nanexa

Controlled release
for better healthcare

Annual report 2022

Contents

This is a translation of the original Swedish version of the annual report. In the event of any discrepancy, the Swedish wording shall prevail.

The year in brief

About Nanexa

Nanexa is a pharmaceutical company that develops long-acting injectable drugs based on PharmaShell® – a proprietary patented drug-delivery system for controlled release of various types of active pharmaceutical substances. Based on PharmaShell, Nanexa both develops its own drugs and collaborates with other pharmaceutical companies, including Novo Nordisk and AstraZeneca, to develop products with their active substances. Nanexa's long-acting products reduce the need for daily administration of drugs, which leads to better adherence and lower healthcare costs. In many cases, a controlled, even release of drugs can reduce unwanted side effects and potentially even lead to a greater efficacy.

Financial summary

- Net sales amounted to: TSEK 2,860 (2,374)
- Operating profit (EBIT) amounted to: TSEK -57,981 (-35,821)
- Profit/loss after tax amounted to: TSEK -58,571 (-35,999)
- Earnings per share amounted to: SEK -1.16 (-1.01)
- Cash flow for the year amounted to: TSEK -24,478 (92,969)
- Cash and cash equivalents at the end of the period: TSEK 81,182 (105,660)
- The Board of Directors proposes that no dividend be paid

Significant events in 2022

Q 1

- **Grant of patents in the USA:** ALD reactor adapted for large-scale production of PharmaShell®-coated drugs.
- **New study results for NEX-18:** Nanexa's preclinical investigation reveals a cause for the moderate skin reactions that occurred in the clinical study involving NEX-18 and at the same time provides a potential solution in order to avoid them. Using the results as a basis, Nanexa is expanding the preclinical programme to optimise the formulation of NEX-18. Clinical studies are expected to resume in 2023.

Q 2

- **Grant of patents for PharmaShell® in the EU:** The patent protection includes the method for manufacturing PharmaShell® and products manufactured using the method.
- **New premises and pilot plant:** Inauguration and occupancy of new premises with offices, an R&D lab and a pilot plant for production at Uppsala Business Park on June 9.

Q 3

- **New own product development project:** Work on Nanexa's third own project NEX-22 begins. A long-acting formulation of liraglutide for the treatment of type 2 diabetes will be developed in NEX-22.
- **Extended cooperation agreement with Applied Materials, Inc:** A supplementary agreement regulating commercial matters and paving the way for potential future licensing agreements with customers in the pharmaceutical industry.
- **GMP certificate from the Swedish Medical Products Agency:** An extended certificate from the Swedish Medical Products Agency for the manufacture of clinical trial materials at Nanexa's newly-built pilot plant in Uppsala.
- **New evaluation agreement:** An agreement with one of the largest pharmaceutical companies in the world for evaluation of a depot formulation for local administration. The agreement includes an option for a license.

Q 4

- **New exclusivity and evaluation agreement:** An agreement with Novo Nordisk regarding evaluation of a depot formulation within a specific substance class worth approximately 46.1 MSEK. In connection with the agreement, a directed share issue to Novo Nordisk was carried out with a value of 17.2 MSEK, which made Novo Nordisk the largest shareholder in Nanexa with 16.5 per cent of the company's shares and votes.
- **Clinical study initiated in own project NEX-20:** A phase 1 study with a long-acting formulation of lenalidomide for the treatment of multiple myeloma is begun according to plan. The study is conducted with healthy volunteers in order to study pharmacokinetic profile, safety and tolerability.
- **Patent settlement:** Nanexa AB and VitriVax, Inc. jointly announced that they have achieved a resolution to the patent infringement lawsuit filed by Nanexa AB against VitriVax, Inc. at the US District Court for the District of Delaware.
- **Two additional evaluation agreements:** An agreement with a pharmaceutical company for evaluation of a depot formulation of a specific substance for intravitreal administration (locally in the vitreous body of the eye). An additional evaluation agreement was signed with another major company which cannot be described in more detail for contractual reasons.

About Nanexa

Nanexa develops drugs that increase the efficacy of treatments and the quality of life for patients suffering from both severe and chronic diseases.

Nanexa exists to provide patients with effective drugs without the need for daily administration. Fewer administration sessions lead to better adherence to prescribed treatment, fewer side effects and savings in healthcare. PharmaShell® also enables Nanexa to help other pharmaceutical companies to develop new effective treatments. Nanexa's solution consists of injectable drug formulations that can be placed as a depot under the skin or locally, for example in a cancerous tumour. This depot continually releases active pharmaceutical substances for a long period without any need for patients to keep track of their medication themselves or to come to the clinic to receive treatment. It increases the efficacy of treatments, makes everyday life easier for the patient and frees up resources for carers.

Thanks to Nanexa's proprietary patented drug-delivery system PharmaShell, the company is able to tailor and control the rate of release of both biological and small-molecule pharmaceutical substances. PharmaShell is based on the Atomic Layer Deposition (ALD) coating technology whereby particles of active pharmaceutical substances are encapsulated with layers, a number of atomic layers thick, that control the rate of release.

Nanexa focuses on areas of disease with medical needs where the market is large and growing. The company is currently implementing projects in both oncology and type 2 diabetes. In oncology, Nanexa is working on the indications for myelodysplastic syndrome (MDS) and multiple myeloma, two forms of blood cancer.

Nanexa has had a GMP-classified pilot plant in place in Uppsala since 2022. That means that the company can now produce drugs for clinical studies and has enabled upscaling of the process to kilogram scale in the future. This will enable the company to handle major clinical development programmes and has also laid the foundations for the ability to scale manufacturing up to commercial scale in collaboration with Applied Materials.

In Nanexa's own projects, the company is basing its approach on existing proven pharmaceutical substances for which patent protection has expired. Nanexa thus minimises the biological risk, reduces the development time and makes the approval process easier. At the same time, Nanexa's technology is able to create new patent protections and thereby generate tremendous value, both in our own product projects and for products in partner-driven projects.

> Nanexa focuses on areas of disease with medical needs where the market is large and growing. The company is currently implementing projects in both oncology and diabetes.

Business model

Nanexa has a two-part business model whereby the company develops its own products and also enters into outlicensing agreements for PharmaShell®.

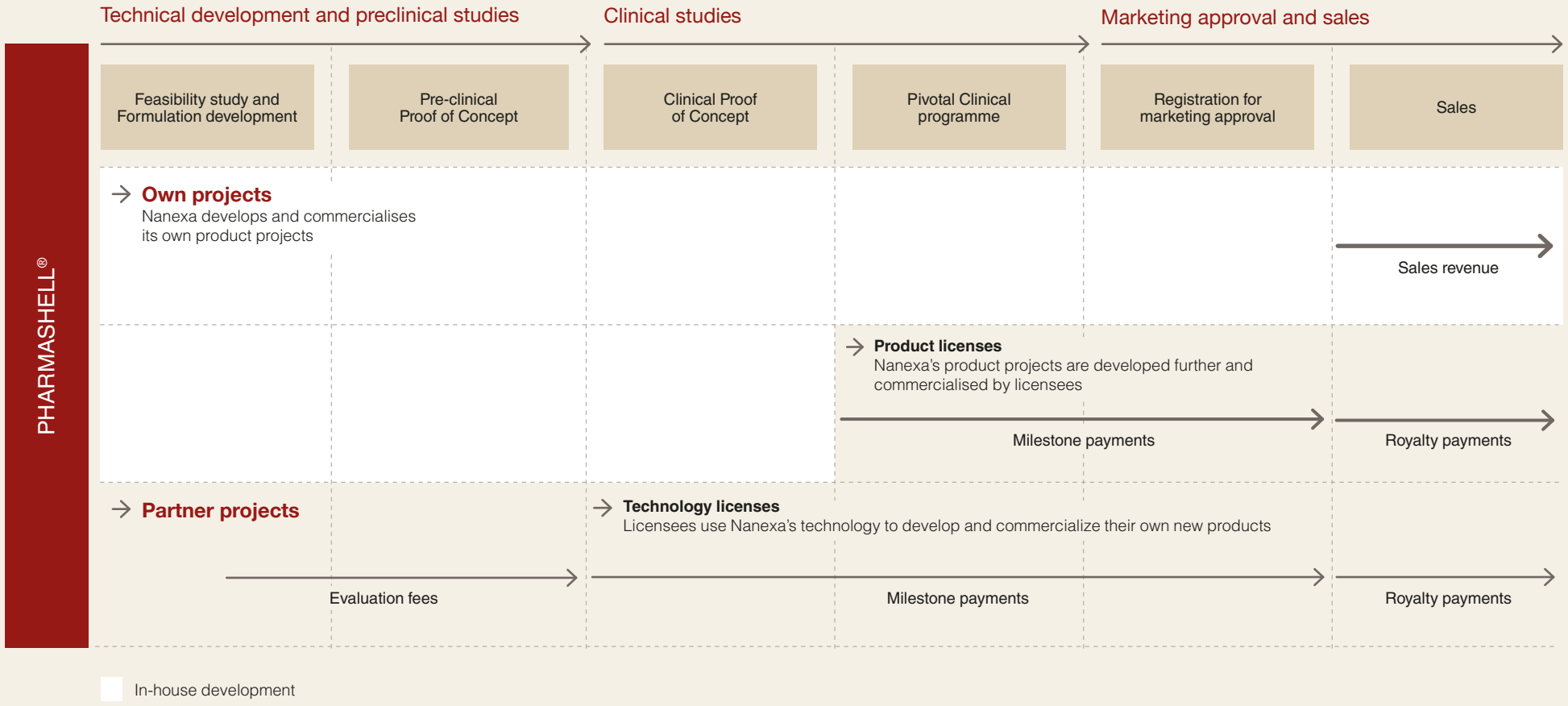
In the development of Nanexa's own projects, the company takes them through the preclinical and clinical phases, mainly up to *proof of concept* (phase II). The company then carries out an assessment of how commercialisation should take place – either in-house or in collaboration with a licensing partner. A decision is made on the basis of what is considered to create most value for the company.

A licensing agreement normally involves an initial payment, referred to as a *signing fee*, and *milestone*payments, when defined development goals are achieved. A *milestone*payment is also made at the time of the market approval of the drug, after which sales-based royalties are payable. Examples of desirable partners include global pharmaceutical companies with strong market positions in the relevant area. Another possibility is licensing agreements with one or more operators with a strong market presence in important regions.

At the same time, Nanexa is actively working to outlicense its technology to other pharmaceutical companies that wish to develop long-acting drugs. Nanexa currently has a number of evaluation agreements in place with the aim of creating a basis for further collaborations and outlicensing agreements.

The revenues from the company's product projects are expected to be significantly higher than the revenues from outlicensing agreements for PharmaShell. However, there can be a higher number of technology licenses, they are closer in time and they can provide a substantial contribution to total revenues from now on.

REVENUE MODEL



Goals

Nanexa's goal is to operate a portfolio of three to four of its own development projects in various development phases which, over time, can either be licensed to major pharmaceutical companies for implementation of a final clinical programme or developed up to commercialisation by Nanexa. The company's own portfolio is supplemented with a broader portfolio of external collaborations which, besides broadening the use of the PharmaShell® system, will contribute significant licensing revenues in both the short and the long term.

The PharmaShell system has potential within a large number of medical indications, where its properties enable the creation of products with unique benefits compared to existing technologies and products. The ongoing further development of the PharmaShell technology, expanded patent portfolio, development of Nanexa's ongoing projects in oncology and diabetes, the company's pilot plant and the development of Nanexa's collaboration projects form the basis of events to increase Nanexa's value in the coming years.

Nanexa's market position

As a pharmaceutical company with a proprietary drug-delivery system for local and controlled release of drugs, Nanexa is in a good position to capitalise on the existing strong market growth in oncology, diabetes and other treatment areas.

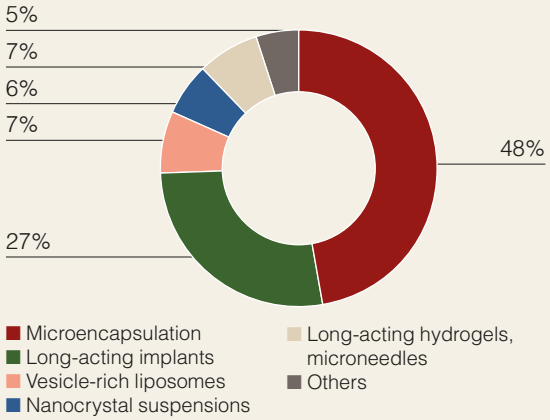
There are more companies in the pharmaceutical industry that base their operations on a range of different strategies and technologies for creation of long-acting drugs. These include microencapsulation, implants, vesicle-rich liposomes, nanocrystal suspensions and hydrogels. It is also a question of different administration methods such as injections, implants, topical, oral or vaginal administration, with injectable drugs being by far the largest segment.

Nanexa's PharmaShell® technology for injectable drugs addresses and avoids most of the competing systems' limitations, for example by making it possible to produce products with a high proportion of active pharmaceutical substance and control over the initial release. At the same time, it is a technology that can be applied to many different types of drugs such as drugs with both high and low solubility, small-molecule and biological drugs such as peptides and monoclonal antibodies.

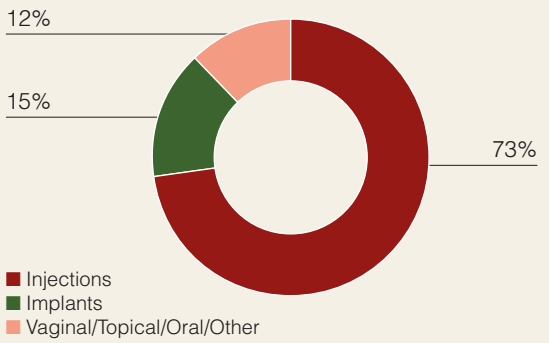
Nanexa's position means that the company is able to develop and commercialise pharmaceutical products by itself or through partnerships with major companies or else outlicense Nanexa's technology to other companies wishing to use it for their own drugs.

Long-acting drug-delivery technologies, estimated value of licensing in 2023

Breakdown by strategy/technology, 100% = 1,060 MUSD



Breakdown by administration method



Source: Roots Analysis: Long-Acting Drug Delivery Technologies and Services Market, 2023-2035 (2023). Available via: https://www.rootsanalysis.com/reports/long-acting-drug-delivery-market.html


USB
RS 232
anlg. output

The CEO's comments

2022 can be summarised by large steps forward in the company's development

2022 was a year in which we took large steps towards commercialisation of our PharmaShell system. We signed four new evaluation agreements and in particular one with Novo Nordisk which also included a 4 MUSD payment for a specific exclusivity during the evaluation period. We have also made important progress in our own development projects in which we have now taken NEX-20 (one-month depot of lenalidomide) into the clinical phase and have initiated a new project with tremendous potential in type 2 diabetes, NEX-22 (one-month depot of liraglutide). In the NEX-18 project, we have identified possible improvements to the formulation in order to eliminate effects on the skin and continue product development. An opportunity to demonstrate greater efficacy than the original product Vidaza was also identified in discussions with our Scientific Advisory Board. This is an opportunity based on our long release and we consider it to be worth evaluating. At the same time, we are noticing great and growing interest in our company and technology on the part of the major global pharmaceutical companies, particularly when it comes to formulation of biological substances, an area which currently presents major challenges. We regard the fact that Novo Nordisk also invested 17 MSEK in Nanexa during the year, thereby becoming the largest shareholder in the company, as confirmation of our single-minded approach.

The right priorities

I look back on the past year with pride. Our long-term work to build up documentation with preclinical data on small molecules, peptides and larger proteins is now bearing fruit since we are seeing significantly greater interest from potential partners with four new collaborations during the year. The fact that we have initiated clinical studies in both our blood cancer projects also makes a great difference in discussions with potential partners and means that we have taken an important step towards in-depth collaboration and potential licensing agreements in the future.

Greater confidence

In order for a company in Nanexa's position to succeed, potential partners and licensees need to have confidence in both the company management and our technology, PharmaShell. We have a highly experienced management team with many years in the global pharmaceutical industry and with extensive experience of taking pharmaceutical projects from idea to market. We are now also in a position where we have strong preclinical data in several areas and a pilot plant that was certified by the Swedish Medical Products Agency in 2022 and which makes it possible for us to produce clinical trial materials within the company and to scale up our manufacturing process. As proof of this, we can now charge significantly more for our evaluation projects. Overall, we are in a good position to continue our journey towards commercialising our technology and our projects.

Patent dispute

One event worth mentioning during the year is the fact that we have reached a settlement in the patent dispute that we were involved in. in 2021, we filed an application for a summons regarding a patent infringement against the company VitriVax in the US. We are very pleased with both the outcome and the fact that we have managed to conclude the lawsuit, which has taken both time and resources.

> Our long-term efforts to build up documentation on preclinical data on small molecules, peptides and larger proteins are now bearing fruit.

New opportunities

We are constantly seeing new opportunities for us and our technology in a range of different contexts. The collaboration agreements we signed in 2022 relate, among other things, to delayed delivery of monoclonal antibodies, intratumoral delivery and intravitreal administration (locally in the vitreous in the eye). The fact that we are now working on small molecules, biological substances and injections into different types of tissue for different types of indications shows the extent of what we are able to do. We are planning ahead for new projects of our own in which decisions are made based on where we can achieve the greatest clinical benefit, market size and how well our technology suits the purpose. At the same time, we have been active in visiting partner conferences and scientific congresses to provide information about ourselves, our technology and our studies in 2022. There is significant interest, which creates a good basis for possible collaborations.

The way forward

I look forward to the future with confidence. At the end of 2022, we are in a strong financial situation with a new major shareholder in Novo Nordisk. We have really matured as a company and much of our focus is now on developing our collaborations and our own projects in order to take them to the point where licensing agreements or more extensive development agreements become possible. We have signed an exclusivity agreement with Novo Nordisk in the substance area to which the project relates. We will continue our work in business development and look forward to the opportunity to sign partner agreements that are important for us in the future.

David Westberg,
CEO Nanexa

> We have really matured as a company and much of our focus is now on developing our collaborations and our own projects in order to take them to the point where licensing agreements or more extensive development agreements become possible.

Depot drugs – the big picture

An increasing need for care requires new solutions

The world's population is facing a constantly rising average age. According to one forecast, the number of people over the age of 60 will rise to just over 1.4 billion by 2030 and to over 2 billion by 2050.[1] We also see the same trend in Sweden. In 2020, almost 20 per cent of the population was over the age of 64 and by 2070 that proportion is expected to have risen by 25 per cent.[2] That development will mean greater pressure on an already strained healthcare system because the system must serve more people and also because many people will live longer and suffer a range of age-related, chronic diseases such as cardiovascular disease, diabetes and cancer.

Reduced burden on healthcare

An important part of the solution may consist of treatments that reduce the need for hospital care. For example, many cancer treatments currently require frequent visits to hospital and thus extensive care resources. Depot drugs would enable the number of physical care contacts to be reduced. For example, it would lead to major savings in healthcare if patients only needed to visit hospital for an injection once a month instead of every day.

Greater quality of life and greater treatment efficacy

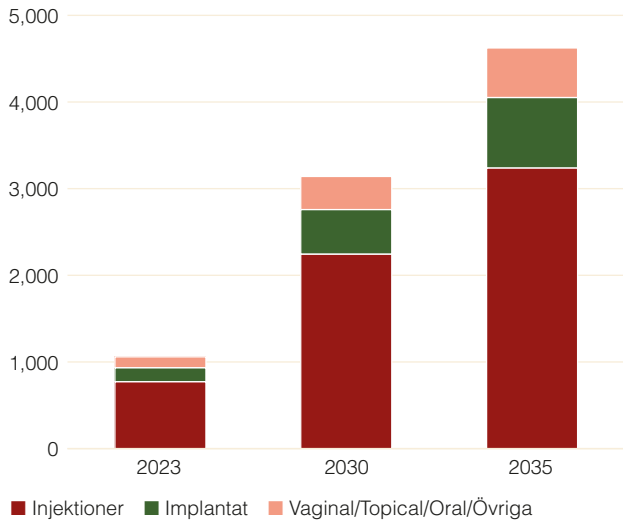
Depot drugs can also provide patients with great benefits, with greater convenience as well as fewer side effects and more effective treatment. Depot drugs also make it possible to increase adherence, in other words the extent to which patients actually take their medicine as prescribed. For example, when a drug has to be taken every day, the patient may forget to take the drug, particularly in treatments for chronic illnesses with mild symptoms such as type 2 diabetes and obesity. For drugs that cause troublesome side effects, it is also the case that patients avoid taking the drug as prescribed and there may also be other reasons why patients fail to follow their treatment. Regardless of the cause, poor adherence means that the drug will not have the intended efficacy in the long term.

A long-acting product can lead to a smooth, continuous release that can reduce concentration peaks and at the same time provide a longer exposure to the active substance in the drug, which has the potential to reduce side effects and improve the efficacy of the treatment, while making everyday life easier for patients.

