ANNUAL REPORT

2022

KAROLINSKA DEVELOPMENT

KAROLINSKA
DEVELOPMENT

List of contents

About Karolinska Development

Karolinska Development (Nasdaq Stockholm: KDEV) is an investment company which offers a unique opportunity to participate in the value creation of a number of Nordic life sciences companies with substantial commercial potential. All of the portfolio companies are developing potentially ground-breaking treatments for medical conditions with a substantial need for improved therapies, including prolonged labour, hepatic encephalopathy, bone defects, septic chock, heart failure and serious viral infections. To date, two of the companies have launched their first products.

www.karolinskadevelopment.com
Twitter: @Karolinska_Dev
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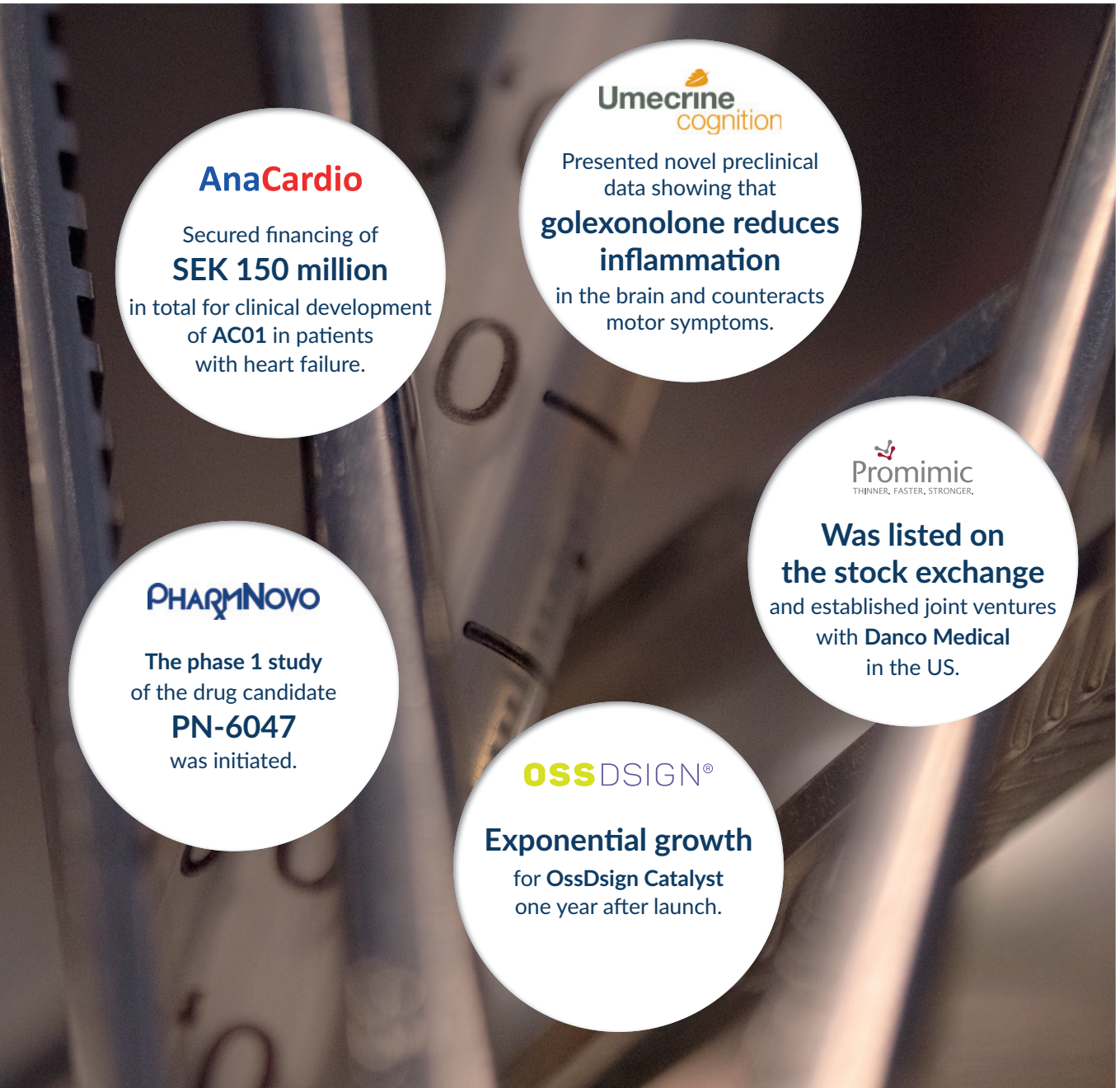


THE PORTFOLIO COMPANIES´ STARTING POSITION FOR 2023

- **Dilafor** performs activities to be able to enter phase 3 in 2024.
- **Umecrine Cognition** has started its study of golexanolone in patients with PBC (primary biliary cholangitis) and is expected to communicate interim results during the year.
- **Modus Therapeutics** is expected to initiate a phase 2 study of sevuparin in patients with sepsis.
- The medical technology companies **OssDsign** and **Promimic** will continue the work to establish their respective products on the world market, with a focus on the US.
- Bolstered by the successful capital acquisitions in 2022, **AnaCardio** is preparing to initiate a phase 1b/2a study of its drug candidate in patients with heart failure.
- **SVF Vaccines** plans to start a phase 1 study of its vaccine candidate against hepatitis B and D.
- **Aprea Therapeutics** focuses on the clinical development of ATRN-119, a solid tumor drug project acquired in 2022.
- **Biosergen** is expected to complete the final part of a phase-1 study of its drug candidate against systemic fungal infection.
- **Henlez** continues to develop its topical enzyme-based treatment of hidradenitis suppurativa.
- A first reading of the result from **Pharmnovo´s** phase 1 study of the company´s drug candidate for severe nerve pain is planned to take place during the second quarter.

FINANCIAL SUMMARY

SEKm	2022	2021
Net profit/loss	-88.1	170.8
Cash, cash equivalents and short-term investments	189.8	92.4
Earnings per share (SEK)	-0.3	1.0
Net asset value per share (SEK)	4.6	5.6
Equity per share (SEK)	4.6	5.5
Share price at year end (SEK)	1.7	5.3
Investments in portfolio companies	110.3	69.2
Total portfolio fair value	**1,312.5**	**1,293.1**
Net portfolio fair value	**984.0**	**950.2**

KAROLINSKA DEVELOPMENT HAS MADE two new investments in 2022, expanding its portfolio which now comprises eleven innovative companies. Several of the existing companies have, at the same time, made considerable progress both financially and in terms of development. AnaCardio, OssDsign and Umecrine Cognition have raised new capital to strengthen their respective operations ahead of the next phase of their work, while Dilafor has completed the extension of its clinical phase 2b study of tafoxiparin.

Welcome to Henlez and PharmNovo

PharmNovo, which was added to Karolinska Development's portfolio in July, is developing a ground-breaking pharmaceutical project for the treatment of neuropathic pain – a condition that is not only difficult to treat, but which often risks becoming chronic. The PN6047 pharmaceutical project has demonstrated convincing effects in established preclinical disease models, and the candidate drug is expected to not only result in a better effect profile, but also, potentially, to be safer and to give rise to less serious adverse effects than existing treatments, which can result in the patient developing an addiction. The plan is now to evaluate the candidate drug as part of a first clinical study.

