2022
Annual Report

A Swedish company within animal health.
We develop modern, safe and effective vaccines for animals.

INTERVACC

A new generation of vaccines within animal health

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Intervacc AB (publ) is a Swedish company within animal health developing safe, effective vaccines for animals. The Company's technology platform is based on several years of research at Karolinska Institutet and Swedish University of Agricultural Research where the foundation was laid for the Company´s research and development work. The Intervacc share has been listed on the Nasdaq First North Growth Market since April 2017.

The Annual Report 2022 of Intervacc AB (publ) 556238-1748, consists of an administration report, income statement, balance sheet, cash flow statement, with notes (pages 16-47).

This report has been prepared in a Swedish original version and translated into English. In the event of any inconsistency between the two versions, the Swedish language version should have precedence.

2022 in brief

- During the year, sales of the company's first own-developed vaccine, Strangvac®, against the horse disease strangles began in Sweden, Denmark, the UK, Germany, France, Austria, the Netherlands, Belgium, Luxembourg, Poland, Ireland, and Italy.
- The regulatory process to sell Strangvac® in the US was initiated when the application for marketing authorization for Strangvac® in the US was submitted to the United States Department of Agriculture (USDA). The company estimates that approval may be granted during the first half of 2025.
- Positive results were achieved in a proof-of-concept study where piglets from vaccinated sows were protected against experimental challenge with *Streptococcus suis* at both 4 and 7 weeks after birth.
- Positive results were achieved in a safety and immunogenicity study that tested a prototype vaccine in pregnant cows. The study was an encouraging step in the company's ambition to develop a vaccine to protect dairy cows from mastitis caused by the bacteria *Staphylococcus aureus*. Following this success, the company initiated a proof-of-concept study to measure the level of protection provided by the prototype vaccine, and was awarded a grant of 80,000 euros from the EU's VetBioNet initiative, which covers approximately 30% of the costs of this phase.

CEO comment

In 2022, Strangvac® became available for sale in key markets across Europe, and we made significant progress in our projects to develop veterinary vaccines against *Streptococcus suis* and *Staphylococcus aureus* infections.

During the year, sales of Strangvac® were initiated in the key European markets of Sweden, Denmark, the United Kingdom, Germany, France, the Netherlands, Belgium, Luxembourg, Austria, Ireland, Poland, and Italy. Strangvac® is a vaccine against the infectious disease strangles, caused by the bacterium *Streptococcus equi*, which affects horses worldwide. It is the most frequently diagnosed infectious disease of horses. It is highly contagious, often affects all of the horses on a farm and can lead to the deaths of up to 10 % of these horses in some outbreaks.

Feedback from the use of Strangvac® in the field is very positive, and early field data from horses vaccinated with Strangvac® and then exposed to strangles in their natural environment are very encouraging. We look forward with great confidence to being able to make a significant difference in the fight against strangles, first in Europe and then globally. Our goal is to use vaccination to reduce the number of strangles outbreaks to one-tenth of the current level.

- 2 of 22 (9%) horses vaccinated with Strangvac® fell ill during an outbreak of strangles in Sweden. 91% of the horses that had taken two doses did not develop strangles.
- **All 63 (100%) non-vaccinated horses on the same farm fell ill**

- 15 healthy horses in Germany were moved from a farm with an outbreak of strangles to new premises
- **Here they received 2 doses of Strangvac® at an interval of 4 weeks**
- 2 weeks later the horses were moved back to their original farm and they **did not develop strangles**

- 43 healthy horses in Austria were vaccinated following the identification of index cases of strangles
- **None of the vaccinated horses developed signs of strangles**, helping to control the spread of disease

- 32 horses in the UK were affected by strangles
- 2 horses died out of the 27 horses that developed disease and an elderly horse recently suffered a second episode of strangles
- However, **none of the 5 horses vaccinated with Strangvac® developed signs of strangles**

- 45 healthy horses in the Netherlands were vaccinated with Strangvac®
- Blood sera recovered from 10 vaccinated horses showed that 5 (50%) were seropositive indicating exposure to *S. equi*
- **None of the 45 vaccinated horses developed signs of strangles**

Some early experiences of vaccination with Strangvac in field use.

We are at the beginning of the S-curve that veterinary vaccines sales usually follow, and therefore, the sales volumes have been relatively modest during these launch months. With a growing number of examples of vaccination in the field protecting horses and increasing support from leading veterinarians within equine health, we are convinced that Strangvac® will become one of the core vaccines for horses alongside those that protect against equine influenza virus and tetanus.

We continue to raise awareness and knowledge about strangles as a disease and our vaccine as an effective solution. One such activity is the Strangles Awareness Week that takes place the first week of May, where Intervacc is one of many organizations spreading the message about the importance of combating strangles around Europe.

United Kingdom, the Netherlands, and Sweden are examples of countries that participates in Strangles Awareness Week.

During the year, we also had significant breakthroughs in our two development projects - to develop a vaccine against *Streptococcus suis*, which cause severe infections in piglets, and *Staphylococcus aureus* infections, which is the most common causes of mastitis (udder inflammation) in dairy cows. With these breakthroughs, our work to develop these urgently needed vaccines advanced significantly. With these vaccinations, we can help farmers increase their profitability while contributing to improved animal health and reduced antibiotic use.

We will provide more information about all of these activities in this year's annual report. A big thank you to all employees, partners, and shareholders for fantastic efforts during the year!

We also want to send a posthumous and heartfelt thank you to one of our founders, Rune Bergman, who passed away at the end of 2022. Rune was a visionary of great proportions and it is thanks to him and the other founders' single-minded belief in Intervacc that the company exists at all. Rune was a significant force and an entrepreneur in the truest and best sense of the word and his visions are, and will be, present with us at Intervacc for the foreseeable future.

Andreas Andersson
CEO

Intervacc a group focussed on animal health

1. Developing and commercializing **modern, safe and effective vaccines for animals, focused on** infectious diseases caused by **streptococci and staphylococci**, based on a technology platform **using recombinant fusion proteins.** Potential to **reduce the use of antibiotics** and **fight antibiotic resistance**

2. **Sales of lead product Strangvac® in key European countries** after having received marketing approval in the EU and UK

3. Strangvac® **addresses a severe** (fatal), **common** and **highly contagious global disease**. A vaccine with **great coverage against all globally circulating strains** with the potential to be a **game changer** in the fight against equine strangles

4. **Demonstrated efficacy** against *Streptococcus suis* infection in piglets **by vaccinating sows**. **Successful safety and immunogenicity study** against *Staphylococcus aureus* infections to reduce mastitis **in dairy cows**

5. Innovative platform and vaccine pipeline based on partnerships with world leading expertise at the **Swedish University of Agricultural Sciences, SLU** and the **Karolinska Institute, KI**

Intervacc AB (publ) based in Stockholm is developing new vaccines against bacterial infections in animal health care. The vaccines are based on new technology using fused recombinant proteins. The principle of Intervacc's vaccine development is to identify surface - located bacterial proteins that stimulate an effective immune respons and to combine them with recombinant technology so that they are suitable for large scale production for use in vaccines.

The company has its own sales organisation within the Nordic countries through its subsidiary Nord Vacc Läkemedel AB, which conducts marketing and sales of veterinary medicines on the Scandinavian market.

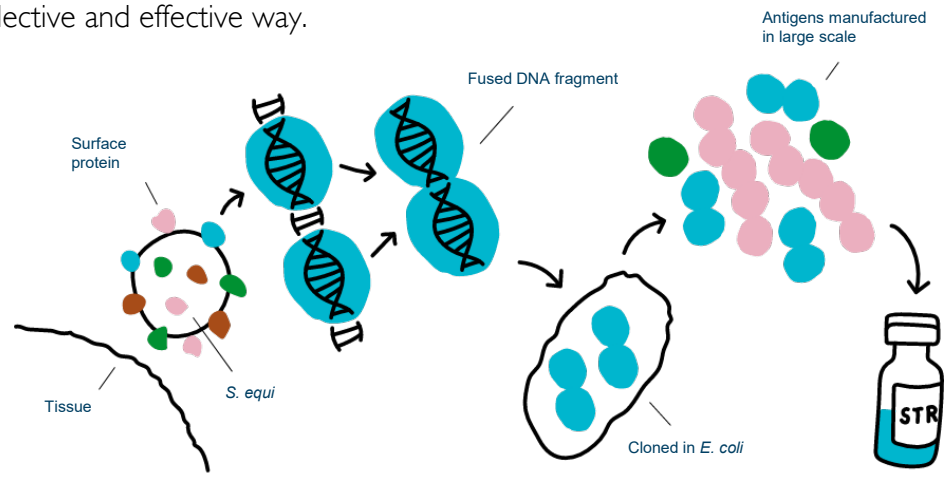
Our Swedac accredited laboratory Mybac-Vettech is a subsidiary performing diagnostic services in veterinary bacteriology within the Swedish market. Diagnostics is an important part of the animal health chain and Mybac-Vettech's customers are mainly veterinary clinics and stud farms, where analysis of samples for horse breeding is an important activity.

Vaccination

Vaccination is one of the most effective medical measures to prevent infectious diseases. Vaccination prevent disease by strengthening the body's defences against external attacks by stimulating the immune system. The body's immune system acts primarily by producing antibodies and killer cells. The immune system also learns from the attack and develops an immunological memory. This provides a faster and stronger defence in the event of another attack.

Biotechnology

The technology platform is based on research at Karolinska Institutet and the Swedish University of Agricultural Sciences. In short, the concept involves linking parts of the genes encoding different bacterial surface proteins together. Thanks to this technology, several important surface proteins can be incorporated into a few vaccine components. The key is to develop efficient and tailored proteins that generate an effective immune respons and are suitable for production on a large commercial scale. Through this innovative technology, vaccines that are completely devoid of living infectious substances are developed, while at the same time targeting multiple disease-causing mechanisms in a very selective and effective way.



A new generation of vaccines

The tailored proteins in our vaccines give rise to a specific and protective antibody response that differs from the antibody response of the disease-causing microorganism. This means that it is possible to distinguish between an animal that has been vaccinated and one that is or has been infected. This property is called DIVA (Differentiation of Infected from Vaccinated Animals) and is invaluable during ongoing epidemics as it must be possible to distinguish vaccinated animals from those who have or have had the infection. A vaccine without DIVA properties, can be difficult to use in circumstances where you want to map and limit the spread of infection with the help of serological sampling or DNA-based tests such as PCR. DIVA property is particularly important when vaccines are used for food-producing animals.

The synthetically developed and active ingredients in our recombinant vaccines means that there is no part of the bacterium in the vaccine that can cause the disease that the vaccine protects against.