A growing market

The independent research firm Roots Analysis has recently published a report in which they have evaluated various aspects of technologies for long-acting depot drugs.[3] The report estimates the value of licensing agreements (upfront and milestone payments) in the global market for this type of

License payments for long-acting drug-delivery technologies, MUSD[3]



[1] HelpAge International: Global AgeWatch Index 2013 Insight report (2013). Available via: https://www.helpage.org/global-agewatch/reports/global-agewatch-index-2013-insight-report-summary-and-methodology/

[2] Statistics Sweden (SCB): Population forecast for Sweden (2022): Available via: https://www.scb.se/hitta-statistik/sverige-i-siffror/manniskorna-i-sverige/befolkningsprognos-for-sverige/

[3] Roots Analysis: Long-Acting Drug Delivery Technologies and Services Market, 2023-2035 (2023). Available via: https://www.rootsanalysis.com/reports/long-acting-drug-delivery-market.html

[4] Marketwatch March 2023, https://www.marketwatch.com/press-release/from-2023-to-2028-report-on-the-long-acting-injectables-market-2023-03-18

technology at just over 1 billion dollars in 2023, expecting it to rise to approximately 4.6 billion dollars by 2035 – an average annual growth rate of 13.1 per cent. As well as the value of the agreement, there is also the value of sales-based royalties, which is also significant since global sales of long-acting injectable drugs are expected to grow from 14.9 billion dollars in 2022 to 24.4 billion dollars by 2028.[4] In Roots Analysis' evaluation, PharmaShell® comes out well because the technology enables the release of both small-molecule and biological substances with long dosage intervals (months). PharmaShell is also surrounded by a high level of technological maturity and the Nanexa company has many years' experience in the field.

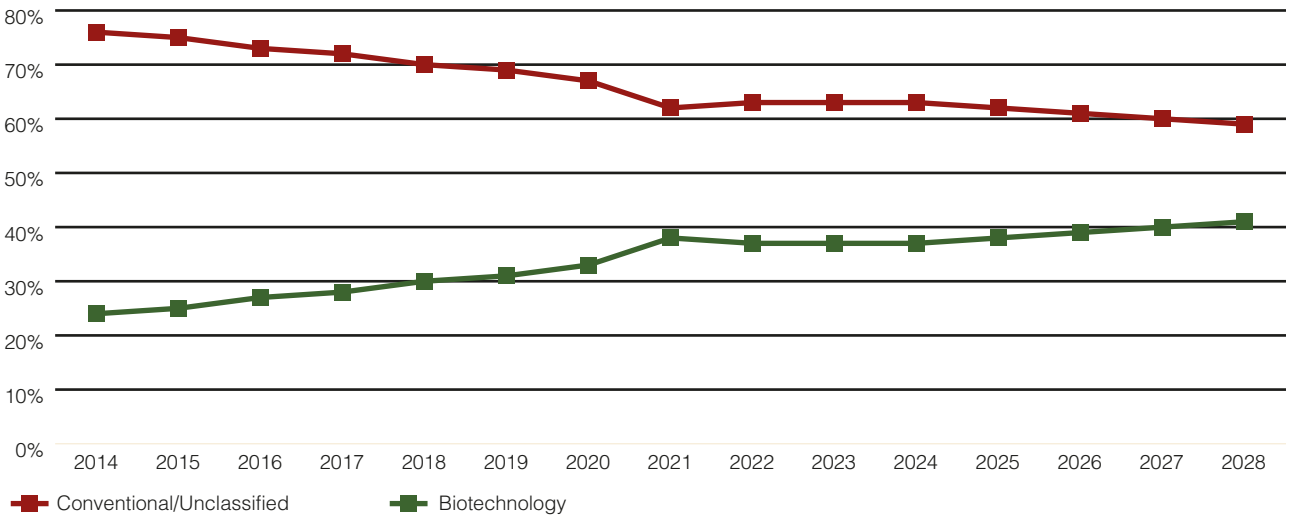
Global developments in the pharmaceutical field

So-called biological drugs are a segment that is experiencing particularly rapid growth and that continues to take market share from conventional drugs based on synthesised small molecules. It is estimated that biological drugs will account for 41 per cent of the market value by 2028. Glucagon-like peptide-1 receptor agonists (GLP-1 RA) are a class of biological pharmaceutical substances used in the treatment of both type 2 diabetes and overweight/obesity. One of the GLP-1 RA substances currently on the market is called liraglutide, which is the substance that Nanexa chose to develop a long-acting depot drug from in the company's NEX-22 project in 2022. The market for GLP-1 RA-based drugs in the seven major Western markets (the US, France, Germany, Italy, Spain, the UK, Japan) is expected to reach 28 billion dollars by 2029.[5]

Nanexa is continually evaluating both biological and small-molecule substances for new product candidates. The strong growth in biological drugs is attractive, with many potential injectable products that could be a good fit for PharmaShell technology and where its unique properties could mean major advantages compared to other drug-delivery technologies.

[5] *Global Data, Type 2 diabetes Global Forecast 2019-2029, Nov 2020. Available via: https://pharma3.globaldata.com/HomePage*
[6] *Evaluate Pharma: World Preview 2022 Outlook to 2028: Patents and Pricing (2022): Available via: https://www.evaluate.com/thought-leadership/pharma/world-preview-2022-report*

Technology – share of sales of prescription and over-the-counter drugs[6]



Depot drugs can deliver smarter treatments

PATIENTS

- Depot drugs make it easier for the patient. Instead of needing to monitor daily medication or visiting the clinic to get treatment, depot drugs are released over a long period.
- PharmaShell can deliver a more even, continuous dose, which can reduce certain side-effects associated with other modes of administration.

HEALTHCARE

- Depot drugs produce greater adherence in the treatment as there is no need for the patient to monitor tablets or injections.
- Greater adherence in turn leads to greater efficacy for the treatment.

PAYERS

- Fewer patient visits to clinics and hospitals save money for society.
- Greater adherence produces more cost-effective treatment.

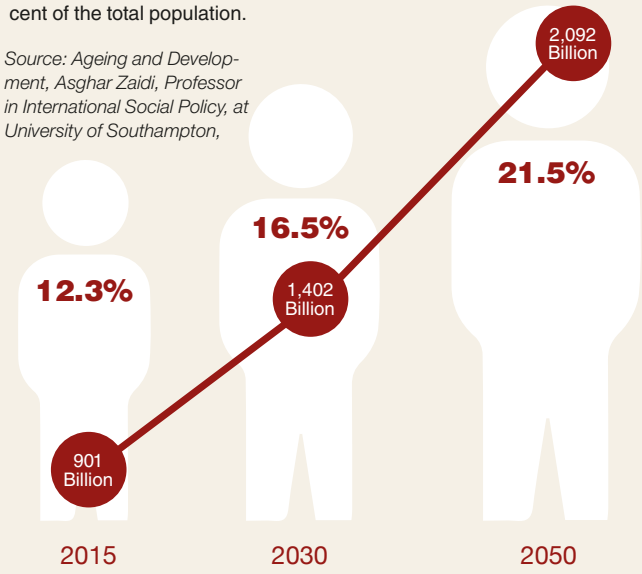
SUSTAINABILITY

- Depot drugs provide greater control over pharmaceutical substances and reduce the risk of them being handled incorrectly.
- Patients avoid handling the drug, which reduces the risk, for example, of it being flushed down the toilet or thrown into the rubbish.

An increasingly ageing population

According to a report from the UN on global demographic trends, just under 1.4 billion people, or 16.5 per cent of the world's population, will be over 60 by 2030. By 2050 the figure rises to just over 2 billion or 21.5 per cent of the total population.

Source: Ageing and Development, Asghar Zaidi, Professor in International Social Policy, at University of Southampton,



Advantages of PharmaShell® for global pharmaceutical companies

Can increase revenue streams

- Through long-acting and injectable products that provide significant opportunities to improve treatments in many indication areas
- Provides an opportunity for product differentiation

Can improve existing products – better product life-cycle

- Through development of long-acting and injectable product variants
- Through expansion of the product portfolio and by supplementing existing formulations

Can extend patent protection

- Patent protection on existing products can be extended through new forms of preparation

May make it possible to produce long-acting and injectable products from new substances

- Completely new products can be developed through formulation of new substances using PharmaShell®

PharmaShell®

Nanexa's PharmaShell® drug-delivery technology

PharmaShell® is a technology platform for drug delivery that makes possible the development and production of a completely new generation of long-acting injectable drugs. With PharmaShell, Nanexa coats particles of an active pharmaceutical substance (API) with an extremely thin, dense coating of an inorganic material, like the shell of an egg. When these coated particles are injected as a depot into the body, the release of API is controlled by dissolution of the coating material. The coating process takes place using Atomic Layer Deposition (ALD) technology, which allows the thickness and composition of the coating material to be adjusted. In this way, it is possible to control the dissolution time of the coating and thus the release of API from the depot into the body.

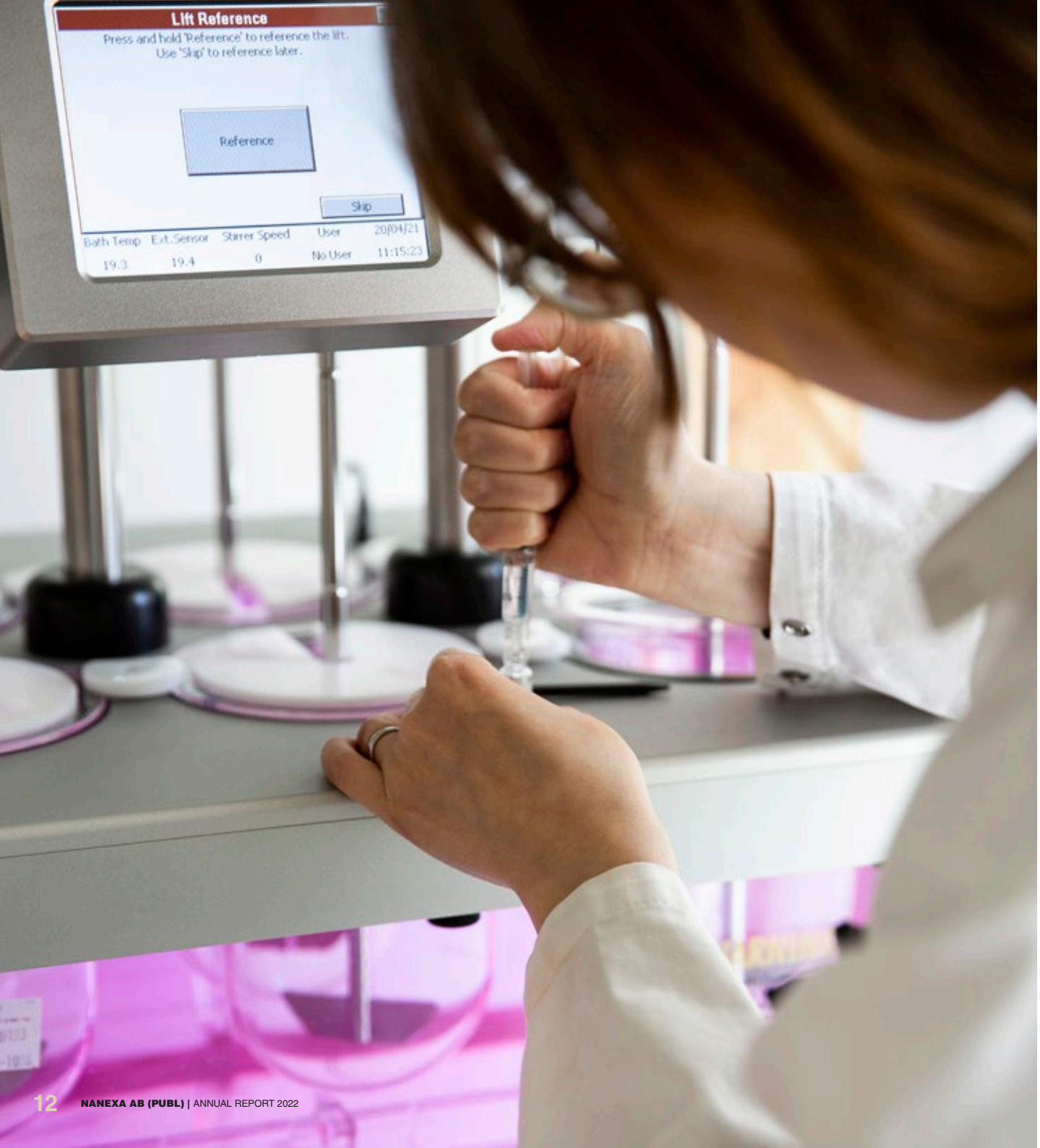
The goal in drug treatment is to achieve a sufficiently high plasma concentration of API to produce efficacy and simultaneously avoid the concentration becoming too high, thus risking contributing to side effects. One challenge in the development of depot drugs is that the initial release, also referred to as the initial burst, often becomes too high, which can create toxic plasma concentrations of API in the blood, leading to unwanted side effects. PharmaShell creates the unique ability to also control the initial release, which is a great advantage compared to other technologies and solutions for long-acting release of API.

PharmaShell is a versatile technology platform. Through extensive preclinical studies, Nanexa has shown that PharmaShell can be used for all possible pharmaceutical substances – from small-molecule to biological substances such as antibodies and peptides. Nanexa has also shown that the company can create drug depots that last from one week up to several months. The versatility of PharmaShell is something that Nanexa does not see in competing technologies and solutions.

The advantage of long-acting drugs compared to treatments that require daily administration, for example, is that there is no risk that patients will miss taking their medication. It is common for patients not to follow their prescribed drug treatment, which can in turn lead to poorer treatment efficacy or no treatment efficacy. With long-acting injectable drugs, this type of problem can be avoided, which produces benefits for patients, healthcare and society in general.

BENEFITS OF PHARMASHELL®

- Possibility of controlling the depot length in order to optimise treatment. Everything from one week to one month or several months
- Possible to control the initial release after administration in the body, which is a common problem for most competing depot preparation platforms
  - Makes depot formulation of high potency substances possible
  - Enables dose increase in depot preparations
- Very high drug load (up to 80%)
  - Minimises injection volumes
  - Enables depot preparation of less potent drugs
  - Enables longer depot preparations
- Flexible, can be used for many different drugs
  - Small molecules
  - Biological substances such as peptides and proteins
  - Substances with high and low solubility
- Prevents breakdown of the drug after injection into the body
  - The PharmaShell coating protects the substances from being broken down while they are in depots
- Numerous applications
  - Subcutaneous or intramuscular administration for systemic exposure
  - Local administration in the case of tumours or other tissue for local effect



Patents

Nanexa's patent portfolio consists of approved patents and patent applications. The basic patent relates to the technology that enables the coating of drug particles with a metal oxide shell using ALD. The basic patent covers the manufacturing method, the products that come out of it and the use of PharmaShell®-formulated drugs. Nanexa has also filed a number of additional patent applications.

The basic patent, first restricted to injectable preparations, was approved in the US in January 2019. Since then, it has also been approved in Canada, China, Japan and South Korea. A so-called "Decision to Grant" has been issued in the EU (by the European Patent Office, EPO) and the patent is at the application stage in India. A divisional patent application, for administration in all possible ways, for example through injection, inhalation and oral preparations, has been submitted in parallel and this application was approved in the US in November 2019 and in Japan in November 2020. This new patent entails a considerable widening of the patent protection in relation to the basic patent, which creates better opportunities for future commercial agreements with current and future partners.

In September 2020, Nanexa received approval for a patent application in the UK relating to an ALD reactor adapted for commercial production of PharmaShell-coated drugs. The same patent application has also been submitted as an international so-called PCT application, and a separate application has been submitted in the US, where it has now also been approved.

In addition to this, the company has ongoing patent applications relating to improvements to the PharmaShell process, drug formulations and also processing equipment for PharmaShell. These applications are at an early stage in the patenting process.

Nanexa's assessment is that the company is at the forefront of ALD technology in drug development and it is important for Nanexa to work actively on intellectual property issues. New questions are constantly emerging in the development process and company's patent team works closely with the company's patent representative in order to protect the patent portfolio and new inventions.

Interview Anders Johansson

Co-founder of Nanexa and Head of Intellectual Property

Our patent portfolio is constantly growing

How would you describe your patent strategy?

The most important thing in order to be able to file relevant patent applications that generate value and provide strong protection is to conduct intensive research and development. We are world leaders in what we do and that also means that we are the first to face new challenges. It may seem like hard work, but I see it as an enormous advantage. If you are the first to identify a problem, you also have the chance to be the first to find a solution.

We have a strong R&D team that is willing to take on all kinds of challenges. I am constantly involved in discussions and, besides being part of the actual problem-solving itself, my role is to pick up patent ideas in these discussions. Could this solution to a problem be patentable? What materials do we need to enable us to write a good patent application and what deadlines do we have to keep to? For effective patent work, these are important issues to bear in mind at all times.

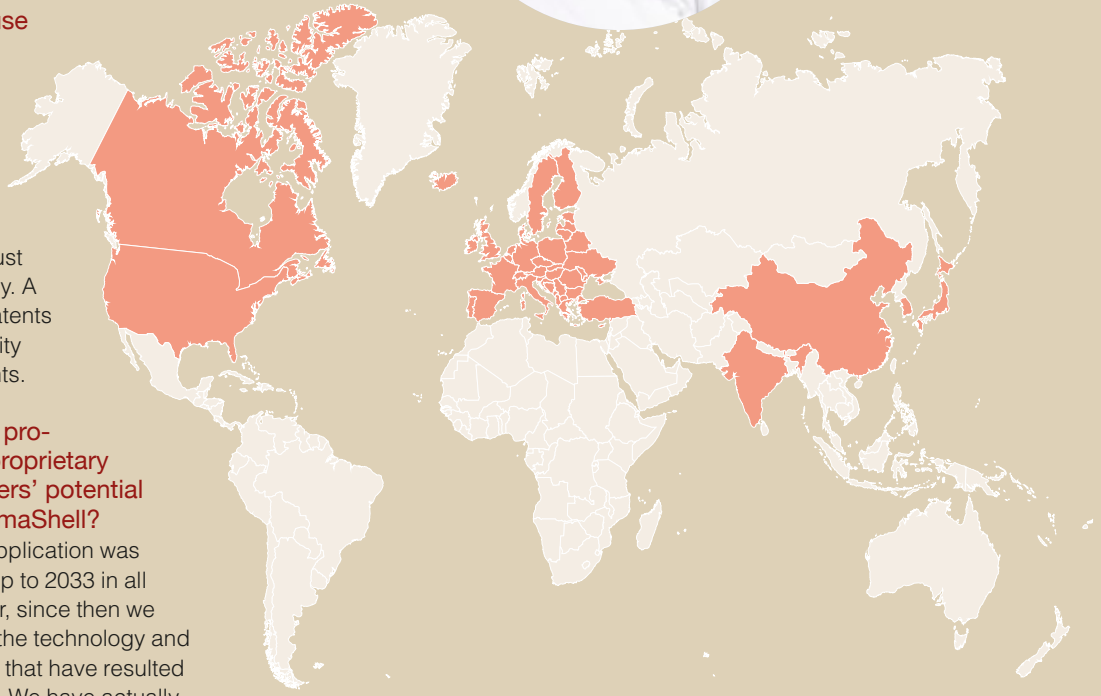
Nanexa's patent portfolio is constantly growing and we currently have 13 patent families with approved patents in two of them – our basic patent and our patent regarding an ALD reactor for scaling up the process. We submit our applications in all the countries that are important to us in business terms and we focus on products, processes and usage.

How do you use patents to generate licensing agreements?

A partner that uses PharmaShell® for its products has to know that the patent portfolio is strong enough to keep competitors away from the market in question. That's something we can demonstrate with our strong, extensive patent portfolio. We can also offer licenses in divisional patents that apply specifically to a partner's drug.

How can your partners use your technology to produce exclusivity in markets?

We strongly believe that if you are going to use ALD to achieve delayed release of parenterally administered drugs, you must use our patented technology. A partner who licenses our patents is therefore offered exclusivity during the term of the patents.



How far does the patent protection extend for your proprietary products and your partners' potential products based on PharmaShell?