In October, Karolinska Development took part in a seed financing for the Danish dermatology company, Henlez, which is developing a product to treat hidradenitis suppurativa – a chronic inflammatory condition that is highly stigmatising and which is characterised by severe pain, malodorous wound fluid, and permanent scarring of the armpits and groin. The company is now working both on the development of a topical application formulation for their candidate product ahead of a planned clinical evaluation, and on an expansion of their project portfolio.

Successful capitalisation in a volatile market

Several of our portfolio companies have successfully raised capital for investment in their respective ongoing development work, despite a volatile market. AnaCardio's series A investment round, for example, raised SEK 150 million from a group of long-term and reputable investors, including Flerie Invest, Industrifonden and 3B Health Ventures. The successful financing is a validation of the company's AC01 development project in the field of heart failure, and the capital contribution will be used for a clinical phase 1b/2a study of the candidate drug.

OssDsign's directed share issue, meanwhile, raised just over SEK 65 million before deductions for transaction costs this autumn. The capital will be used to finance the company's expansion plans and growth strategy – a strategy which focuses on building a global bone graft business, accelerating growth in the USA, expanding the product portfolio, and accelerating clinical programs.

During the same period, Umecrine Cognition secured SEK 41 million in funding ahead of the start of a clinical phase 2 study of the candidate drug, golexanolone, which is being developed as a treatment for primary biliary cholangitis (PBC) – a condition that arises when the bile ducts in the liver break down.

The strong financial support we have seen from external financiers is testament to their confidence in our portfolio companies and strengthens the companies going forward as they deliver innovations that can make a real difference to patients and their families.

Stock market debut and acquisition

The portfolio company, Promimic, was floated on the stock market in an IPO that raised SEK 80 million before deductions for issue costs. Trading on the Nasdaq First North Growth Market began in April and shortly thereafter, in July, Promimic and Danco Medical formed a joint venture to strengthen the customer offering in the US market. The initiative is expected to have a major impact on Promimic's growth and profitability as early as 2023.

The portfolio company, Aprea Therapeutics, shifted focus in the wake of its acquisition of the American biotechnology company, Atrin Pharmaceuticals, and its portfolio of candidate drugs. The spotlight is now on ATRN-119, which is being evaluated as a treatment for solid tumours by inhibiting a signalling pathway that is important in the tumour's DNA damage repair.

Strong clinical data production

Research activity levels in Karolinska Development's portfolio companies are high, with substantial amounts of important data generated in 2022 and the presentation of additional results expected in 2023. OssDsign is working hard on building up a package of clinical evidence in relation to the company's synthetic bone substitutes, OssDsign Catalyst and OssDsign Cranial PSI, which are used in the treatment of cranial bone defects. At the end of the year, the company presented positive long-term data and low complication levels from treatments with both OssDsign Catalyst and OssDsign Cranial PSI. The company has also successfully recruited patients for the prospective multicentre register, PROPEL, where data from patients treated with OssDsign Catalyst are being collated.

SVF Vaccines published preclinical data during the first quarter, indicating that the company's candidate therapeutic vaccine, SVF-001, has the potential to elicit an immune response in a preclinical disease model of hepatitis B. The results were also presented at the EASL International Liver Congress in June.

In early 2023, **Umecrine Cognition** presented promising preclinical results for its candidate drug, golexanolone, which, in a well-established disease model of Parkinson's disease, demonstrated that it improved both motor and non-motor symptoms of this CNS disease, and we are looking forward to following the company's new findings going forward. Umecrine Cognition is, furthermore, about to launch a clinical phase 2 study of golexanolone in primary biliary cholangitis (PBC).

At the end of the year, **Dilafor** completed recruitment of patients to the extension of its phase 2b study of the candidate drug, tafoxiparin, in order to evaluate a dose response effect of the treatment. In February 2023, the results were presented, which showed that treatment with tafoxiparin has a positive effect on cervical ripening with a clear dose-response relationship for the doses that were evaluated. The results strengthen the drug candidate and increase the possibility of attracting commercial partners to the project, which has great potential to reduce the risk of complications for both mother and child in connection with the initiation of labor. We generally aims to sell portfolio companies or enter into partnerships with large pharmaceutical companies after completion of a phase 2b study with a demonstrated treatment effect, and Dilafor is no different in this respect.

Aprea dosed the first patient in an open, clinical phase 1/2a study of ATRN-119, and the results will be released on a rolling basis in 2023.

PharmNovo began its clinical phase 1 program with PN-6047 – a candidate drug being developed for the treatment of neuropathic pain – during the year.

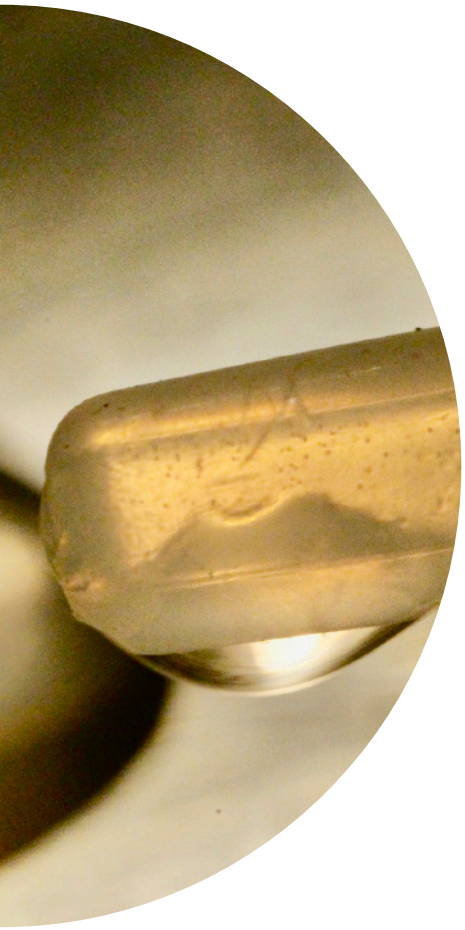
In 2022, **Modus Therapeutics** completed recruitment to the company's clinical phase 1b study where the drug candidate sevuparin is evaluated in a well-established disease model of sepsis and septic shock. In February 2023, the company presented positive results from the study that will be used to select the dose and shape the design of the planned phase 2 study with sevuparin, which is expected to start in 2023. **Biosergen's** projects also advanced in 2022 and the company is now preparing a clinical phase 2 study of its candidate drug, BSG005, which is being developed as a treatment for the fungal infection, mucormycosis.

Well-equipped for an eventful 2023

Our portfolio companies have advanced their positions in 2022 and we are looking forward to yet another year in which we expect significant progress from their research and development and, of course, from the commercialisation of the products that have already reached the market. We are working hand in hand with our innovative portfolio companies to make a difference to our patients and society, and given the prevailing market climate and the volatility we are currently seeing, our role in the innovation system is more important than ever before.

Solna 20 March 2023

Viktor Drvota
Chief Executive Officer



Long-term investments in potentially ground-breaking innovations

KAROLINSKA DEVELOPMENT is a listed investment company that hand-picks most of its investments from the flood of medical innovations from the Karolinska Institute and other highly respected universities and research institutions in the Nordic region. The company invests in pharmaceutical projects and medtech products that have the potential to revolutionise the treatment of diseases where there is a substantial need for new therapies. Investments are made in partnership with other, usually international, specialist investors in order to increase the portfolio companies' long-term financing opportunities and their access to commercial and scientific expertise.