Patents

The company owns four patent families. The patent families include a total of about 20 issued patents in various countries and further patents pending. Intervacc has an active patent strategy, which means that applications for patents and trademark protection are submitted in the countries that are considered to have good market potential or are considered to be key markets for the product in question. As the company's products are biologically manufactured, this in itself means enhanced protection as biosimilars, in comparison with generics as copies of chemically manufactured drugs are called, are more difficult to develop and get approved. The company's assessment is that filed patent applications are likely to be granted and provide patent protection for all of the planned vaccine candidates.

Market

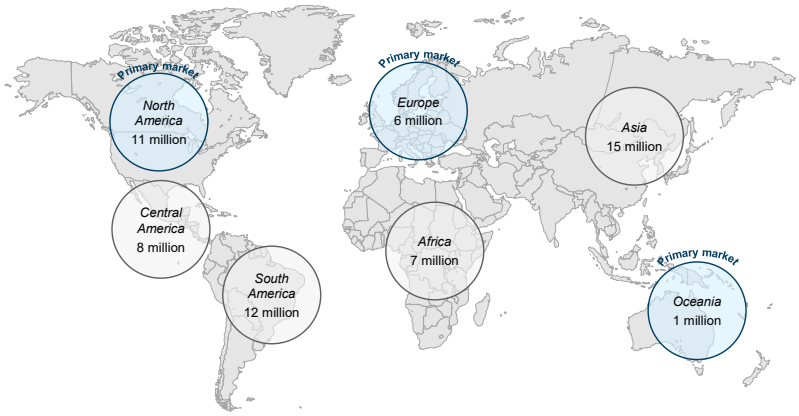
The interest and need for vaccines against infectious diseases in food-producing and companion animals is increasing in the world. The increasing interest in vaccines is driven, among other things, by increased problems with the development of resistance to various antibiotics, new advances in vaccine technology, increased knowledge if the immune response and an increased appreciation of the importance of good animal welfare.

Intervacc's market is within veterinary vaccines and is one of the segments that are expected to drive the veterinary pharmaceutical market in the coming years.

Equine Strangles vaccine market

The primary markets for the company are the EU, North America, Australia, and New Zealand, where approximately one-third of the total number of horses are located. Globally, the number of horses is estimated to be around 60 million (FAOSTAT). Based on the number of sold vaccine doses in several European countries, the company estimates that approximately 30-60% of all horses in these markets are vaccinated against various infectious diseases, primarily influenza but also West Nile Fever, Herpes, Tetanus, and others. The two geographical markets, the EU and the USA, currently account for approximately 70% of the global market for veterinary vaccines.

- Vaccines are disease preventing and **target a large proportion of the market**
- Intervacc's primary markets comprise **~1/3** of global horse population
- In primary markets **30 – 70%** of horses are vaccinated
- An anticipated average vaccination of **~1 – 2 doses per year** results in **recurring revenue**



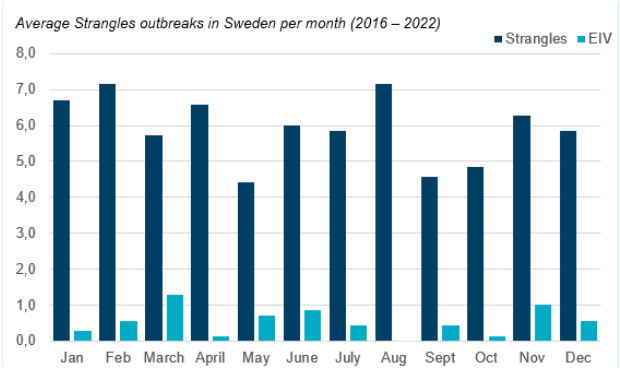
Marketing strategy

In the Nordic countries, we distribute Strangvac® through our own sales organization. To commercialize Strangvac® in Europe, excluding the countries where we sell ourselves, we have signed a distribution agreement with Dechra Pharmaceuticals PLC, which is one of the world's leading companies in animal health and one of the four largest players in Europe in drugs aimed at horses.

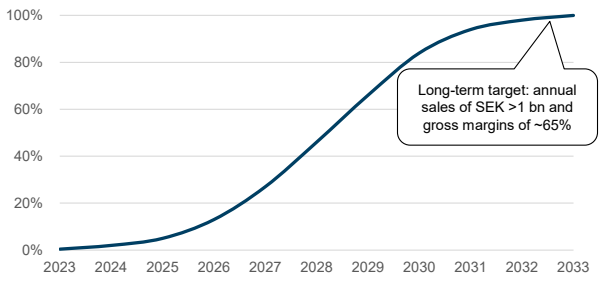
Our marketing strategy is to build the market by increasing the awareness of how severe, common, and contagious equine strangles is, establishing guidelines and recommendations that give confidence to veterinarians and horse owners of how to use Strangvac® for the prevention of strangles, and to build a brand image that encourages wider use. Equine strangles is a severe (fatal) and highly contagious global disease that is very common and can affect any horse. It is underreported in most European countries but initiatives are in place to encourage more openness about the disease – such

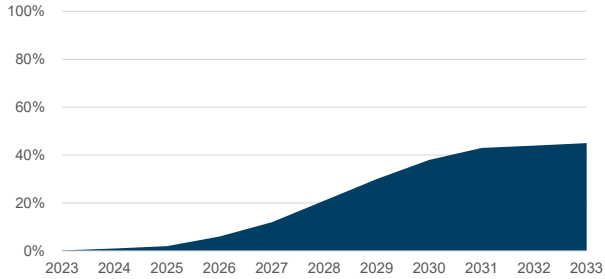
as Strangles Awareness Week. It is also easier to talk about the disease now that solutions such as Strangvac® are available. In establishing guidelines and recommendations we work with vaccine ambassadors and Key Opinion Leaders Veterinarians and horse owners who have used Strangvac® are positive and are endorsing the wider use of Strangvac® to reduce the prevalence of this severe disease. As the number of vaccinated horses continues to grow, we are generating more and more knowledge of the safety and effectiveness of Strangvac® that builds confidence and encourages more veterinarians and owners to vaccinate the horses in their care. Our target is to make Strangvac® a Basic or Core vaccine for horses. In building a brand image that encourages use we are highlighting that Strangvac® is an effective way to protect your beloved horses and it is a cost- effective way to mitigate risk for those whose businesses rely on healthy horses. Insurance companies can even further incentivise usage in the future.

Strangles outbreaks are common and occur throughout the year across Europe. As an example, there are on average one or two outbreaks per week just in Sweden. Only the first index case in an outbreak is registered and an outbreak usually includes many horses. With vaccination we are convinced that these outbreaks can be reduced significantly and leading KOLs believe that Strangvac® has the potential to cut the number of outbreaks by 90% - akin to the benefits that have been realized by vaccination against equine influenza virus.



The establishment of sales of a new vaccine typically follows a traditional S-curve, with an introductory phase, an expansion phase, and a maturation phase where the maturation phase evolves to an established position with continued growth at a slower pace. How long it takes from launch to the maturation phase differs greatly between different products. For biological pharmaceuticals such as vaccines, it is common for the time interval between launch and maturation phase to be 3–8 years. For most of the markets that we are now selling in, sales started in Q4 2022, so we are still very early in the predicted growth curve.





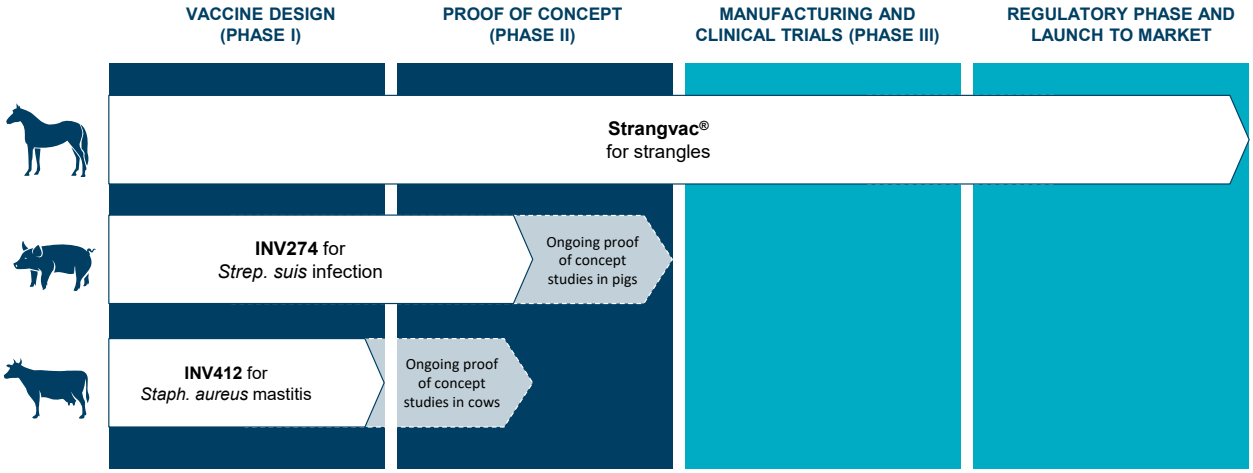
For vaccine like Strangvac® that is to a large extent building the market, we assume that time to full market penetration is in the longer time frame range.

Research and Development

A new generation of vaccines

Intervacc's business concept is to develop modern, effective and safe vaccines against bacterial infections that affect animals. The possibilities of examining the genome of pathogenic bacteria using molecular biological methods to design new vaccines have increased in the last decade.

Our current pipeline includes the following projects:

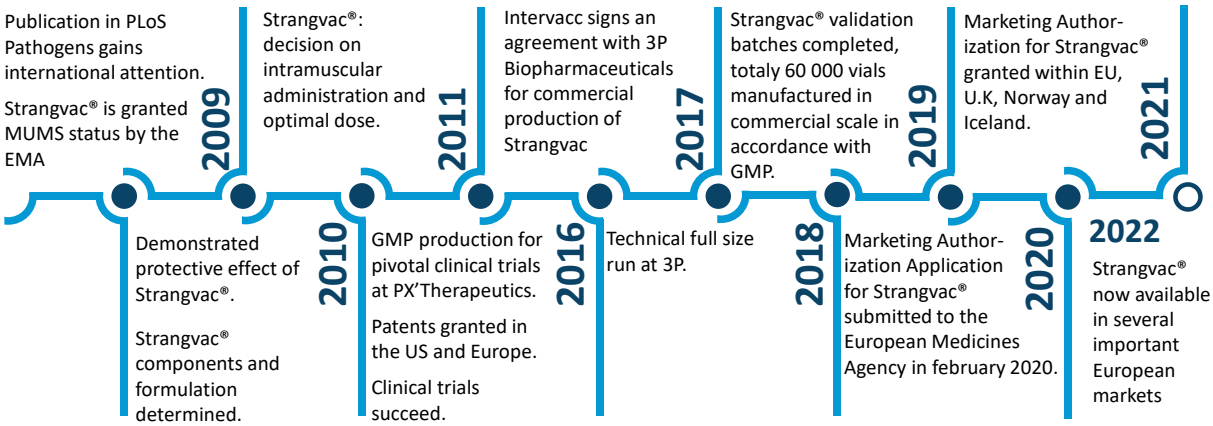


The infectious diseases addressed by each vaccine project are:

- strangles, which affects horses and is caused by the bacteria *Streptococcus equi.*
- sepsis and meningitis caused by the bacteria *Streptococcus suis*, which affects piglets.
- mastitis (udder inflammation) caused by the bacteria *Staphylococcus aureus*, which affects dairy cows.