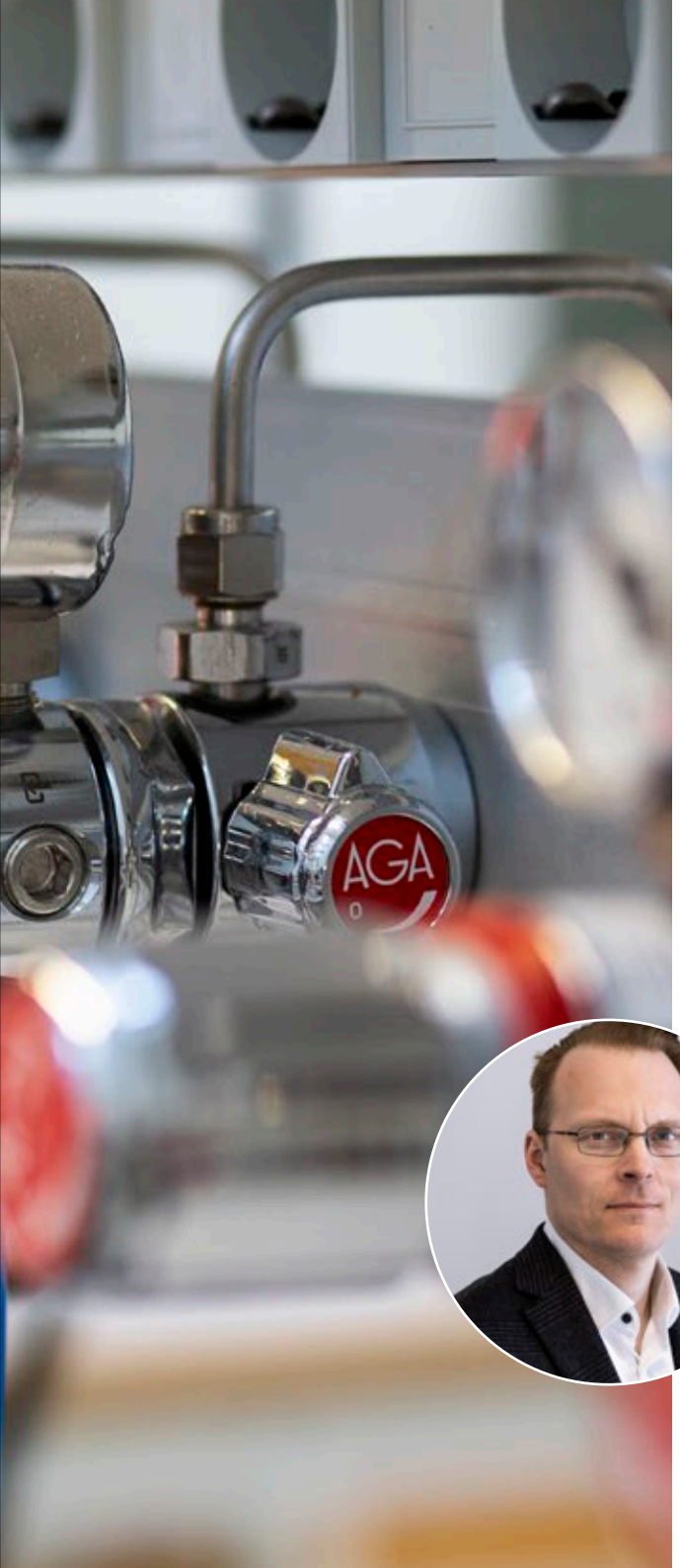
Our first approved patent application was filed in 2013 and it is valid up to 2033 in all important markets. However, since then we have continued to develop the technology and have faced new challenges that have resulted in more patent applications. We have actually filed twelve new patent applications in the past four years and the patents granted on these will be valid for 20 years after the date on which they were filed. Our two most recent applications were filed before Christmas 2022 and will therefore be valid up to 2042 if they are approved.

ALD – THE COATING TECHNOLOGY BEHIND THE PHARMASHELL® DRUG-DELIVERY SYSTEM

PharmaShell® is based on Atomic Layer Deposition (ALD), a well-established technology that has been used on a large, automated scale in the electronics industry for decades. The technology is now being used by Nanexa to manufacture the PharmaShell coating.

The ALD technology builds up a very thin surface coating, atomic layer by atomic layer, through use of reactive gases. The ALD technology makes it possible to tailor the structure of the coating (PharmaShell) which encloses the drug, both in terms of the thickness and content, which makes it possible to control the unique properties that PharmaShell has.

Nanexa's application of the ALD process takes place at low temperatures, down to room temperature, which is important to avoid damaging and inactivating the pharmaceutical substance that is enclosed. A further benefit of the ALD process is that no solvents or other additives, which then have to be removed at later stages of the process, are needed. The technology is thus very simple in essence and suitable for large-scale production.



Production and plant

A unique pilot plant means flexibility and new opportunities

In 2022, Nanexa completed its new pilot plant in Uppsala for the development and manufacture of pharmaceuticals formulated using the company's technology. The facility is the only one of its kind in the world since it was built to meet the existing strict requirements for handling cytostatics and other highly toxic drugs, while being adapted to handle so-called aseptic manufacturing, which is critical for the ability to manufacture depot drugs from biological substances such as monoclonal antibodies which are sensitive to other sterilisation processes. During the year, the new facility was also approved by the Swedish Medical Products Agency within the framework of an updated GMP certification and was quickly started up for the manufacture of clinical trial materials prior to the start of the clinical phase I study involving NEX-20 at the end of the year.

Having its own manufacturing with a permit from the Swedish Medical Products Agency means that Nanexa itself has full control over the manufacture of trial materials for clinical trials in its projects, in which the company now has the ability to go from an idea to a clinical trial itself.

> The new plant has attracted a great deal of interest and gives us an opportunity to take on projects from partners with all possible kinds of substances

Mårten Roth, co-founder of Nanexa, CTO and Head of RnD Atomic Layer Deposition

The new pilot plant and the collaboration with Applied Materials for scaling up production equipment mean that Nanexa is well equipped to take drug projects through all clinical development phases, including phase III studies, and establish a basis for large-scale commercial production. It is also important to be able to show these abilities to Nanexa's partners in the pharmaceutical industry prior to in-depth development collaborations and technology licensing agreements.

THE COLLABORATION WITH APPLIED MATERIALS

In 2020, Nanexa entered into a cooperation agreement with Applied Materials Inc., – an American company that is a world leader in materials technology solutions that are used to produce practically all new chips and advanced screens throughout the world. The cooperation agreement primarily relates to development of equipment and processes for large-scale production of pharmaceuticals based on ALD and the PharmaShell® technology. The collaboration has become closer since then and in 2022 a supplementary agreement was also entered into to regulate commercial matters and pave the way for potential future licensing agreements with customers in the pharmaceutical industry. It regulates matters such as mutual cost and revenue sharing as well as Nanexa's exclusivity for outlicensing in the parenteral area (injectable drugs).

Parallel to the cooperation agreement, Applied Ventures, the venture capital arm of Applied Materials, invested approximately 2.1 million dollars in Nanexa through a directed issue and a subsequent preferential rights issue of shares in 2021. Applied Ventures currently owns 3.8% of the number of shares and votes in Nanexa.

Pipeline

Nanexa develops the drugs of the future

Nanexa's two-part business model enables the company to generate value in various ways using its technology platform. On the one hand, Nanexa implements its own product projects through clinical development – primarily up to phase II (proof of concept) – after which the company makes a decision as to whether Nanexa will carry out the commercialisation itself or along with a suitable licence partner. Nanexa implements partner projects with various major pharmaceutical companies and develops depot formulations of their drugs with the aim of outlicensing the PharmaShell technology®. Nanexa currently has its own project portfolio with three of its own projects and a number of partner projects in the active evaluation phase.

Own product projects

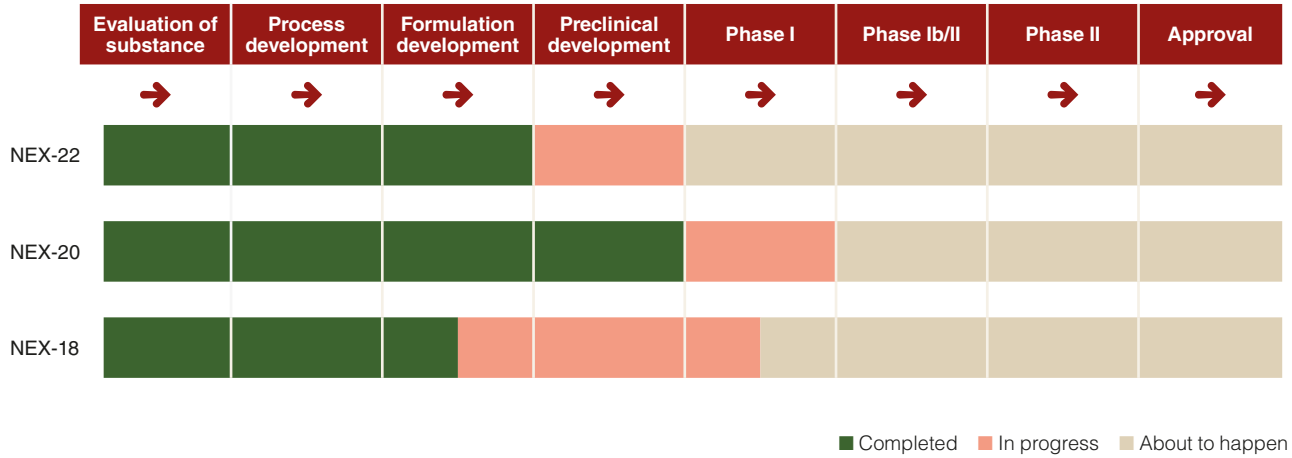
Nanexa focuses primarily on developing improved versions of existing drugs to achieve new and significantly improved properties that generate value for patients, healthcare and society in general. Thanks to PharmaShell, Nanexa is able to develop products with significant patent protection and high market value. Starting from well-tested pharmaceutical substances means that the biological risk is reduced and the development projects are less costly than for projects with new untested substances. It also makes the registration process easier and shortens the time to market.

Nanexa has evaluated a large number of project candidates on the basis of medical need, market potential and technical conditions. The selection process is long and extensive and many different parameters are factored in with technical evaluations of substances and interviews with leading experts in specific fields.

Nanexa is currently developing improved long-acting versions of two existing drugs for the treatment of different types of blood cancer as well as an existing drug for type 2 diabetes:

- In the NEX-22 project that Nanexa initiated in 2022, the company is developing a long-acting formulation of liraglutide for the treatment of type 2 diabetes. Liraglutide is a substance in the Glucagon-like peptide 1 receptor agonists (GLP-1 RA) class which is currently the fastest growing class of drugs in type 2 diabetes and overweight/obesity and which can open up large markets for us. Nanexa's plan is to make a depot that will cover a month's need for the drug, compared to daily injections at present, which would provide great patient benefit and improve adherence to treatment, which is currently extremely low despite the high risk of serious sequelae.
- In the NEX-20 project, Nanexa is developing a long-acting formulation of lenalidomide for the treatment of multiple myeloma, a severe form of blood cancer. Here, adherence to prescribed treatment is poor, which makes the efficacy of the treatment suboptimal or non-existent. Here, too, Nanexa's goal is to develop an injectable product that is given once a month instead of the daily capsules given in current treatments.

PIPELINE FOR PRODUCT PROJECTS



➔ In the NEX-18 project, Nanexa's goal is to develop a product containing the substance azacitidine that can be given to patients with myelodysplastic syndrome (MDS) as a monthly injection. The currently available treatment options mean that patients need to get to the clinic for daily injections for a whole week each month. This poses challenges for these, often very frail, patients and places a significant burden on the healthcare system.

Advantages of own product projects

Nanexa sees tremendous advantages in implementing its own product projects since the company has full control over the rate of development and is able to generate greater value for Nanexa compared to the partner projects carried on by the company. Nanexa is also seeing that the results generated in its own projects validate the company's technology and lead to greater interest on the part of the major pharmaceutical companies in testing PharmaShell for their own projects.

Interview Otto Skolling

We learn a lot from our collaborations

Otto Skolling, Director Business Development

What have the decisive factors been in the work to conclude the cooperation agreements you have entered into?

There are a number of different factors at work. The fact that we develop our own projects and take them into the clinical phase has been extremely important. We then receive confirmation that our requisite documentation for conducting clinical studies is of high quality when it is reviewed by the Swedish Medical Products Agency. In this way, we lower the risk level for pharmaceutical companies to try out a new technology. We have also established a pilot plant for the production of GMP materials that facilitates discussions with our partners since they see that we are also able to produce PharmaShell on a larger scale and for clinical trials. The technology itself also has a number of characteristics that distinguish us from many other companies in the same industry and that gives us tremendous competitive advantages.

What does it mean for you to collaborate with major global companies such as Novo Nordisk and AstraZeneca?

It is incredibly instructive to collaborate with the large global companies as they have a completely different resource mass that they can use to solve the challenges that are always faced during product development. Since they have detailed knowledge of the indications in which they work, there is a greater understanding of how the biology of different diseases works and which models are best suited in order to study those states.

How is potential patient benefit factored into the choice of indications in your partner-driven projects?

Since we work exclusively with injectable depot preparations, patient benefit is one of the most important parameters for our partners. Reducing the number of injections from one daily injection to one monthly injection while maintaining efficacy is naturally regarded as extremely positive by the vast majority of patients. Hypothetically, it may also be the case that a more even supply of a drug can provide a better side-effect profile since a depot preparation is better for avoiding high and low plasma levels of the drug. The market potential for the drug in question is factored into the prioritisation of possible partner projects because greater potential can provide higher licence revenues – and patient benefit is then key.

Licensing of PharmaShell®

The PharmaShell® technology provides good opportunities to formulate injectable and long-acting products based on many different types of pharmaceutical substances. Nanexa therefore collaborates with several other companies that want to use Nanexa's technology to develop new and/or better drugs from their substances. These collaborations contribute revenue for Nanexa as early as the evaluation phase. They also help validate and increase Nanexa's knowledge of the possibilities of the company's technology. In the relatively short term, there are opportunities for extensive development agreements and, in the long run, licensing agreements where there is significant commercial potential.

Nanexa's first collaboration was entered into with AstraZeneca as early as 2013 and it has been followed since then by several collaborations with other global pharmaceutical and biotech companies. In 2022, Nanexa signed a number of additional evaluation agreements, so-called Material Transfer and Feasibility Study Agreements, all aimed at creating injectable depot formulations. These agreements cover different therapeutic areas (including ophthalmology and oncology), classes of molecules (small molecules, peptides and antibodies) and different forms of administration.

Specifically, an evaluation agreement was signed with Novo Nordisk in December 2022 that gives them exclusivity for a limited period in order to evaluate PharmaShell for a specific substance class. Nanexa received a cash payment of 4 MUSD as payment for exclusivity and 425 KUSD as payment for the work to be carried out during the preliminary study.

Nanexa's collaborations usually begin with an evaluation of the technology through coating of model substances or drug candidates. In initial collaborations, Nanexa receives remuneration for services rendered. If the counterparty wishes to proceed with the ambition to develop a drug candidate through extended preclinical and clinical trials, a licensing agreement is entered into which regulates access to the technology, production of clinical material and commercial rights at a product launch. The agreements include technology access fees, milestone payments and royalties on the sale of the final product.

The partner projects are of great importance to Nanexa since in the long run they can provide significant licence revenues without any risk for Nanexa and they also cover the development costs that the company assumes in relation to the partner. However, Nanexa has no control over the projects in terms of if or when a major company decides to continue or discontinue the development of a project.

If the company's collaborations with AstraZeneca, Novo Nordisk or any of the other unnamed pharmaceutical companies develop satisfactorily, there are good opportunities to enter into licensing agreements for continued product development. Those licensing agreements could generate significant revenue for Nanexa.

NOVO NORDISK

During the year, Nanexa entered into an agreement with Novo Nordisk worth approximately 46.1 MSEK. The agreement grants Novo Nordisk exclusivity within a particular substance class and the opportunity to evaluate Pharmashell with its own products. As part of the agreement, a directed share issue to Novo Nordisk was carried out, which resulted in an injection of capital of 17.2 MSEK (before issue costs). Following the share issue, Novo Nordisk now owns 16.5 per cent of the shares and votes in Nanexa, which makes them the company's largest shareholder.

NEX-22

The goal: greater adherence and more comfortable treatment of type 2 diabetes

NEX-22 is a depot formulation of liraglutide with month-long release that could replace current treatments involving daily or weekly injections of liraglutide and other GLP-1-RAs. In a study of patients with type 2 diabetes, around 50 per cent did not follow the prescribed treatment[1] – even though that can lead to serious sequelae.

Based on interviews with leading experts, Nanexa considers that injections given once a month instead of daily could provide significantly better adherence to the prescribed treatment. NEX-22 would therefore be an important addition to current treatment options. Greater adherence helps improve treatment efficacy over time and thus gives rise to healthier patients and savings for healthcare and society.

Patients with low adherence to prescribed treatment form the main target group for NEX-22. However, Nanexa considers that the greater convenience of significantly fewer injections makes NEX-22 an attractive treatment option for the majority of patients with type 2 diabetes who are treated with GLP-1-RAs.

Sales of drugs for type 2 diabetes in the seven largest markets in the Western world are estimated at approximately 50 billion dollars in 2022. GLP-1-RA accounts for approximately 15 billion dollars and is expected to grow by approximately 10 per cent per year over the 2022–2029 period.[2]

[1] Weiss et.al. Patient Prefer Adherence. 2020;14:2337-2345
[2] Global Data Type 2-diabetes forecast, December 2021
[3] Datamonitor Type 2-diabetes Disease analysis March 2021. Available via: https://pharmaintelligence.informa.com/products-and-services/commercial-success/datamonitor-healthcare

Type 2-diabetes

Type 2 diabetes is a metabolic disease in which the body has difficulty regulating blood sugar levels, which leads to high blood sugar. The disease occurs mainly in upper middle age (>45 years), though the incidence in younger people is increasing due to increasingly sedentary lifestyles and unhealthy diet. Common symptoms include fatigue, increased thirst and frequent urination. The initial symptoms are vague and can sometimes be difficult to spot.

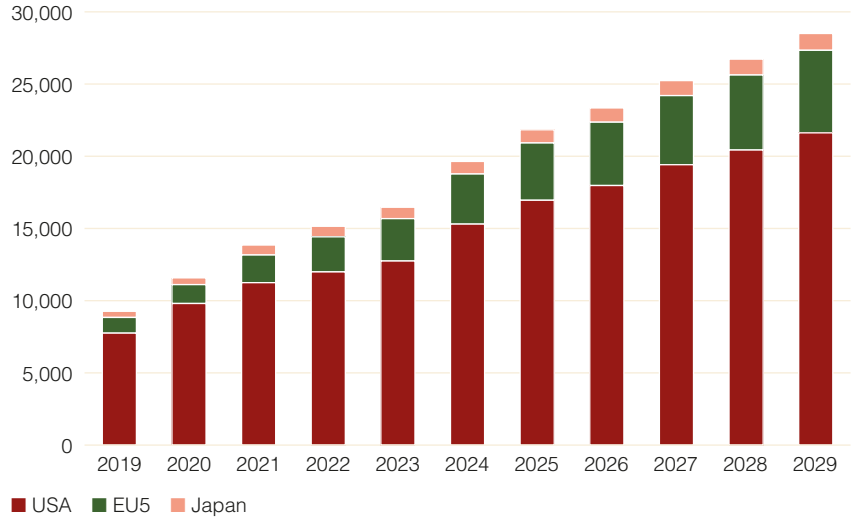
The disease can cause several serious sequelae such as kidney damage, impaired vision and heart disease. Treatment is therefore crucial, both for the patients' overall health and well-being and in order to limit the associated costs for healthcare and society.

Type 2 diabetes is one of our most common diseases and the incidence is increasing rapidly with an ageing population. Datamonitor Healthcare estimates that there are currently around 600 million people in the world living with type 2 diabetes, a figure that is expected to rise to 635 million by 2027.[3] Not all those living with type 2 diabetes have been diagnosed and fewer and fewer receive adequate treatment. In the seven largest markets in the Western world, it is estimated that approximately 50 million people will be treated with drugs by 2027, with an increase of 2–3% per year.[2]

The treatment goal for type 2 diabetes is lower blood sugar levels. This can be achieved by means of physical activity and good eating habits, but in most cases drugs are also necessary. A change in lifestyle in terms of eating habits and exercise is an important first step in the treatment of type 2 diabetes. A low-calorie diet and physical activity are key to lowering blood sugar levels.

Several drugs are available for the treatment of type 2 diabetes. One of the most common drug classes for the treatment of type 2 diabetes is glucagon-like peptide-1-receptor analogues (GLP-1-RAs), which are given subcutaneously once a day or once a week. Liraglutide is a GLP-1-analogue currently given by means of daily injections.

GLP-1 diabetes market forecast 7MM (MUSD)



Source: Global Data Type 2-diabetes forecast December 2021

The clinical programme for NEX-22

The work to develop a PharmaShell® formulation of NEX-22 began in autumn 2022. The first results are expected in the first quarter of 2023 from a preclinical study on extended pharmacokinetic profile for one month. Preclinical studies will continue during the year towards the goal of having all preparations ready for a first clinical study at the end of 2023. Preparations also include preparation by Nanexa for GMP manufacturing of clinical trial materials, stability studies and compilation of a clinical trial application.

The first Phase I study with NEX-22 will study the pharmacokinetic profile of different doses of liraglutide formulated using PharmaShell. For type 2 diabetes, HbA1c* is the primary efficacy variable in clinical studies and is measured by means of blood tests. That means that future efficacy studies of NEX-22 can be carried out by studying HbA1c in the studies by means of simple blood tests.

**Glycosylated hemoglobin is a form of hemoglobin that is primarily used as a measure of the concentration of glucose in blood plasma over longer periods of time.*

Interview Jan Bolinder

Professor of Clinical Diabetes Research at Karolinska Institutet

How would you describe the treatment of type 2 diabetes today compared to 10 years ago?

The biggest change is that drugs based on the substance classes GLP-1 RA and SGLT2 inhibitors are becoming more and more widespread. Besides effectively lowering blood sugar by means of various mechanisms without risking hypoglycemia (dangerously low blood sugar), they have also been shown to have both cardiovascular and renal protective properties and give rise to weight loss. The combined properties of these drugs mean that they are currently recommended at an early stage in international treatment recommendations.

