

A woman with long blonde hair, wearing a white shirt and a dark backpack, is pushing a stroller on a paved walkway. The scene is set at sunset, with the sun low on the horizon, creating a warm, golden glow. In the background, there are trees, a road, and a city skyline across a body of water. The overall mood is peaceful and serene.

# 2022

Annual and  
Sustainability Report

**BioGaia**<sup>®</sup>  
Supporting your invisible heroes

# Table of contents

About BioGaia	3	Healthy business	58
Key events during the year	4	Healthy planet	69
Investment in our shares	6	Community engagement	78
Letter from our Chairman	8	Sustainability Governance	81
CEO's message	11	Auditor's report sustainability	84
Vision, business model and value creation	14	GRI-Index	85
Global trends	15	Emission sources	88
Product portfolio	18	Financial information	89
Strategy	22	Administration report	90
Omnichannel retailing	23	Five-year summary	96
Leverage global brand	26	Group	97
Leverage scientific edge	28	Parent Company	100
Product supply	34	Notes to the financial statements and accounting policies	103
Direct markets	37	Signatures of the Board of Director	117
Goals and future prospects	43	Auditor's report	118
Sustainability	44	Definitions of key ratios	121
Key sustainability events 2022	45	Corporate governance report	123
Words from the Sustainability Manager	46	The BioGaia share	126
BioGaia's value chain	48	Executive Management	128
Prioritised sustainability areas	49	Board of Directors	129
Healthy products	50	Glossary	130

# About BioGaia

BioGaia is a Swedish probiotic company that has been at the forefront of microbiome research for more than 30 years. BioGaia develops, markets and sells probiotic products within the areas of gut, oral and bone health. Our probiotic products with bacterial strains from the *L. reuteri* species are among the most scientifically well-documented probiotics.

At the end of 2022, the BioGaia group had 212<sup>1</sup> employees, a total of 32<sup>2</sup> nationalities and operated in three market areas - EMEA (Europe, Middle East and Africa), Americas (USA, Canada and South America), and APAC (Asia and Pacific). With employees all around the world, BioGaia strives to have a healthy corporate culture, with a strong focus on diversity and equal opportunity.

At BioGaia, we operate as a lean organisation and have parts of our value chain externally. This efficiency and diversification of our production chain allow us to adapt to market needs in a more flexible way. We have two types of distribution: through distribution partners and our own distribution. Our products are sold in more than 100 countries worldwide through its partnerships with nutrition and pharmaceutical companies, while our own distribution extends to five markets.

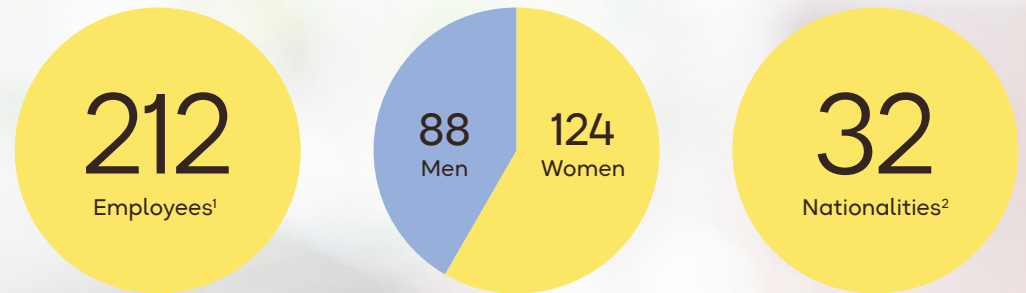
We have an extensive research network, which allows us to work closely with the global scientific community to advance the understanding of probiotics and the human microbiome.

1. December 31, 2022

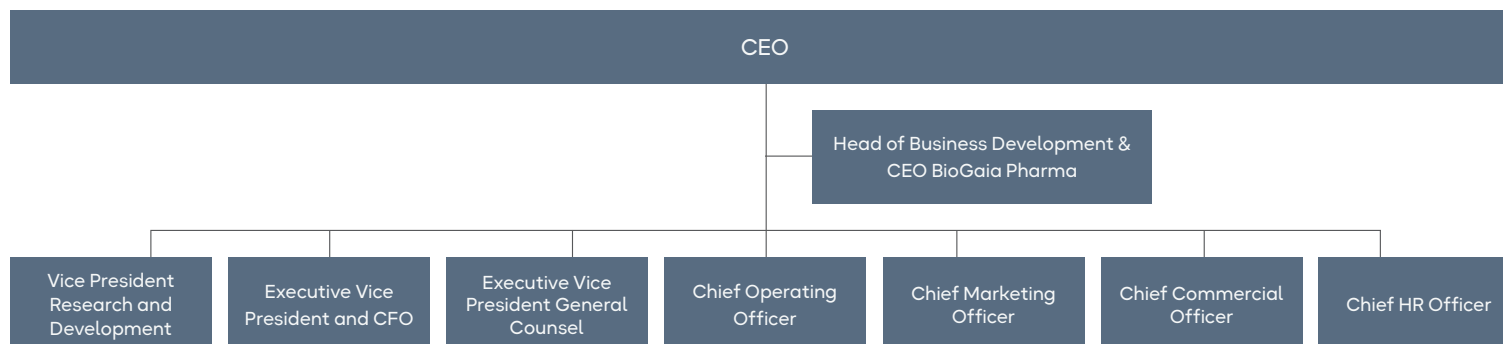
2. October 2022

Around 10 percent of our net sales is invested in research and development to expand our product portfolio further, discover new bacteria strains and deepen the knowledge of probiotics.

When BioGaia was founded in 1990, the company sold its probiotic products through partners using the partners' brands. In 2006, we launched the BioGaia brand. Today, a key part of BioGaia's brand strategy is to increase the proportion of sales consisting of BioGaia-branded products. Today, BioGaia is a consumer brand, and our vision is to be the most trusted probiotic brand in the world.



## BioGaia AB organisation



# Key events 2022

## First quarter 2022

**BioGaia Pharma:** First Patient Enrolled in Phase II Clinical Study Evaluating BGP345A for the treatment of opioid induced constipation (OIC-1) [↗](#)

**BioGaia Pharma:** First Patient Enrolled in Phase I Clinical Study Evaluating BGP014 in mild to moderate ulcerative colitis (AUCH-1). [↗](#)

**BioGaia's probiotic reduces inflammation** in patients with diverticulitis. [↗](#)

## Second quarter 2022

**BioGaia starts its own distribution in Canada.** [↗](#)

**BioGaia signs exclusive agreement in South Korea** for the baby gut health range [↗](#)

**BioGaia launches product to support children's respiratory health** [↗](#)

## Third quarter 2022

**MetaboGen and BioGaia open pilot plant** for new bacteria strains. [↗](#)

**Skinome launches pioneering skincare** probiotic following collaboration with BioGaia. [↗](#)

**BioGaia Pharma** wins the jury's choice award at Medicon Valley Microbiome Pitch Day. [↗](#)

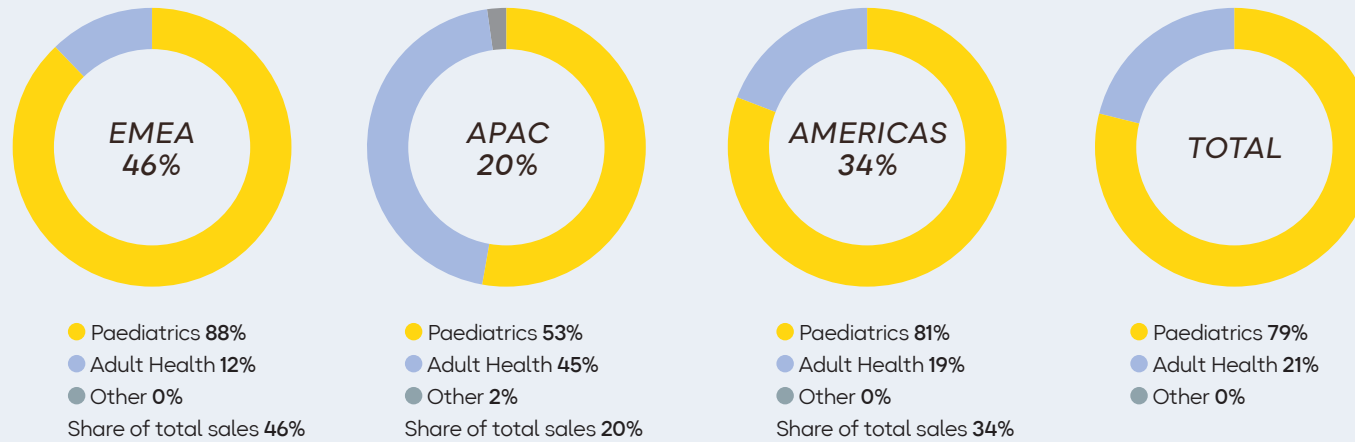
## Fourth quarter 2022

No significant events during the fourth quarter.

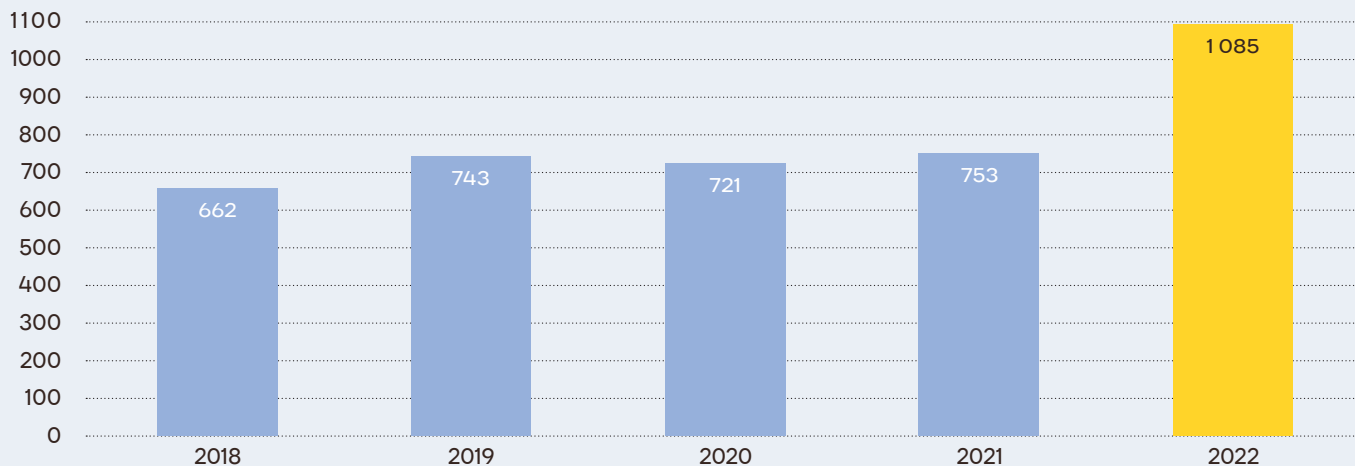
Q1	Q2	Q3	Q4
JANUARY FEBRUARY MARCH	APRIL MAY JUNE	JULY AUGUST SEPTEMBER	OCTOBER NOVEMBER DECEMBER

# Key figures 2022

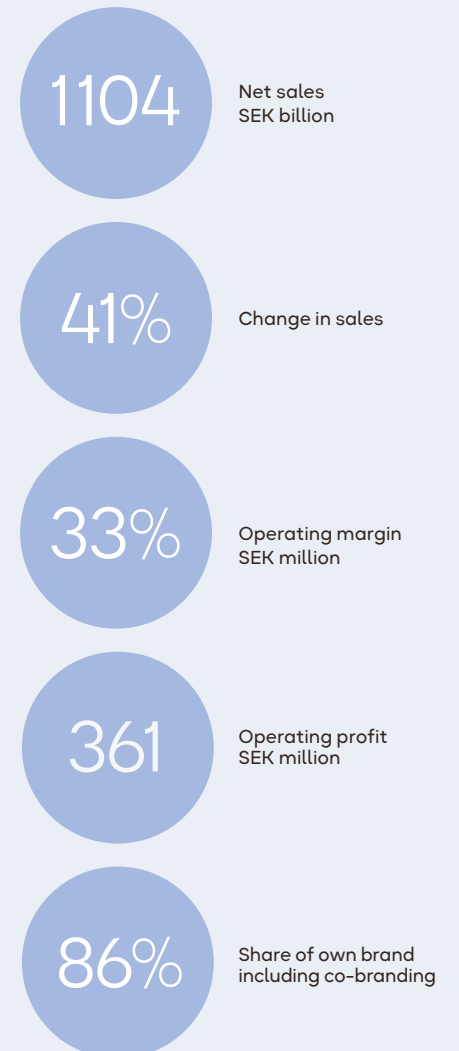
## Sales by market and segment



## Annual product sales for the past 5 years (SEK million)



## Highlights



# Investment in our shares

An investment in BioGaia offers ownership in a company with an attractive position in a market with growth potential.

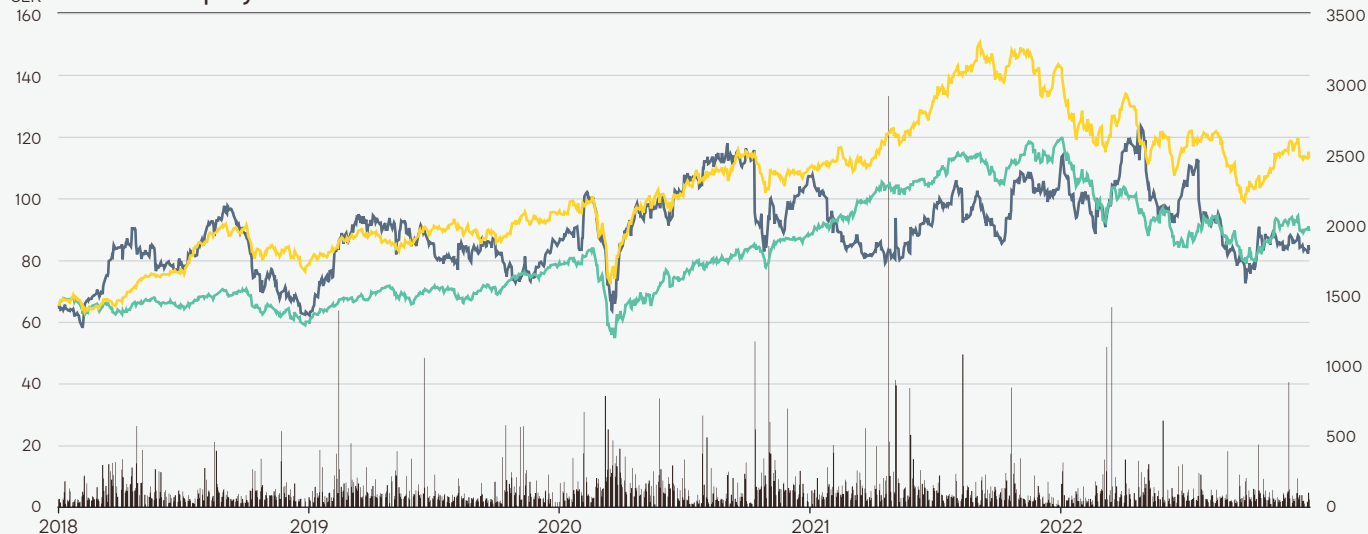
BioGaia is a world leader in probiotics, and since its formation in 1990, the company has created significant value for its consumers, customers and shareholders. This is achieved by maximising sales of established products and developing new products that cater to consumer demand and needs.

In 1998, BioGaia AB was listed on the stock exchange and the key factors behind the value of its shares are described on the following page.



# Investment in our shares

BioGaia's equity curve



Read more about BioGaia's sustainability work in the **Sustainability Report** on page 44

- Shares
- OMX Stockholm PI
- OMX Stockholm Health Core PI
- Number of shares traded in 1000s

## Expanding industry

The market for probiotics is expected to grow by approximately 6 percent by 2026, primarily driven by an increased focus on health and preventive measures.<sup>1</sup>

## Leading market position

BioGaia is the world's largest developer of probiotics for children with colic. We retain this position through new products and updates to the existing product range. Examples include the addition of vitamin D in Protectis baby drops and the development of an alternative type of packaging – easy dropper – for the same product.

## Profitable growth

Our revenue increased by 41 percent in 2022, and the operating margin averaged 33 percent over the past five years despite the pandemic, high inflation and general global economic decline. We continue to focus on profitable growth by satis-

fying the needs of our consumers and remaining cost efficient.

## Innovative products

We invest approximately 10 percent of net sales into research and development to provide us with greater competitive advantages in the short and long term. This enables us to launch new patented products. For example, we were first in the world to introduce chewable probiotic tablets and probiotic drops.

## Strong brand

BioGaia is our group brand, and as a result of our continued development, we have progressively evolved into the leading consumer brand in probiotics. This means we are able to create and retain loyal customers (our distribution partners and consumers) in most markets and regions.

## Efficient business

A large share of the products we sell are manufactured at our factory in Eslöv, in the south of Sweden, under our own management. This enables us to efficiently produce and deliver our products profitably to customers. We are also continuing to optimise our manufacturing operations, our range of products and supply chain using Lean processes and automation.

## Sustainable solutions

We have committed to fulfilling a science-based climate target, which were approved by the Science Based Target initiative (SBTi). When we develop new products, our ambition is to minimise our environmental impact and carbon dioxide emissions. We ensure that we maximise sustainable properties and energy efficiency, during the use phase and recycling at the end of the product lifecycle. This will continue to strengthen our competitiveness and create further business incentives for BioGaia.

1. Euromonitor, april 2022



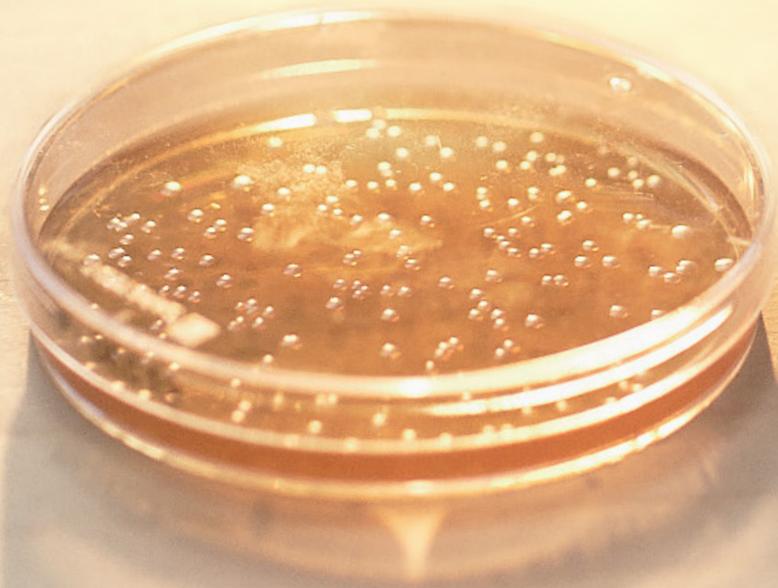
Peter Rothschild – Chairman

# Research is at the very core of everything we do

Research into the microbiome is advancing at a rapid pace. I am proud that BioGaia is helping drive this development. Being at the forefront of research has shaped our past and our future. It is in our DNA. Our strong consumer brand together with a high level of confidence within the healthcare profession provides us with a solid platform for continued growth.



"I am incredibly proud that we, together with researchers from across the globe, are driving the development of probiotics forward and that we are also at the very forefront of this field."



**Research is the single most important parameter for our success**

The probiotics market is fragmented, and many companies are competing for the attention of consumers. However, the crucial factor in a consumer's purchasing decision is their trust in the product. In other words, whether the consumer sees the product as safe to use and effective for its purpose.

To achieve our vision to be the most trusted probiotic brand in the world, we have made enormous investments in research and development during the past 30 years. Every product we sell has undergone at least two clinical studies, proving the product's positive effects.

Research is in our DNA. This is why we invest about 10 percent of our net sales in research and development. Our research is indication-based, which means we start with a condition such as colic or constipation, and conduct high-quality pre-clinical and clinical studies that focus on these particular conditions. This makes us unique and is one of several reasons for the high level of trust we have among consumers and healthcare and medical services professionals around the world.

BioGaia's extensive research network spreads knowledge and awareness of our patented bacteria strains through its research. It is a fantastic feeling to have published more than 250 scientific articles about clinical studies with our *L. reuteri* strains, with the participation of more than 21,000 individuals of all ages.

I am incredibly proud that we, together with researchers from across the globe, are driving the development of probiotics forward and that we are also at the very forefront of this field.

### **BioGaia has two types of distribution**

Our close collaboration with our distribution partners has helped BioGaia reach its leading position today. A key target group for BioGaia is the healthcare industry. To raise awareness about our products and their benefits, we will continue to offer training and information activities aimed at healthcare and medical services. The initiatives are partly carried out through our BioGaia Academy concept and partly through the distribution network's sales force's continuous dialogue with doctors, nurses, midwives, pharmacists and dentists, among others. Our successful and comprehensive research is crucial to this; without the data and evidence supporting our products' first-rate properties, healthcare professionals wouldn't have the same level of trust that they do today.

Several years ago, we expanded our model and, today, BioGaia has two types of distribution - via our distribution partners and direct distribution. The two do not compete with each other. It's quite the contrary, since the two complement each other, and this combination increases brand awareness. Together, they provide a stable foundation for BioGaia's continued growth.

### **Contribution to preventive healthcare**


Research into the microbiome is advancing at rapid speed. Almost every day, we learn something new about the intricate relationship between our health and the billions of microorganisms that live in our bodies.

Preventive initiatives can result in great benefits for individuals, the healthcare system and society as a whole. There are clear indications that probiotics can help people to actively prevent diseases and should, therefore, be considered as one of several tools in preventive care. This is increasingly important as people live longer.

Probiotics are also a vital piece of the puzzle in solving growing antibiotic resistance - one of the largest threats to humanity according to the World Health Organisation (WHO). Since probiotics mitigate the potential side effects of antibiotics, this means more people can complete the entire antibiotic treatment course. This is one area where our products can make a significant difference worldwide.

Despite BioGaia being founded more than 30 years ago, we are just at the beginning of our journey. With research as our beacon, we will continue to build on and nurture our unique position.

**"I look forward,  
with confidence,  
to an exciting  
2023."**



Peter Rothschild, Founder and Board Chairman of BioGaia



**Isabelle Ducellier – CEO**

## **Continuing to develop our business with the consumer in focus**

With world-class probiotic products and more than 30 years of frontline experience in microbiome research, we are more than ready to take the position as the leading research and health-oriented consumer brand. For the first time in BioGaia's history, sales for the year exceeded SEK 1 billion. With a solid strategy and a strong financial position, we are preparing ourselves for these challenging times in the global economy.

### **Highest sales ever in the history of the company**

When I took over as CEO in 2018, I wrote that our journey had only just begun. Four years on, I am pleased to see that we have come a long way on our journey, transitioning from a business-to-business company to a business-to-consumer company. Since taking the strategic decision to complement existing sales via distribution partners with our own direct distribution in strategically important markets, we have successfully built a more consumer-oriented business. This hybrid strategy – sales via our distribution partners and direct distribution to end consumers – has already generated results. For the first time in the company's history, BioGaia achieved sales of SEK 1 billion in 2022. We have reported double-digit growth for the past six quarters, including acquisitions, and increased total net sales by 41 percent compared to the previous year. We are on the right path.

### **Accelerating BioGaia's brand**

If we are to succeed in further strengthening the BioGaia brand, we must speak with one voice, regardless of the channel we use to market to consumers. From having focused solely on training our distribution partners about our research and products, we are now, with our own funds, reaching out to consumers with

products in current and new markets. Our five direct markets accounted for 24 percent of total sales by the end of 2022, which I consider a good sign that we are focusing on the right things.

### **Positive performance in our strategic markets**

EMEA remains our largest market area and accounts for 46 percent of our total sales. In 2022, sales recovered, and then some, following the pandemic. Here, we can clearly see the results of our hybrid strategy. In the UK, we increased the number of returning customers in the form of subscribers via our local e-commerce platform while, in parallel, we saw an increase in sales in pharmacies. In Finland, where we took over distribution, we achieved a 20 percent share of the baby drops market during the year, and our products are available in more than three-quarters of pharmacies. Likewise, sales in Italy and France recovered to levels that are higher than pre-pandemic, thanks to our dedicated distribution partners.

Consumers in the USA are accustomed to doing most of their everyday shopping on a single platform. So it comes as no surprise that we saw strong sales growth during the year, driven by online sales via well-established marketplaces such as

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**"Our five direct markets accounted for 24 percent of total sales by the end of 2022, which I consider a good sign that we are focusing on the right things."**

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BioGaia's brand and understanding consumer behaviour, purchasing habits and needs. During the year, our expanding marketing department has worked intensively to grow brand awareness and compile consumer insights, something we lacked in the past and requiring us to, effectively, guess with regard to these aspects. We obtain insights from market surveys, social media and through our direct market e-commerce website and external market places. This knowledge makes it easier for us to improve and adapt our offerings and communication.

In line with our transition to increase consumer focus, we have grown our digital presence. Today, online sales account for approximately 25 percent of our total sales. We should be available where consumers are, whether this is on their mobile phones, at the pharmacy or at the doctor's surgery. Through our digital and physical presence, we are able to achieve global reach and provide greater accessibility to our

Amazon and Target. I am very pleased with the successful integration of Everidis, our distribution partner in the USA, which we acquired at the end of 2021, and that we could welcome it into the BioGaia family during the year. In Latin America, BioGaia achieved its best-ever result. We now operate in 20 countries in Latin America and, during the year, we opened our own regional office in Mexico City.

We have seen a temporary change in purchasing behaviour among consumers in Japan and China as a result of the pandemic. In Japan, a large share of our sales of oral health products have been through dentists, but the pandemic restrictions led to an upswing for our e-commerce and sales via Amazon. In China, the e-commerce giant Tmall and the newcomer TikTok have become an increasingly successful entry channel to grown online sales, which have risen from 4 percent to 12 percent in this year alone.

# "All of the conditions are in place to continue our journey to fulfil our vision to be the most trusted probiotic brand in the world."

## Sustainability permeates BioGaia's business

Sustainability permeates our core business. Our studies show that BioGaia's probiotic products contribute to better health. The good bacteria in our products prevent today's and tomorrow's health problems for both children and adults. We are proud but not content. Instead, we are constantly striving to make our operations and our products more sustainable. We do this, in part, through transparent research, responsible marketing, high quality, ethics and safety and by making sustainable choices throughout the value chain.

We take the measures we can to future-proof and reduce climate emissions in our operations. During the year, we introduced a science-based climate target, which were approved by the Science Based Target initiative (SBTi), for how we shall reduce our climate emissions in line with the Paris Agreement. This means we committed to reducing the company's own emissions (Scope 1 and 2) by 46 percent between 2019 and 2030. You can read more about this in the sustainability section of this report.

Having conducted extensive microbiome research, we know global system changes and collaboration are essential to improving health worldwide. This is why we offer support to several organisations, such as the Children's Mission in the Philippines and Panzi Hospital in the Democratic Republic of Congo, which work on health-promoting activities. In 2017, we established the Foundation to Prevent Antibiotic Resistance (PAR). The Foundation works to support research, education and information initiatives. In 2022, we donated almost SEK 3 million to its activities.

## Looking ahead

Supported by a very strong 2022, we look to 2023 with confidence. A great deal of uncertainty exists, and we face many challenges. The issues that dominated 2022 will continue to dominate our world as we move forward. We find ourselves in an unusual situation today, with stagflation, climate change, a worsening geopolitical situation and, to a certain extent, an ongoing pandemic. Despite this heavy backdrop, BioGaia has demonstrated strong resilience through cost control and a well-prepared agenda to tackle the challenges and leverage the opportunities as they arise.

I am very proud of what BioGaia employees achieved in 2022 and am convinced that we have implemented a strategy that is right for us. All of the conditions are in place to fulfil our vision to be the most trusted probiotic brand in the world.



Isabelle Ducellier, CEO BioGaia

# Vision, business model and value creation

BioGaia has two types of distribution - via our distribution partners and direct distribution. The majority of BioGaia's revenue comes from gut health products, such as chewable tablets, drops for children with colic, and oral health products. Revenue is also earned from the sale of bacterial cultures to

be used in licensees' products (such as infant formula and dairy products), as well as royalties for the use of *L. reuteri* in licensees' products. BioGaia's products are available in more than 100 markets through sales via nutrition and pharmaceutical companies and our own subsidiaries.

## Vision

To be the most trusted probiotic brand in the world.

## Mission

To provide the world with probiotics that have clinically proven positive effects on health and well-being.

## Positioning

Food supplements with clinically-tested, high-quality probiotics that are sold through pharmacies and via online retail platforms.

## Values

### Innovation

We strive for breakthrough solutions that make a difference in people's lives.

### Collaboration:

Trust, helpfulness and curiosity define our way of working.

### Passion

We are engaged and put our soul into everything we do.

Read more about BioGaia's value chain in the sustainability section on page 48.



# Global trends

With an aging population, we see a growing interest in personal health and disease prevention. Science has made enormous strides over the past two decades in understanding the role gut flora plays in our health. BioGaia – with more than 30 years of frontline experience in microbiome research and probiotic products with documented health benefits – is well-positioned for continued growth.

### **Growing interest in preventive care and personal health**

In the wake of the pandemic, the need for proactive care has come to the fore, both at the societal level and for the individual consumer.

More and more consumers are taking responsibility for their health by seeking information about healthy eating and preventive healthcare. One survey shows that interest in personal health and how it can be improved has increased. 67 percent of respondents say that their interest in products designed to boost the immune system and improve gut health has increased. Moreover, as many as 53 percent say they want to improve their gut health, while nearly 70 percent say they want to boost their immune system.<sup>1</sup> Thus, the demand for healthcare products and food supplements is expected to continue to rise sharply.

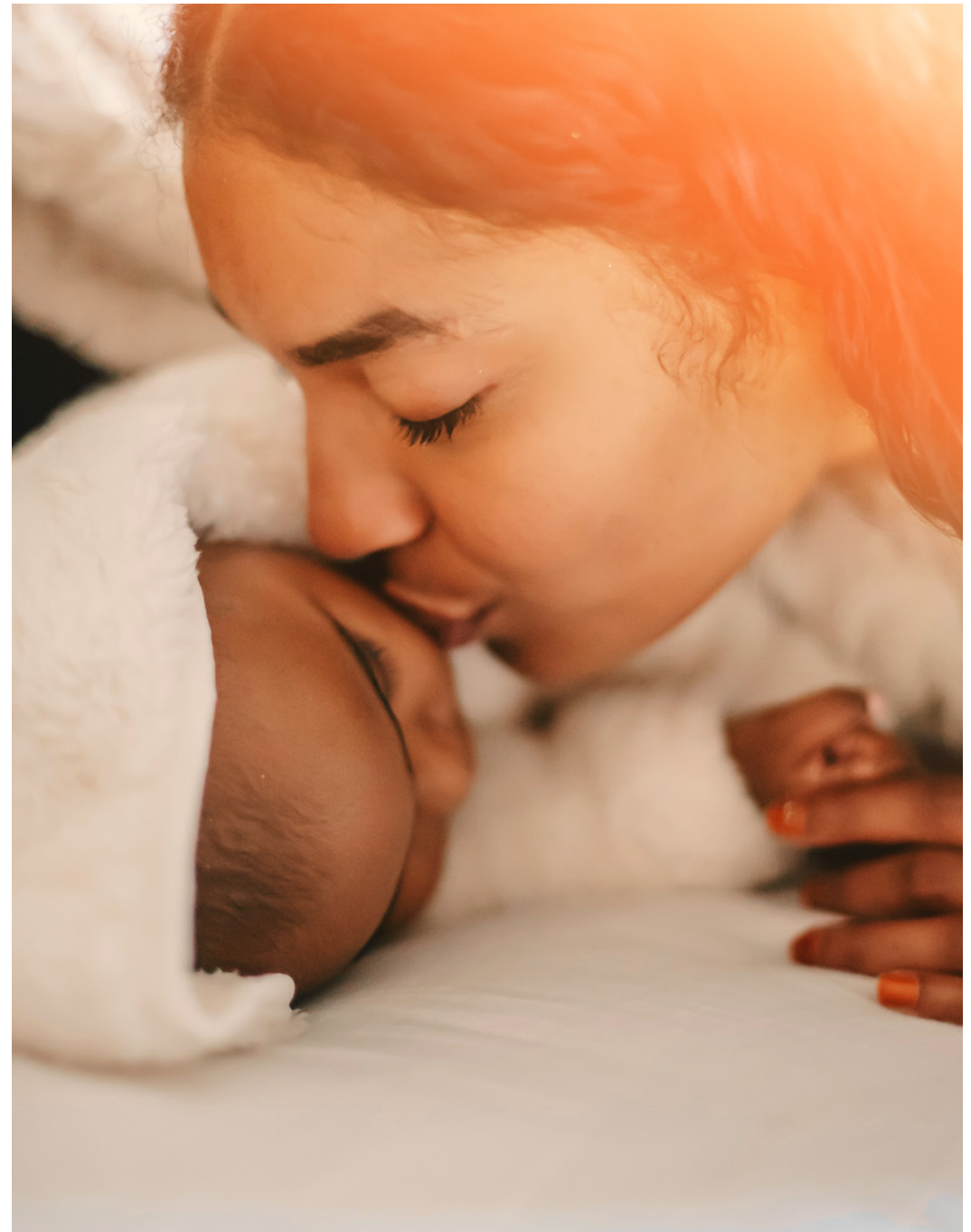
BioGaia offers products that promote bone health, gut health, oral health and immune health and is well-equipped to meet this growing trend. At the same time, awareness and knowledge of probiotics are low. Therefore, as a leader in its field of research, BioGaia is investing more in consumer education to increase knowledge.

### **Increased knowledge of gut flora and health**

The standard of living has increased worldwide in recent decades, but so too have lifestyle diseases. Stress, sedentary lifestyles and poor diets are affecting the physical and mental health of more and more people. The way we live today has negatively affected our intestinal flora, reducing the diversity of our microbiota.

Conditions such as colic, constipation, diarrhoea and indigestion are often signs that our gut health is out of balance. Gut flora imbalance can also weaken the immune system, which can increase susceptibility to inflammation or allergies. New research also suggests there is a link between gut flora imbalance and diabetes, obesity and cardiovascular diseases.<sup>2</sup>

Science has made enormous strides over the past two decades in understanding the role gut flora plays in our health. With extensive experience leading the frontlines in microbiome research, BioGaia is well-positioned to continue driving developments in probiotic health.



<sup>1</sup> FMCG Gurus 2022

<sup>2</sup> [https://www.cell.com/cell/fulltext/S0092-8674\(18\)31306-0](https://www.cell.com/cell/fulltext/S0092-8674(18)31306-0)



In 2017, BioGaia founded the Foundation to Prevent Antibiotic Resistance.



Food and healthcare products accounted for the clearest growth in e-commerce. The online pharmacy segment is expected to grow nearly 14 percent by 2027.

- 1 Statista, Online Pharmacy worldwide
- 2 Statista, Online Pharmacy worldwide
- 3 PostNord, Ehandelsbarometern Q3 2022; Statista, Online Pharmacy worldwide

### Continued shift towards e-commerce

E-commerce adoption was accelerated by the pandemic. As societies have reopened, the trend has slowed somewhat, but e-commerce has continued to evolve, particularly in some segments. Food and healthcare products have accounted for the clearest e-commerce growth, and the online pharmacy segment is expected to grow at a rate of almost 14 percent annually by 2027. In 2022, user penetration in the online pharmacy segment was nearly 20 percent. It is expected that this will reach about 30 percent in five years. The pharmaceutical industry is relatively independent of the economic cycle, so even if the unstable macro-economic situation persists, pharmaceutical spending is expected to have a stable development. In line with our omnichannel strategy, we have stepped up our direct-to-consumer communication in our digital channels and made our products available via e-commerce.

### The development of antibiotic resistance is not abating

Over the past few years, the Covid-19 pandemic has overshadowed another global public health threat - antibiotic

resistance. According to the World Health Organisation (WHO), there is a risk that antibiotic resistance will spread due to the misuse and overuse of antibiotics following the pandemic. Since probiotics can reduce the adverse effects of antibiotics, probiotics could be vital for fighting antibiotic resistance. Many people do not complete their course of antibiotics because of the adverse effects of antibiotics. A study published in the European Journal of Public Health also shows a correlation between the intake of BioGaia's *L. reuteri* DSM 17938 strain and a reduced need for antibiotic use in children. BioGaia established the Prevent Antibiotic Resistance (PAR) Foundation in 2017 to provide financial support for research and information campaigns on measures to reduce society's use and need for antibiotics. In 2022, funding was granted to a three-year project focused on the prevention of antibiotic resistance associated with infections in the elderly. The Foundation will also fund a 12-month career scheme in the UK, India, Rwanda and Kenya with a focus on increasing knowledge of antibiotic resistance and how it can be prevented in selected areas. Read more about PAR on page 79.

### Importance of sustainability is increasing

The latest IPCC report has made it abundantly clear that if the world continues its current trajectory of global warming, we will not achieve the central objective of the Paris Agreement to limit warming to 1.5°C above pre-industrial levels. At the same time, more and more people are realising the importance of a transition to social and economic sustainability. Demands on companies and organisations are increasing, due to tougher regulations, as well as growing demands from consumers, suppliers and employees. Climate impact, business ethics and control are high on the agenda of all companies that want to take responsibility and contribute to the transition. In 2022, BioGaia continued to strive for ambitious sustainability improvements to ensure that we continue working to reduce our climate impact, while also providing a positive and stimulating workplace for our employees and upholding solid business ethics. Read more about our sustainability performance on page 44.

# A product portfolio that promotes the health of the whole family throughout every stage of life

BioGaia is world leader in probiotics and our products are used in more than 100 markets. During the past three decades, we have invested heavily in scientific research into the importance of good bacteria for our health. The result is a number of scientifically proven and clinically tested probiotic products that promote general human health and resilience – from birth and throughout every stage of life.





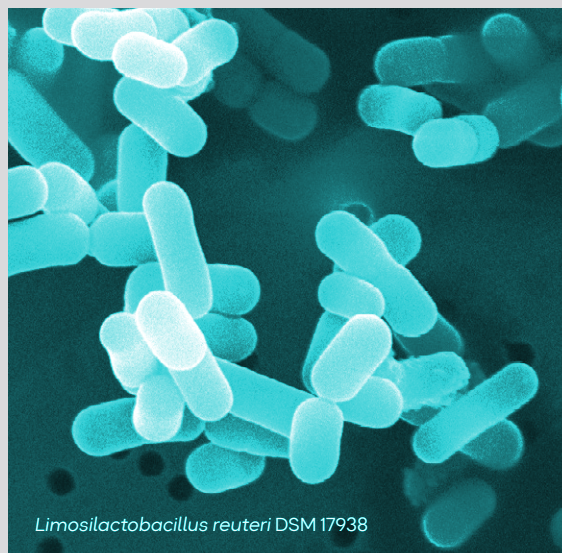
## BioGaia's range of products

Our broad product portfolio – in paediatric and adult health – promotes gut health, oral health and bone health for the entire family and throughout every stage of life. Today, BioGaia's paediatrics segment accounts for about 80 percent of total sales, and the most sold product is our Protectis baby drops against colic. Our product range

includes oil drops, chewable tablets and lozenges, capsules and oral rehydration solution (ORS). In most countries, the products are registered as food supplements.

The aim of the mother and child category, within the overall portfolio, is to launch products specifically for mothers'

health and to create a broader portfolio in child health using new probiotic strains that enable us to target new indications. The portfolio has evolved from offering only broadly based products to now including more specific products.



*Limosilactobacillus reuteri* DSM 17938

### What are probiotics?

Microorganisms are everywhere – around us, on plants, in the soil, air and the seas and also in and on us. Most human microorganisms are present in the gut. For more than three decades, BioGaia's core research has focused on microorganisms and in particular lactobacilli. Beneficial microorganisms, which can be used to strengthen the gut microbiota, are referred to as probiotics.

The origins of the word probiotic are Greek, meaning "for life". The World Health Organisation (WHO) defines defines probiotics as "live microorganisms, which, when administered in adequate amounts, confer a health benefit on the host". As the definition indicates, probiotic bacteria must be alive and provide a positive effect on the person taking them.

In order to understand how probiotics work, we must turn our attention back to the microbiota and the balance between good and harmful bacteria. An imbalance may occur due to stress, poor diet, infection and the use of antibiotics. An imbalance may lead to an increased number of harmful bacteria, which could result in infection or inflammation. Adding probiotics helps to rebalance the microbiota.

### Product launch in 2022

BioGaia Pharax is a product designed to strengthen the immune system in children and promote children's respiratory health. For market-specific launches, see page 91.



### Product quality, safety and sustainability


Our research largely concerns increasing the understanding of microorganisms and conducting clinical studies of different indications, such as IBS, colic and diabetes. An equally important part of the development, and subsequent sale of probiotic food supplements, concerns controlling the product quality, safety and shelf life. BioGaia always guarantees quality until the best-before date.

BioGaia's strains of *L. reuteri* are among the most studied probiotics in the world, especially studies on small children, with strong pre-clinical and clinical evidence. Up until December 2022, over 250 clinical studies with BioGaia's different strains of *L. reuteri* had been performed. These studies included more than 21,000 individuals of different ages.

### Good and harmful bacteria

Today, bacteria are often described as both good and harmful. However, historically, science has primarily focused on pathogenic bacteria or harmful bacteria. It was only during the past 100 years that it was discovered that not all bacteria are dangerous. Furthermore, it wasn't until the 1980s that it was discovered that certain bacteria – known as probiotic bacteria – are beneficial to humans. This discovery coincided with a change in our living conditions.

We are no longer exposed to such a wide variety, or large quantity of bacteria as we were when we lived as hunters and gatherers, or in traditional farming communities. Our modern way of living appears to have had a negative impact on the development of our immune system. By adding good bacteria – probiotics – we can counter the negative consequences of the depletion of our microbiota resulting from our modern lifestyle.



BioGaia currently has over 600 granted patents for various bacteria strains.

#### **What we know about the microbiota in our gut**

Most of the bacteria living in and on us can be found in the gut and form what is known as the gut microbiota. Despite extensive research into human and animal microbiota, our knowledge is still in its infancy. BioGaia's own research and the research conducted by our extensive research network continuously provide valuable insights into the subject. Research shows a clear link between many chronic diseases – such as diabetes, asthma and various inflammatory conditions – and changes to the bacteria composition. Although it is unclear why it is so, there is, indeed, a clear connection between altered gut microbiota and the development of disease compared to the gut microbiota in healthy individuals.

Our gut microbiota weighs over one kilogram, and there are hundreds of species of bacteria that together form a highly

complex ecosystem. Due to the large variations in gut microbiota among individuals, it is difficult to identify which bacteria are good and which are harmful. Research is making significant progress, but there remains much to explore, and this is a strong driver for BioGaia's R&D activities going forward.

#### **Consumer-centric research strategy**

The majority of BioGaia's research involves condition-based research. This involves focusing on a single condition, such as IBS, and studying whether a probiotic bacteria strain can improve it. Using the knowledge and specificities of the unique probiotic strains in BioGaia's portfolio, studies are performed to understand if and how a bacteria strain may have an effect on a condition. If a clinical study shows that a certain bacteria strain has a positive effect, further pre-clinical studies are conducted to explain how probiotic bacteria achieved

the demonstrated effect in more detail. You could refer to it as a consumer-centric research strategy, where BioGaia begins with a condition in individuals and then conducts research to identify a potential solution.

#### **More than 600 patents**

BioGaia currently has over 600 granted patents for various bacteria strains, with *L. reuteri* DSM 17938 being the most studied. This is the bacteria strain found in the Protectis baby drops against colic product.

# Strategy

To achieve our vision - to be the most trusted probiotic brand in the world - a dedicated focus on the underlying elements that bring success is required.

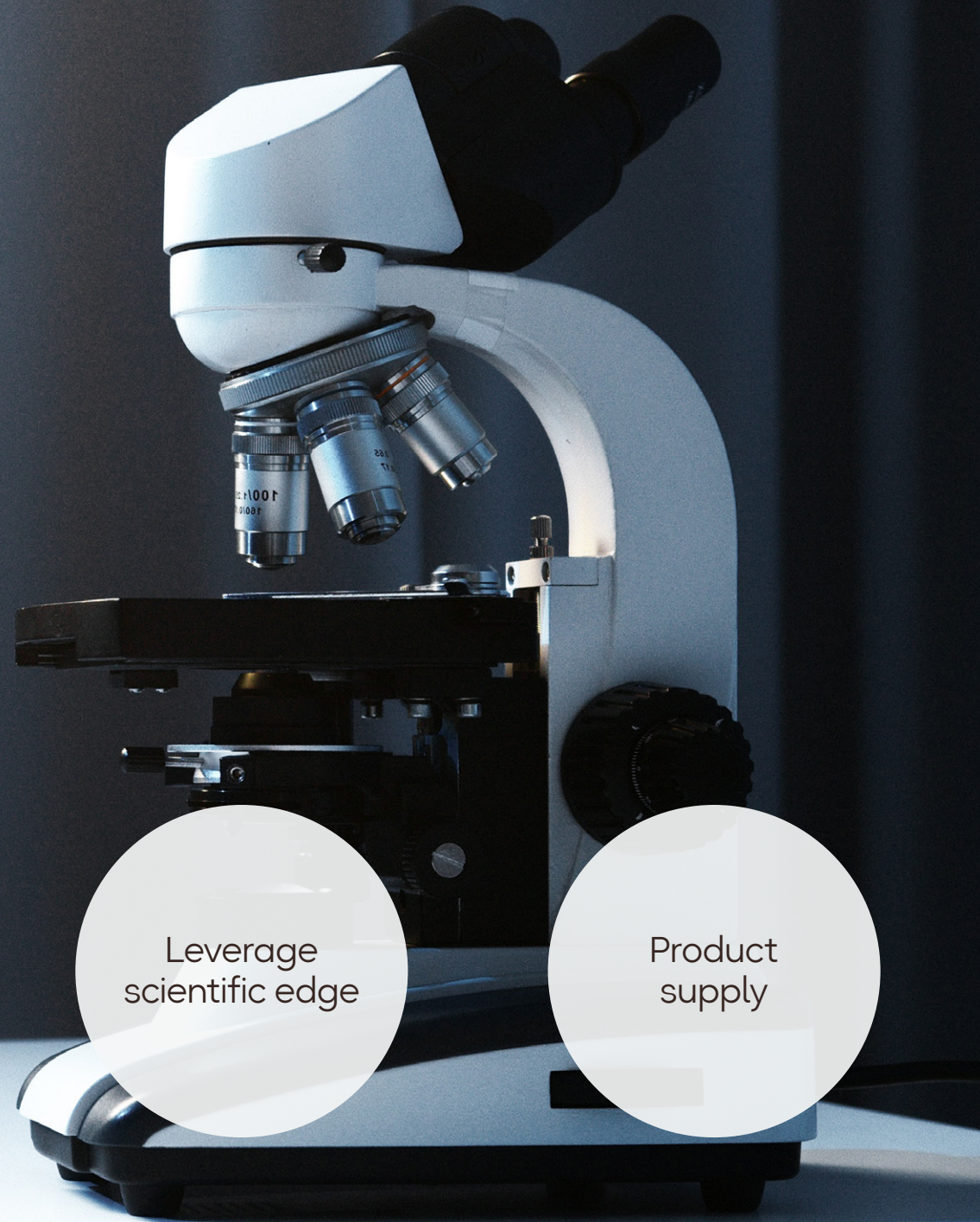
BioGaia has identified four strategic pillars that govern the resources and competencies we invest in when we conduct our business:

Omnichannel  
retailing

Leverage  
global brand

Leverage  
scientific edge

Product  
supply



Sebastian Heimfors – Chief Commercial Officer

# Omnichannel retailing

"The ultimate goal of our omnichannel strategy is to build a successful consumer experience – both online and offline – whether they are visiting pharmacies, social media or their doctor."