Strangvac® now available in key European markets

Our first proprietary vaccine Strangvac®, a vaccine against the streptococcal infection strangles that affects horses, is now available in several important European markets. The development of Strangvac has been achieved in partnership with world-leading scientists at the Karolinska Institute and the Swedish University of Agricultural Sciences. The journey on the way to an approval for this new long-awaited vaccine against a highly contagious disease that affects horses worldwide started in the 2000s.



Strangvac® on its way to other parts of the world

Parallel to the introduction in Europe, we are working to obtain a license for sales and distribution of Strangvac® in the U.S. We estimate that approval can be achieved during the first half of 2025. The timeframe depends, among other things, on any requirements for local studies and the time needed for the U.S. authority's inspection of our manufacturing partners' facilities. The application for a license for sales and distribution in Canada will be made in conjunction with the application in the U.S., and approval for Canada is expected to be approximately simultaneous or slightly after the approval for the U.S.

We plan to begin the formal approval process in Australia and New Zealand in 2023 with the goal of obtaining approval in 2024.

Our vaccine development projects against *Streptococcus suis* and *Staphylococcus aureus*-infections

Effective vaccines against these prevalent infections will be an important tool for strengthening animal health and well-being, improving the economy of food production and reducing the use of antibiotics. With Strangvac®, we have shown that we can develop safe and effective vaccines that are easy to use (Strangvac® is administered intramuscularly and stored in regular refrigerator temperature).

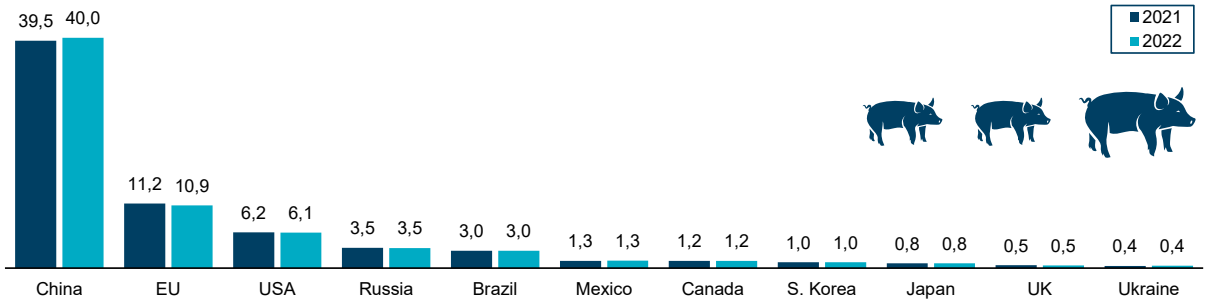
Strangvac® paves the way for a new generation of vaccines against bacterial infectious diseases. Based on the same technology platform, and with a focus on similar types of bacterial infections, we aim to develop more safe and effective vaccines. At the forefront of our development portfolio, we have a prototype vaccine against *Streptococcus suis* infections, one of the most serious pathogens affecting piglets.

S. suis infection is one of the most common bacterial causes of death in piglets and is considered a global, major health problem in swine husbandry. *S. suis* is a zoonotic infection which means that it can also affects humans resulting in meningitis.

Piglets are mainly affected during the first weeks of life, but it can be difficult to get vaccines to work in very young individuals before their immune system is fully developed. Therefore, we were delighted when earlier this year we showed that vaccination of pregnant sows with our prototype vaccine was safe and provided protection to piglets through the transfer of immunity via colostrum immediately after birth. There is currently no effective vaccine against *S. suis* infections and the demand for a vaccine is great. Today, *S. suis* infections are treated with antibiotics and there is reason to assume that the infection pressure will increase further as the use of antibiotics decreases in accordance with the EU goals to reduce antibiotic use in animals by 50% from 2020 to 2030.

We estimate that there are just under 1 billion pigs globally, and approximately 150 million pigs in the EU. Of the 150 million pigs in the EU, approximately 10 million are breeding sows. Our results indicate a possible vaccination schedule where each breeding sow would receive a primary vaccination of 2 doses, followed by a dose before each litter.

We estimate that a vaccine against *S. suis* infections that is based on sows being in a vaccination schedule with a booster before each farrowing has a total accessible market value of approx. SEK 1 (one) bn in Europe alone. *S. suis* is endemic in pig populations across the world and it is a growing problem to food security, and so we expect that our vaccine programme will yield significant global benefits both to animal and human health.



USDA projections on Sow inventory (millions)

We have also made significant progress in our project to develop a vaccine against mastitis in dairy cows caused by *Staphylococcus aureus* this year and demonstrated that the prototype vaccine is safe and immunogenic in pregnant heifers. In the ongoing phase, which is part-funded by a grant from the EU's VetBioNet programme, we are testing whether the vaccine protects diary cows against *S. aureus* infection. Mastitis is one of the most common bacterial diseases affecting dairy cows worldwide. In Europe alone there are 2.6 million cases of mastitis every year, causing annual losses of around 600 million euros, losses which have likely increased further with the rising price of milk. Approximately 25% of mastitis cases are caused by *S. aureus*, and mastitis is the most common reason for antibiotic use in dairy cows.

The global market for veterinary vaccines is expected to grow by about 6-10% annually. The UN, EU, and governments are working intensively to reduce the use of antibiotics. Today, more antibiotics are used for healthy animals than for sick people. The focus from governments to reduce the use of antibiotics and improve food security is further fuelling the need for effective vaccines against bacterial diseases.

Key EU trends

- **2011:** The European Commission's One Health Action Plan Against Antimicrobial Resistance
- **May 2020:** Farm to Fork Strategy with an objective to reduce the total EU sales of antimicrobials for use in farmed animals and aquaculture by 50% by 2030
- **January 2022:** European Parliament approved new legislation to ban the prophylactic use of antibiotics in farmed animals

We anticipate:

- **Near-term:** Increase in vaccinations as a disease prevention measure in healthy animals as antibiotics are phased out
- **Mid to long-term:** Further increase in vaccinations as disease rates are likely to rise among animal populations that are neither given antibiotics nor vaccines

Board of Directors and organization

Strengthening the organization

New employee ahead of Strangvac® sales start.

During the year we continued to strengthen the organisation ahead of sales commencing and in March, Hege Drangsholt joined as product specialist and country manager for Denmark.

Board of Directors

In accordance with the Nomination Committee's proposal, the Annual General Meeting on June 14th resolved to elect Michela De Carli as new member of the Board of Directors and re-elect the Board members Ed Torr, Niels Holck, Björn Sjöstrand, Bengt Guss, Marianne Hansson and Stefan Ståhl. Björn Sjöstrand was elected Chairman of the Board.

Michela de Carli, has extensive experience in vaccine manufacturing and supply chain in animal health. She has held several leading roles at Pfizer animal health, later Zoetis, the world's largest veterinary medicine company, where she was responsible for strategic supply of goods. She has also had the role of operations manager at Sandoz's US B2B operations and contributes with both commercial and logistical expertise. In both her previous roles and current role as a self-employed person and consultant, she has extensive experience of working with various contract manufacturers around the world. She lives in Italy but works globally.

The share

The company's share is listed on Nasdaq First North Growth Market, Stockholm and traded since April 7, 2017 with the tickername "IVACC" (ISIN SE0009607252).

The graph below shows the Intervacc share's closing prices from January 1st, 2022

Share price development from January,1st 2022 until March,22th, 2023

Shareholders

At the end of 2022 Intervacc had about 18 500 shareholders, which implies a reduction of approx. 6% in the number of owners during the year. The 17 major shareholders controlled 40,8% of capital and votes at the years end. A compilation of major shareholders can be found in the administration report.

Share Capital

At the end of 2022 share capital in Intervacc amounted to SEK 101,0 million. The number of shares was 50 490 843 corresponding to a quota value per share of SEK 2,00.

Share volume

During the year totally 32,5 million shares were traded worth a total of SEK 1 308 million. On average 128 368 shares were traded per day (source: NASDAQ).

Equity Research

The company use Penser Access a service from Erik Penser Bank, with Henrik Holmer as responsible analyst, for Equity Research. This is a paid ongoing analysis assignment that can be followed at epaccess.penser.se/bolag/intervacc/. Danske Bank with Lars Hevreng as responsible analyst also monitors the company.

Investor Relations

In 2022, Intervacc participated in a number of investor relations activities, for example at Erik Penser Banks Health Care day and company day, ABGSC Investor Days, ABGSC Pet Expo, Carnegie Healthcare Seminar, Handelsbanken's Healthy Hour, SEB's Annual Healthcare Seminar, Pareto Securities' Healthcare Conference and several interviews in the Penser Access podcast and YouTube channel.

CEO Andreas Andersson and Chief Scientific Officer Andrew Waller.

Certified Adviser

Eminova Fondkommision AB act as the Company's Certified Adviser and are responsible for overseeing that Intervacc complies with the rules and guidelines set forth by First North Growth Market. For more information contact Eminova Fondkommission AB, info@eminova.se, phone +46(0)8-684 211 00.

ADMINISTRATION REPORT

The Board of Directors and the CEO of Intervacc AB (publ.) Corporate identity number 556238-1748, based in Stockholm, hereby submit the annual report and consolidated statements for the financial year 2022-01-01 - 2022-12-31. Figures in parentheses refer to the previous year. All amounts are expressed in thousands of kronor (TSEK) unless otherwise stated.

The business

Company

Intervacc AB (publ) based in Stockholm is developing new vaccines against bacterial infections within animal health. The vaccines are based on technology using fused recombinant proteins. The principle of Intervacc's vaccine development is to identify surface-located bacterial proteins that stimulate an effective immune response and to combine them with recombinant technology so that they are suitable for large-scale production for use in vaccines.