What are the biggest challenges associated with today's treatment options?

More and more people are suffering type 2 diabetes. The number of patients globally is expected to rise from approximately 500 million at present to approximately 700 million by 2045. The reason is primarily the greater incidence of overweight and obesity in the world, along with increasingly sedentary lifestyles. More and more young people also now suffer type 2 diabetes, which means that over time more people are at risk of suffering from sequelae such as cardiovascular problems, kidney failure and fatty liver. We therefore need more options in the toolbox to satisfy a greater need for different forms of combination treatments.

At the same time, there are challenges associated with adherence to drug treatment and many people today do not follow their prescribed treatment, which leads to poor efficacy or no efficacy at all.

How do you see the future in the field of type 2 diabetes?

Thanks to the fact that we currently have several effective diabetes drugs, we will be able to prevent late complications and sequelae better than before. New, even more potent drugs are also on the way or under development, as well as various technologies to prolong the efficacy of injected drugs and thus simplify treatment and adherence.

With both greater prevalence and greater incidence, the need for care will increase significantly at a global level. More research, development and new treatments are needed in order to meet this need. Type 2 diabetes is one of our biggest endemic diseases and leads to considerable healthcare costs.

What role can a company like Nanexa play in the future of diabetes care?

It has been shown that small, innovative companies are needed in order to challenge established pharmaceutical companies with new ideas that can lead to breakthroughs and new treatments. I believe that Nanexa, with its PharmaShell® technology, is in a good position to develop innovative products. We need new products that can increase adherence to treatments, make life easier for patients and make healthcare easier. The company's agreement with Novo Nordisk is proof that it can offer global pharmaceutical giants solutions to challenges that they find difficult to solve themselves with established technologies.

NEX-20

The goal: greater adherence in the treatment of multiple myeloma

Lenalidomide is an immunomodulatory substance that acts on tumour cells and the tumour microenvironment and is used for the treatment of multiple myeloma. Current treatment options involve lenalidomide being administered orally every day for 21 days, followed by a recovery period of seven days, after which the treatment is repeated. Some patients may also receive maintenance treatment at a lower dose but for longer periods of time.

However, poor adherence to treatment is currently reported in approximately 38 per cent of patients taking lenalidomide.[1] Newly diagnosed patients with multiple myeloma often feel relatively well. However, side effects often occur when they start treatment with lenalidomide that may lead patients to stop following the prescribed treatment. The treatment is also extremely costly, which means that patients in some parts of the world, such as the US, cannot afford to follow the treatment recommendations.

These problems are addressed by Nanexa with NEX-20. The company is developing a depot formulation for monthly injection of lenalidomide which can increase adherence to the treatment while reducing costs for patients in the US because injected drugs have higher subsidies there than oral drugs.

Nanexa began the practical development work in the project in early 2021. Preclinical studies were carried out with NEX-20 in 2022 to choose the most promising formulation with an extended pharmacokinetic profile. This formulation is now being used in the first clinical study involving NEX-20.

Leading experts and Nanexa itself consider that lenalidomide will remain a key treatment option for patients with multiple myeloma for many years to come, often in combination with new treatment options.

LENALIDOMIDE

Lenalidomide is the active substance in the product Revlimid®, which is sold by Bristol Myers Squibb (Celgene) in the US, Japan and the five largest countries in Europe.

The preparation was approved by the American Food and Drug Administration (FDA) in the US in June 2006 in combination with dexamethasone for treatment of multiple myeloma. Sales are expected to amount to 12.8 billion dollars in 2021.[2] The patent for lenalidomide expired in the US during the first quarter of 2022 and in the EU during the second quarter of 2022.

[1] Clin Lymphoma Myeloma Leuk. 2020;20(2):98-104. Available via: https://www.sciencedirect.com/journal/clinical-lymphoma-myeloma-and-leukemia/vol/20/issue/2

[2] BMS Annual report 2021. Available via: https://www.bms.com/investors/financial-reporting/annual-reports.html

THE CLINICAL PROGRAMME FOR NEX-20

Since lenalidomide is not registered as a subcutaneous preparation, a preclinical toxicological study was also conducted in mini-pigs. The application for clinical trials was submitted to the Swedish Medical Products Agency in September and was approved in November. NEX-20 was administered to the first subject at the beginning of December. The first clinical Phase 1 study aims to study NEX-20 in different sequential dose groups in healthy volunteers. During the first quarter of 2023, all subjects will have been dosed in dose groups 1 and 2 and evaluation of the pharmacokinetic profile, safety and tolerability of the drug will take place during the following quarter. The protocol has scope for studying additional dose levels, depending on the data generated.

Continued optimisation of NEX-20 formulations based on results obtained is planned in 2023 and planning of the design of upcoming efficacy studies in patients with Multiple Myeloma is in progress in consultation with the Scientific Council for NEX-20 and CROs (Contract Research Organisations).

Multiple Myeloma

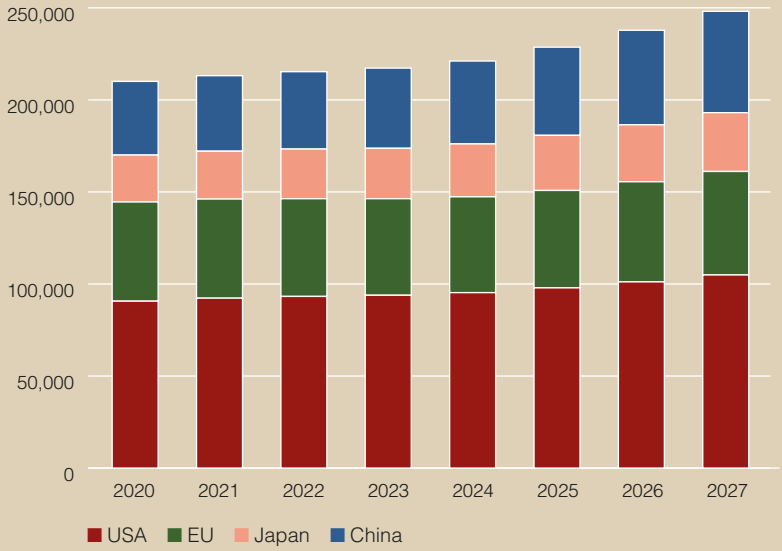
Multiple Myeloma is a haematologically malign disease which arises in the lymphatic B-cell system, where the myeloma cells consist of a malignantly transformed plasma cell – a type of white blood corpuscle – which infiltrates the bone marrow and which can damage the skeleton and the kidneys. Multiple Myeloma accounts for approximately 10 per cent of all haematological cancer and approximately 1 per cent of all cancer.

Global Data estimates that in 2017 there were 350,000 patients with Multiple Myeloma in the eight major markets (US, EU5[3], Japan and China), which is expected to increase to 550,000 patients by 2027.[1]

The median age at diagnosis is 69, and the disease is slightly more common in men than in women. Modern myeloma treatment has meant that the prognosis for the disease has improved markedly in the past two decades, with almost 50 per cent of patients living with myeloma for five years or more after diagnosis.[2] Long-term survival is no longer uncommon.

The market for Multiple Myeloma in the US, EU5[3], Japan and China was 17.8 billion dollars in 2019 and is estimated to increase to 21.6 billion dollars by 2027.[1]

Multiple Myeloma patients treated with lenalidomide[1]



1) Global Data Multiple Myeloma Forecast, 2019
2) www.cancerresearchuk.org/about-cancer/myeloma
3) EU5 = United Kingdom, Germany, France, Spain and Italy

Interview
Mimi Choon-Quinones

Senior Vice President, Global Advocacy, Access, Policy & Research at the international Myeloma Foundation (IMF).

What are the major challenges with today's treatment options?

While there have been significant advances in the treatment of multiple myeloma in recent years, there are still some challenges that exist with current treatment options. These include, for example, poor compliance, drug resistance in some patients, toxic side effects, high costs reducing access to new treatments, and difficulties in tailoring treatment due to disease heterogeneity.

With so many treatment options available today, along with different guidelines and recommendations, there is also a big challenge with the imbalance in information that individual physicians and patients have. This makes it difficult to agree on treatment, considering both individual and societal factors such as possible loss of productivity during treatment, administration, and treatment efficiency.

Therefore, we work to make peer-reviewed information widely available to ease access for all stakeholders.

How does the IMF work for global equal access to new treatments?

For instance, we raise awareness about myeloma and the need for global access to new treatments by hosting educational events, providing resources for patients and healthcare providers, and engaging with the media to increase public awareness about the disease.

My team and I are currently working on an open-source tool that will provide easy access for all stakeholders regarding different aspects of treatment options. It will serve as a decision support and economic model built on robust and peer-reviewed data from different sources. With this tool, users will be able to obtain information about different treatment options, their related costs and societal impact, alternatives, and access situations, among other things. Our hope is that this tool will be used to ease and improve decision-making both at the policy level and in clinics.

What possibilities do you see with Nanexa's solutions in multiple myeloma?

The challenges with compliance are huge with today's treatment options, not only among patients but also among treating physicians who have a hard time prescribing according to the many changing guidelines and recommendations due to the many available options. With Nanexa's solution, the uncertainties concerning dosing that physicians experience can be eliminated. For patients, compliance is currently reliant only on willpower. Thus, I believe that Nanexa's efforts in this area have the potential to be a game changer.

About IMF

The IMF is a global organization focusing on multiple myeloma with mora than 520,000 members in 240 countries worldwide. The IMF is dedicated to improving the quality of life of myeloma patients while working toward prevention and a cure.

NEX-18

The goal: simplified everyday life for patients with myelodysplastic syndrome (MDS)

Azacitidine is currently part of the basic treatment of MDS and is included in the treatment guidelines published by both the European Society for Medical Oncology (ESMO) and the National Comprehensive Cancer Network (NCCN). The current treatment options with azacitidine face a challenge in that they are given as daily injections at a clinic for one week each month, followed by a recovery period of three weeks before the treatment is repeated. The mainly elderly patients suffering from MDS therefore need to visit the clinic every time they have to be given an injection, which places a great burden on both patients and their relatives.

The time of each visit also involves a significant cost for the carer. The treatment lasts from a minimum of six months up to over one year. Reducing the number of visits to the clinic with a long-acting injection would mean a tremendous benefit for patients, carers and payers. NEX-18 makes that possible by formulating azacitidine using PharmaShell®. A drug is created in which the API is released into the body in a controlled, long-acting way. PharmaShell enables Nanexa to encapsulate and protect azacitidine in a way that prevents hydrolysis of the substance.

Azacitidine's short half-life (less than one hour)[1] with the injected products currently available on the market not only means a need for frequent injections, but also causes an initial high concentration in the blood after each injection. NEX-18's controlled release provides a lower and more even level in the blood over time, which could lead to a better side-effect profile.

A formulation of NEX-18 with continuous release over a longer period of time could produce a product with superior efficacy to Vidaza®. This is based on the fact that the cancer cells are affected for a significantly longer time during the treatment and thereby affect a higher number of cell division cycles (shown as demethylation of DNA).

The goal of NEX-18 is to replace current treatment with seven injections with only one injection per month, with the same or greater efficacy.

Although intensive development of new treatments in the field of blood cancer, including immunotherapeutic treatments, is ongoing, Nanexa considers that azacitidine will also play an important role in the future, both as a standard treatment and as a base in combination treatments with new therapies. The company has arrived at this assessment after interviews with several internationally recognised experts in the field.

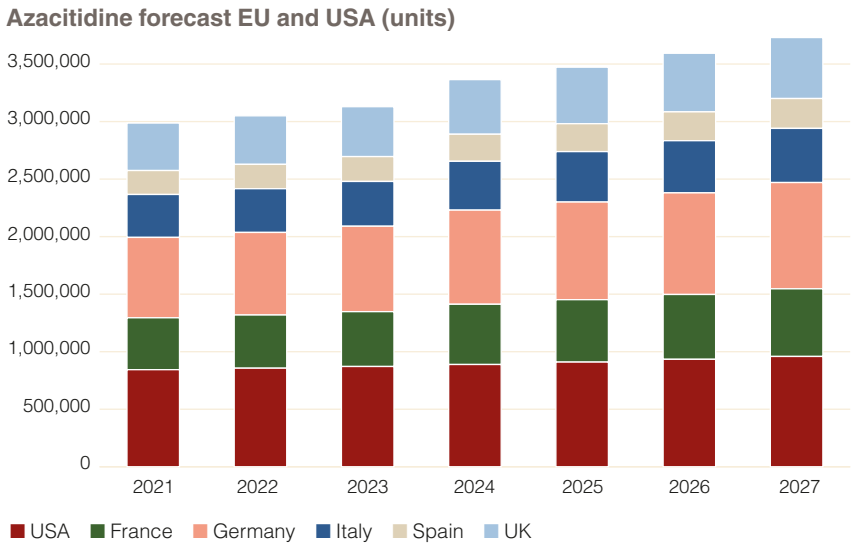
Several drugs under development are being studied in combination with or as a complement to azacitidine.[2] This means that when these new drugs are launched, they will be prescribed along with azacitidine, which means that azacitidine will also continue to be prescribed a great deal in the future.

Data from the closely related acute myeloid leukaemia (AML) indication suggests that longer exposure to a demethylating drug such as azacitidine may be beneficial in haematologic cancer of these types. The possibility of studying this in an extended preclinical programme was promoted by the scientific council for the project during the year. A product with better treatment efficacy, in addition to the above benefits of a depot formulation, would place the company in a unique position in the market.

AZACITIDINE

Azacitidine, which is a nucleoside analogue with cytotoxic and epigenetic effect (the cell's capacity to read DNA as to whether a gene shall be removed or attached), is the active substance in the product Vidaza®, which is marketed by Bristol Myers Squibb (Celgene). Vidaza® was launched in 2004 in the US and in 2008 in the EU and achieved its peak sales – 820 million dollars globally – in 2012. The product patent expired in the US in 2011 and in Europe in 2018, but annual sales of Vidaza® in 2020 remained above 450 million dollars globally.[3] Generics had taken over more and more in 2021 and sales of azacitidine amounted to approximately 500 million dollars in the seven large markets (US, France, Germany, Italy, Spain, UK and Japan). Volume remains stable with a slight increase.[4]

[1] *Vidaza SUMMARY OF PRODUCT CHARACTERISTICS 2022*
[2] *NIH, National Library of Medicine, ClinicalTrials.gov*
[3] *BMS Annual Report 2020*
[4] *Data obtained from Midas Data, IQVIA, 2022*

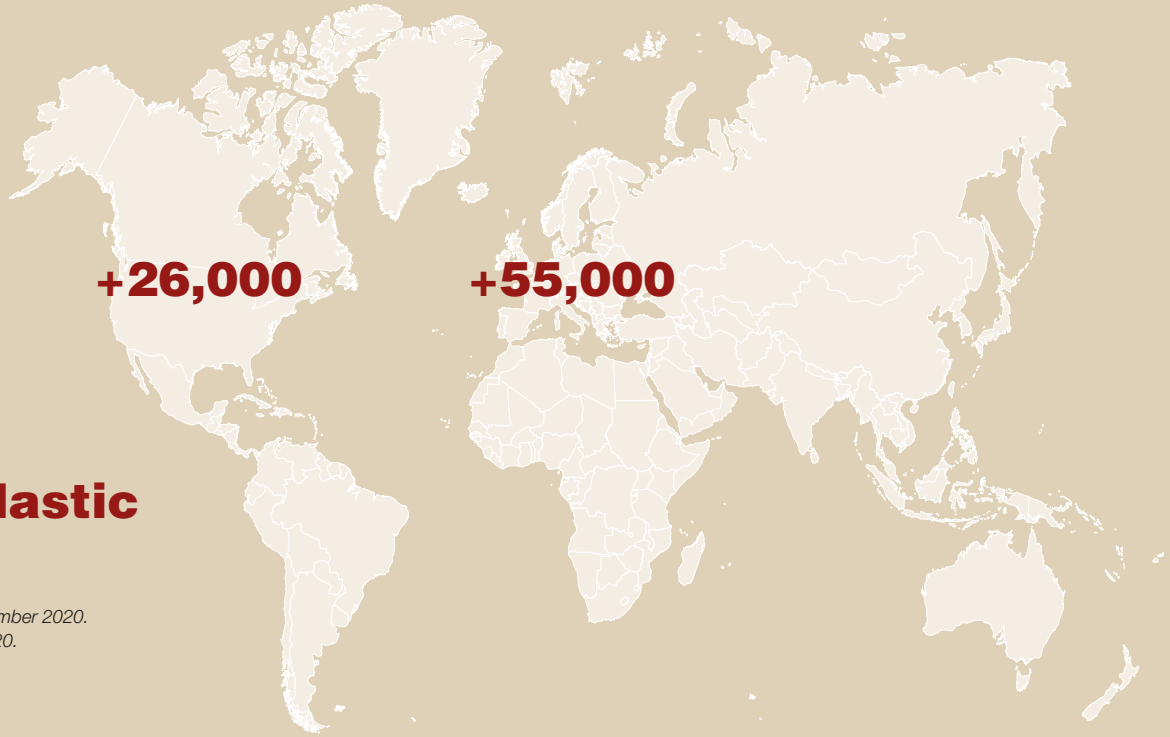


Source: Coherent MDS Market forecast 2021 and Coherent MDS Market report, 2020.

The clinical programme for NEX-18

The first clinical study with NEX-18 was terminated prematurely in the first quarter of 2022. The study showed that the PharmaShell formulation produced an expected depot effect with a prolonged release of azacitidine. However, patients showed moderate skin reactions at the injection site, which were considered reasons not to continue dose escalation until the cause of the skin reactions had been investigated in preclinical studies. Three different preclinical studies were carried out in 2022 to compare local irritation of the NEX-18 formulation given in the clinical study and its various components, as well as a reformulated NEX-18.

The preclinical studies have continued to produce positive results with possible reformulations to minimise skin reactions at the injection site. Before the clinical phase of the project resumes, a preclinical study is planned in order to support the hypothesis that NEX-18 can also provide an advantage in efficacy with regard to demethylation. This is in order to work out a design for further phase I/II studies to achieve clinical Proof of Concept.



Myelodysplastic syndrome

[1)] *Datamonitor MDS Spotlight November 2020.*
[2)] *Coherent MDS Market report, 2020.*

Myelodysplastic syndrome (MDS), is a group of chronic diseases in which haematopoiesis (blood formation) does not function normally. The cause of this is that the haemopoietic stem cells in the bone marrow are not capable of producing mature blood cells of different types (red and white blood corpuscles and platelets). In the majority of cases this means that the patients have anaemia, too low a number of white blood corpuscles (leukopenia) and a reduced number of platelets (thrombocytopenia).

MDS occurs primarily in the elderly. The median age at diagnosis is 71, and the incidence rises substantially after the age of 60. The disease is somewhat more common in men than in women. Datamonitor Healthcare estimates that in 2019 there were approximately 238,000 patients with MDS globally and that the number would increase to 313,500 by 2028 – 26,000 of these being in North America and 55,000 in Europe[1].

The market for MDS in the US, the EU and China was 2.0 billion dollars in 2020 and is expected to increase to 3.4 billion dollars by 2027[2].

Sustainability

Nanexa strives to create long-term value by developing a more efficient form of administration for medicines that can provide people with a better life. The company's overall goals in terms of sustainability are well integrated into the company's vision, and developing more concrete sustainability goals is planned for 2023.

Nanexa's aim is to be a credible, reliable supplier and partner for its customers and other partners, an attractive employer and a beneficial long-term investment for the company's shareholders.

Social and environmental sustainability is an important part of Nanexa's work, and the business is conducted in accordance with regulatory guidelines and industry standards, which naturally integrate many of the most important sustainability issues. The sustainability work focuses on running the business in accordance with ethical guidelines and taking into consideration the environmental impact of Nanexa's operations and those of its suppliers.

Nanexa's manufacture of materials for use in clinical trials is conducted under Good Manufacturing Practice (GMP) conditions in accordance with official requirements. Trials and studies are conducted during the preclinical and clinical development phases in order to ensure that the final drugs are both effective and safe. Regulatory approval is always required for clinical studies, which are then carried out within the framework of the country's legislation and ethical rules. The tests and studies are structured in accordance with current standards, guidelines and directives, e.g. good clinical practice (GCP).

Quality system

Nanexa develops innovative drug delivery systems with the aim of creating effective solutions to important medical problems. Nanexa endeavours to achieve quality in every aspect of development, and all employees must have a common sense of responsibility for achieving the company's goals and those of our partners. With a thorough quality system, the goal is to meet the requirements set by authorities, both national and international. The company builds in quality from the start in all processes, by continually following up results and constantly improving the processes. The target is for Nanexa to be involved in improving today's drug treatments within several different medical indications.

Environmental impact

Nanexa is committed to maintaining and protecting the environment directly and indirectly in all parts of the business and consistently strives to reduce the use of environmentally hazardous substances to ensure that the company's environmental impact is as low as possible.

