acquired technology-based assets is 10 years.

Capitalized development expenditure

Expenditure on development projects is recognized as an asset in the consolidated financial statements when it is probable that the projects will generate future economic benefits. If a business combination gives the Group access to products, technological equipment or processes it did not previously have, and utilization of these is expected to provide economic benefits for the Group, a value for these technology-based intangible assets may be reported in the consolidated statement of financial position.

The purpose of development projects is to develop new products and improve existing ones. Because development of products in the areas in which Biotage is active is a long process, it is not uncommon for a development project to span several fiscal years. Reporting and control of development expenses takes place through project reporting, which is part of the Group's ERP system.

Development projects are classified as Product Care, Pre-Study or Product Development. Expenditure associated with Product Care projects is recognized immediately as an expense. Pre-Study projects in the research phase are recognized immediately as an expense. When a project moves from the research phase to the development phase, and it can be demonstrated how the intangible asset will generate probable future economic benefits, and it meets the criteria in IAS 38 for capitalization of internally-generated intangible assets, it is reclassified as Product Development. The development phase is aimed at producing new technology or a new product and ends when the technology is placed in service or the new product is launched in the Group's sales markets.

The amortization period for capitalized development costs begins when the fully developed asset is available for use in the manner intended. In many cases, this is when the new product is launched. Amortization is on a straight-line basis over a period of time and is based on an assessment of the product's estimated useful life. The Company's capitalized development costs can be divided into systems, consumables and software. The estimated useful life for systems and consumables is 7 years, and for software 3 years. Useful life expectations are based on the Company's experience of the lifespans of its products and on its innovation cycles, i.e., the intervals at which Biotage could be expected to launch new products to replace, or partly replace, previous ones. These useful life assumptions are reviewed regularly during impairment testing, which is conducted on an individual level annually or more frequently if there is an indication of impairment.

Market and customer-related intangible assets

Patent and license rights, customer relationships and trademarks are recognized at cost less accumulated amortization. The amortization period for patents is normally 10 years, but never longer than the patent term. Amortization begins when the first national patent is granted. The patent portfolio is also evaluated annually to identify any need for additional amortization. License rights are amortized over their duration, which is 5-10 years. Customer-related intangible assets are amortized on a straight-line basis with an estimated useful life of 10 years.

For trademarks, the useful life is considered indefinite as the intention of the acquisitions is to develop and strengthen the entire trademark portfolio. The Group's acquired trademarks, which are considered to have an indefinite useful life, are attributable to Horizon Technology, Inc. and PhyNexus, Inc. The assessment that these trademarks have an indefinite useful life is based on the following circumstances. They are well-established trademarks in their own areas, which the Group intends to retain and further develop. The trademarks are considered to be of significant economic importance as they form an integral part of the product offering to the market, signaling quality and innovation in the products. The trademarks are therefore seen to affect product pricing and competitiveness. By virtue of their connection with the ongoing operations, they are considered to have an indefinite useful life and are expected to be used as long as the relevant operations continue.

Impairment testing is conducted at least once a year. Considering that it has been assessed that cash flows attributable to brands cannot be distinguished from other cash flows within each cash-generating unit, impairment testing for both goodwill and brands is carried out jointly by calculating the recoverable amount for the cash-generating unit. See also Goodwill below.

Goodwill

Goodwill is recognized as an intangible asset at cost less accumulated impairment in the balance sheet. For business combinations where the total of the purchase consideration transferred, any non-controlling interests, and the acquisition-date fair value of the acquirer's previous equity interest in the acquiree, exceeds the acquisition-date fair value of identifiable net assets, the difference is reported as goodwill. Goodwill is tested for impairment annually

or more frequently if there are indications of a decline in value. The carrying amount of goodwill is compared with its recoverable amount, which is the higher of value in use and fair value less costs to sell. Any impairment is recognized as an expense in the income statement.

For impairment testing, goodwill is allocated to the smallest cash-generating unit in the Company in which the goodwill in question is monitored during internal control. See also Section 10, Significant accounting estimates, on page 55, which describes the estimates and assumptions made during impairment testing.

Software licenses

Acquired software licenses are capitalized on the basis of the expenditure incurred when the software itself is acquired and placed in service. Amortization is applied over the useful life, which is 3 to 7 years, depending on the contractual terms.

6.2 Property, plant & equipment

Items of property, plant & equipment are recognized at cost less accumulated depreciation and impairment losses. These assets include factories, offices, testing instruments, production tools, computers and peripherals and office and warehouse equipment. The cost of property, plant & equipment comprises the purchase price and any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended. The cost of an item of property, plant & equipment is recognized as an asset on initial measurement, as is the cost of major spare parts if it is probable that future economic benefits associated with the asset will flow to the Group. Other costs are recognized as an expense in the period in which they are incurred.

Depreciation is applied on a straight-line basis over the asset's estimated useful life. Parts of an item of property, plant and equipment which constitute a large proportion of the asset's total cost and which have different useful lives are treated as separate components of property, plant & equipment and are subject to separate depreciation.

The following useful lives apply:

Land	No depreciation
Site improvements	10-20 years
Buildings	30-40 years
Production tools	3-7 years
Improvement of 3rd-party property	2-10 years
Computers	3-4 years
Other property, plant & equipment	3-5 years

The gain or loss arising from the disposal of an item of property, plant & equipment is the difference between the selling price and the asset's carrying amount, and is reported under other operating income or other operating expenses.

6.3 Financial assets

Financial assets are accounted for in accordance with the description in section 6.6 Financial instruments.

6.4 Leases

From 2019, leases are recognized in the balance sheet as a right-of-use asset over a determined lease term. A corresponding liability is recognized on the initial reporting date. Right-of-use assets are depreciated over their estimated useful lives, while minimum lease payments are apportioned between the finance charge and the reduction of the outstanding lease liability. In financial and cost terms, Biotage has a small proportion of leases, which are mainly rental agreements for premises. Biotage applies the simplified transition method and has not restated comparatives. Exemptions are allowed for short-term leases and leases where the underlying asset is of low value. This means that leases with a maximum term of 12 months and leases for office machinery are recognized as an expense on a straight-line basis over the lease term.

Right-of-use assets held under leases are initially measured at an amount corresponding to the lease liability on January 1, 2019. The liability has been calculated as the present value of future lease payments, discounted using the Group's incremental borrowing rate on January 1, 2019.

Accounting principles for leases

The Group assesses whether an arrangement is a lease or contains a lease at the commencement date. The Group recognizes a right-of-use asset and an associated lease liability for all leases where the Group is lessee, apart from short-term leases (leases with a term shorter than 12 months) and low-value leases (e.g., office equipment). For these leases, the Group recognizes the lease payments as an expense on a straight-line basis over the term of the lease, or on another systematic basis that is more representative of the pattern in which the economic benefit from use of the leased assets is diminished.

The lease liability is initially measured at the present value of the lease payments that are not paid at that date, discounted using the interest rate implicit in the lease if the rate can be readily determined. If the rate cannot be readily determined, the lessee's incremental borrowing rate is used.

The lease liability includes rental and lease costs for the periods in which the Company is bound by existing contracts, and periods where it is reasonably certain that options to extend the leases will be exercised. If a lease renewal is imminent (within one year), it is assumed that the lease will be extended unless known circumstances indicate otherwise. If there are a number of leases for premises for the same establishment in a country, it is assumed that they will be extended until the expiry date of the lease with the longest term. Five years is the longest lease term included, as assumptions beyond five years are not considered reasonable.

Lease payments included in the measurement include fixed payments, expected indexation of rental amounts unless they are insignificant, and amounts expected to be payable under residual value guarantees. For most subsidiaries, future rental payments are not index-linked but defined in the existing contract. Payments other than for leased assets are recognized as an expense as incurred.

The lease liability is reported as a separate item in the consolidated statement of financial position. After the commencement date, the lease liability is measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made. The Group reassesses the lease liability and makes a corresponding adjustment to the right-of-use asset in the event of a change to the lease term, changed lease payments as a result of changes to an index or rate, or changes to amounts expected to be payable under a residual value guarantee. The lease liability is remeasured using a revised discount rate if there is a change in the lease term; otherwise, the rate does not change.

Right-of-use assets comprise the amount of the initial measurement of the corresponding lease liability, lease payments made on or before the commencement date and any initial direct costs. They are subsequently measured at cost less accumulated depreciation and impairment losses. The useful life of the right-of-use asset is the same as the lease term. Right-of-use assets are reported as a separate item in the consolidated statement of financial position. The Group applies IAS 36 to determine whether a right-of-use asset is impaired and to account for any impairment loss identified.

Variable lease payments that do not depend on an index or rate are not included in the measurement of the lease liability and right-of-use asset. These payments are recognized in profit or loss in the period in which the event or condition that triggers the payments occurs. For Biotage, this is an insignificant amount.

As a practical expedient, IFRS 16 allows lessees to elect not to separate non-lease components from lease components, and instead account for each lease component and any associated non-lease components as a single lease component.

The incremental borrowing rate has been determined on the basis of government bonds in Sweden, and the equivalent for leases in other countries, the Company's creditworthiness and a reflection of the risk in the underlying asset.

There are no agreements in the Group where a company in the Group is a lessor.

For the comparative year, the leases were reported in accordance with IAS 17. All leases were classified as operating leases. For operating leases reported under IAS 17, the leased asset is not recognized in the balance sheet and the lease payment is recognized as an expense in the income statement on a straight-line basis over the lease term.

6.5 Inventories

Inventories are measured using the "lower value" principle, i.e., the lower of cost and net realizable value. Cost is measured using the FIFO method. The cost of finished goods and work in progress consists of design costs, raw materials, direct labor, other direct costs and related indirect manufacturing costs. Borrowing costs are not included in cost. The net realizable value is the estimated selling price in the ordinary course of business less costs of completion and costs necessary to make the sale.

6.6 Financial instruments

Financial instruments reported in the statement of financial position include securities, other financial receivables, trade and other receivables, cash & cash equivalents, trade payables, loans, other liabilities and derivatives.

Recognition in the statement of financial position

Financial assets are recognized in the statement of financial position when the Group becomes a party to the contractual provisions of the instrument. Trade receivables are recognized when an invoice has been sent. A liability is recognized when the counterparty has performed and there is a contractual obligation to pay.

A financial asset or part of a financial asset is derecognized when the rights to receive cash flows from the asset have expired or have been transferred or the Group no longer has control of it. Financial liabilities are derecognized when the contractual obligation has been discharged or extinguished in some other way.

A financial asset and a financial liability may be offset and the net amount presented in the statement of financial position when, and only when, the Company has a legally enforceable right to set off the recognized amounts, and the Company intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously. The Group does not offset financial assets and liabilities on the reporting date.

Classification and measurement

Financial assets are classified into categories on initial recognition. The classification is based on the business model used to manage the assets and their contractual cash flow characteristics. The Company considers whether the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Financial assets are classified in the following categories:

1. Financial assets at amortized cost
These assets are held to collect contractual cash flows that are solely payments of principal and interest on the principal amount outstanding.
2. Financial assets at fair value through profit or loss
These assets are held to collect contractual cash flows and to sell investments, and have contractual cash flows that are solely payments of principal and interest on the principal amount outstanding.
3. Financial assets at fair value through OCI
These are other financial assets and investments in equity instruments.

The Group holds trade receivables, cash and other non-current receivables to collect contractual cash flows. As the contractual cash flows from these assets consist of payments of principal and interest on the principal amount outstanding, they are measured at amortized cost. Financial liabilities are measured at fair value through profit or loss if they are held for trading or were placed in this category on initial recognition.

The Group's financial liabilities consist of liabilities to credit institutions, lease liabilities, other financial liabilities and trade and other payables. They are all measured at amortized cost, apart from leases. See 6.4 above.

Amortized cost is the amount at which an asset or liability is measured at initial recognition minus principal repayments, plus or minus cumulative amortization using the effective interest method of any difference between the initial amount and the maturity amount, and minus any reduction for impairment or uncollectibility. The effective interest rate is the rate that discounts all estimated future cash payments or receipts through the expected life of the financial instrument to the initially recognized carrying amount of the financial asset or liability.

The fair values of assets and liabilities with a remaining maturity of less than three months, such as cash deposits, trade and other receivables, and trade and other payables, are considered equal to their carrying amounts.

The transition to IFRS 9 does not have any material effect on the Group's earnings and financial position. Although the new rules introduce a change to the classification of financial assets, this does not affect the measurement of financial assets and liabilities.

For a description and definition of fair value measurement, see notes 19 and 20.

Impairment

The Group recognizes a loss allowance for expected credit losses on financial assets measured at amortized cost. At each reporting date, the Group reports the change in expected credit losses since initial recognition.

The Group measures losses for all financial assets through a loss allowance equal to 12-month expected credit losses. If the credit risk of a financial instrument has increased significantly since initial recognition, a loss allowance for full lifetime expected credit losses is recognized (the general approach).

The Group assesses these full lifetime expected credit losses either individually or collectively, based on all reasonable and supportable information, including prospective factors. The Group's measurement of expected credit losses on financial instruments reflects an unbiased and probability-weighted amount that is determined by evaluating the range of possible outcomes, the time value of money, and reasonable, supportable information about current conditions and forecasts of future economic conditions.

Under the simplified approach, the Group reports full lifetime expected credit losses for trade receivables, contract assets and lease receivables.

The general approach is used for other financial assets. A practical expedient is applied for cash and cash equivalents with a low credit risk on the reporting date. For intra-group and other receivables, a calculation based on the probability of default shows that the amount of the loss allowance is insignificant.

The Group considers a default to exist when it is unlikely that a counterparty will meet its obligations based on indicators such as financial difficulties and missed payments. A default is also considered to exist when payment is 90 days overdue. The Group writes off receivables when it is considered that there is no possibility of further cash flows.

Derivatives and hedge accounting

The Group has elected to apply the transitional provisions contained in IFRS 9, which allow a continuation of the hedge accounting

requirements in IAS 39. Derivatives are recognized on the contract date and are subsequently measured at fair value. Under the Company's financial policy, derivative financial instruments may only be held for hedging purposes. In its hedge accounting, the Group uses cash flow hedges and fair value hedges. The Company's derivatives consist of forward contracts which are used to hedge currency risk associated with external and internal flows of products and services. In accordance with IAS 39, the portion of the gain or loss on a derivative designated as a cash flow hedge that is determined to be an effective hedge is recognized in other comprehensive income, and the accumulated changes in fair value are recognized in the hedging reserve in equity. Any gain or loss on the ineffective portion of the hedge is recognized immediately in profit or loss. Amounts in the hedging reserve are recycled into profit or loss in the same period in which the hedged item affects profit or loss. Biotage hedges currency risk in accordance with the Board's established financial policies. Currency hedging is based on the expected difference between the cash flow in SEK and other currencies.

Other information about financial instruments

Trade receivables

Trade receivables are reported net of provisions for expected losses. As trade receivables are of short duration, they are measured at nominal amounts without discounting, using the amortized cost method. Expected credit losses on trade receivables are measured through a loss allowance using the simplified approach, as the receivables do not contain any significant financing component and are of short duration. The allowance for credit losses is based on the matrix model, which takes into account historical data on the number of days outstanding. The allowance is adjusted for relevant current conditions and probable future outcomes. The provision amount is recognized in the income statement.

Non-current securities and other financial assets

Non-current receivables are measured at amortized cost using the general approach for impairment. Assessment of whether financial assets are credit-impaired is made by reference to known and probable circumstances, based on the knowledge available at each point in time, established financial plans and relevant forward-looking factors.

Trade payables

Trade payables are categorized as *Financial liabilities at amortized cost*. As trade payables are of short duration, they are measured at nominal amounts without discounting.