Strangvac® is the first proprietary vaccine in the company's development portfolio and it has been introduced in important markets in Europe during 2022. In parallel with the introduction in Europe, the company is working to obtain a license for the sale and distribution of Strangvac® in the U.S. market. The company plans to start the formal application process for approval in Australia and New Zealand during 2023 with the goal of obtaining approval in 2024.

The subsidiary Nord Vacc Läkemedel AB (556323-1090) is a distributor of veterinary medicines and has an established sales and marketing organization in the Nordic markets. In Denmark, operations take place through a branch office of Nord Vacc Läkemedel AB. The group also includes the Swedish company Mybac-Vettech AB (556336-6243) which performs diagnostic services in veterinary bacteriology, which includes horses.

Financial Summary

Sales

Net sales during the financial year 2022 amounted to SEK 9.7 million, which is SEK 4.5 million better than in 2021 (5.2). The company's first in-house developed product, Strangvac®, began to be sold on the Swedish market in the last days of March 2022, and has successively during 2022 begun to be sold on the most important markets in Europe. Together with our partner and distributor Dechra Pharmaceuticals, Strangvac® will gradually be launched in other markets in Europe.

Operating result

During 2022, the operating profit has been charged with a cost of SEK -5.9 million that refers to vaccine vials manufactured with antigens from the validation batches (manufactured in 2019) where the shelf life date has passed, and the manufactured vials have therefore not been assessed to have an economic value on the balance sheet date. In the event that the company manages to extend the shelf life of the antigens, it is possible that the vials may gain commercial value. The company has several ongoing projects that relate to both production improvements and regulatory compliance and that aim to provide greater flexibility in manufacturing and at the same time ensure that products are manufactured and controlled according to quality standards. It includes, for example, extended shelf life and will simplify planning and production as well as improve margins, and above all lay the foundation for the economies of scale that come with the manufacture of larger quantities.

During 2022, the operating profit has also been credited with SEK 1.9 million regarding an older and disputed debt (from 2017) that the company no longer considers likely to be obliged to pay. These two items, together SEK -4.0 million, have been subtracted from the operating profit of 2022.

The operating profit for 2022 amounted to SEK -64.4 million, which is a deterioration of SEK -35.0 million compared to the same period in 2021 (-29.4). Of the deterioration SEK -14.6 million refers to depreciation of balanced development costs that the company began with during the first quarter of 2022 at the launch of Strangvac® in Europe. Furthermore, the group has costs for both manufacturing, regulatory compliance, marketing and sales that are largely independent of volume, and thereby makes a big impact with the smaller volumes the company has at the beginning of the commercialization of the company's first product, Strangvac®.

The negative operating profit is mainly explained by the fact that the commercialization of the group's first in-house developed product, Strangvac®, is in a start-up stage.

Cash Flow

During 2022, the working capital has increased and affected the cash flow by SEK -26.5 million (-2.3), mainly through the build-up of inventory which burdened the cash flow. The cash flow during 2022 has meant that cash and cash equivalents have decreased by SEK -70.0 million (-48.5), and cash and cash equivalents on the balance sheet date amount to SEK 45.7 million (115 ,7).

Financial position

On the balance sheet date 2022, equity amounted to SEK 250.2 million, which compared to the same balance sheet date 2021 is a decrease of SEK 58.1 million. About 61% of the group's balance sheet total (52%) has been invested in balanced development costs, which on the balance sheet date 2022 amount to SEK 160.9 million (171.3). Cash and cash equivalents, which on the balance sheet date amount to SEK 45.7 million (115.7), are largely affected by the sales of Strangvac® in Europe and the investments made in research and development, where our new and ongoing projects are becoming increasingly advanced. The project portfolio refers to vaccines against *S. suis* infections in pigs and *S. aureus* infections in dairy cows (mastitis). Research and development costs also include the upcoming regulatory process with the USDA (United States Department of Agriculture). The company does not yet generate a positive cash flow from business operations. This can mean that capital-intensive investments cannot be carried out as planned, are postponed or that the company enters into partnerships. The company makes the assessment that there are funds for the next 12 months, see section Future outlook page 22.

Five-year comparison Group, definition of key figures, note 27

	2022	2021	2020	2019	2018
Net sales	9 684	5 241	4 780	12 139	35 600
Loss after financial items	-64 155	-29 375	-25 601	-27 892	-31 050
Net result in % of net sales	-662%	-560%	-536%	-230%	-87%
Total assets	265 035	329 393	355 282	237 067	202 662
Solidity %	94%	94%	95%	93%	94%

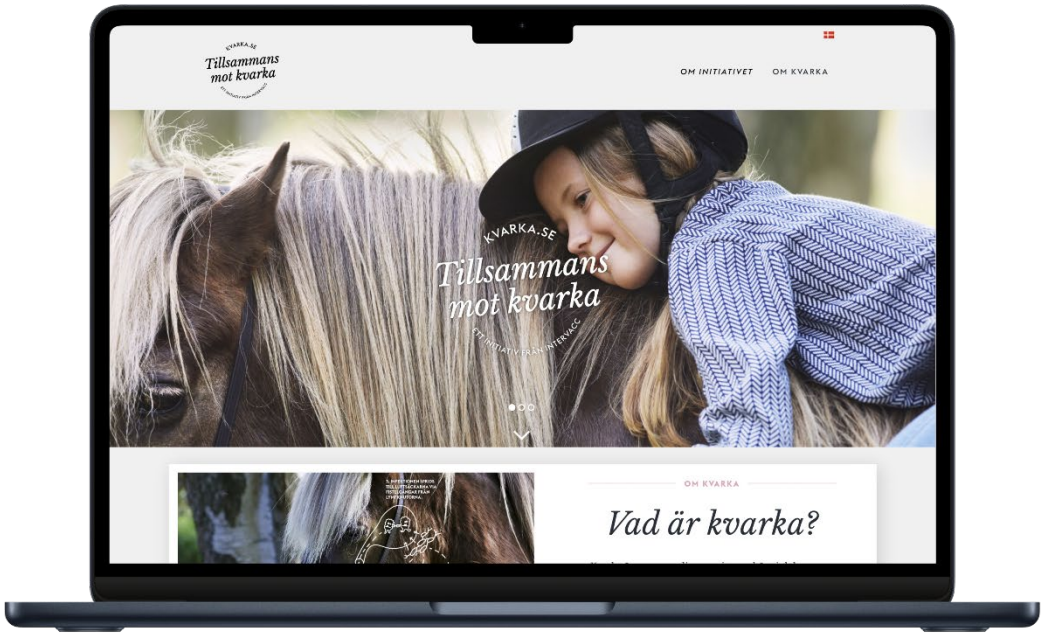
Five-year comparison parent company, definition of key figures note 27

	2022	2021	2020	2019	2018
Net sales	6 951	259	-	-	-
Loss after financial items	-53 750	-19 327	-15 002	-14 197	-57 156
Total assets	295 216	348 641	368 360	243 515	194 772
Solidity %	95%	95%	96%	94%	96%

Shareholdings

The table below shows major shareholders in Intervacc at December 31st, 2022.

Shareholder	Number of shares	% of cap/votes
Handelsbanken Microcap	4 490 000	8,9%
Robur	3 419 868	6,8%
Fjärde AP-fonden	2 500 000	5,0%
B. Sjöstrand incl. comp	1 251 242	2,5%
H. Isoz	1 045 900	2,1%
K Janzon incl. comp	1 041 000	2,1%
Aktia Asset Management Oy	770 000	1,5%
Nordea Småbolagsfonder	749 389	1,5%
N. Aguiar	739 007	1,5%
BNP Paribas, Luxembourg	709 031	1,4%
N.R Bergman incl. comp	701 505	1,4%
Aktie-Ansvar Sverige	700 000	1,4%
Jyske Bank/Bank of NY	654 599	1,3%
Capital Group Smallcap World Fund	576 068	1,1%
T. Eklund	451 918	0,9%
J. Virgin	438 139	0,9%
K. Dahlbäck	385 763	0,8%
Others	29 867 414	59,2%
Total	**50 490 843**	100,0%



Assessments, risks and uncertainty factors

In order to prepare reporting, the management and the Board must make assessments and assumptions that affect assets and liabilities, as well as income and expenses reported in the financial statements. The conditions for Intervacc's operations change gradually, which means that these assessments can change and affect both the company's position and profitability. The estimates and judgments in this section are those that are judged to be most important based on the significance of the assessments and the risks and uncertainties.

Strangvac®

Since only one of Intervacc's vaccine candidates have reached the phase where it will be possible to commercialize, a significant portion of the company's assessed asset value can be attributed to the commercialization of this vaccine. This dependence means that there is a risk of a negative impact on the company's forecasts and asset value if any part of the launch of Strangvac® does not go as planned.

Financing

Research and development of pharmaceuticals is to a great extent a risky, complicated, time-consuming and capital-intensive process. The company does not yet generate enough cash flow from its own business to finance its operations. There is a risk that financing cannot be secured for future capital needs or that such financing cannot be obtained on favorable terms, which can have negative effects on the company's survival, development and investment opportunities. For assessments made, see Financial position page 18 and Future outlook page 22.

Key personnel

Intervacc is highly dependent on senior executives and other key personnel. Loss of key personnel can have negative financial and commercial effects on the company.

Sales and distribution

There is always a risk that the Company or its partners will not achieve expected sales targets, which will result in lower revenues than forecasted. There is also a risk that the company is unable to deliver products due to problems with manufacturing, lack of resources, disruptions to external suppliers, lack of product quality, problems with regulatory compliance or disruptions in the supply chain that affect the manufacture, sales and logistics of the company's products.

Currency risks

The group is exposed to currency risks which, due to unfavorable changes in exchange rates, can negatively affect earnings and equity. Currency risks involve the risk that the fair value of future cash flows will vary due to exchange rate movements. Exposure to currency risk arises primarily from payment flows in foreign currency and when converting balance sheet items in foreign currency to the Group's reporting currency, which is Swedish kronor (SEK). The company's outflows mainly

consist of SEK and EUR, which are the same currencies as for the company's inflows from operational activities. Sales to external distributors take place in EUR, while sales under own management take place in SEK. At the time of this report's publication, the group does not hedge currency risks.

Covid-19

The Covid-19 pandemic has been in focus also during 2022. How large and how long-lasting the effects of Covid-19 will be is difficult to forecast. It cannot be ruled out that it will have negative consequences for the company and affect launch and sales due to lack of resources and disruptions at external suppliers that affect the production and logistics of the company's products.

The invasion of Ukraine

Russia's invasion of Ukraine is a humanitarian catastrophe. In addition to the deteriorating security situation, the war entails obvious risks of disruptions in supply chains, price increases for raw materials, energy and transport. There are no suppliers, subcontractors or customers in Russia, Belarus or Ukraine in the Group, and on the day of this annual report, we have not seen any effects that affect the business.