The company continuously strives to reduce their negative impact on the environment by maintaining good work procedures, using technology that reduces negative impacts and considering environmental criteria when choosing suppliers. The modes transport used must always have as low an environmental impact as possible. As a knowledge-intensive company, we want our employees to be able to participate in international conferences and meetings in order to stimulate the development and exchange of ideas and experiences. At the same time, we are keen to reduce the environmental impact caused by unnecessary business trips, and we strive to communicate digitally and to always consider different methods of business travel. We encourage conference calls and online meetings.

In addition to Nanexa's direct impact on the environment, there is also a large potential for having an indirect impact. Nanexa's PharmaShell allows for the controlled release of various pharmaceutical substances over several days, weeks or even months. This means that patients who previously needed to visit healthcare facilities or take their medication daily, can now do so less frequently. Consequently, patients require fewer trips for their treatment, and simultaneously, the use of disposable products, such as syringes, can be dramatically reduced. Depending on the areas of indication, we see several potential environmental benefits. In terms of diabetes, where Nanexa is currently conducting a project, the differences can be enormous in terms of the use of disposable materials, depending on whether the patient needs to have an injection monthly or daily. In terms of the company, this indirectly contributes to goal 12 of the UN's Global Goals for Sustainable Development, responsible consumption and production. To treat myelodysplastic syndromes (MDS), the patient needs to visit a clinic for seven days as part of every 28-day treatment period. However, with PharmaShell, the patient only needs to visit the clinic once a month. This means not only less travel, but that Nanexa is directly contributing to reduced CO_2 emissions.

Employees

Nanexa supports the UN Global Compacts' ten principles in the areas of human rights, labour, environment and anti-corruption. Nanexa's aim is openness and transparency in its operations and developing the sustainability efforts is a continually ongoing process.

Nanexa's fundamental view is that all employees have equal value and the same opportunities, regardless of their background and individual differences, and that these differences increase the opportunities for growth and change and are an asset to the organization. The company's diversity work means to not discriminate, but rather to value and manage diversity. Nanexa continuously reviews the company's processes and diversity criteria are taken into consideration when recruiting employees and when engaging consultants. Our ambition is to achieve a strong level of commitment among the employees and to have a low level of staff turnover.

Nanexa's contribution to the global goals

NANEXA'S SUSTAINABILITY MANAGEMENT CONTRIBUTES TO THE UN'S 17 GLOBAL GOALS. NANEXA SUPPORTS ALL 17 GOALS, BUT HAS IDENTIFIED FOUR AREAS WHERE THE COMPANY CAN CONTRIBUTE AND MAKE A DIFFERENCE.

UN SUSTAINABILITY GOAL 3: Good health and well-being

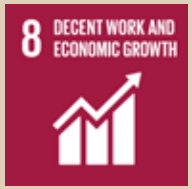
Good health is a fundamental condition for people to achieve their full potential and to contribute to social development.

Through our products and the PharmaShell® drug delivery system, Nanexa is contributing to better health for patients suffering from cancer, diabetes and other diseases, and thereby to the UN sustainability goal 3.

UN SUSTAINABILITY GOAL 5: Gender equality

Equality between women and men is a prereq-uisite for sustainable and peaceful development. Equality entails an equitable distribution of power, influence and resources. All format of violence, discrimination and harmful customers in relation to women and girls affect both the individual and society as a whole. It has been demonstrated time and time again that political, economic and social equality between women and men contributes to all dimensions of sustainable development.

Nanexa considers that all people have equal value regardless of, for example, gender or ethnicity. These values govern how the company recruits and interact with both employees and external stakeholders.



UN SUSTAINABILITY GOAL 8: Decent work and economic growth

Decent work promotes sustainable economic growth and is a positive force for the entire planet.Creating good conditions for innovation and entrepreneur-ship, and for ensuring decent working conditions for all, benefits sustainable economic growth that includes all of society.

As an employer, Nanexa offers a good working environment with good employment terms and the opportunity for development.

UN SUSTAINABILITY GOAL 12: Sustainable consumption and production

Sustainable consumption does not just entail envi-ronmental benefits, but also social and economic benefits such as increased competitiveness, growth in both the local and global market, increased employment, improved health and reduced poverty. Transitioning to sustainable consumption and production of goods is a necessity in order to reduce our adverse impact on the climate, environment and human health.

Nanexa's aim is to minimise its adverse impact on the environment. Further reading is available in the environment and travel section.

The share

Nanexa's share has been listed on the Nasdaq First North Growth Market since 29 May 2020, and is included in both First North All share SEK and First North Health Care PI index.

The share was previously listed on the Spotlight Stock Market (formerly Aktietorget) since 17 June 2015.

Facts about the Nanexa share

Number of shares*	50,695,626
Market capitalization, millions of SEK*	140
Ticker	NANEXA
ISIN	ISIN SE0007074166

** As of 31/12/2022*

Nasdaq First North Growth Market och Certified Adviser

Nordic growth companies and is primarily designed for small and medium-sized companies. It does not have the same legal status as a regulated market and the regulations are somewhat less extensive than those that apply to the stock exchange's major marketplaces. All companies with shares traded on First North Growth Market have a Certified Adviser who monitors whether the company complies with First North Growth Market's regulations for providing information to the market and investors. Nanexa's designated Certified Adviser is Erik Penser Bank.

Erik Penser Bank
Tel: +46 (0)8-463 80 00
Apelbergsgatan 27, Box 7405
SE-103 91 Stockholm, Sweden

Earnings per share

Earnings per share before and after dilution for the period January–December 2022 amounted to SEK -1.16 (-1.01).

Dividend policy

Nanexa does not currently have a dividend policy. Nanexa is a growth company where the plan is to allocate profits generated for development of the business, and Nanexa does not anticipate providing any dividends in the next few years. Share dividends may be relevant in the future when Nanexa's profits and financial position allow it.

Share capital

As of 31 December 2022, Nanexa's share capital amounted to 6,561,096. The number of outstanding shares amounted to 50,695,626 which corresponds to a quotient value per share of SEK 0.13. The number of shares at full dilution of outstanding warrants was 53,174,626. A directed issue of 10,000,000 shares to Novo Nordisk was carried out at end of 2022, which was registered on January 2, 2023.

The average number of shares during the period January–December 2022 was 50,695,626 (35,633,470). Including full dilution of outstanding subscription warrants, the average number of shares was 52,679,086 (42,071,338).

According to the company's articles of association, the share capital must be at least SEK 3,100,000 and at most SEK 12,400,000, distributed over a minimum of 24,000,000 and at most 96,000,000 shares. Each share carries one vote at the shareholders' meeting.

Shareholders

Nanexa had 3,060 shareholders as of 31 December 2022.

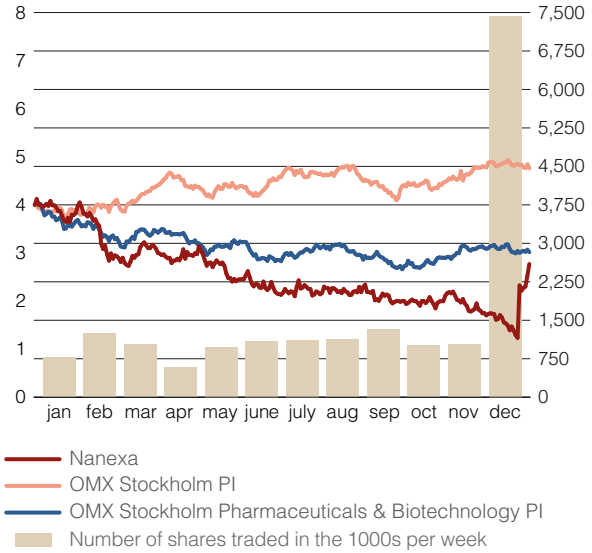
The 10 largest owners as of 31 December 2022

	NUMBER OF SHARES	SHARE
Novo Nordisk A/S *	10,000,000	16.5%
M2 Capital Management AB	4,167,194	6.9%
Försäkringsbolat Avanza Pension AB	3,801,318	6.3%
Jan Petersen	3,517,817	5.8%
Skirner Förvaltning AB (incl owners)	2,653,337	4.4%
Applied Ventures, LLC.	2,334,742	3.8%
Nordnet pensionsförsäkring AB	2,022,051	3.3%
Ivar Nordqvist	1,437,500	2.4%
Mikael Jacobsson	1,055,089	1.7%
David Olsson	1,011,050	1.7%
Total 10 largest owners	32,000,098	52.7%
Other shareholders	28,695,528	57.3%
Totalt	**60,695,626**	**100.0%**

** Novo Nordisks aktier registrerades den 2 januari 2023.*
Källa: Holdings

Nanexa's share price development and turnover

As of 30 December 2022, the closing price was SEK 2.77 (4.00), which was a decrease of 30.8% over the year. The highest closing price during the year was SEK 4.12 which was listed on 3 January 2022, and the lowest was SEK 1.23, which was listed on 21 December 2022.



Warrant programs

In connection with the 2020 AGM, two share-related incentive schemes were introduced in the form of warrants of series 2020/2023:1 (TO3) and 2020/2023:2 (TO4) for management and personnel and board members respectively. Both TO3 and TO4 have a duration of about 3 years, and can be used for subscription of shares during the period 1 June–31 July 2023. The number of outstanding warrants of series TO3 is 392,000 and the number of TO4 is 724,000, equivalent to a total of 1,116,000 shares and a dilution of 1.81% calculated on the number of outstanding shares as of the date for this annual report.

In connection with the 2021 AGM, a share-related incentive scheme was introduced in the form of warrants of series 2021/2024:1 (TO5) for management and personnel. TO5 has a duration of about 3 years, and can be used for subscription of shares during the period 15 June–31 July 2024. There are 380,000 outstanding warrants of series TO5, equivalent to a dilution of 0.62% calculated on the number of outstanding shares as of the date for this annual report.

In connection with the 2022 AGM, a share-related incentive scheme was introduced in the form of warrants of series 2022/2025 (TO6) for management and personnel. TO6 has a duration of about 3 years, and can be used for subscription of shares during the period 15 June–31 July 2025. There are 983,000 outstanding warrants of series TO6, a dilution of 1.59% calculated on the number of outstanding shares as of the date for this annual report.

ANALYSTS WHO FOLLOW NANEXA

Fredrik Thor, Redeye
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Administration report

The board and CEO of Nanexa AB (publ), based in Uppsala and with corporate ID number 556833-0285, hereby submit the annual report for the financial year 2022. Figures in brackets refer to last year. All amounts are expressed in SEK '000 (TSEK) unless otherwise specified.

NANEXA'S OPERATIONS

Nanexa is a pharmaceutical company that is developing injectable drugs based on the patented and innovative drug delivery system PharmaShell®, a system that enables next-generation, long-acting injectables with high drug load and manufactured with atomic layer precision.

Nanexa originated at the Ångström Laboratory at Uppsala University, and since its inception in 2007 has based its operation on the Atomic Layer Deposition (ALD) coating technology. Since 2015, the company has been focusing on the PharmaShell system, where ALD is applied as a drug delivery technology. Nanexa manages the development of a product portfolio of proprietary drug candidates, based on PharmaShell, and also has several evaluation projects for licensing of the technology to external development partners that comprise large pharmaceutical companies and smaller biotech companies within both human- and veterinary medicine. The company has developed its own GMP-certified manufacture of material for clinical trials, and, through the collaboration with Applied Materials and the recently completed pilot plant in Uppsala, also a unique capacity for ALD-based manufacturing of drugs for more large-scale development project and potential commercial scale.

Multi-year review (TSEK)

	2022	2021	2020	2019
Net sales	2,861	2,374	2,367	1,710
Operating income	-57,980	-35,821	-21,489	-12,710
Intangible fixed assets	65,248	45,708	33,542	16,954
Cash and cash equivalents	81,182	105,660	12,691	11,378
Equity	109,096	151,293	43,351	24,878
Equity/assets ratio (%)	64.1	91.7	80.7	70.0
Number of employees, average	17	13	10	8
Number of outstanding options	2,479,000	1,496,000	4,147,978	3,812,527
Cash flow from current activities	-7,871	-25,128	-16,827	-9,417
Cash flow from investment activities	-35,422	-25,789	-20,801	-10,655
Cash flow from financing activities	18,814	143,886	38,940	20,699
Cash-flow for the year	-24,478	92,969	1,313	627
Cash and cash equivalents at end of year	81,182	105,660	12,691	11,378
Earnings per share	-1.16	-1.01	-1.09	-0.88
Equity per share	2.15	2.98	2.04	1.64
Average number of shares	50,695,626	35,633,470	19,914,967	14,690,784
Number of shares at end of the year	50,695,626	50,695,626	21,223,854	15,159,898

Definitions of key ratios

Equity	Total of equity, restricted reserves and unrestricted equity
Equity/assets ratio	Equity divided by balance sheet total
Earnings per share	Profit after tax divided by average number of outstanding shares

SIGNIFICANT EVENTS DURING THE YEAR

Quarter 1

- Nanexa AB received a new patent in the USA relating to an ALD reactor adapted for large scale production of PharmaShell® coated drugs.
- Nanexa announced that the company's preclinical investigation indicates the cause and a potential solution to the moderate skin reactions that arose in the clinical study with NEX-18. With these results, Nanexa expanded its preclinical program to optimize the formulation of NEX-18 to re-enter clinical phase in the coming years.

Quarter 2

- The European Patent Office (EPO) granted Nanexa's patent application relating to the drug delivery system PharmaShell®. The patent protection covers the manufacturing method of PharmaShell and products produced using the method.
- Nanexa was granted funding under the VINNOVA project "Verification in Test Center, Part III" for a maximum amount of SEK 290,000, for an internal research project with the aim of coating monoclonal antibodies (mAbs) with PharmaShell®.
- Nanexa completed its new facilities with offices, R&D

laboratory and production pilot plant at Uppsala Business Park and an inauguration ceremony was held in June.

- At Nanexa's Annual General Meeting on June 9, it was decided, among other things, to elect Richard Davis as new board member, on authorizations for the Board to decide on rights issue and directed issue, and to establish a warrant-based incentive program for employees. A total of 983,000 warrants were thereafter subscribed for, corresponding to a maximum dilution of 1.6% calculated on the number of outstanding shares as of the date for this annual report.

Quarter 3

- During the quarter, Nanexa announced the start of the product project NEX-22, addressing a very large market. In NEX-22, the company will develop a long-acting formulation of liraglutide with PharmaShell® for the treatment of type 2 diabetes. NEX-22 is the company's third proprietary product development project.
- Nanexa expanded its collaboration agreement with Applied Materials, Inc., through an amendment regulating commercial arrangements, paving the way for potential future license agreements with customers in the pharmaceutical industry.
- Nanexa received extended GMP certificate from the Swedish Medical Products Agency for production of clinical trial material in the new production plant in Uppsala.
- Nanexa signed a Material Transfer and Feasibility Study Agreement with an option to license, with a Global Pharmaceutical Company, for evaluation of the PharmaShell® drug delivery system making a depot formulation of a specific compound for local release.

Quarter 4

- During the quarter, Nanexa signed an exclusivity and evaluation agreement, a so-called Material Transfer and Feasibility Study Agreement with leading global pharmaceutical company Novo Nordisk A/S ("Novo Nordisk") for the evaluation of Nanexa's drug delivery system PharmaShell® with Novo Nordisk products within a certain substance class. As part of the agreement, Nanexa receives payments of approximately SEK 46.1 million for providing Novo Nordisk a time-limited exclusivity and work performed during the evaluation period. In connection with the agreement, a directed issue of shares to Novo Nordisk was also carried out, which brought SEK 17.2 million before issue costs to Nanexa and made Novo Nordisk the largest shareholder, with 16.5 percent of the shares and votes in the company.
- Nanexa started, according to plan, the Phase 1 study with NEX-20, a long-acting formulation of lenalidomide for treatment of multiple myeloma. The study is carried out in healthy volunteers with the aim to study the pharmacokinetic profile, safety and tolerability of the drug.
- Nanexa AB and VitriVax, Inc. jointly announce that they have resolved the patent infringement lawsuit filed by Nanexa AB against VitriVax, Inc. in the United States District Court for the District of Delaware.
- Nanexa signed a Material Transfer and Feasibility Study Agreement with a Specialty Pharma company, for evaluation of the PharmaShell drug delivery system making a depot formulation of specific compounds for intravitreal delivery.

TURNOVER AND EARNINGS

Total sales for the year amounted to 2,860 (2,374) TSEK and related mainly to previous and recent evaluation and exclusivity agreements and orders for sensor coating. Capitalised development costs amounted to 24,311 (15,636) TSEK, attributable mainly to NEX-20 and to a lesser extent NEX-18, NEX-22 and the PharmaShell-system.

External project and development costs in the period amounted to -23,769 (-13,698) TSEK, with the increase being mainly attributable to activities within NEX-20 and to start-up and work on GMP certification of the new manufacturing facility. Other external costs amounted to -28,816 (-15,844) TSEK, with the increase being largely attributable to one-off costs of a total of approximately -6,279 TSEK relating mainly to the patent litigation in the US and also moving and fitting out new premises and higher costs for premises for the new production facility. Personnel costs amounted to -22,773 (-16,743) TSEK during the year and have increased due to a growing organization, in line with the company's strategic plan, and higher variable remuneration for 2022.

The loss for the year amounted to -58,571 (-35,999) TSEK.

CASH FLOW AND INVESTMENTS

The cash flow for the year amounted to -24,478 (92,969) TSEK. The exclusivity fee of 41,381 TSEK paid by Novo Nordisk in December 2022 has been recognised as revenue to a small extent during the period and most of it is distributed over time, which mainly explains the increase in current- and non-current liabilities. Other cash flow from operating activities amounted to -49,252 (-25,182) TSEK and investments amounted to -35,422 (-25,789) TSEK, of which -7,768 (-7,764) TSEK related to tangible fixed assets in the production facility and other investments related to capitalised development costs and patents. Net proceeds from new issues of shares and warrants during the period amounted to 16,375 (143,941) TSEK and new loan financing, linked to investments in production equipment among other things, amounted to 5,985 (1,000) TSEK, while amortisation of these loans and loans raised previously amounted to -3,544 (-1,055) TSEK.

FINANCIAL POSITION

The company's cash and cash equivalents as of 31 December 2022 amounted to 81,182 (105,660) TSEK. Shareholders' equity amounted to 151,293 (43,351) TSEK at year-end.

The company works continuously to secure the long-term financing and based on recent developments, including agreements with and addition of Novo Nordisk the shareholder list, the board and management see good opportunities to secure continued financing.

At the time of signing the annual report, the board of directors assesses that the company's current working capital and cash and cash equivalents are sufficient to finance the operations according to the current business plan until the end of 2023. To ensure financing thereafter, the company can postpone planned investments and activities, which means that the cash is sufficient until the end of the first quarter of 2024, but may also be financed by raising capital or agreements on licenses and / or exclusivity regarding the PharmaShell technology.

PERSONNEL

The number of employees at year end was 19 (17), of which 7 (5) were women and 12 (12) were men. The average number of employees (FTE) during the year was 17 (13). In addition to employees, the company has engaged about 10 consultants with key competencies in drug development, quality assurance and business development.

EXPECTED FUTURE DEVELOPMENT

In the coming years, the company will work to realize its business concept and vision through its strategy and thereby achieve its stated goals.

During 2023, the company is expecting to complete the clinical phase I study with NEX-20 which was started at the end of 2022, run preclinical studies and prepare for the start of a first clinical study with NEX-22 by year-end, and continue preclinical evaluation of effect and tolerability with a new formulation of NEX-18. In addition to that, Nanexa has the ambition to sign new evaluation agreements and deliver according to signed agreements to advance the collaboration to further product development with any of the partners who are currently evaluating the PharmaShell system.

During 2024, clinical studies are planned with NEX-22 (fas I), NEX-20 (fas Ib) and NEX-18 (fas Ib).

RUSSIA'S WAR OF AGGRESSION IN UKRAINE

The geopolitical situation changed significantly with Russia's invasion of Ukraine in February 2022, where the war of aggression still goes on. Besides anxiety and human suffering, it has created uncertainty and had negative effects on economic development in Europe and globally, among other things spiralling inflation. Nanexa's management are carefully monitoring developments and their current assessment is that the war has no direct impact on the company's operations.

RISKS AND UNCERTAINTY FACTORS

Nanexa's operations are affected by a number of factors, the effects of which on the company's earnings and financial position are in some respects somewhat or fully beyond the control of the company.

When assessing the company's future development, it is important to consider these risks, in addition to opportunities for profit growth.

The following describes, in no particular order, the significant risks and uncertainties that are considered to be of greatest importance for the company's future development.

In addition, Nanexa is affected by currency risk in connection with transaction exposure, primarily for changes in EUR, GBP and USD.

Risks related to drug development

Early-stage development projects are risky and associated with uncertainty

Nanexa conducts and has conducted a number of development projects that have not yet achieved any major commercial breakthrough. Both the collaborative projects and the company's own NEX-18 and NEX-20 projects are in a preclinical and early clinical phase, which means that Nanexa will need to invest additional resources in research and development to achieve commercial success. Investments in development are associated with great uncertainty, as it is not possible to predict in advance the outcome of the studies that are carried out. Time and cost aspects of product development are also difficult to determine with accuracy in advance.