Loans

Amounts due to credit institutions, bank overdrafts and other liabilities are categorized as *Financial liabilities at amortized cost*. Any transaction costs are distributed over the term of the loan using the effective interest method. Non-current liabilities are due for settlement more than 12 months after the reporting date, while current liabilities are due within 12 months of the reporting date.

6.7 Taxes

Income tax consists of current tax and deferred tax. Taxes are recognized in the income statement except when the underlying transaction is recognized in OCI or directly in equity, in which case the related tax effect is also recognized in OCI or equity.

A current tax liability or asset is the amount of income taxes payable or recoverable in respect of the taxable profit or loss for the current year and prior years.

A deferred tax liability or asset is recognized for temporary differences between the carrying amounts of assets and liabilities and their corresponding tax bases or the carryforward of unused tax losses and credits. Biotage does not recognize deferred tax liabilities or assets for temporary differences arising from non-deductible goodwill or the initial recognition of an asset or liability which does not affect accounting profit or taxable profit or loss.

Deferred tax assets are only recognized to the extent that it is probable that taxable profit will be available against which they can be utilized. Deferred tax is measured using national tax rates that have been enacted or substantively enacted by the reporting date in the countries where the Group has legal entities with tax losses that can be utilized.

6.8 Provisions

Provisions for restructuring are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, and it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. Restructuring provisions include the cost of lease cancellation and termination benefits to employees. Provisions are not recognized for future operating losses.

Provisions for warranties for products sold are based on the warranty terms & conditions and historical warranty costs and quality rates. Provisions are classified as non-current and current items. Non-current obligations will not require an outflow of resources during the next 12 months. All other obligations are classified as current.

6.9 Share capital

All issued shares are ordinary shares, which are classified as equity. Transaction costs directly attributable to the issue of new shares or options are recognized in equity, net of tax, as a deduction from the issue proceeds.

7 Items in the consolidated income statement

7.1 Revenue recognition

Revenue is the value of the consideration that the Company is entitled to receive for goods sold or services rendered in the course of the Group's ordinary activities, excluding VAT and discounts, and after elimination of intra-group sales.

Revenue is recognized in accordance with IFRS 15 *Revenue from Contracts with Customers*, which is based on a five-step model. The first steps involve identifying the type of contract and its performance obligations. The price is then determined and allocated to the different components of the contract. Revenue is recognized when control of the goods or service has been transferred to the buyer.

Sale of goods

The Group develops and sells systems, re-agents, accessories, spare parts and services on a global basis directly to end users through its subsidiaries, and through distributors. Revenue is recognized when control of the products has been transferred from seller to buyer and the customer has confirmed acceptance, which is normally on delivery. In these circumstances, revenue is recognized at a point in time.

Rendering of services

Sales of services are recognized as revenue in the reporting period in which the services are performed. The Company's sales of services include servicing of systems and customer-specific development projects. For customized development projects, services are performed over a long period and revenue is therefore recognized by reference to the stage of completion of the transaction at the end of the reporting period. There is a small proportion of customized development projects.

Service contracts may be signed by customers purchasing the Company's systems. It is not known to what extent or at what point in the contract period customers will use the service agreements. It is therefore the assessment that this represents a stand-ready obligation under IFRS 15. The customer simultaneously receives and consumes all benefits provided by the entity as the entity performs. The obligation therefore qualifies as a performance obligation satisfied over time. The entity's commitment to provide services during the contract

period is separately identifiable from other promises. There is no integration, modification or close dependence on other services that customers are offered. The service is therefore considered to be distinct in nature and within the scope of the contract, and is reported as a single obligation under IFRS 15. The company's satisfaction of its performance obligation is considered to be evenly distributed over the contract period. The customer can benefit from the service and has unlimited access to it throughout the contract period. Revenue is therefore recognized on a straight-line basis over the contract period.

Interest income

Interest income is distributed over the term of the interest-bearing investment using the effective interest method.

7.2 Cost of sales

Cost of sales comprises payment of sub-contractors when the Company uses other manufacturers, raw materials for production, salaries and other personnel expenses for production staff, costs of premises, packing and freight costs, depreciation of production facilities and other facilities used in production and a share of common costs.

7.3 Employee benefits

Retirement benefit obligations

The Group's pension plans are funded by contributions to insurance policies. They are all defined-contribution plans. Defined-contribution plans are plans under which companies pay fixed contributions into a separate entity (a fund). Under defined-contribution pension plans, the Group's legal or constructive obligation is limited to the amount that it agrees to contribute to the fund. It has no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods. The expenses are charged to the Group's income as the benefits are earned, which normally coincides with the date on which the premium is paid.

Termination benefits

Termination benefits are paid when employment is terminated before the normal retirement age or when an employee accepts voluntary layoff in return for termination benefits. Termination benefits are recognized when the Company is committed to terminating the employment of employees before the normal retirement date or providing termination benefits as a result of an offer made to encourage voluntary layoff. The Company is committed to a termination when it has a detailed formal plan for the termination.

Variable pay

The Group provides variable pay for employees in positions where their performance has a measurable effect on the Group's earnings. Estimated expenses for variable pay are recognized on an ongoing basis and provision is made for these expenses in the consolidated statement of financial position. Variable pay for key management personnel is described on pages 58-60.

Short-term employee benefits

For employee benefits (such as wages, paid vacation and sick leave) and pensions, the amount of benefits expected to be paid in respect of service rendered by employees in a period is recognized in that period.

7.4 Impairment

Impairment is recognized when a significant increase in a financial asset's credit risk is identified during an individual or collective assessment. Impairment losses are recognized in profit or loss on the basis of reasonable and verifiable data, including forward-looking factors. The impairment reflects an unbiased and probability-weighted amount that is determined by evaluating the range of possible outcomes, the time value of money, and reasonable, supportable

information about current conditions and forecasts of future economic conditions.

The simplified model is applied for trade receivables, contract assets and lease receivables. Under this model, full lifetime expected losses are recognized immediately. The general approach is used for cash and cash equivalents and other non-current receivables. For cash and cash equivalents, a practical expedient is also applied for low credit risk on the reporting date.

If there is supportable and objective evidence that an impairment loss recognized in prior periods no longer exists, the impairment loss is reversed. Reversed impairment losses are recognized in the income statement. Testing of previous impairment losses is conducted on an individual basis. Goodwill impairment is not reversed.

7.5 Other operating income and expenses

Other operating income and other operating expenses include share of profit/loss of associates, one-time payments, exchange gains/losses on operating receivables and liabilities and gains/losses on the sale or disposal of non-current assets.

8 The Parent Company's accounting policies

The Parent Company applies the Swedish Annual Accounts Act and the Swedish Financial Reporting Board's recommendation RFR 2 *Accounting for Legal Entities*. This allows application of IFRS as adopted by the EU to the extent that such application is not in conflict with the Swedish Annual Accounts Act and the Pension Obligations Vesting Act, and also takes into account the relationship between tax expense and accounting profit.

Amended accounting policies for the Parent Company

The amendments to RFR 2 *Accounting for Legal Entities* that came into effect in 2019 have not had any material effect on the Parent Company's financial reporting.

The differences between the Parent Company's and the Group's accounting policies are described below.

8.1 Classification and presentation

The Parent Company's income statement and balance sheet are presented in accordance with the format described in the Annual Accounts Act. The main difference from IAS 1 *Presentation of Financial Statements*, which is applied when preparing the consolidated financial statements, concerns the reporting of finance income, finance costs, non-current assets and equity, and the presentation of provisions as a separate item. The Parent Company also presents a statement of comprehensive income, which is separate from the income statement.

8.2 Investments in Group companies

Investments in subsidiaries are recognized at cost in the Parent Company's financial statements. Acquisition-related costs for subsidiaries, which are recognized as an expense in the consolidated financial statements, are included as part of the cost of investments in subsidiaries.

8.3 Investments in associates

Investments in associates are recognized at cost in the Parent Company's financial statements. Any future dividend from an associate will be reported on a separate line under financial items.

8.4 Financial instruments

The Parent Company does not apply IFRS 9 for legal entities. The Parent Company recognizes an allowance for expected credit losses on financial assets reported under non-current assets and measured at amortized cost. At each reporting date, the Parent Company reports changes in expected credit losses since initial recognition. When

calculating the net realizable value of financial assets reported as current assets, the impairment principles contained in IFRS 9 are applied. Derivative instruments that are not subject to hedge accounting and have a negative fair value are reported at this value. A financial asset is derecognized when the contractual right to receive cash flows has expired or been settled and a financial liability is derecognized when the contractual obligation has been discharged or extinguished.

8.5 Leases

The Parent Company does not apply IFRS 16 for legal entities. Lease payments are recognized as an expense on a straight-line basis over the lease term or on another systematic basis if that basis is more representative of the pattern of the lessee's economic benefit.

8.6 Shareholder and Group contributions

Group contributions the Parent Company receives from subsidiaries are reported under finance income using the same principles as ordinary dividends from subsidiaries. Group contributions made by the Parent to subsidiaries are reported as an increase in investments in Group companies. Shareholder contributions are recognized directly in the recipient's equity and are reported in the issuer's shares and interests, to the extent that impairment is not required.

8.7 Untaxed reserves

Changes in untaxed reserves are recognized as an appropriation in the income statement. The accumulated value of the provisions is reported under untaxed reserves in the balance sheet. Tax depreciation allowances are calculated in accordance with current tax legislation. Tax depreciation allowances are regarded as accelerated depreciation, which is reported as an untaxed reserve.

9 Financial risks and the Group's risk management

9.1 Financial risks in the Biotage Group

In addition to the business risks that Biotage faces in the course of its operations, there are also different types of financial risks, which include currency risk, interest rate risk, credit risk and refinancing risk. Credit risk associated with customer relationships is managed within a defined framework and is decentralized by means of local credit ratings. Other risks are managed centrally. The Group's financial policy requires financial risks to be minimized, taking into account reasonable hedging expenses, and access to liquidity to be maintained.

Currency risk

A significant proportion of the Group's sales are conducted in USD, EUR, JPY and GBP. The proportion of sales in SEK is relatively small. Operating expenses and financial instruments are also related to these currencies, although SEK is dominant. The Group's legal entities have intra-group balances. Translation of these balances to SEK may have a significant effect on the Group's financial position and results. As the Group's functional currency is SEK, movements of the Swedish krona against other transaction currencies will have an effect on the Group's results and financial position. A 10 percent change in the USD/SEK exchange rate would affect income and equity by SEK 36,806 (30,980) thousand. The corresponding effect of a 10 percent change in the EUR/SEK rate would be SEK 3,193 (-20) thousand. Hedging instruments were used only to a limited extent in 2019. The main exposures are trade receivables in EUR, USD and GBP, which amount to SEK 144,747 thousand. A 10 percent change in the EUR/SEK, USD/SEK and GBP/SEK rates would have an effect of SEK 14,475 thousand on the income statement. Other financial instruments are essentially in SEK.

Interest rate risk

Interest rate risk is the risk that the value of financial instruments will fluctuate because of changes in market interest rates. The Group's

financial assets are not particularly exposed to these changes as the holdings are of short duration. The Group's interest risk is essentially the risk that its refinancing will be more expensive if general interest rates rise and vice versa. Interest-bearing liabilities have increased significantly during the year as a result of large investments. A change of 1 percentage point in the Group's interest rate on interest-bearing assets would affect income and equity by SEK 1,859 (1,770) thousand. A change of 1 percentage point in the Group's interest rate on interest-bearing liabilities would affect earnings and equity by SEK 1,096 (1,094) thousand.

Credit risk

Credit risk can be divided into financial and operational. Operational credit risk is the risk of customers being unable to pay for delivered goods. The majority of customers are large companies and scientific institutions with operations which are normally state-financed. Based on historical data, it is management's assessment that Biotage has a low credit risk, as losses have historically corresponded to less than 0.5 percent of sales. No single customer accounts for more than 5 percent of the Group's total sales. The Group applies the simplified matrix model for calculating expected credit losses on trade receivables. See note 16 The model is based on historical losses, but also considers prospective factors.

The Group's financial credit risk is counterparty risk in bank deposits, trade receivables, derivatives and financial investments. The financial policy sets limits for each counterparty, and only Swedish banks with low credit risk and high ratings in the long-term assessments of the rating agencies Standard & Poor's and Moody's may be used for investments and derivatives. The Group's method for managing expected credit losses is described in section 6.6 *Financial instruments* and in note 16 *Trade and other receivables*.

Total credit exposure was SEK 384 (335) million at the reporting date and consisted primarily of cash and cash equivalents of SEK 186 (177) million and trade receivables of SEK 198 (156) million.

Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in accessing funds to discharge its financial obligations. The statements of cash flow for 2018 and 2019 show sufficiently positive cash flows from operations to allow the Group to fully discharge its current obligations. In addition, Biotage has cash & cash equivalents that are considerably higher than current and non-current liabilities. In a long-term perspective, the Group's liquidity and financing risk is the risk that it may become dependent on credit facilities or capital contributions for its expansion. This risk is managed by means of liquidity planning and liquidity monitoring and by ensuring good relations are maintained with lending institutions and major shareholders.

A maturity analysis of contractual payment obligations related to the Group's financial liabilities is presented in the tables below. The amounts in these tables are not discounted values and also include interest payments. The amounts cannot therefore be reconciled with those reported in the balance sheets. Interest payments are determined based on the conditions that apply on the reporting date. Amounts in foreign currency are translated to Swedish kronor at the closing rate.

There is no significant difference between the liability on December 31, 2019 and the actual payment including interest, i.e., undiscounted cash flows.

9.2 The Group's risk management

Biotage has a Risk Management Policy and conducts an annual internal risk audit based on a survey that all managers and all regional managers are asked to complete, after which a compilation of the Group's overall risks and their management is made. To deal with the effects of the financial risks associated with Biotage operations and financial management, the Board has established a financial policy for the Group. This policy is designed to facilitate the Group's financial

work and alleviate the economic consequences of financial risks. Work must be performed carefully and professionally. Implemented measures must be documented and reported to the appropriate company body.

The policy contains a division of responsibilities, duties and authority between the Company's Board, CEO, CFO and Accounting Manager. Administrative procedures have also been established on the basis that those who conduct transactions should be separate from those responsible for controlling, accounting and reporting of transactions. Systematic reporting documentation for financial transactions must be submitted to the accounting manager for checking against the documents received by the transaction counterparty.

The strategy is for the central finance function at head office to manage currency risk for the entire Group. Because the Group engages in operations, production and sales in a number of countries, it has a certain income statement exposure as a result of its income and expenses being in different currencies. This exposure may be affected by factors such as choice of currency for sales and purchases. Similarly, the Group's assets, liabilities and equity in its wholly-owned subsidiaries, and receivables from/liabilities to external customers and suppliers in different currencies result in balance sheet exposure and currency risk. This exposure is largely managed by choice of currency for sales and purchases, loans and foreign currency investments.

Biotage aims to minimize the currency risk that arises in commercial flows. Biotage will never engage in speculative position-taking to exploit exchange rate volatility by entering into transactions for which there is no underlying commercial cash flow or imbalance. Credit risk associated with trade receivables must be monitored on an ongoing basis.

Available liquidity must be managed by the CFO or a person designated by the CFO. The necessary credit facilities for business financing must be in place in the Swedish companies and the foreign companies. For foreign companies, the purpose of operating loans is to reduce currency exposure, cover working capital requirements, offset liquidity fluctuations and avoid unnecessary excess liquidity in individual subsidiaries.

Effects of financial instruments on the Group's results and financial position

The Group's financial instruments, as reported in the consolidated statement of comprehensive income or additional information, are essentially based on transactions associated with the Group's business operations. Biotage does not engage in active trading or conduct transactions in financial instruments other than for the development, production and sale of the Company's products and services. The main financial instruments are trade receivables, other operating receivables, shares, trade payables and other operating liabilities. Exchange rate movements may have a material impact on the Group's results and financial position, and this has previously been the case.