Historically, our distribution partners have handled a major share of our sales. Over the past two years, we have developed a model that now stands on two strategic pillars – sales via our distribution partners (B2B), and direct distribution (B2C) to strengthen our connection with end consumers. To succeed with both distribution partners and direct distribution, we have created an omnichannel strategy. The aim of the strategy is to ensure that we offer a consistent customer experience regardless of the consumer channel.

### Continued focus on direct distribution

As digitalisation grows, we have seen a growing need to connect with consumers through more ways than just distribution partners. We have therefore, in an initial phase, selected five strategic markets – Sweden, UK, Finland, USA and Japan – where we have taken over the distribution ourselves through either acquisitions or own establishment. There are several reasons why these five markets in particular are strategically important. In Sweden, we want to start building the BioGaia brand while continuing to develop our distribution via partners, who often sell our products under another brand. In the UK, Finland, USA and Japan, probiotics awareness, level of maturity and level of digitalisation are high – three factors that are crucial for the success of direct distribution.

2022 was an eventful year for our direct markets. To mention a few examples, BioGaia Japan launched on Amazon, and BioGaia USA was built up following the acquisition of Everidis, our distribution partner in the USA, at the end of 2021. By working with our direct markets, we have learnt valuable lessons and gained important experience that will benefit us as we continue to broaden our direct distribution channel.

### Increased digital expertise

To reach consumers in all relevant channels and gain a better understanding of consumer behaviour, in 2022, BioGaia continued to recruit and increase expertise across a range of areas, including digitalisation, search engine optimisation

(SEO), e-commerce and consumer marketing. This has already generated results. Our share of sales via direct distribution has continued to grow in both relative and absolute terms. That consumers use digital platforms for their purchasing is still a strongly growing trend. BioGaia's role is to continue to facilitate and make our products available online.

### Consumer behaviour during the year

Direct distribution creates several advantages for BioGaia. We help consumers to gain a better understanding of our products, while also gathering important consumer insights.

Throughout the year, this direct distribution model helped us understand how the customer journey can be made simpler and more relevant, and enabled us to respond faster to varying consumer needs. One example is how we created a subscription service after identifying a consumer need for regular product deliveries. In the UK, subscribers already account for 30 percent of the customer base. We believe that development of the subscription service holds major potential for extending the customer lifecycle. We have also noted that consumers are only discovering the rest of our product portfolio to a fairly limited degree. We are working actively to address that by offering probiotic products for the whole family, through all stages of life.

Another insight is that most consumers use our products because they are recommended by a healthcare professional, or hear about us from their friends and acquaintances. We are obviously delighted and proud of this, but we also see major potential to raise awareness of BioGaia in general, so that more people can learn about the probiotics that BioGaia offers. The customer journey often begins by gathering information and making comparisons, which can lead to both one-off and recurring purchases of BioGaia's products, after which they will hopefully continue purchasing all or some of the other products in our product range.





### In line with consumer mindsets

During the year, we conducted a survey in Sweden to receive feedback on purchasing, packaging and delivery experience. The survey revealed that the product packaging is not perceived as sufficiently premium. Since we want to be perceived and market ourselves as a premium brand, we identified a clear measure for improvement. We have since been studying packaging alternatives with the requirement that the packaging must also be made from sustainable materials. We found packaging made from recycled wool that we have now purchased and are currently testing in Sweden and the UK.

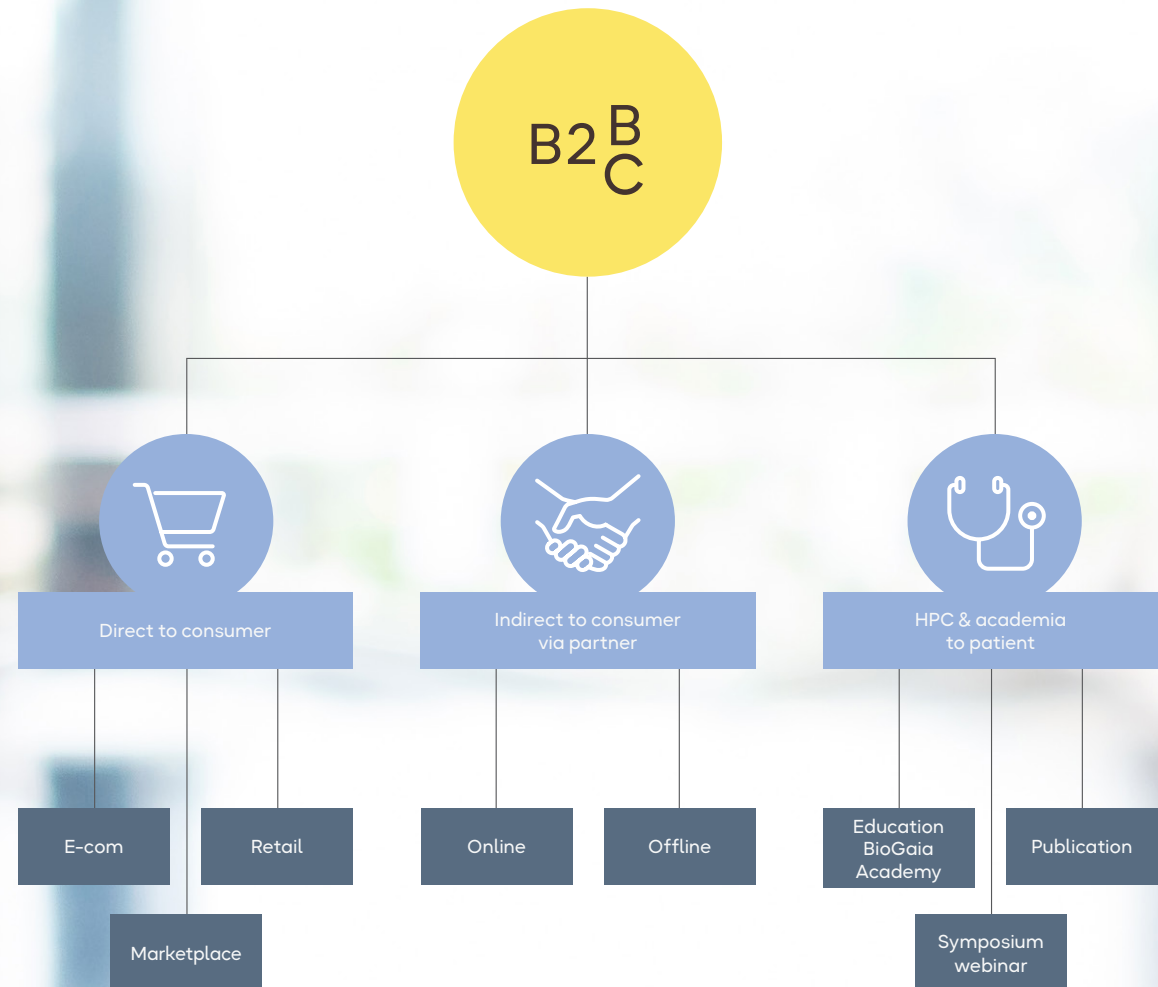
We are learning a great deal from engaging with consumers through more digital channels, including our own e-commerce business, social media, and marketplaces like Amazon, Target, Tmall, and Walmart. During the year, we, and our partners, worked on campaigns in various channels with the aim of increasing brand awareness and demand for our products.

Additionally, we offer our experience to our distribution partners to support them in their efforts to increase digitalisation. This includes making the lessons we have learnt from establishment and exposure in marketplaces available to our partners.

The ultimate goal of our omnichannel strategy is to build a successful consumer experience – both online and offline – whether they are visiting pharmacies, social media or their doctor. To succeed, this requires a personalised, clear and consistent voice and a visible, attractive and simple customer journey from beginning to end.

The consumer journey is changing and with the help of increased consumer insights we need to constantly develop in order to stay relevant. We are looking forward to continuing our digital transformation in the coming years.

## To succeed with both distribution partners (B2B) and direct distribution (B2C), we have created an omnichannel strategy.



A woman with blonde hair, wearing a black button-down shirt, stands in a pharmacy or store. She is holding a small white and teal box of BioGaia product in her right hand. The background consists of wooden shelves with various BioGaia products, including boxes and bottles, arranged neatly. The lighting is warm and focused on the woman.

Linda Hägglund – Chief Marketing Officer

## Leverage global brand

"As a brand owner, we must have control of the overarching communication and ensure that BioGaia speaks with one voice, regardless of the channel."

### Focus to increase brand awareness

During the year, worked on increasing BioGaia's global brand awareness. As part of our efforts to continue reaching those working in healthcare and medical services professions, we have attended the most important global congresses in paediatrics. These focal points allow us to meet leading paediatricians and many of our most important distribution partners.

To increase brand awareness among consumers, we have invested in consumer marketing in our direct markets through campaigns for our Pharax and Protectis baby drops products. Campaign advertisements were displayed in social media and digital parent forums encouraging people through special offers to purchase and try the products via BioGaia's own e-commerce site or online pharmacies.

We also communicate with consumers through monthly blog posts and a newsletters to subscribers and customers who have bought products from our e-commerce site. We use these channels to provide information on various themes that are relevant for consumer health throughout the different seasons of the year. During the year, we also attended the largest health fair in the Nordic region, "Allt för hälsan." Combined, these efforts and initiatives help to increase brand awareness while we also obtain important consumer insights.

### One BioGaia

During the year, we prepared uniform marketing documentation and marketing guidelines. The purpose of these is to ensure that, as a brand owner, we have control of the overarching communication so that BioGaia speaks with one voice, regardless of the channel. The aim is that both we and our distribution partners follow these, though there will naturally be language changes and other adaptations to local regulations since our products are sold in more than 100 markets.

In line with our hybrid strategy, during the year, we launched a new visual identity. The new visual identity is designed to be used in marketing channels to reach the healthcare professionals and in marketing initiatives directly targeting consumers. The work included creating a brand voice and design that attracts consumers and effectively supports our brand values: passionate, approachable, trustworthy. Once again, the overall aim is to create recognition, so that consumers meet one BioGaia regardless of channel. It is increasingly important that our communication and marketing is consistent as we develop BioGaia's global brand and meet more consumers, both online and offline. We can achieve this consistency by using global toolboxes for marketing and by inspiring our distribution partners around the world to use the same visual identity when selling BioGaia's products. In 2022, we launched new



global marketing material for Gastrus and Prodentis Kids, which our partners can adapt and use in their marketing to the healthcare and medical services profession and to consumers.

### Increased insight through consumer surveys

A key part of our strategy during the year was using customer surveys to gain greater consumer insights.

We have gained a better understanding of which consumer segments we should target, what drives consumers and what challenges they face. In turn, these insights offer greater opportunities to enhance our brand and product offering.

During the year, we also worked with our product pipeline by capitalising on the bacteria strains we already have and creating attractive products for consumers. A better understanding of consumer drivers and challenges will help us to create product concepts that increase our ability to communicate the added value of the products in markets with regulatory challenges. Pharax is one example of a product that was launched in Sweden, a market with regulatory challenges with respect to marketing probiotics. The product was launched during the common cold season when demand is high for products containing Pharax's properties. Next year, additional marketing activities tailored for consumers are planned both for our own activities and via our distribution partners as part of our endeavour to be the most trusted probiotic brand in the world.



**Gianfranco Grompone – Vice President Research and Development**

## Leverage scientific edge

Science has made tremendous strides in the past two decades towards understanding the roles that probiotics play in human health. Still, probiotic research is in its infancy, and there is much to learn. BioGaia has been at the forefront of probiotic bacteria research for more than 30 years. We are proud of our

efforts – this year we have invested 10 percent of net sales in research and development. Still, research into the human microbiome is only in its infancy, and much remains to be learned and understood.



BioGaia's research and development represents a fascinating research journey from basic research to clinical application, combining scientific questions with market needs.

As part of our research on probiotics, we combine a dedicated team of probiotic researchers with cross-border innovation work. Our team of microbiologists, immunologists, metabolism experts, process experts and those responsible for clinical development collaborate with a comprehensive international network of leading researchers and doctors. Together, we match scientific goals to develop interdisciplinary projects, doctoral programs and clinical studies. The heart of this strategy is our pipeline of bacterial strains. It provides us with new probiotic candidates that are subject to comprehensive evaluation from a biological and technical point of view perspective. This is where we take scientific innovation, market and authority requirements and public health aspects.

As a result of the above strategy, we offer new insights into the mechanisms of probiotic strains and explore new synergistic effects and interactions between pre, pro and postbiotics. We use this science to develop applications for the purpose of developing new and relevant strategies regarding probiotics for human health.

Our research and development strategy is based on three separate but complementary areas of focus – first, to continuously develop our existing product range, secondly to select, identify, characterise and develop new strains and third, to develop next-generation probiotics with a focus on strictly anaerobic bacteria (bacteria that cannot tolerate oxygen).

# 1. Develop the existing product line

Research on health, gut microbiota and probiotics has exploded in the 21<sup>st</sup> century, especially in recent years, with BioGaia's strains being highly sought after by researchers worldwide.

We collaborate closely with the scientific community to advance the understanding of probiotics. By the end of 2022, the number of ongoing studies with our bacteria strains reached 40. We encourage researchers who collaborate with BioGaia to publish their results in peer-reviewed journals. According to international research standards, all studies must have ethical approval and be published regardless of the results. This ensures transparency, reliability, and scientific relevance.

**Below we highlight three of the 13 studies with BioGaia strains that were published in 2022:**

**Interest in the importance of the gut microbiota** in diverticulitis is increasing, and a recent randomised controlled trial (RCT) by Ojetti et al.<sup>1</sup> showed that probiotics, with an anti-inflammatory effect, can reduce abdominal pain and shorten hospital stay for adult patients with acute uncomplicated diverticulitis. This study adds to the literature published in medical journals that indicates that probiotics may have anti-inflammatory properties and effects on diseases that are common in an ageing population. This is the second randomised controlled study with *L. reuteri* ATCC PTA 4659 showing positive effects in people with diverticulitis.

**Another area** of interest is the long-term effects of probiotics after supplementation during infancy and/or childhood. Rianda et al.<sup>2</sup> conducted a long term follow-up study investigating if probiotic supplementation in childhood could improve adolescent neurodevelopment. The study was based on a Randomised Controlled Trial (RCT) carried out in 2007-2008, and the children were followed up 10 years after the initial supplementation with probiotics. The researchers

found that probiotic supplementation in childhood had positive strain-specific long-term neurodevelopmental benefits. Specifically, *L. reuteri* DSM 17938 demonstrated a benefit in reducing depressive states later in life.

**Functional stomach and intestinal diseases**, especially colic in children, are still of significant interest. Recently an open real-life study in India was published by Wadhwa et al.<sup>3</sup> exploring the effect that BioGaia Protectis drops containing *L. reuteri* DSM 17938 had on crying time and the mother's depression scale.

As usual, it was an open-label study, not a randomised or placebo-controlled one that ended up at the top of the research pyramid. It is, however, important to study the effect of probiotics in a real-life setting. The study showed a correlation between reduced crying time and a reduction in depression for the mother.

Yvan Vandenplas, one of the authors of the aforementioned study says, "Both randomised controlled trials and studies in real-life studies are of great importance because the results - if they are positive - in uncontrolled situations full of confounding variables confirm what has been found in randomised controlled trials, where all confounding variables are controlled."

In 2022, and for the first time ever, the European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) published a common position paper with recommendations for the use of specific probiotics for the management of selected pediatric gastrointestinal disorders<sup>4</sup>. The clinical guidelines not only recommend *L. reuteri* DSM 17938 for the management of colic, functional abdominal pain and acute gastroenteritis but also state that *L. reuteri* DSM 17938 is the most studied probiotic for the management of infant colic.

BioGaia's probiotic products with *L. reuteri* are among the most scientifically well-documented probiotics. To date, the efficacy and safety of BioGaia's different strains of *L. reuteri* have been documented and published in over 250 clinical studies with more than 21,000 participants of all ages.

We are continuously developing our existing product line and knowledge of how our products work by performing additional clinical trials and research with our products. The purpose is to add more evidence and knowledge of how the bacterial strain or strains work in both existing and new areas. Performing research and clinical trials is a long process and most often the timeframe is from one to several years.

It is estimated that by 2025, a quarter of the global population will suffer from a chronic disease. We are convinced that BioGaia's probiotic products can help create a balanced microbiota and optimal physiological development in infants, as well as prevent diseases in adults. Our ambition is to continue to explore the possibility of our probiotic strains affecting microbial diversity in connection with childbirth (caesarean section compared to vaginal), neurological conditions and immune system development in infants. We will also investigate areas related to microbial diversity in prenatal and postnatal conditions.

1 <https://pubmed.ncbi.nlm.nih.gov/35045564/>

2 <https://www.sciencedirect.com/science/article/pii/S1756464622000846>

3 <https://pubmed.ncbi.nlm.nih.gov/35076544/>

4 <https://statics.teams.cdn.office.net/evergreen-assets/safelinks/1/atp-safelinks.html>

## 2. Develop new strains for commercial use

BioGaia has over 800 strains in its collection and around 600 granted patents, with *L. reuteri* DSM 17938 being the most studied. Using this collection, we screen new strains to find interesting candidates for further investigation. We look at different characteristics and conduct mechanistic and pre-clinical studies to understand how the different strains work. Based on consumer insights and our former clinical studies, we identify unmet clinical needs where we believe our probiotics can be effective. We conduct safety and indication-based research based on this thorough selection and analysis, where we investigate the potential benefits of a bacterial strain based on a certain condition.

We also work retrospectively, which means that after having positive results in a clinical study, we perform more research to understand the mechanisms by which the probiotic strains work. One example of this is the recently published paper on *L. reuteri* DSM 17938, DSM 32846 (BG-L46) and membrane vesicles<sup>1</sup>.

From a microbial ecology perspective, this is an important discovery and sheds light on a new way *L. reuteri* may be able to help infants with colic. With the help of this research, conducted in conjunction with an Industrial PhD supported by BioGaia, we can now hypothesise how probiotics, specifically *L. reuteri* DSM 17938, act distantly, or how membrane vesicles secreted by probiotic strains could selectively activate particular cells.

In terms of postbiotics for the future, we foresee these findings as a potential innovation. Postbiotics refer to the fermentation process or bioactive compounds left behind after the body digests both prebiotics and probiotics. This "waste" helps slow down the growth of harmful bacteria.

This year, we have focused on other new strains both in terms of preclinical characterisation, human safety in a clinical study and in combination with other strains or with prebiotics.

We have studied and characterised, in diverse models, a new *Bifidobacterium longum* DSM 32847 (BG-L47) probiotic strain. We have identified specific mechanisms developed by this strain in combination with *L. reuteri* DSM 17938 or alone, and we will continue the development of this specific strain in both the *in vitro* characterisation and clinical efficacy.

From our collection, we are also working on new strains in the pipeline, such as *L. albertensis* strains and *L. rhamnosus* strains, and have obtained preliminary interesting insights. Additionally, we have begun screening *in vitro* for specific immune effects.

We are also working on the next generation of colic drops for infants. Our current clinical phase involves continuously improving the already established effects. To be able to provide the best clinical evidence, we are developing a clinical strategy that includes several different studies before we launch our next-generation colic drops.

## 3. Develop next generation probiotics

Together with the wholly-owned subsidiary MetaboGen, BioGaia has opened a pilot plant in Eslöv, in the south of Sweden, as a step toward the development of the next generation of probiotics. The facility handles the manufacturing of bacteria with different requirements during fermentation, including traditional lactobacilli as well as new, stricter anaerobes' strains.

In a clinical study currently underway, BioGaia is evaluating the effectiveness of a combination of two butyrate-producing next-generation probiotic strains: *Faecalibacterium prausnitzii* DSM 32379 and *Desulfovibrio piger* DSM 32187.

"BioGaia's research and development represents a fascinating research journey from basic research to clinical application, combining scientific questions with market needs."

<sup>1</sup> Pang, Lundberg et al., 2022, Frontiers in Microbiology

## Over the years, BioGaia has conducted studies in the areas of:

- Colic, regurgitation and constipation in infants
- Infection prevention in infants and adults
- Functional abdominal pain in children
- Antibiotic-associated diarrhea (AAD)
- Acute diarrhea
- Gingivitis (inflammation of the gums)
- Periodontal disease
- General health
- *Helicobacter pylori* (the gastric ulcer bacterium)
- Osteopenia
- Autism spectrum disorder
- Depression
- Bone health
- Urinary tract infections

Our probiotic strains are subjects of interest to the international scientific community, doctors and basic scientists who frequently ask us to perform research on our strains. Over the years, we have built an extensive global research network and initiated partnerships with universities, hospitals and scientific institutions worldwide.

## BioGaia's global partnerships with universities and hospitals:

- Swedish University of Agricultural Sciences in Uppsala
- Sahlgrenska University Hospital in Gothenburg
- Örebro University
- Texas Children Hospital in the USA
- The university hospitals in Bari and Turin in Italy
- Stockholm University
- Baylor College of Medicine, Houston, USA
- National University of Singapore (NUS)
- University of Leuven, Belgium
- University of Wisconsin Madison, USA

Over the years, we have also linked up with doctoral students, master's students and international interns.

In addition, we also receive requests from companies that wish to collaborate with us. During the year, BioGaia Invest, BioGaia's wholly owned subsidiary, collaborated with Skinome on the development of a product containing a strain of *L. reuteri* to naturally improve skin health by supporting the skin microbiome.



## Research conducted by BioGaia's subsidiaries

### BioGaia Pharma

BioGaia Pharma, founded in 2017, is a subsidiary of BioGaia AB. It utilises solid and extensive experience in probiotics research and development to develop new biotherapeutic product platforms. BioGaia Pharma selects and develops pharmaceutical candidates based on supporting pre-clinical and clinical research.

In 2022, patient enrolment began for clinical studies of two pharmaceutical candidates in our two prioritised programmes. The first programme, BGP014, concerns ulcerative colitis (UC). Ulcerous Colic is a debilitating condition characterised by chronic inflammation of the intestinal tract. The trial is taking place in Sweden. The second programme, BGP345A, aims to treat constipation in patients receiving opioids to relieve pain. The study is taking place in France. Both studies are scheduled to be completed in 2023.

During the year, BioGaia Pharma took part in the Medicon Valley Microbiome Pitch Day, where research projects and start-ups in the field of the microbiome were presented. The main reason for attending was to see the level of interest in the two programmes, for ulcerative colitis and constipation in patients receiving opioids to relieve pain. The jury chose BioGaia Pharma as one of two winners, emphasising the company's strong science, experienced teams, and clear business models. This represented an important step to confirm the viability of BioGaia Pharma's prioritised initiatives.

### BioGaia Invest

BioGaia Invest has been a wholly-owned subsidiary since its formation in 2021. The focus of BioGaia Invest is to invest in companies with breakthrough technology, services and products with the potential to support BioGaia's growth. So far, BioGaia Invest has invested in Boneprox and Skinome, two companies that showed strong growth in 2022.

Skinome focuses on skincare products that strengthen the skin's natural microbiome. BioGaia and Skinome have collaborated to develop microbiome-friendly probiotic skincare products. In 2022, Skinome launched a first skin lotion that contains live probiotic bacteria that restore the balance in the skin's microbiome and improve skin health. The skin lotion combines a strain of *L. reuteri* with a minimal number of skin-identical ingredients.

Boneprox provides services and products based on AI, machine learning and secure and efficient communication to the dental and health sectors. These products and services enable clinics, dentists and healthcare professionals to be more efficient when sending, receiving and analysing images and diagnosing patients. In 2022, Boneprox established its service with the main dental clinic chains in Sweden and Norway. Promising initiatives are also progressing in Japan. The patented AI technology can be used to detect osteopenia using dental x-rays. Our Osfortis for bone health and Prodentis for oral health products match the identified needs. We are working so BioGaia and Boneprox can detect patients at risk of osteopenia – one area where BioGaia conducts research. In the future, we believe the collaboration can be extended in diagnostics, oral health and other indications.



Nigel Titford, CEO BioGaia Pharma



Ludvig Milesson – Chief Operating Officer

## Product supply

“BioGaia’s laboratory in Eslöv, also called The Centre of Excellence, develops and builds knowledge about existing products, knowledge that is then used in the development of the next generation of probiotics.”

### Optimised production process

BioGaia strives to continuously optimise the production process, with formulation and packaging as supporting components. This provides us with a flexible, efficient and diversified production chain adapted to market needs. In 2022, BioGaia continued to develop the strategic steps in the value chain.

The fermentation of our probiotic bacteria is conducted at external partners, where the bacteria are freeze-dried into powder. Currently, BioGaia has two suppliers that perform fermentation and freeze-drying. After this, the deliveries are checked and sent to production. Production and packaging are managed at different facilities with high-quality production capacity, including the subsidiary BioGaia Production's factory in Eslöv. This way, the supply of goods is highly flexible.

### Well-developed supplier network

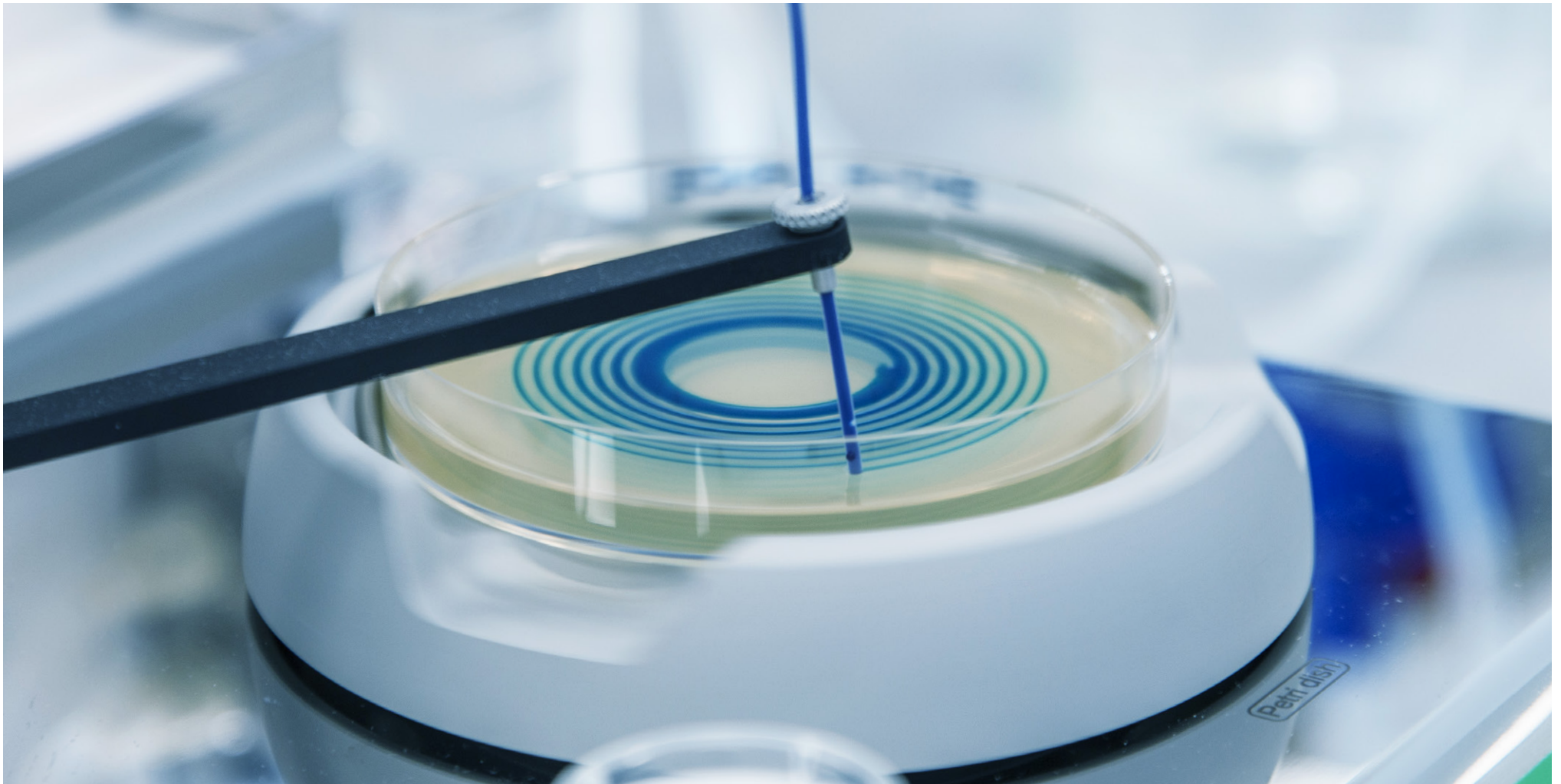
An important part of production is ensuring that we have a well-balanced inventory, something that became especially clear during the pandemic. In collaboration with our suppliers, we are able to continually improve and adapt our production and logistics to meet market needs and new sustainability requirements. As a result, BioGaia has placed a high priority on maintaining good relationships with suppliers.

### BioGaia Production

A response to demand led BioGaia Production to increase production in 2022. Despite challenging economic climate challenges in the global value chains, production continued without disruption. During the year, a decision was made to invest further in BioGaia Production's production capacity. Full implementation will occur by the end of 2023. The offices in Lund and Eslöv will be consolidated into an office in Eslöv to take full advantage of synergies and opportunities for collaboration. Construction will begin in 2023.

BioGaia's laboratory in Eslöv, also called "The Centre of Excellence", develops and builds knowledge about existing products, knowledge that is then used in the development of the next generation of probiotics.





### **New pilot plant for controlled manufacturing for clinical studies and product development**

Research and fermentation of new bacteria strains are taking place to expand the existing product portfolio. This is of strategic importance to retain and strengthen the company's internal expertise and to protect intellectual property (IP) to ultimately expand the company's patents.

The development of the next generation of probiotic products often requires special conditions and new technologies. In response to these requirements, BioGaia and its subsidiary MetaboGen constructed a pilot plant in Eslöv in 2022 that is now completed. The facility handles manufacturing of bacteria with different requirements during fermentation, both traditional lactobacilli as well as new, extremely oxygen-sensitive strains. The automated and specialised

pilot plant will be used for controlled manufacturing of products for clinical studies, process development and manufacturing operations to develop new products and further develop existing products. The facility, combined with the capacity at BioGaia Production, provides BioGaia control over the entire development process, from early stages to own manufacturing on pilot scale.

A world map with a teal-to-orange gradient background. Five yellow callout boxes point to specific countries: USA (North America), Sweden (Scandinavia), Finland (Scandinavia), UK (Europe), and Japan (East Asia).

# BioGaia increases presence in direct markets

For more than three decades, BioGaia has successfully built a global presence in more than 100 markets through long-term relationships and collaborations with distribution partners. As a result, BioGaia has developed a strong position in the healthcare and medical services sectors. Since BioGaia made the strategic decision to supplement its existing sales through distribution partners with direct distribution in prioritised markets, BioGaia now has five direct markets: Sweden, Finland, the UK, USA and Japan.

In 2021, we established our own companies and took control of distribution in Sweden, Finland and the UK. 2022 saw the integration of our US distribution partner Everidis, which we acquired at the end of 2021. During the year, BioGaia took important steps to be even more accessible and present in these prioritised markets. At the end of 2022, our five direct markets accounted for 24 percent of total sales. This suggests that the establishment process had been effective.



**At the end of last year, we acquired our distribution partner, Everidis, as a step to increase the pace of its digital initiative to reach consumers directly while continuing to market to the healthcare sector. The acquisition and implementation were successful, and we have seen strong results during the year. With a customer value of 2 billion dollars, USA is the world's largest probiotics market with excellent potential for continued growth. The USA remains a key market and an important reference market for BioGaia.**

2022 was a record year for BioGaia USA with double digits growth through Amazon, Target.com and walmart.com. Our range of BioGaia drops, Gastrus, and our oral care are showing strong growth.

During the pandemic, we changed the way we interact with healthcare professionals, e.g., through web-based "lunch and learn" lectures for healthcare professionals as well as other online-based educational efforts. Although we are moving towards more normal conditions, we have seen a shift in interest

for large national conferences in favour of more local and regional conferences. This is a great opportunity for BioGaia to work closely with physicians. BioGaia USA has participated at Family Medicine Expo, American Academy of Pediatrics, Smilecon Dental meeting, Chicago Dental Meeting as well as American Academy for Oral Systemic Health.

We have made a big investment in influencer marketing. According to FYPM (a platform where creators can anonymously share their experiences when collaborating with different brands), BioGaia has been voted by influencers as the fourth-best brand to work with. FYMP stated "Similar to the traditional workplace, the best brands to work for, view influencers as unique individuals and invest heavily in creator relationships.

In 2022, we launched Pharentis Drops (also known as Pharax), which aims to strengthen the immune system and support children's upper respiratory health. Looking ahead, we expect to see growth in the dental and mother and child segments, where we already today have a strong position.



Joakim Annwall – Country Manager USA



UK

**Since November 2021, BioGaia has sold its probiotic products under its own management in the UK market. Prior to this, BioGaia's probiotic products were only available to a limited extent through a smaller distribution partner.**

The awareness and knowledge of probiotics are evolving in the UK. Despite an overall poor economic situation, BioGaia UK increased net sales and market share during 2022, and we have achieved listings in all the major UK wholesalers. During the year, we launched Gastrus and Protectis strawberry-flavoured kids tablets product in the market, and it was very well received by both wholesale and retail customers. Currently, our products within the mother and child segment are in over 650 pharmacies and constitute 80 percent of our sales.

In addition to the development in wholesale and pharmacy channels, our online brand store had a very strong year where

more and more consumers are enjoying the benefits of enrolling in our subscription program; BioGaia probiotics delivered free of charge through their letterbox at the time and frequency of their choosing.

2022 was the first full year with direct distribution in this market. To increase awareness of BioGaia, we have had an ongoing digital marketing campaign with the country's largest website for parents, Mumsnet. In addition, we continued to invest in medical marketing, including participation in the PPPP Congress (Probiotics, Prebiotics, Postbiotics in Pediatrics). We also participated in several other events, such as the annual conference for midwives and tradeshow for primary care and pharmacies.

Despite the macro-economic outlook, we expect to significantly increase sales in 2023.



Steven Hicks – Country Manager UK



Ingrid Messerer – Sales Manager Northern Europe

**During the previous year, BioGaia Sweden took over distribution of its products in the adult health segment – entirely in line with the consumer-oriented strategy to increase the share of direct distribution. In 2022, BioGaia continued to develop and strengthen our partnerships with players such as the major pharmacy chains and online pharmacies.**

In 2022, we launched three products in our paediatrics category – Protectis drops, Protectis drops with vitamin D and Pharax drops. Thanks to these launches we now offer products for all areas of life – everything from Protectis drops for babies to Prodentis for adults.

During the year, and in line with our omnichannel strategy, we strengthened our partnerships with the major pharmacy chains, online pharmacies, online health food stores and Amazon in

Sweden. At the same time, we developed our Swedish e-commerce platform using insights from customer surveys.

We also continued to develop and broaden our digital and physical consumer marketing for consumers, both on our own and via retailers. This was done through newsletters, advertising, campaigns, competitions and targeted offerings with the aim of increasing brand awareness. BioGaia also participated in one of the largest health, wellbeing and fitness tradeshows in the Nordic region, "Allt för hälsan," where we were able to meet health-conscious visitors and speak about the benefits of our probiotics. We noted a growing interest in probiotics and our immune health products during the year.

We are looking forward to broadening and expanding our partnerships and launching more products on the Swedish market in the coming year.



**Finland is one of the most developed markets in the world for probiotics. Awareness of probiotics is high, as is the per capita use. Last year, the previous distribution agreement with a Finnish distribution partner was terminated, and we took control under own management. This was an important strategic step for BioGaia.**

Since November 2021, BioGaia's products have been available at Finnish pharmacies, both in physical stores and online shops. However, BioGaia has been in the Finnish market for 18 years but under the former brand name, Rela.

In 2022, BioGaia began direct distribution in the Finnish market. Our cooperation with pharmacies has evolved, and we have

successfully secured our first hospital tender in one of the five different hospital districts in Finland. We have focused on training of pharmacists, nurses and midwives in public mother and child clinics and have trained nearly 2,000 pharmacists and 1,400 nurses so far.

Gastrus, our solution to the growing problem of stomach disorders, has been very well received in Finland. We have also seen steady growth for our Prodentis product. Sales of BioGaia Protectis drops and the easydropper with vitamin D have made an incredible start. After just one year, BioGaia has already achieved a 20 percent market share of the Finnish probiotic baby drops market.



Minna Tähtinen - Country Manager Finland

## Finland





Japan

**Our dental category still accounts for most of BioGaia Japan's sales, primarily because of periodontal disease. As many as four million people have periodontal disease in Japan. Over the last two years, our operations targeting dentists in Japan have been impacted by pandemic restrictions.**

Major Japanese pharmaceutical companies and food manufacturers have shown significant interest in periodontal disease prevention products. As the only company with high-level evidence for the prevention of periodontal disease, BioGaia has a competitive advantage. In April, dairy manufacturer Kabaya Ohayo signed a five-year renewal of its exclusive sales contract for dental supplements and dairy products, allowing them to use both our patented strain

and sales network. Since July 2022, Covid-19 has significantly impacted Japan, with the country recording one of the highest number of cases in the world. As a result, the number of patients in dental clinics has decreased by as much as 40 percent.

Despite the challenges related to Covid-19 sales remain at the same level as the previous year and the gross profit has developed positively. The expansion of direct sales to dental clinics has been successful and the development is positive. In addition, sales via e-commerce have increased thanks to successful digital marketing on social platforms and better customer service.



Keitaro Nomura  
Country Manager Japan



# Goals and future prospects

## Goals

BioGaia's overarching vision is to be the most trusted probiotic brand in the world.

The long-term financial goal is an operating margin (operating profit in relation to sales) of at least 34 percent with continued strong growth. BioGaia's dividend policy is to pay a shareholder dividend equal to 50 percent of profit after tax in the Group excluding non-recurring items.

BioGaia's research and development of probiotic products are ultimately based on the goal of helping people maintain good health. We also work to reduce our climate and environmental impact. BioGaia has committed to a science-based climate target to reduce its absolute scope 1 and scope 2 greenhouse gas emissions by 46 percent by 2030 from a base year of 2019, as well as to measure and reduce its scope 3 emissions. In 2022, the target has also been approved by the Science Based Target initiative.

## Future

BioGaia will achieve the targets through increased investments in research, product development, brand strengthening measures and sales organisation. We will carry out this strategic work in our direct markets and in collaboration with our global distribution partners. You can read more about the strategy in the strategy section of this report on page 22.

With a strong product portfolio consisting of an increased number of innovative products, most sold under own brand, successful clinical studies and a strong distribution network that covers a large part of the interesting markets, the future continues to look bright for BioGaia.

Based on our strong financial position, we are continuously looking for interesting acquisitions that can strengthen BioGaia's business. This may mean developing documented new bacterial strains to develop new probiotic products. It may also mean working with distribution partners that could expand our global presence in markets where we believe our own distribution companies would create value. Or it may mean working with qualitative research companies that are able to commercialise new clinical data.



Sustainability

# Key sustainability events 2022



BioGaia has committed to a science-based climate target that has been approved by the Science Based Target initiative and was achieved in 2022.



Internal CO<sub>2</sub> cost implemented that is used to determine the size of annual climate investments and to incentivise emission reductions.



Decision taken to only use certified paper from sustainably managed forests (FSC-certified) in product packaging at BioGaia Production.



BioGaia remains on AllBright's green list of listed companies with an equal gender distribution in management positions.



Updated materiality assessment completed.



Collaboration started with Woola, a provider of more sustainable transport packaging that is being tested for deliveries in the UK and Swedish markets.



Invested in Climate Transformation Fund in order to focus on the most effective climate investments.

Jonathan Gromark – Sustainability Manager

## “Good health is a basic prerequisite for people, society and the planet.”

For BioGaia, sustainability is about consistently striving for better health, whether it is through our products, how business is conducted or how we affect the planet. I believe this is what will be required to continue to be a successful company in the future and become the most trusted probiotic brand in the world.



## Jonathan Gromark – Sustainability Manager

In 2022, BioGaia took several important steps to become a more sustainable company with concrete initiatives to contribute to better health through "healthy products", "healthy business" and "healthy planet".

Within **healthy products**, we continued our long-term efforts in research and development. This allows us to offer clinically proven, high-quality products that contribute to better health, which are marketed and made available in a responsible manner. Additionally, throughout the year, we continued our commitment to combating antibiotic resistance. This included spreading and increasing knowledge about antibiotic resistance and, through the PAR Foundation, financing projects that help combat antibiotic resistance in different ways.

to how we could reduce the environmental impact of our packaging. Additionally, our work to phase out the use of palm oil has also finally begun yielding results. We have now made sure that most of the material used in secondary product packaging is from sustainable forestry. In addition, we have made sure that our transport packaging to consumers uses a special environmentally friendly solution.

During the year, we committed to a science-based climate target, approved by the Science Based Target initiative, which

It has been valuable for our employees to reflect on and consider how the business could be most beneficial to society and how this relates to the organisation's long term financial performance.

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**"The basis for how we create value is based on our desire to contribute to better health. Even though our products focus on the health of the individual, health has a deeper meaning for us."**

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Within **healthy business**, we further developed governance, we conducted our annual anti-corruption training, and our employee survey showed that our employees are satisfied with the workplace. Several significant steps were also taken to further integrate sustainability into the business. The previous materiality assessment was updated, which helped to further embed the company's sustainability work in the organisation. As part of this process, employees also had time to reflect on and consider how the business could be most beneficial to society and how this was related to the organisation's long term financial performance.

As part of this process, employees also had time to reflect on and consider how the business could be most beneficial to society and how this was related to the organisation's financial performance.

**In our efforts to contribute to a healthy planet**, we have continued to look for new ways to reduce our environmental impact. Clearer objectives were adopted as

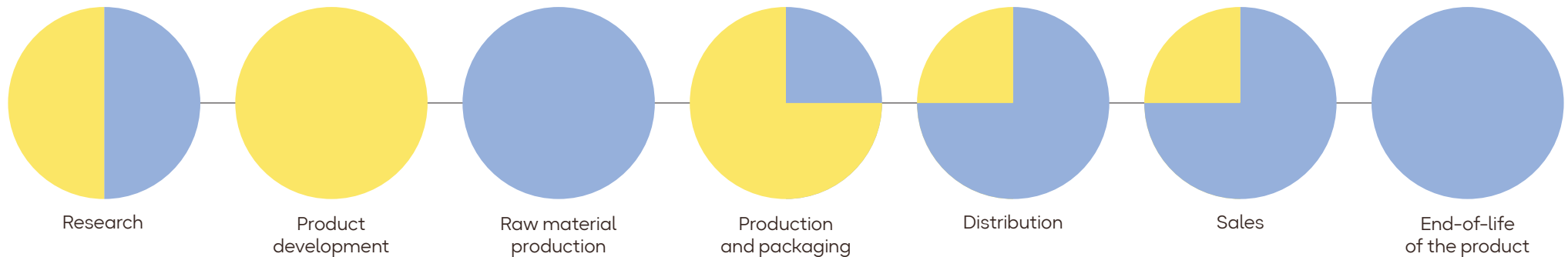
we achieved in 2022. But we will not stop there – more work is needed to ensure that we continue to fulfil the target. We will also continue working to reduce Scope 3 emissions, where the largest share of emissions occurs. In addition to working to reduce our own emissions, we have also decided to finance effective climate projects through the Climate Transformation Fund. The size of funding will be decided on the basis of our own emissions using an internal carbon price.

Our continuous improvements produced results, which was recognised by the MSCI ESG index, which in 2021 raised us to an A grade and which we retained in 2022. I look forward to further developing BioGaia's sustainability strategy in 2023 based on the results of the materiality assessment conducted. I am also looking forward to not only taking more concrete steps to reduce our environmental impact and create value for our stakeholders, but to accelerate the positive impact that we have on human health.

# BioGaia's value chain

An explanation of "where the effects occur or are caused" and BioGaia's control and capacity to make a difference.

- Majority of this work is performed internally
- Majority of this work is performed externally



BioGaia conducts its own research and collaborates with a large external researcher network. Research includes everything from developing and improving methods for how probiotic cultures are produced to extensive pre-clinical and clinical research. BioGaia also works strategically to identify new bacteria strains for the probiotics of the future. The way research is conducted influences everything from the health effects and quality of the product to the end consumer. We develop existing and new probiotic products based on the insights we gain from end consumers.

BioGaia's product development focuses on analysing and identifying new product formulas and creating new delivery formats and packaging solutions. BioGaia's market surveys provide consumer insight, which leads to the development of even more consumer-friendly products. The choice of ingredients in the product formulas impacts both human and environmental health. The form of delivery and the packaging solution have a strong impact on environmental impact, usability, and product quality.

Raw materials for products, packaging material and bacteria cultures come from external suppliers. Through the choice of supplier, requirements specification and follow-up, BioGaia can affect the environmental impact, quality and working conditions of the raw material suppliers with whom we choose to work with. The suppliers' impact in these areas is dependent on their manufacturing processes and the sub-suppliers they collaborate with within the supply chain.

Production and packaging of our probiotic products is handled both by external suppliers and BioGaia's subsidiary BioGaia Production. In the supply chain, BioGaia takes care of logistics as well as quality assurance and control of production. We have a significant impact on product quality in this part of the chain. Environmental impact is caused by the amount of waste generated, raw material used and the energy required for their processes. BioGaia has substantial control over this when production takes place at BioGaia Production but less control at external suppliers.

The finished products are collected by our partners or subsidiaries from our production units and distributed worldwide. The choice of transportation has a major environmental impact. BioGaia has greater opportunities to influence the type of transportation when distribution is managed by the subsidiaries.