Future outlook

In connection with the year-end report 2022, the board has decided to adopt the following long-term financial goals regarding Strangvac®:

Strangvac® has the potential to reach annual global sales exceeding one billion SEK with a gross margin of approx. 65%.

The board makes the assessment that the company's sales will increase during the year. If sales instead remain at the current level, it means that the working capital is not sufficient to conduct the business as planned in the existing business plan for the coming year. The company's working capital needs are primarily attributable to the commercialization of the company's first in-house developed product, Strangvac, as well as continued development of the projects in the project portfolio. The company has begun the regulatory process for approval in the United States, which may include local studies regarding both safety and efficacy, and the scope of these studies, and thus the costs, are not yet known. In order to secure working capital, the Company may primarily postpone planned investments, but may also be financed by raising capital or license deals. Against this background, the board's assessment is that the funding for 2023 is secured.

If none of these solutions can be implemented and financing cannot take place in any other way, then there is, on the other hand, a significant factor of uncertainty that can lead to a negative impact on the Company's business plan and ability to drive operations and development at the planned pace to achieve its growth-oriented goals, and lead to doubt about the company's ability to continue its operations.

Significant events during the year

New study confirms that Strangvac® is likely to be effective against all known strains of *Streptococcus equi*

In the largest study of its kind, published in the January ed. of 'Equine Veterinary Journal', scientists confirm that the antigens used in the Strangvac vaccine were highly conserved regardless of which strain of Streptococcus equi was examined from outbreaks in 19 countries around the world.

Intervacc applies for a Permit for Sale and Distribution of Strangvac® in the U.S.

On February 16, 2022 the Company's application for a Permit for Sale and Distribution of Strangvac® in the U.S. has been submitted to the U.S. Department of Agriculture (USDA).

The European Medicines Agency extends the shelf life of the antigens used in Strangvac to 28 months

During March, after reviewing stability data, the European Medicines Agency approved the extension of the shelf life of the antigens in Strangvac® to 28 months.

Strangvac® released for sale in Sweden

On March 23, 2022 Intervacc announced that the first batch of Strangvac® was released for sale in Sweden. The product was in stock at our logistics partner in Sweden, and about a week later when the product information was registered in the system used by pharmacies around Sweden the first orders could be delivered.

Positive results in proof-of-concept study to develop a vaccine against *Streptococcus suis* infection in pigs

On April 25, 2022 Intervacc announced positive results from a proof-of-concept study where piglets from vaccinated sows were protected against experimental challenge with *Streptococcus suis*.

The study showed that piglets from sows that had been vaccinated with a prototype fusion protein vaccine had significantly fewer clinical signs of disease compared to piglets from sows that received a placebo, adjuvant-only, vaccine following challenge with a virulent strain of *Streptococcus suis* at 4 or 7 weeks of age.

Progress in development of a vaccine to prevent mastitis in dairy cows caused by *Staphylococcus aureus*

Intervacc announced the initiation of a proof-of-concept study to measure the effectiveness of a vaccine to protect dairy cows against mastitis caused by *Staphylococcus aureus* following successful safety and immunogenicity studies testing this prototype vaccine in pregnant heifers. This next phase of the project will be receiving a grant of 80k Euro from the EU's VetBioNet initiative.

Mastitis is one of the most important diseases of dairy cattle worldwide. Over 2.6 million cases of disease, causing losses of approximately 600M€, occur in European farms each year. Approximately 25% of contagious mastitis cases are caused by *Staphylococcus aureus* and the control of mastitis is the most common reason for antibiotic use in dairy cows.

Intervacc receives order for Strangvac, from the Dechra Pharmaceuticals PLC Group

On July 20th Intervacc announced that the company has received an order for the equivalent of approximately SEK 3 million from Dechra. The order concerns the delivery of Strangvac®, a vaccine against the highly contagious and serious infectious disease equine strangles, which is endemic across Europe. The order, contains vaccine vials for regions including the UK, Germany and France.

Sales start for Strangvac® in several important European markets

On October 12th, 2022 Intervacc announced that the first batch of Strangvac® for sale in Germany, France, Austria, Belgium, Luxemburg and the Netherlands has been released. On November 15th, it was announced that Strangvac® will be distributed to wholesalers in Ireland and on November 28th, the sales of the vaccine in Poland began. On December 13th, Intervacc announced that the first batch of Strangvac® vaccine doses for sale in Italy was released.

The vaccine has thus in Q4 been launched in several important European markets. The distribution in Europe, excluding the markets in the Nordics and the Baltic region, is done with the help of Dechra Pharmaceuticals PLC.

Intervacc has applied for supplementary protection certificates for Strangvac® in key European markets

The European patent for Strangvac® is approved and in force until May 2031. Pending the approval of the supplementary protection certificates, the protection in Great Britain, Sweden, the Netherlands, Italy, Ireland, France, Spain, Germany and Austria will be extended until May 2036.

Change in number of shares and votes in Intervacc AB (publ)

CEO Andreas Andersson and three other key persons have subscribed for shares in Intervacc by exercising warrants.

The now completed incentive program resulted in the utilization of all 330,455 warrants, each of which gave the right to subscribe for one new share at a price of SEK 18.52 per share. Intervacc thus received approx. SEK 6 million in cash. After completed registration of issued shares, the total number of shares and votes in Intervacc AB (publ) as of 4 August 2022 amounts to 50,490,843.

Intervacc and the Swedish University of Agricultural Sciences, SLU, extends a multi-year contract for the development of innovative animal health vaccines

On December 19th, 2022 – Intervacc and the Swedish University of Agricultural Sciences, SLU, announced that they have extended the contract for the development of animal health vaccines using recombinant proteins. The successful collaboration has led to a vaccine against equine strangles approved by the European Medicines Agency, as well as promising vaccine candidates against other streptococcal and staphylococcal infections.

The vaccine against equine strangles, approved by EMA and VMD, paves the way for a new generation of vaccines for bacterial infections. Based on the same technology platform, and with a focus on the same types of bacterial infections, Intervacc is developing more safe and effective vaccines. At the forefront of our development portfolio is a prototype vaccine against *Streptococcus suis* infections, one of the most serious infections affecting piglets, followed by a prototype vaccine against *Staphylococcus aureus*, which results in mastitis, a disease of the udder in dairy cows that is difficult to treat.

Nomination Committee appointed in respect of AGM 2023 in Intervacc

The composition of the Nomination Committee in respect of the annual general meeting 2023 was established during November. The Nomination Committee consists of the following persons who together represent approximately 23 percent of the number of shares and votes in the company based on the last known shareholder information at the end of 2022.

- Ulrika Enhörning, appointed by Swedbank Robur Fonder
- Lotta Sjöberg, appointed by Handelsbanken Fonder
- Thomas Ehlin, appointed by Fjärde AP-fonden
- Björn Sjöstrand, chairmen of the board

Significant events after year end

The board adopts long-term financial goals regarding Strangvac®

In connection with the year-end report 2022 the board of directors decided to adopt the following long-term financial goals: Strangvac has the potential to reach annual global sales exceeding one billion SEK with a gross margin of approx. 65%.

Changes in equity

Amounts in TSEK

Group

	Group			
	Share capital	Other contributed equity	Other equity including net loss for the year	Sum
Equity by 2021-01-01	**100 321**	**287 688**	**-50 399**	**337 610**
Conversion difference			17	17
Net loss for the year			-29 375	-29 375
Equity by 2021-12-31	**100 321**	**287 688**	**-79 757**	**308 252**
Equity by 2022-01-01	**100 321**	**287 688**	**-79 757**	**308 252**
,				
New share issue	661	5 459		6 120
Share issue expenses		-100		-100
Conversion difference			45	45
Net loss for the year			-64 158	-64 158
Equity by 2022-12-31	**100 982**	**293 047**	**-143 870**	**250 159**

Parent Company

	Restricted equity			Non-restricted equity			
	Share capital	Statutory reserve	Development expenditure fund	Share premium reserve	Loss brought forward	Loss for the year	Sum
Equity by 2021-01-01	100 321	17	90 611	287 671	-105 480	-19 108	354 032
Transfer to development expenditure fund			21 983		-21 983		0
Transfer of last years result					-19 108	19 108	0
Net loss for the year						-23 111	-23 111
Equity by 2021-12-31	**100 321**	**17**	**112 594**	**287 671**	**-146 571**	**-23 111**	**330 921**
Equity by 2022-01-01	**100 321**	**17**	**112 594**	**287 671**	**-146 571**	**-23 111**	**330 921**
New share issue	661			5 459			6 120
Share issue expenses				-100			-100
Transfer to development expenditure fund			4 242		-4 242		0
Transfer from development expenditure fund			-14 556		14 556		0
Transfer of last years result					-23 111	23 111	0
Net loss for the year						-55 116	-55 116
Equity by 2022-12-31	**100 982**	**17**	**102 280**	**293 030**	**-159 368**	**-55 116**	**281 825**

Disposition of the company's results

The Board of Directors and the President's proposal for disposition of the company's results.

Available to the Annual General Meeting, SEK

Loss brought forward	-159 368 253
Share premium reserve	293 031 100
Loss for the year	-55 116 278
	78 546 569

The Board of Directors and the President propose that SEK 78 546 569 is carried over.