Regulatory risk

In the event that the trials conducted within the framework of Nanexa's development project are successful, the company's operations will be subject to regulatory approvals at a later stage from various national authorities such as the Food and Drug Administration (FDA) in the USA and the European Medicines Agency (EMA) in Europe. There is a risk that delayed or missing approvals may entail requirements for adaptation of the product, which may delay the market launch in various geographical markets and thus adversely affect the company's future earning capacity.

Business and operational risks

Dependent on collaborative partners

Nanexa operates a number of collaborative projects together with various pharmaceutical companies to evaluate PharmaShell[x§] in combination with potential drug candidates. The continued development of the company's operations is partly dependent on maintaining and developing existing partnerships and identifying new potential partners and, in the long run, entering into license agreements for the development of drug candidates, both for the proprietary product projects in subsequent clinical development and for the PharmaShell technology. It is normal in the sector in which Nanexa operates that only a small number of evaluation projects become product projects, and many product projects are terminated before they get through all phases of clinical development. There is thus a risk that one or more of these partners will choose not to proceed with the collaboration with the company.

There is also a risk that the companies with which Nanexa concludes partnership agreements will not fulfil their obligations. Nanexa cannot control the resources that the company's current and future partners invest in the projects and the timing of such investments. The company's partners may also develop or evaluate alternative technologies that could compete with PharmaShell or that may affect Nanexa's partners' involvement in the collaboration. Finally, identifying and establishing new collaborations can be more costly and/or take longer than the company anticipates.

Future capital needs

Nanexa has not yet shown a positive operating result, and cash flow is expected to remain largely negative until the company manages to conclude licensing agreements that can generate revenue from milestone payments. There is a risk that the company's costs for product development may be more time-consuming and costly than planned. Nanexa may thus have to turn to the public to raise capital in the future. Both the size and the timing of the company's future capital requirements will depend on a number of factors, including success in research and development projects and the conclusion of collaboration and licensing agreements. There is a risk that new capital cannot be raised when the need arises, that it cannot be procured on favourable terms, or that such capital raised would not be sufficient to finance the business according to the plans.

Technological risk

The company's PharmaShell® drug delivery system is based on a technique known in material science as ALD (Atomic Layer Deposition). Although Nanexa believes that the company's technology meets the criteria set to achieve the requested drug release properties, there is a risk that the technology will not work on all individual drugs. There is also a risk that pharmaceutical authorities find that there are medical risks associated with the PharmaShell® material and that more extensive studies must be carried out to determine whether such risks actually exist.

Dependent on key people

In recent years, Nanexa has built up an organization with qualified people to create the best possible conditions for the development and commercialization of the company's projects. However, Nanexa continues to be run by a relatively small organization and the company's future growth is largely dependent on the knowledge, experience and commitment of the management and other key personnel. The company may fail to retain these key personnel and recruit new qualified personnel in the future, which may affect the company's cost base and adversely affect Nanexa's sales development. New recruitments can also take a long time to complete.

Dependent on suppliers for ALD equipment and pharmaceutical substances

The company purchases among other things ALD equipment, associated components, other GMP manufacturing equipment and pharmaceutical substances from external suppliers in order to produce PharmaShell-based products, such as its own NEX-18, NEX-20 and NEX-22 products. The equipment is central to the company's internal development work. There are a number of ALD equipment suppliers, as well as several government approved pharmaceutical substance suppliers. There is a risk that suppliers may greatly increase their prices or change their terms in general. Significant price increases would have a negative impact on the company's liquidity and profitability. Similarly, there is a risk that any delivery difficulties from the suppliers would contribute to delays in the company's projects.

Industry risks

The company's PharmaShell® technology is commercially unproven

The company develops and commercializes the PharmaShell drug delivery technology. ALD is an established technology within the semiconductor industry, but is commercially untested within medical applications. It is not possible to say with certainty that PharmaShell will receive a positive reception in the market. The number of license agreements entered into may be lower or take longer to realize than the company has reason to believe at present.

Competitors

There are a large number of operators developing drug delivery systems, both large pharmaceutical companies and smaller operators such as Nanexa. There are also several competing systems for long-acting parenteral products. Several of the company's competitors have greater resources than the company and may use these to strengthen their respective positions, for example by allocating more capital to invest in marketing or to compete with the company on price. Although Nanexa believes that the company's technology has unique characteristics, the company has not yet achieved a commercial breakthrough and there is a risk that new competing technologies will reach the market before the company achieves a commercial breakthrough. There is also a risk that other players will develop new technology that is superior to PharmaShell, which could impair Nanexa's competitive position.

Legal risks

Intellectual property rights

Nanexa is dependent on proprietary technology and the company's future success is partly dependent on the ability to obtain and maintain patent protection for PharmaShell. Nanexa holds a basic patent for PharmaShell in the USA, China, Japan, South Korea and EU (EPO) and is in the application process in India and Canada. Active work with the patent portfolio is a prerequisite for long-term value creation. There is a risk that Nanexa will not be able to obtain additional patent protection for PharmaShell, that granted patents will not be able to be maintained, that future research will not lead to patents or that granted patents will not provide sufficient protection for Nanexa's products. There is also a risk that a third party infringes patents owned or controlled by the company. Furthermore, a third party may have applied for a patent covering the same product as the company's. If Nanexa is forced to pursue legal processes to determine who is entitled to a specific patent, the cost and time required for such litigation can be significant, and there is a risk that the company may lose such legal actions, which could result in the termination of the protection of the company's product or that Nanexa will have to pay substantial damages.

Product liability

The individuals participating in Nanexa's clinical studies with PharmaShell® may experience side effects, which may in turn delay or halt continued product development and limit or prevent the product's commercial use, or lead to claims for damages, including claims based on product liability. The side effects may also result in damage to the company's reputation, which can affect the company's position in relation to other players in the market. Should this occur, it would greatly affect Nanexa's ability to commercialize PharmaShell.

EVENTS AFTER THE END OF THE FINANCIAL YEAR

➔ Nanexa announced positive outcome in the first preclinical study with NEX-22. In a one-month study in rats, single doses of two different PharmaShell® formulations were studied in different doses. The results show a controlled release of liraglutide, with plasma exposure over 28 days for NEX-22, compared to around two days for a formulation with liraglutide without the PharmaShell coating.

PROPOSED DISTRIBUTION OF EARNINGS

The Board of Directors proposes that retained earnings:

	SEK
Share premium reserve	264,535,875
Retained earnings	-163,372,417
Loss for the year	-58,571,483
	42,591,975
Carried forward to new accounts	42,591,975
	42,591,975

The company's earnings and position in general are shown in the following income statement and balance sheet, as well as cash flow statement and notes.

Accounts

INCOME STATEMENT

TSEK	NOTE	2022	2021
Operating revenue			
Net sales	*2*	2,860	2,374
Capitalised work on own account		24,311	15,636
Other operating income	*3*	1,004	150
		28,175	**18,160**
Operating expenses			
External project and development expenses		-23,769	-13,698
Other external expenses	*4, 5, 6*	-28,816	-15,844
Personnel costs	*7, 8*	-22,773	-16,743
Depreciation of tangible and intangible fixed assets		-10,504	-7,468
Other operating expenses	*3*	-294	-228
		-86,156	**-53,981**
Operating income		**-57,981**	**-35,821**
Profit/loss from financial items			
Interest income and similar income statement		11	0
Interest expenses and similar income statement items		-666	-186
		-655	**-186**
Profit/loss after financial items		**-58,635**	**-36,007**
Reported profit/loss before tax		**-58,635**	**-36,007**
Tax	*9*	64	8
Profit/loss for the year		**-58,571**	**-35,999**
Earnings per share		-1.16	-1.01

BALANCE SHEET

TSEK	NOTE	31/12/2022	31/12/2021
ASSETS			
Fixed assets			
Intangible fixed assets			
Capitalised expenditure for development work	*10*	59,088	41,170
Patents	*11*	6,160	4,538
		65,248	**45,708**
Tangible fixed assets			
Improvement to leased property	*12*	5,394	75
Machinery and other technical installations	*13*	7,202	0
Equipment, tools, fixtures and fittings	*14*	2,497	2,759
Construction in progress and advances regarding tangible fixed assets	*15*	33	6,915
		15,126	**9,749**
Financial fixed assets			
Other securities held as non-current assets	*16*	1	1
Deferred tax assets	*17*	95	31
Other non-current receivables	*18*	1	31
		97	**63**
Total fixed assets		**80,471**	**55,520**
Current assets			
Stock, etc.			
Advance payments to suppliers		487	269
		487	**269**
Current receivables			
Accounts receivable		1,184	282
Other current receivables	*19*	4,288	1,792
Prepaid expenses and accrued income	*20*	2,583	1,473
		8,055	**3,547**
Cash at bank and in hand	*21*	81,182	105,660
Total current assets		**89,724**	**109,476**
TOTAL ASSETS		**170,195**	**164,996**

TSEK	NOTE	31/12/2022	31/12/2021
EQUITY AND LIABILITIES			
Equity			
Restricted equity			
Share capital	*22, 23*	6,561	6,561
Unregistered share capital		1,294	0
Fund for development expenditure		58,649	40,483
		66,504	**47,044**
Unrestricted equity			
Free share premium reserve		264,536	249,456
Retained earnings		-163,373	-109,208
Profit/loss for the year		-58,571	-35,999
		42,593	**104,249**
Total equity		**109,096**	**151,293**
Non-current liabilities	*24, 25*		
Liabilities to credit institutions		4,068	2,573
Other liabilities		18,220	0
Total non-current liabilities		**22,288**	**2,573**
Current liabilities	*25*		
Liabilities to credit institutions		2,204	1,259
Accounts payable		4,661	3,730
Tax liabilities		508	450
Other liabilities		732	603
Accrued expenses and deferred income	*27*	30,706	5,088
Total current liabilities		**38,811**	**11,130**
TOTAL EQUITY AND LIABILITIES		**170,195**	**164,996**

CHANGE IN EQUITY

TSEK	SHARE CAPITAL	UNREGISTERED SHARE CAPITAL	FUND FOR DEVELOPMENT	SHARE PREMIUM RESERVE	PROFIT/LOSS CARRIED FORWARD	PROFIT/LOSS FOR THE YEAR	TOTAL
Equity 31/12/2020	**2,747**	**0**	**29,105**	**109,329**	**-76,094**	**-21,736**	**43,351**
Appropriation according to this year's AGM decision:							
Appropriation according to AGM decision					-21,736	21,736	**0**
New share issue	3,814			160,354			**164,168**
Issue of warrants				156			**156**
Issue expenses				-20,383			**-20,383**
Capitalized development costs			15,636		-15,636		**0**
Depreciation on capitalised development costs			-4,258		4,258		**0**
Profit/loss for the period						-35,999	**-35,999**
Equity 31/12/2021	**6,561**	**0**	**40,483**	**249,456**	**-109,208**	**-35,999**	**151,293**
Appropriation according to this year's AGM decision							
Appropriation according to AGM decision					-35,999	35,999	**0**
New share issue		1,294		15,905			**17,200**
Issue of warrants				314			**314**
Issue expenses				-1,140			**-1,140**
Capitalized development costs			24,311		-24,311		**0**
Depreciation on capitalised development costs			-6,145		6,145		**0**
Profit/loss for the period						-58,571	**-58,571**
Equity 31/12/2022	**6,561**	**1,294**	**58,649**	**264,536**	**-163,373**	**-58,571**	**109,096**

CASH FLOW STATEMENT

TSEK	NOTE	2022	2021
Current activities			
Operating income		-57,982	-35,826
Adjustments for items not included in cash flow	*28*	10,505	-7,468
Interest received		11	0
Interest paid		-665	-181
Cash flow from operating activities before change in working capital		**-48,130**	**-28,539**
Change in working capital			
Change in inventories and work in progress		-218	-207
Change in accounts receivable - trade		-902	813
Change in receivables		-3,577	-613
Change in accounts payable - trade		931	1,552
Change in other liabilities		44,025	1,866
Cash flow from change in working capital		**40,259**	**3,411**
Cash flow from current activities		**-7,871**	**-25,128**
Investing activities			
Investments in intangible fixed assets		-27,654	-18,025
Investments in tangible fixed assets		-7,768	-7,764
Investments in financial fixed assets		0	0
Cash flow from investment activities		**-35,422**	**-25,789**
Financing activities			
New share issue		17,515	164,324
Issue expenses		-1,140	-20,383
Borrowings		5,985	1,000
Amortisation of loans		-3,544	-1,055
Cash flow from financing activities		**18,814**	**143,886**
Cash-flow for the year		**-24,478**	**92,969**
Cash and cash equivalents at start of year		105,660	12,691
Cash and cash equivalents at end of year		**81,182**	**105,660**

Notes

NOT 1 ACCOUNTING AND VALUATION PRINCIPLES

GENERAL INFORMATION

The annual accounts were drawn up in accordance with the Swedish Annual Accounts Act and BFNAR [the General Guidelines of the Swedish Accounting Standards Board] 2012:1 Financial statements and consolidated financial statements (K3).

The accounting principles are unchanged compared to previous years.

Foreign currencies

Monetary receivables and liabilities in foreign currency are measured at the rate on the balance sheet date. Transactions in foreign currency are translated using the spot exchange rate on the transaction date.

Income recognition

Services

For services on fixed price or current account, income is recognised that is attributable to a service that has been performed as income in line with the work being carried out and material being supplied or consumed. Evaluation agreements regarding PharmaShell and different drug candidates are mainly based on fixed price for performance of specified services.

Other types of income

Compensation for fixed-term exclusivity to the PharmaShell technology is accrued on a straight-line basis over the estimated exclusivity period.

State aid is recognised at fair value when there is reasonable certainty that the aid will be received and the company will meet all associated conditions. The aid is booked in the period when the costs arise for which the state aid is intended to compensate. State aid for acquisition of intangible assets reduces the asset's reported value.

Fixed assets

Intangible fixed assets

Intangible fixed assets are recognised at acquisition value minus accumulated depreciation and impairment. The capitalisation model is applied to internally generated intangible assets. Depreciation is applied on a straight-line basis over the estimated useful life.

Capitalised expenditure for development work	10 years
Concessions, patents, licences, trademarks	5 years

Tangible fixed assets

Tangible fixed assets are recognised at acquisition value minus depreciation. The acquisition value includes expenses that can be directly attributable to the acquisition of the asset.

When a component in a fixed asset is replaced, any remaining part of the old component is discarded and the new component's acquisition value is capitalized.

Additional expenses that relate to assets which are not divided into components are added to to the acquisition value if it is deemed to give the company future economic benefits, to the extent that the asset's performance increases in relation to the asset's value at the time of acquisition.

Expenditure for running repairs and maintenance is recognised as a cost.

Capital gain and capital loss respectively on disposal of a fixed asset is recognised as Other operating income and Other operating expenses.

Tangible fixed assets are written off systematically over the asset's estimated useful life. When the depreciable amount of the assets is determined, it is taken into consideration, where appropriate, in the residual value of the asset.

Equipment, tools, fixtures and fittings	5 years
Machinery and other technical installations	5 years

Improvements to leased property are depreciated over the term of the duration of the lease.

Impairment of non-financial assets

An impairment test is carried out when there is an indication that the value of an asset has decreased. If the asset has a recoverable amount below the carrying amount, it is written down to the recoverable amount. For assets, which had previously been written down, a test is conducted on each balance sheet date of whether a reversal should be made.

Financial instruments

Financial instruments are recognised in accordance with the rules in i K3 chapter 11, which means that valuation is made based on historical cost. Financial instruments recognised in the balance sheet include securities, other current and non-current receivables, cash at bank, accounts payable and borrowings.The instruments are recognised in the balance sheet when Nanexa AB becomes a party to the contractual conditions for the instrument.

Financial assets are removed from the balance sheet when the right to receive cash flows from the instrument has expired or has been transferred and the company has substantially transferred all risks and rewards associated with ownership.

Financial liabilities are removed from the balance sheet when the obligations have been settled or ceased in some other way.

Accounts receivable and other receivables

Receivables are recognised as current assets with the exception of items falling due more than 12 months after the balance sheet date, which are classified as fixed assets. Receivables are entered at the amount that is expected to be paid after deduction for individually assessed bad debts.

Borrowings and accounts payable

Borrowings and accounts payable are recognised initially at acquisition value after deduction for transaction costs.

Offsetting of financial receivables and financial liabilities
A financial asset and a financial liability are offset and recognised at a net amount in the balance sheet only when a legal right to offset exists and when a settlement at a net amount is considered to take place or when a simultaneous sale of the asset and settlement of the liability is considered to take place.

Leases
All lease contracts where the company is lessee are reported as operational leasing (rental agreements), regardless of whether the contracts are financial or operational. Leasing charges are recognised as an expense on a straight-line basis over the leasing period.

Stocks
Stock is valued at the lower of cost or net realisable value at the closing date.

Payments to employees
Payments to employees means all forms of payments that the company makes to the employees, and include salaries, paid holidays, paid absence, bonuses and pension constibutions. Payments are recognised as an expense and a liability when there is a legal or constructive obligation to make a payment as a result of a past event and the amount can be reliably estimated.

Payments upon termination are made when the company decides to terminate an employment before the normal date of the employment's termination or when an employee accepts an offer of voluntary departure in exchange for such a payment. If the payment does not give the company any future economic benefit, a liability is entered and a cost when the company has a legal or informal obligation to provide such a payment. The payment is valued at the best estimate of the payment that would be required to settle the obligation on the balance sheet date.

Estimates and assessments
Nanexa AB makes estimates and assessments concerning the future. The estimates for accounting purposes that are the result of them, by definition, seldom correspond to the actual results. The estimates and assumptions that involve a significant risk of material adjustments to the carrying amounts of assets and liabilities during the next financial year are addressed in outline below.

Capitalised expenditure for development work
The Company's largest asset amount constitutes the capitalised expenses for development work. These are valued at acquisition value and accrued expenses. In the estimates of the accrued expenses, the management make certain estimates and assessments of the cost of time accrued, which is to some extent a standard rate. The valuation of the capitalised expenditure for development work is thus dependent on these assessments and the value would be affected by a change to them, even though the assessment at the date of submitting the annual accounts is that these are reasonable.

Income taxes
Deferred tax receivables regarding loss carryforwards or other future tax deductions are recognised insofar as it is likely that the deduction can be made against a surplus for future taxation. As of 31-12-2021, the company has an estimated tax deficit of SEK 111,624,651, equivalent to a theoretical deferred tax asset of SEK 22,994,678. This asset has not been capitalised as there is uncertainty about future performance and it is thus deemed uncertain when it will be possible to utilise this deficit.

Otherwise, the assessment is made that there are no estimates and assessment in the end of year accounts which entail a significant risk of material adjustments to the carrying amounts during the coming year.

NOT 2 DISTRIBUTION OF NET SALES

	2022	2021
Net sales per business segment		
Services	2,860	2,374
	2,860	**2,374**
Net sales are broken down by geographic markets:		
Nordic countries	1,013	248
Europe (excluding the Nordic countries)	0	304
North America	1,847	1,822
	2,860	**2,374**

NOT 3 OTHER OPERATING INCOME AND OTHER OPERATING EXPENSES

	2022	2021
Other operating income		
Exchange rate gaint	614	91
Other income	390	59
	1,004	**150**
Other operating expenses		
Exchange rate loss	-294	-228
	-294	**-228**

NOT 4 OPERATIONAL LEASES

Leasing costs for the year in respect of leases amount to SEK 6,036,800.

Future lease payments for non-cancellable leases fall due for payment as follows:

	2022	2021
Within one year	7,119	1,588
In more than one year but within five years	26,069	2,028
	33,188	**3,616**

Operational leasing refers to rented premises and equipment. The leases for offices runs for three years at a time with a mutual period of notice of 3 months. The leases for rented laboratories runs for five years for the initial lease period with a period of notice of 9 months. The contract is subsequently extended by 3 years at a time. Offices and labs leased during 2019 run until further notice, with a notice period of 1 month. There is a supplement to the lease for rented premises for tenant adaptation which runs for eight years.

NOT 5 REMUNERATION TO THE AUDITORS

Auditing work refers to review of the annual accounts and accounting records and the management by the board of directors and the CEO, other work incumbent on the company's auditors and advice or other assistance deriving from observation during that review or performance of that other work.

	2022	2021
Öhrlings PricewaterhouseCoopers AB		
Audit assignments	380	284
Audit work in addition to the audit assignment	0	27
Tax consultancy	0	0
Other services	98	84
	478	**395**

NOT 6 RELATED PARTY TRANSACTIONS

During the period January-December 2022, the company has purchased consultancy services from the board members Otto Skolling through Pharmor AB for SEK 810 (1,235) thousand and Bengt Gustavsson through through Sangus Jazz AB for SEK 2,334 (1,144) thousand. Otto Skolling resigned from the Board in connection with the 2022 Annual General Meeting. The consultancy services are clearly separated from the assignments as a board member of the company, and the fees for the purchased services are considered to be market-based.

See also note 8 for information about remuneration and pension obligations to board members and the CEO.