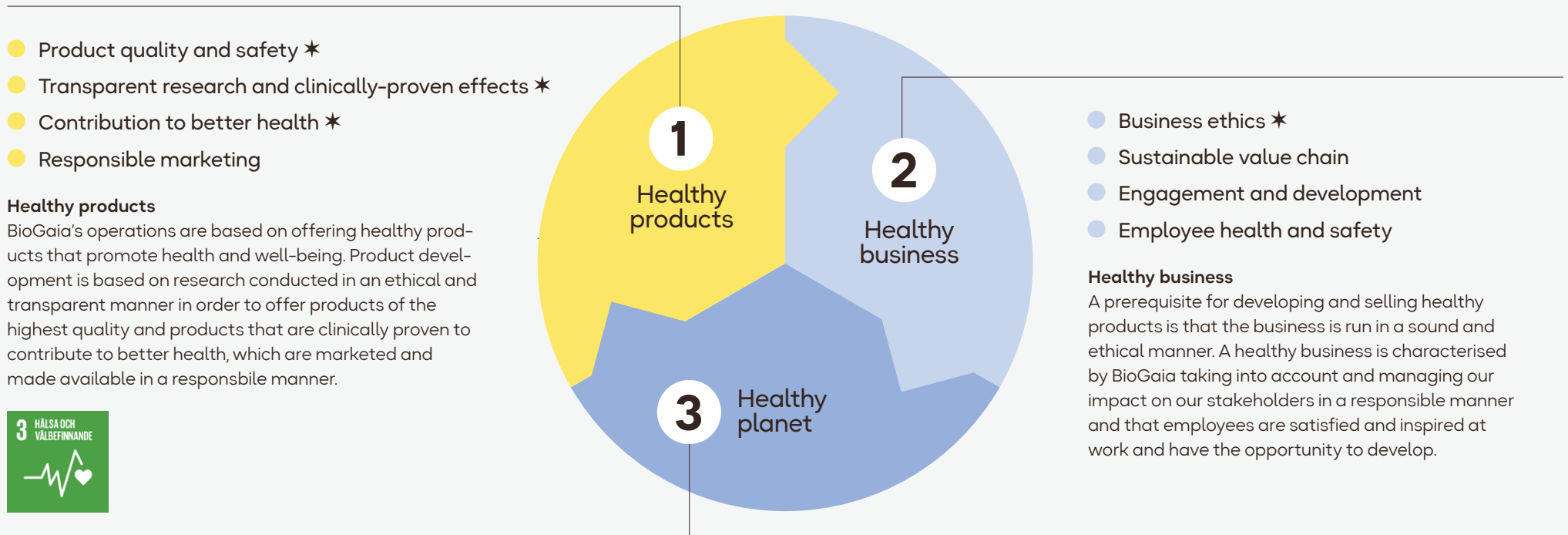
BioGaia supports its distribution partners and subsidiaries with sales and marketing activities and in regulatory issues. In this part of the value chain, it is important that sales and marketing to consumers is responsible and accurate in accordance with BioGaia's overall strategy. Business trips take place around the world with the aim of growing sales. This travel helps to increase cooperation and understanding but also has an environmental impact.

Positive health effects are a result of the research conducted, which target groups and how many within the groups have used the probiotics, how the products are used and how efforts have ensured high quality throughout the value chain. The negative environmental impact of ingredients at this stage of the chain is non-existent or minor. The environmental impact of packaging is dependent on how the end consumer handles the packaging when the product has been used. The negative environmental impact can be reduced by providing consumers with information about how packaging can be recycled.



# Prioritised sustainability areas

BioGaia contributes to better health by selling products with clinically-proven effects. How healthy our business is not only about the direct health effects our products have on end consumers, but also how the products and our business impact society and the planet as a whole. We have therefore divided our sustainability work into three categories: "healthy products", "healthy business" and "healthy planet".



- Product quality and safety \*
- Transparent research and clinically-proven effects \*
- Contribution to better health \*
- Responsible marketing

### Healthy products

BioGaia's operations are based on offering healthy products that promote health and well-being. Product development is based on research conducted in an ethical and transparent manner in order to offer products of the highest quality and products that are clinically proven to contribute to better health, which are marketed and made available in a responsible manner.



- Business ethics \*
- Sustainable value chain
- Engagement and development
- Employee health and safety

### Healthy business

A prerequisite for developing and selling healthy products is that the business is run in a sound and ethical manner. A healthy business is characterised by BioGaia taking into account and managing our impact on our stakeholders in a responsible manner and that employees are satisfied and inspired at work and have the opportunity to develop.

- Material and raw material management
- Sustainable packaging
- Sustainable transportation

### Healthy planet

The health of our planet and the health and well-being of people are strongly linked. What affects the planet also affects human health. As a company that strives to contribute to better human health, we must take into account how BioGaia's actions impact the health of the planet. That means we have to consider the impact of our products on the environment. The only way to create a more sustainable and healthy future is to care for both the health of ourselves and our planet.



\* = Indicates areas of highest priority

# Healthy products

As a company, BioGaia strives to make products that are healthy in every way, including their impact on individuals, the planet, and society. Our efforts to develop and offer healthy products occur primarily through four focus areas: **contribution to better health, transparent research and clinically proven effects, responsible marketing and quality and safety.**



**Materiality and opportunities**

BioGaia's purpose is to offer probiotics that promote human health and well-being. We consider the impact BioGaia has on health and well-being to be the most critical factor for BioGaia's long-term success.

A long-term strategic focus on research and development has enabled BioGaia to produce and sell probiotic products with clinically proven health effects. Our efforts to provide information to and training for distribution partners, consumers and healthcare professionals about probiotics contribute to the understanding of how probiotics can make a positive impact on health. BioGaia's commitment to combating antibiotic resistance also contributes to better health.



**Health improvements through research**

All products sold and marketed by BioGaia have been tested in clinical studies. The large number of completed and published studies distinguishes us from many other players in the industry.

BioGaia's research helps to develop knowledge about how probiotics can promote health in a variety of different areas. For a more detailed description of the research areas, refer to page 32. In 2022, BioGaia invested SEK 107 million in pre-clinical and clinical research, which accounted for 10 percent of net sales.

Investments in R&D <sup>1)</sup> (BSD 10)	2022	2021	2020
SEK m	107	105	105 <sup>1)</sup>
SEK % of sales	10	13	14

<sup>1)</sup> Costs by function (including personnel expenses) for BioGaia group.

BioGaia has an extensive patent portfolio that protects the company's probiotic bacteria strains and their uses. The pre-clinical and clinical research offers us valuable knowledge and could potentially give rise to new innovations and patents<sup>2)</sup>.

<sup>2)</sup> In connection with the patent registration process, BioGaia's patent department takes into account the potential negative health effects resulting from the market exclusivity that accompanies a patent. The patents held by BioGaia for its probiotic products have been assessed as not entailing any such critical adverse effects.

**Value creation for consumers**

BioGaia's products are sold in more than 100 markets around the world. The results from clinical studies suggest the potential health improvements that can be achieved with each product when used by the intended consumer group. The number of doses sold provides an indication of how significant an impact BioGaia has had on human health. In 2022, the number of doses sold as finished products increased by 17 percent and BioGaia's products are now sold in 113 markets.

Sales (BSD 11)	2022	2021	2020
Number of markets	113	110	109
Number of doses sold as finished products (millions)	698	594	537

A dose is the amount of the product consumers are recommended to take on each occasion. The dose varies between products.

The number of doses sold by BioGaia during any year gives an indication of the value generated by the company since each dose provides a positive health effect. Value creation is also dependent on other factors, such as whether the product reaches the right target group and if all of the doses are taken by the consumer. Doses from products sold during the year by the acquired company in the USA (Everidis) that were not from BioGaia were excluded from the estimated number of doses.

BioGaia also sells probiotic cultures directly to a small number of corporate customers. The amount of culture sold by BioGaia in 2022 is estimated to be sufficient for about 650 (647) million doses. This calculation is based on the number of doses that BioGaia's customers state the culture is sufficient to make. Sales of cultures represent a small share of BioGaia's total revenue. The number of doses BioGaia sells through probiotic culture sales is not comparable to the number of doses BioGaia sells as finished products when processing has already been carried out to allow consumers to benefit from the healthy bacteria in the culture.

In several of the markets where BioGaia operates, there is legislation that restricts the ability to communicate relevant information about the efficacy of the products. When selling to consumers, it is important to provide relevant information about the products so that consumers can make well-informed decisions. As a result, BioGaia strives to communicate more transparently with all target groups, which would benefit consumers. You can read more about this under Coherent rules and level playing field on page 54.

### Probiotics education

Educating people about probiotics has always been an important part of our business. Ever since BioGaia was founded, we have held seminars at tradeshows for doctors and healthcare professionals – activities that are now an established and important part of our business. In 2018, the BioGaia Academy was launched – a digital training platform for doctors and other healthcare professionals interested in probiotics and their application. The initiative's first training programme was for paediatricians. Since then, training programmes have been offered to dentists and our distribution partners. The BioGaia Academy's main purpose is to raise awareness and knowledge of probiotics and their positive effects in a range of different areas. The training programmes are deeply rooted in BioGaia's research and provide valuable knowledge exchange between participants and BioGaia. As a result of the different backgrounds and experiences of the participants, we are able to gain a deeper understanding of how products are used and what different needs exist.

Post-training evaluations show that participants feel the training programmes offer new knowledge and tools in clinical work to improve health through the use of probiotics. Training programmes have also reportedly resulted in new networks, where participants gained new ideas for clinical studies.

Our goal is to continue developing BioGaia Academy and establishing training in new indication fields and making the programmes more user-friendly.

### BioGaia's work to combat antibiotic resistance

In 2022, BioGaia continued its work to increase awareness of antibiotic resistance, also referred to as antimicrobial resistance (AMR). For the second consecutive year, BioGaia ran an AMR initiative, together with other life science members of SwedenBIO<sup>1</sup>, to disseminate information about and, in turn, raise awareness of antimicrobial resistance and to slow down its spread. In connection with the World Health Organisation's annual, global AMR campaign in November, an international film was produced, targeting national and international decision-makers. The film was shared through social channels and made available worldwide. The purpose of the campaign was to raise awareness of AMR and show people that life science companies have solutions that can help prevent infections, provide alternative treatments and improve existing antibiotics. BioGaia specifically highlighted a message that clinically proven probiotics are one way to help the body retain a good balance and reduce the risk of infection and thus restrict the use of antibiotics. BioGaia highlighted the importance of clinically proven probiotics in helping the body maintain a healthy balance, reduce the risk of infection, and reduce the use of antibiotics. BioGaia also offers clinically proven probiotics that can be taken in conjunction with antibiotics treatment to reduce the side effects of antibiotics.

Through its support of the Foundation to Prevent Antibiotic Resistance, BioGaia helps to enable research in important areas. During 2022, BioGaia allocated almost SEK 3 million to the foundation to finance projects the Foundation considers to have significant potential to combat antibiotic resistance in society. Read more about the foundation on page 79.

1. SwedenBIO is a Swedish trade association for life science companies in the biotech sector

In 2022, BioGaia continued its work to increase awareness of antibiotic resistance.

### Materiality and risks

In order to contribute to better health, it is crucial to us that our products have a clinically proven effect. Additionally, it is imperative that research is carried out in a transparent, independent, and ethical manner to ensure that the results are reliable.

### How work is conducted

Most of the research is carried out in collaboration with universities in Europe and North America. The studies of our products and strains vary in scope as does the extent of BioGaia's involvement. This varies from responsibility for conducting the study to only supplying the active product and its placebo to the study. Regardless of the level of our involvement, BioGaia always requires the studies to comply with ethical standards. Researchers should adhere to international and national legislation as well as the Helsinki Declaration's ethical principles for medical research. BioGaia's ethical research policies are outlined in the company's internal Code of Conduct and the specific requirements stipulated in research contracts. All of BioGaia's research partners are encouraged to work in accordance with the International Council for Harmonisation on Good Clinical Practices (ICH-GCP), which is the international ethical, scientific and practical standard that all clinical research must follow.

This means research that BioGaia is involved in must obtain local ethical approval before the commencement of research projects. All participants must be informed of the study and be willing and able to give written consent for participation. Participants must have the right to discontinue at any time, for whatever reason, without affecting their right to a follow-up investigation or future care. Pre-clinical studies on animals must also be justified and the principles of the 3Rs – replace, refine, reduce – must be applied.

BioGaia always encourages researchers to be transparent with their results, regardless of the outcome. The studies must be registered on a public website, such as ClinicalTrials.gov.

### The total number of published studies on BioGaia's probiotic strains at the end of the year (BSD 1)

Product	Strain or strain combination	2022	2021	2020
Protectis	<i>L. reuteri</i> DSM 17938	172 <sup>1</sup>	165 <sup>1</sup>	153 <sup>1</sup>
Prodentis/ Pharax	<i>L. reuteri</i> DSM 17938 & <i>L. reuteri</i> ATCC PTA 5289	65/1	60/1	53
Gastrus	<i>L. reuteri</i> DSM 17938 & <i>L. reuteri</i> ATCC PTA 6475	8	7	6
Osfortis	<i>L. reuteri</i> ATCC PTA 6475	3	1	1
Colus <sup>2</sup>	<i>L. reuteri</i> ATCC PTA 4659	2	2	1
<b>Total number of articles</b>		<b>251</b>	<b>236</b>	<b>214</b>

1) Including articles with the mother strain *L. reuteri* ATCC 55730.

2) Not yet a commercial product



**Materiality and risks**

Clear and accurate marketing creates consumer confidence and increases the company's credibility. Therefore, it is important that BioGaia's marketing is clear and accurate and not misleading. Through our advocacy for a shared regulatory system for the marketing of probiotic products that permits the disclosure of essential information about the products, we also want to help consumers to make more well-informed decisions.

**How work is conducted**

BioGaia's Board has adopted a global Communication Policy according to which the company may only communicate claims that are truthful, accurate, clearly distinguishable and balanced. A Marketing Directive was adopted by the company's Executive Management to help the company and the marketing department communicate responsibly. This Marketing Directive requires employees at BioGaia AB to market the company and its products consistently, in accordance with our values, as well as laws and regulations. The Directive includes guidelines for publication in BioGaia's various channels and has been communicated to all BioGaia employees. The marketing department also held special training that focused on the Directive.

Distribution agreements and a Code of Conduct that distribution partners must sign clarify that BioGaia's products may only be marketed using claims that are supported by the results from clinical studies and in accordance with law in the country in which the product is marketed.

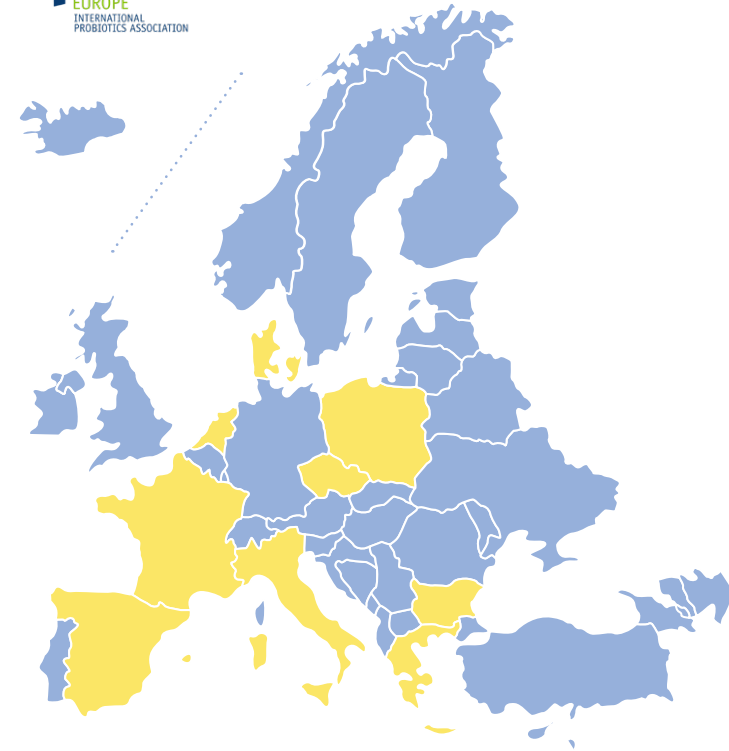
**Coherent rules**

For BioGaia, it is imperative that there are coherent rules for how probiotic products may be marketed. Otherwise, there is a risk that consumers do not receive relevant facts and information about proven products, and instead receive information about products without clinically proven effects. As the European Food Safety Authority (EFSA) has

not yet approved any health claims for individual probiotic strains, the term "probiotic" is considered by the European Commission as a health claim. This means the term "probiotic" is prohibited in communications with consumers in the EU. Recently, however, a number of countries have introduced new national guidelines. In 2021, Denmark and the Netherlands permitted the term "probiotic" as a mandatory category name for food supplements. In January 2023, France also introduced national guidelines and permits the term "probiotic".

As part of efforts to promote a harmonised legal status for probiotics in the EU, BioGaia is active in the International Probiotics Association (IPA), where BioGaia's CEO is a board member. The IPA is a non-profit organisation that aims to provide a united voice for probiotics worldwide. As part of its efforts to open up a dialogue about probiotics, the IPA and member organisations held a webinar on EU legislation and the way forward. A dialogue was also held between the IPA and the European Commission regarding probiotics. In addition, the IPA conducted a consumer survey in eight European countries to achieve a greater understanding of consumers' views on probiotics in relation to probiotics legislation.

BioGaia also actively participates in the International Scientific Association for Probiotics and Prebiotics (ISAPP). ISAPP is a non-profit organisation that works to promote science on probiotics, prebiotics and related topics. ISAPP was founded in 2002 and brings together leading global scientific experts and has established a foundation for how probiotics and prebiotics are studied and understood. ISAPP safeguards scientific integrity and transparency and believes advances in the field of probiotics should be driven by a rigorous scientific approach and science-based communication. BioGaia follows ISAPP's criteria for probiotic products which the table below/on the next page describes in more detail.



**Regulatory assessment regarding the use of the term probiotic in foods, beverages and dietary supplements**

The countries in yellow allow the word probiotic on labels: Bulgaria, Czech Republic, Cyprus, Denmark, Greece, Italy, Malta, The Netherlands, Poland, Spain, and France.

- With reference to nutritional/physiological effects or
- As the name of the category

Other European countries are considering developing a national/European approach that can help better identify foods containing probiotic microorganisms (e.g., Romania, Sweden, Slovenia, United Kingdom).



Criteria for probiotics and BioGaia's assessment of level of compliance (BSD 2)

ISAPP's criteria	Strain or strain combination
● Backed by science	BioGaia's products are well-documented. More than 250 articles have been published based on clinical studies with BioGaia's strains. <sup>1</sup>
● Provides an effective dose	BioGaia always uses the same and adequate quantity of bacteria per dose in products as has been used in clinical studies.
● Provides the benefit I'm seeking	BioGaia's probiotic strains have been studied for several different conditions, such as colic, functional abdominal pain, constipation, side effects of antibiotics, diarrhoea and to prevent infection.
● It's safe for me	All BioGaia's strains have Qualified Presumption of Safety (QPS) status. For more information, see EFSA <sup>2</sup> . Safety for BioGaia's strains has been the subject of more than 30 studies.
● Names of the microbes	BioGaia always states the bacteria's genus, species and strain on the package, in scientific contexts and in market communication.
● CFU	BioGaia guarantees the quantity of live organisms (CFU content <sup>3</sup> ) per dose at the expiration date for all products.
● Suggested dose or serving size	BioGaia always states the suggested dose on the package.
● Proper storage conditions	BioGaia always specifies how the product should be stored.
● Company contact information	Contact information is always on the package.

● Fully met      ● Partially met      ● Not met

1. A safety study is a clinical study that evaluates the potential risks of consuming a product.

2. EFSA, the European Food Safety Authority, is an agency with the primary purpose of advising legislators in the European Union on matters relating to food safety.

3. CFU = Colony Forming Units.

### Materiality and risks

Food supplements that are unsafe pose a serious threat to consumer health. The safety and quality of BioGaia's products are therefore of the utmost importance. The quality of our products also affects the consumer experience. Reliable research on the product's positive effects and a consistent production process ensure the product's high quality. The quality of BioGaia's products is directly controlled during the production phase, as well as during direct sales to end consumers through our own e-commerce sites. When products are delivered to distribution partners and resellers, BioGaia has indirect control over quality.

### How work is conducted

All products developed and sold by BioGaia comply with the company's quality demands as set out in the BioGaia Quality Standard (BQS), which includes laws and regulations related to the EU's food regulations, technical requirements and manufacturing in accordance with good manufacturing practice for food supplements.

BioGaia's Quality Management System governs the company's way of working in order to meet its Quality Standards. This includes ensuring product safety through the application of HACCP (Hazard Analysis and Critical Control Point) – a systematic and preventive approach to food safety where manufacturing processes are analysed on the basis of biological, chemical and physical hazards. The critical points identified are ensured by introducing control measures into processes, through testing or other types of monitoring. The onboarding programme for all new employees includes training in quality and information about our products and their effects. Regular quality training, and training when a particular need has been identified, is provided to employees who work in parts of the business that influence product quality.

To ensure quality is maintained, regular production controls are conducted according to standardised processes and routines at contract manufacturers as well as in our own production unit, BioGaia Production. These controls include recipient control of each batch of raw material before approval for use in production, controls of quality parameters during manufacturing and analysis of the finished product.

Quality and product safety controls are performed by personnel with relevant training. Any identified non-conformances, complaints or quality issues are reviewed and addressed. Each individual manufactured finished product batch is checked against applicable requirements to determine whether it is fit for its intended use. The product's safety and quantity of probiotic bacteria are analysed to ensure the products meet the requirements set out in the specifications.

The requirements in the specifications are based on BioGaia's clinical studies and regulatory requirements. Safety tests include analyses to check whether the product is contaminated with objectionable contaminants. The analyses are either performed by BioGaia's in-house laboratories or by qualified third parties. Non-conformances are managed and investigated using a standardised methodology to ensure that only products deemed safe are released into the market. The investigation includes an examination of the cause of the problem and identifies measures to prevent the reoccurrence of similar problems. A regular review of the quality status of the products and the efficiency and suitability of the Quality Management System is conducted. The results are presented to the management team to identify and decide on possible improvement measures.



All products developed and sold by BioGaia comply with the company's quality demands as set out in the BioGaia Quality Standard (BQS).



### Permits and certifications

All manufacturing of BioGaia's products takes place in operations with certified quality management systems. BioGaia Production, which is owned by BioGaia AB, and contract manufacturers are authorised to manufacture food, and all are certified by an independent third party according to the appropriate standards for good manufacturing practice for the product in scope, either ISO 22000, US FDA 21 CFR Part 111 (GMP for food supplements) and/or GMP for medicines.

This means contract manufacturers' compliance with quality systems is regularly verified by an independent party or authority. Since contract manufacturers use a quality management system, this means their personnel receive regular quality training and systems are in place to qualify and monitor their subcontractors. As a result, BioGaia is able to ensure that even the company's subcontractors have advanced quality work. BioGaia also requires its suppliers/subcontractors of raw materials to present a certificate that their quality management system has been subjected to third-party review.

### Audits

Contract manufacturers and other suppliers, including contract laboratories, are qualified, monitored and audited regularly by BioGaia. In 2022, audits were carried out on site at four contract manufacturers, three contract laboratories and one contract warehouse. In addition to these audits, BioGaia systematically followed up the performance of manufacturers and suppliers in terms of quality and maintained regular dialogue to ensure progress on quality matters and that contractual agreements were properly implemented.

In 2021 and 2022, BioGaia's quality system was audited by an external party. Any identified significant non-conformances that emerged in the audit have been rectified. BioGaia's subsidiary, BioGaia Production, was also audited in 2022 by the Australian Therapeutic Goods Administration without any critical remarks.

### Product development

According to BioGaia's product development process, products developed must always contain the same dose as in the clinical study. This dose must correspond to consumer needs, and ingredients, packaging materials, and manufacturing processes should match those of the clinical study to quality requirements (BioGaia Quality Standard) and BioGaia's environmental and sustainability requirements. A product can only be sold once all the criteria have been met by BioGaia. BioGaia regularly monitors legislation and scientific evidence to adjust existing products if necessary.

### Recalls (BSD 3)

There were no recalls in 2022. However, if a recall had been required, an established system is in place to manage it.

### Progress and priorities going forward

In 2022, a targeted effort was made to further develop and improve identified parts of the quality management system. In 2023, these improvements will be implemented to ensure compliance.

As a result of the completed materiality analysis, BioGaia intends to develop new goals and ambitions for healthy products.



## Healthy business

BioGaia strives to run a healthy business, which means promoting business ethics, maintaining human rights and good working conditions throughout the value chain. Within the area of healthy business, BioGaia manages the following sustainability issues: **Business Ethics, Sustainability in the value chain, and Occupational Health and Safety, Employee Engagement and Development and Diversity.**

### Materiality and risks

Business ethics refers to conducting governance and operations in a sustainable and transparent manner pursuant to the law and the company's Code of Conduct. Business governance ensures that decisions are made in a way that considers both the long-term profitability and the impact on the company's stakeholders. Business ethics encompasses how BioGaia acts to combat financial crime in all forms. The focus in this area is on the prevention of bribery and corruption. Employees must be made aware of the risks while BioGaia ensures compliance with risk-based internal procedures in accordance with established governing documents.

The company's efforts to ensure that operations are conducted in an ethical manner have a huge impact on its financial strength and social impact. Therefore, the area is considered one of the company's most important sustainability issues. For more information about how sustainability is integrated into governance, refer to the Sustainability governance section on page 81.

### Anti-corruption work

BioGaia takes a firm stance against corruption and works to minimise related risks. It is important not only to contribute to a more sustainable and equitable society but also to protect the company's reputation and financial strength.

BioGaia operates in more than 100 countries with different levels of corruption risk. The main risks of corruption and bribery arise in connection with the sale of products to distribution partners, major purchases, and potential insufficient independence of researchers and doctors. As a result, it is crucial that all employees are aware of corruption risks and prepared to manage them.

In order to guide and support employees in anti-corruption work, BioGaia has an anti-bribery and anti-corruption policy as well as a policy to prevent conflict of interest. The company's policy document defines bribes, corruption, and conflict of interest, along with guidelines for appropriate behavior when these issues arise. All employees are also provided with information on how to report incidents.

Anti-corruption is a top priority, and a member of Executive Management is responsible for these issues. The Board of Directors bears ultimate responsibility for business ethics and anti-corruption in the organisation. Employee training in anti-corruption is held annually. Training includes information on the impact of corruption on societies, BioGaia's anti-corruption policy and existing laws and regulations. The training also draws attention to BioGaia's whistleblower

function, which enables anonymous reporting and plays a vital part in anti-corruption efforts. Training is concluded with a test that all employees must complete and pass to ensure they have understood the material.

BioGaia's aim is that all employees in the group should receive annual anti-corruption training. During 2022, 96 percent (97) of the Parent Company and 89 percent (92) of employees in the group received training. In early 2023, training was also made available to management at BioGaia's company in Japan. During 2023, training is also scheduled to be made available to employees of the recently acquired company in the USA.

## BioGaia's aim is that all employees in the group receive annual anti-corruption training.

### Anti-corruption work (GRI 205-2)

Total number and percentage of employees who have received training in the company's anti-corruption policies by employee category

	2022 <sup>1</sup>	2021 <sup>1</sup>	2020
BioGaia AB	96% (94)	97% (93)	100% (96)
Management team	100% (8)	100% (9)	100% (10)
Employees	96% (86)	96% (81)	100% (86)
BioGaia group	89% (116)	92% (119)	100% (160)
Management <sup>2</sup>	89% (16)	100% (13)	100% (18)
Employees	85% (100)	91% (106)	100% (142)

<sup>1</sup> Data at group-level does not include employees who were on leave of absence or parental leave during the period as well as employees in Japan and the recently acquired company in the USA.

<sup>2</sup> Management in BioGaia group includes Executive Management at BioGaia AB (8), Managing Directors at BioGaia Pharma (1), MetaboGen (1) and BioGaia Production (1), BioGaia Finland (1), BioGaia Japan (3), BioGaia UK (1), BioGaia Canada (1), BioGaia USA (1)

Data in parentheses refers to the total number of people who completed the training.

### Whistleblower function

BioGaia's whistleblower system is provided by an external party where employees and external stakeholders can anonymously report perceived deviations. The system can be reached through BioGaia's website and is available in Swedish and English. The company's guidelines for the whistleblower function are communicated to employees on several different occasions, such as during anti-corruption training and when onboarding new employees.

Relevant policy documents to ensure business ethics in our operations:

- Code of Conduct
- Guidelines for the whistleblower service
- Anti-Corruption Policy
- Conflicts of Interest Policy
- Insider Trading Policy

The team responsible for managing reported incidents in the system includes a representative from the Board of Directors and representatives from Human Resources and Corporate Governance. BioGaia undertakes to comply with the EU directive to protect whistleblowers. No incidents were reported to the whistleblower system during 2022.

### Updating, developing and implementing policies

The board annually reviews and approves all policies. The management at BioGaia has received training in the group's policies and processes to combat corruption and bribery. The company's suppliers, distribution partners have signed and partners have signed BioGaia's external code of conduct, including anti-corruption clauses. BioGaia has also introduced anti-corruption clauses in the standardised contract templates.

### A reliable taxpayer

The primary focus of BioGaia's business is on commercial aspects, not tax aspects. We always comply with applicable tax laws and practices in the markets where we operate. To further emphasise the principle of always acting responsibly and transparently, in 2023, the company will include this principle in the financial framework. This is the financial framework that describes the company's financial guidelines, goals, rules and processes.

BioGaia's whistleblower system is provided by an external party where employees and external stakeholders can anonymously report perceived discrepancies.

The primary focus of BioGaia's business is on commercial aspects, not tax aspects.

By making demands, following up and, if necessary, opting out of partnerships with providers who do not meet BioGaia's requirements, BioGaia can work towards a more sustainable value chain.

In accordance with BioGaia's internal Code of Conduct, efforts are continuously made to reduce the company's impact in all parts of the value chain. In 2018, BioGaia also adopted a Code of Conduct for the company's suppliers and distribution partners. The Code describes BioGaia's expectations and minimum requirements for providers in areas such as human rights, working conditions, the environment, business ethics and anti-corruption. The Code is included in our contracts with suppliers and distribution partners.

**Suppliers**



BioGaia has relatively few suppliers for key input goods, such as bacterial cultures, contract manufacturing, oils for the products and packaging material. BioGaia also has a small number of suppliers for other important services, such as packing and testing.

Through long-term and close relationships, BioGaia can help improve the suppliers' sustainability agenda and reduce sustainability risks in the supply chain. BioGaia has external suppliers for production and product packaging as well as culture suppliers and analytical services in Sweden, Denmark, Belgium, Italy, Spain and the USA. Suppliers of ingredients for the products are mainly located in Europe and the USA. However, BioGaia's second-tier suppliers are located in other parts of the world.

BioGaia conducts its work on sustainable sourcing through risk-based assessment and compliance requirements with BioGaia's Code of Conduct. As part of the company's Supplier

Risk Assessment, specific sustainability risks have been added and are managed in a structured and systematic manner. Sustainability work at prioritised suppliers, such as new contract manufacturers, culture producers and analytical services in high-risk countries, is evaluated through a self-assessment, and may be supplemented with further examination if deemed necessary. During 2022, no new suppliers of these services were contracted in high-risk regions, which means no new assessments have been carried out. All suppliers with whom we work with must sign our code of conduct and confidentiality agreement.

By the end of 2022, 100 percent (100) of BioGaia's suppliers of analytical services, contract manufacturers and culture producers had signed up to the Code of Conduct or presented their own equivalent Code of Conduct.

<b>Objective 2022</b>	
To include a sustainability assessment of suppliers in the Supplier Risk Assessment process.	
<b>Objective 2023</b>	
Ensure that the environmental impact and other sustainability parameters are included and considered as selection criteria in new procurements regarding transport, ingredients and packaging.	

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**Through long-term and close relationships, BioGaia can help improve the suppliers' sustainability agenda.**

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### Distribution partners

BioGaia's distribution partners have a direct impact on how the products are distributed and marketed to consumers. The distribution partners are, for example, responsible for ensuring that BioGaia's products comply with local laws and regulations in their respective markets. If a distribution partner's operations do not meet BioGaia's expectations, there is a risk that BioGaia's brand and confidence could be damaged.

As part of BioGaia's distribution agreements, distribution partners ensure they meet all legal requirements in their local market. Distribution partners assume full responsibility but are offered support by BioGaia's own experts. Additionally, BioGaia requires that distribution partners only make claims supported by research.

At the end of 2022, 98 percent (97) had signed up to the Code of Conduct, or presented their own equivalent version. During the year, BioGaia began collaborating with a supplier that supports BioGaia in carrying out in-depth ESG analyses

of potential distribution partners in high-risk countries. The purpose of the analyses is to minimise the risk that BioGaia collaborates with companies that have connections with illegal or unethical activities and/or have a relationship with individuals or organisations that are subject to sanctions.

Since most of BioGaia's distribution partners are respected and well-known providers, the risk is normally low but relevant when BioGaia enters into partnerships with smaller providers in new markets where the risk is deemed higher. In 2022, one such ESG analysis was performed of a potential distribution partner in a high-risk country. No links to sanctions, financial crime, terrorism, political or other negative media publicity were identified in the analysis. BioGaia will continue using this service for new collaborations in the future. Due to Russia's ongoing invasion of Ukraine, BioGaia chose in 2022 to suspend exports of goods to the distributor in Russia and Belarus.

### Key suppliers and distribution partners that have signed the Code of Conduct (BSD 6 & 7, GRI 414-1)

	2022	2021	2020
Contract manufacturers and culture producers	100%	100%	100%
Analytical services	100%	100%	100%
New suppliers that have signed the Code of Conduct during the year <sup>1)</sup>	0	0	-
Distribution partners that have signed the Code of Conduct during the year	98% <sup>2)</sup>	97%	90%
New distribution partners in high-risk countries assessed for legal and ESG risks	100%	-	-

1) No new contract manufacturers, culture producers or analytical services were added during the year.

2) All of BioGaia's partners (except one<sup>1)</sup>) have signed the Code of Conduct or have an equivalent Code of Conduct. <sup>1)</sup>The sub-distributor that accounts for the bulk of sales has an equivalent Code of Conduct

## BioGaia's three core values:

### Materiality and risks

BioGaia strives to engage and inspire our employees, offering each of them an opportunity to become the best version of themselves to benefit their colleagues and the business. Systematic work to increase engagement among employees reduces the risk of losing valuable expertise, which ultimately impacts the company's capacity to deliver high-quality products.

Employee engagement and development are encouraged through work with values, leadership and development activities, as well as through regular employee surveys. The results of employee surveys are also followed up by specific measures.

### Work with values

BioGaia is a value-driven company that works actively to incorporate the company's values in day-to-day operations. In 2022, several initiatives were taken to consolidate the central role of BioGaia's values in the business. This was achieved by communicating and reinforcing the values at the company's joint conferences and similar events. During the autumn, BioGaia also appointed value ambassadors to draw attention to cultural and value issues. The company's onboarding days for new employees were also revised to include value and reflection exercises. New employees are assigned a senior colleague from another department to meet with regularly during their first few months as part of our "buddy program". Its purpose is to strengthen and spread the company culture to new employees and create a stronger sense of community.



Every month, an employee email is sent to employees by the HR department to help create a sense of belonging and to highlight recent events for employees.

### Leadership and development activities

For some time now, BioGaia has held regular performance reviews to ensure a structured development and evaluation process. This continued throughout the year and most BioGaia employees stated that they have had such a review.

During the year, BioGaia's value-based leadership programme also continued, when face-to-face training sessions were combined with self-study for all managers. The programme is built around the company's three core values: "passion", "innovation" and "collaboration", and the theme for this year's

training sessions was self-leadership and leading others. The leadership programme will continue in 2023 and will focus on change management.

In addition to the value-driven leadership programme, health and safety training was also held for the company's managers as well as development at the individual level based on needs identified in the completed performance reviews. A 360-feedback process was conducted to strengthen the development of the management team. Each participant received an individualised report and detailed individual feedback based on the results of the process.

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**BioGaia is a value-driven company that works actively to incorporate the company's values in day-to-day operations.**

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### Employee surveys

In 2022, BioGaia continued to work with its employee survey tool &Frankly, which was implemented at the end of 2021. The tool offers simple, anonymous surveys to measure engagement in areas such as leadership and well-being, and creates an open dialogue in the company about what improvements can be achieved. As planned, four pulse surveys were conducted during the year. The results have been studied at various levels in the organisation. The HR department has worked closely with managers to offer its support in interpreting the results, holding discussions with employees, and identifying and implementing improvement measures. On the basis of the discussions, an organisational change was executed aimed at creating clearer roles within the company. During the year, a positive trend was noted for several of the key ratios the company had chosen to measure and monitor. The measures taken based on the survey responses may have led to this result.

### Employee turnover

During 2022, there was a slight decrease in employee turnover at BioGaia AB, 9.7 percent compared to 11.3 percent in 2021. Employee turnover during the year was partly due to

several new recruitments. This was, in turn, a result of BioGaia's increased focus on direct sales to consumers, which required new capabilities in areas such as digitalisation, sales and consumer marketing.

### Results for the year

The responses in the regular employee surveys indicate that most employees are satisfied at BioGaia. BioGaia's Employee Net Promoter Score (eNPS) reached 37 during the year, which is significantly higher than the external benchmark of 18. Other metrics for engagement and working environment also showed higher results than the external benchmarks. This may be the result of extensive initiatives undertaken throughout the year around employee well-being, creating a sense of community, and strengthening company-wide values with the aim of maintaining a strong company culture during the changes the organisation is currently experiencing. Employee engagement is high, as shown by the results of the employee survey and the various employee-initiated activities.

## Benefits offered to employees include<sup>1</sup>:

- ✓ **Free medical examinations** every second year for employees under the age of 50 and every year for employees over 50.
- ✓ **Extra healthcare insurance** and full salary from the first day of sick leave<sup>2</sup>
- ✓ **Health and wellness contribution**
- ✓ **Counselling** as needed, regardless of whether it concerns private or work-related problems.
- ✓ **The offer to top up parental allowance** for a period of six months as a supplement to compensation from the Swedish Social Insurance Agency.

1) These benefits are mainly offered to employees in Sweden and local differences may exist for employees outside of Sweden

2) The majority of employees live in Sweden, where there is a widespread state-provided healthcare system. The benefits BioGaia provides are in addition to this.

### Percentage of employees receiving regular performance and career development reviews<sup>2</sup> (GRI 404-3)

	2022			2021			2020		
	Total	Women	Men	Total	Women	Men	Total	Women	Men
BioGaia AB (total) <sup>3</sup>	95%	96%	97%	92% (82)	93% (55)	90% (27)	84% (75)	88% (52)	77% (23)
Employees with permanent contracts	95%	96%	97%	92% (82)	93% (55)	90% (27)	-	-	-
Employees with temporary contracts	- (0)	- (0)	- (0)	- (0)	- (0)	- (0)	-	-	-
Full-time employees	95%	95%	97%	90% (80)	93% (54)	90% (26)	-	-	-
Part-time employees	100%	100%	- (0)	100% (2)	100% (1)	100% (1)	-	-	-

1) All employees who were employed by BioGaia AB during the period of the performance reviews should have been offered a review. There are individual reasons why all employees did not conduct a performance review during the period.

2) 2021 was the first year we reported performance and career development reviews per employment type.

3) The percentage is based on the number of employees offered an opportunity for a performance review during the period and the number of employees who actually completed their performance review during the period.



## Personalstyrka (GRI 2-7)

Average number of employees during the year	2022			2021			2020		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Total BioGaia group	88	124	212	66	95	161	64	93	157
BioGaia AB <sup>1)</sup>	37	66	103	31	64	95	30	65	95
<b>Subsidiaries</b>									
Sweden	27	17	44	22	14	36	22	15	37
Japan	14	21	35	11	16	27	10	13	23
USA	8	18	26	2	0	2	2	0	2
Finland	0	2	2	0	1	1	-	-	-
Canada	1	0	1						
UK	1	0	1						

<sup>1)</sup> Including employees in Mexico (1), South Africa (1), Singapore (3).

BioGaia AB – employees at end of year per employment type) (headcount)	2022			2021			2020		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Total employees at end of year	41	68	109	32	67	99	32	65	97
Employees with permanent contracts	41	67	108	32	66	98	32	64	96
Employees with temporary contracts	0	1	1	0	1	1	0	1	1
Full-time employees	41	67	108	31	66	97	30	64	94
Part-time employees	0	1	1	1	1	2	2	1	3

Number of employees at end of year by country <sup>1)</sup>	2022	2021
Sweden	142	131
Japan	35	28
USA	26	2
UK	1	2
South Africa	1	1
Singapore	3	3
Finland	2	1
Mexico	1	-
Canada	1	-

<sup>1)</sup> The breakdown of total number of employees by country is new for 2021 and earlier data is therefore not available

Short and long-term sick leave	2022	2021	2020
BioGaia AB	2.0%	2.3%	1.9%
Men	2.2%	3.2%	2.5%
Women	1.6%	0.4%	0.7%

- BioGaia AB has 1 employee in Mexico, 1 in South Africa and 3 in Singapore.
- A very small part of the organization's activities are carried out by people who are not employees.
- The total number of employees does not vary significantly during the year.
- Data is coming from a combination of HR and payroll systems.
- Data per employment type is not available for the BioGaia Group.

## New employee hires and employee turnover (GRI 401-1)

New employees <sup>1)</sup>	2022	2021	2020
BioGaia AB	13	(17)	(8)
Men	77% (10)	76% (13)	50% (4)
Women	23% (3)	24% (4)	50% (4)
<30 years old (%)	8% (1)	12% (2)	0% (0)
30-50 years old (%)	77% (10)	65% (11)	75% (6)
>50 years old (%)	15% (2)	24% (4)	25% (2)

<sup>1)</sup> Numbers of employees in parentheses.

Personalomsättning <sup>1)</sup>	2022	2021	2020
BioGaia AB	10% (10)	11.3% (11)	7.3% (7)
Men	8.7% (9)	3.0% (3)	3.1% (3)
Women	1% (1)	8.3% (8)	4.2% (4)
<30 years old (%)	0% (0)	0% (0)	0% (0)
30-50 years old (%)	6.8% (7)	3.0% (3)	5.2% (5)
>50 years old (%)	2.9% (3)	8.3% (8)	2.1% (2)

<sup>1)</sup> Numbers of employees in parentheses.

### Materiality and risks

BioGaia strives to promote a physically and mentally healthy environment for our employees. It is important for the well-being and motivation of employees, which also contributes to greater productivity and ultimately lower costs for BioGaia. Our Work Environment Policy lays the foundation for our efforts to create a safe and healthy workplace.

### Employee safety

During 2022, BioGaia took a holistic approach to the systematic working environment and further developed processes and procedures. A Safety Committee, consisting of employee and employer representatives from each office, met regularly to work together to create a positive and safe working environment and to identify opportunities for improvements related to both physical and psychological working environments. When taking up their new duties, new managers must routinely complete a short health and safety training course.

The systematic fire protection work was also reviewed and a new external partner was chosen to provide additional verification of the company's fire protection through training and practical exercises.

BioGaia routinely surveys the psychological and social work environment through regular anonymous pulse surveys, discussions between managers and employees and via regular performance reviews. See page 64 for more.

### Safety in production

BioGaia's subsidiary, BioGaia Production, is responsible for a large share of BioGaia's production which, together with BioGaia AB's laboratories, represents a substantial share of BioGaia's product development and manufacturing. Here, the risk of physical injury is elevated in comparison to the rest of the organisation.

The risk of accidents may increase if the company's employees are not properly trained for handling chemicals and/or machines. Furthermore, repetitive physical work may result in strain injuries.

BioGaia Production continuously works with improvements, for example by investing in equipment that minimises the risk of injuries and by endeavouring to rotate physical tasks among staff. Safety checks are carried out every day at BioGaia Production and deviations are addressed on a continuous basis. Health and safety representatives and the safety committee at BioGaia Production meet twice per year to discuss any incidents and accidents. No accidents took place at BioGaia Production in 2022.

### Employee safety in BioGaia's supply chain

The portion of BioGaia's production not conducted by BioGaia Production is performed by contract manufacturers, where the risk of poor working conditions cannot be controlled by BioGaia to the same extent as its own production. Safety and working conditions at external manufacturers are covered in the Code of Conduct that BioGaia's suppliers, including BioGaia Production, must sign.

### Promote health

BioGaia arranges recurring activities to improve employee health and sense of community. These could be various types of physical exercise or social events. For example, a relay race was held in August and a health challenge in the spring of 2022. During the year, a group of employees at BioGaia arranged various challenges every week to create a sense of community and belonging, which included everything from small competitions to shared breakfasts. The aim is to strengthen the company's culture and sense of community.

### Results for the year

Sick leave in 2022 decreased compared with previous years, from 2.3 percent to 2 percent. During the year, BioGaia group had 0 (0) injuries resulting in absence (LTI).

### Work-related injuries<sup>1)</sup> (GRI 403-9)

Work-related injuries resulting in absence	2021	2020	2019
Number of lost time incidents (LTI <sup>2)</sup> )	0	0	1
Number of incidents per 1,000,000 working hours (LTIF <sup>3)</sup> )	0	0	31
Degree of seriousness (days of absence per LTI)	0	0	5

1) Number of incidents. BioGaia group has never had a fatal accident.

2) Lost Time Incident (LTI) is an incident that results in loss of working hours.

3) Lost Time Incident Frequency (LTIF:  $(LTI \times 1,000,000) / (\text{average number of employees} \times 2,080 \text{ hours})$ ).

### Materiality and risks

BioGaia is an organisation that has employees with backgrounds from several different parts of the world. A survey from 2022 shows that we have employees from 32 different countries. A diverse and inclusive organisation is important for commercial success and for attracting qualified employees. A lack of diversity and gender equality in the workplace can lead to poor decision-making and performance as a result of potential group thinking, low employee loyalty, a lack of motivation and a discriminating workplace culture where employees are not happy.

### Work to combat discrimination

BioGaia strives to be a gender-equal company with zero tolerance for all forms of discrimination, bullying and harassment. The company's Diversity Policy is based on

Swedish anti-discrimination legislation, and a diversity plan makes this policy more concrete with measurable goals that are followed up every year. The action plan outlines what will happen if anyone is subjected to discrimination, bullying, or harassment. Additionally, employees can report discrimination incidents anonymously through the company's whistleblower function. During the year, BioGaia presented its work to combat discrimination to all employees.

### Results from the year

The targets BioGaia set in its action plan for discrimination and harassment have all been achieved, except for the inclusion of a module on equality and diversity in the leadership training programme. BioGaia aims to increase its efforts to communicate its diversity ambitions to external recruitment partners and managers. The employee survey for 2022 revealed no signs of discrimination and no incidents of discrimination were reported.