INCOME STATEMENT

		Group		Parent company	
Amounts in TSEK	Note	2022-01-01 -2022-12-31	2021-01-01 -2021-12-31	2022-01-01 -2022-12-31	2021-01-01 -2021-12-31
Operating income					
Net sales	3	9 684	5 241	6 951	259
Work performed by the company for its own use and capitalized		2 668	3 682	2 668	3 682
Other operating income		729	2 516	716	2 467
Total		13 081	11 439	10 335	6 408
Operating expenses					
Raw materials and consumables		-6 314	-598	-5 905	-
Goods for resale		-2 671	-2 079	-2 735	-
Other external costs	4	-26 873	-14 651	-25 017	-12 824
Employee benefit expenses	5, 6	-19 611	-17 025	-14 745	-12 579
Depreciation/amortization of property, plant and equipment and intangible assets		-20 858	-6 152	-14 874	-104
Other operating expenses		-1 167	-327	-1 079	-281
Total operating expenses		-77 494	-40 832	-64 355	-25 788
Operating loss		**-64 413**	**-29 393**	**-54 020**	**-19 380**
Profit and loss from financial items					
Other interest income and similar profit items		383	92	383	92
Interest income and similar loss items		-125	-74	-113	-39
Total financial items		258	18	270	53
Loss before appropriations		**-64 155**	**-29 375**	**-53 750**	**-19 327**
Appropriations					
Group contribution paid		-	-	-1 366	-3 784
Loss before taxes		**-64 155**	**-29 375**	**-55 116**	**-23 111**
Taxes					
Tax on profit for the year	7	-3	-	-	-
Net loss for the year		**-64 158**	**-29 375**	**-55 116**	**-23 111**
The result is entirely attributable to the parent company's owners					
Earnings per share before dilution attributable to the Parent Company's shareholders	8	-1,28	-0,54		
Earnings per share after dilution attributable to the Parent Company's shareholders	8	-1,28	-0,54		

BALANCE SHEET

		Group		Parent company	
Amounts in TSEK	Note	2022-12-31	2021-12-31	2022-12-31	2021-12-31
ASSETS					
Fixed assets					
Intangible assets					
Capitalized expenditure for research and development and similar	9	160 945	171 259	160 945	171 259
Patent	10	9 073	8 064	9 073	8 064
Goodwill	11	5 893	11 786	-	-
Total intangible assets		175 911	191 109	170 018	179 323
Tangible assets					
Equipment, tools, fixtures and fittings	12	1 334	861	1 228	665
Total tangible assets		1 334	861	1 228	665
Financial assets					
Participation in group companies	13	-	-	35 922	35 922
Receivables from group companies	14	-	-	7 193	1 519
Deferred tax asset	15	11 387	11 390	9 677	9 677
Total financial assets		11 387	11 390	52 792	47 118
Total fixed assets		**188 632**	**203 360**	**224 038**	**227 106**
Current assets					
Inventories etc.					
Raw material and consumables		21 926	90	21 795	-
Finished products and goods for resale		2 478	1 477	-	-
Advance payment to suppliers		3 019	5 046	3 019	5 046
Total inventories		27 423	6 613	24 814	5 046
Current receivables					
Account receivables - trade		1 292	453	675	-
Current tax assets		360	677	291	553
Other receivables		845	995	833	834
Prepaid expenses and accrued income	16	784	1 583	416	1 225
Total current receivables		3 281	3 708	2 215	2 612
Cash and bank balances					
Cash and bank	17	45 699	115 712	44 149	113 877
Total cash and bank balances		45 699	115 712	44 149	113 877
Total current assets		**76 403**	**126 033**	**71 178**	**121 535**
TOTAL ASSETS		**265 035**	**329 393**	**295 216**	**348 641**

		Group		Parent company	
Amounts in TSEK	Note	2022-12-31	2021-12-31	2022-12-31	2021-12-31
EQUITY AND LIABILITIES					
Equity, group					
Share capital		100 982	100 321		
Other contributed equity		293 047	287 688		
Other equity including net result for the period		-143 870	-79 757		
Total equity, group		250 159	308 252		
Equity, parent company					
Restricted equity					
Share capital	18			100 982	100 321
Statutory reserve				17	17
Development expenditure fund				102 280	112 594
Total restricted equity				203 279	212 932
Non-restricted equity					
Share premium reserve				293 030	287 671
Loss brought forward				-159 368	-146 571
Loss for the year				-55 116	-23 111
Total non-restricted equity				78 546	117 989
Total equity, parent company				**281 825**	**330 921**
Non-current liabilities					
Liabilities to credit institutions	19	183	222	183	222
Total non-current liabilities		**183**	**222**	**183**	**222**
Current liabilities					
Liabilities to credit institutions	19	139	211	39	39
Advance payment from customers		-	1		-
Accounts payable - trade		5 614	9 655	5 191	7 628
Liabilities to group companies		-	-	379	371
Other liabilities		1 171	1 474	851	1 087
Accrued expenses and deferred income	20	7 769	9 578	6 748	8 373
Total current liabilities		**14 693**	**20 919**	**13 208**	**17 498**
TOTAL EQUITY AND LIABILITIES		**265 035**	**329 393**	**295 216**	**348 641**

CASH FLOW STATEMENT

		Group		Parent company	
Amounts in TSEK	Not	2022-12-31	2021-12-31	2022-12-31	2021-12-31
Operating activities					
Operating result		-64 413	-29 393	-54 020	-19 380
Adjustment for non-cash items	21	20 902	6 169	14 874	104
Interest received		383	92	383	92
Interest paid		-125	-74	-113	-39
Cash flow from operating activities before working capital changes		**-43 253**	**-23 206**	**-38 876**	**-19 223**
Cash Flow from changes in working capital					
Change in inventories		-20 810	-5 029	-19 768	-5 046
Change in receivables		427	-647	397	-423
Change in current liabilities		-6 154	3 419	-4 290	3 215
Cash flow from operating activities		**-69 790**	**-25 463**	**-62 537**	**-21 477**
Investing activities					
Investment in capitalized expenditure for research and development	9	-4 242	-21 982	-4 242	-21 982
Investment in patents	10	-1 009	-455	-1 009	-455
Purchase of property, plant and equipment	12	-881	-769	-881	-769
Sale of property, plant and equipment	12	0	79	0	107
Cash flow from investing activities		**-6 132**	**-23 127**	**-6 132**	**-23 099**
Financing activities					
New share issue		6 120	-	6 120	-
Share issue expenses		-100	-	-100	-
Borrowings		-	264	-	264
Repayment of debt		-111	-214	-39	-87
Changes in loans to group companies	14	-	-	-7 040	-3 671
Cash flow from financing activities		**5 909**	**50**	**-1 059**	**-3 494**
Cash flow for the year		-70 013	-48 540	-69 728	-48 070
Cash at the beginning of the year		115 712	164 252	113 877	161 947
Cash at the end of the year		**45 699**	**115 712**	**44 149**	**113 877**

NOTES

Note 1. Accounting policies

The annual report has been prepared in accordance with the Annual Accounts Act (1995: 1554) and BFNAR 2012: 1 Annual Report and Consolidated Accounts (K3). The principles are unchanged compared with the previous year. The company's reporting currency is Swedish kronor and amounts are reported in thousands of kronor (TSEK) unless otherwise stated. The Parent Company applies the same accounting principles as the Group, except in the cases listed below under the section "Parent Company's accounting principles".

Consolidated financial statements.

The consolidated financial statements have been prepared in accordance with the acquisition method. The acquisition method means that an acquisition of a subsidiary is regarded as a transaction whereby the parent company indirectly acquires the subsidiary's assets and liabilities. From the time of acquisition, the consolidated accounts include the acquired subsidiary's earnings, assets and liabilities as well as any goodwill (or negative goodwill) incurred.

Subsidiaries are companies in which the parent company directly or indirectly holds more than 50% of the voting rights or otherwise has a controlling influence. Controlling influence means a right to formulate a company's financial and operational strategies in order to obtain financial benefits.

Translation of subsidiaries and foreign operations with reporting in foreign currency

Subsidiaries in other countries prepare their annual accounts in foreign currency. Upon consolidation, the items in these companies' balance sheets and income statements are translated with the exchange rate at the balance sheet date, and the exchange rate at the day each business event took place, respectively. The exchange rate differences that arise are reported in accumulated exchange rate differences in the Group's equity. For foreign operations (branches), monetary items in foreign currency are translated at the exchange rate on the balance sheet date. Other non-monetary items are reported at the exchange rate on the day of the business event. Income and expenses are translated at an average exchange rate.

Revenue recognition

Income, and expenses, which are attributable to the financial year are included regardless of the time of payment. Revenue is reported when the company has transferred the significant risks and rewards associated with the ownership of the goods to the buyer, and:

- income can be calculated reliably,
- it is probable that the financial benefits to the company from the transaction will accrue to the company, and
- the expenses incurred or expected to arise as a result of the transaction can be calculated reliably.

Revenue is valued at the fair value of what has been received or will be received. Deductions are made for trade discounts, quantity discounts and other similar price deductions.

Income tax

Current tax is income tax for the current financial year that refers to the taxable profit for the year and the part of the previous financial year's income tax that has not yet been reported. Current tax is valued at the probable amount according to the tax rates and tax rules that apply on the balance sheet date.

Deferred tax is income tax for taxable profit for future financial years as a result of previous transactions or events.

Deferred tax is calculated on temporary differences. A temporary difference exists when the carrying amount of an asset or liability differs from the tax value. Temporary differences are not taken into account in differences attributable to investments in subsidiaries, branches, associated companies or joint ventures if the company can control the timing of reversal of the temporary differences and it is not obvious that the temporary difference will be reversed in the foreseeable future.

Differences arising from the first recognition of goodwill or in the first recognition of an asset or liability unless the attributable transaction is a business combination or affects tax or reported profit also do not constitute temporary differences.

Deferred tax assets represent a reduction in future income tax that relates to deductible temporary differences, tax loss carried forward and other unutilized tax deductions. Deferred tax liability is income tax that relates to taxable temporary differences and that is to be settled in the future.

Deferred tax assets relating to loss carried forward or other future tax deductions are reported to the extent that it is probable that the deductions can be offset against future tax surpluses.

Leasing

A leasing agreement is classified as either a financial leasing agreement or an operational leasing agreement. A financial leasing agreement is a leasing agreement according to which the financial risks and benefits associated with owning an asset are essentially transferred from the lessor to the lessee. An operational leasing agreement is a leasing agreement that is not a financial leasing agreement.

Leasing fees according to an operational leasing agreement, including the first increased rent but excluding expenses for services such as insurance and maintenance, are reported as an expense on a straight-line basis over the leasing period.

Rights and obligations under a financial leasing agreement are reported as assets and liabilities in the balance sheet. At the first reporting occasion, assets and liabilities are reported at the lower of the asset's fair value and the net investment.

Gross investment in a financial leasing agreement is the sum of the minimum lease fees that the lessor receives and any non-guaranteed residual value that accrues to the lessor. Minimum lease fees consist of the payments, excluding variable fees, service expenses and taxes, which must be paid by the company to the lessor during the leasing period with the addition of any guaranteed residual values. Net investment in a leasing agreement is the present value of the gross investment discounted to the implicit interest rate of the leasing agreement.

The minimum lease fees are distributed on interest and amortization of the debt according to the effective interest method, where interest is distributed over the leasing period by debiting each financial year with an amount corresponding to a fixed interest rate for the debt reported during each financial year. Variable fees are reported as an expense in the financial year in which the expenses arise.

Assets under a financial leasing agreement are depreciated over the estimated useful life as other assets of a similar nature. If it cannot be established with a reasonable degree of certainty that the ownership will be transferred to the company at the end of the leasing period, the asset is depreciated completely during the leasing period, or the useful life if it is shorter.

Compensation to employees

Pension obligations

The group has defined contribution pension plans that are financed through payments from the group companies to insurance companies. The Group has no further payment obligations once the fees have been paid. The fees are reported as an expense during the period when the employees performed the services to which the fee relates.