9.3 Capital management

Biotage defines capital as equity. The Group's capital management objective is to safeguard its ability to conduct operations and generate reasonable returns for shareholders and value for other stakeholders. The Group monitors its capital structure on the basis of the equity/assets ratio, which is calculated as equity divided by total assets. At the end of the year, the equity/assets ratio was 66 (70) percent for the Group and 84 (67) percent for the Parent Company.

Financial liabilities, December 31, 2019	Within 3 months	3-12 months	1-5 years	After 5 years	Total
Liabilities to credit institutions	249	1,331	114,455	–	116,035
Trade and other payables	114,527	39,367	105,984	–	259,877
Total	114,776	40,697	220,439	0	375,912

Financial liabilities, December 31, 2018	Within 3 months	3-12 months	1-5 years	After 5 years	Total
Liabilities to credit institutions	664	664	114,712	–	116,040
Trade and other payables	106,958	13,064	–	–	120,022
Total	107,622	13,728	114,712	0	236,062

There is no significant difference between the liability on December 31, 2019 and the actual payment including interest, i.e., undiscounted cash flows.

Net sales

The Group's most significant revenue currencies are USD and EUR.

Net sales by currency	2019			2018		
	Currency thousands	SEK thousands	Distribution %	Currency thousands	SEK thousands	Distribution %
EUR	16,060	170,023	15	15,086	154,617	17
USD	61,650	583,554	53	53,979	469,764	52
GBP	4,867	58,824	5	4,979	57,699	6
JPY	1,511,644	131,211	12	1,318,872	103,795	11
CNY	39,782	54,462	5	30,169	39,631	4
KRW	5,076,923	41,123	4	4,007,891	31,662	3
SEK	33,793	33,793	3	26,726	26,726	3
CAD	3,448	24,548	2	3,666	24,538	3
CHF	271	2,593	0	140	1,269	0
NOK	–	–	–	608	663	0
INR	9,251	1,242	0	4,188	532	0
Total SEK thousands		1,101,373	100		910,896	100

Net assets

Previously, the Group's net assets were mainly in SEK. This changed in 2018, largely due to the acquisition of the US company Horizon Technology, Inc., which was financed with a loan in SEK.

Net assets by foreign currency, December 31	2019			2018		
	Currency thousands	SEK thousands	Distribution %	Currency thousands	SEK thousands	Distribution %
EUR	3,060	31,925	4	-20	-201	-0
USD	39,504	368,062	42	34,534	309,803	44
GBP	7,811	95,402	11	7,802	88,535	13
JPY	637,366	54,367	6	565,729	45,937	7
CNY	25,727	34,302	4	25,268	33,021	5
KRW	477,035	3,864	0	2,259,372	18,075	3
CAD	900	6,415	1	956	6,302	1
INR	36,811	4,877	1	8,884	1,139	0
CHF	101	970	0	62	561	0
SEK	275,318	275,318	31	199,008	199,008	28
Total SEK thousands		875,503	100		702,180	100

The table below shows the Group's net assets by exposure to transaction risk and exposure to translation risk as of December 31, 2019. The latter refers to the risk of variations in exchange rates affecting the carrying amounts of subsidiaries and foreign assets when translated to SEK.

Net assets, December 31, 2019	Transaction risk			Translation risk		
	Currency thousands	SEK thousands	Distribution %	Currency thousands	SEK thousands	Distribution %
EUR	5,254	54,822	19	-2,195	-22,897	-7
USD	14,530	135,381	46	24,974	232,682	76
GBP	1,460	17,833	6	6,351	77,569	25
JPY	413,644	35,284	12	223,722	19,083	6
CNY	30,659	40,877	14	-4,932	-6,576	-2
KRW	-10,539	-85	0	487,573	3,949	1
CAD	900	6,415	2	-	-	-
INR	19,139	2,536	1	17,672	2,342	1
CHF	64	613	0	37	356	0
Total SEK thousands		293,676	100		306,509	100

10 Significant accounting estimates

When preparing the consolidated and Parent Company's financial statements, the Board and CEO make a number of judgments and estimates that may affect the reported financial position and results.

Estimation uncertainty

Accounting estimates and assessments are evaluated regularly. They are largely based on historical experience and expectations about future events which are considered reasonable in the present circumstances. Certain accounting estimates and assumptions are of particular significance when measuring assets and liabilities in the balance sheet. Goodwill is the balance sheet item with the greatest risk of value changes as a result of adjusted assumptions or estimates. The most significant judgments used in the measurement of assets and liabilities are based on assumptions regarding the future scope for marketing the Group's products and services in volumes and at prices that allow a reasonable economic return. Scope for marketing is highly dependent on the Group's access to technical expertise for the production of new and improved products and on the level of customer investment in new product development, knowledge and methods in the scientific areas in which the Group's products are used. The estimated success of the Group's objective to broaden its products' areas of application also affects overall estimates of sales figures and financial results for Biotage.

Impairment testing of goodwill and other assets

Goodwill is tested for impairment annually when the annual financial statements are prepared, or as soon as impairment is indicated by changes. Goodwill testing involves calculating the recoverable amount of the cash-generating unit to which the carrying amount of goodwill is allocated, which for Biotage is the Group as a whole, as it consists of one single operating segment. The forecasts of the Group's expected cash flows used in the calculations (discounted cash flow) are determined by members of Biotage management, who base their judgment on past experience and the Company's own expectations about the future. During impairment testing, management makes a number of other assumptions when applying the discounted cash flow model and these may have a significant effect on the measurement result. See also note 11 for a description of key assumptions. However, sensitivity analyses show that the outcome of the testing would not change if the growth rate were reduced by 50 percent or the discount rate were increased by 20 percent compared with the assumptions made. An impairment loss is recognized in the income statement if the carrying

amount exceeds the recoverable amount. At the end of the year, the Group's goodwill was SEK 316 (186) million. See also note 11.

Acquired trademark assets are also tested for impairment annually or more frequently if changes indicate impairment. The recoverable amount of the Group's capitalized brands is calculated for the cash-generating unit to which the asset belongs. At the end of the year, the value of the Group's trademarks was SEK 26.6 (15) million. See also note 12.

Capitalized development expenditure

Development costs are capitalized when a project enters the Product Development phase and meets the recognition criteria set out in IAS 38. Under the standard, an intangible asset qualifies for recognition if it is probable that the future economic benefits attributable to the asset will flow to the Company and the cost of the asset can be measured reliably.

In accordance with IAS 38, Biotage capitalizes its development on the basis of a measurement of each project's expected contribution to the Group's sales revenue and cash flows. Projects are measured at cost. An item is derecognized in the statement of financial position when the product is no longer marketed or the technology is no longer used by Biotage, or when it is only expected to generate sales revenue on a limited scale. Preparation of the consolidated financial statements involves reviewing the carrying amounts of products and projects in progress in the statement of financial position. As this is based on an assessment of the product's or the technology's expected demand, use and price, it is subject to some uncertainty. Impairment losses may also arise from rapid technological development and improved products from competitors. At the end of the year, the Group's capitalized development expenditure was SEK 105 (101) million. See also note 12.

Biotage reports amortization and impairment of capitalized development costs as research & development expenses. Another possible income statement presentation method would have been to report all or parts of the above-mentioned amortization charge as cost of sales. Had the Company reported the year's full amortization charges and impairment for these assets in this way, cost of sales would have increased and research & development expenses would have decreased by SEK 22.2 (17.3) million. This would not therefore have had any effect on operating profit. Capitalization of development costs has reduced research & development expenses by SEK 26.5 (24.0) million.

Deferred tax asset

Biotage recognizes tax loss carryforwards on the basis of how they are expected to be utilized against future profit and the extent to which the Company can demonstrate that it is probable that such profit will be available in future periods before the unused tax losses expire. Tax loss carryforwards are mainly associated with the Swedish and US companies. When determining the value of tax losses carried forward, an assessment is made of the coming year's tax credits and the countries in which they are expected to occur. Biotage bases this on management's assessments of each company's development and results in future years. Should the Group be unable to realize its plans, an impairment loss would have to be recognized for this item. Similarly, the value of tax losses can be affected by changes in legislation regarding their utilization and changes in tax rates. After deducting the amounts used in 2019, and based on a new assessment at the end of the year, recognized deferred tax assets arising from unused tax losses amounted to SEK 35 (60) million, corresponding to a tax effect of SEK 165 (279) million in historical tax losses. See also note 23.

Notes

NOTE 1 Average number of employees, salaries, employee benefits and social security contributions

	Group		Parent Company	
	2019	2018	2019	2018
Board and senior executives				
A presentation of Board members and senior executives can be found on pages 84-85.				
<i>Board</i>				
Female	2	2	2	2
Male	4	3	4	3
Total	6	5	6	5
<i>Group Management</i>				
Female	1	1	–	–
Male	2	2	1	1
Total	3	3	1	1
<i>Average number of employees</i>				
Female	151	128	–	–
Male	289	276	1	1
Total	440	404	1	1
<i>Salaries and benefits</i>				
Board and CEO	8,726	6,307	8,726	6,307
Other senior executives, 2 individuals	4,157	4,300	–	–
Other employees	279,475	223,762	–	–
Total salaries and benefits	292,358	234,369	8,726	6,307
<i>Contractual and statutory social security contributions</i>				
Board and CEO	1,239	2,203	1,239	2,203
Other senior executives	1,550	1,491	–	–
Other employees	61,197	48,352	–	–
Total contractual and statutory social security contributions	63,986	52,046	1,239	2,203
<i>Pension expenses *)</i>				
Board and CEO	299	902	299	902
Other senior executives	846	809	–	–
Other employees	14,080	12,734	–	–
Total pension expenses	15,225	14,445	299	902
Total salaries, social security contributions and pension expenses	371,569	300,860	11,079	9,411

*) For salaried employees in Sweden, the ITP 2 plan's defined-benefit retirement and family pension obligation (or family pension) is covered by insurance through Alecta. According to the Swedish Financial Reporting Board's statement UFR 10 *Accounting for ITP 2 Plans Financed by Insurance in Alecta*, this is a multi-employer defined-benefit pension plan. The Company did not have access to sufficient information for the 2019 fiscal year to report its proportionate share of the plan's obligations, plan assets and costs, which meant that it was not possible to report the plan as a defined-benefit plan. Consequently, the ITP 2 pension plan insured through Alecta is reported as a defined-contribution plan. The premium for the defined-benefit retirement and family pension is calculated individually and is based on factors that include salary, previously earned pensions and the expected remaining period of service. Expected contributions for ITP 2 insurance covered by Alecta in the next reporting period are SEK 3,462 (3,153) thousand. The Group's share of the total contributions

to the plan is 0.01601 (0.01714) percent, while its share of the total number of active members in the plan is 0.01195 (0.01219) percent.

The collective consolidation level is the market value of Alecta's assets as a percentage of its insurance obligations calculated by reference to Alecta's actuarial methods and assumptions. This is not consistent with IAS 19. The collective consolidation level is normally allowed to vary between 125 and 155 percent. If Alecta's collective consolidation level falls below 125 percent or exceeds 155 percent, measures must be taken to create the right conditions for the level to return to the normal range. If the consolidation level is too low, an appropriate measure could be to increase the agreed price for new insurance and extension of existing benefits. If the consolidation level is too high, premium reductions could be introduced. At the end of 2019, Alecta's surplus, which was reported as a collective consolidation level, was 148 (142) percent.

Note 1 cont'd

Average number of employees by country

	2019			2018		
	Total	Male	Female	Total	Male	Female
Parent, Sweden	1	1	–	1	1	–
Subsidiaries, Sweden	84	53	31	85	54	31
USA	127	92	35	109	72	37
UK	141	78	63	134	92	42
Germany	13	11	2	12	9	3
France	4	3	1	4	4	–
China	23	17	6	21	16	5
Japan	29	20	9	27	20	7
South Korea	9	7	2	7	5	2
India	9	6	2	5	4	1
Switzerland	1	–	1	–	–	–
Total	440	289	151	404	276	128
Distribution %		66%	34%		68%	32%

Remuneration of Board members and senior executives

Principles

The Chairman and members of the Board receive fees as adopted by the annual general meeting. The President & CEO receives a basic salary, variable pay, other benefits and a pension. An upward adjustment of the basic salary for 2018 and 2019 has been made for the previous President & CEO in order to keep the Company's total wage costs neutral. This is because social security contributions decreased when the retirement age (65) was reached in 2017. Other senior executives also receive a basic salary, variable pay, other benefits and a

pension. Group management is made up of other senior executives (two individuals) and the President & CEO. The basic salary to variable pay ratio must be proportional to responsibility and authority. The President & CEO receives variable pay, which is linked to the Group's annual results, up to a maximum of 100 percent of his annual salary. Other senior executives receive variable pay up to a maximum of 40 percent of their basic salary. The Board may also decide to award a discretionary payment to the President & CEO and other senior executives.

Accrued salaries, fees and other benefits in 2019

	Board fees	Basic salary	Variable pay	Other benefits	Pension expense	Other remuneration ¹⁾	Total
<i>Chairman of the Board:</i> ²⁾							
Thomas Eklund to Nov 6	605,566	–	–	–	–	–	605,566
Torben Jørgensen from Nov 7	–	–	–	–	–	–	–
<i>Board members:</i>							
Yvonne Mårtensson	103,075	–	–	–	–	–	103,075
Mark Bradley	166,150	–	–	–	–	–	166,150
Peter Ehrenheim	323,392	–	–	–	–	–	323,392
Åsa Hedin	47,371	–	–	–	–	–	47,371
Karolina Lawitz	283,392	–	–	–	–	–	283,392
Nils Olof Björk	91,408	–	–	–	–	–	91,408
Total accrued cost of fees paid to Board members in 2019	1,620,354	–	–	–	–	–	1,620,354
Torben Jørgensen, President & CEO to November 5	–	3,225,086	1,819,579	227,819	239,491	1,040,803	6,552,777
Tomas Blomquist, President & CEO from November 6	–	500,000	500,000	–	60,000	20,000	1,080,000
Other senior executives (2 individuals)	–	2,883,228	1,072,221	119,487	845,750	201,775	5,122,461
Total for 2019	1,620,354	6,608,314	3,391,800	347,306	1,145,241	1,262,578	14,375,592

1) Other remuneration is mainly vacation allowances paid in accordance with the Swedish Annual Leave Act. For Torben Jørgensen, an amount of SEK 716,625 has also been included. This relates to retirement contributions paid out in the form of ordinary compensation.

2) Thomas Eklund was Chairman of the Board until the election of the previous CEO Torben Jørgensen as new Chairman at an EGM on November 7, 2019. As Torben Jørgensen is employed by the Company and receives a salary until April 2020, he does not receive Board fees for the period.

Accrued salaries, fees and other benefits in 2018

	Board fees	Basic salary	Variable pay	Other benefits	Pension expense	Other remuneration ¹⁾	Total
<i>Chairman of the Board:</i> ²⁾							
Ove Mattsson ³⁾	165,000	–	–	–	–	–	165,000
Thomas Eklund ³⁾	440,000	–	–	–	–	–	440,000
<i>Board members:</i>							
Yvonne Mårtensson ³⁾	260,000	–	–	–	–	–	260,000
Peter Ehrenheim ³⁾	275,000	–	–	–	–	–	275,000
Karolina Lawitz ³⁾	256,667	–	–	–	–	–	256,667
Nils Olof Björk ³⁾	240,000	–	–	–	–	–	240,000
Total accrued cost of fees paid to Board members in 2018	1,636,667	–	–	–	–	–	1,636,667
CEO Torben Jørgensen	–	3,046,620	2,973,015	174,392	902,214	286,913	7,383,154
Other senior executives (2 individuals)	–	2,802,000	1,354,144	131,774	808,608	143,667	5,240,193
Total for 2018	1,636,667	5,848,620	4,327,159	306,166	1,710,822	430,580	14,260,014

1) Other remuneration is mainly vacation allowances paid in accordance with the Swedish Annual Leave Act.