In 2022, BioGaia invested in a new tool to manage payroll mapping, which provides new opportunities to analyse employee salaries. The results of this year's payroll mapping showed very small deviations. There are no significant deviations in the company's salary structure with regard to discrimination<sup>1</sup>.

In 2022, BioGaia was again included on Allbright's green list, as one of 69 green-listed companies from a total of 339 assessed companies. Allbright is an organisation that ranks Swedish-listed companies, from best to worst, based on the number of women that are recruited into management positions.

### BioGaia's action plan for the 2020–2023 period contains the following objectives:

- Equal rights and opportunities in terms of work and development opportunities.
- As equal a gender distribution as possible.
- No one shall feel harassed, offended or bullied.
- No one shall feel discriminated against in the recruitment process or in the appointment of positions.
- Salary differences due to gender shall not exist.
- Diversity aspects shall always be included as a parameter in assessments and decisions.
- All employees shall be informed about and be well familiar with BioGaia's diversity policy so that they can participate in and accept personal responsibility for diversity work.

**ALLBRIGHT**

In 2022, BioGaia was again included on Allbright's green list.

<sup>1</sup> Grounds for discrimination are gender, gender identity or expression, ethnicity, religion or other belief system, functional impairment, sexual orientation and age.

<sup>2</sup> Allbright Foundation is a Swedish politically independent, non-profit foundation that promotes equality and diversity at the executive business level in Sweden. The foundation continually reviews executive management teams and Boards and actively works to influence decision-makers to increase the proportion of women in senior positions. The most equal companies are listed on Allbright's green list, the average ones on the yellow list and the male-dominated companies end up on the red list.

## Diversity and equal opportunities (GRI 3-3)

### Diversity of governance bodies and employees (GRI 405-1)

Age distribution	2022		2021		2020	
	Board of Directors	Executive Management	Board of Directors	Executive Management	Board of Directors	Executive Management
BioGaia AB - total	9	8	9	10	8	10
<30 years of age	0	0	0	0	0	0
30-50 years of age	4	3	4	5	4	3
>50 years of age	5	5	5	5	4	7

Gender distribution	2022		2021		2020	
	Men	Women	Men	Women	Men	Women
BioGaia AB - Board	67%	33%	67%	33%	62%	38%
BioGaia AB - Executive Management	50%	50%	60%	40%	60%	40%
BioGaia AB - all employees	37%	63%	32%	68%	32%	68%
BioGaia group	41%	59%	40%	60%	40%	60%

### Parental leave<sup>1)</sup> (GRI 401-3)

Parental leave at BioGaia AB <sup>1)</sup>	2022		2021	
	Men	Women	Men	Women
Percentage of employees in the reporting period that took parental leave, by gender	14% (5)	8% (5)	7% (2)	10% (6)
Percentage of employees that returned to work in the reporting period after parental leave ended, by gender	20% (7)	6% (4)	3% (1)	6% (4)
Percentage of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender	8% (3)	8% (5)	7% (2)	10% (6)
Percentage that return to work and retention rates of employees that took parental leave, by gender	14% (5)	12% (8)	7% (2)	10% (6)

<sup>1)</sup> All employees with children younger than eight years old are entitled to parental leave  
 Note: Numbers of employees in parentheses.



A close-up photograph of a person's hand reaching out towards a field of tall, golden-brown grasses. The sun is low on the horizon, creating a warm, golden glow and a lens flare effect. The background is softly blurred, showing more of the field and some green foliage. The overall mood is peaceful and natural.

# Healthy planet

A healthy planet is a prerequisite for human health and wellbeing. Many of the health problems we see in the world today can be linked to environmental pollution and unhealthy lifestyles. Therefore, working towards a healthy planet is a matter of course for a company like BioGaia whose purpose is to contribute to better health. BioGaia's code of conduct includes the principle of taking the planet into consideration in all decisions. To contribute to a healthier planet, we focus primarily on three sustainability issues: **packaging, ingredients, and transportation.**

# Climate change – one of the defining issues of our time

We want to take responsibility and work on reducing our greenhouse gas emissions, something that the company's stakeholders clearly demand and expect.

Active efforts to reduce our climate impact could lead to increased resilience and reduced costs. Global climate change also represents a physical risk for BioGaia that may affect the company's facilities and access to important raw materials.

## Climate target achieved for 2022 through the purchase of renewable electricity

BioGaia has few emission sources in scope 1 as the company only has a few of its own vehicles. BioGaia's main emissions in scopes 1 and 2 come from electricity use. Therefore, buying and investing in renewable electricity is the most effective measure to meet the science-based climate target. In order to reduce emissions, BioGaia buys renewable electricity for its operations. Since 2020, renewable electricity has been purchased for all premises in Sweden. Since 2021, renewable electricity has also been purchased for operations in Japan through separate certificates corresponding to electricity consumption.

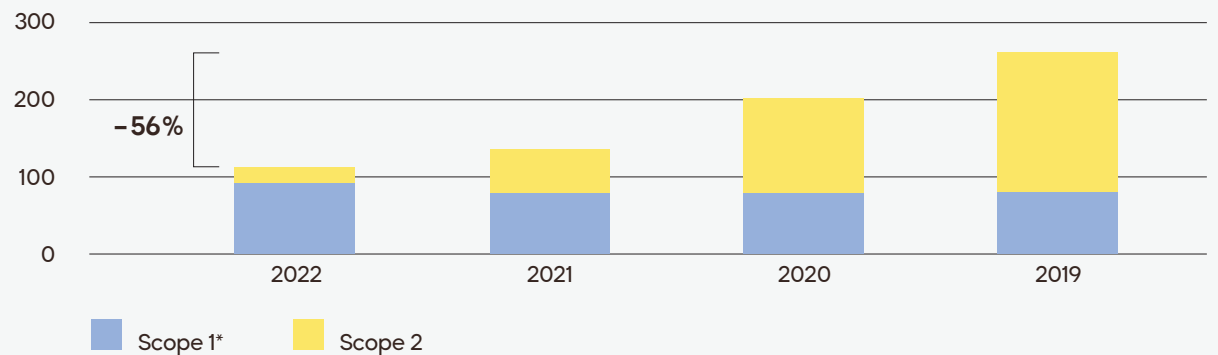
In 2022, BioGaia purchased renewable electricity certificates for both Japan and its recently acquired company in the United States. According to a market-based calculation of the company's emissions, by purchasing renewable electricity, BioGaia has reduced its emissions by 56 percent since 2019 (approx. 150 tonnes of CO<sub>2</sub>e). As a result, the target of a 46 percent reduction in emissions from 2019 was achieved in 2022.

To continue living up to its commitment, BioGaia will be required to source renewable electricity for all major buildings and premises it uses and owns. Purchasing these certificates promotes the expansion of renewable electricity in the markets in which BioGaia operates. In other countries where BioGaia has operations, such as Finland and the UK, employees either work exclusively from home or rent space in the offices of other organisations. Due to this, BioGaia has limited control and insight into how electricity is used at these locations. In any case, the electricity consumption attributable to this is comparatively very low.

BioGaia has committed to a science-based climate target to reduce its absolute scope 1 and 2 greenhouse gas emissions by **46 percent** by **2030** from a base year of **2019**.



Emissions from Scope 1 and 2, including the newly acquired subsidiary in the USA



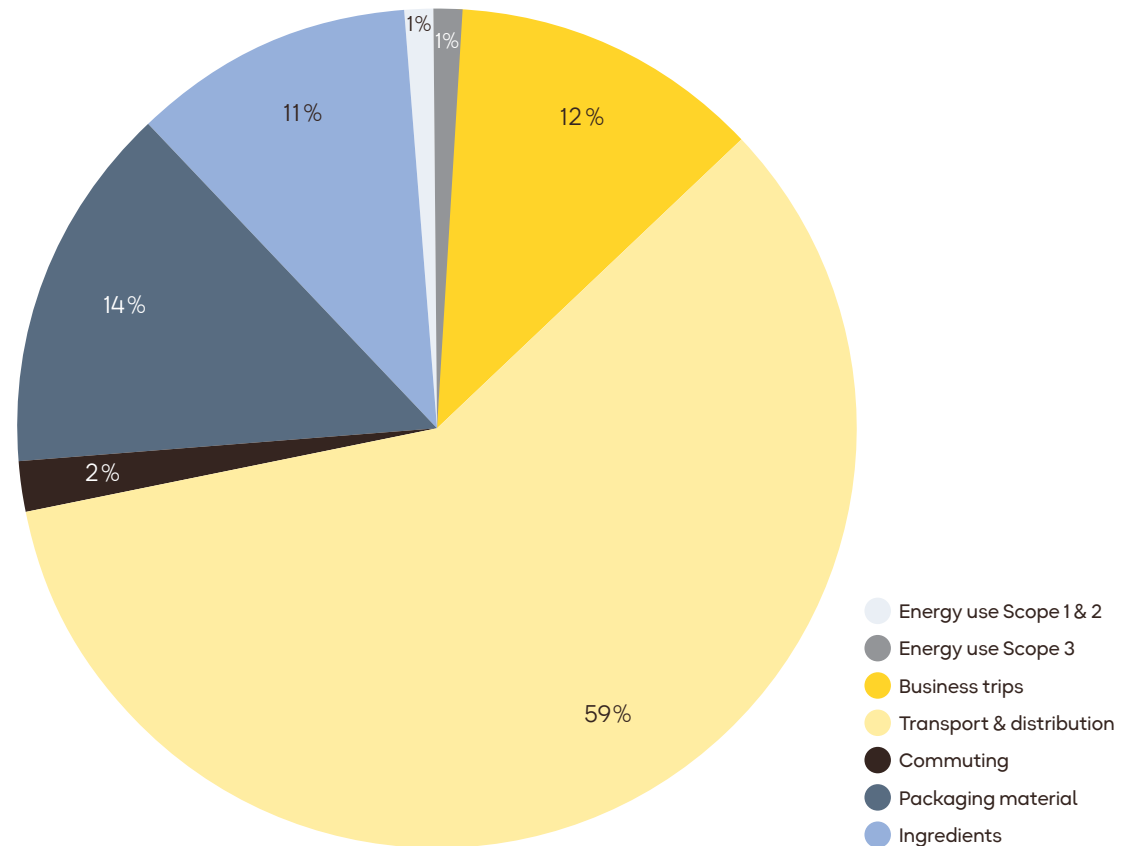
### Scope 3 emissions

Since most of the emissions arise in the value chain outside the organisation (Scope 3), it is particularly important that BioGaia's focus is on initiatives that reduce these emissions. The materiality assessment performed during the year confirmed that the company must focus on the three main emission sources i) packaging, ii) ingredients for products and iii) transportation. The initiatives undertaken by BioGaia in these emission sources can be seen on pages 72-77.

## Internal carbon price

In 2022, BioGaia introduced an internal carbon price to further drive operations in a more sustainable direction and to finance initiatives deemed to have a major impact on the reduction of global emissions. By introducing a cost for greenhouse gas emissions, the company must become even more conscious of how its decisions affect the company's emissions. BioGaia will base its support for impactful climate projects on an internal carbon price of USD 100 per tonne of carbon dioxide equivalents in Scope 1 and 2 and USD 10 for emissions in Scope 3 excluding emissions from distribution. Emissions from distribution are not included as the data on emissions from this source is uncertain as it depends on factors such as the transport methods used by BioGaia's distribution partners, over which BioGaia has limited control. For more information about the climate projects supported, see Community engagement on page 78.

## BioGaia's emission sources



Only a small percentage (2 percent) of the company's total greenhouse gas emissions arise from its own operation (such as our own vehicles), or indirectly through the energy used in the properties owned or rented by the company (electricity, heating or cooling), meaning Scope 1 and 2. The vast majority of emissions from operations arise in other parts of the value chain (Scope 3). Most of BioGaia's emissions are from transportation to distribution partners (approximately 60 percent). The production of ingredients and packaging materials also constitutes a large share of emissions (approximately 25 percent). Under normal circumstances, business travel also constitutes a large share of emissions (approximately 10 percent).

1) Distribution partners also refer to BioGaia's own subsidiaries. Additional significant emissions also occur when distribution partners ship goods to retailers and later to customers. In these instances, BioGaia has very limited control and insight, and, therefore, these emissions are not included in the climate calculations.

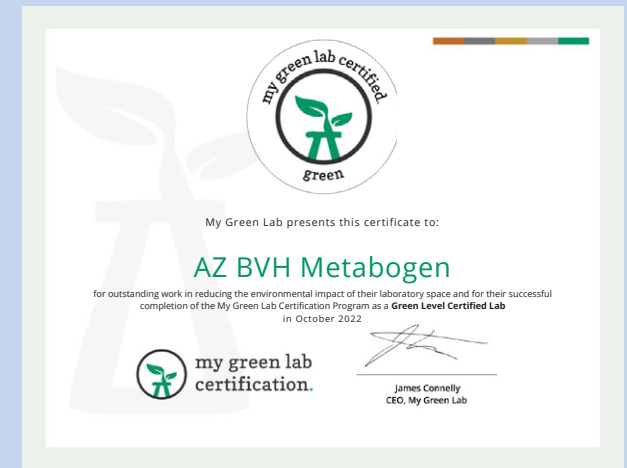
## Initiative for sustainable product development

### Lifecycle analysis of ingredients and packaging

The basis of our efforts to reduce the negative environmental impact resulting from ingredients and packaging is largely based on the results of the life-cycle analysis. This was carried out in 2020 according to the guidelines in ISO 14040 and ISO 14044. The work produced lifecycle data for the majority of the products' ingredients and packaging. In connection with the lifecycle analysis, a tool was developed to evaluate the environmental impact as a result of various changes to the products. The analyses not only calculate the products' impact on climate change but also other forms of environmental impact, for example, acidification and eutrophication (ReCiPe points).

### Checklist for more sustainable product development

In 2022, a checklist was developed for employees to use in the development of new products. The checklist must ensure that important sustainability parameters for ingredients and packaging are taken into account early on in the process.



## BioGaia's operations in Gothenburg awarded My Green Lab certification

In 2022, BioGaia's operations in Gothenburg, which are run by the subsidiary MetaboGen, took part in a programme to reduce the environmental impact of its laboratory activities relating to waste and chemicals management and energy and water use. A certificate at the highest green level was awarded by My Green Lab\* after an evaluation of the company's implemented improvements and to which degree the business had improved.

\* My Green Lab is a non-profit organisation that strives to improve social and environmental responsibility in laboratory environments. The organisation allows companies with laboratory environments to participate in a programme to reduce their environmental impact and subsequently receive a certification based on the degree to which they succeed in implementing the improvement measures identified. Depending on how many improvement measures a company manages to complete, companies can achieve different certification levels. A green certification is the highest certification level.



### Materiality and risks

According to the climate estimations, packaging (manufacturing and materials) accounts for 10 to 15% of the total climate emissions<sup>1</sup>. Additional negative impacts may arise if the packaging is not properly dealt with during final disposal. To minimise the environmental impact of the packaging, BioGaia must choose packaging solutions that have as little impact on the environment as possible – both from the manufacturing process and final use.

### Strategy for more sustainable packaging

Using more environmentally friendly packaging is a high priority for BioGaia and we continued to explore alternative packaging solutions during 2022. The goal is to identify packaging solutions that can be produced in a more sustainable manner, using more environmentally friendly materials and with a minimal environmental impact at the end-of-life of the product. This should be achieved without compromising the packaging's ability to safeguard the quality and shelf-life of the contents.

Once again, the company looked at ways of reducing packaging's environmental impact during the year. Based on this work, we established the following overarching goals:

- BioGaia shall strive to identify new packaging solutions that reduce our climate impact per dose and prioritise packaging solutions that offer the most significant impact.
- Sustainability is to be assessed in product development projects and during tenders for packaging solutions.
- BioGaia shall strive to only use recyclable or biodegradable packaging by 2030.
- All paper packaging used in production must have FSC certification or be verified to be recycled by 2025.

## Using more environmentally friendly packaging is a high priority for BioGaia and we continued to explore alternative packaging solutions during 2022.

### More environmentally friendly packaging from BioGaia's suppliers

Setting demands and establishing dialogue can reduce the environmental impact of packaging suppliers. Throughout the year, dialogues were held, and opportunities for improvement were identified. One supplier suggested a more sustainable biomaterial, but BioGaia has not been able to incorporate it into its products. Another supplier has identified the opportunity to increase the degree of mono-material in their existing packaging solution but has not yet implemented it. During 2023, BioGaia will follow up on the suppliers' proposals.

In 2022, BioGaia evaluated environmentally friendly packaging materials that not only can be recycled but also break down in nature. Unfortunately, the analysis showed that the material did not provide sufficient protection for the products. BioGaia will continue to review, improve and test new packaging options based on the new packaging strategy.

<sup>1</sup> Primary and secondary transport packaging is included when calculating emissions. Additional packaging material used when handling the products during shipment, such as pallets, stretch film, etc. is not included since sufficient information has not yet been collected.

### Materials<sup>1</sup> (GRI 301-1 & 301-2)

Materials used in tonnes	2022	2021	2020
Glass (tonnes)	258	251	230
Plastics – mainly PE (tonnes)	102	82	76
Paper (tonnes)	295	212	177
Aluminium (tonnes)	21	21	23
<b>Recycled input materials used</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>
Recycled glass (tonnes)	130	138	–
Recycled glass (%)	50%	55%	54%
Recycled aluminium (tonnes)	2.3	2.3	–
Recycled aluminium (%)	11%	11%	–

<sup>1</sup> The data is based on sales. Waste during production is not included. Data includes primary and secondary packaging as well as packaging used in intermediate processes.

Emissions from packaging materials	2022	2021	2020
Emissions from the production of packaging materials (tonnes CO <sub>2</sub> equivalents) <sup>2</sup>	839	731	647
Emissions, including end-of-life and transport	1036	907	812
Grams CO <sub>2</sub> equivalent per dose <sup>2</sup>	1.2	1.2	1.3
Grams CO <sub>2</sub> equivalent per dose, including end-of-life and transport	1.5	1.5	1.6

<sup>1</sup> For further information about the emissions calculations, refer to the section "Environmental impact of operations" on page 21.

<sup>2</sup> Data revised between the 2020 and 2019 reports due to new results from the 2020 life-cycle assessment.

### Packaging material produced in our own production company

BioGaia Production works to minimise the use of unnecessary packaging material. For example, the stretch film used consists of 51 percent recycled plastic, which means 19 percent lower climate impact than stretch film without recycled material. Additionally, it is completely recyclable.

### Certified paper from responsibly managed forests (FSC-certified material)

In 2022, BioGaia ensured that the majority of its outer packaging (secondary packaging) is made of cardboard from responsibly managed forests with environmental, social and financial benefits. From 2023, all products produced by BioGaia Production will use certified cardboard.

In 2022, BioGaia also ensured that an additional contract manufacturer provided BioGaia's products with certified cardboard for the products' outer packaging. BioGaia estimates that 74 percent of the company's outer packaging will come from certified responsibly managed forests in 2023.



## More sustainable transport packaging when selling directly to consumers

During the year, BioGaia partnered with a provider called Woola to use more environmentally friendly transport packaging for direct distribution to consumers in Sweden and the UK. Through Woola, BioGaia will use surplus wool instead of bubble wrap to protect products when sending them via mail.

The sheep wool is residual waste from local farmers in Estonia. If the wool were not used, it would have been disposed of as waste and either incinerated or buried.

The use of wool instead of plastic reduces the risk of microplastics in nature and the dependence on fossil fuels. Moreover, the paper in the envelopes used to send products will be manufactured from recycled paper.

1) The manufacturing of wool is considered to have a minimal environmental impact since the material would have been discarded if BioGaia had not used it. The manufacturing process has very few steps and is also deemed to have a very small environmental impact. Woola promises to provide us with a lifecycle report that BioGaia can use to prepare a more detailed calculation in the future.

### Materiality and risks

According to climate estimations, the manufacturing of raw materials accounts for approximately 10 percent of BioGaia's total emissions. Some of the ingredients used by BioGaia in its products, such as palm oil are associated with negative effects. In addition to its impact on climate change, palm oil is also associated with deforestation, a reduction in biodiversity, human rights violations and/or indecent working conditions. It is therefore imperative for BioGaia to select ingredients with less environmental impact. In addition, it is imperative to evaluate and make relevant demands on its suppliers and subcontractors from whom BioGaia purchases ingredients. BioGaia shall not use suppliers that disregard environmental impact or human rights.

### Governance

BioGaia strives to improve its products from a sustainability perspective. The company's ambition to integrate social and environmental considerations into product development is documented in its internal Code of Conduct. A new process was introduced by BioGaia in 2022 to avoid purchasing ingredients from suppliers who do not comply with the company's code of conduct.

### Phasing out of palm oil

In our lifecycle assessment, palm oil was identified as the ingredient with the greatest impact on people, the planet and biodiversity. Therefore, BioGaia is working towards phasing out palm oil completely. Based on our 2019 sales figures and lifecycle data analysis conducted in 2020, the phasing out of palm oil from our products is estimated to result in a total reduction of more than 150 tonnes of CO<sub>2</sub>e per year.

It is BioGaia's goal to eliminate palm oil from its products by 2025. Since palm oil is sold in over 100 markets with different laws, rules, and distributor interests, phasing out palm oil takes time. Careful planning is required to avoid a situation

where fully functional products must be discarded during the transition due to complex regulations in certain markets.

BioGaia recruited someone specifically to work on phasing out palm oil. At the end of 2022, palm oil-free variants of our tablet product range were made available worldwide. In the European market, we also began selling a new formulation of our drops without palm oil. For regulatory reasons, an alternative recipe for palm oil-free drops has been developed for markets outside the EU. Sales of this product are expected to start in 2023.

Palm oil is being phased out as planned. In 2022, 27 percent (5) of the drops sold in Europe and 60 percent (26) of all tablets BioGaia sold were free from palm oil. Once the new products have been on sale for a full year, this percentage will increase. As we move forward, we will be replacing products in markets that are more complex in terms of regulations with long lead times, meaning the process to replace products will take longer. Additionally, the European phase-out of drops has been slightly delayed due to distribution partners' desire to launch a palm oil-free variant with a new recipe update at the same time. Both changes should be introduced at the same time, in this case, to reduce workload and lower the risk of having to discard the packaging. For the palm oil used today, BioGaia buys credits from RSPO-certified independent small-holders in accordance with RSPO's Book and Claim system.

Based on our 2019 sales figures and lifecycle data analysis conducted in 2020, the phasing out of palm oil from our products is estimated to result in a total reduction of more than 150 tonnes of CO<sub>2</sub>e per year.

BioGaia's goal is that all products sold by the company will be palm oil free by 2025.

### Emissions (GRI 305-1, GRI 305-4, BSD4 & BSD5)<sup>1)</sup>

Emissions from ingredients	2022	2021	2020
Tonnes CO <sub>2</sub> equivalents	850	744	637
Grams CO <sub>2</sub> equivalent per dose	1.2	1.3	1.2

<sup>1)</sup> For further information about the emissions calculations, refer to the section "Environmental impact of operations" on page 21.

### Status for phasing out palm oil in products<sup>1)</sup> (BSD 8)

Total sales of palm oil-free products during the year	2022	2021
Amount of tablets sold without palm oil vs total tablets sold (%)	60%	26%
The amount of drops sold without palm oil vs total drops sold (%)	27%	5%

<sup>1)</sup> Nor does data take into account products containing vitamin D with traces of palm oil.

### Materiality and risks

According to climate projections, transportation accounts for more than 70 percent of BioGaia's total emissions. Roughly 60 percent of these emissions are from the transportation of products to distribution partners. 10 percent of this amount is from transportation to our subsidiaries. A little over 10 percent of emissions are from business travel. By reducing our travel, BioGaia can reduce the company's emissions and costs. As we have seen, particularly in 2022, energy and fuel prices can be highly volatile. Making the company less dependent on these costs means it is less affected by these fluctuations.

### Distribution

During the year, we began reviewing what opportunities exist to reduce emissions from distribution. Using boats instead of flights to transport goods has been identified as a way to reduce emissions, and the company is exploring this option for its direct markets. The distribution process to external distributors is more challenging since it is usually the distribution partners themselves who choose the method of transport, not BioGaia. As one initiative to influence distribution partners' choice of transport method, we have included a statement in the company's official recommendations for transport methods. This statement states that BioGaia encourages partners to evaluate and use the most environmentally friendly method. It is also stated that significant improvements can usually be achieved by substituting air freight for trucks or boats.

### Business travel

BioGaia's management team has developed and adopted a travel directive to reduce emissions from business trips. Guidelines for employee travel are outlined in the directive. This directive aims to increase employee safety and reduce costs and climate impact of business trips. It emphasises the importance of choosing train journeys over air travel to reduce climate emissions. BioGaia also plans to reduce emissions from business trips by 30 percent during the period 2021-2025 compared with 2019.

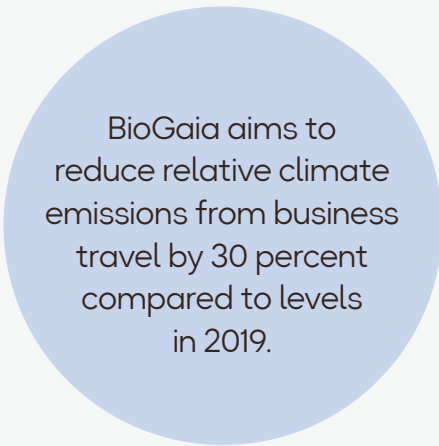
During 2022, as the effects of the pandemic subsided and travel became possible again, business travel also increased, and emissions are expected to increase as well. The level of emissions has not reached the same level as before the pandemic. In 2022, emissions from travel were 14 percent lower than in 2019 and 35 percent lower per sales volume. This means that BioGaia achieved its goal in 2022 to reduce emissions by more than 30 percent compared to 2019. This is largely due to increased sales in 2022.

During the year, BioGaia also chose to change its travel agency. Among many things, the newly appointed supplier should make it easier for employees to choose train journeys. In addition, the supplier is considered to be able to provide better and more regular data on emissions from travel, which can allow a better and more frequent analysis of how the company performs in relation to set targets.

### Commuting

BioGaia introduced a flexible work model in 2021 that allows employees to work from home two days a week. As a result, there have probably been fewer emissions generated from travel to and from work. However, a reduction in emissions cannot be seen in the data compared to 2019. This is mainly due to the fact that the group has more employees.

A newly conducted employee survey was also carried out during the year, providing more detailed and updated data on emissions from employees' trips to and from work. This means previous years' data regarding emissions are not entirely comparable.



BioGaia aims to reduce relative climate emissions from business travel by 30 percent compared to levels in 2019.

## Climate impact (GRI 3-3)

Tonnes CO <sub>2</sub> e. emissions by company	Scope 1 (GRI 305-1)				Scope 2 (GRI 305-2)				Scope 3 (GRI 305-3)			
	2022	2021	2020	2019	2022	2021	2020	2019	2022	2021	2020	2019
BioGaia AB	0	0.1	0	0	5.1	5	2	9	6 760	6 502 <sup>2</sup>	1 605	2 558
BioGaia's subsidiaries	93.5	75 <sup>1</sup>	9	9	16.2	0.2	30	57	695	81	55	52
<b>Total emissions for BioGaia group</b>	<b>93.5</b>	<b>75</b>	<b>9</b>	<b>9</b>	<b>21</b>	<b>6</b>	<b>32</b>	<b>66</b>	<b>7 455</b>	<b>6 584</b>	<b>1 661</b>	<b>2 609</b>

1) Increase from previous years is a result of updated calculations for company cars and refrigerant leakage.

2) Increase from previous years is mainly a result of updated calculations of distribution.

Tonnes CO <sub>2</sub> e. emissions by category	2022	2021	2020	2019
<b>SCOPE 1 (GRI 305-1)</b>				
Company cars	93	64	-	-
Refrigerant leakage	0	12	-	-
<b>SCOPE 2 (GRI 305-2)</b>				
Electricity, cooling and heating – market based <sup>1)</sup>	22	6	36	69
Electricity, cooling and heating – location based	199	121 <sup>7</sup>	58	56
<b>SCOPE 3 (GRI 305-3)<sup>2)</sup></b>				
Electricity, cooling and heating – market based <sup>1)</sup> not included in Scope 2 (3)	27	43	-	-
Emissions from company cars – Scope 3	28	20	-	-
Product ingredients (1, 10)	850	744	637	644
Product packaging <sup>3)</sup> (1)	839	731	647	696
Outbound transportation <sup>4)</sup>	4 477	4 764	-	-
Handling of packaging at the end of the lifecycle (12)	119	102	102	108
Transportation of raw materials (4)	79	74	63	69
Commuting (7)	134	59	33	143
Business travel (6)	891	53	170	939
Other (office supplies and office waste as well as emissions from rented properties) <sup>5)</sup> (1, 5, 8)	11	15	15	14
Total emissions in BioGaia group excl. outbound transportation	3 091	1 901	1 702 <sup>6)</sup>	2 684
<b>Total climate impact included in BioGaia's internal CO<sub>2</sub> cost (excl. outbound transportation)</b>	<b>3 091</b>	<b>1 901</b>	<b>-</b>	<b>-</b>
<b>Amount paid for CO<sub>2</sub>e emissions (USD)</b>	<b>41 500</b>	<b>26 300</b>		
<b>Total climate impact incl. outbound transportation</b>	<b>7 570</b>	<b>4 764</b>	<b>-</b>	<b>-</b>

1) Includes Scope 2 and 3 emissions from electricity, heating and cooling and from company cars.

2) The type of Scope 3 category is shown in parentheses.

3) Includes emissions from both direct and intermediate packaging used when producing products.

4) New item for 2021, which was found to have a significant impact on BioGaia's emissions. Of these, 4,022 tCO<sub>2</sub>e is related to outbound transportation to distribution partners and 458 tCO<sub>2</sub>e to outbound transportation to subsidiaries.

5) Prior to 2021, the item "Other" included office supplies and cars owned and is therefore not comparable with previous years.

6) Total emissions in 2020 amounted to 1,702 tonnes of CO<sub>2</sub>e. The sum of 1,703 presented in the table is due to a rounding error.

7) During reporting in 2022 an error was identified in the data for estimated location-based emissions in 2021 and this was corrected. Location-based emissions in 2021 were 121 CO<sub>2</sub>e and not the reported figure of 59 CO<sub>2</sub>e. Location-based emissions in 2020 and 2019 are much lower as these were based on estimates and not actual data.

## Calculation methods

- The calculation method was further refined in 2022, by updating data for certain packaging and providing more detailed data for the type of transportation used for distribution of goods. This means the figures differ from what has been reported in previous years.
- Emissions have been calculated using the Greenhouse Gas Protocol's guidelines.
- Average emissions per employee were 2022 15 tCO<sub>2</sub>e/person excluding distribution and 37 tCO<sub>2</sub>e/person including distribution.
- BioGaia uses 2019 as the base year for following up emissions.
- The emission factors used normally include the following greenhouse gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. The emission factors used are presented on page 45.
- BioGaia applies operational control as the consolidation approach for emissions defined in the GHG Protocol Corporate standard.

# Community engagement

As a value-driven organisation, BioGaia believes strong community involvement goes hand in hand with deliberate sustainability work. BioGaia is involved in and supports a number of organisations focused on areas with links to BioGaia's business.



# PAR Foundation

In 2017, BioGaia founded the Foundation to Prevent Antibiotic Resistance, also known as the PAR Foundation. PAR is an independent foundation with the aim of preventing antibiotic resistance through support for research, education and information activities. Antibiotic resistance is considered one of the world's main threats to human health. Antibiotic resistance is a major threat that threatens the entire modern healthcare system when seemingly mild diseases or wounds and standardised interventions lead to life-threatening infections. Since its inception, the PAR Foundation has distributed a total of SEK 12.39 million to seventeen different projects globally.

According to the World Health Organisation (WHO), the overuse and misuse of antibiotics in healthcare, livestock and food

production has created a real threat to humanity. A synchronised global action plan is required to avoid a post-antibiotics era when common infections may again be fatal. Greater awareness of public health measures that can improve public health is necessary if WHO is to maintain the efficacy of antibiotics today and tomorrow.

The SEK 2.9 million that BioGaia set aside for the foundation during 2022 supports projects to prevent infections in the elderly. Additionally, it enables education and information projects in Africa, the UK, and India aimed at increasing knowledge about antibiotic resistance prevention.



"Since its inception, the PAR Foundation has distributed a total of SEK 12.39 million to seventeen different projects globally"



## Children's Mission Philippines

In 2022, BioGaia donated SEK 500,000 to the Children's Mission Philippines (CMP) to finance efforts related to health and nutrition, education and community development as well as humanitarian aid. As a result of the pandemic, the Philippines have experienced particularly difficult times in recent years. Among other things, the support has been used to combat malnutrition in children under the age of six, conduct medical checks, conduct care visits aimed at supporting children's health, provide pre-postnatal care for mothers, and contribute to maternal and child health care in particularly poor areas of the country. The organisation also provides basic education to poor children, and, during 2021 and 2022, it provided food and supplies to families affected by Typhoon Odette. Additionally, the organisation also runs schools and orphanages and offers welfare programs to poor women and their families.

# Panzi Hospital

Through the organisation Friends of Panzi, BioGaia supports Dr Denis Mukwege, who received the Nobel Prize in 2018, and his work at the Panzi Hospital in the Democratic Republic of Congo. In 2022, this support amounted to SEK 100,000. Over the years, the Panzi Hospital has helped more than 50,000 women and child rape victims with their physical injuries and with building new lives. Additionally, Panzi offers maternity care, family planning, and healthcare services, for example, the daily lives of premature babies and undernourished children.



# Climate Transformation Fund

Since 2013, BioGaia has purchased carbon offsets for the company's emissions. However, in 2022 the company decided to support the Climate Transformation Fund to maximise the impact of its climate investments. BioGaia's support for the fund is based on an internal CO<sub>2</sub> cost. For more information about this, see page 71.

The fund focuses on long-term global impact, and its intention is to support the most cost-efficient and sustainable climate solutions to achieve net zero emissions worldwide. The fund supports both new and untried technology, including projects that work with methods to sustainably store carbon (Carbon Capture System, CCS), advocacy and policies to reduce emissions, and the scaling up of successful, proven solutions like sustainable projects that restore and protect nature.

Each year, the fund selects a number of projects related to carbon removal, decarbonisation, and restoring and protecting nature that have the potential to reduce emissions in the short, medium, and long term. By not focusing solely on projects that can provide climate offset credits, the fund can also support other types of projects needed to achieve its Sustainable Development Goals. An advisory group with extensive experience in climate change selects projects based on a number of criteria.

BioGaia will provide support in line with the internal carbon price set for emissions estimated in 2021 and beyond. In 2022, BioGaia invested USD 26,300 in the fund and, for its 2021 emissions, it will invest USD 41,500 in 2023.



## Negative emissions – Husk, Cambodia

The husks left from rice cultivation are either burned or left to decompose, which releases the carbon stored in the plant. Instead, Husk in Cambodia creates biochar from rice husk, which stores carbon for a long time. Together with nutrients, organic farmers use this biochar as a fertiliser, which restores soil health and increases yields. We are supporting HUSK in building its second biochar plant. The foundation's model increases farmers' incomes, restores soils, and reduces CO<sub>2</sub> emissions. HUSK has significant potential to scale up, but to do this, it needs more customers to obtain its carbon separation certification.



## Protecting and restoring nature – Warsi, Indonesia

The destruction of rainforests to make way for palm oil plantations or grazing animals poses a serious threat. A key aspect of solving the climate crisis is halting deforestation. Warsi in Indonesia helps local communities obtain forestry permits so that they have legal ownership rights and can prevent their land from being felled. Climate The Transformation Fund supports them in establishing new projects and protecting approximately 40,500 hectares of land through community ownership in four villages. More than 700,000 tonnes of CO<sub>2</sub> are estimated to be prevented by the project.

Offering local communities the right to their own land is one method that has been successful in reducing deforestation. Warsi has extensive experience helping local societies obtain forest licenses to protect their land. In addition, they have been a partner of Rainforest Foundation Norway for many years, one of the world's leading non-governmental organisations that work to protect rainforests. Providing funding for this project enables Warsi to expand into new areas of Indonesia.



# Sustainability Governance

## Governance

The Board of Directors is ultimately responsible for the company's sustainability performance. The CEO reports on the progress of the company's sustainability work at every Board meeting.

In 2020, BioGaia established a Sustainability Committee comprising representatives from across the company, including a Board member and the CEO. This Committee's work is headed by BioGaia's Sustainability Manager and the Committee meets four times per year. During 2022, the Committee focused on the overall sustainability strategy, and its stated targets for managing environmental impact with a particular focus on the company's packaging, products and transportation. Additionally, the Committee focused on the ambitions for this year's Sustainability Report and how it will be integrated into the annual report. In addition to the meetings in the sustainability committee, management and key individuals in the company have also been involved in updating the company's materiality assessment. For more information about how the company is governed, refer to the Corporate Governance Report.

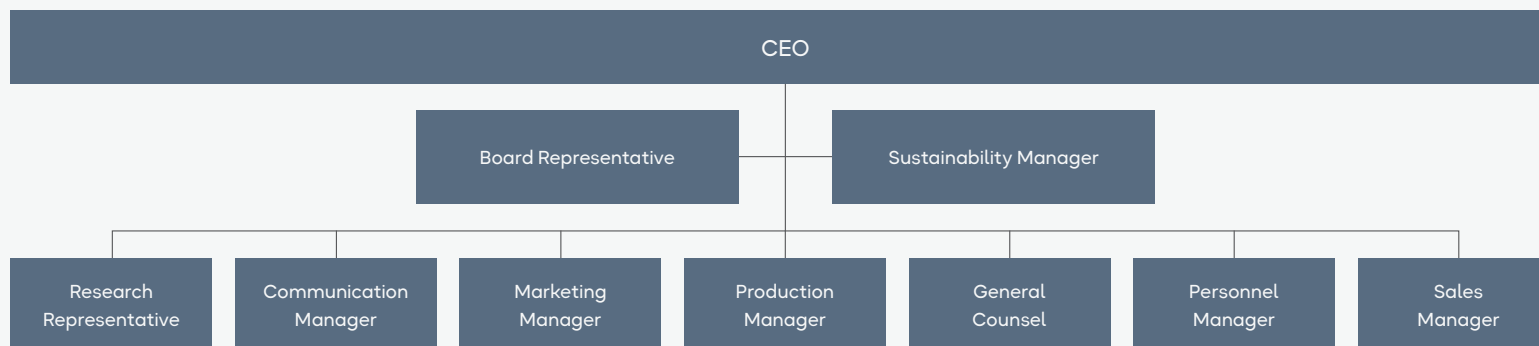
## Governing documents

BioGaia has an internal Code of Conduct that provides overall guidelines and policies for how the company is to be operated and how sustainability is to be integrated into operations. The company's policies are reviewed and approved every year by the Board. BioGaia also has several directives that are approved by the CEO and/or Executive Management. It is mandatory for all new employees to review all of the company's policies and directives as part of their on-boarding. Anti-corruption training also includes that employees confirm that they have read and undertake to comply with the Code of Conduct and policies for anti-corruption and conflicts of interest. All policies and directives are available on BioGaia's intranet.

## BioGaia has the following policies and directives:

- Code of Conduct
- Anti-Corruption Policy
- Conflicts of Interest Policy
- Insider Trading Policy
- Financial Policy
- Work Environment Policy
- Diversity Policy
- Recruitment Directive
- Data Protection Policy
- Data Integrity Directive
- IT Security Directive
- Communication Policy
- Marketing Directive
- Travel Directive
- Supplier Code of Conduct
- Distributor Code of Conduct

## Sustainability committee:



# Materiality assessment

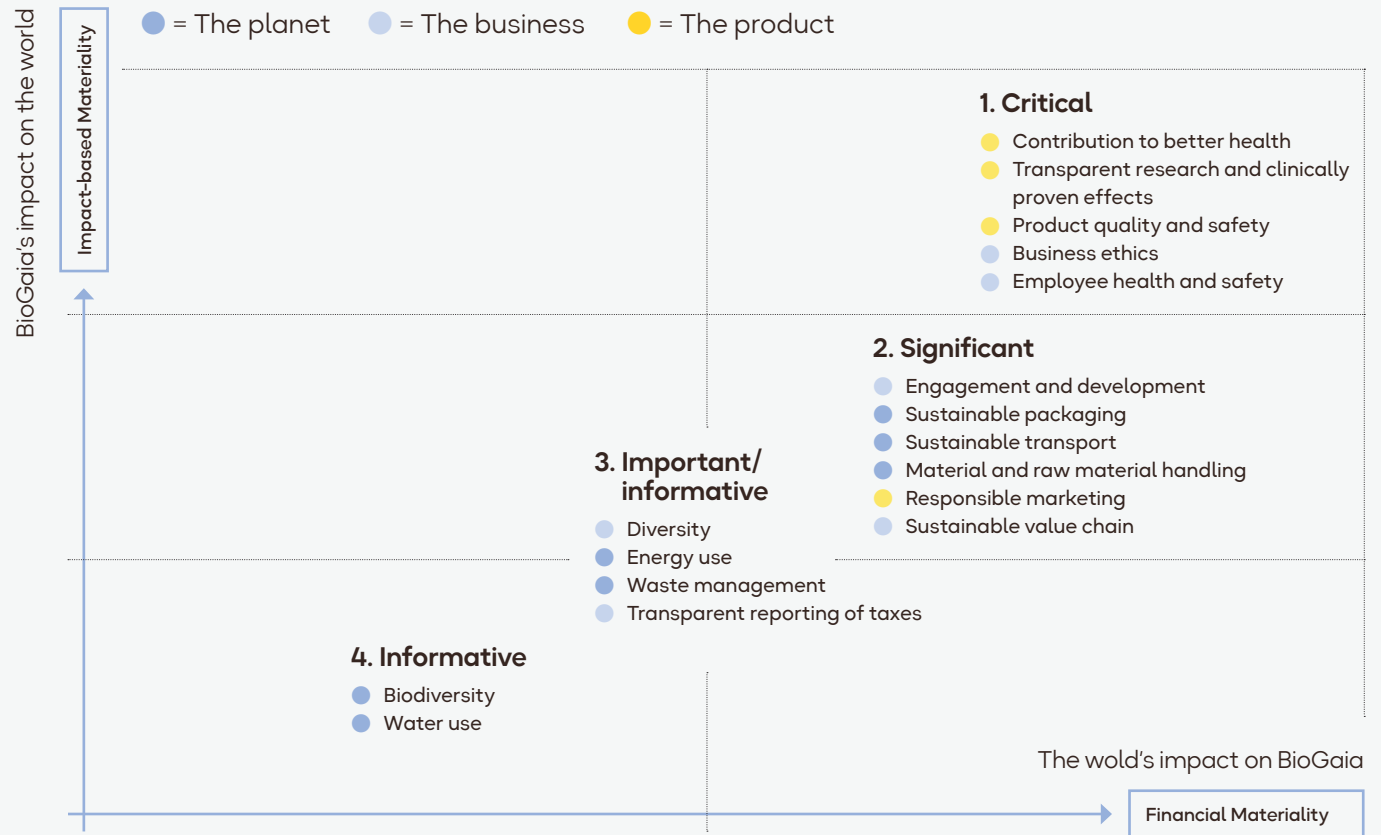
During the year, BioGaia updated its materiality assessment to further develop and evaluate its sustainability strategy. In accordance with forthcoming EU directives, double materiality was evaluated, meaning what impact the company has and what the company is impacted by.

The analysis was performed with an initial review of issues deemed important by stakeholders. This involved an assessment of the business environment to identify future risks and opportunities for the company. In addition, stakeholder dialogue was conducted through surveys of customers/distribution partners and employees, reviews of ongoing consumer dialogues, interviews with stakeholders, reviews of investors' assessments of BioGaia's sustainability efforts, and reviews of sustainability reporting frameworks (including GRI, SASB, and UN Sustainable Development Goals) and reports.

Afterward, the sustainability issues that were identified in the initial analysis were graded in discussions with executive management to ensure that only topics relevant to BioGaia's operations were considered.

## Impact analysis

A detailed analysis of each issue was conducted using three criteria - scope, severity, and likelihood - in order to evaluate how the company impacts the world around it (materiality of impact). Based on the degree, scope, and remediability of the impact, severity was evaluated. Furthermore, to ensure the company's specific circumstances were also taken into account, an assessment was also conducted of the company's capacity to influence the result and the likelihood that such action would influence the outcome. The analysis was performed by the Sustainability Manager based on the



available data. Key individuals from various departments in the organisation also provided input by assessing each issue on the basis of the criteria named above. They also took part in the workshop where the results were confirmed.

## Financial materiality

Each member of the management team assessed financial materiality using the results of the impact analysis, a summary of stakeholder dialogues (data from surveys or other communication) and other relevant data. Each member's overall results were then presented at a workshop where both BioGaia's impact on the surrounding world and the surrounding world's impact on BioGaia were discussed and confirmed.

## Results and next step

The work identified four groups of areas with different priorities: critical, material, important and less material. The graph above illustrates all of the issues grouped into the different areas.

The first group, with issues categorised as critical, includes: contributions to health, transparent research with proven products, product quality and safety, employee health and safety, and business ethics. These issues were considered to be critical for the business' financial strength and ability to have a positive impact on society.

# Stakeholder engagement

The second group contains issues considered material since they have or may have a significant impact on the surrounding world or BioGaia's operations over time. This group includes the following issues: employee engagement and development, responsible marketing, sustainable value chain as well as environmental impact from the areas that in climate calculations were shown to have a greatest climate impact: transportation, ingredients and packaging.

The third group consists of important issues that will be managed and reported, but that will not be pursued with the same priority as the first two groups, since these are not considered to have the same level of impact on the surrounding world and the company's operations. These topics include diversity, energy management, waste management, and transparent reporting of taxes (which will be included in business ethics reporting).

The fourth group is categorised as less material. This group includes: biodiversity and water consumption, which are considered less material at the current time. These topics will continue to be monitored as the degree of materiality for these topics may change if operations develop in the future and if new information about impact in the value chain is identified and is found to be material.

On the basis of the results of the materiality assessment, the organisation, with better understanding and support, will further develop the action plans for each area through concrete initiatives and goals.

In order to achieve our goals and ambitions, we must involve and work closely with our stakeholders. During the work on the updated materiality analysis targeted dialogues were conducted with prioritised stakeholders, which are defined as those deemed to have the greatest influence on, and interest in, BioGaia as well as the parties BioGaia has the greatest influence and impact on.