NOT 7 SALARIES, OTHER REMUNERATION AND SOCIAL INSURANCE EXPENSES

	2022	2021
Average number of employees		
Women	5	4
Men	12	9
	17	**13**
Salaries, remuneration, social insurance expenses and pension costs		
Board of Directors and CEO	4,585	4,213
Other employees	12,403	7,386
	16,989	**11,599**
Social insurance expenses		
Pension expenses for the board of directors and CEO	682	684
Pension expenses for other employees	1,574	1,098
Other social insurance contributions in accordance with law and agreements	2,786	2,075
	5,042	**3,857**
Total salaries, remuneration, social insurance expenses and pension expenses	**22,032**	**15,456**
Gender distribution among senior executives		
Percentage of women on the board	29 %	25 %
Percentage of men on the board	71 %	75 %
Percentage of men among CEO and senior executives	100 %	100 %

NOT 8 REMUNERATION TO SENIOR EXECUTIVES

	BASIC SALARY/ DIRECTOR'S REMUNERATION		PENSION EXPENSES		OTHER REMUNERATION		TOTAL REMUNERATION	
REMUNERATION AND SALARIES	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Chairman Göran Ando	260	229			0	9	260	239
Board member Richard Davis[1]	73							0
Board member Bengt Gustavsson	130	114			2,334	1,153	2,464	1,267
Board member Eva Nilsgård	230	136			10	3	240	139
Board member Urban Paulsson	130	114					130	114
Board member Otto Skolling[2]	57	114			810	1,235	867	1,349
Board member Birgit Stattin Norinder	218	79					218	79
Board member Magnus Westgren	130	114					130	114
Board member Mårten Rooth[2, 3]	619	1,162	173	204	0	155	792	1,521
CEO David Westberg	2,090	1,717	509	480	548	292	3,147	2,489
Other senior executives	4,552	2,704	1,258	679	5,278	3,513	11,088	6,896
Totalt	**8,489**	**6,484**	**1,940**	**1,363**	**8,980**	**6,361**	**19,409**	**14,208**

[1] Eleceted to the board of directors at the 2022 AGM.
[2] Resigend from the board of directors at the 2022 AGM.
[3] Mårten Rooth is an employee of the company and does not receive board fees.

Remuneration to the board of directors
The chairman of the board of directors and board members receive a fee as decided at the annual general meeting. During 2022, the board fees have been paid as salary and reported on the company's employer declarations.

Remuneration to chief executive officer
The pension provision is made with an amount equivalent to 20% of the gross monthly salary. The pension expense includes salary changes exceeding 20%. In the event of termination by the company, a period of notice of six months applies for the CEO, with entitlement to special severance pay equivalent to six months salary.

Other remuneration
Other remuneration to board members refers to consultancy fees and expenses while other remuneration to employees refers to bonus payments.

NOT 9 TAX ON PROFIT/LOSS FOR THE YEAR

	2022		2021	
RECONCILIATION OF TAX	**PER CENT**	**AMOUNT**	**PER CENT**	**AMOUNT**
Reported profit/loss before tax		-58,635		-36,007
Tax at current tax rates	20.60	12,079	20.60	7,418
Tax effect of non-deductible expenses		-18		-225
Non-taxable income		0		0
Tax adjustment depreciation		-64		0
Costs to be deducted but not included in the reported result		235		0
Tax deficit for which no deferred tax asset is reported		-12,168		-7,176
Reported effective tax		**64**		**8**

	2022	2021
Deferred tax		
Change in deferred tax relating to temporary differences	64	8
Closing deferred tax asset	**64**	**8**

The Company reports a loss in connection with income taxation, the company consequently does not currently pay income tax. Accumulated loss carryforward amounts to SEK 171,001,881 kr (SEK 111,624,651) and has no time restriction. No deferred tax assets attributable to loss deductions have been reported during the period.

NOT 10 CAPITALIZED EXPENSES FOR DEVELOPMENT AND SIMILAR WORK

	31/12/2022	31/12/2021
Opening acquisition values	55,725	40,089
Acquisitions	24,311	15,636
State aid	0	0
Closing accumulated acquisition values	**80,036**	**55,725**
Opening depreciation	-14,555	-9,990
Depreciation for the year	-6,393	-4,565
Closing accumulated depreciation	-20,948	-14,555
Closing carrying amount	**59,088**	**41,170**

NOT 11 PATENTS

	31/12/2022	31/12/2021
Opening acquisition values	9,030	6,642
Acquisitions	3,343	2,388
Closing accumulated acquisition values	12,373	9,030
Opening depreciation	-4,492	-3,199
Depreciation for the year	-1,721	-1,293
Closing accumulated depreciation	-6,213	-4,492
Closing carrying amount	**6,160**	**4,538**

NOT 12 IMPROVEMENT TO LEASED PROPERTY

	31/12/2022	31/12/2021
Opening acquisition values	274	274
Reclassifications	5,787	0
Closing accumulated acquisition values	6,061	274
Opening depreciation	-199	-144
Depreciation for the year	-468	-55
Closing accumulated depreciation	-667	-199
Closing carrying amount	**5,394**	**75**

NOT 13 MACHINERY AND OTHER TECHNICAL INSTALLATIONS

	31/12/2022	31/12/2021
Opening acquisition values	0	0
Acquisitions	7,802	0
Closing accumulated acquisition values	9,064	0
Opening depreciation	0	0
Depreciation for the year	-600	0
Closing accumulated depreciation	-1,862	0
Closing carrying amount	**7,202**	**0**

NOT 14 EQUIPMENT AND TOOLS

	31/12/2022	31/12/2021
Opening acquisition values	9,751	8,902
Acquisitions	1,059	849
Closing accumulated acquisition values	10,810	9,751
Opening depreciation	-6,992	-5,437
Depreciation for the year	-1,321	-1,555
Closing accumulated depreciation	-8,313	-6,992
Closing carrying amount	**2,497**	**2,759**

NOT 15 CONSTRUCTION IN PROGRESS AND ADVANCES REGARDING TANGIBLE ASSETS

	31/12/2022	31/12/2021
Opening acquisition values	6,915	0
Acquisitions	4,113	1,674
Reclassifications	-5,787	0
Advances on equipment and tools	- 5,209	5,241
Closing accumulated acquisition values	33	6,915
Closing carrying amount	**33**	**6,915**

NOT 16 OTHER SECURITIES HELD AS NON-CURRENT ASSETS

	31/12/2022	31/12/2021
Opening acquisition values	1	0
Acquisitions	0	1
Closing accumulated acquisition values	1	1
Closing carrying amount	**1**	**1**

NOT 17 DEFERRED TAX ON TEMPORARY DIFFERENCES

31/12/2022

TEMPORARY DIFFERENCES	DEFERRED TAX ASSETS	NET
Depreciation on improvements to leased property	95	95
	95	**95**

31/12/2021

TEMPORARY DIFFERENCES	DEFERRED TAX ASSETS	NET
Depreciation on improvements to leased property	31	31
	31	**31**

CHANGE IN DEFERRED TAX	AMOUNT AT BEGINING OF YEAR	REPORTED IN INCOME STATEMENT	AMOUNT AT END OF YEAR
Depreciation on improvements to leased property	31	64	95
	31	**64**	**95**

NOT 18 OTHER NON-CURRENT RECEIVABLES

	31/12/2022	31/12/2021
Opening acquisition values	31	31
Outgoing claims	-30	0
Closing accumulated acquisition values	1	31
Closing carrying amount	**1**	**31**

NOT 19 OTHER CURRENT RECEIVABLES

	31/12/2022	31/12/2021
Tax asset relating to current tax	0	0
Other items	4,288	1,792
	4,288	**1,792**

NOT 20 PREPAID EXPENSES AND ACCRUED INCOME

	31/12/2022	31/12/2021
Prepaid rental expenses	1,770	430
Prepaid lease expenses	64	41
Prepaid insurance premiums	56	51
Other prepaid expenses	673	528
Accrued income	21	423
	2,583	**1,473**

NOT 21 CASH AND CASH EQUIVALENTS

	31/12/2022	31/12/2021
Cash and cash equivalent		
Cash funds	0	1
Bank balances	81,182	105,659
	81,182	**105,660**

NOT 22 NUMBER OF SHARES AND QUOTA VALUE

The share capital consists of 50,695,626 (50,695,626) shares with a quota value of SEK 0.13 (0.13).

NOT 23 APPROPRIATION OF PROFITS OR LOSS

	31/12/2022
Proposal for the appropriation of profits	
The Board of Directors proposes that the available profits be appropriated:	
free share premium reserve	264,536
retained earnings	-163,372
loss for the year	-58,571
	42,592
be appropriated so that	
carried forward to new accounts	42,592
	42,592

NOT 24 LONG-TERM LIABILITIES

As of 31 December 2022, the company had no non-current liabilities that fall due more than five years after the closing date.

NOT 25 LIABILITIES RECOGNISED IN MULTIPLE ITEMS

The company's bank loan of SEK 6,271,581 is recognised in the following balance sheet items.

The company's accrued revenues of SEK 40,773,530 relating to the exclusivity agreement with Novo Nordisk A/S are recognized under the following items in the balance sheet.

	31/12/2022	31/12/2021
Non-current liabilities		
Liabilities which fall due for payment within one–five years after the closing date	4,068	2,573
Income regarding Novo Nordisk A/S in one-five years from balance sheet date	18,220	0
	22,288	**2,573**

	31/12/2022	31/12/2021
Current liabilities		
Liabilities which fall due for payment:		
within one year after the closing date	2,204	1,259
within one year from balance sheet date	22,553	0
	24,757	**1,259**

NOT 26 OVERDRAFT FACILITY

	31/12/2022	31/12/2021
The amount of the bank overdraft facility granted amounts to	300	300
Utilised credit amounts to	0	0

NOT 27 ACCRUED EXPENSES AND PREPAID INCOME

	31/12/2022	31/12/2021
Accrued salaries	2,924	1,266
Accrued holiday pay	1,546	1,287
Accrued social insurance expenses	1,033	795
Accrued audit and closing expenses	230	230
Accrued expenses – invoices not received	2,420	1,510
Prepaid income	22,553	0
	30,706	**5,088**

NOT 28 ADJUSTMENT FOR ITEMS NOT INCLUDED IN THE CASH FLOW

	31/12/2022	31/12/2021
Depreciation	10,504	7,468
	10,504	**7,468**

NOT 29 PLEDGED ASSETS

	31/12/2022	31/12/2021
For the company's own account		
Corporate mortgage	7,015	7,015
Assets with retention of title	6,686	0
	13,701	**7,015**

NOT 30 CONTINGENT LIABILITIES

In the opinion of the Board of Directors, the company has no contingent liabilities.

NOT 31 SIGNIFICANT EVENTS AFTER THE END OF THE FINANCIAL YEAR

➜ Nanexa announced positive outcome in the first preclinical study with NEX-22. In a one-month study in rats, single doses of two different PharmaShell® formulations were studied in different doses. The results show a controlled release of liraglutide, with plasma exposure over 28 days for NEX-22, compared to around two days for a formulation with liraglutide without the PharmaShell coating.

Uppsala 03/05/2023

Göran Ando
Chairman

Richard Davis | Bengt Gustavsson | Eva Nilsagård

Urban Paulsson | Birgit Stattin Norinder | Magnus Westgren

David Westberg
Chief Executive Officer

Our auditor report was submitted on 03/05/2023

Niclas Bergenmo
Chartered accountant
Principal auditor

Corporate Governance

Nanexa AB is a Swedish public limited company, whose shares have been traded on Nasdaq First North Growth Market since 29 May 2020, and prior to that on Spotlight Stockmarket, Stockholm, since 2015. Since the listing on Spotlight, the company's corporate governance has been based mainly on Swedish legislation, the company's articles of association, internal rules and regulations, good stock market practices, and where it is deemed relevant for the company, the Swedish code of corporate governance (the "Code"). Nanexa is not required to comply with the Code as Nasdaq First North is not a regulated market.

CORPORATE GOVERNANCE WITHIN NANEXA

The purpose of corporate governance within Nanexa is to create a clear division of roles and responsibilities between owners, the board and the company management. Governance, management and control of Nanexa is divided between the shareholders' meeting, the board and the CEO.

SHARES AND SHAREHOLDERS

Nanexa's share is listed on the Nasdaq First North Growth Market. As of 31 December 2021, Nanexa had 3,107 shareholders and the share capital amounted to SEK 6,561,096.74, distributed over a total of 50,695,626 shares. The quotient value of the shares thus amounted to approximately SEK 0.1294. A directed issue of 10,000,000 shares to Novo Nordisk was carried out at end of 2022, which was registered on January 2, 2023. All shares are ordinary shares and are equally entitled to the company's profits, and each share entitles to one vote at the AGM. At the annual general meeting, each voting member may vote for the full number of shares owned or represented, without restriction in the number of votes.

SHAREHOLDERS' MEETING

In accordance with the Companies Act, the shareholders' meeting is the company's highest decision-making body. The shareholders exercise their voting rights at the shareholders' meeting. The AGM must be held within six months from the end of each financial year. In addition to the AGM, an extraordinary shareholders' meeting can be convened. The company's shareholders' meetings are held in Uppsala, where the company has its registered office.

Notice of the annual general meeting and notice of an extraordinary general meeting, where questions about amendments to the Articles of Association are dealt with, must be issued not earlier than six weeks and not later than four weeks prior to the meeting. Notice of other extraordinary general meetings must be issued not earlier than six weeks and not later than two weeks prior to the general meeting. Notice of a general meeting shall be announced in the Swedish Official Gazette and on the company's website. It shall be advertised in Dagens Industri that notice has been issued.

Shareholders who wish to attend the shareholders' meetings must be included in such a transcript or other presentation of the entire share register as referred to in Chapter 7, section 28(3) of the Swedish Companies Act (2005:511), regarding the circumstances five working days before the meeting, and must also confirm their participation to the company no later than the time and date specified in the notice of the meeting. This latter day may not be a Sunday, public holiday, Saturday, Midsummer Eve, Christmas Eve or New Year's Eve and shall not occur earlier than on the fifth weekday before the general meeting.

Shareholders may bring one or two assistants to the shareholders' meeting, on condition that the shareholder has notified this in accordance with the previous paragraph.

ANNUAL GENERAL MEETING 2022

Nanexa's 2021 Annual General Meeting was held on 9 June 2022. In addition to the usual AGM issues, the AGM made the following decisions:

- to re-elect Göran Ando, Bengt Gustavsson, Eva Nilsagård, Urban Paulsson, Birgit Stattin Norinder and Magnus Westgren and to newly elect Richard Davis as board members. Göran Ando was re-elected as chairman of the board.
- that remuneration shall be paid with SEK 260,000 for the chairman, with SEK 230,000 to the chairman of the audit committee, with SEK 180,000 to other members of the audit committee, and with SEK 130,000 to other board members not employed by the company. It was further decided that the auditor's fees should be paid in accordance with approved invoices.
- to appoint as auditors Öhrlings PricewaterhouseCoopers AB, who have announced that Niclas Bergenmo will continue as principal auditor.
- to establish a nomination committee ahead of the Annual General Meeting 2023 and also to set an instruction for the nomination committee pursuant to the proposal adopted in the notice of the General Meeting.
- to adopt the board's proposal on authorizations for the board to decide on rights issue and directed share issue.
- to establish a warrant-based incentive scheme that includes all employees in the company, as proposed by the board of directors. A total of 983,000 warrants of series TO 6 were subscribed after the meeting, corresponding to a maximum dilution of 1.6 percent calculated on the number of outstanding shares as of the date for this annual report.

ANNUAL GENERAL MEETING 2023

The AGM will take place on Friday 9 June 2023 in Uppsala. Notice will take place through a press release and an announcement in the Swedish Official Gazette as well as through publication on Nanexa's website. It will also be advertised in Dagens Industri that notice has been issued.

NOMINATION COMMITTEE

Nanexa's 2022 AGM decided, in accordance with the proposal, to establish a nomination committee to be appointed according to instruction for the 2023 AGM. The nomination committee ahead of the 2023 AGM has comprised

- Philip Norin
- Hanno Lindroth, appointed by Mårten Rooth
- Christian Östberg, appointed by Anders Johansson
- Göran Ando, chairman of the board of directors, co-opted.

Christian Östberg was appointed as chairman of the nomination committee.

BOARD OF DIRECTORS

The board members are normally elected by the AGM for the period until the end of the next AGM. According to company's articles of association, the board shall consist of 3–10 members with no more than five deputies. Seven board members were elected at the 2022 AGM. The chairman is elected by the AGM and has special responsibility for the management of the board's work and for ensuring that the board's work is well organized and implemented in an effective manner.

According to the Code, a majority of the board members elected by the shareholders' meeting shall be independent in relation to the company and the company management. Six of the seven board members are considered to be independent in relation to the company and its management, and all members are regarded as independent in relation to the company's major shareholders. Nanexa thereby meets the Code's requirement for independence.

At the end of the financial year, Nanexa's board consisted of seven members: chairman Göran Ando and the ordinary members Bengt Gustavsson, Richard Davis, Eva Nilsagård, Urban Paulsson, Birgit Stattin Norinder och Magnus Westgren.

		ATTENDANCE		INDEPENDENCE	
BOARD OF DIRECTORS	ELECTED	BOARD MEETINGS	AUDIT COMMITTEE	IN RELATION TO THE COMPANY	IN RELATION TO MAJOR SHARE-HOLDERS
Göran Ando	2020	13 (13)	6 (7)	Yes	Yes
Bengt Gustavsson	2017	13 (13)		No	Yes
Eva Nilsagård	2021	12 (13)	7 (7)	Yes	Yes
Urban Paulsson	2019	12 (13)		Yes	Yes
Mårten Rooth[1]	2020	4 (4)		No	Yes
Otto Skolling[1]	2019	4 (4)		No	Yes
Birgit Stattin Norinder	2021	12 (13)	7 (7)	Yes	Yes
Magnus Westgren	2015	9 (13)		Yes	Yes
Richard Davis[2]	2022	9 (9)		Yes	Yes

[1] Resigned from the board of directors at the 2022 AGM.
[2] Elected to the board of directors by the 2022 AGM.

The board's responsibility and work

The board is the company's highest decision-making body after the AGM. According to the Companies Act, the board is responsible for the company's management and organization, which means that the board is responsible for, among other things, setting goals and strategies, ensuring procedures and systems for evaluating established goals, continuously assessing the company's results and financial position, and evaluating the operational management.
The board is also responsible for ensuring that the annual accounts and interim reports are prepared in a timely manner. The board also appoints the company's CEO.

The board follows written rules of procedure that are reviewed annually and is laid down at the inaugural board meeting each year. The rules of procedure regulate, among other things, the board's practice, functions and the distribution of work between the members of the board and the CEO. In conjunction with the inaugural board meeting, the board also determines the instructions for the CEO. The board meets in accordance with a schedule determined annually. In addition to these board meetings, additional board meetings can be convened to deal with issues that cannot be dealt with at an ordinary board meeting. In addition to the board meetings, the chairman and the CEO have an ongoing dialogue regarding the management of the company.

The work of the board in 2022

The board held thirteen minuted meetings in 2022, six of which were ordinary board meetings and seven were extra board meetings with one or more specific decision items, where three were held per capsulam. All meetings during the year that were not held per capsulam have followed an approved agenda, which was provided to the members prior to the board meetings. The CEO and CFO participate in the majority of the board meetings. A review of the current business situation, the company's earnings and financial position and prospects for the remainder of the year are reviewed at each ordinary board meeting. The work of the Board during the year has largely focused on:

- Development of the project portfolio
- Collaborative agreements with Novo Nordisk, other partners and Applied Materials
- Strategy and business analysis

- Financial development and raising of capital
- Interim reports, year-end report and annual report
- Proposal for the introduction of incentive schemes for management and other employees

The remuneration to Nanexa's board members is decided by the AGM. The AGM of 9 June 2022 decided that board fees shall be paid with SEK 260,000 for the chairman, with SEK 230,000 to the chairman of the audit committee, with SEK 180,000 to other members of the audit committee, and with and SEK 130,000 to each of the other board members who are not employed by the company.

AUDIT COMMITTEE

After the 2022 AGM an audit committee was appointed consisting of Eva Nilsagård (chair), Göran Ando and Birgit Stattin Norinder. The audit committee assists the board in monitoring the company's accounts and financial reporting processes, which, without affecting the board of directors' responsibilities and duties in general, shall include monitoring the company's financial reporting, monitoring the efficacy of the company's internal controls and risk management, staying informed of the auditing of the annual report, reviewing and monitoring the audit's impartiality and independence and thus specifically observing whether the auditor provides the company with services other than auditing services, as well as contributing to the nomination committee in preparation of proposals for the General Meeting's decision on choice of auditor.

The board of directors appoints the members of the committee each year at the inaugural board meeting or when a committee member has to be replaced. At the same meeting, the board of directors also establishes an instruction for the committee's work. The audit committee keeps minutes of its meetings that are made available for the board of directors.

The audit committee has held seven meetings during 2022 in connection with interim reports and ordinary board meetings.