2) Ove Mattsson was Chairman of the Board until the end of the AGM in April 2018, when Board member Thomas Eklund was elected Chairman.

3) Board members also received compensation for statutory employer contributions, as listed below, as their fees were paid to legal entities.

Ove Mattsson SEK 80,982.
 Thomas Eklund SEK 78,554.
 Yvonne Mårtensson SEK 65,982.
 Peter Ehrenheim SEK 70,695.
 Karolina Lawitz SEK 62,840.
 Nils-Olof Björk SEK 35,990.

Comments on the tables above and on the previous page*Board*

The 2019 AGM adopted Board fees of SEK 1,175,000 for the period until the 2020 AGM. The Chairman's fees accounted for SEK 500,000 of this amount. In addition, a maximum of SEK 255,000 was adopted for remuneration of committee work. The 2018 annual general meeting adopted Board fees of SEK 1,400,000 for the period until the 2019 annual general meeting. SEK 500,000 of this amount relates to the Chairman's fees. In addition, a maximum of SEK 255,000 was adopted for remuneration of committee work. This framework was defined by the 2018 and 2019 annual general meetings.

President & CEO

Torben Jørgensen, who was President & CEO until November 5, 2019 and remains employed until April 2020, has a basic monthly salary of SEK 227,500. An upward adjustment of the basic salary has been made since 2018 in order to keep the Company's total wage costs neutral. This is because social security contributions decreased when the President & CEO reached retirement age (65) in 2017.

Tomas Blomquist, who took over as President & CEO on November 6, 2019, has a basic monthly salary of SEK 250,000.

In addition to the basic salary, a vacation allowance is paid in accordance with the Swedish Annual Leave Act. The President & CEO also receives variable pay and a pension, and is entitled to termination benefits, which are described below.

Variable pay and other benefits

The previous President & CEO, Torben Jørgensen, received variable pay of up to 100 (100) percent of his fixed annual salary in 2019 until November 5, i.e., a maximum of SEK 2,275,000 per year.

President & CEO Tomas Blomquist receives variable pay of up to 100 (100) percent of his fixed annual salary, i.e., a maximum of SEK 3,000,000 per year. For 2019, variable pay only applies to the period from November 6, 2019, when he took up his position, and corresponds to a maximum of SEK 500,000.

The Board may also decide to award a discretionary payment.

Pensions

The retirement age for President & CEO Tomas Blomquist is 67. The pension premium is 30 percent of the pensionable salary. The pensionable salary is the basic salary.

Termination of employment/termination benefits

The Company may remove President & CEO Torben Jørgensen from his post at any time.

The Company's contract with Tomas Blomquist for his employment as President & CEO has a mutual notice period of six months and is valid until further notice. If either party terminates the contract, the Company is entitled to ask the President & CEO to leave his position with immediate effect. However, the President & CEO is obliged to be available to the Company to carry out any work that the Board considers appropriate during the notice period. In the case of termination initiated by the Company, the President & CEO is entitled to termination benefits corresponding to one fixed annual salary on the date on which employment ceases in addition to pay during the notice period.

The employment contract with former President & CEO Torben Jørgensen terminates without a prior notice period on April 16, 2020. In the case of termination of employment initiated by the Company and not based on gross neglect of duties to the Company, Mr. Jørgensen will retain his fixed annual salary until April 2020. This remuneration is pensionable and counts towards vacation pay.

Note 1 cont'd

Guidelines for remuneration of senior executives adopted by the 2019 AGM.

The 2019 AGM adopted the following guidelines for remuneration of senior executives. Senior executives consists of the CEO and other members of Group management. The guidelines shall apply to employment contracts entered into after the AGM's decision on the guidelines and to any changes made to existing conditions of employment after the meeting's decision. The Company shall endeavor to offer its senior executives market-based salaries. The remuneration committee shall prepare remuneration matters and present proposals for the Board's consideration. Proposals for remuneration shall take into account the importance of duties, expertise, experience and performance. Remuneration shall comprise a fixed annual salary, variable pay, retirement benefits, discretionary payments, other benefits and termination benefits. The Board is entitled to derogate from these guidelines if it believes there is sufficient reason to do so in a particular case.

President & CEO

The President & CEO receives an annual salary of SEK 2,730,000 under the terms of his employment contract. An upward adjustment of the basic salary has been made with effect from 2018 in order to keep the Company's total wage costs neutral. This is because social security contributions decreased when the President & CEO reached retirement age (65) in 2017. The Company makes a pension provision corresponding to 35 percent of the CEO's fixed annual salary. In addition to the fixed annual salary, the CEO receives variable pay of up to 100 percent of his fixed annual salary. The variable pay is linked to the Company's achievement of defined financial targets. The CEO receives annual compensation of SEK 100,000 for travel and increased housing costs.

Other members of Company management

This group consists of two individuals, who report directly to the CEO. All members of Company management receive a

fixed annual salary which is in line with market salaries, and variable pay of up to 40 percent of the fixed annual salary. 75 percent of the variable pay is linked to the Company's achievement of defined financial targets. The remaining 25 percent is based on defined goals relating to personal performance. The pension provision may amount to up to 30 percent of the fixed annual salary. Any new members of Company management can expect the same remuneration conditions.

Variable pay and performance requirements

The Board is entitled to decide on the criteria for variable pay.

Discretionary bonuses

The Board may decide to award a discretionary payment to members of Company management, including the CEO. Such a discretionary payment may only be made in exceptional circumstances.

Other benefits

Senior executives may be awarded other customary benefits such as a company car, health care, etc.

Termination benefits

Salaries during the period of notice and termination benefits for senior executives shall not exceed 24 monthly salaries.

Equity and share-based incentive programs

Any equity and share-based incentive programs shall be adopted by the Annual General Meeting. Allotment shall be in accordance with the decision of the AGM.

Previously decided remuneration

There is no previously decided remuneration that is not yet due for payment.

Remuneration in 2018

For information on remuneration of senior executives in 2018, see note 1 on pages 55-58 of the 2018 annual report.

NOTE 2 Income statement classified by nature of expense

If Biotage had presented its income statements classified by nature of expense, the composition would have been as follows:

Income statement classified by nature of expense	Group		Parent Company	
	2019	2018	2019	2018
<i>Operating income</i>				
Net sales	1,101,373	910,896	2,880	2,537
<i>Operating expenses</i>				
Purchased finished products, inputs, semi-finished products and production services	-290,846	-226,675	-	-
Personnel expenses	-369,949	-325,050	-9,458	-8,294
Other external costs	-180,795	-156,451	-16,799	-15,071
Depreciation, amortization and impairment of assets	-51,767	-38,853	-897	-1,100
Other operating items	104	8,612	-87	17
Total operating expenses	-893,253	-738,418	-27,240	-24,448
Operating profit	208,120	172,478	-24,361	-21,911

NOTE 3 Composition of income**Composition of net sales:**

	Group		Parent Company	
	2019	2018	2019	2018
Net sales - distribution between products and services:				
Products, systems	999,338	823,870	–	–
Service contracts and other services	94,260	79,645	2,880	2,537
Other sales revenue	7,775	7,381	–	–
Total sales revenue	1,101,373	910,896	2,880	2,537

Revenue by geographical market and product area 2019

	Organic Chemistry	Analytical Chemistry	Scale-up*	Biomolecules	Total
North and South America	166,290	217,273	74,991	25,472	484,026
Europe	133,197	93,842	29,697	9,021	265,757
Japan	98,961	15,113	16,627	786	131,486
China	90,092	20,357	1,700	–	112,149
EMEA and APAC	13,308	24,910	3,790	496	42,505
South Korea	28,510	13,025	2,023	556	44,114
India	17,946	1,234	2,131	26	21,337
Total sales revenue	548,304	385,754	130,958	36,357	1,101,373
Sweden's share of sales in Europe					9,223

Revenue by geographical market and product area 2018

	Organic Chemistry	Analytical Chemistry	Scale-up*	Total
North and South America	159,173	187,853	39,161	386,186
Europe	128,837	89,681	26,741	245,259
Japan	75,580	12,298	15,912	103,790
China	70,856	17,125	1,010	88,991
EMEA and APAC	15,357	23,325	1,950	40,632
South Korea	22,661	10,359	2,931	35,951
India	8,474	1,017	596	10,087
Total sales revenue	480,938	341,658	88,301	910,896
Sweden's share of sales in Europe				6,335

*Scale-up was Industrial Products in 2018.

The distribution above relates to sales per product area to customers located in the above geographical areas.

Revenue by sales channel

	2019	2018
Direct sales through own sales channels	1,041,238	870,264
Sales through distributors	60,135	40,632
Total sales revenue	1,101,373	910,896

Revenue – systems and aftermarket

	2019	2018
Systems	533,332	452,563
Aftermarket	568,041	458,334
Total sales revenue	1,101,373	910,896

Point in time of transfer of goods and services

	2019	2018
Goods transferred at a point in time	1,007,113	831,251
Services transferred at a point in time	22,651	20,381
Service contracts and other services transferred over a period of time	71,609	59,264
Total sales revenue	1,101,373	910,896

Note 3 cont'd

Contractual balances

	12/31/2019	12/31/2018
Contract assets:		
Accrued income contract research	–	265
Contract liabilities:		
Deferred income service contracts	49,819	46,623
Contractual balances, net	49,819	-46,358

SEK 40,669 (30,369) thousand of the existing contract liabilities on December 31, 2018 were recognized as revenue in 2019.

Prepaid service contracts are expected to be recognized as revenue in the following years

2020	37,617
2021	6,034
2022	3,334
2023	1,582
2024	812
2025	161
2026	127
2027	131
2028	22
Total	49,819

Service contracts may be signed by customers purchasing the Company's systems. The contracts are from one to two years and are recognized on a straight-line basis over the term. Costs for obtaining a contract and for services rendered are recognized in the period in which they are incurred. A small proportion of the revenue relates to contract research. This is distributed over the duration of the contract by reference to the project's stage of completion. The contractual balances for these types of revenue are presented above.

Intra-group sales and purchases of products and services

	Parent Company	
	2019	2018
Parent to subsidiary, products	–	–
Parent to subsidiary, services	2,880	2,537
Subsidiary to parent	–	–
Subsidiary to subsidiary	–	–
Total intra-group sales	2,880	2,537

NOTE 4 Administrative expenses

Administrative expenses include the following fees paid to auditors. Audit services include examination of the annual financial statements, interim reports, accounting records, internal control and administration of the business by the CEO and Board. They also include examination of the financial statements of subsidiaries, advice and other assistance relating to observations made during the audit. Other advice and assistance comes under other fees.

	Group		Parent Company	
	2019	2018	2019	2018
<i>Fees to the auditors Deloitte</i>				
Audit services	1,441	1,233	928	746
Other assistance arising from audit	277	294	277	293
Tax advisory services	32	67	–	–
Other advisory services	–	–	–	–
Total	1,750	1,594	1,205	1,039

NOTE 5 Leases and rental agreements

Lease agreements, where the group is the lessee, are recognized on the balance sheet as a lease liability and posted as "right-of-use assets". Short-term lease agreements (under one year) and lease agreements of a nominal value are expensed in the period they relate to and are therefore not included in the lease liability amount. Please refer to Note 10 for information about right-of-use assets. Other leases and rental agreements are treated as finance leases, and their effect on cash flow is shown in the table below.

	Group		Parent Company	
Cash outflow	2019	2018	2019	2018
<i>Lease and rental agreements during year</i>	20,689	17,497	159	146
Remaining rental and lease payments				
Within one year	21,591	18,671	159	157
Between one and five years	38,187	26,847	417	263
After five years	–	–	–	–
Total	59,778	45,518	576	420

The table above shows the 2018 provision for future minimum lease payments, along with an analysis of lease liability maturities (future cash flows) for 2019.

The Group's leases include premises and vehicles. During the year, leases were acquired in the acquired subsidiary PhyNexus, Inc. and a new contract for warehouse premises in Sweden was signed. A number of car leases have ended and have been replaced with new ones.

Variable lease expenses and covenants in existing agreements do not occur to any appreciable extent. Options have only been included in the lease liability amount where it was deemed reasonably certain that the particular options would be exercised in order to extend the relevant leases.

Total cash outflow during the year for lease agreements, including low-value and short-term agreements, amounted to thousand SEK 22,115.

Leases signed in the foreign subsidiaries present a currency risk in the Group. The table below shows right-of-use assets and lease liabilities grouped into different currencies at the reporting date.

	Right-of-use asset %	Lease liability %
SEK	45	45
USD	25	24
JPY	10	9
GBP	9	11
CNY	5	5
EUR	2	2
KRW	2	2
INR	2	2
Total	100	100

Residual value guarantees, which only exist in Swedish leases for vehicles, amounted to SEK 1,924 thousand on December 31, 2019.

Amounts recognized in income statement

Depreciation of right-of-use assets	21,060
Interest expenses, lease liabilities	787
Costs attributable to short-term leases	601
Costs attributable to low-value leases	825
Total	23,273

The Group's commitments under short-term leases amounted to SEK 601 thousand on December 31, 2019.

Operating lease commitments, December 31, 2018	46,548
Discounted using the Group's incremental borrowing rate, 1.3%	-1,176
Less: low-value leases	-1,030
Adjustments for expected index changes	116
Adjustments for different treatment of extension options	20,498
Commitments under IFRS 16, January 1, 2019	64,956

NOTE 6 Depreciation, amortization and impairment of assets

Depreciation, amortization and impairment by class of assets

	Group		Parent Company	
	2019	2018	2019	2018
Capitalized research & development expenditure	22,232	17,310	–	–
Patents, licenses and trademarks	17,140	9,511	884	669
Land and buildings	403	398	–	–
Right-of-use assets	21,060	–	–	–
Improvement of third-party property	1,674	1,201	–	–
Plant and machinery	10,775	9,775	–	–
Total depreciation/amortization	73,284	38,195	884	669
Impairment arising from disposals	1,088	658	13	431
Total depreciation/amortization and impairment	74,372	38,853	897	1,100

Depreciation, amortization and impairment by function of expense

	Group		Parent Company	
	2019	2018	2019	2018
Cost of sales	9,240	4,821	–	–
Distribution costs	22,896	8,799	–	–
Administrative expenses	13,326	2,409	–	–
Research and development	28,910	22,824	897	1,100
Total depreciation/amortization	74,372	38,853	897	1,100

Amortization and impairment of capitalized research and development expenditure is reported under research & development expenses.