Developing a new pharmaceutical or medtech product takes a long time and requires substantial investments. There is a significant risk of an individual project failing to make it to market, but the enormous potential for growth in value in those companies that do achieve success means that there is, nonetheless, considerable interest in investing in small to medium-sized life science companies. Karolinska Development has a well-developed method for optimising the commercial potential of the portfolio companies and for, wherever possible, reducing the inherent biological project risk – all research and development is, after all, conducted specifically because the results are not known in advance.

Optimising development programs to reduce the risk

One way of reducing the risks is to implement broad development programs with multiple potential spheres of use for a single candidate drug or medtech product. A candidate drug that proves to be ineffective for one particular medical indication may very well be successful in another. The portfolio companies receive professional support during the process of optimising the design of clinical studies, and the potential for spreading the risks by expanding the indication areas is evaluated continuously. The development strategy for the individual projects is formulated in close cooperation with world-leading scientific and clinical experts.

Exit strategy established when the initial investment is made

Another way of optimising the value creation is to plan when and how the investment will be divested when the investment is first made. Karolinska Development works purposefully to optimise the portfolio companies' preconditions for commercialising their projects. In recent years, furthermore, the portfolio companies have been strengthened through the addition of people with a documented ability to conduct international business transactions in the life science sector.

Karolinska Development's business model

Continuous monitoring of the total portfolio risk

Another factor for success involves continuously adjusting the composition of Karolinska Development's portfolio in order to maintain an acceptable combined risk level. Karolinska Development's current portfolio is well-balanced, containing both listed and unlisted life science companies in various stages of development and operating spheres in both the pharmaceutical and medtech sectors.

Experienced investment team with extensive global network

The most important asset of an investment company is the people who are responsible for selecting and developing the investments. Karolinska Development's company management team comprises individuals with in-depth experience of investment activities, research and development, and enterprise. The management team also has an extensive international network in not only the scientific and financial worlds, but in the global life science sector, too.

A long-term approach increases the potential for a good return

Karolinska Development's involvement in its portfolio companies is a long-term one. Companies operating in the pharmaceutical development sector are normally held until proof of concept is demonstrated in phase 2 studies. The reasoning here is that this is an attractive time to do business, e.g. in the form of revenue-generating partnerships with global pharmaceutical companies, in that positive phase 2 results demonstrate that a candidate drug has the anticipated biological effect. This substantially reduces the development risk going forward and hence significantly increases the value of the project. The holdings in portfolio companies operating in the medtech sector are divested at an even later stage, when the companies have launched their first product and have become cash flow positive. Opportunities for entering into cashflow-generating licensing agreements, conducting stock market flotations, or divesting projects, are, however, evaluated continuously throughout the companies' development processes.

Five reasons to invest in Karolinska Development

EVALUATING THE QUALITY and level of innovation of a research project is difficult and time-consuming for investors without in-depth knowledge of the life science sector. An investment in Karolinska Development offers a unique and straightforward opportunity to share in the growth in value of a number of carefully selected, highly innovative Nordic life science companies with substantial commercial potential.

Access to both public and unlisted companies

As a private individual, one's opportunities to invest in companies that are not traded on an exchange are often limited, and in those instances where one could manage to invest in one, divesting the holding at short notice is much more difficult. Karolinska Development's extensive network in the Nordic life science sector offers ongoing opportunities to invest, even in unlisted companies.

Good risk spread

Investments in small and medium-sized life science companies entail significant risks, in that the outcome of project development is often binary. A good risk spread requires a broad and well-composed portfolio, but building up and then continuously monitoring this kind of portfolio can be difficult and time-consuming. A holding in Karolinska Development gives you the opportunity to share in the growth in value of a well put together portfolio of innovative, Nordic life science companies.

Professional assessment of biological risk

The ability to assess the likelihood of the biological concept behind a life science project leading to a finished product requires extensive expertise and experience. Karolinska Development's investments are always based on professional assessments of the level of innovation and viability of the scientific hypothesis upon which each individual project rests.

Professional assessment of commercial risk

Even if a life science project develops well from a purely medical perspective, it does not necessarily mean that it will be possible to capitalise on the scientific advances. Karolinska Development conducts a detailed analysis of a potential new portfolio company's commercial potential, i.e. the probability that its projects can be out-licensed, sold, or launched in-house, before every investment.

Continuous and detailed monitoring of the holdings

Karolinska Development's investment managers continuously monitor the portfolio companies' development, make any additional investments that look attractive, and divest holdings at the times that they calculate will result in the best return for shareholders.

Autumn's financing round propels heart failure project to clinical phase

In September, Karolinska Development and a group of highly reputed investors took part in a financing round that will take AnaCardio's candidate drug, AC01, through a clinical phase 1b/2a study in patients with heart failure. AC01 is designed to restore the heart's normal muscular function and blood circulation in a new, safer way, and has the potential to affect the underlying cause of the disease.

AnaCardio's journey began at the Karolinska University Hospital's cardiology unit, where Prof. Lars Lund had noted that a hormone that was primarily regarded as an appetite stimulant also had an effect on the heart's contractility and could consequently act as a treatment for heart failure. He took his idea to KI Innovations, the Karolinska Institute's innovation department, who put Lars Lund in contact with Karolinska Development's CEO, Viktor Drvota.

"My background as a cardiologist meant this really interesting-sounding idea immediately grabbed my attention. The hormone doesn't affect the patient's blood pressure and didn't seem to cause any cardiac arrythmia or tachycardia-like problems. This was definitely something we wanted to examine more closely," says Viktor.

ABOUT HEART FAILURE

Heart failure affects over 100 million people worldwide and causes a poorer quality of life, recurrent hospitalisations, and a high risk of death. Heart failure is a progressive cardiac syndrome that impairs the ventricles' ability to fill with or eject blood. The most common and serious form of heart failure is heart failure with reduced ejection fraction (HFrEF), leading to impaired delivery of blood and oxygen to organs and tissues.

The prevalence of heart failure increases as individuals age, occurring in 10–20 % of those over the age of 80. Heart failure is a leading cause of hospitalisation for these patients, with over 50 % of them re-hospitalised within 6 months of discharge (Desai, Circ 2012). Quality of life is significantly reduced, with advanced cases of heart failure often requiring both cardiac devices and surgical interventions. The mortality rate for patients with heart failure is estimated at 60 % within a 5-year period, while those with HFrEF experience an even worse prognosis, with mortality increasing as blood circulation deteriorates.

Case Study: AnaCardio

This was the start of a lengthy process of building up the structure around the project – a process in which Karolinska Development, primarily in the form of its CSO, John Öhd, was heavily involved. Hormones produced by the human body cannot be patented, and gaining a production patent is difficult, so the search began for a similar substance. The search eventually lighted on the pharmaceutical company, Helsinn, which had just such a substance and with whom AnaCardio signed a licensing agreement. This coincided with the start of work on building up the AnaCardio organisation by employing a CEO and a Medical Director, amongst others. Karolinska Development then brought in a couple of seed investors who, alongside Karolinska Development, helped finance the company's preparatory work for the launch of a clinical 1b/2a study.

"This part of the journey took around two years to complete, which is fairly illustrative of how we work and of how we can make this type of investment. This is precisely how we go about helping a researcher build a company," says Viktor Drvota.

Karolinska Development has no desire to run projects like this on their own, partly because doing so would tie up too much capital, and partly because it's better to share the financing risk. Karolinska Development's business model is based on forming syndicates and becoming one of several principal owners and financiers of the portfolio companies. In September 2022, Karolinska Development and a group of long-term, highly reputable investors such as Flerie Invest, Industrifonden and 3B Health Ventures, invested SEK 150 million in AnaCardio.