Stakeholder	Prioritised issues	Dialogue type
Consumers	<ul style="list-style-type: none"> <li>- Safe products</li> <li>- Products with positive health effects</li> <li>- Products containing sustainable ingredients</li> </ul>	Direct, ongoing dialogue with consumers via social media and email.
Owners/shareholders	<ul style="list-style-type: none"> <li>- Returns and dividends</li> <li>- Value creation</li> <li>- Reliable and responsible operations</li> <li>- Climate change</li> </ul>	Quarterly reports, capital market days, investor presentations.
Employees	<ul style="list-style-type: none"> <li>- Skills development and career path</li> <li>- Healthy working environment</li> <li>- Non-discrimination</li> </ul>	Close dialogue between employees and managers, regular performance reviews, internal conferences, employee surveys.
Suppliers	<ul style="list-style-type: none"> <li>- Long-term and evolving collaboration</li> </ul>	<p>Direct and ongoing dialogue via the Sales, Marketing and Operations departments.</p> <p>Discussions with suppliers in connection to sustainability data requests.</p>
Distribution partners	<ul style="list-style-type: none"> <li>- Evolving collaboration</li> <li>- Business ethics</li> <li>- Climate change</li> </ul>	<p>Direct and ongoing dialogue via the Sales and Marketing departments as well as BioGaia's quality department and department that handles regulatory issues</p> <p>Dialogues about BioGaia's distributor Code of Conduct and replying to distributor questionnaires such as how the company works with sustainability.</p> <p>Surveys of selected distribution partners in 2022 focused on which sustainability issues they consider most material</p>
Researchers	<ul style="list-style-type: none"> <li>- Independent research projects</li> <li>- Evolving collaboration</li> </ul>	Direct and ongoing dialogue via the research department.
Authorities	<ul style="list-style-type: none"> <li>- Regulatory compliance</li> </ul>	Dialogue with authorities either directly or through national and/or international industry organisations.
Future generation	<ul style="list-style-type: none"> <li>- Climate change</li> <li>- Existential risks</li> </ul>	It is not possible to have a direct dialogue with future generations, but they play an important role as stakeholders. Therefore, in the materiality analysis, the company's potential impact on future generations has been highlighted. It has been emphasised that an issue that has a limited impact today but that will affect several generations in the future, in fact, has a wide-ranging impact.

# Auditor's report on the statutory sustainability report

To the general meeting of the shareholders in BioGaia AB (publ), corporate identity number 556380-8723

## **Engagement and responsibility**

It is the board of directors who is responsible for the statutory sustainability report for the financial year 2022-01-01-2022-12-31 and that it has been prepared in accordance with the Annual Accounts Act.

## **The scope of the audit**

Our examination has been conducted in accordance with FAR's standard RevR 12 The auditor's opinion regarding the statutory sustainability report. This means that our examination of the statutory sustainability report is substantially different and 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.

## **Opinion**

A statutory sustainability report has been prepared.

Stockholm March 24, 2023

Deloitte AB

Jenny Holmgren  
Authorized Public Accountant

# GRI index

Declaration of use: BioGaia has reported in accordance with GRI standards for the period 1 January 2022 to 31 December 2022. **GRI 1 use:** GRI 1: Foundation 2022

Applicable **GRI Sector Standard:** No applicable sector standard was available on the date for publication of the 2022 report

GRI Standard	Disclosure	Page number(s)	Comment
GRI 2: General Disclosures 2021			
The organization and its reporting practices			
2-1	Organizational details	GRI Index	The Parent Company BioGaia AB has its head office in Stockholm. BioGaia AB, BioGaia Production AB, MetaboGen AB, BioGaia Invest AB and BioGaia Pharma AB are located in Sweden. BioGaia Biologics Inc and BioGaia USA, LLC are based in the USA, BioGaia Probiotics Canada inc. is based in Canada, BioGaia UK Limited is based in the UK, BioGaia Finland Oy is based in Finland and BioGaia Japan Inc is based in Japan.
2-2	Entities included in the organization's sustainability reporting	GRI Index	The report covers the whole BioGaia group but when data has not been available for all subsidiaries it is noted in the text or tables in the report. The sustainability impact of products sold by BioGaia USA (Everidis) that were not developed by BioGaia is not included in any reported data and key ratios since information about the impact of these products has not yet been compiled. All companies in the group are listed under note 14.
2-3	Reporting period, frequency and contact point	GRI Index	Annual reporting, the contact point is the Sustainability Manager Jonathan Gromark, jg@biogaia.se
2-4	Restatements of information	At the end of the GRI Index	
2-5	External assurance	GRI Index	The report was examined by the auditor in accordance with FAR's auditing standard RevR 12 but not reviewed by a third party.
Activities and workers			
2-6	Activities, value chain and other business relationships	p. 48	
2-7	Employees	p. 63-65	
2-8	Workers who are not employees	GRI-Index	BioGaia was unable to total the quantity of consulting services used in 2022 as FTEs but the hours are considered non-significant relative to employees.
Governance			
2-9	Governance structure and composition	GRI-Index & p. 81	The Board of Directors is ultimately responsible for the company's sustainability performance. The governance of BioGaia is conducted through the General Meeting of Shareholders via the Board and the CEO. For more information about BioGaia's governance structure, see the corporate governance report found in BioGaia's 2022 Annual Report. Information about the Board members' other positions and commitments is available at BioGaia.com - Investors - Corporate governance - Board of directors.
2-10	Nomination and selection of the highest governance body	GRI-Index	The Board of Directors is BioGaia's highest governance body. For more information about BioGaia's governance structure, see page 81 and in the corporate governance report.
2-11	Chair of the highest governance body	GRI-Index	The Board Chairman is not a senior executive at BioGaia. For more information about BioGaia's governance structure, see the corporate governance report found in BioGaia's 2022 Annual Report.
2-12	Role of the highest governance body in overseeing the management of impacts	GRI-Index	The Board monitors and follows up the financial performance, forms the vision, establishes strategies and sets targets. The Board's report on internal control over financial reporting for the financial year 2022 is provided in the corporate governance report, which can be found in BioGaia's Annual Report.
2-13	Delegation of responsibility for managing impacts	GRI-Index	The Board has established instructions for the CEO that, among other things, regulate management and development of the company and the provision of reports and decision data to the Board. Reporting on the company's impact on the surrounding economy, society or the environment is done when deemed necessary and four times a year via the sustainability committee.
2-14	Role of the highest governance body in sustainability reporting	GRI-Index	The Board of Directors is ultimately responsible for the company's sustainability performance. The CEO reports on sustainability issues at every Board meeting. One Board meeting each year has a particular focus on sustainability issues. BioGaia has established a Sustainability Committee comprising representatives from across the company, including a Board member and the CEO. This work is headed by BioGaia's Sustainability Manager. The board reviews and approves both the annual report and the sustainability report.
2-15	Conflicts of interest	GRI-Index	According to BioGaia's Code of Conduct and Conflicts of Interest Policy, conflicts of interest are to be avoided, and if they cannot be avoided they are to be reported. According to the policy, all members must declare at the beginning of each board meeting (or during the meeting) if any of them have any conflict of interest with regard to a matter on the agenda. He or she must leave the meeting when the board is dealing with the matter and may not vote on the matter in question. If the chairman of a board may have a conflict of interest, a lead independent director must be appointed by the rest of the board to chair the specific matter.
2-16	Communication of critical concerns	GRI-Index	The Board's report on internal control over financial reporting for the financial year 2022 is provided in the corporate governance report, which can be found in BioGaia's Annual Report.
2-17	Collective knowledge of the highest governance body on sustainability issues	GRI-Index	The Board has good knowledge of sustainability issues. The Board routinely includes sustainability aspects in matters it addresses.
2-18	Evaluation of the performance of the highest governance body	GRI-Index	Each Board member has completed a survey about the Board's work during 2022. For more information about the evaluation of the Board, see the corporate governance report found in BioGaia's 2022 Annual Report.
2-19	Remuneration policies	GRI-Index	Guidelines for remuneration to the CEO and other members of the management team were resolved by the 2022 Annual General Meeting and apply until new guidelines are adopted by the General Meeting of Shareholders. The Board shall prepare proposals for new guidelines at least every fourth year for decision by the General Meeting of Shareholders.

GRI Standard	Disclosure	Page number(s)	Comment
<b>GRI 2: General Disclosures 2021</b>			
2-20	Process to determine remuneration	GRI Index	The CEO's total remuneration is resolved by the Board after preparation by the Remuneration Committee.
2-21	Annual total compensation ratio	GRI Index	Information about remuneration is presented in the remuneration report for 2022.
Strategy, policies and practices			
2-22	Statement on sustainable development strategy	p.11-13 & 46-47	
2-23	Policy commitments	GRI-Index	In 2020, BioGaia developed and presented an internal Code of Conduct for employees. This includes the company's ethical standards, sustainability ambitions and commitments. The Code serves as a guideline for all employees and is also a statement of corporate values and commitments. The Code references e.g, international agreements on human rights and labour standards (e.g. ILO), the Helsinki Declaration's ethical principles as well as the principles of the 3Rs (Replacement, Refinement and Reduction) for research. Please see BioGaia's website for further information.
2-24	Embedding policy commitments	p. 81	For more details, see BioGaia's code of conduct, which can be found on the website <a href="http://www.biogaia.com">www.biogaia.com</a> .
2-25	Processes to remediate negative impacts	p. 87	
2-26	Mechanisms for seeking advice and raising concerns	GRI-Index & p. 60	Employees are encouraged to actively highlight problems for their superiors or Legal. BioGaia has also implemented a whistleblower service, where employees can anonymously report problems.
2-27	Compliance with laws and regulations	GRI-Index	During 2022, no cases were brought to light when BioGaia failed to comply with laws and regulations. No fines were incurred during the year.
2-28	Membership associations	GRI-Index	BioGaia is a member of Svensk Egenvård, IPA Europe and Global, Medicon Valley Alliance and Effektfullt.
Stakeholder engagement			
2-29	Approach to stakeholder engagement	p. 83	
2-30	Collective bargaining agreements	GRI-Index	All employees at BioGaia Production are covered by collective bargaining agreements
<b>GRI 3: Material Topics 2021</b>			
3-1	Process to determine material topics	p. 82-83	
3-2	List of material topics	p. 49 & 86-87	
3-3	Management of material topics		Related indicators:
	- BioGaia's contribution to better health	p. 51	BSD 10, BSD 11
	- Transparent research and clinically-proven effect (previously referred to as: Well-documented products & transparent product information)	p. 53	BSD 1
	- Responsible marketing	p. 54	BSD 2
	- Product quality and product safety	p. 56	BSD 3
	- Business ethics (previously referred to as: Anti-corruption and anti-bribery)	p. 59	205-2, 205-3
	- Sustainability in the value chain including	p. 61	414-1, BSD 6, BSD 7
	- Responsible suppliers		
	- Responsible partners		
	- Employee engagement & development (Previously: Employee well-being & Training and development)	p. 63	401-1, 2-7, 404-3
	- Occupational health & safety	p. 66	403-9 (reporting of the management approach in accordance with GRI requirements 403-1 to 403-7 has not yet been compiled and will be reviewed in 2023)
	- Diversity and equal opportunities	p. 67	401-3, 405-1
	- Climate impact	p. 70	<b>305-1, 305-2, 305-3, 305-4</b>
	- Sustainable packaging	p. 72-73	<b>301-1, 305-2, BSD 5</b>
	- Sustainable ingredients	p. 72 & 75	<b>BSD 4, BSD 8</b>
	- Sustainable transportation	p. 76	<b>BSD 9</b>
<b>GRI 200: Economic disclosures</b>			
205-2	Communication and training on anti-corruption policies and procedures	p. 59	Not broken down by region, with the exception that employees in Japan have not taken part in anti-corruption training in 2022. Not broken down by employment category.
205-3	Confirmed incidents of corruption and actions taken	GRI-Index	No corruption incidents were brought to the company's attention in 2022.

GRI 300: Environmental disclosures			
301-1	Materials used by weight or volume	p. 73	
301-2	Recycled input materials used	p. 73	
305-1	Direct (Scope 1) GHG emissions	p. 77	Excludes biogenic emissions as they are deemed non-existent or very small from the company's operations.
305-2	Energy indirect (Scope 2) GHG emissions	p. 77	Excludes biogenic emissions as they are deemed non-existent or very small from the company's operations.
305-3	Other indirect (Scope 3) GHG emissions	p. 77	Excludes biogenic emissions as they are deemed non-existent or very small from the company's operations.
305-4	GHG emissions intensity	p. 77	
GRI 400: Social disclosures			
401-1	New employee hires and employee turnover	p. 65	Not broken down by region
401-3	Parental leave	p. 68	
403-9	Work-related injuries	p. 66	Total number of hours worked is not reported
404-3	Percentage of employees receiving regular performance and career development reviews	p. 64	
405-1	Diversity of governance bodies and employees	p. 65	
414-1	New suppliers that were screened using social criteria	p. 62	
BioGaia specific disclosures (BSD)			
BSD 1	Published clinical studies per strain combination	p. 53	
BSD 2	Criteria for probiotics and BioGaia's assessment of level of compliance	p. 55	
BSD 3	Number of recalls	p. 57	
BSD 4	Emissions from ingredients	p. 75	
BSD 5	Emissions from packaging materials	p. 73	
BSD 6	Percentage of suppliers that have signed the Supplier Code of Conduct	p. 62	Includes contract manufacturers, culture producers and analytical services
BSD 7	Percentage of partners that have signed the partner Code of Conduct	p. 62	
BSD 8	Phase-out of palm oil in BioGaia's products	p. 75	

## GRI 2-4

### Acquisitions

At the beginning of 2022, BioGaia AB became the majority shareholder in the company Everidis, BioGaia's exclusive distributor of BioGaia branded products in the USA. Following the acquisition, Everidis is referred to as BioGaia USA. Since BioGaia USA became part of the group from 1 January, its operations are also included in reported data for 2022. However, this year's report includes only the sustainability impact of the products BioGaia USA sold under BioGaia's brand during the year.

### New and changed sustainability aspects

During the year, a materiality assessment was performed which resulted in other and new sustainability aspects and boundaries. This also meant BioGaia's sustainability issues are now divided into three areas; "healthy products", "healthy business" and "healthy planet".

The material topics added in "healthy products" are "contribute to better health", "responsible marketing" and "transparent research and clinically-proven effect". The "responsible research" sustainability aspect has been merged with the "transparent research and clinically-proven effect" aspect.

Material topics were added and changed in "healthy business" as the sustainability issue "Business ethics" now includes issues such as anti-corruption work, corporate governance and transparent reporting of taxes. "Sustainability in the value chain" includes both how BioGaia works with sustainability issues upstream in the supply chain and downstream in the distribution chain.

The sustainability aspect referred to as "Employee well-being" has been merged with the earlier sustainability aspect "Training and development" and is now referred to as "Engagement and Development". This is because these two aspects are very closely related and have a substantial impact on each other. The earlier sustainability aspect referred to as "Safety in production" is now called "Occupational health & safety" and has been broadened to include all employees in the group. To a greater degree, it also takes into account mental illnesses, such as stress and burnout. In previous reports, these factors were instead included in the sustainability aspect, "Employee well-being".

The new overarching area "healthy planet" addresses BioGaia's environmental issues. In this area, BioGaia has chosen to prioritise the following sustainability issues: sustainable packaging, ingredients and transportation. The previous sustainability issue - Environmental impact of operations - has been divided into these three sustainability issues. BioGaia will also communicate its environmental impact from other areas and activities but will focus on these three areas.

### Adjustments in data

The previous year's data has not been corrected but the quality of the emission estimates from distribution from the company's subsidiaries has improved in 2022 by collecting data directly from the companies. In estimates of emission reductions in Scope 1 and 2 for the whole group with the aim of following up whether BioGaia achieves its science-based target, emissions from BioGaia USA in 2019 were estimated and added to total emissions during the base year. Scope 2 emissions from BioGaia USA in 2019 were calculated using data obtained of energy consumption in premises used in 2019. Scope 1 emissions from own vehicles in 2019 were estimated for both BioGaia Japan and USA. These were estimated to be the same as emissions during the past year when data was available.

### GRI 2-25

BioGaia strives to make its contact information as accessible as possible to consumers and other interested parties. It is therefore possible to contact the company by email, phone, and website. Consumer complaints and other consumer matters are initially handled by an external company, which allows for faster handling. If necessary, the external party forwards the case to the relevant department at BioGaia. A report containing complaints is compiled annually by relevant functions within the organisation for analysis and action. External parties can also submit complaints through BioGaia's whistleblower service featured on the BioGaia website.

# Included emission sources for calculated carbon footprint

Scope	Definition	Included emission sources / activities & data gathering process
Scope 1	Direct GHG emissions from vehicles/premises	BioGaia's only source of Scope 1 emissions is from owned or leased cars used by the subsidiary in Japan, stationary combustion for BioGaia Japan, and refrigerants at BioGaia Production. BioGaia does not lease any cars in any other part of the group.
Scope 2	Indirect emissions from purchased heating and electricity from premises	Data on emissions, electricity usage and energy used for heating and cooling have been collected from suppliers to BioGaia AB's offices, BioGaia Japan, BioGaia Production, BioGaia USA and from Metabogen. Other subsidiaries are working in rented office spaces (two in USA, two in Finland and one in South Africa) and energy usage is estimated based on number of employees times the average energy usage per employee at the Stockholm office. Emissions are calculated by multiplying the energy usage by the emission factor for the energy mix in the local region (from IEA). For the market-based method, if renewable energy is not used, the residual mix from AIB or the Swedish Energy Markets Inspectorate is used when available and otherwise local energy mix from IEA. For the location-based method, the local energy mix from IEA is used.
Scope 3	1. Purchased goods and services	All raw materials used to produce the products are included based on product content and total sales. Emission factors were obtained from the life-cycle assessment and SimaPro. The analysis used the IPCC's Global Warming Potentials 2013 with a 100-year time horizon. Emissions from other goods such as IT equipment, furniture and paper are small and are extrapolated based on # employees from an assessment made in 2016 by external consultants.
	2. Capital goods	Not included due to insufficient data about cradle-to-grave lifecycle data on owned capital goods.
	3. Other fuel- and energy-related activities	Scope 3 emissions included are based on the amount of electricity used according to Scope 2 and emissions factors for Scope 3 emissions from IEA, AIB or the Swedish Energy Markets Inspectorate.
	4. Upstream transportation and distribution	Transports from supplier of raw materials for the product to BioGaia's facilities are included based on estimates made by consultants of the lifecycle assessment based on distance between supplier and BioGaia's facilities.
	5. Waste generated in operations	Waste from operations is included from 2021.
	6. Business travel	This includes the use of hotels, flights, taxis, rail travel and car rental. Estimates are based on as much detail as possible for transportation. In some cases, the estimates were obtained from the travel agency. Emission factors from DEFRA for well-to-tank (WWT) including the high-altitude factor (RF) for aviation have been used for data coming from the supplier. The adjustment factor used to account for high-altitude effects of air travel is 1.9, of that used by DEFRA.
	7. Employee commuting	Included and based on an employee survey in 2022 with BioGaia AB and the result has been extrapolated for all employees in the group. Emission factors were obtained from the Swedish Transport Administration and the Swedish Energy Agency.
	8. Upstream leased assets	Emissions from rented office space are reported in Scope 2.
	9. Downstream transportation and distribution	Emissions from distribution was a preliminary calculation for 2021 while travel by consumers to purchase the product was not included due to insufficient data. Emission factors were obtained from the Swedish Energy Agency, NTM and ICAO with an RFI factor of 1.9. Transports to BioGaia's subsidiaries in the USA and Japan have been calculated based on data directly from the companies, while other transport distances have been estimated.
	10. Processing of sold products	Not applicable – BioGaia produces and sells the final product that consumers consume.
	11. Use of sold products	Not applicable – the product is consumed.
	12. End-of-life treatment of sold products	Included based on scenario from lifecycle assessment. However, accuracy will be improved, and the packaging recyclability further explored to develop better packaging solutions. Emission factors were obtained from the lifecycle assessment and SimaPro. The analysis used the IPCC's Global Warming Potentials 2013 with a 100-year time horizon.
	13. Downstream leased assets	Not applicable – BioGaia does not lease assets to other entities.
	14. Franchises	Not applicable – BioGaia does not have any franchises.
	15. Investments	Not applicable – BioGaia group does not have any investments in other companies.





Financial  
information

# Administration report

Figures in parentheses refer to the previous year.

The Board of Directors and the CEO of BioGaia AB (publ.) corporate identification number 556380-8723, hereby submit their annual report and consolidated financial statements for the financial year 2021. The financial reports relate to the Group and the Parent Company for the period 1 January 2022 to 31 December 2022. The annual report is established in the Group's reporting currency, Swedish kronor, with amounts in SEK 000s unless stated other.

## BioGaia

**The company** BioGaia is a healthcare company that develops, markets and sells probiotic products with documented health benefits. The products are primarily based on different strains of the lactic acid bacterium *L. reuteri* in combination with unique packaging solutions that make it possible to create probiotic products with a long shelf life. The class B shares of the Parent Company BioGaia AB are quoted on the Mid Cap List of Nasdaq OMX Nordic Exchange Stockholm.

BioGaia has 212 employees, of whom 147 are based in Sweden (Stockholm, Lund, Eslöv and Gothenburg).

**Business model** BioGaia works with three international networks within the areas of research, production and distribution. BioGaia's revenue comes mainly from the sale of drops, gut health tablets, oral rehydration solution (ORS) and oral health products to distributors and through its own subsidiaries. Revenue is also earned from the sale of bacterial cultures to be used in licensee products (such as infant formula and dairy products), as well as royalties for the use of *L. reuteri* in licensee products. The products are sold through nutrition and pharmaceutical companies in more than 100 countries.

BioGaia holds patents for the use of certain strains of *L. reuteri* and certain packaging solutions in all major markets.

**The BioGaia brand** BioGaia launched its own consumer brand at the beginning of 2006. Today, distribution partners sell finished products under the BioGaia brand in a large number of markets. One central part of BioGaia's strategy is to increase the proportion of sales consisting of BioGaia-branded products.

Some of BioGaia's distributors sell finished consumer products under their own brand names. On these products, the BioGaia brand is shown on the consumer package since BioGaia is both the manufacturer and licensor.

BioGaia's licensees add *L. reuteri* culture to their products and sell these under their own brand names. On these products, the BioGaia brand is most often shown on the package as the licensor/patent holder.

## Key events in 2022

**New contracts and launches** BioGaia's probiotic reduces inflammation in patients with diverticulitis. On 3 February, BioGaia announced that a randomised, double-blind, placebo-controlled study showed that BioGaia's probiotic strain *Limosilactobacillus reuteri* ATCC PTA 4659 significantly reduces inflammation in patients with uncomplicated diverticulitis. The group that received probiotic supplements also had shorter hospitalisation periods, which had economic benefits.

BioGaia starts its own distribution in Canada. On 17 May, BioGaia announced that it will be selling probiotics under its own management in Canada, starting in 2023.

BioGaia signs exclusive agreement in South Korea for the baby gut health range. On 8 June, BioGaia announced that it had extended its collaboration with Grace International, giving the company exclusive rights to market and sell its probiotic drops for infants in South Korea.

BioGaia launches product to support children's respiratory health. On 1 July, BioGaia announced that it had launched BioGaia Pharax in the USA. BioGaia Pharax aims to strengthen the immune system and support children's upper respiratory health.

MetaboGen and BioGaia open pilot plant for new bacteria strains. On 29 August, BioGaia announced that BioGaia and the subsidiary MetaboGen have built a pilot plant in Eslöv. The facility handles manufacturing of bacteria with different requirements during fermentation, both traditional lactobacilli as well as new, extremely oxygen-sensitive strains.

Skinome launches pioneering skincare probiotic following collaboration with BioGaia. On 22 September, BioGaia announced that BioGaia and Skinome have collaborated on the research and development of a product with live bacteria that can improve skin health in a natural way by supporting the skin microbiome. The first product, Skinome Probiotic Concentrate, will be available to consumers from September 2022.

**Other key events** BioGaia's profit for the first quarter exceeds market expectations. On 25 April, BioGaia announced that its profit for the first quarter exceeded market expectations.

The record date for the share split in BioGaia AB was determined as 19 May 2022. BioGaia's Annual General Meeting on 6 May resolved on a share split of the company's existing shares, whereupon each share, regardless of series, is divided into five new shares. The record date for the split will be 19 May 2022.

Change in number of shares and votes. On 31 May, BioGaia announced that the number of shares and votes in BioGaia has increased during May due to the share split resolved by BioGaia's Annual General Meeting on 6 May 2022. As of 31 May 2022, the total number of shares in BioGaia amounts to 100,982,310 (previously 20,196,462 shares), whereof 3,703,340 class A shares, with ten votes each, and 97,278,970 class B shares, with one vote each, corresponding to in total 134,312,370 votes. The share capital is unchanged and amounts to SEK 20,196,462.

BioGaia's profit for the second quarter exceeds market expectations. On 14 July, BioGaia announced that its result for the second quarter exceeded market expectations.

BioGaia's profit for the third quarter exceeds market expectations. On 17 October, BioGaia announced that its profit for the third quarter exceeded market expectations.

## Key events after the end of the financial year

There are no key events to report.

## Launches in 2022

	Country	Product	Brand
Ascendis	Botswana	Protectis drops	BioGaia
Ascendis	Botswana	Protectis tablets	BioGaia
EwoPharma	Czech Republic	BioGaia Prodentis Kids lozenges	BioGaia
EwoPharma	Albania	BioGaia Protectis drops	BioGaia
EwoPharma	Albania	BioGaia Protectis drops with vitamin D	BioGaia
EwoPharma	Kosovo	BioGaia Protectis drops	BioGaia
EwoPharma	Kosovo	BioGaia Protectis drops with vitamin D	BioGaia
BioGaia	UK	BioGaia Protectis tablets with new flavour strawberry	BioGaia
Abbott	Ecuador	BioGaia Gastrus	BioGaia
Abbott	Ecuador	BioGaia Prodentis lozenges	BioGaia
Abbott	Chile	BioGaia Prodentis lozenges	BioGaia
Abbott	Chile	BioGaia Protectis tablets with vitamin D	BioGaia
Abbott	Cambodia	BioGaia Protectis tablets	BioGaia
Ferozsons	Pakistan	BioGaia Protectis drops with vitamin D	BioGaia
PT Interbat	Indonesia	BioGaia Prodentis lozenges with new flavour (apple)	BioGaia
Monos Pharma	Mongolia	BioGaia Prodentis lozenges	BioGaia
BioGaia	Sweden	BioGaia Pharax drops	BioGaia
Abbott	Costa Rica	BioGaia Gastrus tablets	BioGaia
Abbott	Panama	BioGaia Gastrus tablets	BioGaia
Phillips Therapeutics	Nigeria	BioGaia Protectis drops	BioGaia

Distributor	Country	Product	Brand
Phillips Therapeutics	Nigeria	BioGaia Protectis tablets	BioGaia
BG Distribution	Hungary	BioGaia Pharax drops with vitamin D	BioGaia
Jaba Recordati	Portugal	BioGaia Protectis easydropper	BioGaia
Casen Recordati	Spain	BioGaia Protectis tablets with new flavour (strawberry)	BioGaia
Interbat	Indonesia	BioGaia Prodentis Kids lozenges	BioGaia
Nestlé	Brazil	B.Lactis drops with vitamin D	BioGaia
Abbott	Ecuador	BioGaia Protectis drops with vitamin D	BioGaia
Abbott	Ecuador	BioGaia Protectis tablets with vitamin D	BioGaia
Ethical Nutrition	Argentina	BioGaia Protectis drops	BioGaia
Ethical Nutrition	Argentina	BioGaia Protectis tablets	BioGaia
Interbat	Indonesia	BioGaia Protectis tablets with vitamin D	BioGaia
Denomics	South Korea	BioGaia Prodentis Kids	BioGaia
Unilab	Philippines	BioGaia minipack	BioGaia
Dr Mums	China	BioGaia Pharax	BioGaia
BG Distribution	Hungary	BioGaia Prodentis tablets	BioGaia
Aché	Brazil	Minipack	BioGaia
BioGaia	Sweden	BioGaia Protectis drops, easydropper	BioGaia
BioGaia	Sweden	BioGaia Protectis drops, easydropper with vitamin D	BioGaia
Dr.Mums	China	BioGaia Protectis capsules	BioGaia

Distributor

## Financial performance in 2022

Consolidated net sales amounted to SEK 1,104.0 million (785.1), which is an increase of SEK 318.8 million (41%) (excluding foreign exchange effects, 29%) of which the acquisition of Nutraceuticals accounted for an increase of SEK 80.1 million (10%). Organic growth was 19%.

Sales in EMEA totalled SEK 511.5 million (335.8), an increase of 52%, which was due to increased sales within both the Paediatrics and Adult Health segments. In EMEA, sales increased mainly in Italy and France.

Sales in APAC totalled SEK 223.0 million (214.5), an increase of 4%, which was due to increased sales within the Paediatrics segment, while the Adult Health segment noted a decrease. Sales increased mainly in South Korea and Vietnam, which was partly offset by lower sales in Japan and Australia.

Sales in the Americas totalled SEK 369.5 million (234.9), an increase of 57%, which was due to increased sales within both the Paediatrics and Adult Health segments. Sales increased mainly in the USA and Chile. Sales in Nutraceuticals increased by 5%.

**Sales by segment** Sales in the Paediatrics segment amounted to SEK 868.4 million (603.7), an increase of 44% (excluding foreign exchange effects, 32%).

Sales of BioGaia Protectis drops increased compared with the preceding year. Sales increased mainly in EMEA, in Italy and France, but also in the Americas and USA.

Sales of BioGaia Protectis tablets within Paediatrics increased compared with the preceding year. Sales increased in EMEA and the Americas, primarily in France and the USA.

Sales in the Adult Health segment amounted to SEK 230.2 million (176.9), an increase of 30% (excluding foreign exchange effects, 19%).

Sales of BioGaia Protectis tablets increased compared with the preceding year. Sales increased in EMEA and the Americas, mainly in Italy and Belgium, but decreased in APAC.

Sales of BioGaia Gastrus increased compared with the preceding year. Sales increased in EMEA and the Americas, but decreased in APAC. Sales increased mainly in the USA.

Sales of BioGaia Prodentis increased compared with the preceding year. Sales of BioGaia Prodentis increased in the Americas but decreased in EMEA and APAC compared with the preceding year. Sales increased mainly in the USA and South Korea, which was partly offset by lower sales in Japan and China.

**Gross margin** The total gross margin amounted to 73% (74%). The gross margin for the Paediatrics segment amounted to 74% (76%) and for the Adult Health segment to 67% (68%).

**Operating expenses and operating profit** Operating expenses amounted to SEK 440.5 million (329.2), an increase of SEK 111.3 million (34%), of which the acquisition of Nutraceuticals accounted for an increase of SEK 97.0 million (29%). Excluding other operating expenses (exchange losses/gains) operating expenses increased by 37%. Excluding Nutraceuticals (now BioGaia USA), operating expenses increased by SEK 14.4 million (4%).

Operating expenses included costs of evaluation of acquisition candidates of SEK 1.2 million (9.3), restructuring costs (relating to personnel) of SEK 5.6 million (8.9) and the reversal of an earlier impairment of right-of-use assets linked to a rental contract for premises in Lund of SEK -1.7 million (4.2). Excluding these expenses, operating expenses amounted to SEK 435.4 million (306.9), an increase of SEK 128.5 million (42%).

Selling expenses amounted to SEK 320.8 million (192.4), an increase of 67% primarily due to the acquisition of Nutraceutics and increased costs for sales and marketing activities.

R&D expenses amounted to SEK 106.8 million (105.5), an increase of 1%. R&D expenses include costs for the subsidiaries MetaboGen AB and BioGaia Pharma AB of SEK 20.8 million (23.4).

Administrative expenses amounted to SEK 39.8 million (42.5), a decrease of 6%. The decrease in administrative expenses is attributable to lower costs for the evaluation of acquisition candidates and the reversal of an earlier impairment of right-of-use assets linked to a rental contract.

Other operating expenses refers to exchange losses/gains on receivables and liabilities of an operating nature and amounted to SEK -27.0 million (-11.2).

Operating profit amounted to SEK 361.5 million (253.7), an increase of 42%. The operating margin was 33% (32%). Operating profit excluding costs for the evaluation of acquisition candidates and restructuring as well as the reversal of an earlier impairment of right-of-use assets linked to a rental contract totalled SEK 366.5 million (276.1), an increase of SEK 90.4 million (33%). The operating margin excluding costs for the evaluation of acquisition candidates, restructuring costs and the reversal of an earlier impairment of right-of-use assets linked to a rental contract totalled 33% (35%).

Profit after tax and earnings per share Profit after tax amounted to SEK 373.6 million (196.3) an increase of 90%. The effective tax rate was 17% (22%). Profit after tax was affected by financial income from the value adjustment of an additional purchase price of SEK 80.0 million. Financial income is non-taxable for which reason the effective tax rate is lower.

Earnings per share amounted to SEK 3.70 (1.94). There are no dilutive effects.

**Balance sheet 31 December** Total assets amounted to SEK 2,214.0 million (2,128.1). Goodwill from the acquisition of Nutraceutics has been translated and other surplus values identified in the acquisition are amortised. The financial liability for the additional purchase price was value adjusted. Compared with the previous year, inventories and trade receivables have increased while trade payables have decreased.

**Cash flow** Cash flow amounted to SEK -12.8 million (13.1). Cash flow includes a dividend of SEK 301.3 million (68.9) as well as a provision to the Foundation to Prevent Antibiotic Resistance of SEK 2.9 million (2.8).

Cash flow from operating activities was SEK 318.9 million (221.9). The increase in cash flow in operations compared with the year-earlier period is due to an improved operating profit that was partly offset by a negative change in working capital.

Investments in property, plant and equipment amounted to SEK 179 million (6.4). Investments in financial assets amounted to SEK 0.0 million (22.2). The preceding period included the acquisition of shares in Boneprox AB and Skinome AB in conjunction with the establishment of BioGaia Invest AB.

**Parent Company** The Parent Company's net sales amounted to SEK 945.3 million (732.0) and profit before tax was SEK 316.0 million (185.9). Impairment was recognised of shares in a subsidiary corresponding to the group contribution for the year as well as an additional impairment of SEK 12.7 million pertaining to the shares in MetaboGen. The financial performance of the Parent Company is in all material respects in line with that of the group.

## Research and development

BioGaia has an extensive research network and collaborates with universities and hospitals around the world including the Swedish University of Agricultural Sciences (SLU) in Uppsala, Sweden, the Karolinska Institute in Stockholm, Sweden, Sahlgrenska University Hospital in Gothenburg, Sweden, Texas Children's Hospital in the USA and the University Hospitals of Bari and Turin, Italy.

BioGaia's strains of *L. reuteri* are among the most studied probiotics in the world, especially in young children. To date, over 250 clinical studies with BioGaia's human strains of *L. reuteri* have been performed on more than 21,000 individuals of all ages.

Studies have been performed on:

- Infantile colic and digestive health in children
- Antibiotic-associated diarrhoea (AAD)
- Acute diarrhoea
- Gingivitis (inflammation of the gums)
- Periodontal disease
- General health
- *Helicobacter pylori* (the gastric ulcer bacterium)
- Low bone density
- Diverticulitis

## Reporting clinical studies

In order to ensure transparency and aim for the highest possible scientific standards, BioGaia encourages researchers to design studies and report results in a way that enables publication in well-renowned medical journals. The aim is that all studies, regardless of result, should be published. Furthermore, BioGaia requires all studies to be ethically approved and registered on a public website, such as ClinicalTrials.gov.

## Environmental information

BioGaia has a fundamentally ethical and environmentally friendly mission, namely to conduct research and development aimed at offering clinically proven, health-enhancing and user-friendly probiotic products.

BioGaia shows its commitment to the environment by:

- striving to use eco-friendly packages
- encouraging its suppliers and distributors to take environmental aspects into account in their decisions
- measuring the climate impact of the company and its products and compensating for its carbon dioxide emissions

In 2017, BioGaia established an independent foundation (The Foundation to Prevent Antibiotic Resistance). The aim of the Foundation is to reduce antibiotic resistance through support to research, education and information activities. The goal is for this to promote the use of products and methods that prevent infections or in other ways reduce the use of antibiotics. In a longer perspective, this will also have positive effects on the environment.

BioGaia conducts no operations that are subject to permit or notification requirements.

For more information, see the company's Sustainability Report.

## Business risks and uncertainties

BioGaia's operations are associated with both risks and opportunities of various types. Certain risks are of a more general nature such as markets and countries, research and development, products and production, health and safety, environment, corruption and violation of human rights, while other risks are more specific to the company. The following section is not a complete risk analysis but gives an indication of the factors of significance for future development including sustainability risks.

## Group

**Intangible assets** As of the balance sheet date, assets in the group relating to MetaboGen are recognised at SEK 51.1 million consisting of R&D projects in progress (SEK 45.8 million) and goodwill (SEK 5.3 million) attributable to the surplus value at the acquisition of MetaboGen in 2018. The group also has assets for surplus values (SEK 2.5 million) as well as goodwill (SEK 166.0 million) relating to Nutraceutics. There is a risk that these assets will be impaired. BioGaia has tested the intangible assets for impairment and does not consider that an impairment requirement exists on the balance sheet date. For more information, see Note 11.

**BioGaia's partners** BioGaia does not primarily sell directly to end-users but sells its products to distributors (partners) which then sell on the products. The agreements normally have a term of 3-7 years.

BioGaia is dependent on the distributors investing the resources necessary for marketing and sales. So that the company itself can influence this to a greater extent, BioGaia launched its own brand in 2006. Today, many of BioGaia's partners sell wholly or partly under the BioGaia brand. BioGaia provides its partners with strong marketing support in the form of education, information about new clinical studies, speakers at symposia, marketing and PR support. There is a risk that BioGaia's partners will not perform according to the company's wishes. However, BioGaia has formulated its agreements so that it is possible to terminate the agreement if a distributor does not meet certain minimum sales targets.

**Research and development** BioGaia invests considerable sums in research, clinical studies and product development with the aim of developing products with proven health benefits. Even after pilot studies, there is always a risk that a project will be wholly or partly unsuccessful. BioGaia works with a range of research initiatives in which the company strives for a balance between low and high-risk projects.

Research and clinical studies are carried out at universities and hospitals around the world. To ensure that the clinical studies are performed in accordance with the applicable regulations and provide reliable results, BioGaia's own staff are involved in parts of the work with clinical studies. The study agendas are always approved by BioGaia, the ethics committee and other relevant authorities. Agreements are signed with hospitals and universities in which they undertake to comply with the applicable regulatory requirements. BioGaia monitors the studies to ensure that they are conducted in a correct and ethical manner. BioGaia always urges the researchers to publish the results of their studies.

**Intellectual property** BioGaia's business activities are based on a large number of intellectual property rights, such as patents, trademarks, names of strains and Internet domains. The company works continuously to strengthen its intellectual property rights by protecting the company's products. The various patents have different terms but those covering the most used strains in BioGaia's products apply until 2026 and 2027.

There is always a risk of infringement of intellectual property. These rights are enforced on an ongoing basis, but there are no guarantees that future infringements will not cause the company damage. BioGaia continuously monitors its business environment.

**Regulatory affairs** BioGaia's products are currently sold in more than 100 countries around the world. Due to their differing regulatory systems, the length of time between contract and product launch varies between countries. In most countries, the products are registered as food supplements but in a few markets they are registered as a category of pharmaceutical.

In the EU, the use of nutrition and health claims for food is regulated by the European Food Safety Authority (EFSA). The EFSA rules apply to food products that are marketed to consumers with various claims about preventative health effects. In order to make a health claim for a product and in marketing, EFSA approval is required.

There is always a risk that the rules will be changed in the different markets with a resulting negative impact on sales at least for a period.

To minimise this risk and be proactive, BioGaia's regulatory department works closely with equivalent functions at distributors/partners which monitor local regulations.

**Employees** BioGaia's operations are wholly dependent on the employees' expertise, and they therefore constitute the company's most valuable resource. In order to attract and retain skilled and motivated employees, BioGaia strives to create a culture in which all employees are given the opportunity to develop, influence their own work situation and maintain a good balance between work and leisure in order to avoid stress. The company continuously evaluates the current staffing situation and the need for recruitment.

**Product liability** BioGaia sells food supplements. There is a risk that a consumer could experience damage and claim that this damage is attributable to BioGaia's product. This risk also exists in clinical studies.

For BioGaia, the top priority has always been to ensure that the products that are manufactured and offered to customers are of a high quality and are safe to use. The employees concerned are given relevant training in product safety. The agreements with BioGaia's suppliers include quality requirements and the company has processes in place to ensure that the suppliers comply with the agreements.

**Business ethics** BioGaia's business model is based on three networks Research, Production and Distribution. BioGaia's products are sold in more than 100 countries, which means that the brand is exposed all over the world. To ensure that all parties perform their duties in an ethical and, according to BioGaia, correct manner, BioGaia adopted a Code of Conduct in 2017. The Code of Conduct contains minimum requirements in areas such as human rights, labour rights, environment and business ethics and anti-corruption. For further information, see the company's Sustainability Report.

With regard to the research network, BioGaia encourages a sufficiently high level in the design of the studies and reporting of results to enable publication in respected medical journals and thereby ensure the highest possible scientific standards. Furthermore, BioGaia requires that before participants are accepted, the study must be registered on a public site, such as ClinicalTrials.gov. The goal is to publish all studies regardless of the results.

**Sustainable supply chain** BioGaia's ambition is to take responsibility and give consideration to sustainability risks and delivery accuracy risks throughout the entire value chain, from suppliers via distributors and all the way to the consumer.

One key component of BioGaia's business model is the effort to build close and long-term relationships with a small number of suppliers. BioGaia's aim is to always have a least two independent suppliers if this is commercially viable. All suppliers must read and sign BioGaia's Supplier Code of Conduct.

#### Parent Company

**Subsidiary BioGaia Pharma AB** Operating profit for the period amounted to SEK -3.8 million (-8.7). On the balance sheet date, assets in BioGaia Pharma were reported at SEK 21.1 million in the Parent Company. Since the company is not profitable, there is a risk of impairment of these assets in the Parent Company. Impairment was recognised during the year corresponding to a group contribution provided. BioGaia has tested the remaining financial assets for impairment and considers there is no indication of impairment on the balance sheet date.

**Subsidiary MetaboGen AB** The company conducts research and development projects. Operating profit for the period amounted to SEK -11.1 million (-10.0). On the balance sheet date, assets in the Parent Company relating to MetaboGen were recognised at SEK 88.0 million. Since the company does not yet have a positive cash flow, there is a risk of impairment of these assets in the Parent Company. Impairment was recognised during the year corresponding to a group contribution provided and an additional impairment of SEK 12.7 million. BioGaia has tested the remaining financial assets for impairment and considers there is no indication of impairment on the balance sheet date.

**Other subsidiaries** BioGaia established a subsidiary in Canada.

#### Financial risk management

The overall objective of the group's finance function is to secure cost-effective financing for the group's operations and group companies and to provide secure cash management with a market-based return on investment. The overall objective of financial risk management is to minimise the risk of negative effects on the group's earnings. Consequently, the group's financial investments must have a low risk profile.

Below is a description of the group's assessed risk exposure and the related risk management. For more information, see Note 27.

**Currency risk** BioGaia has revenue primarily in EUR and USD but also in SEK, JPY and CHF and expenses primarily in SEK, but also in EUR, JPY and USD. In 2022, the company had a cash flow surplus of approximately EUR 30.9 million (19.2), a cash flow surplus of JPY 631.5 million (75.6) and a cash flow surplus of USD 29.1 million (31.8). For more information, see Note 27.

**Interest rate and liquidity risk** The group has no external loans. The company's interest rate risk consists of the return on cash and cash equivalents. The Board has issued a liquidity policy for cash and cash equivalents in which the basic principle is that investment risks should always be minimised and investments should be made primarily in Swedish kronor. To minimise currency risk, other currencies may also be considered. The company's cash and cash equivalents may be invested only in bank accounts, commercial paper or other fixed income securities with very limited risk. This means that no investments may be made in shares, equity funds, options, etc.

**Credit risks** BioGaia's credit risks are tied to trade receivables. Customers have a 30–90 day credit period. When signing agreements with new customers, an assessment is made of the customer's financial position. The company has routines for collection of past due accounts receivable and additional evaluations of the customer's financial position are carried out when required in order to minimise risks.

**Cash flow risk** BioGaia has good liquidity. The risk of a liquidity shortage is therefore immaterial. Cash flow amounted to SEK -12.8 million (13.1). Cash flow includes dividends of SEK -301.3 million (-68.9). Cash and cash equivalents at 31 December 2022 amounted to SEK 1,488.4 million (1,484.7).

**Price risk** BioGaia buys most of its goods on the international market and has several alternative suppliers, which reduces the company's price risk.

BioGaia's price to distributors is largely the same for all customers, but can vary with respect to the order volume. Certain markets are subject to aggressive price competition towards consumers. However, BioGaia's strategy is not to compete in terms of price but to instead convince doctors of the effectiveness and safety of the products by showing the results of clinical studies.

**War in Ukraine** During the year, BioGaia was affected by increased inflation with rising energy prices and interest rates. BioGaia conducts no own operations in Ukraine or Russia and has no suppliers in these markets. There is continuing uncertainty about the general macroeconomic situation with higher interest rates, inflation and cost increases and it cannot be excluded that BioGaia's sales and costs may be further affected by this. To offset this, BioGaia has raised prices.

## Future outlook

BioGaia's goal is to create strong value growth and a good return for the shareholders. This will be achieved through a greater emphasis on the BioGaia brand, increased sales to both existing and new customers and a controlled cost level.

In view of the company's strong product portfolio consisting of an increased number of innovative products that are sold predominantly under the BioGaia brand, successful clinical trials and an expanding distribution network that covers a large share of the key markets, BioGaia's future outlook looks bright.

**Financial target and dividend policy** The long-term financial target is an operating margin (operating profit in relation to sales) of at least 34% with continued strong growth and increased investments in research, product development, brand building and the sales organisation.

Previously, the dividend policy was to pay a shareholder dividend equal to 50% of profit after tax in the Parent Company. This was changed during the year and it now stipulates that dividends to shareholders are to equal 50% of profit after tax in the group excluding non-recurring items.

## Employees

The number of employees in the group at 31 December 2022 was 212 (167).

The company has an incentive programme aimed at ensuring employees' long-term commitment to BioGaia. The company has, for example, a bonus programme for all employees based partly on the company's sales and profit and partly on qualitative targets. The maximum bonus is equal to 12% of annual salary. In addition to this programme, BioGaia has also implemented a subscription warrants programme as resolved by the 2021 Annual General Meeting. The programme involves the issue of a maximum of 365,000 warrants where each warrant shall entitle the holder during the period from 6 July 2024 through 6 November 2024 to subscribe for one new class B share in BioGaia.

Following the share split that took place in 2022, each option gives a right to subscribe to five shares (previously one share) for a subscription price of SEK 115.6 (previously SEK 578.2). See Note 3 for additional information about employees and personnel expenses.

## The adoption of guidelines for remuneration to senior executives by the 2022 Annual General Meeting

The 2022 Annual General Meeting adopted the following guidelines for remuneration of senior executives. The guidelines do not apply to remuneration resolved by the General Meeting.