NOTE 7 Other operating income

Other operating income

	Group		Parent Company	
	2019	2018	2019	2018
Exchange differences	2,410	14,681	60	17
EU funding	393	215	–	–
Other operating income	–	1,500	–	–
Total other operating income	2,802	16,396	60	17

NOTE 8 Finance income, finance costs and borrowing

	Group		Parent Company	
	2019	2018	2019	2018
Finance income:				
Interest income on financial assets	765	630	45	–
Profit/loss from investments in Group companies	–	–	42,238	–
Interest income, receivables from Group companies	–	–	221	216
Exchange gains from financing measures, net	6,044	5,496	3,227	3,335
Group contributions received	–	–	151,959	90,645
Total	6,809	6,126	197,690	94,196
Finance costs:				
Interest expense and similar payments to banks	2,860	1,737	1,797	1,613
Profit/loss from investments in associates	–	578	–	–
Interest expense on liabilities to Group companies	–	–	–	–
Other finance costs	77	–	–	–
Total	2,937	2,315	1,797	1,613
Net finance income/expense	3,872	3,811	195,893	92,584

NOTE 9 Taxes

	Group		Parent Company	
	2019	2018	2019	2018
Current tax	-9,672	-10,719	–	–
Deferred tax	-15,500	2,056	-27,711	-14,872
Total	-25,172	-8,662	-27,711	-14,872

	Group				Parent Company			
	2019		2018		2019		2018	
Tax reported in profit/loss for the year	%	SEK 000	%	SEK 000	%	SEK 000	%	SEK 000
Profit before tax		211,992		176,289		171,532		70,673
Tax using parent's applicable tax rate	-23.3	-49,479	-21.6	-38,148	-21.6	-37,051	-22.0	-15,548
Effect of different tax rates for foreign subsidiaries	-1.1	-2,351	-0.3	-445	0.0	–	0.0	–
Correction, prior years	0.0	-31	0.0	-81	0.0	–	0.0	–
Non-taxable income	5.4	11,521	0.1	190	5.3	9,123	0.0	–
Non-deductible expenses	-0.2	-402	-0.4	-676	0.0	-54	-0.2	-119
Other taxable income statement items not included in profit for the year	-4.6	-9,749	-1.5	-2,562	0.0	–	0.0	–
Other deductible income statement items not included in profit for the year	2.4	5,182	0.9	1,561	0.0	–	0.0	–
Utilization of loss carryforwards	16.7	35,314	16.8	29,553	16.3	27,982	22.2	15,667
Other	0.2	323	-0.1	-110	0.0	–	0.0	–
Current tax expense	-4.6	-9,672	-6.1	-10,719	0.0	-0	0.0	-0
Reversal of previously recognized loss carryforwards	-16.7	-35,314	-16.8	-29,553		-27,982	-22.2	-15,667
Recognition of previously unrecognized loss carryforwards	4.9	10,296	16.3	28,771		–	1.1	794
Tax effect of accrual and reversal of temporary differences	4.4	9,253	1.6	2,838		–	0.0	–
Effect of changed tax rate	0.1	271	0.0	24		271	0.0	–
Other	0.0	-5	0.0	-24		–	0.0	–
Deferred tax expense	-7.3	-15,500	1.2	2,056		-27,711	-21.0	-14,872
Total tax reported in consolidated and parent income statements	-11.9	25,172	-4.9	-8,662		-27,711		-14,872
Items in other comprehensive income		25,198		16,542		–		–
Tax effects of these items		-580		-320		–		–

NOTE 10 Property, plant and equipment**Land and buildings**

	Group	
	12/31/2019	12/31/2018
Cost		
Opening balance, January 1	15,478	15,160
Acquisitions during the year	–	–
Sub-total	15,478	15,160
Translation differences for the year	1,150	318
Closing balance, December 31	16,628	15,478
Accumulated depreciation and impairment:		
Opening balance, January 1	-5,406	-4,908
Depreciation for the year	-403	-398
Sub-total	-5,809	-5,306
Translation differences for the year	-418	-100
Closing balance, December 31	-6,226	-5,406
Carrying amount	10,402	10,072

Improvement of third-party property

	Group	
	12/31/2019	12/31/2018
Cost		
Opening balance, January 1	10,742	9,973
Acquisitions during the year	2,995	458
Disposals/impairment during the year	–	-139
Sub-total	13,737	10,292
Translation differences for the year	490	450
Closing balance, December 31	14,227	10,742
Accumulated depreciation and impairment:		
Opening balance, January 1	-6,723	-5,426
Depreciation for the year	-1,674	-1,201
Disposals/impairment during the year	–	139
Sub-total	-8,397	-6,488
Translation differences for the year	-359	-235
Closing balance, December 31	-8,756	-6,723
Carrying amount	5,471	4,019

Plant and machinery

	Group	
	12/31/2019	12/31/2018
Cost		
Opening balance, January 1	104,289	103,350
Acquisitions during the year	12,518	11,507
Reclassifications	11,433	6,478
Disposals/impairment during the year	-7,532	-20,139
Sub-total	120,708	101,196
Translation differences for the year	5,286	3,093
Closing balance, December 31	125,995	104,289
Accumulated depreciation and impairment:		
Opening balance, January 1	-69,751	-72,847
Depreciation for the year	-10,775	-9,775
Reclassifications	-10,993	-4,906
Disposals/impairment during the year	6,423	20,012
Sub-total	-85,096	-67,516
Translation differences for the year	-3,387	-2,235
Closing balance, December 31	-88,482	-69,751
Carrying amount	37,513	34,538

Right-of-use assets

	Group	
	12/31/2019	12/31/2018
Cost		
Opening balance, January 1	–	–
Reclassifications from operating leases	64,956	–
Acquisitions during the year	13,456	–
Disposals/impairment during the year	-229	–
Sub-total	80,037	–
Translation differences for the year	1,377	–
Closing balance, December 31	79,561	–
Accumulated depreciation and impairment:		
Opening balance, January 1	–	–
Depreciation for the year	-21,060	–
Disposals/impairment during the year	229	–
Sub-total	-20,831	–
Translation differences for the year	138	–
Closing balance, December 31	-20,694	–
Carrying amount	58,868	–

With respect to the carrying value of SEK 58.9 Mil reported for right-of-use assets, SEK 52.2 Mil relates to premises and 6.7 Mil relates to vehicles.

Summary of carrying amount:

	Group	
	12/31/2019	12/31/2018
Land and buildings	10,402	10,072
Improvement of third-party property	5,471	4,019
Plant and machinery	37,513	34,538
Right-of-use assets	58,868	–
Total in consolidated balance sheet	112,253	48,630

NOTE 11 Goodwill

	Group	
Cost:	12/31/2019	12/31/2018
Opening balance, January 1	640,274	558,242
Acquisitions during the year	128,596	73,329
Sub-total	768,870	631,571
Translation differences for the year	1,217	8,703
Closing balance, December 31	770,087	640,274
Opening impairment	-454,219	-454,219
Total amortization and impairment	-454,219	-454,219
Closing accumulated impairment	-454,219	-454,219
Carrying amount	315,869	186,055

Goodwill impairment testing

Preparation of the 2019 annual financial statements included goodwill impairment testing. Management monitors goodwill for the Group as a whole. The Group consists of a single operating segment. The increase in goodwill for the year is related to the acquisition of PhyNexus, Inc. During the year, these operations have been integrated into the Group's other operations to such an extent that cash flows from the originally acquired asset can no longer be identified as of December 31. The recoverable amount for the cash-generating unit has been assessed on the basis of the estimated value in use, which also involved calculation of projected cash flows from the Group's operations. The cash flows are based on the Group's budget for 2020 and business forecasts for 2021-2024. The budget and forecasts are based on management's past experience and as far as possible on external sources of information. Key parameters in the calculation of the recoverable amount are estimated sales growth and operating profit. Assumptions about the gross margin and the development of other operating expenses have greatest impact on the assessment of operating profit and sales growth.

An assumption of annual sales growth of 4.0 (4.0) percent has been used in the impairment testing until the end of the forecast period in 2024. After this period, the assumed growth rate will be 2.0 (2.0) percent, which Biotage believes to be a reasonable estimate of the market's long-term growth rate. A sensitivity analysis shows that neither an adjustment of 2 percent in the discount rate, nor a change of 2 percent in sales growth, nor an adjustment of 2 percent in the operating margin would give rise to impairment. The 2019 discount rate is lower than in 2018. This is partly due to the introduction of IFRS 16, which has affected the capital structure and resulted in a higher proportion of external loans in relation to equity. See also page 55.

	2019	2018
Equity financing	9.01%	9.35%
Debt financing	2.32%	2.32%
Average based on Group's capital structure	8.07%	8.65%
The pre-tax discount rate has been calculated as:	12.90%	11.70%

NOTE 12 Other intangible assets**Capitalized development expenditure**

	Group		Parent Company	
Cost:	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Opening balance, January 1	228,454	207,797	–	–
Acquisitions during the year	26,516	24,010	–	–
Disposals during the year	–	-3,353	–	–
Closing balance, December 31	254,971	228,454	–	–
Accumulated amortization and impairment:				
Opening balance, January 1	-127,247	-112,759	–	–
Amortization for the year	-22,232	-17,310	–	–
Disposals during the year	–	2,822	–	–
Closing balance, December 31	-149,479	-127,247	–	–
Carrying amount	105,492	101,207	–	–

Patents, licenses, trademarks, etc.

	Group		Parent Company	
Cost:	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Opening balance, January 1	155,537	72,317	13,717	12,885
Acquisitions during the year	3,425	74,097	1,721	2,029
Acquisitions	75,689	–	–	–
Reclassifications	-2,237	6,662	–	–
Disposals during the year	-268	–	-84	-1,197
Sub-total	232,145	153,076	15,354	13,717
Translation differences for the year	2,383	2,461	–	–
Closing balance, December 31	234,528	155,537	15,354	13,717
Accumulated amortization and impairment:				
Opening balance, January 1	-64,091	-48,708	-2,734	-2,832
Amortization for the year	-17,140	-9,511	-884	-669
Reclassifications	1,920	-5,375	–	–
Disposals during the year	268	–	71	766
Sub-total	-79,043	-63,594	-3,546	-2,734
Translation differences for the year	-930	-497	–	–
Closing balance, December 31	-79,973	-64,091	-3,546	-2,734
Carrying amount	154,555	91,446	11,808	10,983

	Group		Parent Company	
Total property, plant & equipment and intangible assets reported:	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Land and buildings	10,402	10,072	–	–
Improvement of third-party property	5,471	4,019	–	–
Plant and machinery	37,513	34,538	–	–
Sub-total property, plant & equipment	53,385	48,630	–	–
Right-of-use assets	58,868	–	–	–
Goodwill	315,869	186,055	–	–
Capitalized development expenditure	105,492	101,207	–	–
Patents, licenses, trademarks, etc.	154,555	91,446	11,808	10,983
Sub-total intangible assets	260,047	192,654	11,808	10,983
Total carrying amount of property, plant & equipment and intangible assets	688,169	427,339	11,808	10,983

Distribution by country:	Group		Parent Company	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Sweden	266,566	244,416	11,808	10,983
USA	362,413	148,202	–	–
UK	42,751	28,693	–	–
Japan	9,006	4,433	–	–
China	3,847	1,217	–	–
Other countries	3,585	378	–	–
Total	688,169	427,339	11,808	10,983

NOTE 13 Investments in associates

	Group		Parent Company	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Opening cost	17,368	17,838	19,284	19,284
Share of profit/loss	-3,384	-1,690	–	–
Translation differences	631	1,220	–	–
Closing accumulated cost	14,615	17,368	19,284	19,284
Closing accumulated carrying amount	14,615	17,368	19,284	19,284

Companies owned directly by the Parent

Company name	Reg. no.	Reg'd office	Number of shares	Share of capital	Share of votes	Group		Parent Company	
						12/31/2019	12/31/2018	12/31/2019	12/31/2018
Chreto ApS	33382170	Værløse, Denmark	50,000	21.4%	21.4%	14,615	17,368	19,284	19,284
Total carrying amount						14,615	17,368	19,284	19,284

NOTE 14 Financial assets

	Group		Parent Company	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Miscellaneous non-current receivables	3	3	–	–
Miscellaneous long-term deposits	1,996	1,850	–	–
Total financial assets	1,999	1,853	–	–

NOTE 15 Inventories

	Group	
	12/31/2019	12/31/2018
Raw materials and consumables	42,983	29,039
Products in progress	13,319	12,726
Finished products	117,457	90,573
Total inventories	173,760	132,338

Inventory items recognized as an expense in 2019 amounted to SEK 255,878 (249,187) thousand. Obsolescence of SEK 1,844 (3,574) thousand was recognized during the year. The obsolescence reserve on December 31 was SEK 16,403 (16,193) thousand.

NOTE 16 Trade and other receivables

	Group		Parent Company	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Trade receivables (a)	197,651	155,777	–	–
Prepayments and accrued income (b)	14,128	11,617	1,195	2,389
Other current receivables (c)	15,164	17,686	981	2,616
Total trade and other receivables	226,943	185,080	2,176	5,005

Management believes that the carrying amount of trade receivables, net of the allowance for expected credit losses, corresponds to their fair value. The entire allowance for expected credit losses relates to trade receivables.

	Group		Parent Company	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018
(a) Change in allowance for expected credit losses on trade receivables				
Allowance for expected credit losses at beginning of year	-2,883	-1,697	–	–
Trade receivables written off during the year	1,224	1,525	–	–
Allowance for expected credit losses for the year	-3,463	-2,883	–	–
Reversal of unused amounts	1,788	172	–	–
Total expected credit losses	-3,335	-2,883	–	–

Group

	12/31/2019			12/31/2018		
	Gross	Expected credit losses	Trade receivables	Gross	Expected credit losses	Trade receivables
Aging of trade receivables						
Not due	158,607	-1,272	157,335	119,402	-1,162	118,240
Past due, 1-30 days	14,580	-231	14,349	22,965	-223	22,742
Past due, 31-60 days	7,210	-122	7,088	5,794	-56	5,738
Past due, > 61 days	20,589	-1,710	18,879	10,499	-1,442	9,057
Total	200,986	-3,335	197,651	158,660	-2,883	155,777

Assessment of expected credit losses is made immediately on billing. Expected credit losses on trade receivables are estimated according to the simplified matrix model. This model is based on previous experience of actual losses in each billing currency, but also takes into account forward-looking factors such as the general economic

development expected in the customers' industries. The calculation is made alongside an individual assessment. This consideration of relevant current circumstances and knowledge of customers may lead to a change in the credit loss allowance.

	Group		Parent Company	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018
(b) Prepayments and accrued income				
Accrued income	–	265	–	–
Prepaid rents	4,286	3,183	–	–
Prepaid insurance	1,035	1,214	612	362
Other items	8,807	6,955	583	2,027
Total	14,128	11,617	1,195	2,389
(c) Other current receivables				
VAT	8,971	8,774	273	219
Income tax	507	539	–	155
Other current receivables	5,687	8,373	708	2,242
Total	15,164	17,686	981	2,616

NOTE 17 Appropriation of profit

Proposed appropriation of profit for the fiscal year, SEK

Amounts at the disposal of the annual general meeting:

Share premium reserve	57,970,173
Retained earnings	338,530,270
Profit for the year	143,821,157
Total	540,321,600

Board and CEO's proposed appropriation:

Carried forward	540,321,600
Total	540,321,600

NOTE 18 Liabilities to credit institutions

	Group		Parent Company	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Current portion	–	–	–	–
Non-current portion				
Credit facilities: Credit granted	149,182	149,182	150,000	150,000
Unused portion of revolving credit facility	-39,632	-39,782	-40,000	-40,000
Total	109,550	109,400	110,000	110,000

Collateral has not been provided for the credit. All long-term liabilities mature between one and five years from the reporting date. The lender has set covenants for the loan in the form of the Net debt/EBITDA ratio (cash and cash equivalents less interest-bearing liabilities/Operating profit before interest, taxes, depreciation and impairment) and the interest coverage ratio defined as EBITDA/Net financial items. Both covenants have been met by a good margin.