"That's how you spread the risks in your portfolio – by being a principal owner with a 15–30 percent share in a number of companies, together with other owners. The goal is for our operations' ownership to be around that sort of level, even if it doesn't always hit those exact figures," says Viktor Drvota.

In November, AnaCardio announced that it had been given approval by the authorities in Sweden, Netherlands, Italy, and the UK to launch the clinical phase 1b/2a study that will evaluate the candidate drug AC01. The project is based on a unique mechanism of action that is designed to increase the heart's contractility without giving rise to side effects such as cardiac arrythmia or tachycardia. The substance increases the heart's contractile force and results in increased cardiac output, which may potentially improve organ function, quality of life while simultaneously reducing hospitalisations and mortality risks.

The phase 1b/2a study will evaluate safe dosage levels and effect on patients with heart failure who are treated with the AC01 substance. The first patient is scheduled to be enrolled in the study in early 2023, and the results are expected in 2024.

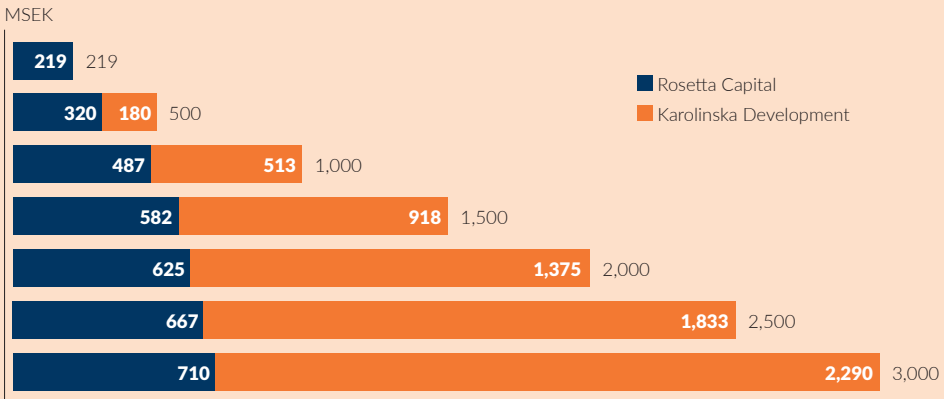
"The potential – both for patients and in a purely commercial sense – is huge if we can develop a completely new drug that addresses heart failure," says Viktor Drvota.

KDev Investments and the agreement with Rosetta Capital

In December 2012, Karolinska Development entered into partnership with the international specialist investor, **Rosetta Capital**, which invested SEK 220 million in a number of portfolio companies in return for a share of the future profits from these companies. The shareholdings in the portfolio companies comprised by the agreement with Rosetta are invested in the jointly owned company, **KDev Investments AB**, which today comprises five companies: Aprea Therapeutics, Modus Therapeutics, Dilafor, Promimic and Biosergen. The return, including Rosetta Capital's additional investment of SEK 44 million in the portfolio companies, will be distributed in accordance with a "waterfall structure", as illustrated in the graph below. With its current shareholding, Karolinska Development's proportion of dividends will be 0 percent for accumulated dividends up to SEK 220 million, 65 percent for accumulated dividends between SEK 220 million and SEK 880 million, 75 percent for accumulated dividends between SEK 880 million and SEK 1,320 million,
and 92 percent for accumulated dividends above SEK 1,320 million.

KDev Investments has so far paid SEK 45 million in dividends to Rosetta Capital.

Distribution of dividends under waterfall-structure*



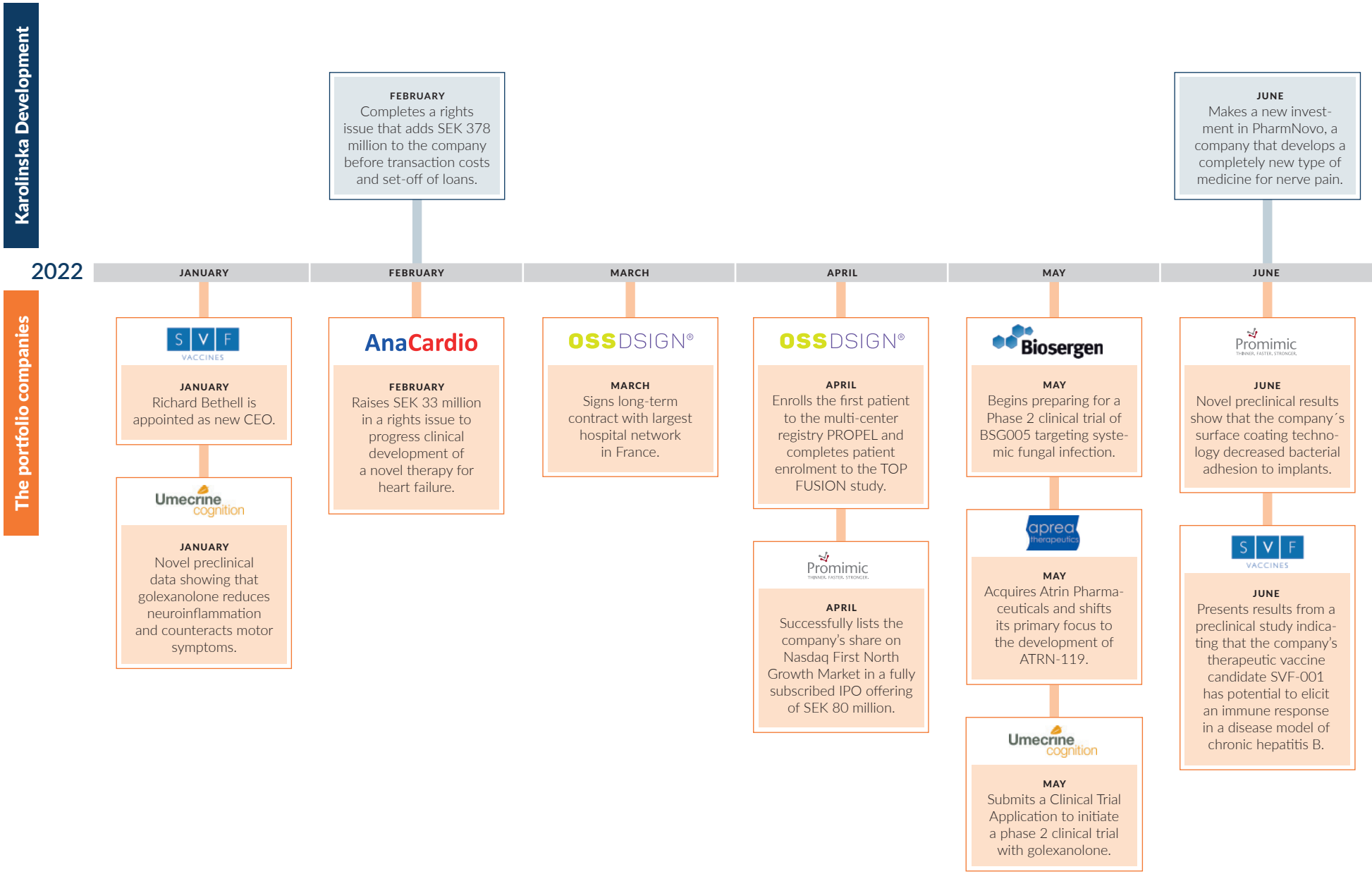
Accumulated exit value of all KDev Investments portfolio companies payable as dividends (SEKm).