Short-term compensations

Short-term compensation in the group consists of salary, social security contributions, paid holiday, paid sick leave, medical care and bonus. Short-term compensation is reported as an expense and a liability when there is a legal or informal obligation to pay compensation.

Compensation in the event of termination

Severance pay is paid when any company within the group decides to terminate an employment before the normal time for termination of employment or when an employee accepts an offer of voluntary resignation in exchange for such compensation. If the compensation does not give the company any future financial benefit, a liability and an expense are recognized when the company has a legal or informal obligation to provide such compensation. The compensation is valued at the best estimate of the compensation that would be required to settle the obligation on the balance sheet date.

Tangible and intangible fixed assets

Tangible and intangible fixed assets are reported at acquisition value less depreciation and any write-downs.

Expenses for concessions, patents, licenses, trademarks, tenancies and similar rights and assets that are of significant value to the business in the coming years are reported as intangible fixed assets.

The acquisition value of acquired tangible and intangible fixed assets includes, in addition to the purchase price, expenses that are directly attributable to the acquisition such as customs fees, expenses for delivery and handling, installation and assembly expenses, expenses for testing the asset's functions and expenses for consulting services directly related to the acquisition.

The assets are depreciated over the estimated useful life and reflect the expected consumption of the fixed asset's future economic benefits. Depreciation takes place with a linear depreciation method that constitutes for:

Patents	5 years
Equipment, tools and installations	5 years
Capitalized expenditure for research and development	10 years
Goodwill related to daughter company Nordvacc Läkemedel AB	10 years

The reason for the longer amortization period for goodwill is that the acquisition of the subsidiary Nordvacc Läkemedel AB is considered a long-term investment, which will, among other things, be used as a basis for the group's in-house sales of in-house developed products, and positively affect the group's profitability for a long time. The group's first in-house developed product was launched in March 2022.

Procurement through internal reprocessing

The company applies the activation model, which means that the work of developing an internally generated intangible fixed asset is divided into a research phase and a development phase. All expenses arising from the company's research phase are reported as an expense when they arise

All expenses for the development of intangible assets are reported as an asset if all of the following conditions are met:

- It is technically possible to complete the intangible fixed asset so that it can be used or sold.
- The company's intention is to complete the intangible fixed asset and to use or sell it.
- There are conditions for using or selling the intangible fixed asset.
- It is likely that the intangible fixed asset will generate future economic benefits.
- There are necessary and adequate technical, financial and other resources to complete the development and to use or sell the intangible fixed asset.
- The expenses that are attributable to the intangible fixed asset during its development can be calculated reliably.

Expenses for an internally generated intangible fixed asset are only included in the acquisition value if the purpose of the acquisition is that that part through own development work shall form part of a new unique asset. When the company reports expenses for own development work as an asset, the corresponding amount is transferred from unrestricted equity to a fund for development expenses. After the first reporting opportunity, internally generated intangible fixed assets are reported at acquisition value after deductions for accumulated depreciation and any accumulated write-downs. Depreciation begins when the asset can be used.

Write-downs

If a fixed asset on the balance sheet date has a lower value than the value that follows from the value after depreciation made according to the estimated useful life, the asset is written down to this lower value if it can be assumed that the decline in value is permanent. Financial fixed assets can be written down to the lower

value that the asset has on the balance sheet date, even if it cannot be assumed that the decline in value is permanent. In addition to write-downs relating to goodwill, write-downs are reversed if there are no longer grounds for it.

The Group's reported assets are assessed at each balance sheet date to determine whether there is an indication of impairment.

Impairment of tangible and intangible fixed assets

If there is an indication of impairment, the asset's recoverable amount is calculated. If it is not possible to determine substantially independent cash flows for an individual asset, and its fair value less costs to sell cannot be used, the assets are grouped when testing for impairment to the lowest level where substantially independent cash flows can be identified - a so-called cash-generating unit.

An impairment loss is recognized when the carrying amount of an asset or cash-generating unit (group of units) exceeds its recoverable amount. An impairment loss is recognized as an expense in the income statement for the year. When impairment needs have been identified for a cash-generating unit (group of units), the impairment amount is primarily allocated to goodwill. Thereafter, a proportional write-down is made of other assets included in the unit (group of units).

The recoverable amount is the higher of fair value less costs to sell and value in use. When calculating the value in use, future cash flows are discounted with a discount factor that takes into account risk-free interest and the risk associated with the specific asset, together WACC (Weighted Average Cost of Capital).

Receivables and liabilities in foreign currency

Receivables and liabilities in currencies other than the reporting currency are translated into the reporting currency according to the exchange rate on the balance sheet date.

Financial instruments

Financial instruments are reported in accordance with the rules in K3 chapter 11, which means that valuation takes place based on acquisition value.

Financial instruments reported in the balance sheet include trade receivables, other receivables, trade payables and loan liabilities. The instruments are reported in the balance sheet when group companies become parties to the instrument's contractual terms. Financial assets are removed from the balance sheet when the right to receive cash flows from the instrument has expired or been transferred and the Group has transferred substantially all the risks and rewards associated with ownership. Financial liabilities are removed from the balance sheet when the obligations have been settled or otherwise terminated.

Accounts receivable and other receivables

Receivables are reported as current assets with the exception of items with a due date more than 12 months after the balance sheet date, which are classified as fixed assets. Receivables are taken up to the amount expected to be paid after deduction for individually assessed bad debts. Receivables that are interest-free or that carry interest that deviates from the market rate and have a term exceeding 12 months are reported at a discounted present value and the change in time value is reported as interest income in the income statement.

Loan debts and accounts payable

Loans are initially reported at acquisition value after deduction for transaction costs (amortized acquisition value). If the reported amount differs from the amount to be repaid at maturity, the difference is accrued as interest expense over the term of the loan using the instrument's effective interest rate. Hereby, at the due date, the reported amount and the amount to be repaid correspond. Short-term trade payables are reported at acquisition value.

Write-down of financial assets

At each reporting date, the company evaluates whether there is objective evidence that a financial asset or group of assets is in need of write down. Objective evidence consists partly of observable conditions that have occurred and that have a negative impact on the possibility of recovering the acquisition value, and partly of a significant or prolonged decrease in the fair value of an investment in a financial investment classified as a financial asset that can be sold.

Inventory

Inventories are valued at the lower of acquisition costs and net sales value, calculated on a first-in-first-out basis. The net sales value has been calculated at the sales value after deduction of the estimated sales cost, with which obsolescence has been taken into account.

Provisions

Provisions are reported when there is a legal or informal obligation as a result of a previous event, it is probable that an outflow of resources will be required to settle the obligation and the amounts can be estimated reliably. The timing or amount of the outflow may still be uncertain.

Short-term and long-term receivables and liabilities

Fixed assets and non-current liabilities essentially consist only of amounts that are expected to be recovered or paid after more than twelve months from the balance sheet date. Current assets and current liabilities essentially only consist of amounts that are expected to be recovered or paid within twelve months from the balance sheet date.

Cash flow statement

The cash flow statement is prepared according to the indirect method. The reported cash flow includes only transactions that entailed receipts or payments.

As liquid assets, the company classifies, in addition to cash, available balances with banks and other credit institutions as well as short-term liquid investments that are listed on a marketplace and have a shorter maturity than three months from the time of acquisition. Restricted funds are not classified as liquid funds. Changes in blocked funds are reported in investment activities.

Parent company accounting principles

The differences between the Group's and the Parent Company's accounting principles are set out below.

Group contribution

In the Parent Company, group contributions are reported in the income statement and affect net income for the year.

Shareholder contribution

In the giving company, the amount is reported as an increase in financial fixed assets (Shares in group companies), and in the receiving company, the addition is reported in unrestricted equity.

Equity

The presentation of the parent company differs from the consolidated accounts and equity is divided into restricted and unrestricted capital, in accordance with the Annual Accounts Act.

Note 2. Estimates and assessments

In order to prepare the annual report, the company management and the board must make assessments and assumptions that affect asset and liability items, and income and expense items reported in the financial statements. The estimates and assessments for accounting purposes dealt with in this section are those that are deemed to be the most important based on the significance of the assessments and the uncertainty. The conditions for Intervacc's operations are gradually changing, which means that these assessments can change.

Balanced development costs

The company's principle is to capitalize development costs. In each financial statement, an assessment is made as to whether the period's expenses meet requirements for capitalization in accordance with accounting regulations K3 and whether there is any need for write-downs regarding previously capitalized costs. Determining the ability to activate and the possible write-down of previously activated projects is a difficult assessment issue. The risks and assessment difficulties mainly relate to the assessment of the commercializability of an individual project. By discounting future estimated cash flows, the company has assessed that there is no need for a write-down.

Reporting of deferred tax assets

Assessments are made to determine both current and deferred tax liabilities and tax assets, not least with regard to the value of deferred tax assets. The company must then assess the probability that the deferred tax assets will be used to offset future taxable profits. The actual result may deviate from these assessments, among other things due to changes in the future business climate or changes in tax rules. By assessing the probability of utilization of loss deductions in the next 5 years, the company has assessed that there is no need for write-downs.

Additional Information

Note 3 Group internal purchases and sale	Parent company	
	2022	2021
Sales to group companies	53%	-
Purchases from group companies	5%	9%

Note 4 Remuneration to auditors	Group		Parent company	
PwC	2022	2021	2022	2021
The audit assignment	351	331	296	248
Audit beyond the audit assignment	-	-		-
Tax advice	-	-		-
Other services	-	11		11
	351	342	296	259
Moore Stephens (Riga) Ltd				
The audit assignment	-	7	-	-
	0	7	-	-
Total	351	349	296	259

Note 5 Average number of employees	Group		Patent company	
The average number of employees is based on attendance hours paid by the company related to normal working hours.	2022	2021	2022	2021
Average number of employees	15	13	10	8
of which women	7	3	4	2
of which men	8	10	6	6

Note 6 Salary, other remuneration and social security expe	Group		Patent company	
Salary and other remuneration regarding:	2022	2021	2022	2021
The Board of Directors, Managing Director	2 412	2 318	2 412	2 318
Other employees	11 091	9 136	7 656	6 103
Sum	13 503	11 454	10 068	8 421
Pension costs regarding:				
The Board of Directors, Managing Director	360	336	360	336
Other employees	1 562	1 526	1 186	1 169
Sum	1 922	1 862	1 546	1 505
Social expenses	3 696	3 158	2 806	2 290

Specification salary and pension to:	Group		Patent company	
Managing Director	2022	2021	2022	2021
Andreas Andersson, salary	1 507	1 518	1 507	1 518
Andreas Andersson, pension	360	336	360	336