NOTE 19 Financial assets and liabilities**Classification**

Classification of the Group's financial instruments, which is described on pages 49-51, is as follows:

Assets	Classification	Carrying amount	Classification	Carrying amount
		12/31/2019		12/31/2018
Non-current receivables	1)	1,999	1)	1,853
Trade receivables	1)	197,651	1)	155,777
Other current receivables	1)	15,164	1)	17,686
Other current receivables	2)	–	2)	–
Derivatives	3)	455	3)	–
Accrued income	1)	–	1)	265
Cash and cash equivalents	1)	185,867	1)	177,020
Total		401,135		352,601
Liabilities	Classification	Carrying amount	Classification	Carrying amount
		12/31/2019		12/31/2018
Non-current liabilities to credit institutions	1)	109,550	1)	109,400
Trade payables	1)	41,461	1)	54,764
Derivatives	3)	–	3)	5
Additional purchase consideration	2)	84,859	2)	–
Short and long-term lease liabilities	1)	59,328	1)	–
Other current liabilities	1)	4,497	1)	4,842
Accrued expenses	1)	69,334	1)	60,411
Total		369,030		229,422

Classification

- 1) Financial assets and liabilities at amortized cost
- 2) Financial assets and liabilities at fair value through profit or loss
- 3) Financial assets and liabilities at fair value through OCI

NOTE 20 Fair value**Group**

Financial assets at amortized cost	Total	Level 1	Level 2	Level 3
Non-current receivables	1,853	1,853	–	–
Current receivables	173,728	173,728	–	–
Cash and cash equivalents	177,020	177,020	–	–
Closing balance, 12/31/2018	352,601	352,601	–	–
Non-current receivables	1,999	1,999	–	–
Current receivables	212,815	212,815	–	–
Cash and cash equivalents	185,867	185,867	–	–
Closing balance, 12/31/2019	400,681	400,681	–	–

Financial liabilities at amortized cost	Total	Level 1	Level 2	Level 3
Non-current liabilities	109,400	109,400	–	–
Current liabilities	120,017	120,017	–	–
Closing balance, 12/31/2018	229,417	229,417	–	–
Non-current liabilities	215,534	215,534	–	–
Current liabilities	153,496	153,496	–	–
Closing balance, 12/31/2019	229,417	229,417	–	–

Estimated fair values based on discounted future cash flows, with a discount rate that reflects the counterparty's credit risk being the most significant input, are not expected to differ significantly from the carrying amount of financial assets and current financial liabilities measured at amortized cost. Consequently, the carrying amounts of these financial assets and liabilities are considered to represent a good approximation of the fair values.

There were no transfers between the levels during the periods. The tables below provide information on how fair value is determined for

financial instruments measured at fair value in the statement of financial position. Fair value is determined on the basis of inputs in one of the following three levels:

Level 1: inputs that are quoted prices in active markets for identical instruments

Level 2: inputs other than quoted market prices in Level 1 that are directly or indirectly observable market data

Level 3: inputs that are not observable in the market

Financial assets at fair value	Total	Level 1	Level 2	Level 3
Closing balance, 12/31/2018	–	–	–	–
Derivatives used for hedging	455	–	–	455
Closing balance, 12/31/2019	455	–	–	455
Financial liabilities at fair value	Total	Level 1	Level 2	Level 3
Derivatives used for hedging	5	–	–	5
Closing balance, 12/31/2018	5	–	–	5
Acquisitions	84,859	–	–	84,859
Closing balance, 12/31/2019	84,859	–	–	84,859

There were no transfers between the levels during the periods.

The tables below present a reconciliation of opening and closing balances for instruments measured at fair value in the statement of financial position and which are included in level 3.

Biotage hedges currency risks in accordance with the Board's established financial policies. Currency hedging is based on the expected difference between the cash flow in SEK and other currencies.

Group

	Other derivative assets		Liabilities	
	2019	2018	2019	2018
Changes in financial instruments in Level 3				
At beginning of year	–	578	5	–
Acquisitions	–	–	84,859	–
Total gains and losses recognized in profit or loss	455	-578	-5	5
Closing balance, December 31	455	–	84,859	5

The fair value disclosures provided for the Group in respect of derivatives also apply to the Parent Company.

Measurement of derivatives (level 3)

The fair value of derivatives used for hedging is determined by discounting future cash flows using a discount rate that reflects the counterparty's credit risk. Future cash flows are estimated based on the Swedish Central Bank's quoted exchange rates.

Measurement of financial asset relating to Chreto ApS option (level 2)

The option for Biotage to acquire all outstanding shares in Chreto ApS was measured at fair value. The fair value calculations were based on level 3 of the fair value hierarchy, which means that the value was determined based on a valuation model using significant inputs that are unobservable. The option expired on December 31, 2018, and has not been exercised.

Measurement of additional purchase consideration receivable (level 3)

Financial assets measured at fair value consist entirely of an additional consideration liability from the subsidiary PhyNexus, Inc., which was acquired in 2019. The fair value was determined based on management's forecast for the operations associated with the additional consideration. The forecast has been prepared based on estimates of future sales and cost of goods sold for these operations. An additional consideration payment is made if the relevant operations achieve the gross profit requirements stipulated in the agreement. If the result, according to the calculation models stipulated in the additional consideration agreement, increased by 10 percent, the additional consideration payable would also increase by 10 percent.

NOTE 21 Other financial liabilities

	Group		Parent Company	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Changes during the year				
Opening balance, January 1	1,570	810	–	–
New financial liabilities during the year	84,597	996	–	–
Amounts used during the year	-16	-236	–	–
Closing balance, December 31	86,151	1,570	–	–

	Group		Parent Company	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018
The liability consists of:				
Non-current portion	68,782	1,201	–	–
Current portion	17,369	369	–	–
Total	86,151	1,570	–	–

NOTE 22 Provisions

	Group	
	12/31/2019	12/31/2018
Provision for warranties	3,504	3,159
Other personnel-related provisions	2,599	2,245
Total provisions	6,103	5,404
The provisions consist of:		
Non-current portion	2,599	2,245
Current portion	3,504	3,159
Total	6,103	5,404

Changes during the year, Group	Warranties	Other provisions	Total
Opening balance 01/01/2019	3,159	2,245	5,404
New provisions during the year	3,504	230	3,734
Amounts used during the year	-3,159	-	-3,159
Closing balance, 12/31/2019	3,504	2,475	5,979

Provision for warranties:

Biotage normally provides a one-year warranty on its products. The recognized provision for warranties corresponds to a percentage of the year's sales. The percentage is calculated on the basis of actual warranty

costs during the fiscal year. The provision for warranties is classified as a short-term obligation as it is considered likely that the warranty obligations will be settled within 12 months of the reporting date.

NOTE 23 Deferred tax

	Group		Parent Company	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018
<i>Deferred tax assets</i>				
Tax loss carryforwards	35,204	59,953	5,912	33,623
Other deferred tax assets	9,131	2,252	-	-
Total deferred tax assets	44,335	62,205	5,912	33,623
<i>Deferred tax liabilities</i>				
Intangible assets	-26,981	-12,928	-	-
Other deferred tax liabilities	-1,993	-1,852	-	-
Total deferred tax liabilities	-28,884	-14,780	-	-
Total deferred tax assets and liabilities	15,451	47,425	5,912	33,623

Group			
Change in deferred tax	Deferred tax assets	Deferred tax liabilities	Net
January 1, 2018	60,735	-1,622	59,113
Acquisitions	-	-13,424	-13,424
Change in OCI	312	-632	-320
Recognized in income statement	1,158	898	2,056
December 31, 2018	62,205	-14,780	47,425
January 1, 2019	62,205	-14,780	47,425
Acquisitions	-	-15,895	-15,895
Change in OCI	-147	-433	-580
Recognized in income statement	-17,723	2,223	-15,500
December 31, 2019	44,335	-28,884	15,451

Parent

Change in deferred tax	Deferred tax assets	Deferred tax liabilities	Net
January 1, 2018	48,495	–	48,495
Recognized in income statement	-14,872	–	-14,872
December 31, 2018	33,623	–	33,623
January 1, 2019	33,623	–	33,623
Recognized in income statement	-27,711	–	-27,711
December 31, 2019	5,912	–	5,912

Recognition of tax loss carryforwards

The Group has tax losses of about SEK 28 million in Swedish legal entities prior to the 2020 tax year. These tax loss carryforwards continue indefinitely. Tax losses in US subsidiaries amount to approx. SEK 131 million and expire in the period 2021-2031. Tax losses in German subsidiaries amount to approx. SEK 6 million. In 2019, the Group utilized tax losses against taxable profits, corresponding to a tax effect of SEK 35.3 million, and new loss carryforwards of SEK 10.3

million were recognized. The net effect of SEK 25.0 million has affected tax expense reported for the year. The carrying amount of the Group's deferred tax assets on December 31, 2019 is SEK 35.2 (60.0) million, while the corresponding figure for the Parent Company is SEK 5.9 (33.6) million. There are no additional unrecognized loss carryforwards in the Group. Further information on significant accounting estimates can be found on page 56.

NOTE 24 Trade and other payables

	Group		Parent Company	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Liabilities to suppliers	41,461	54,764	1,598	1,717
Other current liabilities	4,895	5,216	229	71
Accruals and deferred income (a)	120,267	107,126	8,234	8,041
Total trade and other payables	166,624	167,106	10,061	9,829
(a) Accruals and deferred income				
Personnel-related expenses	51,210	43,678	5,712	6,942
Deferred income	50,933	46,715	–	–
Other accruals	18,124	16,733	2,522	1,099
Total	120,267	107,126	8,234	8,041

NOTE 25 Statement of cash flows

Other adjustments for non-cash items	Group		Parent Company	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Exchange differences	-1,855	-3,348	–	–
Share of income of associates	3,384	1,690	–	–
Depreciation and impairment	74,372	39,412	897	1,100
Group contributions	–	–	-151,959	-90,645
Other	600	-10,069	–	–
Total	76,501	27,684	-151,063	-89,545

Changes in liabilities attributable to financing activities during the year consist of the Parent Company's borrowings and dividends paid. These items do not represent non-cash movements. All cash and cash equivalents consist of bank balances. Depreciation, amortization and impairment in the consolidated statement of cash flows for 2019 was SEK 74,372 thousand and SEK 21,163 thousand of the figure is an effect of the introduction of IFRS 16 Leases.

NOTE 26 Shares and participating interests

	12/31/2019	12/31/2018
Parent Company		
Opening cost	939,855	938,332
Investments during year	182	1,523
Closing accumulated cost	940,037	939,855
Opening impairment	-467,934	-467,934
Closing accumulated impairment	-467,934	-467,934
Closing accumulated carrying amount	472,103	471,922

Companies owned directly by the Parent

Company name	Reg. no.	Reg'd office	Number of shares	Share of capital	Share of votes	Opening carrying amount 2019	Investments during year	Impairment during year	Closing carrying amount 2019
Biotage Sweden AB	556487-4922	Uppsala, Sweden	19,336,284	100%	100%	276,224	–	–	276,224
CEMU Bioteknik AB	556011-2384	Uppsala, Sweden	100	100%	100%	120	–	–	120
Pyrosequencing AB	556554-3476	Stockholm, Sweden	100	100%	100%	100	–	–	100
MIP Technologies AB	556578-4674	Lund, Sweden	96,940	100%	100%	35,295	–	–	35,295
Pyrosequencing, Inc.	04-3484142	Boston, USA	100	100%	100%	77,695	–	–	77,695
Biotage GmbH	HRB 39374	Düsseldorf, Germany	1	100%	100%	0	–	–	0
Biotage SARL	434715785	Paris, France	500	100%	100%	68	–	–	68
Biotage Italy S.r.l	IT03617450964	Milan, Italy	1	90%	90%	0	–	–	0
Biotage Ltd.	0126-01-004032	Tokyo, Japan	200	100%	100%	0	–	–	0
Biotage GB Ltd.	1033865	Cardiff, Wales	100	100%	100%	76,744	–	–	76,744
Biotage Trading (Shanghai) Co., Ltd.	91310115580622067B	Shanghai, China	1	100%	100%	994	–	–	994
Biotage Korea Co., Ltd.	110111-6105476	Seoul, Korea	27,000	100%	100%	2,030	–	–	2,030
Biotage India Pvt Ltd.	27AAHCB4849G1ZH	Mumbai, India	2,045,000	100%	100%	2,651	–	–	2,651
Biotage Switzerland GmbH	CHE-426.855.092	Neuhausen am Rheinfall, Switzerland	20	100%	100%	–	182	–	182
Total carrying amount						471,922	182	–	472,103

Companies owned by other subsidiaries

Company name	Owner	Reg. no.	Reg'd office	Number of shares	Share of capital	Share of votes	Opening carrying amount 2019	Closing carrying amount 2019
Biotage LLC	Pyrosequencing, Inc.	04-3535072	Charlotte, USA		100%	100%	204,432	231,373
Horizon Technology, Inc.	Pyrosequencing, Inc.	02-0457387	Salem, USA	209,346	100%	100%	177,810	165,616
PhyNexus, Inc.	Pyrosequencing, Inc.	37-1916129	San Jose, USA	483,332	100%	100%	–	198,849
ESyTech AB	Biotage Sweden AB	556588-8350	Uppsala, Sweden	100,000	100%	100%	260	260
Biotage Italy S.r.l	Biotage GmbH	IT03617450964	Milan, Italy	1	10%	10%	10	10
Total							382,512	596,108

PhyNexus, Inc. and Biotage Switzerland GmbH were acquired during the year. Changes to the carrying amount of other subsidiaries' shareholdings are due to translation differences during conversion to Swedish kronor.

Acquisition of PhyNexus, Inc.

On January 15, 2019, Biotage AB acquired 100 percent of the privately-owned company PhyNexus, Inc., based in California, US. The acquisition has strengthened Biotage's position as a chemical separation company within the growing biomolecular segment. With PhyNexus's innovative technology platform and its patented pipette-based consumables, Biotage will be able to offer global customers automated solutions for efficient purification of biomolecules such as proteins, plasmids and antibodies at laboratory scale. Biotage predicts that this platform has the potential to eventually target a growing market worth several billion US dollars. The acquired technology platform will enable the development of new workflow approaches for clinical, forensic, food and environmental testing through dispersive solid phase extraction in combination with high throughput pipetting robotics and the new media development program.

The total purchase consideration is approx. USD 21.4 million, corresponding to SEK 191.3 million, translated at the SEK/USD exchange rate of 8.93 on the acquisition closing date, based on a debt-free and cash-free basis. Approx. USD 10.0 million (SEK 89.3 million) of the total purchase consideration consists of expected future additional consideration payments for the years 2019 to 2023, which will be based on future results. The remaining consideration of approx. USD 11.4 million (SEK 102.0 million) was paid on the acquisition date and comprised approx. USD 6.6 million (SEK 58.6 million) in 487,337 newly issued Biotage shares and approx. USD 4.8 million (SEK 43.3 million) in cash.

Consideration shares issued in connection with the acquisition have increased the number of Biotage shares from 64,714,447 to 65,201,784, resulting in dilution of 0.7 percent for existing shareholders. The newly issued shares have been subscribed by the principal owners of PhyNexus (including the largest shareholder Doug Gjerde, representing about 60 percent of the shares and votes in PhyNexus). Additional shares may be issued in connection with the post-closing price adjustments and future additional consideration payments.

The acquisition analysis has not identified any differences between carrying amounts and fair values of other receivables. Inventories are measured at their carrying amounts SEK 23.9 million of the group's total sales is attributable to products of the acquired company, PhyNexus. Had PhyNexus been wholly owned since January 1, 2019, its contribution to the group's sales would have increased by an additional SEK 0.8 million. The acquired entity's effect on the group's net profit and cash flow is difficult to estimate as PhyNexus has been integrated with the group's other business units.

The acquired company's net assets on the acquisition date	Acquisition analysis, SEK millions
Property, plant and equipment	0.0
Intangible assets - Customer relationships	49.2
Intangible assets - Trademarks	10.3
Intangible assets - Patents/technology	13.4
Inventories	8.3
Trade and other receivables	5.3
Cash and cash equivalents	3.7
Trade and other payables	-3.1
Deferred tax liability	-15.3
Net identifiable assets and liabilities	71.8
Goodwill on consolidation	119.4
Consideration transferred	191.3

The analysis shows goodwill of SEK 119 million. The goodwill included in the acquisition corresponds to the expected scope for expanding sales of PhyNexus products to a larger market with the Biotage global sales organization, the synergies that arise from broadening the Biotage product range, and the biomolecule expertise that the acquired company brings. This goodwill is not considered tax-deductible.