CEO AND OTHER SENIOR EXECUTIVES

The CEO is subordinate to the board and is responsible for the company's day-to-day management and day-to-day operations. The division of duties between the board and the CEO is specified in the rules of procedure for the board and the instructions for the CEO. The CEO is also responsible for preparing reports and compiling information from the management prior to the board meetings and presenting the material at the board meetings. According to the instructions for financial reporting, the CEO is responsible for financial reporting in the company and must therefore ensure that the board receives sufficient information to enable the board to continuously evaluate the company's financial position.

The CEO shall keep the board continuously informed about the development of the company's operations, the development of the turnover, the company's earnings and financial position, liquidity and credit situation, important business events and any other event, situation or circumstance that can be assumed to be of material importance to the company's shareholders.

Nanexa's management team currently consists of ten people and, besides the CEO, comprises the company's Chief Financial Officer, Head of R&D Atomic Layer Deposition, Head of R&D Pharma, Head of Intellectual Property, Senior Project Leader, Head of Quality Assurance (consultant), Medical Director (consultant), Head of Regulatory affairs (consultant), Head of Strategic market analysis (consultant) and Head of Business Development (consultant). The CEO and other senior executives are presented in more detail elsewhere in the annual report and on the company's website.

Remuneration to senior executives

The board decides on the CEO's remuneration. Terms and conditions for senior executives must be based on market conditions and consist of a balanced mix of fixed salary, variable remuneration, pension benefits and terms of termination. Salaries and other remuneration for the 2022 financial year were paid to the CEO and other senior executives, as stated in Note 8.

EXTERNAL AUDIT

The auditor shall review the company's annual report and the accounts, as well as the administration of the board and the CEO. After each financial year, the auditor shall submit an audit report to the AGM. According to the company's articles of association, the company shall have one or two auditors with or without deputy auditors. The company's auditor is Öhrlings PricewaterhouseCoopers AB, with Niclas Bergenmo as principal auditor.

In 2022, the total fee paid to the company's auditor amounted to SEK 478,000.

INTERNAL CONTROL

According to the Swedish Companies Act and the Annual Accounts Act, the board is responsible for internal control. The purpose of the internal control is to achieve effective and efficient operations, to ensure reliable financial reporting and information about the business and to comply with applicable laws, regulations, policies and guidelines.

Internal control of financial reporting

The company has designed procedures and activities to follow up the financial reporting and to ensure that any errors are detected and rectified. These activities include follow-up and comparison of earnings performance or items, account reconciliations and balance sheet specifications, as well as approval of bank transactions and collaboration agreements, proxy and attestation instructions, and accounting and valuation principles. The company's CFO is responsible for analysing and following up the company's financial reporting and results. Authorizations to financial systems are limited according to authorizations, responsibilities and roles.

Information and communication

The company also has internal control functions for information and communication that are intended to ensure that correct financial and other company information is communicated to employees and other stakeholders. An Information Policy has been established in this connection.

The company's internal instructions and policies are available to all employees and provide detailed information on current procedures in all parts of the company and describe the control functions and how they are implemented.

MONITORING

The CEO ensures that the board receives regular reports on the development of the company's operations, including the development of the company's earnings and financial position and information about important events, such as research and development results and important agreements and contracts. The CEO reports on these issues to the board. The board considers all interim reports and annual reports in advance. kontrollfunktionerna och hur de implementeras.

BOARD OF DIRECTORS

According to Nanexa's articles of association, the board shall consist of 3–10 members with no more than five deputies. Nanexa's board currently consists of seven board members.

The Company's registered office is situated in the municipality of Uppsala. The board members are elected for the period until the end of the 2022 AGM.

1. Göran Ando

Chairman of the Board since 2020

Born: 1949

Education: Bachelor's degree from Uppsala University and Doctorate in Medicine from Linköping University.

Experience: Göran Ando has over 30 years' experience within the pharmaceutical industry, where he began his career in 1978 as medical director of Pfizer AB and continued as director of clinical research with Pfizer International in the USA. Dr. Ando then became 'VP, Medical and Scientific Affairs' at Bristol-Myers and returned to Sweden as chair of the Astra Research Centre. Between 1989 and 1995, he held a number of senior positions at Glaxo, including research and development manager for Glaxo Group Research.

President and Deputy CEO and moved to the USA in 1997 to lead research and development with additional responsibility for manufacturing, information technology, business development and mergers and acquisitions. During his nine-year tenure as Head of Research and Development at Pharmacia/Pharmacia & Upjohn, 17 new drugs were approved by the U.S. Food & Drug Administration (FDA) prior to Pfizer's acquisition of Pharmacia.

Dr. Ando was then named CEO of Celltech Group PLC in the UK, one of the most successful European biotech companies, until it was acquired by UCB Pharma in 2005.

Göran Ando was elected in 2005 to the board of Novo Nordisk A/S where he became deputy chairman in 2006 and chairman between 2013 and 2018.

Other positions: Göran Ando is chairman of the board of yepoint Pharmaceuticals (USA), Tessa Therapeutics (Singapore) and Nouscom AG (Switzerland), as well as member of the board of Selecta Biosciences (USA).

Holdings in Nanexa: 40,000 shares and 300,000 warrants of series TO 4 (2020/2023:2).

2. Richard Davis

Board member since 2022

Born: 1973

Education: Doctor of Philosophy (PhD) in Pharmacology and Bachelor of Science in Biochemical Pharmacology from University of Leicester, UK.

Experience: Richard has many years of experience as an investor and executive in pharmaceutical development companies. Richard previous experience i.a. from positions as Global Oncology Venture and Transaction Lead at Johnson and Johnson, CEO of European clinical stage biotechnology company Trino Therapeutics, and Investment Manager and responsible for direct healthcare investments and venture capital funds at Wellcome Trust. During his time at Wellcome Trust, Richard was on the board of a number of biotech companies and worked closely with management teams on strategy, financing and exits via M&A and public listings.

Other positions: Chief Business and Operating Officer at Swiss oncology company Nouscom AG.

Holdings in Nanexa: 0

3. Bengt Gustavsson

Board member since 2017

Born: 1962

Education: BSc in Pharmacy, Doctor of Medical Science (DMSc) Uppsala University. EUCOR / ECPM degree in Pharmaceutical Medicine from EUCOR universities in Basel, Freiburg and Strasbourg.

Experience: Bengt Gustavsson has many years' experience from the pharmaceutical industry in Sweden and the Nordic countries, and has been Nordic Medical Director at Novartis Oncology, Nordic Clinical Research Director at Sanofi-Aventis, Nordic Medical Head of Celgene and Global Head of Medical Affairs på Oncopeptides. Bengt Gustavsson is a former reserve officer in the Swedish Air Force.

Other positions: Medical Director at Nanexa since 2021. Owner and CEO of Sangus Jazz AB.

Holdings in Nanexa: 32,000 shares and 106,000 warrants of series TO 4 (2020/2023: 2).

4. Eva Nilsagård

Board member since 2021

Born: 1964

Education: BA in Business Administration as well as Executive MBA from the School of Business, Economics and Law at the University of Gothenburg.

Experience: Eva Nilsagård has over 30 years' experience of senior positions, primarily within the automotive and medtech/biotech industries, including CFO for Vitrolife, Plastal Industri and OptiGroup, Senior VP Strategy & Business development at Volvo Group Sales & Marketing EMEA, as well as senior posts within AstraZeneca and AB Volvo. CEO of Nilsagård consulting AB, where she held several interim posts as CEO and CFO, as well as board assignments in listed, private and state-owned companies where she contributed expertise including within audit committee work and corporate governance. During the last ten years, Eva has acted as mentor to several young female managers.

Other positions: Board member of Addlife AB, Bufab AB (publ), Hansa Biopharma AB, Nimbus Group AB, Irras AB, Xbrane Biopharma AB, Ernströmgruppen AB, eEducation Albert AB and AB Svensk Exportkredit, chair of the board of Spermosens AB and Diagonal Bio AB, as well as CEO and board member of Nilsagård Consulting AB.

Holdings in Nanexa: 60,000 shares, via company.

5. Urban Paulsson

Board member since 2019

Born: 1963

Education: Law degree, Lund University.

Experience: Urban Paulsson has been working for more than 25 years within the pharmaceutical industry with a range of legal issues and in various roles, including as General Counsel and Vice President Corporate Development at Camurus AB and General Counsel at Vitrolife AB. He has previously worked as a lawyer and partner at the Bird&Bird and Nordia law firms. In recent years, Urban has founded four biotechnology companies – Cinclus Pharma, Gesynta Pharma, Cormorant Pharmaceuticals and Buzzard Pharmaceuticals. Cormorant was successfully sold to BMS in 2016.

Other positions: Chairman of the board of Evident Life AB, Gesynta Pharma AB, Buzzard Pharmaceuticals AB, MetaCurUm Biotech AB, Cavis Technologies AB, Brf Bellman AB, Cordivest B and board member of Nylof Holding AB. Urban is active as an investor within life science.

Holdings in Nanexa: 60,000 shares and 106,000 warrants of series TO 4 (2020/2023:2) via company.

6. Birgit Stattin Norinder

Board member since 2021

Born: 1948

Education: Master of Pharmaceutical Science and BA in art history from Uppsala University.

Experience: Birgit Stattin Norinder has extensive experience from pharma and biotech companies in Sweden, the US and the UK. She has been responsible for several research and development departments, which has resulted in a number of new and approved drugs. Birgit has held roles including CEO and Chair of Prolifix Ltd, Senior Vice President Worldwide Development at Pharmacia & Upjohn and Director International Regulatory Affairs at Glaxo Group Research Ltd. Birgit has also held several positions as board member and chair of the board for European biotechnology companies.

Other positions: Board member of AddLife AB, Vivesto AB and Jettesta AB.

Holdings in Nanexa: 20,000 shares.

7. Magnus Westgren

Board member since 2015

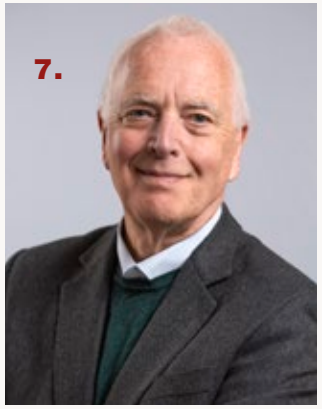
Born: 1950

Education: Bachelor of medicine and PhD in medicine at Lund University. Senior lecturer at Karolinska Institutet.

Experience: Magnus Westgren has previously been Head of Obstetrics at Karolinska University Hospital and has been a Professor at Karolinska Institute since 2006. Postdoctoral work 1984–1985 at the Obstetrics and Gynaecology Department at the Women's Hospital University of Southern California. Magnus has also been scientific consultant and advisor for the Swedish National Board of Health and Welfare, supervisor for 30 doctoral students, and has published more than 300 scientific reports. He is a Fellow of the Royal College of Obstetricians and Gynaecologists.

Other positions: Chairman of the board of MedSciNet AB, board member of BoostPharma ApS and Westknow AB and senior professor at the Karolinska Institute.

Holdings in Nanexa: 253,464 shares, private and via company, and 106,000 warrants of series TO 4 (2020/2023:2). Relatives' holdings: 700 shares.



MANAGEMENT

1. David Westberg

CEO and employee since 2015

Born: 1960

Education: Master of Engineering in Chemistry at the Royal Institute of Technology.

Experience: David Westberg has over 25 years' experience of the pharmaceutical industry, including from Pharmacia, Pharmacia-UpJohn and Orexo. David's positions include global project manager for development projects and Head of the Product Development Department at Pharmacia & Upjohn. David has also been responsible for and, as chief project manager, run two of Orexo's drug projects (Edluar and Zubsolv) from early development phase, through formulation development and clinical development to registration for market approval at the FDA in the US.

Other assignments: David Westberg has no other assignments.

Holdings in Nanexa: 118,176 shares, 155,000 warrants of series TO 3 (2020/2023:1), 100,000 warrants of series TO 5 (2021/2024:1) and 150,000 warrants of series TO 6 (2022/2025).

2. Björn Svanström

CFO since 2019, employed since 2020

Born: 1971

Education: MSc. in Business Administration at the Stockholm School of Economics.

Experience: Björn Svanström has long experience within economics, finance and the capital market from roles including within corporate finance at SEB Enskilda, group controller at Teleca AB, CEO of Praktikertjänst's investment company, Praktikerinvest and in recent years as CFO for development companies within life science, including Dilafor AB.

Other assignments: CEO and board member of Novandi Strategy AB.

Holdings in Nanexa: 10,000 shares, 75,000 warrants of series TO 3 (2020/2023:1), 50,000 warrants of series TO 5 (2021/2024:1) and 125,000 warrants of series TO 6 (2022/2025).

3. Mårten Rooth

Head of R&D Atomic Layer Deposition and CTO, co-founder and employee since 2009

Born: 1977

Education: PhD in Materials Chemistry from Uppsala University, awarded in 2008.

Experience: Mårten Rooth is co-founder of Nanexa. He has many years' experience of Atomic Layer Deposition (ALD), with a number of scientific articles published in the field.

Other assignments: Board member of Velotek Sweden AB.

Holdings in Nanexa: 432,000 shares, 50,000 warrants of series TO 3 (2020/2023:1), 50,000 warrants of series TO 5 (2021/2024:1) and 125,000 warrants of series TO 6 (2022/2025).

4. Joel Hellrup

Head of pharmaceutical R&D, employed since 2016

Born: 1983

Education: Pharmacist degree and PhD in pharmaceutical science at Uppsala University.

Experience: Joel Hellrup received his PhD in pharmaceutical science in 2016 from Uppsala University and started as a formulator at Nanexa in the same year. Joel has had a key role in the development of PharmaShell® and has several scientific articles published within the field.

Other assignments: None.

Holdings in Nanexa: 7,000 shares,, 35,000 warrants of series TO 3 (2020/2023:1), 20,000 twarrants of series TO 5 (2021/2024:1) and 125,000 warrants of series TO 6 (2022/2025).

5. Kristine Bäck

Senior project leader, employed since 2022

Born: 1978

Education: Bachelor of Pharmaceutical Science at Södertörn/ Uppsala University.

Experience: Kristine Bäck has more than 20 years' experience within the pharmaceuticals industry and development projects with formulation development, preclinical and clinical studies. Kristine has long experience from roles as global project manager for clinical programmes with studies from Phase 1 to market registration and has worked at AstraZeneca, Sobi and Oncopeptides, among other companies.

Other assignments: None.

Holdings in Nanexa: 15,000 shares och 125,000 warrants of series TO 6 (2022/2025).

6. Anders Johansson

Head of Intellectual Property, co-founder and employee since 2009

Born: 1976

Education: Master's degree and PhD in chemistry at Uppsala University.

Experience: Anders Johansson is co-founder of Nanexa. He has previous experience as a patent consultant at the patent office, Bjerkéns KB.

Other assignments: Co-owner, founder and board member of Bara Riktig Mat and Kemi Förlag AB.

Holdings in Nanexa: 410,250 shares, 50,000 warrants of series TO 3 (2020/2023:1), 50,000 warrants of series TO 5 (2021/2024:1) och 125,000 warrants of series TO 6 (2022/2025).

7. Bengt Gustavsson

Medical Director, since 2021

See more detailed description under Board of Directors.

8. Marie Gårdmark

Director Regulatory Affairs, since June 2020

Born: 1965

Education: PhD, M Sci Pharm.

Experience: Dr. Gårdmark has long and wide-ranging experience from product development of drugs. She has more than 10 years' experience from various leading roles within the Medical Products Agency, including as Director of Licensing where she also worked on the development of guidelines and legislative issues. Besides this, Dr. Gårdmark has more than 10 years' experience from senior roles in both Big Pharma and small pharmaceutical companies, primarily within the field of strategic regulatory issues and advisory meetings with the FDA and EMA. Her principal focus has been within preclinical and clinical development.

Other assignments: CEO RegSmart Life Science AB.

Holdings in Nanexa: 0

9. Otto Skolling

Director Business Development, since 2016

Born: 1961

Education: MSc in Engineering, KTH Royal Institute of Technology Stockholm.

Experience: Otto Skolling has worked for more than 25 years in the pharmaceutical industry, primarily in business development and financing, but also product development. Among other roles, Otto has worked at PharmaciaUpJohn (Project Director), Novozymes (Director Product Pipeline, Business Development & Director M&S Biopharmaceutical ingredients), Karolinska Development (Vice President Business Development / Portfolio Management). Otto also has extensive experience from board work in start-up companies in the pharmaceutical industry.

Other positions: Responsible for Business Development at Nanexa since 2015, Chief Business Officer at Asarina Pharma AB, Board member in Athera Biotechnologies AB, Lipidor AB and Bactaviva AB, CEO and Board member in Isles of Wines AB and CEO and chairman of Pharmor AB.

Holdings in Nanexa: 9,600 shares and 106,000 warrants of series TO 4 (2020/2023: 2), via companies.

10. Sven Undeland

Director Strategic market analysis, since 2016

Born: 1961

Education: Master iin Science (M.Sc) in Chemical and Administrative Sciences, University of Karlstad.

Experience: Sven has broad commercial and clinical experience from the international pharmaceutical industry, based on senior positions within Pharmacia, AstraZeneca and Orexo. Sven has mainly worked with strategic commercial support in life science projects. In addition, Sven has several years' experience from business development and has successfully negotiated and completed several licence agreements.

Other assignments: CEO and chairman of FHC Undeland AB and board member of Red Hot Diagnostics AB, working as consultant.

Holdings in Nanexa: 0

11. Mikael Asp

Head of QA and expert sakkunnig, since June 2020

Born: 1962

Education: Master of Chemical Engineering from the Royal Institute of Technology.

Experience: Mikael Asp has more than 30 years' experience of development, quality assurance and manufacture of drugs. Mikael has worked at Pharmacia, Fresenius-Kabi, Pfizer, Oasmia etc. in roles including production manager, quality manager, CTO and CEO.

Other assignments: Board member of ATI Pharmaqua AB.

Holdings in Nanexa: 3,624 aktier.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ADVISORY BOARDS AND CONSULTED EXPERTS

Nanexa's scientific councils (so-called Advisory Boards) and consulted experts consist of so-called "Key Opinion Leaders" (KOLs) Leaders (KOL) in each disease area. For NEX-18 and NEX-20, scientific councils have been formally established and it is the company's intention that this will also happen for NEX-22, where individual experts have so far been consulted separately.

The function of the councils and experts towards Nanexa is the same regardless of the project and is to provide qualified scientific advice regarding the indication in question (diabetes type 2 diabetes, multiple myeloma, MDS). This means scientific interpretation of preclinical as well as clinical data from the company's research studies, discussion and advice on the design of clinical development programs, advice on the medical need for new treatments within each indication, advice on the current project's "Target Product Profile", advice and information on the direction of clinical drug development in the respective indication, own clinical experience, advice on which congresses can be good to target for different publications, advice on relevant clinical and preclinical research groups to collaborate with, advice on which patient groups that might be realistic to study in clinical trials; and an understanding of the healthcare system in the countries the respective KOL comes from or operates in.

Advisory board NEX-18

Prof. Robert Peter Gale, MD, PhD
Centre for Haematology Research, Department of Immunology and Inflammation, Imperial College London, London, Great Britain.

Prof. Axel Glasmacher, MD, PhD
AG Life Science Consulting GmbH & Co. KG, Bonn, Germany (Previously Bonn University and Celgene).

Prof. Kirsten Grønbæk, MD, PhD
Department of Haematology, Centre for Cancer and Organ Diseases, Rigshospitalet, Rigshospitalet, Copenhagen University Hospital, Copenhagen, Denmark.

Prof. Uwe Platzbecker, MD, PhD
Department of Hematology, Cellular Therapy and Hemostaseology, Leipzig University Hospital, Leipzig, Germany.

Dr. Magnus Tobiasson, MD, PhD
Department of Hematologi, Karolinska University Hospital, Stockholm, Sweden.

Dr. José Miguel Torregrosa Diaz, MD
Hematology-Oncology Unit, University Hospital of Poitiers, Poitiers, France.

Advisory board NEX-20

Prof. Axel Glasmacher, MD, PhD
AG Life Science Consulting GmbH & Co. KG, Bonn, Germany (Previously Bonn University and Celgene, as VP Medical Affairs and Head of Global Clinical R&D Hematology-Oncology).

Prof. Xavier Leleu, MD, PhD
University Hospital of Poitiers, Poitiers, France.

Prof. Marie von Lilienfeld-Toal, mMD, PhD
University Hospital of Jena, Germany.

Dr. Christopher Maisel, MD
Texas Oncology-Baylor Charles A. Sammons Cancer Center, Dallas, Texas, USA.

Prof. Karthik Ramasamy, MD, PhD
University of Oxford, Oxford, Great Britain.

Scientific advisors NEX-22

Prof. Jan Bolinder, MD, PhD
Karolinska Institutet, Stockholm, Sweden.

Prof. John Buse, MD, PhD
University of North Carolina, Chapel Hill, North Carolina, USA.

Prof. Deepak L Bhatt, MD, MPH
Harvard Medical School, Boston, Massachusetts, USA.

UPCOMING EVENTS

Interim report Quarter 1, 2023	4 May, 2023
Annual General Meeting 2023	9 June, 2023
Interim report Quarter 2, 2023	23 August, 2023
Interim report Quarter 3, 2023	27 October, 2023
Year-end report for 2023	20 February, 2024

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