*When calculating distribution of dividends, any dividends previous distributed will be taken into account, accumulated paid dividend amounts to SEK 45 million.

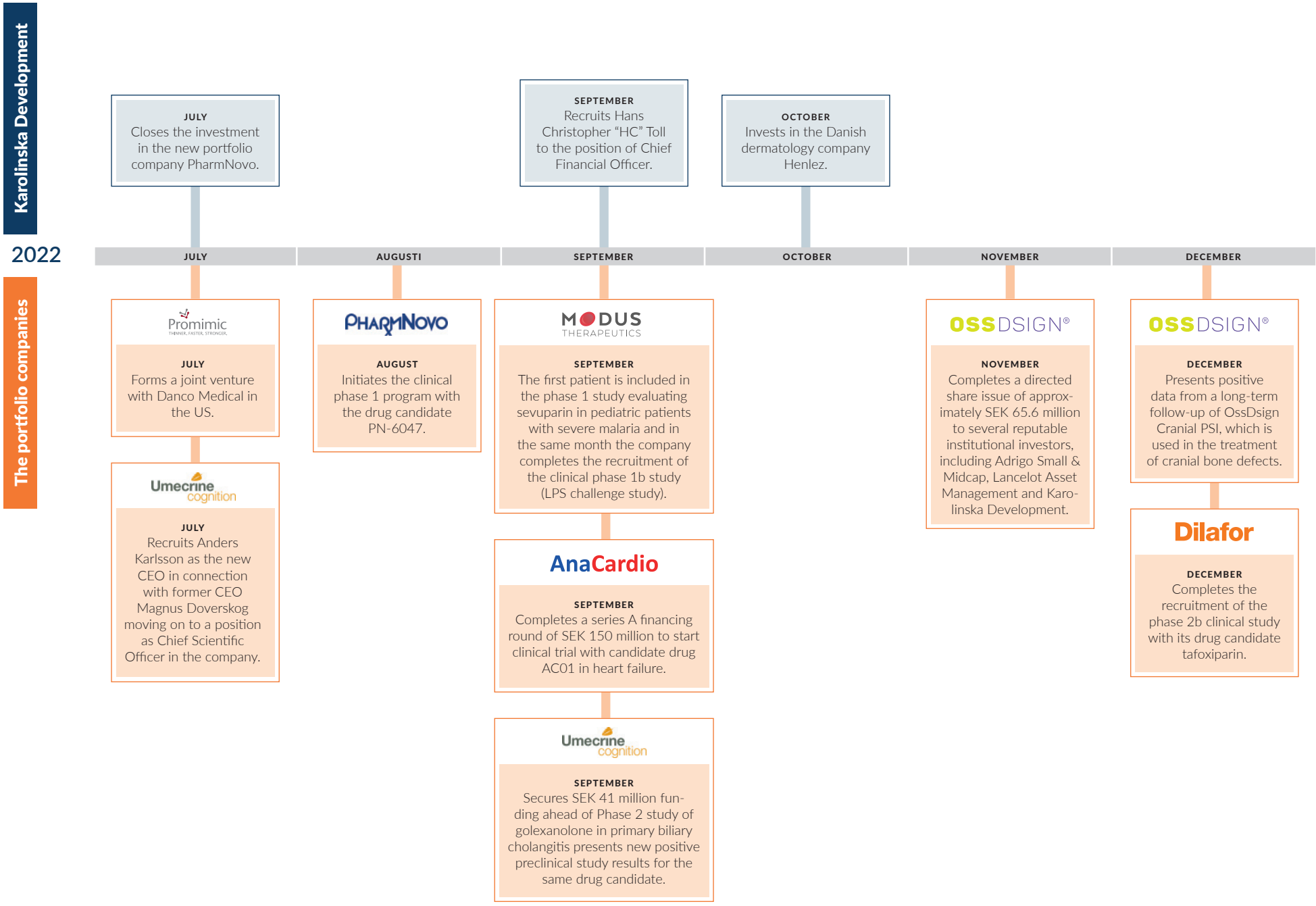
What is fair value?

- **Fair value** quantifies the combined value of the company's investments at a given time. The calculation of the portfolio's fair value is based on the provisions of the international accounting standard, IFRS 13, and the International Private Equity and Venture Capital Valuation Guidelines (IPEV Valuation Guidelines). The fair value of the portfolio is divided into "Total portfolio fair value" and "Net portfolio fair value".
- **The total portfolio fair value** is the aggregate return that would be obtained by Karolinska Development and KDev Investment if the shares in the portfolio companies were to be divested in an orderly transaction between market operators at the year-end.
- **The net portfolio fair value** is the aggregate dividend that Karolinska Development will receive after KDev Investment's dividend payment to Rosetta Capital.

Key events in 2022



Key events in 2022



Value creation through sustainable enterprise

Karolinska Development's core operations focus on improving people's health. Our investments concentrate on areas where there is currently a lack of effective treatments, including rare diseases, women's health, and a range of infectious diseases. We contribute to society's development by being part of the innovation system that progresses new pharmaceuticals and medical technology products, and the pharmaceutical products under development by our portfolio companies have the potential – if they reach the market – to positively impact millions of people's lives. We have implemented a number of sustainability-related policies and are active managers of our portfolio companies, helping them develop both an understanding of ESG (Environment, Social, Governance) issues and the skills to manage them. This approach enables us to ensure responsible commercial operations, from both an impact and a commercial perspective.

One of the prerequisites for our investments is that the portfolio companies' existing products and services have the potential to revolutionize the treatment of diseases and disabilities where there is a real need for new therapies. Our aim, through this approach, is to create long-term value for human health, and our investment process consequently targets projects and companies engaged in ground-breaking development work in areas where there are currently no effective treatment alternatives.

Responsible ownership

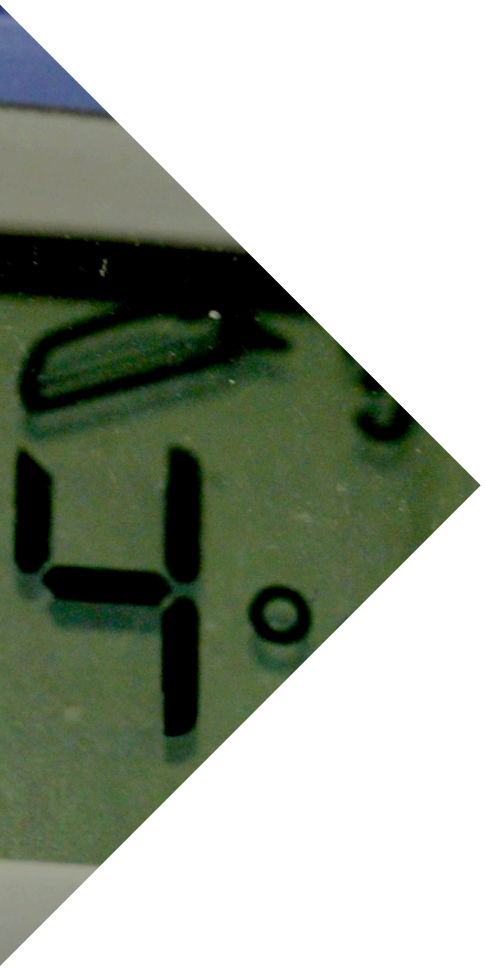
As an active owner, a large part of our impact on people and environment takes place through the companies we own and in which we invest. A high level of ambition in terms both of our responsibilities as an owner and of how we contribute to the portfolio companies' development is a common denominator for all our investments, and to this end, we are represented on the Board of Directors of most of our portfolio companies. This enables us to play an active role in helping ensure strong corporate governance, developing value creation, and ensuring satisfactory management of sustainability aspects. Our engagement with the portfolio companies places particular emphasis on social aspects such as helping the companies ensure long-term skills supply and good management of gender equality issues.