Acquisition-related costs amounted to SEK 3.2 million, with a cash-flow effect of SEK -3.1 million, and are related to fees paid to external legal representatives and consultants in connection with due diligence and similar services. The costs are reported under administrative expenses in the consolidated statement of comprehensive income.

Acquisition of Horizon Technology, Inc.

On January 16, 2018, Biotage AB acquired 100 percent of the privately-owned company Horizon Technology, Inc., based in New Hampshire, United States. Horizon is a supplier of automated systems and consumables for separation in water purification, food testing and the petrochemical and pharmaceutical industries. Horizon's product range is complementary to the Biotage product portfolio and strengthens the Company's position, particularly in food safety and environmental applications. Marketing of Horizon's products is also expected to benefit from the Biotage global direct sales organization. Biotage acquired all of the shares in Horizon by paying the entire consideration of SEK 142.5 million on the acquisition date.

The acquired business's sales and effect on the Group's cash flow are difficult to assess, as it has been integrated into the Group's other operations.

This acquisition analysis has not identified any differences between carrying amounts and fair values of other receivables. Inventories are measured at their carrying amounts. Deferred tax is attributable to surplus values relating to trademarks, customer relationships and patents/technologies. The useful lives of trademarks have been assessed as indefinite. The useful lives of customer relationships are 10 years and of patents/technologies, 15 years.

The acquired company's net assets on the acquisition date	Acquisition analysis, SEK millions
Property, plant and equipment	0.6
Intangible assets - Customer relationships	26.4
Intangible assets - Trademarks	13.0
Intangible assets - Patents/technology	19.5
Other intangible assets	2.1
Inventories	8.2
Trade and other receivables	9.0
Cash and cash equivalents	12.7
Trade and other payables	-10.0
Deferred tax liability	-12.4
Net identifiable assets and liabilities	69.2
Goodwill on consolidation	73.3
Consideration transferred	142.5

The analysis shows goodwill of SEK 73 million. The goodwill included in the acquisition corresponds to the expected scope for expanding sales of Horizon's products to a larger market with the Biotage global sales organization, the synergies that arise from broadening the Biotage product range, and the environmental and water purification expertise that the acquired company brings. This goodwill is not considered tax-deductible.

Acquisition-related costs amount to SEK 2.5 million and relate to fees to external legal representatives and consultants in connection with the preparation of agreements and due diligence analyses. The costs are reported under administrative expenses in the consolidated statement of comprehensive income.

NOTE 27 Pledged assets and contingent liabilities

	Group		Parent Company	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Contingent liabilities				
Guarantees, subsidiaries	-	-	46,270	28,077
Total	-	-	46,270	28,077
Pledged assets	-	-	-	-

The Parent Company has provided sureties for the following subsidiaries' obligations with the Group's main creditor, Handelsbanken:

Biotage LLC	04-3535072	Charlotte, USA
Biotage GB Ltd	1033865	Cardiff, Wales
Biotage Sweden AB	556487-4922	Uppsala, Sweden

The Parent Company guarantees all liabilities of Biotage GB Ltd. (see above) at the reporting date. This exempts the Company from the requirement for audited accounts in accordance with section 479A of the Companies Act 2006.

NOTE 28 Related-party disclosures**Subsidiary**

Biotage AB does not engage in any operations described in its business concept; its subsidiaries develop, produce and market the Group's products and services. For this reason, there are considerable transactions between the Parent Company and its subsidiaries, and between subsidiaries themselves. A list of the subsidiaries can be found in note 26.

Summary of transactions with subsidiaries:

SEK thousands		Receivables from subsidiaries		Liabilities to subsidiaries		Services sales (+) purchases (-)		Interest received (+) paid (-)	
Subsidiary	Country	2019	2018	2019	2018	2019	2018	2019	2018
Biotage Sweden AB	SE	90,363	72,352	-	-	800	668	-	-
Biotage Sweden AB	SE	-	-	-	-	-2,818	-3,348	-	-
Cemu Bioteknik AB	SE	-	-	129	129	-	-	-	-
Pyrosequencing AB	SE	-	-	100	100	-	-	-	-
MIP Technologies AB	SE	-	-	-	-	-	63	-	-
Biotage LLC	US	-	-	-	139,744	1,079	686	-	-
Biotage SARL	FR	-	20	-	-	34	20	-	-
Biotage GmbH	DE	25,247	31,722	-	-	121	54	155	158
Biotage Ltd.	JP	6,133	8,045	-	-	286	233	69	58
Biotage GB Ltd.	GB	-	-	-	-	419	345	-	-
Biotage China	CH	-	-	-	-	-	-	-	-
Biotage Korea Co., Ltd.	KO	-	12	-	-	93	47	-	-
Biotage India Pvt Ltd.	IN	60	27	-	-	36	30	-	-
Pyrosequencing, Inc.	US	113,990	160,377	-	-	-	-	-	-
Horizon Technology, Inc.	US	-	404	-	-	-	392	-	-
PhyNexus, Inc.	US	3,546	-	-	-	-	-	-	-
Biotage Switzerland GmbH		-	-	-	-	-	-	-	-
Impairment reserve		-	-29,798	-	-	-	-	-	-
		239,339	243,161	229	139,974	50	-810	224	216

Key management personnel in the company or its parent

Payments to the Board and senior executives are described on pages 57-60. No other transactions have been conducted with Board members, senior executives or individuals or legal entities that are related parties thereof.

NOTE 29 Significant events after the reporting date

The corona pandemic (COVID-19) is affecting the global economy and humankind at large. Biotage's business is also affected and we see complex and hard to judge effects, depending on how long the virus outbreak will last. Biotage is continuously monitoring and evaluating the development of the situation. The business of Biotage is believed not to be the most hit in the short perspective. Several of Biotage's customers are involved in the research and development of analysis, vaccines and cure for the corona virus. This means the Biotage in certain countries may operate albeit substantial governmental

restrictions. It can be expected that also financially strong companies as Biotage may be affected negatively by a prolonged virus outbreak. So far Biotage's supply chain has not experienced disturbances that Biotage has not been able to mitigate. This may change, however, both in relation to accessibility of necessary production resources as more severe disturbances of freight. If Biotage's customers financial situation deteriorates that may in turn affect the customers' ability to pay Biotage.

NOTE 30 Definitions of key figures**Proportion of risk-bearing capital**

The total of equity and deferred tax liabilities in untaxed reserves divided by total assets. As the Group has no untaxed reserves, the proportion of risk-bearing capital is the same as the equity/assets ratio.

Return on equity

Net profit for the year divided by average equity.

Return on capital employed

Profit after financial items plus finance costs divided by average capital employed.

Return on total assets

Profit after financial items plus finance costs divided by average total assets.

Gross margin, %

Gross profit divided by net sales.

Gross profit

Net sales less cost of sales.

Equity per share

Equity divided by the number of shares outstanding at the end of the period.

Cash flow from operations per share

Cash flow from operating activities divided by the number of shares outstanding at the end of the period.

P/E ratio

Share price divided by earnings per share.

P/S ratio

Stock market price divided by sales per share outstanding at the end of the period.

Earnings per share*

Net profit for the period divided by the average number of shares during the period.

Operating margin

Operating profit/loss divided by sales.

Operating profit

Profit before net financial items and taxes. Consists of gross profit minus total operating expenses (sales expenses, administrative expenses, research and development costs, other operating income and other operating expenses).

Equity/assets ratio

Equity divided by total assets.

Capital employed

Total assets minus non-interest-bearing liabilities and provisions. Average capital employed is the sum of capital employed at the beginning and end of the fiscal year divided by two.

Total capital

Total assets. Average total assets is the sum of total assets at the beginning and end of the fiscal year divided by two.

Profit margin

Operating profit/loss plus finance income divided by sales.

Investments

Acquisition of property, plant and equipment, intangible assets and financial assets during the period.

*) Key figure defined under IFRS.

Key figures and performance measures

Alternative performance measures

The Company presents certain performance measures that are not defined under IFRS. The Company believes that these measures provide useful additional information to investors and Company management as they allow evaluation and benchmarking of its performance. As not all companies calculate performance measures in the same way, the measures are not always comparable with those used by other companies. These performance measures should therefore not be considered a substitute for measures defined under IFRS. The reported performance measures are not defined under IFRS unless otherwise stated.

ESMA's guidelines on alternative performance measures are applied with effect from July 3, 2016, which means enhanced disclosure requirements for performance measures not defined under IFRS. Below is an appraisal of the financial measures that Biotage considers relevant under the new guidelines.

Net sales at comparable exchange rates

As most of the Group's net sales are settled in currencies other than the reporting currency, SEK, the amount recognized is affected by exchange rate changes between periods to a relatively large extent. To enable stakeholders and management to analyze sales trends adjusted for currency effects, the Company reports sales trends compared with the comparative period at constant exchange rates. The current period's sales in each currency are translated at the exchange rates that were used in the reported financial statements for the comparative period.

	12 months			
	01/01/2019 -12/31/2019		01/01/2018 -12/31/2018	
Change in net sales, %	SEK thousands	%	SEK thousands	%
Net sales recognized in the comparative period, i.e., previous year	910,896		748,147	
Net sales recognized in the period*	1,065,016		840,177	
Recognized change	154,120	16.9	92,031	12.3
Net sales for the period at comparative period's exchange rates	995,455		808,108	
Change using comparative period's exchange rates	84,559	9.3	59,961	8.0

* Excluding sales from companies acquired during the course of the year.

Net debt

To enable stakeholders and management to monitor and analyze the Group's financial strength, information on the Group's net cash position is reported, which is defined as cash less liabilities to credit institutions, lease liabilities according to IFRS 16, calculated additional consideration and other interest-bearing liabilities. Lease liabilities have been added to this measure from 2019 following the introduction of IFRS 16.

Net debt (SEK thousands)	12/31/2019	12/31/2018
Cash	-185.9	-177.0
Liabilities to credit institutions	109.6	109.4
Lease-related liabilities	59.3	-
Other	86.2	-
Net debt	69.2	-67.6

Net sales and operating profit, rolling 12 months

Biotage has chosen to report net sales and operating profit on a rolling 12-month basis as the Company's management also follows performance over time for the total of the last 12 months' results and considers that this provides additional information to the calendar-based interim data otherwise presented in the report.

Rolling 12 months	01/01/2019 -12/31/2019	01/01/2018 -12/31/2018
Net sales	1,101.4	910.9
Operating profit	208.1	172.5
Sales growth, %	20.9%	21.8

EBIT

In its reports, Biotage uses the performance measure EBIT (Earnings Before Interest and Taxes) as an alternative term for operating profit.

STATEMENT BY THE BOARD OF DIRECTORS

The Board and CEO confirm that the consolidated annual financial statements have been prepared in accordance with international financial reporting standards (IFRS) as adopted by the EU and provide a true and fair view of the Group's financial performance and position. The Parent Company's annual financial statements have been prepared in accordance with generally accepted accounting principles

in Sweden and provide a true and fair view of the Parent Company's financial performance and position. The Board of Directors' report for the Group and Parent Company provides a true and fair overview of the development of their operations, financial position and performance, and describes material risks and uncertainties to which the Parent Company and its subsidiaries are exposed.

The consolidated statement of comprehensive income and statement of financial position and the Parent Company's income statement and balance sheet will be presented for adoption at the annual general meeting on June 4, 2020.

Uppsala, April 28, 2020

Torben Jørgensen
Chairman of the Board

Mark Bradley
Board Member

Peter Ehrenheim
Board Member

Thomas Eklund
Board Member

Åsa Hedin
Board Member

Karolina Lawitz
Board Member

Love Amcoff
Employee Representative

Annika Gärdlund
Employee Representative

Dan Menasco
*Employee Representative
(deputy)*

Magnus Mörling
Employee Representative (deputy)

Tomas Blomquist
President and CEO

Our Audit Report was submitted on April 28, 2020
Deloitte AB

Jonas Ståhlberg
Authorized Public Accountant

AUDITOR'S REPORT

**To the general meeting of the shareholders of Biotage AB (publ)
corporate identity number 556539-3138**

Report on the annual accounts and consolidated accounts

Opinions

We have audited the annual accounts and consolidated accounts of Biotage AB (publ) for the financial year 2019-01-01 - 2019-12-31 except for the statutory sustainability report on pages 24-29. The annual accounts and consolidated accounts of the company are included on pages 24-29 and 32-79 in this document.

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the parent company as of December 31, 2019 and its financial performance and cash flow for the year then ended in accordance with the Annual Accounts Act. The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the group as of December 31, 2019 and their financial performance and cash flow for the year then ended in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, and the Annual Accounts Act. Our opinions do not cover the statutory sustainability report on pages 24-29. The statutory administration report is consistent with the other parts of the annual accounts and consolidated accounts.

We therefore recommend that the general meeting of shareholders adopts the income statement and balance sheet for the parent company and the group.

Our opinions in this report on the the annual accounts and consolidated accounts are consistent with the content of the additional report that has been submitted to the parent company's audit committee in accordance with the Audit Regulation (537/2014) Article 11.

Basis for Opinions

We conducted our audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements. This includes that, based on the best of our knowledge and belief, no prohibited services referred to in the Audit Regulation (537/2014) Article 5.1 have been provided to the audited company or, where applicable, its parent company or its controlled companies within the EU.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

Key Audit Matters

Key audit matters of the audit are those matters that, in our professional judgment, were of most significance in our audit of the annual accounts and consolidated accounts of the current period. These matters were addressed in the context of our audit of, and in forming our opinion thereon, the annual accounts and consolidated accounts as a whole, but we do not provide a separate opinion on these matters.

Capitalized development expenditure

The Group's recognized capitalized development costs on December 31, 2019 were SEK 105 million. The item is material from a financial reporting perspective. The purpose of the projects is to develop new products and improve existing ones. Expenditure on development projects is recognized as an asset in the consolidated financial statements when it is probable that the projects will generate future economic benefits. Decisions to recognize these costs as an asset are based on an assessment made by management.

Management's estimates regarding capitalized development costs and their subsequent measurement may affect the group's earnings and financial position and are therefore of particular importance to our audit.

Further information can be found in the Summary of Significant Accounting and Measurement Policies for the group and parent company on page 47 and in note 12 of the annual report.

Our audit procedures included, but was not limited to, the following procedures:

- We have obtained an understanding of the Company's processes for capitalizing development costs and subsequent valuation. We have also tested important relevant controls.
- We have examined a sample of the year's capitalized costs to obtain assurance that they qualify for capitalization.
- We have examined the Company's impairment test.
- We have examined whether required disclosures have been provided in relevant notes to the financial statements.

Revenue from the sale of products

The Group develops and sells systems, re-agents, accessories, spare parts and services on a global basis directly to end users and through distributors. The Group's revenue for 2019 amounted to SEK 1 101 million and consisted of sales of goods, SEK 999 million, sales of services, SEK 94 million, and other income, SEK 8 million.

Revenue from the sale of goods is recognized when the control of the products have been transferred from the seller to the buyer, which normally occurs on delivery. Revenue from the sale of products is material from a financial reporting perspective.

There is a risk of incorrectly accrued revenue in connection with delivery of goods and that revenue is not complete and is therefore of particular importance to our audit.

Further information can be found in the Summary of Significant Accounting and Measurement Policies for the group and parent company on page 51 and in note 3 of the annual report.

Our audit procedures included, but was not limited to, the following procedures:

- We have obtained an understanding of the Company's processes for revenue recognition according to the criteria contained in IFRS 15.
- We have examined a sample of product deliveries to obtain assurance of correct accrual.
- We have examined whether required disclosures have been provided in relevant notes to the financial statements.