		Group		Patent company	
The Board of Directors:		2022	2021	2022	2021
Björn Sjöstrand	directors remuneration	265	250	265	250
Bengt Guss	directors remuneration	115	100	115	100
Stefan Ståhl	directors remuneration	115	100	115	100
Marianne Hansson	directors remuneration	115	100	115	100
Ed Torr	directors remuneration	115	100	115	100
Niels Holck	directors remuneration	115	100	115	100
Michela De Carli	directors remuneration	65	-	65	-
Newton Aguiar	directors remuneration	-	50	-	50

Note 7 Tax on profit for the year

	Group		Parent company	
	2022	2021	2022	2021
Current tax	-	-	-	-
Deferred taxes	-3	-	-	-
Total	**-3**	**-**	**-**	**-**

	Group				Patent company			
Reconciliation of effective tax	2022		2021		2022		2021	
	%	Amount	%	Amount	%	Amount	%	Amount
Loss before taxes		-64 155		-29 375		-55 116		-23 111
Tax regarding:								
Applicable tax rate		13 217	20,6%	6 051		11 354	20,6%	4 761
Non-deductible depreciation and write-downs		-1 214	4%	-1 214		-	-	-
Other non-deductible costs		-15	0%	-37		-13	0%	-2
Other tax adjustments		99	0%	27		21	0%	1
Increase in loss carryforwards without corresponding capitalization of deferred tax		-12 090	16%	-4 827		-11 362	21%	-4 760
Reported effective tax		**-3**		**0**		**0**		**0**

Note 8 Number of shares and earnings per share

	Group	
	2022-12-31	2021-12-31
On the balance sheet date, the share capital consisted of the following number of shares	50 490 843	50 160 388
Dilution effect of vested options after recalculation	-	243 745
	50 490 843	50 404 133

Options have a dilution effect when they would lead to an issue of ordinary shares at a price lower than the average price of the share during the reporting period. During the financial year 2022, until the options were exercised, the average price for the share was SEK 43.12, which is to be compared with the exercise price of SEK 18.52, see Note 22.

Average number of shares during the year before dilution	50 295 324	50 160 388
Average number of shares during the year after dilution	50 406 868	50 404 133
Net loss for the year (TSEK)	**-64 158**	**-29 375**
Earnings per share before dilution (SEK)	-1,28	-0,54
Earnings per share after dilution (SEK)	-1,28	-0,54

Number of shares after dilution is calculated by adjusting the average number of shares to include all potential dilution of shares. The dilution is attributable to the options from the incentive program from 2019, see Note 22. As the result is negative, earnings per share are unchanged after dilution.

Note 9 Capitalized expenditure for research and development

	Group		Patent company	
	2022-12-31	2021-12-31	2022-12-31	2021-12-31
Acquisition value, opening balance	179 621	157 639	179 621	157 639
Acquisitions	4 242	21 982	4 242	21 982
Accumulated acquisition value, closing balance	183 863	179 621	183 863	179 621
Accumulated depreciation, opening balance	-8 362	-8 362	-8 362	-8 362
Depreciation	-14 556	-	-14 556	-
Accumulated depreciation, closing balance	-22 918	-8 362	-22 918	-8 362
Book value, closing balance	160 945	171 259	160 945	171 259

Note 10 Patents

	Group		Patent company	
	2022-12-31	2021-12-31	2022-12-31	2021-12-31
Acquisition value, opening balance	9 064	8 609	9 064	8 609
Acquisitions	1 009	455	1 009	455
Accumulated acquisition value, closing balance	10 073	9 064	10 073	9 064
Accumulated depreciation, opening balance	-1 000	-1 000	-1 000	-1 000
Depreciation	-	-	-	-
Accumulated depreciation, closing balance	-1 000	-1 000	-1 000	-1 000
Book value, closing balance	9 073	8 064	9 073	8 064

Not 11 Goodwill

	Group	
	2022-12-31	2021-12-31
Acquisition value, opening balance	58 931	58 931
Accumulated acquisition value, closing balance	58 931	58 931
Accumulated depreciation, opening balance	-47 145	-41 252
Depreciation	-5 893	-5 893
Accumulated depreciation, closing balance	-53 038	-47 145
Book value, closing balance	5 893	11 786

Note 12 Equipment, tools, fixtures and fittings

	Group		Patent company	
	2022-12-31	2021-12-31	2022-12-31	2021-12-31
Acquisition value, opening balance	1 224	1 216	769	469
Acquisitions	881	769	881	769
Sales and disposals	-41	-761		-469
Accumulated acquisition value, closing balance	2 064	1 224	1 650	769
Accumulated depreciation, opening balance	-363	-786	-104	-362
Sales and disposals	41	682		362
Depreciation	-408	-259	-318	-104
Accumulated depreciation, closing balance	-730	-363	-422	-104
Book value, closing balance	1 334	861	1 228	665

Note 13 Participation in group companies - Parent company	Patent company	
	2022-12-31	2021-12-31
Company		
Nord Vacc Läkemedel AB, based in Stockholm, registration number 556323-1090		
Equity	565	565
Net result	0	0
Ownership	100%	100%
Number of shares	470 800	470 800
Acquisition value	85 422	85 422
Opening balance write downs	-49 500	-49 500
Write down	-	-
Book value, closing balance	35 922	35 922

The Group includes the following wholly owned companies / entities as subsidiaries to Nord Vacc Läkemedel AB
Branch office in Denmark
Nord Vacc Latvia, registration number 40003858610
Mybac-Vettech AB, registration number 556336-6243

Note 14 Receivables from group companies	Patent company	
	2022-12-31	2021-12-31
Value beginning of period	1 519	1 632
Group contribution	-1 366	-3 784
Other payments to/ from group companies	7 040	3 671
Value end of period	7 193	1 519

Note 15 Deferred tax asset	Group		Patent company	
	2022-12-31	2021-12-31	2022-12-31	2021-12-31
Value beginning of period	11 390	11 390	9 677	9 677
Change in deferred tax, note 7	-3	-	-	-
Book value deferred tax asset	**11 387**	**11 390**	**9 677**	**9 677**
Tax losses	180 903	122 241	162 322	107 167
Temporary differences, finance leases	5	25	0	0
	180 908	122 266	162 322	107 167
	% Amount	% Amount	% Amount	% Amount
Book value deferred tax asset	6 **11 387**	9 **11 390**	5 **9 677**	9 **9 677**

Note 16 Prepaid expenses and accrued income	Group		Patent company	
	2022-12-31	2021-12-31	2022-12-31	2021-12-31
Insurances	62	58	50	48
Rent	338	315	-	-
Development costs	140	1096	140	1096
Other costs	244	114	226	81
	784	**1 583**	**416**	**1 225**

Note 17 Overdraft facility	Group		Patent company	
	2022-12-31	2021-12-31	2022-12-31	2021-12-31
Granted overdraft facility	4 200	4 200	-	-
Whereof unused	4 200	4 200	-	-

Note 18 Share capital, parent company	2022-12-31	2021-12-31
Number of shares, opening balance	50 160 388	50 160 388
Number of shares, share issues	330 455	-
Number of shares, closing balance	50 490 843	50 160 388
Quota value	2,00	2,00

Note 19 Liabilities to credit institutions	Group		Patent company	
	2022-12-31	2021-12-31	2022-12-31	2021-12-31
Current liabilities	139	211	39	39
Non-current liabilities, due within 2-5 years	183	222	183	222
	322	**433**	**222**	**261**

Note 20 Accrued expenses and deferred income	Group		Patent company	
	2022-12-31	2021-12-31	2022-12-31	2021-12-31
Personnel-related costs	3 354	2 978	2 403	1 956
Development costs	3 796	5 434	3 796	5 434
Deferred income, grants	-	460	-	460
Audit	270	275	200	200
Other costs	349	431	349	323
	7 769	**9 578**	**6 748**	**8 373**

Note 21 Adjustment for non-cash items	Group		Patent company	
	2022-12-31	2021-12-31	2022-12-31	2021-12-31
Depreciation	20 858	6 152	14 874	104
Change in deferred taxes	3	-	-	-
Translation difference	41	17	-	-
	20 902	**6 169**	**14 874**	**104**

Other notes

Note 22 Incentive program

The Annual General Meeting on June 11, 2019 decided to implement an incentive program 2019/2022 through a directed issue of a maximum of 380 455 warrants to senior executives and other key personnel in the Company or its subsidiaries. A total of 330 455 warrants were issued. The warrants were issued at a price corresponding to an estimated market value of the warrants using the Black & Scholes option valuation model. Each warrant entitles the holder to subscribe for one new share in the company for each warrant at a subscription price of SEK 18.52. Subscription can take place during the period 1 July – 30 December 2022. Exercise took place during July 2022 after which there are no outstanding warrants.

	Group		Patent company	
Incentive program 2019/2022	2022-12-31	2021-12-31	2022-12-31	2021-12-31
Number warrants in the program	-	380 455	-	380 455
Number of subscribed warrants	-	330 455	-	330 455
Each warrant gives the right to subscribe for 1 share				

Note 23 Corporate mortgages and other pledged assets	Group		Patent company	
	2022-12-31	2021-12-31	2022-12-31	2021-12-31
Corporate mortgages	17 575	17 575	2 000	2 000
Pledged shares in subsidiaries	6 458	12 351	35 922	35 922
	24 033	29 926	37 922	37 922

Note 24 Contingent liabilities	Patent company	
	2022-12-31	2021-12-31
Guarantee on behalf of subsidiary, Nord Vacc Läkemedel AB, registration number 556323-1090	General guarantee	General guarantee
Capital cover guarantee for subsidiary Nord Vacc Läkemedel AB, registration number 556323-1090	General	General

Note 25 Proposal for disposition of the company's results.

The Board of Directors and the President's proposal for disposition of the company's results.

Available to the Annual General Meeting, SEK	
Loss brought forward	-159 368 253
Share premium reserve	293 031 100
Loss for the year	-55 116 278
	78 546 569

The Board of Directors and the President propose that SEK 78 546 569 is carried over.

Other notes cont.

Note 26 Significant events after the financial year

The board adopts long-term financial goals regarding Strangvac®

In connection with the year-end report 2022 the board of directors decided to adopt the following long-term financial goals: Strangvac has the potential to reach annual global sales exceeding one billion SEK with a gross margin of approx. 65%.

Note 27 Definition of key figures

The average number of employees	Attendance hours paid by the company related to normal working hours.
Solidity	Adjusted equity / Total assets
Cash liquidity	Current assets excluding inventories in % of current liabilities
Earnings per share	Net result for the year divided by the average number of outstanding shares

Signatures

Stockholm April 5, 2023

Björn Sjöstrand	Andreas Andersson
Chairman of the board	CEO

Michela de Carli	Bengt Guss	Ed Torr

Marianne Hansson	Niels Holck	Stefan Ståhl