**The guidelines' promotion of BioGaia's business strategy, long-term interests and sustainability** BioGaia performs research and development to provide consumers with clinically-proven, health-promoting, patented and user-friendly probiotic products.

Successful implementation of the business strategy and safeguarding BioGaia's long-term interests, including its sustainability, require BioGaia to be

able to recruit, motivate and retain competent employees who work to achieve maximum shareholder and customer value. This requires BioGaia to be able to offer competitive remuneration. These guidelines enable senior executives to be offered competitive total remuneration.

**Forms of remuneration, etc.** Remuneration shall be market-based and may consist of the following components: fixed cash salary, variable cash remuneration, pension benefits and other benefits. The Annual General Meeting may in addition – and independent of these guidelines – resolve on, for example, share-related and share-price based remuneration. The total remuneration package to senior executives should include a well-balanced mix of the above-named components as well as terms of notice and severance pay. The Board should annually evaluate the extent to which share-based or share-price based long-term incentive programmes should be proposed to the Annual General Meeting.

The fixed cash salary shall be individual and based on the senior executive's responsibilities and role as well as the individual's competence and experience in the relevant position.

The variable cash remuneration may amount to a maximum of 35% of fixed annual cash salary.

Senior executives who are entitled to pensions shall have pension benefits that are defined contribution. Variable cash remuneration shall not qualify for pension benefits. Pension premiums for defined contribution pensions shall amount to a maximum of 30% of fixed annual cash salary.

Other benefits may include life insurance, healthcare insurance (Sw: sjukvårdsförsäkring) and a company car benefit. Such benefits shall be of limited value in relation to other compensation and be consistent with what is customary in the respective geographical market. Other benefits may amount to a maximum of 5% of fixed annual cash salary.

**Termination of employment** In the event of termination of employment the maximum notice period is eighteen months. Fixed cash salary during the notice period plus any severance pay may not together exceed an amount equivalent to the individual's fixed cash salary for a two-year period. In case of termination by the senior executive, the notice period may not be less than three months and no severance pay will be paid.

**Criteria for distribution of variable cash remuneration, etc.**

Variable cash remuneration shall be linked to pre-determined and measurable criteria which may be financial or non-financial. It can also comprise individually adapted quantitative or qualitative targets. The criteria shall be designed so that they promote the group's business strategy and long-term interests, including its sustainability, through for example having a clear link to BioGaia's business strategy or promoting the senior executive's long-term development.

Fulfilment of the criteria for payment of variable cash remuneration shall be measured during a period of one year. When the measurement period for fulfilment of the criteria for payment of variable cash remuneration has ended, the extent to which the criteria have been met shall be determined. The Remuneration Committee is responsible for assessment with regard to variable cash remuneration to the CEO. As regards variable cash remuneration

to other senior executives, the CEO is responsible for the assessment.

**Salary and terms of employment for employees** In preparation of the Board's proposal for these remuneration guidelines, salaries and terms of employment for the company's employees have been taken into account through information on employees' total remuneration, remuneration components as well as remuneration increases and rate of increase over time comprising a part of the Remuneration Committee's and the Board's basis for decision when evaluating the reasonableness of these guidelines and the limitations that are a consequence of them.

**Decision-making process to establish, review and implement the guidelines**

The Board has established a Remuneration Committee. The tasks of the committee include preparation of the Board's proposal for decision on guidelines for remuneration to senior executives. The Board shall prepare proposals for new guidelines at least every fourth year and present the proposal for decision to the Annual General Meeting. The guidelines shall apply until new guidelines are adopted by the Annual General Meeting. The Remuneration Committee shall also monitor and evaluate programmes for variable remuneration to Executive Management, application of the guidelines for remuneration to senior executives as well as applicable remuneration structures and remuneration levels in the group. The members of the Remuneration Committee are independent in relation to BioGaia and Executive Management. When the Board considers and makes decisions on remuneration-related matters, the CEO or other senior executives and Board members are not present insofar as they are affected by the issues.

**Departure from the guidelines** The Board may decide temporarily to depart from the guidelines wholly or partly if in an individual case there is reason for this and such departure is necessary in order to meet BioGaia's long-term interests, including its sustainability, or in order to ensure BioGaia's financial viability. As stated above, the tasks of the Remuneration Committee include preparing the Board's decision on remuneration matters, which includes decisions to depart from the guidelines.

## Most recently adopted guidelines regarding remuneration and other terms of employment for senior executives

The most recently adopted guidelines correspond to those that were proposed to the Annual General Meeting 2022 (see above).

## Corporate governance

BioGaia has published a separate corporate governance report. See pages 123-125.

## Sustainability Report

BioGaia has published a separate sustainability report. See pages 44-88.

## Proposed appropriation of profits

The following funds in the Parent Company are at the disposal of the Annual General Meeting (SEK):

Retained earnings	1,390,105,727
Profit for the year	248,163,398
Profits available for appropriation	1,638,269,125
The Board of Directors proposes that the profits be appropriated as follows	
To be paid as a dividend to the shareholders*	292,848,699
Provision to the Foundation to Prevent Antibiotic Resistance	4,400,000
To be carried forward to new account	1,341,020,426
Total	1,638,269,125

\*) The proposed dividend consists of a dividend according to policy of SEK 1.45 (0.73) per share plus an extra dividend of SEK 1.45 (2.26) per share

## Mandatory disclosures for ESEF reporting

Name of the reporting entity	BioGaia AB (publ.)	IAS 151 a
Legal form of entity	Public limited company (publ.)	IAS 1138 a
Country of incorporation	Sweden	IAS 1138 a
Address of entity's registered office	Kungsbroplan 3A SE-112 27 Stockholm	IAS 1138 a
Principal place of business	Stockholm	IAS 1138 a
Description of nature of entity's operations and principal activities	The company BioGaia is a healthcare company that develops, markets and sells probiotic products with documented health effects.	IAS 1138 b
Name of parent entity	BioGaia AB (publ.)	IAS 1138 c, IAS 24 13



# Five-year summary

Key ratio	2022	2021	2020	2019	2018
Total net sales, SEKm	1,104.0	785.1	747.1	768.3	741.9
Net sales, Paediatrics segment, SEKm	868.4	603.7	583.1	600.1	596.5
Net sales, Adult Health segment, SEKm	230.2	176.9	161.2	167.3	141.7
Other net sales, SEKm	5.4	4.6	2.8	0.9	3.7
Product net sales, SEKm	1,085.4	735.5	721.5	743.0	662.1
Operating profit, SEKm	361.5	253.7	228.2	242.5	277.4
Profit before tax, SEKm	447.6	252.7	227.6	242.3	277.6
Profit after tax, SEKm	373.8	196.3	179.7	187.3	214.2
Profit after tax attributable to owners of the Parent Company, SEKm	373.8	196.3	179.7	187.3	214.2
Growth, net sales, %	41	5	-3	4	21
Operating margin, %	33	32	31	32	37
Profit margin, %	41	32	30	32	37
Equity/assets ratio, %	89	88	91	76	77
Capital employed, SEKm	1,985.0	1,891.6	1,757.6	518.2	514.8
Return on capital employed, %	23	14	20	47	57
Return on equity, %	19	11	16	37	44
Average number of employees	203	161	157	149	130

## Data per share <sup>1)</sup>

Number of shares at 31 Dec, thousands	100,982	100,982	20,196	17,336	17,336
Average number of shares, thousands	100,982	100,982	17,855	17,474	17,336
Earnings per share before dilution, SEK <sup>2) 4)</sup>	3.70	1.94	10.07	10.72	12.40
Earnings per share after dilution, SEK <sup>2) 4)</sup>	3.70	1.94	10.07	10.72	12.40
Equity per share, SEK <sup>4)</sup>	19.53	18.59	97.80	29.06	29.13
Equity per share after dilution, SEK <sup>4)</sup>	19.53	18.59	97.80	29.06	29.13
Share price on balance-sheet date, SEK	84	518	537	424.5	317.50
Dividend per share, SEK	2.90 <sup>3)</sup>	2.98	3.41	3.75	10.00

<sup>1)</sup> In view of the 5:1 share split, which took place in May 2022, historical key ratios from 2021 based on the number of shares have been restated.

<sup>2)</sup> Key ratio defined according to IFRS.

<sup>3)</sup> Dividend proposed but not yet approved.

<sup>4)</sup> A bonus issue element has been taken into account in the calculation of earnings per share before and after dilution, which means that the comparative figure has been recalculated. There are no other dilutive effects.

For definitions of key ratios, see page 121.



# Group

## Statement of comprehensive income

Amounts in SEK 000s	Note	2022	2021
Net sales	2	1,103,957	785,110
Cost of sales	2	-302,028	-202,161
<b>Gross profit</b>	2	<b>801,929</b>	582,949
Selling expenses	4	-320,798	-192,437
Administrative expenses	2, 4	-39,818	-42,546
Research and development expenses	2, 7, 11	-106,805	-105,467
Other operating income	5	27,489	11,604
Other operating expenses	6	-538	-366
<b>Operating profit</b>		<b>361,459</b>	253,737
Financial income	8	91,540	107
Financial expenses	9	-5,386	-1,132
<b>Net financial items</b>		<b>86,154</b>	-1,025
<b>Profit before tax</b>		<b>447,613</b>	252,712
Tax	10	-73,840	-56,439
<b>Profit for the year</b>		<b>373,773</b>	196,273
Items that may be reclassified subsequently to profit or loss			
Translation differences on translation of foreign operations		25,722	1,994
<b>Comprehensive income for the year</b>		<b>399,495</b>	198,267
Profit for the year attributable to:			
owners of the Parent Company		373,773	196,273
Non-controlling interests		-	-
		373,773	196,273
Comprehensive income for the period attributable to:			
owners of the Parent Company		399,495	198,267
Non-controlling interests		-	-
		399,495	198,267
<b>Earnings per share</b>			
Earnings per share, SEK <sup>1,2</sup>		3.7	1.94
Number of shares, thousands		100,982	100,982
Average number of shares, thousands <sup>1,2</sup>		100,982	100,982

<sup>1</sup> A bonus issue element has been taken into account in the calculation of earnings per share before and after dilution, which means that the comparative figure has been recalculated. There are no other dilutive effects.

<sup>2</sup> In view of the 5:1 share split, which took place in May 2022, historical key ratios from 2021 based on the number of shares have been restated.

## Statement of cash flows

Amounts in SEK 000s	Note	2022	2021
<b>Operating activities</b>			
Operating profit		361,459	253,737
Adjustments for non-cash items:			
Depreciation/amortisation and impairment		23,890	27,241
Unrealised gains/losses on forward contracts		-	2,403
Other non-cash items		-9,103	-2,356
		376,246	281,025
Interest received		7,634	64
Interest paid		-5,386	-1,132
Taxes paid		-54,910	-55,934
<b>Cash flow from operating activities before changes in working capital</b>		<b>323,584</b>	224,023
Cash flow from changes in working capital:			
Inventories		-34,125	9,822
Current receivables		-12,403	-17,965
Trade payables		-12,369	-6,151
Current interest-free operating liabilities		54,256	12,146
<b>Cash flow from operating activities</b>		<b>318,943</b>	221,875
Investing activities:			
Purchase of property, plant and equipment	13	-17,916	-6,379
Purchase of financial assets	21	-225	-22,229
Acquisitions of subsidiaries		-	-98,359
<b>Cash flow from investing activities</b>		<b>-18,141</b>	-126,967
Financing activities:			
Dividend		-301,331	-68,870
Amortisation lease liability		-9,143	-7,527
Amortisation loans		-	-7,174
Provision to foundation		-2,900	-2,800
New issue, net		-214	4,525
<b>Cash flow from financing activities</b>		<b>-313,588</b>	-81,846
<b>Cash flow for the year</b>		<b>-12,786</b>	13,062
<b>Cash and cash equivalents at beginning of year</b>		<b>1,484,680</b>	1,467,883
Exchange difference in cash and cash equivalents		16,472	3,735
<b>Cash and cash equivalents at end of year</b>		<b>1,488,366</b>	1,484,680

# Group

## Statement of financial position

Amounts in SEK 000s	Note	31 Dec 2022	31 Dec 2021
<b>Assets</b>			
Non-current assets:			
R&D projects in progress	11	46,075	48,086
Goodwill	11	171,517	149,227
Right-of-use assets	12	13,557	15,080
Property, plant and equipment	13	144,168	138,555
Financial assets	21	25,793	22,229
Deferred tax assets	10	15,325	2,757
Deposits		50	43
<b>Total non-current assets</b>		<b>416,485</b>	<b>375,977</b>
Current assets:			
Inventories	16	142,838	102,737
Trade receivables	17, 21	130,703	118,588
Other receivables	19	18,733	36,304
Deferred expenses and accrued income	20	16,841	9,768
Cash and cash equivalents	21	1,488,366	1,484,680
<b>Total current assets</b>		<b>1,797,481</b>	<b>1,752,077</b>
<b>Total assets</b>		<b>2,213,966</b>	<b>2,128,054</b>

## Statement of financial position

Amounts in SEK 000s	Note	31 Dec 2022	31 Dec 2021
<b>Equity and liabilities</b>			
Equity			
	22		
Share capital		20,196	20,196
Other contributed capital		1,153,794	1,154,008
Foreign currency translation reserve		25,696	-27
Retained earnings		398,957	506,915
<b>Profit for the year attributable to owners of the Parent Company</b>		<b>373,773</b>	<b>196,273</b>
<b>Total equity attributable to owners of the Parent Company</b>		<b>1,972,416</b>	<b>1,877,365</b>
Non-controlling interests	14, 18	2	2
<b>Total non-controlling interests</b>		<b>2</b>	<b>2</b>
<b>Total equity</b>		<b>1,972,418</b>	<b>1,877,367</b>
Non-current liabilities:			
Deferred tax liability	10	12,552	14,240
Other liabilities	27	64,005	109,493
<b>Total non-current liabilities</b>		<b>76,557</b>	<b>123,733</b>
Current liabilities:			
Prepayments from customers	21	9,171	2,815
Trade payables	21	32,050	42,313
Current tax liabilities	24	22,715	4,479
Other liabilities	24	23,110	20,948
Accrued expenses and deferred income	25	77,945	56,399
<b>Total current liabilities</b>		<b>164,991</b>	<b>126,954</b>
<b>Total liabilities</b>		<b>241,548</b>	<b>250,687</b>
<b>Total equity and liabilities</b>		<b>2,213,966</b>	<b>2,128,054</b>

# Group

## Statement of changes in equity

Amounts in SEK 000s	Share capital	Other contributed capital	Foreign currency translation reserve	Retained earnings	Profit for the year	Equity attributable to owners of the Parent Company	Non-controlling interests	Total equity
<b>Opening balance, 1 January 2021</b>	20,196	1,149,483	-2,021	398,855	179,730	1,746,243	2	1,746,245
Dividend				-68,870		-68,870		-68,870
Provision to foundation				-2,800		-2,800		-2,800
New issue warrants		4,525				4,525		4,525
<b>Total transactions with owners</b>		4,525	0	-71,670	0	-67,145	0	-67,145
Carried forward				179,730	-179,730			
<b>Profit for 2021</b>					196,273	196,273		196,273
Other comprehensive income								
Translation differences on translation of foreign operations			1,994			1,994		1,994
<b>Comprehensive income for the year</b>	0	0	1,994	0	196,273	198,267		198,267
<b>Closing balance, 31 December 2021</b>	20,196	1,154,008	-27	506,915	196,273	1,877,365	2	1,877,367
<b>Opening equity, 1 January 2022</b>	20,196	1,154,008	-27	506,915	196,273	1,877,365	2	1,877,367
Dividend				-301,331		-301,331		-301,331
Provision to foundation				-2,900		-2,900		-2,900
New issue warrants		-215				-215		-215
<b>Total transactions with owners</b>		-215	0	-304,231	0	-304,446		-304,446
Carried forward				196,273	-196,273			
<b>Profit for 2022</b>					373,773	373,773		373,773
Other comprehensive income								
Translation differences on translation of foreign operations			25,722			25,722		25,722
<b>Comprehensive income for the year</b>	0	0	25,722	0	373,773	399,495	0	399,495
<b>Closing balance, 31 December 2022</b>	20,196	1,153,793	25,697	398,957	373,773	1,972,416	2	1,972,418

# Parent Company

## Income statement

Amounts in SEK 000s	Note	2022	2021
Net sales	2	945,327	732,009
Cost of sales	2	-327,060	-256,210
<b>Gross profit</b>	2	<b>618,267</b>	475,799
Selling expenses	2	-178,974	-163,189
Administrative expenses	4	-37,562	-34,630
Research and development expenses	2, 7, 11	-89,792	-85,563
Other operating expenses	5	27,314	11,506
<b>Operating profit</b>		<b>339,253</b>	203,923
Result from financial investments			
Impairment loss on shares in group companies	14	-27,540	-18,708
Interest income and similar profit/loss items	8	9,144	688
<b>Net financial items</b>		<b>-23,219</b>	-18,020
<b>Profit before tax</b>		<b>316,034</b>	185,903
Tax on profit for the year	10	-67,871	-39,344
<b>Profit for the year</b>		<b>248,163</b>	146,559

The Parent Company has no transactions in other comprehensive income, which means that comprehensive income for the year corresponds to profit for the year above. As a result, the Parent Company presents no separate statement of comprehensive income.

## Cash flow statement

Amounts in SEK 000s	Note	2022	2021
<b>Operating activities</b>			
Operating profit		339,253	203,923
Adjustments for non-cash items:			
Depreciation/Amortisation		3,667	3,736
Other non-cash items		-12,000	1,693
		330,920	209,352
Interest received		9,144	1,053
Interest paid		-4,823	-365
Forward exchange contracts		-	2,403
Taxes paid		-39,284	-46,786
<b>Cash flow from operating activities before changes in working capital</b>		<b>295,957</b>	165,657
Cash flow from changes in working capital:			
Inventories		-56,025	10,907
Current receivables		-47,931	-17,861
Trade payables		-11,696	-7,838
Current interest-free operating liabilities		60,079	8,920
<b>Cash flow from operating activities</b>		<b>240,384</b>	159,785
Investing activities:			
Purchase of intangible assets		-225	-
Purchase of property, plant and equipment	13	-	-
Purchase of financial assets	14	-9,117	-199,364
Sale of financial assets	14	-	22,229
Repayment of loans from subsidiaries	15	10,835	-
<b>Cash flow from investing activities</b>		<b>1,493</b>	-177,135
Financing activities:			
Dividend		-301,331	-68,870
Provision to foundation		-2,900	-2,800
Shareholder contribution provided		-	-
New issue warrants		-214	-464
<b>New issue, net</b>		<b>-</b>	-
<b>Cash flow from financing activities</b>		<b>-304,445</b>	-72,134
<b>Cash flow for the year</b>		<b>-62,568</b>	-89,484
<b>Cash and cash equivalents at beginning of year</b>		<b>1,333,570</b>	1,419,361
Exchange difference in cash and cash equivalents		9,708	3,693
<b>Cash and cash equivalents at end of year</b>		<b>1,280,710</b>	1,333,570

# Parent Company

## Balance sheet

Amounts in SEK 000s	Note	31 Dec 2022	31 Dec 2021
<b>Assets</b>			
<b>Non-current assets</b>			
Intangible assets	11		
Capitalised expenses for development		225	2,236
<b>Total intangible assets</b>		<b>225</b>	<b>2,236</b>
Property, plant and equipment	13		
Production equipment		3,190	4,438
Equipment and computers		125	309
<b>Total property, plant and equipment</b>		<b>3,315</b>	<b>4,747</b>
<b>Financial assets</b>			
Participations in group companies	14	328,808	331,809
Receivables from group companies	15	-	10,835
Total financial assets		328,808	342,644
<b>Total non-current assets</b>		<b>332,348</b>	<b>349,627</b>
<b>Current assets</b>			
Inventories	16	94,272	38,247
<b>Current receivables</b>			
Trade receivables	17, 21	96,185	94,631
Receivables from group companies	18	78,186	27,051
Current tax assets	19	-	15,700
Other receivables	19	14,842	17,116
Deferred expenses and accrued income	20	2,298	4,780
<b>Total current receivables</b>		<b>191,511</b>	<b>159,278</b>
Cash and cash equivalents	21	1,280,710	1,333,570
<b>Total current assets</b>		<b>1,566,493</b>	<b>1,531,095</b>
<b>Total assets</b>		<b>1,898,841</b>	<b>1,880,722</b>

## Balance sheet

Amounts in SEK 000s	Note	31 Dec 2022	31 Dec 2021
<b>Equity and liabilities</b>			
<b>Equity</b>			
<b>Restricted equity</b>			
Share capital	22	20,196	20,196
Other restricted equity		1,253	1,253
		21,449	21,449
<b>Non-restricted equity</b>			
Retained earnings		1,390,106	1,547,992
Profit for the year		248,163	146,559
	23	1,638,269	1,694,551
<b>Total equity</b>		<b>1,659,718</b>	<b>1,716,000</b>
<b>Liabilities</b>			
<b>Non-current liabilities</b>			
Provisions		-	3,380
<b>Total non-current liabilities</b>		<b>-</b>	<b>3,380</b>
<b>Current liabilities</b>			
Prepayments from customers		2,273	180
Trade payables		19,505	31,202
Liabilities to group companies	18	131,252	75,216
Other liabilities	24	5,165	3,767
Current tax liabilities		12,886	-
Accrued expenses and deferred income	25	68,042	50,977
<b>Total current liabilities</b>		<b>239,123</b>	<b>161,342</b>
<b>Total liabilities</b>		<b>239,123</b>	<b>164,722</b>
<b>Total equity and liabilities</b>		<b>1,898,841</b>	<b>1,880,722</b>

# Parent Company

## Statement of changes in equity

Amounts in SEK 000s	Share capital	Other restricted equity	Retained earnings	Profit for the year	Total equity
Opening balance, 1 January 2021	20,196	1,253	1,477,466	137,672	1,636,587
Carried forward			137,672	-137,672	0
Dividend			-68,870		-68,870
Provision to foundation			-2,800		-2,800
New issue warrants			4,524		4,524
Profit for 2021				146,559	146,559
<b>Closing balance, 31 December 2021</b>	<b>20,196</b>	<b>1,253</b>	<b>1,547,992</b>	<b>146,559</b>	<b>1,716,000</b>
Opening equity, 1 January 2022	20,196	1,253	1,547,992	146,559	1,716,000
Carried forward			146,559	-146,559	0
Dividend			-301,331		-301,331
Provision for foundation			-2,900		-2,900
Warrants			-215		-215
Profit for 2022				248,163	248,163
<b>Closing balance, 31 December 2022</b>	<b>20,196</b>	<b>1,253</b>	<b>1,390,106</b>	<b>248 163</b>	<b>1,659,718</b>

# Notes to the financial statements and accounting policies

All figures in SEK 000s unless otherwise specified. Figures in parentheses refer to the previous year.

## Note 1 Accounting policies

### Compliance with norms and laws

The consolidated financial statements have been prepared in compliance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) and interpretations from the International Financial Reporting Interpretations Committee (IFRIC) that have been approved by the European Commission for application in the EU.

The Parent Company applies the Swedish Annual Accounts Act and the Swedish Financial Reporting Board's recommendation RFR 2, Accounting for Legal Entities, i.e. the same accounting policies as the group except in cases where the Parent Company's compliance with the Swedish Annual Accounts Act limits the applicability of IFRS in the Parent Company.

### New or revised IFRS standards applies by the group from 1 January 2022

**Amendments to IFRS 3 Business Combinations** – Reference to the Conceptual Framework. The amendment to IFRS 3 entails that the standard refers to the 2018 Conceptual Framework instead of the 1989 Framework. The amendment also adds to IFRS 3 a requirement that, for transactions and other events within the scope of IAS 37 or IFRIC 21, an acquirer applies IAS 37 or IFRIC 21 (instead of the Conceptual Framework) to identify the liabilities it has assumed in a business combination. Lastly, an explicit statement was added to IFRS 3 that an acquirer does not recognise contingent assets acquired in a business combination.

**Amendments to IAS 16 Property, Plant and Equipment** The amendment prohibits deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognises the proceeds from selling such items, and the cost of producing those items, in profit or loss.

**Amendments to IAS 37 – Onerous Contracts** – Cost of Fulfilling a Contract The amendment concerns costs a company should include as the cost of fulfilling a contract when assessing whether a contract is onerous. The amendment specifies that the cost of fulfilling a contract comprises the costs that relate directly to the contract. Costs that relate directly to a contract can either be incremental costs of fulfilling that contract (examples would be direct labour, materials) or an allocation of other costs that relate directly to fulfilling contracts (an example would be the allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract).

Annual improvements to IFRS standards 2018–2020 Annual improvements to the IFRS standards 2018–2020 cycle is a package of changes with improvements to different standards:

- **IFRS 1 First-time Adoption of International Financial Reporting Standards:** The amendment permits a subsidiary that becomes a first-time adopter after its parent and that applies paragraph D16(a) of IFRS 1 to measure cumulative translation differences using the amounts reported by its parent, based on the parent's date of transition to IFRSs.
- **IFRS 9 Financial instruments and fees in the 10% test:** The amendment clarifies which fees an entity includes when it applies the 10% test in assessing whether to derecognise a financial liability from the statement of financial position. An entity includes only fees paid or received between the entity (the borrower) and the lender, including fees paid or received by either the entity or the lender on the other's behalf.
- **IFRS 16 Leases:** The amendment to Illustrative Example 13 that removes from the example the illustration of the reimbursement of leasehold improvements by the lessor in order to resolve any potential confusion regarding the treatment of lease incentives that might arise because of how lease incentives are illustrated in that example.
- **IAS 41 Agriculture:** The amendment removes the requirement in paragraph 22 of IAS 41 for entities to exclude taxation cash flows when measuring the fair value of a biological asset using a present value technique. This will ensure consistency with the requirements in IFRS 13.

**New or revised IFRS standards and new interpretations not yet effective** The new and revised standards and new interpretations that have been issued, but are effective for financial years beginning on 1 January 2023, have not yet been adopted by the group. Executive Management's assessment is that these standards and interpretations will not have a material impact on the consolidated financial statements.

### Basis of preparation

The consolidated financial statements have been prepared on the historical cost basis unless otherwise specified. Non-current assets, non-current liabilities and provisions essentially consist of amounts that are expected to be recovered or settled more than 12 months after the closing date. Current assets and current liabilities essentially consist of amounts that are expected to be recovered or settled within 12 months from the closing date.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the company's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements, are disclosed in Note 28.

### Basis of consolidation

The consolidated financial statements consolidate the operations of the Parent Company and the subsidiaries for the period ended 31 December 2022. The Parent Company controls the subsidiaries, and has the ability to affect returns from its involvement with the subsidiaries through its power over the subsidiaries. All subsidiaries have their balance sheet date on 31 December. All intragroup transactions and balances are eliminated in full on consolidation, including unrealised gains or losses arising from inter-company transactions. In cases where unrealised losses on intragroup sales of assets are reversed on consolidation, the underlying asset is tested for impairment also from a group perspective. When necessary, amounts reported in the financial statements of subsidiaries have been adjusted to ensure conformity with the accounting policies of the group.

Profit/loss and other comprehensive income for subsidiaries that are acquired or sold during the year are recognised from the date on which the acquisition or sale went into force, according to what is applicable. Non-controlling interests, which are recognised as a component of equity, represent the share of the subsidiary's profit or loss and net assets that is not held by the group. The group attributes comprehensive income for the subsidiaries to owners of the Parent Company and non-controlling interests based on their respective holdings. Transactions involving the acquisition and disposal of shares in companies where there are non-controlling interests are recognised in the cash flow statement in "Cash flow from financing operations" and in the statement of changes in equity as "Transactions with owners".

### Provision to "Foundation to Prevent Antibiotic Resistance"

Provision to the Foundation to Prevent Antibiotic Resistance was approved at the Annual General Meeting and is in accordance with the Swedish Companies Act, Chapter 17 section 5 on donations for charitable purposes. The provision is recognised as an equity transaction. Support for recognition of the provision in equity is found in the Conceptual Framework for Financial Reporting in the section Financial performance reflected by accrual accounting (1.17ff). BioGaia has made the assessment that the company does not have a controlling influence over the Foundation according to IFRS 10 which is why the Foundation is not consolidated. The assessment is based among other factors on the fact that the Foundation is an independent organ, that BioGaia has no right to proceeds (positive or negative) from the Foundation, that three out of five of the members of the board of the Foundation are external and that an external general secretary is responsible for the day-to-day management.

## Foreign currency translation

- **Functional currency** The functional currency is the currency of the primary economic environments in which the group's companies operate.
- **Transactions** Foreign currency transactions are translated to the functional currency at the rate of exchange ruling on the transaction date. Monetary assets and liabilities in foreign currency are translated to the functional currency at the closing day rate. Exchange differences arising on translation are recognised in profit or loss. Non-monetary assets and liabilities carried at cost are translated at the rate of exchange ruling on the transaction date. Non-monetary assets and liabilities measured at fair value are translated to the functional currency using the rates of exchange applying on the date when the fair value was determined. Changes in value of operating receivables and liabilities are recognised in operating profit, while changes in value of financial receivables and liabilities are recognised in net financial items.
- **Derivatives** In previous years the company had forward exchange contracts in EUR and USD. The forward contracts are recognised at fair value through profit or loss. A financial asset or liability is taken up in the balance sheet when the company becomes party to the contractual terms of the instrument. The company changed its financial policy in 2020 and no new forward contracts have been taken since then.
- **Financial statements of foreign operations** Assets and liabilities in foreign group companies are translated from the group company's functional currency to the group's presentation currency, Swedish kronor (SEK), at the closing day rate of exchange. Income and expenses in foreign operations are translated to SEK at an average rate that is a reasonable approximation of actual rates on the respective transaction dates. An average rate is computed quarterly. Exchange differences arising on translation of foreign group companies are recognised in other comprehensive income.
- **Net investments in group companies** Receivables from a foreign operation for which settlement is neither planned nor likely to occur in the foreseeable future are, in substance, part of the company's net investment in that foreign operation. Exchange differences arising on translation of long-term loans in foreign currency that form part of the net investment in a foreign operation are deferred to a translation reserve in other comprehensive income.

## Segment reporting

Executive Management has analysed the group's internal reporting and determined that the group's operations are monitored and evaluated based on the following segments:

- **Paediatrics segment** drops, gut health tablets, oral rehydration solution (ORS) and cultures to be used as ingredients in licensee products (such as infant formula), as well as royalty revenue for paediatric products.)
- **Adult Health segment** (gut health tablets, oral health lozenges and cultures as an ingredient in a licensee's dairy products).
- **Other** (royalties in respect of development projects, revenue from packaging solutions in the subsidiary CapAble, etc.)

Sales and gross profit are reported for the above segments and are monitored regularly by the CEO (who is regarded as the chief operating decision maker) together with Executive Management. There is no monitoring of the company's total assets and liabilities against the segments' assets.

## Revenue recognition

**IFRS 15** BioGaia applies IFRS 15 for revenue recognition. IFRS 15 includes a model for revenue recognition (the five-step model) that is based on when control of a good or service is transferred to the customer. The basic principle is that an entity recognises revenue to differentiate between the transfer of promised goods or services to customers and an amount that reflects the compensation to which the entity is expected to be entitled in exchange for such goods or services.

- Step 1.** Identify the contract with a customer
  - Step 2.** Identify the performance obligations in the contract
  - Step 3.** Determine the transaction price
  - Step 4.** Allocate the transaction price to each performance obligation
  - Step 5.** Recognise revenue when a performance obligation is satisfied
- Revenue is recognised on the basis of the amount specified in a contract with a customer and does not include any amounts received on account of a third party. BioGaia recognises revenue when the group transfers control of a product or service to a customer. Details of BioGaia's revenue streams are provided below.

BioGaia's revenues mainly comprise sales of goods. No commitment for BioGaia remains after delivery since BioGaia does not provide customers with any extended guarantees or the option to return. Control is transferred to the customer when the good is placed at the disposal of the purchaser.

In addition to the sales of goods, other revenues consist of royalties or exclusivity rights linked to product distribution in a defined market/territory. These contracts include obligations over time and revenue is recognised in pace with fulfilment of BioGaia's performance obligations. The transaction price, i.e. the compensation BioGaia expects to receive in exchange for the goods and services is in most cases fixed and therefore easy to determine. Variable compensation exists in individual cases often in combination with requirements for minimum levels of sales, which simplifies assessment of the transaction price. Interest income is recognised in profit or loss in the period to which it pertains.

## Pensions

All employees in Sweden are subject to mandatory retirement in accordance with Swedish legislation, and other employees in accordance with the respective country's legislation. The company has no pension commitments other than payment of current pension insurance premiums. The pension insurance premiums are of the defined contribution type and are expensed as incurred.

## Income taxes

Current tax refers to the tax computed on taxable profit for the period. Taxable profit differs from recognised profit in the consolidated income statement in that it has been adjusted for non-taxable income and non-deductible expenses and for items of income and expense that are taxable or deductible in other periods.

Deferred tax refers to the tax computed partly on the basis of temporary differences and partly on tax losses.

At every closing date, an assessment is made to determine whether to recognise deferred tax assets not previously recognised in the balance sheet. Such tax assets are recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise these in the future.

## Research and development expenses

Expenditure on research activities is recognised as an expense in the period in which it is incurred. Expenditure on development is recognised as an intangible asset when all of the following conditions are met:

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

Other expenditure on development activities is recognised as an expense in the period in which it is incurred. An individual assessment of all ongoing research and development projects is made quarterly to determine which costs can be capitalised. The carrying amount of capitalised expenditure includes all directly attributable costs such as materials, purchased services and employment costs.

BioGaia typically has research activities in the form of clinical studies underway parallel to product development. Much of BioGaia's product development consists of stability tests to ensure that the products remain stable throughout their shelf lives. While the clinical studies and stability tests are in progress, it is often not possible to be certain that the project will be successful and that the product can be sold. This means that projects often do not meet the requirements for capitalisation. Other aspects of product development include finding new delivery systems and developing existing products. Amortisation of capitalised development costs is started when the asset can be used and the products begin generating revenue, and is carried out on a straight-line basis over the expected useful life of the asset.

## IFRS 16 Leases

- **IFRS 16.** BioGaia applies IFRS 16 for recognition of leases. IFRS 16 introduces a "right of use model" that requires the lessee to recognise almost all leases in the balance sheet, for which reason leases may not be classified as operating or finance leases. The exceptions are leases that have a term of 12 months or less as well as leases where the underlying assets has a low value. Depreciation on the asset and interest expenses on the liability are recognised in profit or loss.
- **The group as lessee** The group assesses whether a contract is or contains a



lease contract at the commencement date. The group recognises a right-of-use and a corresponding lease liability for all leases in which the group is the lessee. This does not apply, however, to short-term leases (defined as leases with a lease term of 12 months or less) and to leases where the underlying asset is of low value. For these leases the group recognises lease payments as an operating expense on a straight-line basis over the lease term, if no other systematic method better reflects how the economic benefits from the underlying asset will be consumed by the lessee. The lease liability is measured initially at the present value of lease payments not paid as of the commencement date, discounted by using the lease's implicit interest rate. If this interest rate cannot be easily identified, the group uses the incremental borrowing rate. The incremental borrowing rate is the interest rate that a lessee would need to pay for financing through borrowing during a corresponding period and with corresponding security, for right-of-use of an asset in a similar economic environment.

Lease payments included in measurement of the lease liability include:

- fixed lease payments (including substantive fixed payments) after deduction for any incentives,
  - variable lease payments depending on an index or a rate, initially measured using an index or rate at the commencement date.
- Non-current lease liabilities are recognised as a separate item and current lease liabilities are recognised together with other current liabilities

The group remeasures the lease liability (and makes a corresponding adjustment to the associated right-of-use) if:

- The lease term has changed or if there is a change in the assessment of an option to purchase the underlying asset. In such cases the lease liability is remeasured by discounting the changed lease payments with a changed discount rate.
- Lease payments change due to changes in an index or rate or a change in the amount expected to be paid out under a residual value guarantee. In such cases the lease liability is remeasured by discounting the changed lease payments with the initial discount rate (provided the changes in lease payments are not due to changed variable interest rate, when a changed discount rate will be used instead).
- A lease contract is changed and the change is not recognised as a separate lease. In such cases the lease liability is remeasured by discounting the changed lease payments with a changed discount rate. The group has not made any such adjustments in the periods presented.

At acquisition right-of-use assets are recognised at the value of a corresponding lease liability, lease payments made on or before the commencement date as well as any initial direct payments. In subsequent periods they are measured at cost after deduction for cumulative amortisation and impairment.

If the group undertakes to dismantle and remove a lease asset, to restore the site on which the item is located or restore the underlying asset to the condition required by the terms and conditions of the lease contract, a provision is recognised according to IAS 37. Such provisions are recognised as part of the cost for right-of-use, unless these payments arise in conjunction with production of goods.

Amortisation of right-of-use assets takes place over an estimated useful life or over the contractual lease term, if this is shorter. If a lease contract transfers right of ownership to the underlying assets at the end of the lease term or if the cost for right-of-use reflects that the group expects to exercise a call option, amortisation takes place over the useful life of the underlying asset. Amortisation starts as per the commencement date for the lease contract.

Right-of-use assets are presented on a separate line in the consolidated statement of financial position.

The group applies IAS 36 Impairment of Assets to decide whether an impairment requirement exists for the right-of-use and reports any identified impairment in the same manner as described in the principles for property, plant and equipment. Variable lease payments that are not due to an index or rate are not included in the measurement of the lease liability and right-of-use. Such lease payments are recognised as an expense in the period in which they arise and included on the line administrative expenses in the consolidated income statement.

IFRS 16 permits, as a practical expedient, that the lessee does not separate non-lease components from lease components and instead recognises each lease component and associated non-lease components as a single lease component. The group has chosen not to apply this exemption.

#### Intangible assets and property, plant and equipment

Intangible assets and property, plant and equipment are recognised at cost less accumulated amortisation/depreciation according to plan and any impairment.

Intangible assets are amortised on a straight-line basis over their expected useful lives.

The following depreciation periods are applied to property, plant and equipment:

#### Non-current assets

Production and laboratory equipment	5-10 years
Equipment and computers	3-5 years
Buildings	20-60 years
Intangible assets	3-10 years

An assessment is made at each balance sheet date to look for any indication that an asset may be impaired. Incomplete projects are tested for impairment annually. The cash-generating unit is the applicable segment. If impairment is indicated, the recoverable amount of the asset is calculated. If this is lower than the carrying amount, the value is written down to the recoverable amount.

Depreciation of buildings is started when construction is completed. For electrical and internal construction work, etc., the depreciation period is 20-30 years, and for framework and foundation the depreciation period is 60 years.

#### Inventories

Inventories are measured at the lower of cost and net realisable value, including provisions for obsolescence. Cost is measured according to purchase price.

#### Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and in banks.

#### Financial assets and liabilities

The group's accounting standards according to IFRS 9 Financial Instruments are provided below.

- **Financial instruments** Financial instruments recognised in the statement of financial position include on the assets side cash and cash equivalents, trade receivables, other current receivables and currency derivatives to the extent these have a positive fair value. On the liabilities side, there are trade payables, other current liabilities, loans and currency derivatives to the extent these have a negative fair value. The category to which the group's financial assets and liabilities belong is specified in Note 21.
- **Recognition and derecognition from the statement of financial position** A financial asset or liability is recognised in the statement of financial position when the company becomes party to the contractual terms of the instrument. A receivable, except trade receivables, is recognised when the company has performed and a contractual obligation exists for the counterparty to pay, even if no invoice has yet been sent. Trade receivables are recognised in the statement of financial position when an invoice has been sent. Liabilities, except trade payables, are recognised when the counterparty has performed and a contractual obligation to pay exists, even if an invoice has not yet been received. Trade payables are taken up when an invoice is received. A financial asset is derecognised from the statement of financial position when the contractual rights are realised, expire or the company has relinquished control. The same applies to part of a financial asset. A financial liability is derecognised from the statement of financial position when the contractual obligations are met or otherwise extinguished. The same applies to part of a financial liability. No currency derivatives or other financial assets and liabilities are offset in the statement of financial position since the terms for offsetting are not met. Acquisition and disposal of financial assets are recognised on the transaction date. The transaction date is the day the company undertakes to acquire or dispose of the asset.
- **Classification and measurement** Financial assets are classified on the basis of the business model in which the asset is held and its cash flow characteristic. If the financial asset is held within the framework of a business model whose objective is collecting contractual cash flows and the financial assets at identified dates give rise to cash flows that are solely payments of principal and interest on outstanding principal, the asset is recognised at amortised cost.

If the financial asset is held in a business model whose objective can be achieved both by collecting contractual cash flows and selling financial assets and the contractual terms of the financial asset give rise to cash flows that are solely payments of principal and interest on the principal at identified dates, the asset is recognised at fair value through other comprehensive income.

All other business models where the purpose is speculation, held for trading or where the cash flow characteristic excludes other business models result in recognition at fair value through profit or loss.

- **Amortised cost and effective interest method** Amortised cost for a financial asset is the amount at which the financial asset is measured at initial recognition minus principal repayments, plus the cumulative amortisation using the effective interest method of any difference between that principal and the outstanding principal, adjusted for any impairment. The gross carrying amount of a financial asset is the amortised cost of a financial asset before adjustment for any loss allowance.
- **Financial liabilities** Financial liabilities are recognised at amortised cost using the effective interest method or at fair value through profit or loss.
- **Financial liabilities at amortised cost** Loans and other financial liabilities, e.g. trade payables, are included in this category. Liabilities are measured at amortised cost.
- **Financial liabilities at fair value through profit or loss** This category consists of financial liabilities held for trading. This category includes provision for the additional purchase price for Nutraceuticals.
- **Impairment** The group recognises a loss allowance for expected credit losses on a financial asset measured at amortised cost or fair value through other comprehensive income, for a lease receivable or for a contractual asset. At each closing date, the group shall recognise in profit or loss the change in expected credit losses since the initial recognition date.

For trade receivables, contractual assets and lease receivables there is a simplified model which means that the group recognises directly expected credit losses for the remaining term of the asset. The expected credit losses for these financial assets are calculated with the aid of a provision matrix which is based on historical events, current conditions and forecasts for future economic conditions and the time value of the money if applicable. For all other financial assets the group shall measure a loss allowance to an amount that corresponds to 12 months' expected credit losses. For financial instruments for which a significant increase in credit risk has occurred since the initial recognition date, an allowance is recognised based on credit losses for the entire term to maturity of the asset. Equity instruments are not subject to these impairment rules.

Default is based on an assessment that it is improbable that a counterparty will meet its commitments on the basis of indicators such as financial difficulties and failure to pay. Regardless of the above, default occurs at the latest when the payment is 90 days overdue.

#### Measurement of financial instruments at fair value

Financial assets and financial liabilities measured at fair value in the balance sheet, or where a disclosure of fair value is provided, are classified in one of three levels based on the information used to determine fair value.

- **Level 1**, Financial instruments where fair value is determined based on observable (unadjusted) quoted prices in an active market for identical assets and liabilities. A market is regarded as active if quoted prices from a stock exchange, broker, industrial group, pricing service or supervisory

authority are readily and regularly available and these prices represent actual and regularly occurring arm's length market transactions.

- **Level 2**, Financial instruments where fair value is determined based on valuation models based on observable inputs for the asset or liability other than quoted prices included in Level 1, either direct (such as price quotations) or indirect (derived from price quotations).  
Examples of observable inputs within Level 2:
  - Quoted prices for similar assets and liabilities.
  - Data on which an assessment of price can be based, such as market interest rates and yield curves.
- **Level 3**, Financial instruments where fair value is determined based on valuation models where significant inputs are based on unobservable data.

#### Accounting Policies of the Parent Company

The differences between the accounting policies applied by the group and the Parent Company are described below. The following accounting policies for the Parent Company have been applied consistently for all periods presented in the Parent Company financial statements.

- **Presentation** The income statement and balance sheet of the Parent Company are presented in accordance with the schedules in the Swedish Annual Accounts Act.
- **Income taxes** The Parent Company recognises untaxed reserves including the deferred tax liability. In the consolidated financial statements, however, untaxed reserves are divided between the deferred tax liability and equity.
- **Subsidiaries** In the Parent Company, shareholdings in subsidiaries are accounted for on a historical cost basis. Group contributions are recognised as an increase in shares in subsidiaries. The carrying amount is tested regularly against the subsidiaries' consolidated equity.
- **Lease payments** Lease payments are recognised as an expense on a straight-line basis over the lease period provided different systematic method does not better reflect economic benefit over time.
- **IFRS 9** The Parent Company applies a simplified approach to classification under IFRS 9.

#### Approved changes to RFR 2 that have not yet come into effect

The Swedish Financial Reporting Board has not approved any material changes that have not yet come into effect.

## Note 2 Segment reporting

BioGaia's operating segments consist of Paediatrics and Adult Health. The Paediatrics segment includes sales of drops, oral rehydration solution (ORS), gut health tablets and also cultures as an ingredient in a licensee's product (such as infant formula). The Adult Health segment mainly includes gut health tablets, bone health products and oral health products and also sales of cultures as an ingredient in a licensee's dairy product and royalties from the sale of Adult Health products. Other consists of a number of smaller segments such as royalties in subsidiaries. Together these account for less than 10% of sales and are therefore not reported separately.

### Net sales by segment

	Group	
	2022	2021
Paediatrics	868,355	603,690
Adult Health	230,205	176,855
Other	5,398	4,566
	1,103,958	785,110

### Gross profit by segment

Paediatrics	643,607	458,480
Adult Health	153,298	119,958
Other	5,025	4,511
	801,930	582,949
Selling, administrative and R&D expenses	-467,421	-340,450
Other operating income/expenses	26,951	11,238
Operating profit	361,460	253,737
Net financial items	86,154	-1,025
Group profit before tax	447,614	252,712

In 2022, SEK 258.2 million (187.5) or 23% (24%) of revenue in the group was attributable to three customers. These three customers belong to both the Paediatrics and Adult Health segments. In 2022, no customer accounted for more than 10% of sales.

### Asia Pacific

Paediatrics	118,684	101,469
Adult Health	100,226	110,892
Other	4,074	2,092
	222,984	214,453

EMEA		
Paediatrics	450,159	288,383
Adult Health	60,190	45,103
Other	1,126	2,318
	511,475	335,804
Americas		
Paediatrics	299,512	213,837
Adult Health	69,788	20,860
Other	198	156
	369,498	234,853
Total	1,103,957	785,110

### Date of recognition

	Group		Parent Company	
	2022	2021	2022	2021
Performance obligations met on specific date (Product sales)	1,085,352	753,464	934,418	685,337
Performance obligations met over time (Licenses and royalties)	18,605	31,646	10,909	14,012
Total	1,103,957	785,110	945,327	699,349

### Contractual assets

Accrued revenue (Royalties)	350	2,963	350	2,760
Total	350	2,963	350	2,760

Contractual assets where performance obligations are met over time refers to royalties. The variation between the periods is related to timing of invoicing.