Measurement of goodwill

The Group's recognized goodwill on December 31, 2019 was SEK 316 million. The account is material from a financial reporting perspective and exceeds our materiality. Goodwill is tested for impairment annually when the annual financial statements are prepared, or as soon as any changes indicate impairment. Goodwill testing involves calculating the value in use for the cash-generating unit to which the carrying amount of goodwill is allocated.

As the total value of the balance sheet item represents a significant proportion of the company's total assets and is sensitive to assumption changes such as growth and discount rate, this area is an important part of our audit.

Further information can be found in the Summary of Significant Accounting and Measurement Policies for the group and parent company on page 48 and in note 11 of the annual report.

Our audit procedures included, but was not limited to, the following procedures:

- We have examined and assessed the Company's procedures for goodwill impairment testing to obtain assurance that the assumptions are reasonable, the procedures are applied consistently and the calculations are conducted with integrity.
- We have examined whether appropriate accounting policies have been applied and whether required disclosures have been provided in relevant notes to the financial statements.

Other information than the annual accounts and consolidated accounts

This document also contains other information than the annual accounts and consolidated accounts and is found on pages 1-23, 30-31 and 84-87. The Board of Directors and the Managing Director are responsible for this other information.

Our opinion on the annual accounts and consolidated accounts does not cover this other information and we do not express any form of assurance conclusion regarding this other information.

In connection with our audit of the annual accounts and consolidated accounts, our responsibility is to read the information identified above and consider whether the information is materially inconsistent with the annual accounts and consolidated accounts. In this procedure we also take into account our knowledge otherwise obtained in the audit and assess whether the information otherwise appears to be materially misstated.

If we, based on the work performed concerning this information, conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors and the Managing Director

The Board of Directors and the Managing Director are responsible for the preparation of the annual accounts and consolidated accounts and that they give a fair presentation in accordance with the Annual Accounts Act and, concerning the consolidated accounts, in accordance with IFRS as adopted by the EU. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of annual accounts and consolidated accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts and consolidated accounts, The Board of Directors and the Managing Director are responsible for the assessment of the company's and the group's ability to continue as a going concern. They disclose, as applicable, matters related to going concern and using the going concern basis of accounting. The going concern basis of accounting is however not applied if the Board of Directors and the Managing Director intends to liquidate the company, to cease operations, or has no realistic alternative but to do so.

The Audit Committee shall, without prejudice to the Board of Director's responsibilities and tasks in general, among other things oversee the company's financial reporting process.

Auditor's responsibility

Our objectives are to obtain reasonable assurance about whether the annual accounts and consolidated accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and generally accepted auditing standards in Sweden 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 annual accounts and consolidated accounts.

A further description of our responsibilities for the audit of the annual accounts and consolidated accounts is located at the Swedish Inspectorate of Auditors website: www.revisorsinspektionen.se/revisornsansvar. This description forms part of the auditor's report.

From the matters communicated with the Board of Directors, we determine those matters that were of most significance in the audit of the annual accounts and consolidated accounts, including the most important assessed risks for material misstatement, and are therefore the key audit matters. We describe these matters in the auditor's report unless law or regulation precludes disclosure about the matter.

Report on other legal and regulatory requirements

Opinions

In addition to our audit of the annual accounts and consolidated accounts, we have also audited the administration of the Board of Directors and the Managing Director of Biotage AB (publ) for the financial year 2019-01-01 - 2019-12-31 and the proposed appropriations of the company's profit or loss.

We recommend to the general meeting of shareholders that the profit to be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the Managing Director be discharged from liability for the financial year.

Basis for Opinions

We conducted the audit in accordance with generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

Responsibilities of the Board of Directors and the Managing Director

The Board of Directors is responsible for the proposal for appropriations of the company's profit or loss. At the proposal of a dividend, this includes an assessment of whether the dividend is justifiable considering the requirements which the company's and the group's type of operations, size and risks place on the size of the parent company's and the group's equity, consolidation requirements, liquidity and position in general.

The Board of Directors is responsible for the company's organization and the administration of the company's affairs. This includes among other things continuous assessment of the company's and the

group's financial situation and ensuring that the company's organization is designed so that the accounting, management of assets and the company's financial affairs otherwise are controlled in a reassuring manner. The Managing Director shall manage the ongoing administration according to the Board of Directors' guidelines and instructions and among other matters take measures that are necessary to fulfill the company's accounting in accordance with law and handle the management of assets in a reassuring manner.

Auditor's responsibility

Our objective concerning the audit of the administration, and thereby our opinion about discharge from liability, is to obtain audit evidence to assess with a reasonable degree of assurance whether any member of the Board of Directors or the Managing Director in any material respect:

- has undertaken any action or been guilty of any omission which can give rise to liability to the company, or
- in any other way has acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association.

Our objective concerning the audit of the proposed appropriations of the company's profit or loss, and thereby our opinion about this, is to assess with reasonable degree of assurance whether the proposal is in accordance with the Companies Act.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with generally accepted auditing standards in Sweden will always detect actions or omissions that can give rise to liability to the company, or that the proposed appropriations of the company's profit or loss are not in accordance with the Companies Act.

A further description of our responsibilities for the audit of the management's administration is located at the Swedish Inspectorate of Auditors website:

www.revisorsinspektionen.se/rn/showdocument/documents/rev_dok/revisors_ansvar.pdf. This description forms part of the auditor's report.

The auditor's opinion regarding the statutory sustainability report

The Board of Directors is responsible for the statutory sustainability report on pages 24-29, and that it is prepared in accordance with the Annual Accounts Act.

Our examination has been conducted in accordance with FAR:s auditing standard RevR 12 The auditor's opinion regarding the statutory sustainability report. This means that our examination of the statutory sustainability report is different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinion.

A statutory sustainability report has been prepared.

Deloitte AB, was appointed auditor of Biotage AB by the general meeting of the shareholders on the 2019-04-24 and has been the company's auditor since 2000-04-26.

Stockholm, April 28 2020
Deloitte AB

Jonas Ståhlberg
Authorized Public Accountant

BOARD OF DIRECTORS



From left: Annika Gärdlund, Mark Bradley, Åsa Hedin, Torben Jørgensen, Peter Ehrenheim, Karolina Lawitz, Love Amcoff and Thomas Eklund.

Torben Jørgensen (1952)

Chairman of the Board
Education: B.Sc., Economics, Copenhagen Business School.
Occupation: Independent adviser, consultant and director.
Other assignments: Chairman of Atlas Antibodies AB. Director of Intervacc AB and Micropos Medical AB.
Board service (years): 1.
Shares: 520,200.
 Torben Jørgensen has attended all Board meetings since his election.

Thomas Eklund (1967)

Board Member
Education: MBA, Stockholm School of Economics.
Occupation: Independent adviser, consultant and director.
Other assignments: Chairman of Sedana Medical AB. Director of Boule Diagnostics AB, Rodebjer Form AB, Bioworks AB, Immedica AB and Surgical Science AB.
Board service (years): 14.
Shares: 111,538, including shares owned via endowment and pension insurance.
 Thomas Eklund attended all Board meetings during the year.

Karolina Lawitz (1956)

Board Member
Education: M.Sc., University of Uppsala.
Occupation: Directorships.
Other assignments: Director of PeptiCore and Red Glead Discovery.
Board service (years): 7.
Shares: 19,500.
 Karolina Lawitz attended all Board meetings during the year.

Peter Ehrenheim (1955)

Board Member
Education: M.Sc. Mechanical Engineering, KTH Stockholm.
Occupation: Entrepreneur.
Other assignments: Chairman of Boule Diagnostics AB, Medcap AB, Bioworks Technologies AB, Sophion A/S, Grönsö Säteri AB and Färsundet Industri AB.
Board service (years): 7.
Shares: 0.
 Peter Ehrenheim attended 11 out of 12 Board meetings during the year.

Mark Bradley (1962)

Board Member
Education: M.A., D.Phil.
Occupation: Professor.
Other assignments: Academic.
Board service (years): 1.
Shares: 0.
 Mark Bradley has attended all Board meetings since his election.

Åsa Hedin (1962)

Board Member
Education: M.Sc., Biophysics, University of Minnesota, US, B.Sc., Physics, Gustavus Adolphus College, US.
Occupation: Directorships, Investor.
Other assignments: Director of Nolato AB, Tobii AB, Cellavision AB, C-Rad AB, E Öhman Fonder AB, Industrifonden, Artificial Solutions and Fidesmo AB.
Board service (years): 0.
Shares: 0.
 Åsa Hedin has attended all Board meetings since her election.

Annika Gärdlund (1966)

Employee Representative
Education: Uppsala University.
Occupation: Senior Accountant.
Other assignments: –
Board service (years): 4.
Shares: 0.
 Annika Gärdlund attended 11 out of 12 Board meetings during the year.

Love Amcoff (1974)

Employee Representative
Education: M.Sc. (Engineering), Uppsala Institute of Technology.
Occupation: Project Manager.
Other assignments: –
Board service (years): 8.
Shares: 3,200.
 Love Amcoff attended 11 out of 12 Board meetings during the year.

Dan Menasco (1977)

Employee Representative (deputy)
Education: Ph.D., Chemistry, University of South Carolina.
Occupation: Global Technical Product Manager, Analytical.
Other assignments: –
Board service (years): 0.
Shares: 0.
 Dan Menasco has attended all Board meetings since his election.

Magnus Mörling (1978)

Employee Representative (deputy)
Education: Mechanical Engineering.
Occupation: Project Manager, R&D.
Other assignments: –
Board service (years): 0.
Shares: 0.
 Magnus Mörling has attended all Board meetings since his election.

Jonas Ståhlberg (1975)

Chief auditor
 Authorized Public Accountant, Deloitte AB.

Information on shareholdings and other assignments is based on data that applied on submission of this annual report.

GROUP MANAGEMENT



Tomas Blomquist * (1970)
Position: President and CEO.
Education: Marketing/Economics.
Employment in the Group (years): 1
Shares: 15,000.
Other assignments: –



Erika Söderberg Johnson * (1970)
Position: Chief Financial Officer.
Education: MBA, Stockholm School of Economics
Employment in the Group (years): 8.
Shares: 4,500.
Other assignments: Director of Saab AB and Qliro Group AB.



Lars Bäckman * (1961)
Position: Chief Legal Officer.
Education: LL.B.
Employment in the Group (years): 13.
Shares: 20,000.
Other assignments: Director of Chreto ApS.



Anders Wikström (1973)
Position: EVP Operations.
Education: B.Sc., CS
Employment in the Group (years): 17.
Shares: 3,150.
Other assignments: –



Cecilia Hållner (1972)
Position: Global Human Resources Director
Education: Uppsala University, Human Resource Management.
Employment in the Group (years): 2.
Shares: 322.
Other assignments: –



Rikke Rytter (1967)
Position: EVP Global Marketing.
Education: Bachelor of Biomedical Laboratory Science.
Employment in the Group (years): 2.
Shares: 1,877
Other assignments: –



Steve Jordan (1953)
Position: Chief Scientific Officer.
Education: Fellow, Royal Society of Chemistry.
Employment in the Group (years): 15.
Shares: 0.
Other assignments: –

* Group Management

Information on shareholdings and other assignments is based on data that applied on submission of this annual report.

PRODUCT REGISTER

ORGANIC CHEMISTRY

MICROWAVE-ASSISTED ORGANIC SYNTHESIS

Systems	Consumables
Biotage® Initiator+	Reaction vials
Biotage® Initiator+ Robot	Resins
Eight/Robot Sixty	

PURIFICATION (FLASH CHROMATOGRAPHY)

Systems	Consumables
Biotage® Dalton 2000	Biotage® Sfär Silica
Biotage® Selekt	Biotage® Sfär Silica D
Isolera™ Dalton 2000	Biotage® Sfär Silica HC
Isolera™ Spektra One	Biotage® Sfär Silica HC D
Isolera™ One	Biotage® Sfär KP-Amino D
Isolera™ Prime	Biotage® Sfär C18 D
Isolera™ LS	

The offering also includes the Biotage system for evaporation, Biotage® V-10, and consumables from the Analytical Chemistry product range, such as scavengers and filtering columns.

PEPTIDE SYNTHESIS

Systems	Consumables
Biotage® Initiator+ Alstra™	Biotage® Sfär Bio C18 D
Biotage® Initiator+ SP Wave	Biotage® Sfär Bio C4 D
Syro I/II	ChemMatrix®

SCALE-UP

PURIFICATION (FLASH CHROMATOGRAPHY)

Systems
Biotage® Flash 75/150
Biotage® Flash 400

The offering also includes consumables for Biotage flash systems.

RESINS IN BULK

Systems
Development and production of silicate-based and polymer-based materials.

CUSTOMIZED DEVELOPMENT PROJECTS

Research services.

ANALYTICAL CHEMISTRY

SAMPLE PREPARATION

Systems	Consumables
Biotage® Extrahera™	Atlantic® ReadyDisk
Biotage® Extrahera™ GLP Software	Atlantic® SPE Disks
Biotage® Horizon 5000	DryDisk®
Biotage® Horizon 3100	EVOLUTE® SPE
Biotage® Horizon SmartPrep	ISOLUTE® FILTER+
Biotage® Lysera	ISOLUTE® HYDRO DME+
Biotage® PRESSURE+	ISOLUTE® PPT+
Biotage® VacMaster™ Disk	ISOLUTE® PLD+
Biotage® VacMaster™ 10, 20 & 96	ISOLUTE® QuEChERS
	ISOLUTE® SLE+
	ISOLUTE® SPE
	Pacific® SPE Disks
	Resins

EVAPORATION OF SAMPLES

Systems
Biotage® Solvent Recovery OG
Biotage® Solvent Recovery SVOC
Biotage® SPE Dry
TurboVap® II
TurboVap® LV
TurboVap® EH
XcelVap®
DryVap®
SpeedVap® IV

BIOMOLECULES

NUCLEIC ACIDS PURIFICATION

Systems	Consumables
AutoPlasmid MM6	Autoplasmid MMG Kits
PhyNexus MEA 2	MinPrep & MidiPrep PhyTips

PROTEIN PURIFICATION

Antibody Binding PhyTips Columns
Custom-packed Resin
Chromatography PhyTips Columns
Gel filtration Buffer Exchange
Recombinant Protein PhyTips columns

GLOSSARY

CMO

Contract manufacturing organization.

CRO

Contract research organization.

Evaporation

Accelerated evaporation of a liquid.

Flash chromatography

A method of separating the substances included in a reaction mixture. Depending on their physical characteristics, the substances move at different speeds through a solid phase with the help of a flow of solvents.

LLE (Liquid Liquid Extraction)

A method of separating compounds based on their relative solubility in two different immiscible liquids, usually water and an organic solvent. This is an extraction of a substance from one liquid phase into another liquid phase.

Microwave synthesis

A synthesis where microwave energy is used to speed up the reaction.

MIP

Molecularly imprinted polymers.

Re-agent

A substance that is added during synthesis to restructure the starting material into the desired product.

Purification

Involves the synthesized compound being isolated from impurities.

Purification column

The physical unit where the medium needed to carry out flash chromatography is packaged. The sample that is to be purified in the column is then applied and purification is carried out as the solvent flows through the column.

SLE (Supported Liquid Extraction)

A product and method representing an efficient alternative to traditional LLE that has higher recovery rates and lends itself well to automation. The extraction of a substance is performed by the sample first being absorbed onto a solid support and then eluted off using an organic solvent.

SPE (Solid Phase Extraction)

A method for separating substances according to how much they prefer a solid phase to a liquid phase. The same principle applies as for flash chromatography, although on a smaller scale.

Synthesis

Involves creating a new substance by combining (synthesizing) several different substances.

Work-up

A process that removes various substances that may have been added to speed up or create reactions.

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