OUR SUSTAINABILITY-RELATED POLICIES

- Code of ethics
- Data protection policy (GDPR)
- Dividend policy
- Environmental policy
- Gender equality and equal opportunities policy
- Human resources policy
- Information and insider policy
- PDMR reporting policy
- Investment policy
- IT security policy
- Payment routines
- Rules of procedure and instructions
- Transactions with related parties policy

Ongoing policy work

Our official positions and methodologies regarding corporate governance and management of sustainability issues are formalised through our policy framework, which is continuously updated. The framework consists of external and internal policies, together with internal guidelines and process descriptions for the company's employees. Our gender equality and equal opportunities policy is based on our fundamental belief that all human beings are of equal worth. We work actively to combat discrimination – whether direct or indirect – and harassment based on age, gender, gender identity or expression, ethnicity, religious beliefs, sexual orientation, or disability. We also work to take advantage of opportunities to increase diversity within the company and the portfolio companies in which we are active owners.



Limiting environmental impact

Karolinska Development conducts operations that entail investments in life science projects that not only have the potential to yield significant returns for their owners, but also consider fundamental values such as human rights, democracy, and sustainable societal development. Our goal, within the framework of active ownership, is to ensure that the portfolio companies comply with legislative requirements in the environmental sphere and apply rules that limit the environmental impact of the companies' operations.

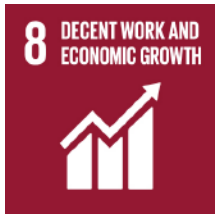
CORPORATE GOVERNANCE AND SKILLS SUPPLY

The text box on the previous page lists our other sustainability-related policies. Karolinska Development's Corporate Governance Report (p. 88) describes in detail the formal governance of the company, identifies the major owners, and presents the composition of the Board of Directors, including Board Members, committees, and Board Members' independence in relation to owners and management. The Corporate Governance Report also describes the company's risks and how employee and skill supply issues are managed.

Our contribution to the UN sustainable development goals

We invest in innovative pharmaceutical projects and medical products that improve human health.

We work actively to increase gender equality, both internally and externally, and through active ownership of our portfolio companies.



We promote economic productivity and create increased economic growth through our investments and active ownership.

Our focus on innovative projects and products contributes to increased access to capital for companies and projects in the early stages of development.

Our investments increase the availability of new therapies for different patient groups. This promotes social and economic inclusion.

Through our active ownership efforts, we work to combat corruption and ensure ethical and transparent corporate governance in our portfolio companies.

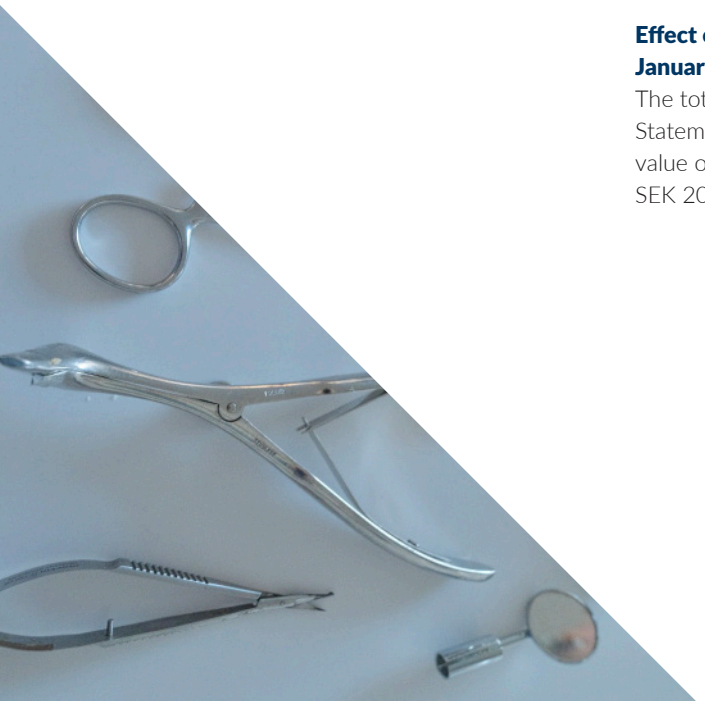
Financial position of the Investment Entity – summary

Investments: January – December 2021:
Karolinska Development's investments in the portfolio companies during the period January–December 2022 totalled SEK 110.3 million (SEK 69.2 million in 2021), of which SEK 109.2 million comprised cash investments and SEK 1.1 million comprised non-cash investments Investments from external stakeholders totalled SEK 354.6 million (SEK 386.3 million 2021).

The portfolio fair value
The total fair value of portfolio companies owned both directly by Karolinska Development and indirectly via KDev Investments rose, year on year, by SEK 19.4 million to SEK 1,312.5 million at the end of the year. The positive change in fair value is attributed to the net investment and fair value changes.

The decrease in the fair value of the part of the portfolio owned via KDev Investments resulted in a decrease in the potential dividend to Rosetta Capital of SEK 14.4 million to SEK 328.5 million. This, in turn, resulted in a net increase in the fair value of the portfolio by SEK 33.8 million in 2022 to SEK 984.0 million.

Effect on the profit of the increase in portfolio value, January – December 2021
The total result of the Changes in portfolio fair value, via the Income Statement, was SEK -76.1 (SEK -23.2) million and the change in fair value of other financial assets and liabilities, earn-out agreements, was SEK 20.4 (SEK 223.2) million.



Revenues and profit/loss
Revenues totalled SEK 2.3 million during the year, compared to SEK 2.2 million in 2021 and primarily comprised income from services provided to portfolio companies.

The Investment Entity's operating profit/loss totalled SEK -87.3 million compared to SEK 160.7 million in 2021.

The Investment Entity's profit for the full year of 2022 totalled SEK -88.1 million compared to SEK 170.8 million in 2021, or SEK -0.34 per share in 2022 compared to SEK 0.97 in 2021.

Financial position
The Investment Entity's equity amounted to SEK 1,241.5 million on 31 December 2022 compared to SEK 971.1 million on 31 December 2021. No interest-bearing liabilities existed on December 31, 2022, compared to a bridge loan, including interest, totaling SEK 124.6 million on 31 December 2021

On 31 December 2022, cash and bank balances (including short-term investments) totalled SEK 189.8 million compared to SEK 92.4 million at the end of 2021. The net debt thus amounted to SEK -189.8 million on 31 December 2022 compared to SEK -32.2 million on 31 December 2021.

Equity/assets ratio and net asset value
The equity/assets ratio of the Investment Entity amounted to 99 percent by 31 December 2022 compared to 88 percent on 31 December 2021. The net asset value amounted to SEK 4.6 per share at the end of 2022, compared to SEK 5.6 per share at the end of 2021.

Accounting principles
Karolinska Development is an Investment Entity as defined in IFRS 10, Consolidated Financial Statements.

High potential for continued value inflection in portfolio

KAROLINSKA DEVELOPMENT'S investments in therapeutic companies are conducted in syndicates with other professional life science investors, normally until proof-of-concept is demonstrated in phase 2 trials, at which point different exit options are evaluated. When engaging in medtech companies, the business model is to finance the companies until they show a positive operating profit.