### Contractual liabilities

Prepayments from customers (Licenses and royalties)	32,268	2,372	-	180
Total	32,268	2,372		180

Contractual liabilities where performance obligations are met over time refers to accruals related to license and royalty revenue. The change relates to an increase in license and royalty liabilities.

For contractual liabilities at the beginning of the year, SEK 2.2 million was recognised as revenue during the year. For contractual liabilities at the end of the year, these will be recognised as revenue over the next five years.

### Performance obligations met on specific date (Product sales)

	Group	
	2022	2021
Paediatrics	867,504	595,361
Adult Health	213,360	155,355
Other	4,488	2,748
	1,085,352	753,464

### Performance obligations met over time (royalties)

Paediatrics	852	8,329
Adult Health	16,844	21,500
Other	909	1,817
	18,605	31,646

Of the group's assets, which amount to SEK 2,214.0 million (2,128.1), more than 80% (90%) are located in Europe. Of the group's capital expenditure on property, plant and equipment during the year, totalling SEK 17.9 million (6.4), more than 70% (90%) took place in Europe.

Sales in Sweden accounted for SEK 19.7 million (16.3) or 2% (2%) of total revenue in the group. The group's largest markets are the USA, France, Italy, Japan and Brazil (USA, Japan, Brazil, France and China). These markets account for approximately 43% (40%) of total revenue. The group's non-current assets amount to SEK 416.5 million (376.0) of which SEK 231.3 million (351.0) is located in Sweden and SEK 182.5 million (25.0) in other countries (USA, Japan and Canada).

### Note 3 Employees and personnel expenses, remuneration to senior executives

#### Average number of employees by country

	2022	of whom, men	2021	of whom, men
Parent Company:				
Sweden	97	35	95	31
Subsidiaries:				
Sweden	41	25	36	22
Japan	32	13	27	11
USA	29	9	2	2
Finland	2	-	1	-
UK	1	1	-	-
Canada	1	1	-	-
Total subsidiaries	106	49	66	35
Total group	203	84	161	66

The number of employees in the group at 31 December 2022 was 212 (167).

#### Salaries and other remuneration divided by country and between the Board/CEO and other employees

	2022 Board, CEO and Executive Vice Presidents	2022 Other employees	2021 Board, CEO and Executive Vice Presidents	2021 Other employees
Parent Company:				
Sweden	11,898	75,911	14,904	66,739
Subsidiaries:				
Sweden	2,732	17,889	3,467	14,030
Japan	4,449	9,498	4,446	8,229
USA	2,540	20,969	-	3,895
Finland	1,052	447	659	142
UK	1,384	-	-	-
Canada	1,476	-	-	-
Total subsidiaries	13,633	48,903	8,572	26,296
Total group	25,531	124,814	23,476	93,035

#### Total salaries and social security expenses

	Group		Parent Company	
	2022	2021	2022	2021
Salaries and other remuneration	150,345	116,511	87,809	81,643
Pension expenses, Board, CEO and Executive Vice Presidents	2,545	3,071	1,639	2,229
Pension expenses for other employees	12,362	11,187	10,990	10,966
Other social security expenses	39,735	33,832	30,254	27,177
	204,987	164,602	130,692	121,115

#### Pensions and health insurance

All employees in Sweden are subject to mandatory retirement in accordance with Swedish law. The company has no pension commitments other than payment of annual pension insurance premiums. For all employees except the CEO<sup>1</sup> over the age of 25 years, the following pension insurance premiums are paid in relation to salary:

	0-7.5 income base amounts	>7.5-30 income base amounts	>30 income base amounts
Pensionable salary within the range:			
Premium	4.5%	30%	0%

<sup>1</sup>For the CEO pension insurance premiums are paid with 4.5% within 7.5 income base amounts and with 30% above 7.5 income base amounts.

All employees in Sweden are covered by health insurance, with benefits. This health insurance is activated after 90 days of sick leave. Together with the employer's health insurance and compensation from the Social Insurance Agency, the employee receives total benefits equal to approximately 65-87% of salary after a qualifying period of 3 months (depending on the level of salary). The company also pays sick pay during the qualifying period (see above), i.e. from day 15 to day 90, when the health insurance is activated. Compensation from the Swedish Social Insurance Agency from day 15 corresponds to just under 80% of salary and is payable in a maximum amount corresponding to an annual salary of 7.5 price base amounts. During this period, the company pays compensation for loss of income so that the employee, regardless of salary level, receives a total of 80% of salary together with compensation from the Swedish Social Insurance Agency.

#### BioGaia's incentive scheme for the employees

BioGaia had a bonus programme for all employees in the Parent Company in 2022. The bonus is partly based on whether sales and operating profit reach budgeted levels and on a number of key qualitative targets for operations.

The maximum bonus amounts to 12% of salary. For 2022, the bonus achieved in the Parent Company was approximately 12% (6%) and the cost of the programme for the group amounted to SEK 16.0 million (6.0). An extra bonus for the CEO was approved for 2022 of SEK 560,000.

#### Subscription warrants programme

BioGaia implemented a subscription warrants programme as resolved by the 2021 Annual General Meeting. The programme involves the issue of a maximum of 365,000 warrants where each warrant shall entitle the holder during the period from 6 July 2024 through 6 November 2024 to subscribe for five new class B shares in BioGaia for a subscription price per five shares that amounts to SEK 578.2. Following the share split that took place in 2022, each option gives a right to subscribe to five shares (previously one share) for a subscription price of SEK 115.6 (previously SEK 578.2). The employees were invited to purchase the warrants at an amount of SEK 55.6 which was the market value determined by an external valuation using a Black-Scholes model. Significant assumptions in model included a share price of SEK 413.0, risk-free interest of 0%, volatility of 37% and a time of period of 3.5 years. A total of 89,730 warrants have been subscribed for. As part of the incentive programme, participants are offered a stay-on bonus in the form of a gross salary bonus from the company corresponding to 50% of the amount the participant paid for the warrants. The first bonus payment, corresponding to 15% of the amount paid by the participant for the warrants, takes place one year after the participant purchased the warrants. The second bonus payment, corresponding to 15% of the amount paid by the participant for the warrants, takes place two years after the participant purchased the warrants. The third bonus payment, corresponding to 20% of the amount paid by the participant for the warrants, takes place three years after the participant purchased the warrants. Bonus payments require that the participant remains employed by the company or its subsidiaries on the date of the bonus payment.

#### Remuneration to senior executives

Remuneration to the Chairman and members of the Board is paid according to the decision of the Annual General Meeting. The Board has appointed a Remuneration Committee consisting of Board Chairman Peter Rothschild, Board member Peter Elving and David Dangoor (chairman). The Remuneration Committee handles matters related to remuneration and other terms of employment of senior executives. The principles for remuneration to senior executives are approved by the Annual General Meeting. The task of the Remuneration Committee is to prepare recommendations in accordance with these principles. Remuneration to the CEO and other senior executives employed by the company consists of fixed salary, variable remuneration and other benefits. Other senior executives consist of the five persons who together with the CEO and Executive Vice Presidents make up the Executive Management.

In the event of termination by the company, the CEO and Executive Vice Presidents are entitled to full salary during an 18 month period of notice. In the event of termination by the company, other senior executives have a statutory notice period of at least three months in accordance with the Swedish Employment Protection Act. In other respects, the CEO and Executive Vice Presidents have the same benefits as other employees. No agreements for termination benefits exist for the CEO or other senior executives.

## Remuneration and other benefits during the year

	Directors' fees	Fixed salary	Variable remuneration	Pension insurance incl. health insurance	Total
<b>Board Chairman</b>					
Peter Rothschild	705	600	-	-	1,305
<b>Vice Chairman:</b>					
David Dangoor	575	-	-	-	575
<b>Board members</b>					
Ewa Björling	265	-	-	-	265
Christian Bubenheim	265	-	-	-	265
Peter Elving	285	-	-	-	285
Bénédicte Flambard	265	-	-	-	265
Anthon Jahreskog	375	-	-	-	375
Niklas Ringby*)	265	-	-	-	265
Vanessa Rothschild	265	-	-	-	265
<b>CEO</b>					
Isabelle Ducellier		3,194	1,204	854	5,252
<b>Executive Vice Presidents:</b>					
Marika Isberg		1,441	270	332	2,043
Alexander Kotsinas		2,014	510	452	2,976
Other senior executives (5 persons):		7,587	934	1,202	9,723
	3,265	14,836	2,918	2,840	23,859

\*) The net is transferred to EQT foundation in accordance with EQT's policy for directors' fees in portfolio companies

## Gender distribution

	2022 Women	2022 Men	2021 Women	2021 Men
Board of Directors	3	6	3	6
Management including CEO	4	4	5	6

## Note 4 Auditor's fees

	Group		Parent Company	
	2022	2021	2022	2021
Deloitte AB				
Audit fees	1,475	1,127	1,100	982
Tax advice	130	-	130	-
Other services		-		-

Audit assignments refer to the auditors' work on the statutory audit, other auditing activities and different types of quality assurance services. Other services are such that are not included in the audit assignment, auditing activities or tax advice.

## Note 5 Other operating income

	Group		Parent Company	
	2022	2021	2022	2021
Government subsidy	159	98	-	-
Exchange rate gains on receivables and operating liabilities, net	26,792	11,506	27,330	11,506
	27,489	11,604	27,330	11,506

Government subsidy refers to support related to Covid-19 in Japan.

## Note 6 Other operating expenses

	Group		Parent Company	
	2022	2021	2022	2021
Exchange rate losses on receivables and operating liabilities, net	538	365	-	-
	538	365	-	-

## Note 7 Operating expenses

### Operating expenses allocated by type of cost

	Group		Parent Company	
	2022	2021	2022	2021
Cost of sales	303,303	202,161	327,060	256,210
Personnel expenses	212,003	168,149	137,345	124,146
Depreciation/Amortisation	23,890	27,241	3,667	3,736
Other operating expenses	230,303	145,426	165,715	155,500
	769,499	542,977	633,787	539,592

For the Parent Company operating expenses include lease payments excluding rents with SEK 0.5 million (0.6) and rents with SEK 7.5 million (6.8).

The Parent Company's future payment commitments regarding lease payments excluding rents amount to SEK 0.3 million (0.9). The Parent Company's lease payments excluding rents fall due for payment with SEK 0.3 million (0.7) within one year and SEK 0.0 million (0.2) within two to five years. The Parent Company's future payment commitments regarding rents amount to SEK 9.8 million (17.7). The Parent Company's rents fall due for payment with SEK 7.2 million (8.3) within one year, SEK 2.6 million (9.4) within two to five years and SEK 0 million (0) after five years.

### Research and development expenses

The expenses capitalised in the balance sheet relate to MetaboGen, and to IT development. No other expenses for development in the Parent Company or subsidiaries during the year meet the requirement for capitalisation in the balance sheet.

### Total research and development expenses

	Group		Parent Company	
	2022	2021	2022	2021
Total R&D expenses excl. amortisation	103,441	102,543	87,964	83,719
Development expenses capitalised during the year	-	-	-	-
R&D expenses not capitalised	103,441	102,543	87,964	83,719
Amortisation component of R&D expenses *)	3,364	2,924	1,828	1,844
R&D expenses with an effect on profit/loss	106,805	105,467	89,792	85,563

\*) This amount refers only to the portion of depreciation on property, plant, equipment and intangible assets (IT development) attributable to the research and development function in the income statement classified by function.

## Note 8 Financial income

	Group		Parent Company	
	2022	2021	2022	2021
Value adjustment of financial liabilities and assets	83,577	-	-	-
Interest income	7,963	107	9,144	688
	91,540	107	9,144	688

## Note 9 Financial expenses

	Group		Parent Company	
	2022	2021	2022	2021
Interest expenses and other financial expenses	5,386	1,132	4,823	-
	5,386	1,132	4,823	-

## Note 10 Tax on profit for the year

	Group		Parent Company	
	2022	2021	2022	2021
Current tax	-88,096	-53,609	-67,871	-39,344
Deferred tax	14,256	-2,830	-	-
	-73,840	-56,439	-67,871	-39,344

### Deferred tax in untaxed reserves

	Group		Parent Company	
	2022	2021	2022	2021
Deferred tax attributable to untaxed reserves	2,918	2,724	-	-
	2,918	2,724	-	-

### Change in deferred tax liability

	Group	
	2022	2021
Opening balance deferred taxes	14,240	11,312
Deferred tax from acquisitions	-	2,620
Resolution of deferred tax	-1,688	-
Provision for deferred tax	-	308
Closing deferred tax liability	12,552	14,240

The deferred tax liability in untaxed reserves SEK 2.9 million and relating to buildings SEK 0.7 million is attributable to the subsidiary BioGaia Production AB. A deferred tax liability from the acquisition of Nutraceuticals Inc. amounts to SEK 0.6 million and other deferred tax liability is related to ongoing research and development projects in MetaboGen AB.

### Change in deferred tax assets

	Group	
	2022	2021
Opening balance deferred taxes	2,757	5,279
Resolution of deferred tax asset	12,568	-2,522
Closing balance, deferred tax	15,325	2,757

SEK 10.2 million of deferred tax assets relates to the subsidiary BioGaia Japan Inc. This mainly relates to a consolidating adjustment of exclusivity revenue for product rights recognised successively over the term of the agreement. Other deferred tax assets of SEK 5.1 million related to a consolidating adjustment of intra-group profits in inventories and a loss allowance.

### Reconciliation of nominal tax and actual tax expenses

	Group		Parent Company	
	2022	2021	2022	2021
Reported profit before tax	447,613	252,712	316,034	185,903
Tax rate	20.6%	20.6%	20.6%	20.6%
Anticipated tax expense	-92,208	-52,059	-65,103	-38,296
Tax effect of other non-deductible and non-taxable items	17,357	-2,899	-3,091	-1,048

	2022	2021	2022	2021
Tax effect of other rates for foreign subsidiaries	2,102	-1,359	-	-
Tax effect on unrecognised deferred tax on loss carry forwards	-1,224	-235	-	-
Tax effect attributable to previous years	-	-	-	-
Other tax adjustment	142	112	323	-
Actual tax expense	-73,831	-56,439	-67,871	-39,344

The tax rate for the group amounted to 16% (22%) of profit for the year after financial items.

## Note 11 Intangible assets

Group	R&D projects in progress	Goodwill	Development costs	Total intangible assets
Accumulated cost				
Opening balance, 1 January 2021	45,850	5,300	6,708	57,858
Acquired goodwill	-	143,927	-	143,927
Closing balance, 31 December 2021	45,850	149,227	6,708	201,785
Opening balance, 1 January 2022	45,850	149,227	6,708	201,785
Additions	-	-	225	225
Exchange differences	-	22,290	-	22,065
Closing balance, 31 December 2022	45,850	171,517	6,933	224,075
Accumulated depreciation				
Opening balance, 1 January 2021	-	-	2,236	2,236
Depreciation	-	-	2,236	2,236
Closing balance, 31 December 2021	-	-	4,472	4,472
Opening balance, 1 January 2022	-	-	4,472	4,472
Depreciation	-	-	2,236	2,236
Closing balance, 31 December 2022	-	-	6,708	6,708

Carrying amounts:				
At 1 January 2021	45,850	5,300	4,472	55,622
At 31 December 2021	45,850	149,227	2,236	197,313
At 31 December 2022	45,850	171,517	225	217,367

#### Parent Company

	R&D projects in progress	Good- will	Develop- ment costs	Total intangible assets
Accumulated cost				
Opening balance, 1 January 2021	-	-	6,708	6,708
Additions	-	-	-	-
Closing balance, 31 December 2021	-	-	6,708	6,708
Opening balance, 1 January 2022	-	-	6,708	6,708
Additions	-	-	225	225
Closing balance, 31 December 2022	-	-	6,933	6,933
Accumulated depreciation				
Opening balance, 1 January 2021	-	-	2,236	2,236
Depreciation	-	-	2,236	2,236
Closing balance, 31 December 2021	-	-	4,472	4,472
Opening balance, 1 January 2022	-	-	4,472	4,472
Depreciation	-	-	2,236	2,236
Closing balance, 31 December 2022	-	-	6,708	6,708
Carrying amounts:				
At 1 January 2021	-	-	4,472	4,472
At 31 December 2021	-	-	2,236	2,236
At 31 December 2022	-	-	225	225

MetaboGen The group recognises intangible assets from the acquisition of MetaboGen which amount to SEK 45.8 million relating to research and development projects and SEK 5.3 million as goodwill. In conjunction with the balance sheet date, impairment testing was carried out using a cash flow model where MetaboGen is a cash-generating unit. Testing for impairment was carried out based on Executive Management's future forecasts. These forecasts were prepared internally by Executive Management based on management's overall experience and their best assessment of the development potential of the company and the projects as well as market growth after launch. The model sees the research and development portfolio as a unit but assessment of future revenue is made per underlying project. Significant assumptions in the model include future revenues, discount rate

and risk adjustment of forecasted cash flow. The forecast period is 11 years and the growth rate reflects the commercialisation of the projects. The forecast period is longer to reflect revenue developments from the launch in 2025 and growth. The model includes a horizon value with a growth assumption of 2% (2%). The discount rate amounts to 9.54% (7.72%) but each project includes a risk adjustment factor. Furthermore, the model includes specific costs per project as well as administrative expenses that are not allocated per project. Future costs are based on Executive Management's budgets and forecasts. Significant assumptions that have changed compared to acquisition and have therefore been updated in the model are estimated costs and risk adjustment. Testing for impairment shows that no impairment requirement exists relating to the intangible assets. To support the impairment testing performed, an overall analysis has been performed of the sensitivity of the assumptions used in the model. An increase in the discount rate by 1% has a negative impact on cash flow valuation by approximately SEK 22 million, but does not lead to impairment. Other assumptions have been left unchanged in the sensitivity analysis. Amortisation starts in conjunction with research and development projects for MetaboGen being completed and/or commercialised. See also Note 28 for additional information.

Nutraceuticals The group recognises surplus values from the acquisition of Nutraceuticals, which amount to SEK 2.5 million relating to buildings and land and SEK 166.0 million as goodwill. In conjunction with the balance sheet date, impairment testing was carried out using a cash flow model where Nutraceuticals is a cash-generating unit. Testing for impairment was carried out based on Executive Management's future forecasts. These forecasts were prepared internally by Executive Management based on management's overall experience and their best assessment of the company and market growth. Significant assumptions in the model include future revenues, operating margin and discount rate. The forecast period is 5 years and the model includes a horizon value with a growth assumption of 2%. The discount rate amounts to 11.21%. Future costs are based on Executive Management's budgets and forecasts. Testing for impairment shows that no impairment requirement exists relating to the intangible assets. To support the impairment testing performed, an overall analysis has been performed of the sensitivity of the assumptions used in the model. An increase of 3% of the discount rate does not lead to any impairment requirement. See also Note 28 for additional information.

During the year, the group and the Parent Company have amortised SEK 2.2 million of capitalised development costs for the ERP system that went into operation in 2020. The amortisation period for these development costs is 3 years.

## Note 12 Right-of-use assets

### Group

	Land and buildings	Equipment	Total rights of use
Accumulated cost			
Opening balance, 1 January 2021	40,697	1,857	42,554
Additions	345	178	523
Disposals	-2,552	-	-2,552
Closing balance, 31 December 2021	38,490	2,035	40,525

Opening balance, 1 January 2022	38,490	2,035	40,525
Additions	6,066	-	6,066
Disposals	-135	-	-135
Closing balance, 31 December 2022	44,421	2,035	46,456
Accumulated depreciation			
Opening balance, 1 January 2021	13,433	260	13,693
Depreciation	6,833	694	7,527
Impairment	4,225	-	4,225
Closing balance, 31 December 2021	24,491	954	25,445
Opening balance, 1 January 2022	24,491	954	25,445
Depreciation/Amortisation	8,582	561	9,143
Reversal of impairment impairment	-1,690	-	-1,690
Closing balance, 31 December 2022	31,383	1,515	32,898
Carrying amounts:			
At 1 January 2021	27,264	1,597	28,861
At 31 December 2021	13,999	1,081	15,080
At 31 December 2022	13,038	520	13,558

The group mainly leases buildings but also IT equipment. The average lease term is 2 years. A maturity analysis of lease liabilities and incremental borrowing rate is presented in Note 27. No extension options of significance exist in leases.

### Amounts recognised in profit or loss related to right-of-use assets

	Group	
	2022	2021
Depreciation of right-of-use assets	7,453	11,752
Interest expense for lease liabilities	565	739
Expenses related to short-term leases and low-value leases	3,956	3,760
Total	11,974	16,251

Total cash-flow for leases amounts to approximately SEK 13.7 million (12.0).

## Note 13 Property, plant and equipment

Group	Parent Company				Total property, plant and equipment
	Land and buildings	Production and laboratory equipment	Work in progress	Equipment, computers	
Accumulated cost:					
Opening balance, 1 January 2021	109,221	79,821	-	24,622	213,664
Additions	1,466	61	-	4,851	6,378
Acquisition of Nutraceuticals	16,801	-	-	2,557	19,358
Disposals	-	-3,744	-	-168	-168
Exchange differences	-	-	-	-17	-17
Closing balance, 31 December 2021	127,488	76,138	-	31,845	235,471
Opening balance, 1 January 2022	127,488	76,138	-	31,845	235,471
Additions	8,104	-	-	9,812	17,916
Disposals	-	-	-	-382	-382
Exchange differences	1,796	-	-	103	1,899
Closing balance, 31 December 2022	137,388	76,138	-	41,378	254,904
Accumulated depreciation:					
Opening balance, 1 January 2021	18,144	41,873	-	19,743	79,760
Depreciation	3,872	7,091	-	2,289	13,252
Acquisition of Nutraceuticals	5,320	-	-	2,506	7,826
Disposals	-	-3,744	-	-168	-3,912
Exchange differences	-	-	-	-10	-10
Closing balance, 31 December 2021	27,336	45,220	-	24,360	96,916
Opening balance, 1 January 2022	27,336	45,220	-	24,360	96,916
Depreciation/Amortisation	4,325	7,183	-	2,692	14,200
Disposals	-	-	-	-382	-382
Exchange differences	-19	-	-	21	2
Closing balance, 31 December 2022	31,642	52,403	-	26,691	110,736
Carrying amounts					
At 1 January 2021	91,077	37,948	-	4,879	133,904
At 31 December 2021	100,152	30,918	-	7,485	138,555
At 31 December 2022	105,746	23,735	-	14,687	144,168

## Parent Company

	Production and laboratory equipment	Equipment and computers	Total property, plant and equipment
Accumulated cost:			
Opening balance, 1 January 2021	12,701	12,806	25,507
Disposals	-	-	-
Additions	-	-	-
Closing balance, 31 December 2021	12,701	12,806	25,507
Opening balance, 1 January 2022	12,701	12,806	25,507
Additions	-	-	-
Closing balance, 31 December 2022	12,701	12,806	25,507
Accumulated depreciation:			
Opening balance, 1 January 2021	7,016	12,245	19,261
Depreciation	1,247	252	1,499
Closing balance, 31 December 2021	8,263	12,497	20,760
Opening balance, 1 January 2022	8,263	12,497	20,760
Depreciation/Amortisation	1,248	184	1,432
Closing balance, 31 December 2022	9,511	12,681	22,192
Carrying amounts:			
At 1 January 2021	5,685	561	6,246
At 31 December 2021	4,438	309	4,747
At 31 December 2022	3,190	125	3,315

## Depreciation of property, plant and equipment is recognised on the following lines in the income statement

	Group		Parent Company	
	2022	2021	2022	2021
Cost of sales	9,016	8,888	-	-
Selling expenses	1,694	1,102	114	154
Administrative expenses	662	660	26	33
Research and development expenses	2,828	2,602	1,291	1,313
	14,200	13,252	1,431	1,499

## Note 14 Financial assets

### Parent Company

Participations in group companies	2022	2021
At beginning of year	331,809	154,671
Group contribution paid to BioGaia Pharma AB	3,767	8,701
Group contribution paid to MetaboGen AB	11,049	10,007
Group contribution paid to TriPac AB	3	3
Group contribution paid to BioGaia Invest AB	1	-
Impairment loss on shares in subsidiaries	-27,540	-18,708
Shareholder contributions for the acquisition of shares in Nutraceuticals to BioGaia Biologics Inc.	601	134,250
Acquisition of shares in MetaboGen	-	11,441
Shareholder contribution to BioGaia Invest AB	-	23,025
Shareholder contribution to BioGaia Finland OY	2,136	6,059
Shareholder contribution to BioGaia UK Ltd	-	2,360
Shareholder contribution to BioGaia Probiotics Canada Inc.	6,982	-
Carrying amount at end of year	328,808	331,809

### Specification of the Parent Company's equity holdings in group companies

Subsidiary/corp. reg.no./Domicile	No. of shares	Holding, %	Book value
BioGaia Biologics Inc. /-/Raleigh, NC, USA	100,000	100	134,851
TriPac AB /556153-2200/Stockholm	10,000	100	3,606
CapAble AB /556768-3601/Stockholm	10,000	100	0
BioGaia Pharma AB /559114-8191/Stockholm	48,000	96	21,142
BioGaia Japan Inc. /-/Hiroshima, Japan	180	100	0
BioGaia Invest AB /559306-5849/ Stockholm	10,000	100	23,026
BioGaia UK Limited /13574654/ London	1	100	2,360
BioGaia Finland OY /3206997-7/ Helsinki	10	100	8,196
BioGaia Probiotics Canada Inc. /100020438/ Toronto	1	100	6,982
MetaboGen AB /5566872-7142/Stockholm	819,091	100	88,004
BioGaia Production AB /556591-9767/Eslöv	10,000	100	40,641
			328,808

The assets and liabilities of the American subsidiary BioGaia Biologics Inc, and its subsidiaries Nutraceuticals Inc. and BioGaia USA Inc. (previously Everidis Inc.) have been translated at the closing day rate of exchange, SEK 10.44 (9.04). Income statement items have been translated at an exchange rate of SEK 10.12 (9.27).



The assets and liabilities of the Japanese subsidiary BioGaia Japan Inc. have been translated at an exchange rate of SEK 0.0792 (0.0785). Income statement items have been translated at an exchange rate of SEK 0.0771 (0.0781). The resulting translation differences have been recognised in consolidated comprehensive income.

BioGaia Pharma AB was formed in 2017. BioGaia owns 96% of the company. BioGaia Pharma's CEO, Nigel Titford owns 4% of the company. The minority share of equity in BioGaia Pharma amounts to SEK 2,000.

BioGaia launched one wholly owned subsidiary in Canada during the year.

Of total purchases made by the Parent Company, 36.5% (32.1%) was attributable to group companies. Of the Parent Company's sales, 9.1% (3.0%) went to group companies.

## Note 15 Non-current receivables from subsidiaries

### Non-current receivables from subsidiaries

	Parent Company	
	2022	2021
At beginning of year	10,835	10,835
Exchange difference related to loan to BioGaia Japan Inc.	437	-437
Revaluation/provision for net receivable	-437	437
Repayment of loan from BioGaia Production AB	-10,835	-
	-	10,835

### Non-current receivables from group companies at 31 December 2022

	Parent Company	
	2022	2021
BioGaia Production AB	-	10,835
Closing balance at end of year	-	10,835

## Note 16 Inventories

	Group		Parent Company	
	2022	2021	2022	2021
Raw materials and consumables	26,437	20,778	-	-
Finished goods and goods for resale	116,401	81,959	94,272	38,247
	142,838	102,737	94,272	38,247

The group's provision for obsolescence amounted to SEK 7.5 million (6.5) at 31 December 2022. Expenses relating to Impairment losses on inventory and scrapping amounted to SEK 2.0 million (1.2).

## Note 17 Trade receivables

Provisions for trade receivables amounted to SEK 9.3 million (3.8) at 31 December 2022.

The provisions relate partly to impairment of identified doubtful receivables of SEK 3.3 million (3.3) and partly to a provision for expected losses in accordance with IFRS 9 of SEK 5.9 million (0.5).

At 31 December 2022, trade receivables amounting to SEK 44.5 million (27.2) were overdue. Of the overdue receivables, SEK 37.3 million had been recovered as of the date of signing of the financial statements.

### Age analysis

	Group		Parent Company	
	2022	2021	2022	2021
Receivables not overdue	92,116	91,941	62,658	67,485
Less than 3 months	43,203	26,510	36,597	26,510
3-6 months	744	471	744	471
More than 6 months	573	165	573	165
Expected loss provision IFRS 9	-5,933	-499	-4,387	-
	130,703	118,588	96,185	94,631

### The carrying amounts, by currency, are as follows

	Group		Parent Company	
	2022	2021	2022	2021
EUR	40,600	32,284	40,001	31,590
USD	62,021	53,616	46,562	48,363
SEK	14,257	14,802	14,009	14,678
JPY	17,671	18,123	-	-
GBP	2,087	261	-	-
Expected loss provision IFRS 9	-5,933	-499	-4,387	-
	130,703	118,587	96,185	94,631

## Note 18 Related party transactions

### Group

Annwall & Rothschild Investment AB owns 3,703,340 class A shares and 500,000 class B shares, corresponding to 4.2% of the share capital and 27.9% of the voting rights. Annwall & Rothschild Investment AB is owned by the founders Jan Annwall and Peter Rothschild who is Chairman of the Board of BioGaia. Transactions that took place in 2022 were a dividend of SEK 2.98 per share as well as remuneration and directors' fees. For further information, see Note 3.

## Parent Company

The Parent Company owns 100% of the shares in BioGaia Production AB, BioGaia Biologics Inc., USA, BioGaia Japan Inc., Capable AB, Tripac AB, MetaboGen AB, BioGaia Invest AB, BioGaia Finland Oy BioGaia UK Ltd and the newly established company BioGaia Probiotics Canada Inc.

The Parent Company owns 96% of the shares in BioGaia Pharma AB.

### The following transactions have taken place with BioGaia Production AB

	Parent Company	
	2022	2021
Interest income	108	129
Purchase of services	-1,554	-2,965
Purchase of goods	-215,428	-157,793

Goods are purchased on a cost plus basis.

### The following transactions have taken place with BioGaia Japan Inc.

	Parent Company	
	2022	2021
Interest income	1,365	854
Sale of goods	17,470	21,086

### The following transactions have taken place with BioGaia Biologics Inc. and BioGaia USA Inc.

	Parent Company	
	2022	2021
Shareholder contribution provided	-601	-134,250
Purchase of services	-12,863	-12,198
Sale of goods	55,269	-

### The following transactions have taken place with BioGaia Probiotics Canada Inc.

	Parent Company	
	2022	2021
Shareholder contribution provided	-6,982	-
Sale of goods	2,712	-

The following transactions have taken place with BioGaia Pharma AB

	Parent Company	
	2022	2021
Sales of services	57	60
Group contribution paid	-3,767	-8,701
Shareholder contribution provided	-	-

The following transactions have taken place with Tripac AB

	Parent Company	
	2022	2021
Group contribution paid	-3	-3

The following transactions have taken place with BioGaia Invest AB

	Parent Company	
	2022	2021
Shareholder contribution provided	-	-23,025
Group contribution paid	-1	-

The following transactions have taken place with MetaboGen AB

	Parent Company	
	2022	2021
Sales of services	120	120
Group contribution paid	-11,049	-10,008

The following transactions have taken place with BioGaia Finland

	Parent Company	
	2022	2021
Sale of goods	3,658	3,073
Shareholder contributions	-2,136	-6,059

The following transactions have taken place with BioGaia UK

	Parent Company	
	2022	2021
Sale of goods	4,146	972
Shareholder contributions	-	-2,360

The closing balance at the end of the period was as follows

	Parent Company	
	31 Dec 2022	31 Dec 2021
Non-current receivables from subsidiaries		

Non-current receivables, BioGaia Production AB	-	10,835
		10,835
Current liabilities from subsidiaries		
Current liabilities, BioGaia Biologics Inc	-26,354	-16,466
Current liabilities, CapAble AB	-4,287	-4,287
Current liabilities, Tripac AB	-	-
Current liabilities, BioGaia Pharma AB	-5,500	-8,645
Current liabilities, BioGaia Production AB	-74,969	-20,801
Current liabilities, BioGaia Invest AB	-772	-770
Current liabilities, MetaboGen AB	-19,370	-24,247
	-131,252	-75,216
Current receivables from subsidiaries		
Current receivables Tripac	303	306
Current receivables BioGaia UK	2,077	191
Current receivables, BioGaia Japan Inc.	73,094	26,554
	78,186	27,051

See also Note 3 for other related party transactions.

Note 19 Other current receivables

	Group		Parent Company	
	2022	2021	2022	2021
VAT refund	15,470	13,485	14,841	13,485
Current tax assets	332	15,926	-	15,700
Other receivables	2,931	6,893	-	3,633
	18,733	36,304	14,841	32,818

	Group		Parent Company	
	2022	2021	2022	2021
Accrued income	351	9,564	351	4,780
Prepaid rents	1,872	-	1,610	-
Other deferred expenses	14,618	204	337	0
	16,841	9,768	2,298	4,780

Note 20 Deferred expenses and accrued income

Note 21 Financial assets and liabilities

Financial assets	31 Dec 2022		31 Dec 2021	
	Fair value through profit and loss	Accrued cost	Fair value through profit and loss	Accrued cost
Trade receivables	-	130,703	-	118,588
Shares in unlisted companies	25,793	-	22,229	-
Cash and cash equivalents	-	1,488,366	-	1,484,680
Financial liabilities				
Trade payables	-	32,050	-	42,313
Provision for additional purchase price	33,627	-	100,591	-

Measurement of financial instruments at fair value

Financial liabilities

BioGaia has a financial liability relating to the additional purchase price in business acquisitions that is measured at fair value through profit or loss. The additional purchase price is due to the acquisition of Nutraceutics and is based on sales in Nutraceutics in 2026 or 2027. The amount, which will be settled in April 2027 or 2028, may also be adjusted if the agreed budget for marketing costs is exceeded.

During the fourth quarter, a new forecast concerning sales in Nutraceutics in 2027 was prepared showing lower sales than the previous forecast. BioGaia's best assessment of fair value of the financial liability related to the additional purchase price at 31 December 2022 was therefore adjusted to SEK 33.6 million. Estimates of fair value are based on Level 3 of the hierarchy for fair value, which means fair value is determined using valuation models where significant inputs are based on unobservable data. The measurement was based on anticipated future cash flows discounted with a market-based interest rate. The value adjustment is recognised as financial income of SEK 80.0 million for the full year 2022 and is mainly attributable to the adjusted sales forecast. The sales forecast for 2027 is now SEK 287.3 million. A change in the forecast of 10% would entail a change in the provision of about SEK 3.3 million.

Provision for additional purchase price

	Jan-Dec 2022	Jan-Dec 2022
At beginning of period	100,591	-
Value adjustment	-80,013	-
Exchange differences	13,049	-
At end of period	33,627	100,591

## Financial assets

BioGaia owns shares in the companies Boneprox AB and Skinome AB through BioGaia Invest at a cost of SEK 22.2 million. These financial assets are measured at fair value through profit or loss. Estimates of fair value are based on Level 3 of the hierarchy for fair value, which means fair value is determined using valuation models where significant inputs are based on unobservable data.

During the second quarter of 2022, Skinome AB completed a new issue and shares were revalued in an amount of SEK 3.6 million based on the subscription price. The revaluation was recognised as financial income of SEK 3.6 million in the second quarter. During the period, no additional transactions occurred in Boneprox AB or Skinome AB to indicate a change in value. Fair value of these financial assets therefore corresponds to cost for Boneprox AB and value adjustment value for Skinome AB.

## Other financial assets and liabilities

Trade receivables, trade payables, prepayments from customers and accrued income normally have a term that is less than three months why the book value is a good approximation of the fair value.

## Note 22 Equity

The objective of the group's capital management is to safeguard the group's ability to continue as a going concern and to provide a good return to the shareholders. The total number of shares in BioGaia after completion of the split amounts to 100,982,310 (previously 20,196,462 shares), whereof 3,703,340 class A shares, with ten votes each, and 97,278,970 class B shares, with one vote each, corresponding to in total 134,312,370 votes. The share capital is unchanged and amounts to SEK 20,196,462. The class A and B shares grant equal entitlement to the company's assets and profits. Both the class A shares and class B shares have a quota value of SEK 5 each. All shares are fully paid-up and no shares are reserved for transfer. No shares are held in treasury by the company itself or by its subsidiaries.

Other contributed capital consists of payments made by the shareholders in excess of the quota value. The repayment of the warrants reduced equity by SEK 0.2 million during the year. The foreign currency translation reserve arises in translation of the net assets of foreign operations according to the acquisition method. Retained earnings consist of other equity.

The Parent Company's dividend for 2021, as resolved at the 2022 Annual General Meeting, was SEK 301.3 million and corresponded to SEK 2.98 per share. In accordance with the dividend policy, the Board proposes that the upcoming Annual General Meeting on 5 May 2023 approves an ordinary dividend according to policy of SEK 1.45 (0.73) per share, plus an extra dividend of SEK 1.45 (2.26) per share resulting in a total dividend of SEK 2.90 (2.98) per share corresponding to SEK 292.8 million (301.3). The dividend proposal is based on BioGaia's updated dividend policy to distribute 50% of the group's profit. Group profit was adjusted for financial income from adjustment to the value of the additional purchase price for the acquisition of Nutraceutics.

The Board further proposes to the forthcoming Annual General Meeting, a provision to the Foundation to Prevent Antibiotic Resistance of SEK 4.4 million.

Non-controlling interests account for 4.0% of the subsidiary BioGaia Pharma's equity.

Equity in the BioGaia group consists of the sum of equity attributable to the owners of BioGaia AB and equity attributable to non-controlling interests. At 31 December, total consolidated equity amounted to SEK 1,972.4 million (1,877.4) and equity attributable to owners of the Parent Company amounted to SEK 1,972.4 million (1,746.2).

The company's policy is to pay a shareholder dividend equal to 50% of the group's profit adjusted for non-recurring items.

## Key ratios, equity

	2022	2021
Number of shares at 31 Dec, thousands	100,982	100,982
Average number of shares, thousands <sup>3)</sup>	100,982	100,982
Earnings per share, SEK <sup>1) 3)</sup>	3.70	1.94
Equity per share, SEK <sup>3)</sup>	19.53	18.59
Return on equity, % <sup>3)</sup>	19	11
Share price on balance-sheet date, SEK	84.00	518.00
Dividend per share, SEK <sup>2)</sup>	2.90	2.98

<sup>1)</sup> Key ratio defined according to IFRS.

<sup>2)</sup> Dividend proposed but not yet approved. The Board and the CEO propose that the company pays a dividend of SEK 2.90.

<sup>3)</sup> In view of the 5:1 share split, which took place in May 2022, historical key ratios from 2021 have been restated.

## Note 23 Proposed appropriation of profits

The following funds in the Parent Company are at the disposal of the Annual General Meeting:

Retained earnings	1,390,106
Profit for the year	248,163
Profits available for appropriation	1,638,269

The Board of Directors proposes that the profits be appropriated as follows

To be paid as a dividend to the shareholders	292,849
Provision to foundation to prevent antibiotic resistance	4,400
To be carried forward to new account	1,341,020
Total	1,638,269

## Note 24 Other liabilities

	Group		Parent Company	
	2022	2021	2022	2021
Employee withholding tax	3,022	3,379	2,630	2,922
Current tax liabilities	22,716	4,481	12,886	-
Other current liabilities	20,087	17,569	2,535	-
	45,825	25,429	18,051	2,922

Other current liabilities also include a short-term lease liability of SEK 11.1 million.

## Note 25 Accrued expenses and deferred income

	Group		Parent Company	
	2022	2021	2022	2021
Accrued holiday pay	17,144	15,469	14,348	13,682
Accrued social security expenses	2,806	2,534	2,161	2,200
Other accrued expenses and deferred income	57,995	38,396	51,533	35,095
	77,945	56,399	68,042	50,977

## Note 26 Pledged assets and contingent liabilities

	Group		Parent Company	
	2022	2021	2022	2021
Pledged assets	-	-	-	-
Floating charges	-	-	-	-
Contingent liabilities	None	None	None	None

## Note 27 Policy for financial risk management

The overall objective of the group's finance function is to secure cost-effective financing for the group's operations and group companies and to provide secure cash management with a market-based return on investment. The overall objective of financial risk management is to minimise the risk of negative effects on the group's earnings. Consequently, the group's financial investments must have a low risk profile. Below is a description of the group's assessed risk exposure and the related risk management:

### Currency risk

BioGaia conducts operations in various geographical markets and has revenue and expenses in different currencies. This affects both transaction exposure (cash flow) and translation exposure (balance sheet).

### Transaction exposure

Breakdown of net sales in 2022 was approximately:	Breakdown of expenses in 2022 was approximately:
EUR 40% (39%)	SEK 55% (65%)
USD 40% (44%)	EUR 15% (18%)
SEK 9% (6%)	JPY 5% (6%)
Other currencies 7% (11%)	USD 23% (10%)
	Other currencies 2% (1%)

In 2022 the company had a cash flow surplus of approximately EUR 30.9 million (19.2), a cash flow deficit of JPY 631.5 million (75.6) and a cash flow surplus of USD 29.1 million (31.8).

The average exchange rate for EUR/SEK in 2022 was SEK 10.63 (10.14). If the EUR/SEK rate had been SEK 1.0 higher/lower, BioGaia's net sales would have been approximately SEK 42.0 million higher/lower and operating profit approximately SEK 30.9 million higher/lower. The average exchange rate for USD/SEK in 2022 was SEK 10.12 (8.58). If the USD/SEK rate has been SEK 1.0 higher/ lower, BioGaia's net sales would have been approximately SEK 47.5 million higher/ lower and operating profit approximately SEK 30.1 million higher/lower. A stronger SEK rate, primarily against EUR and USD, decreases BioGaia's sales and profit but by working to reallocate a portion of expenses to EUR, the company is working to minimise the impact on profit.

### Translation exposure

Translation exposure is the risk that the value of the group's net investments in foreign currencies will be negatively affected by changes in foreign exchange rates.

The group has seven foreign subsidiaries, three in the USA, one in Japan, one in Finland, one in the UK and one in Canada. The assets and liabilities of the American subsidiary have been translated at the closing day rate of SEK 10.44 (9.04). The assets and liabilities of the Japanese subsidiary BioGaia Japan Inc. have been translated at the closing day rate of SEK 0.0792 (0.0785). The assets and liabilities of the Finnish subsidiary BioGaia Finland Oy have been translated at the closing day rate of SEK 11.13 (10.23). The assets and liabilities of the UK subsidiary BioGaia UK Ltd have been translated at the closing day rate of SEK

12.58 (12.18). The assets and liabilities of the Canadian subsidiary BioGaia Probiotics Canada Inc. have been translated at the closing day rate of SEK 7.71.

The group's translation differences amounted to SEK 25 million (2.0). The acquisition of Nutraceutics in 2021 led to an increase in translation exposure.

### Interest rate and liquidity risk

The group has no external loans. Excess liquidity is invested mainly in bank accounts. For cash and cash equivalents, the company has a liquidity policy in which the basic principles are that investment risks should always be minimised and investments should be made primarily in Swedish kronor. To minimise currency risk, other currencies may also be considered. The company's cash and cash equivalents may be invested only in bank accounts, commercial paper or other fixed income securities with very limited risk. This means that no investments may be made in shares, equity funds, options, etc.

### Credit and counterparty risk

Credit risk is the risk that the counterpart in a transaction causes a loss for the group by not fulfilling its contractual obligations. BioGaia's credit risks are tied to trade receivables and for the Parent Company also loan to subsidiaries. When signing agreements with new customers, BioGaia always carries out an assessment of the customer's financial position. The company has routines for collection of past due accounts receivable and additional evaluations of the customer's financial position are carried out when required in order to minimise risks.

The simplified model is used to determine the expected loss on the group's trade receivables. When calculating the expected loss the trade receivables have been grouped based on age-structure. The expected loss for trade receivables is calculated with the help of a matrix of historical data, current conditions and forecasts of future economic conditions. The calculation does not have a material impact for other current financial receivables and accrued income.

	Group	
	2022	2021
Trade receivables gross	139,962	122,384
Allowance trade receivables	-9,259	-3,796
Trade receivables net	130,703	118,588

	Group	
	2022	2021
Trade receivables gross	139,962	122,384
Allowance opening balance	-3,796	-3,965
Increase from new receivables	-5,933	-499
Decrease from paid receivables	470	668
Move to impaired	-	-
Trade receivables closing balance	130,703	118,588

Trade receivables are spread over a large number of customers and no customer represents a material part of total receivables. In addition, trade receivables are not concentrated to a specific geographical area. As a consequence, the group deems the concentration risks to be limited.

The group's maximum exposure to credit risk consists of the carrying amounts of all financial assets and is outlined in the table below.

	Group	
	2022	2021
Trade receivables	130,703	118,588
Other non-current receivables	18,438	6,893
Accrued income	351	9,564
Cash and cash equivalents	1,488,366	1,484,680
Maximal exposure for credit risk	1,637,858	1,619,725

### Cash flow risk

Cash flow for the period amounted to SEK -12.8 million (13.1). Cash flow included a dividend of SEK 301.3 million (68.9) and tax payments of SEK 54.9 million (55.9).

### Age analysis of the group's financial liabilities:

	Due in less than:						Total
	Interest rate	1 month	1-3 months	3-12 months	1-5 years	More than 5 years	
31 December 2021							
Non-current liabilities related to acquisition of Nutraceutics	9%	-	-	-	-	177,796	177,796
Non-current liabilities (lease liabilities)	3%	-	-	-	9,813	-	9,813
Current liabilities	-	42,946	9,347	10,404	-	-	62,697
	-	42,946	9,347	10,404	9,813	177,796	250,306

	Interest rate	Due in less than:				More than 5 years	Total
		1 month	1-3 months	3-12 months	1-5 years		
<b>31 December 2022</b>							
Non-current liabilities related to acquisition of Nutraceutics	11%	-	-	-	-	59,269	59,269
Non-current liabilities (lease liabilities)	3%	-	-	-	4,913	-	4,913
Other non-current liabilities	-	-	-	-	25,371	-	25,371
Current liabilities	-	32,050	15,772	13,486	-	-	61,308
		32,050	15,772	13,486	30,284	59,269	150,861

Since cash and cash equivalents at 31 December 2022 amounted to SEK 1,488.4 million (1,484.7), no capital contribution is required during the immediate 12 month period unless acquisitions are carried out. The group is not exposed to any material liquidity risk as a consequence of lease liabilities. See Note 28 with respect to additional financial liability relating to the additional purchase price for Nutraceutics.

#### Price risk

BioGaia buys most of its goods on the international market and has several alternative suppliers, which reduces the company's price risk. BioGaia's price to distributors is largely the same for all, but can vary with respect to the order volume. Certain markets are subject to aggressive price competition towards consumers. However, BioGaia's strategy is not to compete in terms of price but to instead convince doctors of the effectiveness and safety of the products by showing the results of clinical studies.