The portfolio currently consists of eleven companies focused on developing innovative treatment methods for severe or life-threatening diseases where there is currently a great need and there is a lack of effective treatment alternatives. Nine of the portfolio companies have drug candidates in ongoing or planned clinical trials and two companies have medtech products in early commercial phases. During the period 2023–2024, four portfolio companies are expected to present data from phase 1 studies and three portfolio companies are expected to present data from phase 2 studies. These study results have the potential to significantly increase the opportunities for attractive divestments or license transactions. Comparable drug candidates have in recent years been out-licensed or sold at contract values that have amounted to billions for the individual projects.

Over the years, the portfolio companies have been strengthened with people who have a documented ability to implement international corporate affairs in life science.

In addition to the portfolio companies, Karolinska Development has interests in two other life science companies, Forendo Pharma and Oncopeptides, in the form of earn-out agreements.

Earn out-agreements

Karolinska Development has interests in two other life science companies, in the form of earn out agreements that provide the opportunity for future income.

oncopeptides — Phase 3

FORENDO PHARMA — Phase 2

Our current portfolio – potential for value inflection

Company	Net Ownership*	Preclinical	Phase 1	Phase 2	Phase 3
aprea therapeutics	KDev Invest 2%	DDR in oncology	2024		
MODUS THERAPEUTICS	KD 38% KDev Invest 17%	Sepsis/septisk shock		2024	
Dilafor	KD 1% KDev Invest 30%	Labor induction			2026
		Pre-eclampsia		2023	
Umecrine cognition	KD 66%	Hepatic encephalopathy			2027
		Primary biliary cirrhosis		2024	
SVF VACCINES	KD 35%	Hep. B/D	2023		
		Covid-19	2024		
AnaCardio	KD 21%	Heart failure		2024	
PHARMNOVO	KD 13%	Neuropathic pain	2023		
Henlez	KD 14%	H. suppurativa			
Biosergen	KDev Invest 2%***	Systemic fungal infection		2023	

Medtech	Net Ownership*	Prototype	Development	PMA/510k	Market
OSSDSIGN®	KD 10%**	Patient-specific craniofacial implants and bone substitutes			Expansion in the EU and the US 2023
Promimic THINNER. FASTER. STRONGER.	KD 2% KDev Invest 14%	Medical implant coatings			Expansion in the EU and the US 2023

KD: Karolinska Development **KDev Invest**: KDev Investments
DDR: DNA damage repair **H.suppurativa**: Hidradenitis suppurativa
* Fully diluted ownership based on current investment plans
** Includes indirect holdings through KCIF Co-Investment Fund
*** Passive investment

Current phase — *Progress and expected results*

Project (First-in-class)
ATR inhibitor ATRN-119
ATR inhibitor ATRN-W1051

Primary indication
Solid tumor malignancies

Development phase
Phase 1

Holding in company*
KDev Investments 2%

Other investors
Morgan Stanley
The Vanguard Group
Renaissance Technologies
BlackRock
Geode Capital Management

Origin
Karolinska Institutet

More information
aprea.com

* Fully-diluted ownership based on current investment plans.

Aprea Therapeutics Inc.

Inhibits the ability of cancerous tumors to repair DNA damage

Aprea Therapeutics (Boston, USA and Stockholm, Sweden) is focused on developing and commercializing novel drugs to combat various types of cancer by affecting the proteins involved in the ability of tumors to repair damage in their DNA.

During the second quarter of 2022, Aprea completed the acquisition of Atrin Pharmaceuticals, a biopharmaceutical company focused on developing novel cancer therapeutics targeting proteins in the DNA damage response (DDR). With the acquisition of the Atrin Pharmaceuticals drug project, Aprea shifts its primary focus to the development of ATRN-119, evaluated in a Phase 1/2 clinical trials in patients with malignant solid tumors – both as monotherapy and in combination with today's standard treatment.

ATRN-119 is an orally-bioavailable, highly potent and selective small molecule inhibitor of ATR, a protein with key roles in response to DNA damage. In the third quarter, Aprea initiated a clinical trial with ATRN-119 as monotherapy in cancer patients with defined gene mutations.

Aprea is also developing ATRN-W1051, an orally-bioavailable, highly potent and selective small molecule inhibitor of WEE1, a key regulator of multiple phases of the cell cycle. ATRN-W1051 is currently in preclinical development, and the company expects that an application for the start of the first clinical trial can be submitted in the second half of 2023.

Aprea is listed on the NASDAQ Global Select Market in the USA since October 2019.

RECENT PROGRESS

- In May 2022, Aprea announced the acquisition of Atrin Pharmaceuticals.
- Following the Annual Shareholders' Meeting on July 28, 2022, Christian S. Schade transitioned to the role of Executive Chairman of the Board of Directors and Oren Gilad was appointed CEO.
- In the third quarter 2022, Aprea´s phase 1/2 clinical trial with ATRN-119 monotherapy was initiated.
- In January 2023, the first patient in the phase 1/2 clinical trial of the drug candidate ATRN-119 was dosed.
- In February 2023, a guaranteed new issue was carried out that will finance the company with USD 5.5 million before transaction costs.

THE MARKET

Targeting DNA Damage Repair, several commercially available Poly ADP-ribose polymerase (PARP) inhibitors induced substantial objective response in patients with DNA repair defects and have received Breakthrough Therapy Designation by the US Food and Drug Administration, FDA, for several cancer indications. The notable commercial success of these PARP inhibitors has made DNA Damage and Response a clinically and commercially validated therapeutic approach. Targeting ataxia telangiectasia and Rad3-related protein (ATR) represents an emerging strategy to treat a broad spectrum of cancers, most notably those that currently lack fully effective treatments.

MODUS THERAPEUTICS

Project (First-in-class)
Sevuparin

Primary indication
Sepsis/Septic shock

Development phase
Phase 1

Holding in company*
Karolinska Development 38%
KDev Investments 17%

Other investors
John Öhd
Nordnet Pensionsförsäkring
Hans Wigzell

Origin
Karolinska Institutet
Uppsala University

More information
modustx.com

* Fully-diluted ownership based on current investment plans.

Modus Therapeutics AB

Develops treatments against life threatening sepsis/septic shock

Modus Therapeutics (Stockholm, Sweden) is developing sevuparin as a treatment of sepsis/septic shock, a life-threatening condition that currently lacks efficient pharmaceutical therapies. Patients that are affected by sepsis are exposed to a risk of developing multi-organ failure and – in severe cases – death. Data from pre-clinical animal models as well as in vitro human cell models has revealed that sevuparin was able to protect blood vessels and counteract lung plasma leakage during systemic inflammation. Previous clinical trials in other patient groups have shown that sevuparin is well tolerated and has a favorable safety profile.