#### Climate-related risk

During the year, BioGaia established climate-related targets to reduce emissions. Active efforts to reduce the company's climate impact could lead to increased resilience, reduced costs and increased goodwill. Climate change in the world also represents a physical risk for BioGaia that may affect the company's facilities and access to important raw materials. BioGaia therefore considers climate risk in the preparation of its financial statements principally in relation to investment decisions and impairment testing.

## Note 28 Critical accounting estimates and assumptions

Certain sources of uncertainty in accounting judgements and assumptions are described below.

**Impairment testing of intangible assets in MetaboGen and Nutraceutics** The group recognises intangible assets from the acquisition of MetaboGen which amount to SEK 45.8 million relating to research and development projects and SEK 5.3 million as goodwill. In conjunction with the balance sheet date, impairment testing was performed on the basis of a corresponding valuation model that was used in conjunction with acquisition. Significant assumptions on costs incurred, milestones and the project portfolio have been updated. Since the valuation is based on an assessment of anticipated demand, utilisation and price scenario for the products or technologies, the valuation is inherently uncertain. Testing shows that no impairment requirement exists. See also Note 11 for additional information.

The group also recognises surplus value from the acquisition of Nutraceutics which amount to SEK 2.5 million relating to buildings and land and SEK 166.0 million pertaining to goodwill. In conjunction with the balance sheet date, impairment testing was carried out using a cash flow model where Nutraceutics is a cash-generating unit. Testing for impairment was carried out based on Executive Management's future forecasts. Significant assumptions in the model include future revenues, operating margin and discount rate. Since the valuation is based on an assessment of future cash flows in the business plan for the company, this is inherently uncertain. Since there is a formal commitment to acquire the remaining share of the company, it is recognised by the group in full without a minority interest. This impacts the value of goodwill and liabilities for the additional purchase price, which are substantially impaired.

**Financial liability for additional purchase price** The group recognises a financial liability for the additional purchase price pertaining to the remaining shares in Nutraceutics amounting to SEK 33.6 million. BioGaia has a commitment to purchase the remaining share of the company but the price will be determined on the basis of sales in 2026 or 2027. The current assessment is based on the updated business plan and the purchase price uses sales from 2027 and will be settled in April 2028. The nominal value relating to the liability amounts to SEK 59.3 million but as the forecast is uncertain this has been discounted with a WACC of 11.21% (9.41). The liability is measured according to fair value in the income statement in net financial items. As the measurement includes a number of assessments there is a risk that the liability changes substantially over time.

The Board of Directors and the CEO hereby give their assurance that the consolidated financial statements and annual report have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and generally accepted accounting practices and give a true and fair view of the financial position and results of operations of the Group and the Parent Company. The administration report for the Group and the Parent Company gives a true and fair view of the business activities, financial position, and results of operations of the Group and the Parent Company and describes the significant risks and uncertainties to which the Parent Company and the Group companies are exposed.

#### Stockholm, 24 March 2023

Peter Rothschild  
Chairman

Isabelle Ducellier  
CEO

David Dangoor  
Vice Chairman

Ewa Björling  
Member of the Board

Peter Elving  
Member of the Board

Bénédicte Flambar  
Member of the Board

Anthon Jahreskog  
Member of the Board

Niklas Ringby  
Member of the Board

Vanessa Rothschild  
Member of the Board

Christian Bubenheim  
Member of the Board

#### Stockholm, 24 March 2023

Deloitte AB

Jenny Holmgren  
Authorised Public Accountant

# Auditor's report

To the General Meeting of Shareholders in BioGaia AB (publ), corporate identity number 556380-8723

## Report on the annual accounts and consolidated accounts

### Opinions

We have audited the annual accounts and consolidated accounts of BioGaia AB (publ) for the financial year 2022-01-01-2022-12-31. The annual accounts and consolidated accounts of the company are included on pages 90-117 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 31 December 2022 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 31 December 2022 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. 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 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/EU) 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/EU) 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.

### Valuation of ongoing research and development projects

BioGaia AB has recognized intangible assets amounting to SEK 46m as of December 31, 2022, relating to ongoing research- and development projects relate to the projects identified in connection the acquisition of MetaboGen AB. The group has performed an internal valuation of the items based on individual assessments of the future earnings capabilities and market expectations on return on investments. The value of the ongoing research and development projects as well as the goodwill may be impacted by micro-macro-economic or company specific events as progress in the projects. The valuations are based on judgement and assumptions that can have a significant impact on the group's financial position. We focused on this area since the recorded value of the assets are material and the assessment of the need for impairment is sensitive for changes in assumptions and therefore a key audit matter.

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

- Review and assessment of BioGaia's procedure to prepare input to the valuations, and that procedures are consistently applied and that there is integrity in the process.
- Review of input data and calculations in the valuation.
- We have evaluated if disclosures provided in note 11 in the groups's notes are appropriate, specifically with regards to disclosure of which of the stated assumptions that are most sensitive in calculating the fair value.
- Evaluation of the reasonableness in the assumptions on which the valuation is based by comparing with external data sources and previous years assumptions to actuals results.

We have used required valuations specialists in our team in conducting our review.

### Valuation of goodwill

BioGaia AB has recognized goodwill to SEK 172m as of December 31, 2022. The value of the reported goodwill is dependent on future returns and profitability in the cash-generating units to which the goodwill refers, and the value is tested at least once a year. Management bases its impairment test on several judgement and estimates such as growth, EBIT development and cost of capital (WACC) as well as other complex circumstances. Management has not identified any need for write-downs. For more information refer to note 11 of management's procedures is described together with important assessments and assumptions. We focused on this area as the reported value of goodwill is material and impairment tests are sensitive to changes in assumptions and is therefore a key audit matter.

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

- Review and assessment of BioGaia's procedures for impairment testing of goodwill and evaluation that the assumptions made are reasonable, that the procedures are consistently applied and that there is integrity in calculations.
- Verification of input data in calculations including business plans for the forecast period.
- Assessment of the safety margins for each cash-generating unit by perform sensitivity analyses.
- Review of completeness in relevant notes to the financial statements.

We have used the required valuation specialists in our team in carrying out our audit.

### Valuation of deferred purchase price

Since the acquisition of Nutraceuticals Corporation BioGaia has a liability for deferred purchase price for the remaining 20% of the shares, to be settled at completion of the transaction in 2027 or 2028. The purchase price for the acquisition of the remaining shares is determined based on the subsidiary's sales in 2026 or 2027. The value of the liability for the additional purchase price is subject to some uncertainty and has been discounted with a WACC of 11.21%. As of December 31, 2022, management has performed a revaluation of the liability resulting in an adjustment of SEK 80m reported as financial income, any further deviations between the estimated deferred purchase price and the actual outcome will be reported in the result until settlement. We focused on this area since the accounting is based on management's assessments and estimates to determine the fair value of the liability for the additional purchase price.

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

- Review the input data of the calculation for the value of the liability.
- Evaluation of the reasonableness of the underlying assumptions for the valuation of the liability.
- Examination that the information provided in notes 21, 27 and 28 is appropriate.

#### 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 1–89, 121–122 and 126–130. 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](http://www.revisorsinspektionen.se/revisornsansvar) This description forms part of the auditor's report"

#### 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 BioGaia AB (publ) for the financial year 2022–01-01–2022–12–31 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/revisornsansvar](http://www.revisorsinspektionen.se/revisornsansvar). This description forms part of the auditor's report.

## The auditor's examination of the Esef report

### Opinion

In addition to our audit of the annual accounts and consolidated accounts, we have also examined that the Board of Directors and the Managing Director have prepared the annual accounts and consolidated accounts in a format that enables uniform electronic reporting (the Esef report) pursuant to Chapter 16, Section 4 a of the Swedish Securities Market Act (2007:528) for BioGaia AB (publ) for the financial year 2022.

Our examination and our opinion relate only to the statutory requirements.

In our opinion, the Esef report has been prepared in a format that, in all material respects, enables uniform electronic reporting.

### Basis for opinion

We have performed the examination in accordance with FAR's recommendation RevR18 Examination of the Esef report. Our responsibility under this recommendation is described in more detail in the Auditors' responsibility section. We are independent of BioGaia AB (publ) 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 evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### 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 Esef report in accordance with the Chapter 16, Section 4 a of the Swedish Securities Market Act (2007:528), and for such internal control that the Board of Directors and the Managing Director determine is necessary to prepare the Esef report without material misstatements, whether due to fraud or error.

### Auditor's responsibility

Our responsibility is to obtain reasonable assurance whether the Esef report is in all material respects prepared in a format that meets the requirements of Chapter 16, Section 4(a) of the Swedish Securities Market Act (2007:528), based on the procedures performed.

RevR 18 requires us to plan and execute procedures to achieve reasonable assurance that the Esef report is prepared in a format that meets these requirements.

Reasonable assurance is a high level of assurance, but it is not a guarantee that an engagement carried out according to RevR 18 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 aggregate, they could reasonably be expected to

influence the economic decisions of users taken on the basis of the Esef report. The firm applies International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The examination involves obtaining evidence, through various procedures, that the Esef report has been prepared in a format that enables uniform electronic reporting of the annual accounts and consolidated accounts. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement in the report, whether due to fraud or error. In carrying out this risk assessment, and in order to design audit procedures that are appropriate in the circumstances, the auditor considers those elements of internal control that are relevant to the preparation of the Esef report by the Board of Directors and the Managing Director, but not for the purpose of expressing an opinion on the effectiveness of those internal controls. The examination also includes an evaluation of the appropriateness and reasonableness of assumptions made by the Board of Directors and the Managing Director.

The procedures mainly include a validation that the Esef report, has been prepared in a valid XHTML format and reconciliation of the Esef report with the audited annual accounts and consolidated accounts.

Furthermore, the procedures also include an assessment of whether the consolidated statement of financial performance, financial position, changes in equity, cash flow and disclosures in the Esef report have been marked with iXBRL in accordance with what follows from the Esef regulation.

Deloitte AB, was appointed auditor of BioGaia AB (publ) by the general meeting of the shareholders on the 2022-05-06 and has been the company's auditor since 2015-05-22.

**Stockholm, March 24, 2023**

Deloitte AB

Jenny Holmgren  
Authorized public accountant



# Definitions of key ratios

## Definitions of key ratios

Return on equity	Profit attributable to the owners of the Parent Company divided by average equity attributable to the owners of the Parent Company.	Return on equity is used to measure profit generation, over time, given the resources attributable to the owners of the Parent Company.
Return on capital employed	Profit before net financial items plus financial income as a percentage of average capital employed.	Return on capital employed is used to analyse profitability, based on the amount of capital used.
Gross margin	Gross profit as a percentage of net sales.	The gross margin is used to measure profitability.
Equity per share	Equity attributable to the owners of the Parent Company divided by the average number of shares.	Equity per share measures the company's net value per share and indicates whether a company will increase the shareholders' wealth over time.
Equity per share, diluted	Equity attributable to the owners of the Parent Company at the end of the period divided by the average number of shares after dilution.	Equity per share, diluted, measures the company's net value per share after any dilution due to ongoing incentive programmes or similar schemes and indicates whether a company will increase the shareholders' wealth over time.
Average number of shares	Time-weighted number of outstanding shares during the year taking bonus issue elements into account.	Used to calculate equity and earnings per share.
Earnings per share	Profit for the year attributable to owners of the Parent Company divided by the average number of shares (definition according to IFRS).	EPS measures how much of net profit is available for payment to the shareholders as dividends per share.
Earnings per share (EPS), diluted	Profit for the year attributable to the owners of the Parent Company divided by the average number of shares after dilution.	EPS, diluted, measures how much of net profit is available for payment to shareholders as dividends per share after any dilution due to ongoing incentive programmes or similar schemes.
Operating margin (EBIT margin)	Operating profit expressed as a percentage of net sales.	The operating profit margin is used to measure operational profitability.
Operating profit	Profit before financial items and tax.	Operating profit is used to measure operating profitability.
Equity/assets ratio	Shareholders' equity at the end of the period as a percentage of total assets.	A traditional metric to show financial risk expressed as the share of total assets financed by the shareholders. Shows the company's stability and ability to withstand losses.
Capital employed	Total assets less interest-free liabilities.	Capital employed measures the company's ability, in addition to cash and liquid assets, to meet the requirements of business operations.
Growth	Sales for the year less sales for the previous year divided by sales for the previous year. Breakdown by foreign exchange, organic growth and acquisitions.	Shows the company's realised sales growth over time.
Profit margin	Profit before tax as a percentage of net sales.	This key ratio makes it possible to compare profitability regardless of the corporate income tax.

## Reconciliation against IFRS

	2022	2021
Return on capital employed		
Operating profit	361,459	253,737
Financial income	91,540	107
Profit before net financial items + financial income (A)	452,999	253,844
Total assets	2,213,966	2,128,054
Interest-free liabilities	-229,187	-236,447
Capital employed	1,984,779	1,891,607
Average capital employed (B)	1,938,193	1,824,582
Return on capital employed (A/B)	23%	14%

	2022	2021
Return on equity		
Profit attributable to owners of the Parent Company (A)	373,582	196,273
Equity attributable to owners of the Parent Company	1,972,225	1,877,365
Average equity attributable to owners of the Parent Company (B)	1,924,795	1,811,804
Return on equity (A/B)	19%	11%

	31 Dec 2022	31 Dec 2021
Equity/assets ratio		
Equity (A)	1,972,227	1,877,367
Total assets (B)	2,213,966	2,128,054
Equity/assets ratio (A/B)	89%	88%

	2022	2021
Operating margin		
Operating profit (A)	361,459	253,737
Net sales (B)	1,103,957	785,110
Operating margin (A/B)	33%	32%

	2022	2021
Profit margin		
Profit before tax (A)	447,613	252,712
Net sales (B)	1,103,957	785,110
Profit margin (A/B)	41%	32%

Equity per share	31 Dec 2022	31 Dec 2021
Equity attributable to owners of the Parent Company (A)	1,972,225	1,877,365
Average number of shares (B)	100,982	100,982
Equity per share (A/B)	19.53	18.59

## Change in sales by segment

Description	Definition	Paediat- rics 2022	Adult Health 2022	Other 2022	Total 2022
A Previous year's net sales according to the average rate		603,690	176,854	4,566	785,110
B Net sales for the year according to the average rate		868,355	230,205	5,398	1,103,958
C Reported change	B-A	264,655	53,351	832	318,848
Percentage change	C/A	44%	30%	18%	41%
D Net sales for the year according to the previous year's average rate		795,615	210,855	5,398	1,011,869
E Foreign exchange effects	C-F	72,740	19,350	0	92,090
Foreign exchange effects, %	E/A	12%	11%	0%	12%
G Change acquisitions (excl. foreign exchange effects)		47,922	32,157	0	80,078
Percentage change	G/A	8%	18%	0%	10%
F Organic change	C-E-G	144,004	1,844	832	146,680
Organic change, %	F/A	24%	1%	18%	19%

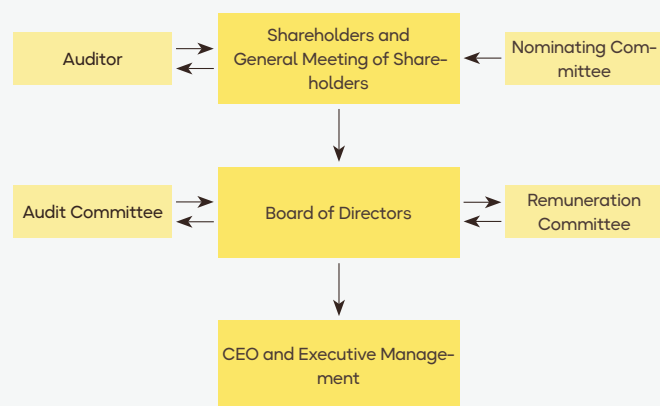
## Average key exchange rates

	Group	
	2022	2021
EUR	10.58	10.13
USD	10.03	8.49
JPY	0.0771	0.0781

# Corporate governance report 2022

## Corporate governance in BioGaia

BioGaia AB (publ), a Swedish public limited company whose class B shares are listed on the Nasdaq Stockholm, applies the Swedish Corporate Governance Code (the Code). The Code is available at [www.bolagsstyrning.se](http://www.bolagsstyrning.se), where the Swedish model for corporate governance is also described. This corporate governance report is submitted in accordance with the Swedish Companies Act and the Code and describes BioGaia's corporate governance during the 2022 financial year. In 2022, BioGaia has not deviated from the rules set out in the Code nor committed any violations of Nasdaq Stockholm's rules or good practice in the Swedish securities market. The corporate governance report has been reviewed by BioGaia's auditor, as set out on page 125.



## Shares

At year-end 2022 the share capital in BioGaia amounted to SEK 20,196,462 consisting of 3,703,340 class A shares carrying 10 votes per share and 97,278,970 class B shares carrying one vote per share. Annwall & Rothschild Investment AB owns 4.2% of the capital and 27.9% of the voting rights in the company. EQT owns 11.1% of the capital and 8.3% of the voting rights in the company. Other individual shareholders hold less than 10% of the share capital and voting rights. Additional information about the company's shares, shareholders, etc., is presented on page xxx and on the company's website under the heading Investors.

## General Meeting of Shareholders

The General Meeting of Shareholders is the company's highest decision-making body. Notice of a general meeting of BioGaia's shareholders is given through an announcement in Post- och Inrikes Tidningar and on the company's website. An announcement that notice has been given is published in Svenska Dagbladet.

BioGaia's 2022 Annual General Meeting took place with no possibility of attending in person or through a proxy and shareholders exercised their voting

rights through advance voting (postal vote). BioGaia's 2023 Annual General Meeting will be held on 5 May 2023 and a notice of the Annual General Meeting will be sent out in April 2023. Shareholders who wish to have items included on the agenda of the meeting have, in accordance with instructions on the company's website, had an opportunity to submit a proposal to the company no later than seven weeks prior to the meeting.

In addition to statutory rights of shareholders to attend a General Meeting of Shareholders it is a requirement in BioGaia's Articles of Association for shareholders who wish to participate in a General Meeting of Shareholders to notify the company no later than the day stipulated in the notice of the meeting. This day may not be a Sunday, other public holiday, Saturday, Midsummer's Eve, Christmas Eve or New Year's Eve and may not occur earlier than the fifth weekday prior to the meeting. Each shareholder in BioGaia entitled to vote may vote for the full number of shares owned and represented by the shareholder with no limit to the number of votes. Class A shares carry entitlement to ten votes and class B shares carry entitlement to one vote. If relevant, notice shall also be given of whether the shareholder intends to be accompanied by an assistant. Documents related to general meetings as well as meetings from earlier annual general meetings and extraordinary general meetings are available on the company's website under the heading Investors/Corporate governance.

## Nominating Committee

The 2022 Annual General Meeting resolved that the Nominating Committee would be appointed as follows:

The Board Chairman shall convene the four largest shareholders in the company, each of which may appoint a member to the Nominating Committee together with the Board Chairman. In determining the composition of the Nominating Committee, the largest shareholders in terms of voting power shall be based on the ownership situation at 30 June 2022. The Nominating Committee shall be chaired by the member representing the largest shareholder on that date. If any of the four largest shareholders should waive its right to appoint a member to the Nominating Committee, the next largest shareholder in order of voting power shall be given the opportunity to appoint a member. The names of the four shareholder representatives shall be made public as soon as they are appointed, but no later than six months prior to the 2023 Annual General Meeting. The Nominating Committee's term of office shall extend until a new Nominating Committee has been appointed.

If the shareholder who appointed a member is no longer one of the four largest shareholders in terms of voting power, and if the Nominating Committee deems it appropriate, the member shall leave and a member for the next largest shareholder in order of voting power is given the opportunity to replace this member. If an appointed member of the Nominating Committee resigns from the Nominating Committee for some other reason, the shareholder who has appointed the member in question has the right to appoint a new member to the Committee. If this shareholder waives its right to appoint a new member, the Nominating Committee, if it deems so appropriate in respect of the remaining mandate period, shall ask the next

largest shareholder in terms of voting power if it wishes to appoint a representative to the Nominating Committee.

The Nominating Committee shall prepare proposals for the following matters to be put before the 2023 Annual General Meeting for resolution:

- appointment of the Chairman of the Annual General Meeting
- election of the Board of Directors
- election of the Board Chairman and possible Deputy Chairman
- fees for Board members
- election of auditors
- fees for the auditors
- reasonable costs for the Nominating Committee
- appointment of the Nominating Committee ahead of the 2024 Annual General Meeting.

In accordance with the Annual General Meeting's resolution, the Nominating Committee has been appointed and consists of Board Chairman Peter Rothschild, Per-Erik Andersson (also Chairman of the Nominating Committee), appointed by Annwall & Rothschild Investments AB, the company's largest shareholder, Karl Johan Sundin, appointed by the company's second-largest shareholder, EQT, Marianne Flink, appointed by the company's third-largest shareholder, Fjärde AP-fonden, and Carlos Moreno, appointed by the company's fourth-largest shareholder, Premier Milton Investors. All members of the Nominating Committee, except for Peter Rothschild, are independent in relation to the company and its Executive Management. No fees are paid by the company for work in the Nominating Committee but BioGaia shall meet reasonable costs that the Nominating Committee deems necessary for completion of its assignment.

All shareholders have had the opportunity to contact the Nominating Committee with recommendations for Board candidates for further evaluation within the framework of the Committee's work. No suggestions or proposals have been submitted to the Nominating Committee as of today's date. The Nominating Committee presents a written motivation to the Annual General Meeting for election of Board members. In its motivation, the Nominating Committee takes into account diversity and breadth in the Board and seeks an even gender distribution.

## Board of Directors' size and composition

The Board is ultimately responsible for BioGaia's organisation and management of its business. According to BioGaia's Articles of Association, the Board shall consist of no fewer than five and no more than nine members with no more than three deputies. During the entire year, the Board was made up of nine members (without deputies). The Nominating Committee has applied the Code's rule 4.1 as a diversity policy when drafting the proposal to the Board. The Nominating Committee considers – which has also been the Nominating Committee's aim with the policy – that the Board has an appropriate composition and size and is characterised by diversity and breadth with regard to members' competence and experience within areas of strategic importance for BioGaia. A presentation of the Board is provided on page 129.

## Board independence

According to the Code, a majority of the Board shall be independent of the company and its Executive Management. At least two of the independent members shall also be independent in relation to the company's major shareholders. The composition of the Board meets the requirements in the Code related to the Board members' independence.

## The work of the Board

According to the Board's rules of procedure, the Board shall hold at least five Board meetings during the year, in addition to the statutory meeting. BioGaia has appointed an external lawyer to serve as Secretary at Board meetings. The CEO is not a member of the Board but, together with the company's CFO and Legal Counsel, is co-opted to attend all Board meetings. Other executives in the company take part in Board meetings in order to present reports. Every Board meeting has included an item on the agenda where the Board has had an opportunity for discussion without representatives of Executive Management being present.

The Board held ten meetings in 2022. For information about attendance at these meetings, see the table on page 124. Ahead of Board meetings, members have received an agreed agenda for the meeting together with written material regarding issues to be handled at the meeting. A key part of the work of the Board is the financial reports that are presented, including the six-month report, interim management statements and year-end report. In addition, during the year the Board dealt with matters relating to M&As and other expansion issues, major investments, strategic issues and sustainability issues. The Board also held details discussions about the overall strategy for BioGaia at its annual strategy review. The Board has adopted rules of procedure for its work as well as CEO instructions, which describe the division of work between the Board and the CEO. The Board has also adopted a number of instructions and policies for conducting operations, for example authorisation instructions, a Code of Conduct, Financial Policy, Communication Policy, Insider Trading Policy, Anti-Corruption Policy, Conflict of Interest Policy, Information Security Policy, Diversity Policy and Work Environment Policy.

## Board attendance in 2022 <sup>1)</sup>

Name	Elected in	Independent in relation to the company	Independent in relation to the major shareholders	Board meeting attendance	Audit Committee attendance	Remuneration Committee attendance	Board fee	Fee Audit Committee	Fee Remuneration Committee	Fixed salary
Peter Rothschild	2018	No	No	10 of 10		1 of 2	685,000		20,000	600,000
David Dangoor	2003	Yes	Yes	9 of 10	4 of 4	2 of 2	475,000	55,000	45,000	
Ewa Björling	2015	Yes	Yes	10 of 10			265,000			
Peter Elving	2018	Yes	Yes	9 of 10		2 of 2	265,000		20,000	
Anthon Jahreskog <sup>2)</sup>	2015	Yes	Yes	10 of 10	4 of 4		265,000	110,000		
Vanessa Rothschild	2020	Yes	No	8 of 10			265,000			
Niklas Ringby	2020	Yes	No	8 of 10			265,000			
Christian Bubenheim	2021	Yes	Yes	9 of 10			265,000			
Maryam Ghahremani <sup>3)</sup>	2020	Yes	Yes	5 of 5			0			
Bénédicte Flambard <sup>4)</sup>	2022	Yes	Yes	3 of 5			265,000			

<sup>1)</sup> If a member was unable to attend a Board meeting, they were able to submit their opinions to the chairman before the meeting

<sup>2)</sup> Is not independent in relation to the shareholder Sebastian Jahreskog, though he is not a major shareholder.

<sup>3)</sup> Left the Board at the AGM in May 2022

<sup>4)</sup> Joined the Board at the AGM in May 2022

## Evaluation of the Board

Within BioGaia's Board there are routines for an annual evaluation of the work of Board members. The evaluation provides a basis for improvements and for the work of the Nominating Committee with the composition of the Board.

All Board members assessed the Board's work in a survey concerning the Board's work in 2022. The surveys were analysed to gain an understanding of the opinions of Board members on how the work of the Board is conducted and what measures might be taken to streamline the work of the Board. The intention of the surveys was also to find out what type of issues the Board considers should be given more space and in which areas additional competence might be required in the Board. The results of the evaluation have been discussed by the Board and reported to the Nominating Committee.

## Remuneration Committee

The Board has appointed a Remuneration Committee from among its members to prepare recommendations and other terms of employment for the CEO and other senior executives who together make up the Executive Management. The Remuneration Committee complies with the guidelines for senior executives as resolved at the 2022 Annual General Meeting. The Remuneration Committee consists of David Dangoor (chairman), Peter Rothschild and Peter Elving. The Remuneration Committee held two minutes meetings in 2022. David Dangoor and Peter Elving attended both meetings. Peter Rothschild attended one meeting.

## Audit Committee

The Board has appointed an Audit Committee from among its members. The key task of the Audit Committee is to support the Board with quality assurance of the financial reporting. The Audit Committee also prepares matters relating to regulatory compliance. The Committee holds regular meetings with the company's auditors and evaluates audit work. The Committee discusses significant accounting issues that affect the group and assists the Nominating Committee in the preparation of proposals for auditors and their remuneration. The chairman of the Audit Committee is responsible for ensuring that the

entire Board is kept informed about the work of the Committee as well as, when necessary, presenting the Board with matters for decision. The Audit Committee's members comprise Anthon Jahreskog (chairman) and David Dangoor. The Audit Committee held four minutes meetings during 2022. The members of the Audit Committee attended each meeting. The auditors have attended and reported to the meeting that examined the interim report for the second quarter and in conjunction with the year-end report.

## CEO and Executive Management

The company's chief executive officer (CEO) is appointed by the Board. The CEO is responsible for overseeing the company's business development and for supervising and coordinating its day-to-day operations. The Board has established instructions for the CEO that, among other things, regulate management and development of the company and the provision of reports and decision data to the Board. According to the CEO Instructions, the CEO shall refer the following matters to the Board for decision:

- Investments and similar in amounts in excess of SEK 2 million
- Decisions on the purchase and sale of real property, shares or acquisition of another company's operations in excess of SEK 2 million
- Decisions on the formation of subsidiaries
- Raising loans
- Entering agreements with a term of more than seven years
- Initiating processes of major scope as well as settlement of disputes of material significance
- Other matters of material financial or other significance.

The CEO prepares requisite information and basis for decisions such as reports relating, among other things, to the company's finances, order situation, significant transactions and strategic issues ahead of Board meetings, and makes presentations including motivated proposals for decision. The CEO also keeps the Board Chairman regularly informed about the company's operations. The Board evaluates the work of the CEO annually. No member of Executive Management is present at this evaluation.

Executive Management is presented on page 128. The management team is headed by the CEO and is responsible for planning, supervising and monitoring

the company's day-to-day operations. Minuted meetings are normally held once a month. The responsibilities and powers of the Executive Management are defined in the job descriptions and in signature authority instructions.

### Auditors

BioGaia's auditors are normally appointed by the Annual General Meeting to serve for a period of one year. The 2022 Annual General Meeting resolved on re-election of the registered auditing firm of Deloitte AB to serve for the period until the end of the Annual General Meeting to be held in 2023. The auditing firm appointed Jenny Holmgren as Auditor in Charge. By decision of the Annual General Meeting, auditing fees are paid according to approved account.

The auditors examine the administration of the company by the Board of Directors and the CEO and the quality of the company's financial reporting. At the request of the Board, the auditors also review the semi-annual report and the year-end report. The auditors report the results of their review to the shareholders through an audit report, which is presented to the Annual General Meeting. In addition, the auditors submit written and oral reports to the Executive Management, the Audit Committee and the Board. The auditors take part in and report to the Audit Committee in conjunction with the interim report for the second quarter and the year-end report. In addition, the auditors participate in at least one Board meeting a year in accordance with the Code. The auditors also submit an auditor's statement on the corporate governance report, the sustainability report and a report on the examination of remuneration to senior executives.

Information about remuneration to the auditors can be found in Note 4 of the annual report.

Furthermore, the entire Board of Directors meets with the auditors at least once a year without the presence of the CEO or other members of the Executive Management.

### The Board's report on internal control over financial reporting for the financial year 2022

#### Introduction

Pursuant to the Swedish Companies Act, the Swedish Annual Accounts Act and the Code, the Board of Directors is responsible for internal control. This description has been prepared in accordance with these rules and provisions and is thereby limited to internal control over financial reporting.

#### Internal control of financial reporting

The Board is responsible for ensuring that the company's organisation is suitably structured so that the financial accounts, cash management and other financial conditions can be controlled satisfactorily.

Every year, the Board of Directors adopts rules of procedure for the Board's activities and instructions regulating the division of responsibilities between the Board and the CEO. The instructions state which matters require approval or authorisation from the Board. At Board meetings, the CEO reports on matters requiring consideration by the Board.

The CEO ensures that the Board is provided with the objective, detailed and relevant information needed for the Board to make well-founded decisions and that the Board is continuously informed about the company's business development and financial position.

Aside from the instructions between the Board and the CEO, BioGaia's control structure is based on the company's organisation and way of conducting operations, where roles and responsibilities are defined. There is a high level of employee awareness about the importance of maintaining good control over financial reporting. The company's financial development is assessed and monitored monthly. Financial reports and summaries are prepared by the group's finance department and are presented to the Board quarterly and to the Executive Management monthly.

#### The company's values

BioGaia has a set of shared values and the company's employees are well aware of these. This is ensured through interviews in connection with new recruitment and through regular workshops with each department.

#### Risk assessment

The company works continuously with risk assessment and risk management to ensure that the risks to which the company is exposed are handled within the limits ultimately established by the Board. The Executive Management continuously analyses the company's business processes with regard to efficiency and risks. This work includes identifying significant risks for misstatements and deficiencies in the financial reporting and ensuring that there are suitable processes and controls in the company's operations to limit these risks. The most critical business processes and the absolutely largest values, in terms of both assets and business/product development, are found in the Parent Company. In addition, the bulk of sales take place in the Parent Company. Processes that are deemed to be of special importance to BioGaia are sales including quality assurance, R&D and manufacturing.

#### Control activities

The risks identified in the financial reporting are managed through a number of control activities in the company's processes. Processes and controls are reviewed and updated regularly in order to detect, prevent and correct any errors or deficiencies. The control structure also includes the division of powers and responsibilities and the Executive Management's monthly review of the company's financial information.

#### Information and communications

BioGaia has information and communication paths that are designed to promote the completeness and accuracy of the financial reporting. Authorisation instructions and policies are distributed to all employees and can be viewed on the company's intranet. All of BioGaia's employees normally meet once a year to increase their knowledge about the company's processes and goals and to exchange information and experiences.

#### Monitoring

The Executive Management performs a yearly evaluation of the effectiveness of internal control. Every year, the company's elected auditing firm, Deloitte AB, also reviews a selection of BioGaia's routines and internal controls. The Board then evaluates this information and ensures that measures are taken in respect of the identified deficiencies and resulting recommendations.

The company has no special review function (internal audit). In light of the company's size and the volume of transactions, together with the expertise in this area possessed by the Board of Directors and the Board's meeting with the independent auditor, the Board has determined that there is no reason to establish a formal internal audit function.

### Stockholm, March 24 2023

Peter Rothschild  
Board Chairman

David Dangoor  
Vice Chairman

Ewa Björling  
Member of the Board

Peter Elving  
Member of the Board

Bénédicte Flambard  
Member of the Board

Anthon Jahreskog  
Member of the Board

Niklas Ringby  
Member of the Board

Vanessa Rothschild  
Member of the Board

Christian Bubenheim  
Member of the Board

#### Auditors's report on the corporate governance statement

To the general meeting of the shareholders in BioGaia AB (publ) corporate identity number 556380-8723

#### Engagement and responsibility

It is the board of directors who is responsible for the corporate governance statement for the financial year 2022-01-01 - 2022-12-31 on pages 123-125 and that it has been prepared in accordance with the Annual Accounts Act.

#### The scope of the audit

Our examination has been conducted in accordance with FAR's standard RevR 16 The auditor's examination of the corporate governance statement. This means that our examination of the corporate governance statement 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 opinions.

#### Opinions

A corporate governance statement has been prepared. Disclosures in accordance with chapter 6 section 6 the second paragraph points 2-6 the Annual Accounts Act and chapter 7 section 31 the second paragraph the same law are consistent with the annual accounts and the consolidated accounts and are in accordance with the Annual Accounts Act.

### Stockholm, March 24 2023

Deloitte AB

Jenny Holmgren  
Authorized Public Accountant

# The BioGaia share

Figures in parentheses refer to the previous year.

## Trading volume

BioGaia AB's class B shares have been quoted on the OMX Nordic Exchange Stockholm since May 1998. On 1 January 2012, the shares were moved from the Small Cap List to the Mid Cap List.

In 2022, an average of 261,201 shares were trading each day in total for an average of SEK 24,993,113 per day.

The number of shareholders at 31 December 2022 was 10,077 (8,709). The total registered share capital of BioGaia AB consists of 3,703,340 class A shares and 97,278,970 class B shares.

## Share price development

The share price decreased from SEK 103.6 to SEK 83.57 in 2022. The highest closing price during the year was SEK 123.4 and the lowest price was SEK 72.71. Market capitalisation at 31 December 2022 was approximately SEK 8,439 million (10,461).

## The BioGaia share

SEK



## Distribution of ownership

Number of shares	Total number of shareholders	
	31 Dec 2022	31 Dec 2021
1-500	7,141	7,762
501-1 000	1,018	463
1,001-5,000	1,424	325
5,001-10,000	211	48
10,001-15,000	61	22
15,001-20,000	35	11
20,001-	187	78
Total number of shareholders:	10,077	8,709

- The share
- OMX Stockholm PI
- OMX Stockholm Health Care PI
- Number of shares traded, 1,000s

### Largest shareholders in BioGaia at 31 December 2022 (source: Monitor)

	Class A shares	Class B shares	Share capital, %	Votes, %
Annwall & Rothschild Investments AB	3,703,340	500,000	4.16%	27.94%
EQT		11,164,630	11.06%	8.31%
Fjärde AP-fonden		8,070,000	7.99%	6.01%
Premier Miton Investors		6,215,183	6.15%	4.63%
TIN Fonder		3,144,175	3.11%	2.34%
Cargill Inc		3,000,000	2.97%	2.23%
Handelsbanken Fonder		2,474,781	2.45%	1.84%
Tredje AP-fonden		2,438,907	2.42%	1.82%
AMF Pension & Fonder		2,275,985	2.25%	1.69%
Juno Investment Partners		1,977,135	1.96%	1.47%
Other shareholders		56,018,174	55.47%	41.71%
<b>Total</b>	<b>3,703,340</b>	<b>97,278,970</b>	<b>100%</b>	<b>100%</b>

### Changes in share capital since the company's formation

Year	Transaction	Increase in no. of shares	Increase in share capital, SEK	Total share capital, SEK	Total no. of class A shares	Total no. of class B shares	Quota value, SEK	Issue proceeds, SEK
1990	Company founded			150,000		30,000	5.00	-
1991	New share issue	12,857	64,285	214,285		42,857	5.00	4,500,000
1993	New share issue	12,554	62,770	277,055		55,411	5.00	4,394,341
1995	New share issue	2,303	11,515	288,570		57,714	5.00	806,009
1996	Bonus issue/Split	60,541,986	5,771,400	6,059,970	4,740,278	55,859,422	0.10	-
1996	New share issue	18,200,000	1,820,000	7,897,970	4,740,278	74,059,422	0.10	15,320,000
1997	New share issue Banco Fonder	2,608,696	260,870	8,140,840	4,740,278	76,668,118	0.10	5,760,000
1997	New share issue BioGaia Fermentation	4,400,000	440,000	8,580,840	4,740,278	81,068,118	0.10	7,469,000
1997	New share issue	21,452,099	2,145,210	10,726,050	5,925,347	101,335,148	0.10	38,597,265
1998	New share issue	5	1		5,925,350	101,335,150	0.10	20
1998	Reverse split				592,535	10,133,515	1.00	-
1998	New share issue (IPO Stockholm Stock Exchange)	2,681,512	2,681,512	13,407,562	740,668	12,666,894	1.00	57,934,131
2000	New share issue November	3,275,000	3,275,000	6,682,562	40,668	15,941,894	1.00	73,031,886
2000	New share issue December	425,000	425,000	17,107,562	740,668	16,366,894	1.00	11,505,294
2004	New share issue Industrifonden	100,000	00,000	17,207,562	740,668	16,466,894	1.00	100,000
2010	New share issue warrant programme	63,400	63,400	17,270,962	740,668	16,530,294	1.00	4,862,780
2015	New share issue warrant programme	65,500	65,500	17,336,462	740,668	16,595,794	1.00	15,844,450
2020	New share issue <sup>1)</sup>	2,860,000	2,860,000	20,196,462	740,668	19,455,794	1.00	1,144,000,000
2022	Split			20,196,462	3,703,340	97,278,970	0.20	-

<sup>1)</sup> Excluding underwriting costs

# Executive Management



## Top row from left

### Marika Isberg

Vice President and General Counsel Born in 1973. Degree of Master of Laws and BSc in Economics at Lund University. Employed by the company since 2016. Holds 200 class B shares and 10,000 warrants.

### Alexander Kotsinas

Executive Vice President and CFO. Born in 1967. MSc Applied Physics, Royal Institute of Technology, Stockholm and BSc Economics, Stockholm School of Economics. Employed by the company since 2019. Holds 2,000 class B shares and 33,000 warrants.

### Linda Hägglund

Chief Marketing Officer Born in 1973. Master in Economics and Business Administration from Umeå University. Employed by the company since 2020. Holds 190 class B shares and 3,000 warrants.

### Sebastian Heimfors

Vice President and Chief Commercial Officer. Born in 1974. Previously employed by Axel Johnson AB as Director Innovation & Data. 30 years of experience in retail, e-commerce and digital transformation in several operative and strategic roles. Employed by the company since 2021. Holds 0 shares.

## Bottom row from left

### Gianfranco Grompone

Vice President Research and Development. Born in 1975. PhD in Microbiology, Cell and Molecular Biology and Engineer degree from ENSAR, France. Employed by the company since 2020. Holds 0 shares.

### Isabelle Ducellier

President and CEO. Born in 1969. Master in International Marketing from EM in Lyon, Executive MBA General Management from Harvard and an executive MBA at INSEAD. Employed by the company since 2018. Previously Secretary General of the Swedish Childhood Cancer Fund, Associate Partner at McKinsey, and CEO of Pernod Ricard Sweden. Holds 13,065 class B shares and 32,250 warrants.

### Jens Velling

Chief Operating Officer. Born in 1961. MSc Chemistry/Biotechnology from the Technical University of Denmark and BBA in Financial Management from the Copenhagen Business School. Employed by the company since 2021. Holds 0 shares.

### Angelika Kjelldorff,

Chief HR Officer. Born in 1969. BSc in Human Resources Stockholm University. Employed by the company since 2019. Holds 500 class B shares.



# Board of Directors



**Peter Rothschild** Born in 1950. Board Chairman. Elected to the Board in 2018. MBA from the Stockholm School of Economics. Founder and principal shareholder of BioGaia. President 1996–2016 and Group President 2016–2018. Chairman of the subsidiary BioGaia Pharma AB. Also Chairman of the Board of Infant Bacterial Therapeutics AB (IBT) and with board assignments in The Foundation to Prevent Antibiotic Resistance (PAR-foundation), Allbright and Hyber AB. Holds 3,703,340 class A shares and 500,000 class B shares via Annwall & Rothschild Investments AB (a company owned jointly with co-founder Jan Annwall).



**David Dangoor** Born in 1949. Board Vice Chairman. Elected to the Board in 2003. BioGaia Board Chairman 2007–2018. MBA from the Stockholm School of Economics. Marketing and PR consultant. President of Innovative Partners LLC. Former Executive Vice President and Marketing Director at Philip Morris USA and Philip Morris International. Other board assignments: New York City Ballet Inc., School of Creative Leadership, Berlin University and Swedish-American Chamber of Commerce (chairman 1997–2001). Holds 1,750,000 class B shares.



**Vanessa Rothschild** Born in 1986. Elected to the Board in 2020. Bachelor's degree in International Economics and Management from University L. Bocconi in Milan and has also studied business and market strategy and decision psychology at the business school HEC in Paris. Previously working as Regional Sales Manager at BioGaia and has also worked as COO at Iero. Has worked at H&M since 2016 in various positions within sustainability and currently as Group Manager for Global Sustainability, Steering and Development. Holds 160 class B shares



**Niklas Ringby** Born in 1980. Elected to the Board in 2020. Holds a M.Sc. in Economics and Business Administration from the Stockholm School of Economics including studies at Carlson School of Management MBA program, University of Minnesota. In addition holds a M.Sc. in Industrial Engineering and Management from the Royal Institute of Technology including studies at ETH in Zurich. Niklas worked at Boston Consulting Group between 2006–2010 and at EQT during 2010–2023. Previous Board roles includes Independent Vetcare, Evidensia, Dometic and BHG Group. Holds 0 shares.



**Bénédicte Flambard** Born in 1973. Elected to the Board in 2022. Has a Master of Administration from the University of Bath, a PhD from the National Institute of Agronomic in France and a Master in Corporate Entrepreneurial Leadership from the Technology Economics & Management in Denmark. She has held several senior positions in the health and agriculture industries and worked in senior positions with pharmaceuticals, health products and consumer goods, among others. Since 2019, Bénédicte Flambard is Global Head of Plant Health Business at FMC Corp. and stationed in Denmark. Other board assignments: Noscomed and Anizome. Holds 0 shares.



**Christian Bubenheim** Born 1965. Elected to the Board 2021. Master of Engineering and Economics from University of Applied Sciences in Munich, Germany. Has spent half of his career in the United States holding executive positions at among others Apple, Intel Mobile, Magellan GPS, Amazon Europe and Scout24. Since 2018 advisor and investor. Chairman of the Board for Bygghemma Group AB. Chairman of the Board for KfzTeile 24 and 21future (nonprofit organization). Other board assignments: BHG Group, Dunlop Protective Footwear. Holds 7,625 shares as well as call options.



**Ewa Björling** Born in 1961. Elected to the Board in 2015. Doctor of Dentistry, Doctor of Medicine and Associate Professor at the Karolinska Institute. Member of the Swedish Riksdag 2002–2014. Minister for Trade in the Swedish Government 2007–2014. Minister for Nordic Cooperation 2010–2014. Other board assignments: Essity AB, Mobilaris AB, Rehman & Partners Global Assessment advisory board. Board Chairman Svenska Petroleum and Biodrivmedelsinstitutet (SPBI). Holds 0 shares.



**Anthon Jahreskog** Born in 1980. Elected to the Board in 2015. MSc Financial Management. Former Chief Operating Officer Fund Linked Products at Credit Suisse Investment Bank, London. Other board assignments: Infant Bacterial Therapeutics AB (IBT), Annexin Pharmaceuticals AB and Fast Track Holdings Ltd. Holds 2,240 class B shares



**Peter Elving** Born in 1948. Elected to the Board in 2018. MBA from the Stockholm School of Economics and EPBA, Columbia University, New York. Formerly leading positions within Kraft Foods in Sweden and internationally, including CEO of Kraft Foods Nordic for many years. Board assignments in several unlisted companies and foundations. Holds 0 shares.

# Glossary

## Antibiotics

Substances that kill or inhibit the growth of bacteria.

## Diverticulitis

Inflammation of bowel pouches. Pouches are bulges in the lining of the large intestine.

## *Helicobacter pylori*

A very common occurring bacteria, present in large portions of the world's population. Resides in the stomach and may lead to peptic ulcers and gastric cancer.

## Clinical research

At BioGaia, this relates to research conducted on humans.

## *Lactobacillus*

Lactic acid bacteria. A collective name for a group of microorganisms that occur naturally in various foods such as yoghurt, olives and pickled vegetables. In the past, we consumed a lot of lactic acid bacteria, but today our diet lacks these beneficial bacteria. Some lactic acid bacteria are also present in the human commensal microbiota. Lactic acid bacteria have vastly different properties and, therefore, may provide different health effects when consumed. There are large numbers of lactic acid bacteria, for example, *Limosilactobacillus reuteri* and *Lactobacillus acidophilus*.

## *Limosilactobacillus reuteri* (*L. reuteri*)

Species within the genus *Limosilactobacillus*. Most of BioGaia's probiotic lactic acid bacteria contain various strains of *Limosilactobacillus reuteri*, for example, *Limosilactobacillus reuteri* Protectis. *Limosilactobacillus reuteri* was previously called *Lactobacillus reuteri*. The name was changed in conjunction with a taxonomic change in 2020 when a large number of genera were given new names.

## Membrane vesicles

Sacs (vesicles) formed from cell membranes and that can be used to transport substances into or out of the cell.

## Periodontal disease

A collective name for conditions that affect the tissues surrounding teeth, such as gingivitis and periodontitis.

## Postbiotics

Postbiotics are non-living microorganisms or substances formed by these that produce health benefits for their host.

## Prebiotics

Food for the beneficial bacteria that live in our stomach and intestinal tract. Prebiotics are often dietary fibre.

## Probiotics

Live microorganisms, which when administered in adequate amounts, confer a health benefit on the host.

## Resistant bacteria

Bacteria that have become resistant to one or several antibiotics.