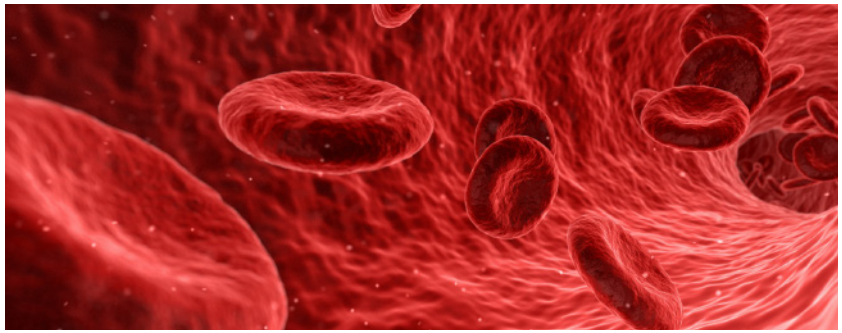
In February 2023 the company presented positive results from the clinical phase 1b study of sevuparin, where the drug candidate's safety profile and efficacy were evaluated in a well-established disease modell for sepsis and septic shock. The study was randomized, placebo-controlled, with the primary aim to evaluate the safety profile of sevuparin in healthy subjects after induction with the bacterial toxin lipopolysaccharide (LPS), a provocation that is a well-established model for characterizing early stages of septic inflammation. The results of the study will be used to define a dose and determine the design of a planned phase 2 study of sevuparin expected to start during 2023.

RECENT PROGRESS

- In May 2022, Karolinska Development provided bridge financing of up to SEK 11.5 million to ensure that momentum in the company's clinical development is sustained.
- The first patient was included in the phase 1 study evaluating sevuparin in pediatric patients with severe malaria in September 2022. The study is a collaboration with Imperial College, London and Wellcome.
- In September 2022, the company completed its recruitment for the clinical phase 1b LPS challenge study.
- In February 2023 the company presented positive results from the clinical phase 1b study of sevuparin, where the drug candidate's safety profile and efficacy were evaluated in a well-established disease modell for sepsis and septic shock.

EXPECTED MILESTONES

- Phase 2a trial in patients with sepsis with an estimated start during 2023.



THE MARKET

Septic shock is a leading cause of death in intensive care units, with mortality rates typically exceeding 30 percent. There is currently no specific pharmaceutical treatment available for the treatment of sepsis. As a result, it is one of the costliest conditions to treat in the hospital care setting. In 2019, US healthcare costs for patients with sepsis were estimated at USD 23 billion. Sepsis/septic shock is triggered by an infection and causes the same form of severe uncontrolled inflammation that can occur in conjunction with extensive surgery, trauma, burns and autoimmunity.

Dilafor

Project (First-in-class)
Tafoxiparin

Primary indication
Labour induction
Preeclampsia

Development phase
Phase 2b

Holding in company*
Karolinska Development 1%
KDev Investments 30%

Other investors
Opocrin
Östersjöstiftelsen
Lee's Pharmaceutical
Praktikerinvest
Rosetta Capital

Origin
Karolinska Institutet

More information
dilafor.com

* Fully-diluted ownership based on current investment plans.

Dilafor AB

Reducing complications with prolonged childbirth

Dilafor (Solna, Sweden) is developing tafoxiparin for obstetric indications, with particular reference to protracted labor and associated complications. Up to 30 percent of all pregnant women undergo induction in labor. In just over half of all cases, the induction fails, leading to protracted labor that entails an increased risk for both mother and child due to medical complications. Between 25 and 40 percent of women who experience protracted labor eventually require an emergency caesarean section. Surgical intervention always entails not only a risk to the patient, but substantial health care costs. With the help of tafoxiparin, the patient suffering could be reduced and valuable health care resources saved.

In 2021, the results of a placebo-controlled phase 2b study were presented which showed that tafoxiparin has a significant positive effect on cervical ripening in first-time mothers who receive treatment to initiate labor. The study included 170 first-time mothers with immature cervixes, which are treated to ripen the cervix and thereby facilitate the onset of labor. Patients were treated with either a subcutaneous injection of tafoxiparin or a placebo once daily for up to one week prior to scheduled initiation. The primary objective of the study was to document the effect of tafoxiparin on cervical ripening measured as the degree of ripening according to an internationally established scale, the Bishop score.

The study results showed that tafoxiparin affected the ripening of the cervix compared to placebo, with a difference that was statistically significant ($p < 0.009$). Based on the positive results, Dilafor extended the phase 2b study, to document the effect of tafoxiparin also in two lower doses than what has been studied thus far. The extension study included 164 women and positive results regarding dose response were presented in mid-February 2023.

RECENT PROGRESS

- In December 2022, recruitment was completed for the extension of the phase 2b study of the drug candidate tafoxiparin for induction of childbirth.
- Positive results from the extension of the phase 2b study with lower doses were presented in February 2023.

EXPECTED MILESTONES

- Start of Phase 3 study with tafoxiparin for labor induction.

THE MARKET

About a quarter of all pregnant women need labor induction. The current standard treatment includes administration of prostaglandins and oxytocin, but in over 50 percent of cases, the induction fails, leading to protracted labor, emergency caesarean sections, or other maternal and foetal complications. Market analyses show that a drug with a good effect on the ripening of the cervix has the potential to reach annual sales over USD 1 billion in the US market alone.

Umecrine Cognition AB

Developing a new approach to alleviate cognitive impairment

Project (First-in-class)
Golexanolone (GR3027)

Primary indication
Hepatic encephalopathy
Primary biliary cholangitis

Development phase
Phase 2b

Holding in company*
Karolinska Development 66%

Other investors
Norrlandsfonden
Fort knox förvaring AB
PartnerInvest

Origin
Umeå University

More information
umecrinecognition.com

* Fully-diluted ownership based on current investment plans.

Umecrine Cognition (Solna, Sweden) is developing golexanolone (GR3207), a candidate drug in a new class of pharmaceuticals that affect the GABA system, where GABA stands for gamma-aminobutyric acid, the chief inhibitory neurotransmitter in the central nervous system. The GABA system is suspected of being over-activated in liver failure, causing very serious clinical symptoms. The over-activation is also thought to lay behind certain cognitive impairments and sleep disturbances. GABAA-receptor modulating steroid antagonists, such as golexanolone, counter the increased activation of the GABA system and has been shown to restore different types of neurological impairments in experimental models. The candidate drug enters the brain and works by reversing the inhibitory effects of the neurosteroid allopregnanolone.

Umecrine Cognition has conducted a clinical phase 2a study of golexanolone in patients with hepatic encephalopathy (HE) – a serious neuropsychiatric and neurocognitive condition that occurs in conjunction with acute and chronic hepatic damage with underlying cirrhosis. The results showed that the candidate drug was well-tolerated, that the safety profile was good, and that the pharmacokinetic profile was favorable. One of the effect parameters – a well-established and sensitive form of EEG study – demonstrates that the candidate drug has a significant effect on brain signaling, with a correlated positive effect on extreme daytime fatigue. Based on these study results, the company has established a plan for the further development of the candidate drug in HE and primary biliary cirrhosis (PBC).

RECENT PROGRESS

- In August 2022, was Anders Karlsson recruited as the new CEO. He succeeds Magnus Doverskog, who moves on to a position as Chief Scientific Officer in the company.
- In September 2022, SEK 41 million was secured for the phase 2b study of golexanolone in PBC.
- In September, Umecrine Cognition presented positive preclinical data supporting the potential of golexanolone to attenuate severe chronic symptoms in patients suffering from PBC.
- In January 2023, data were presented showing the efficacy of golexanolone in a preclinical model of Parkinson´s disease.
- In January 2023, Umecrine Cognition was granted orphan drug designation by the US Food and Drug Administration for the drug candidate golexanolone within the indication PBC.

THE MARKET

PBC (primary biliary cholangitis) is a rare autoimmune liver disease with about 190,000 patients globally where 9 out of 10 sufferers are women. Common symptoms include fatigue, cognitive impairment, itching and, in more advanced cases, even jaundice. The global PBC treatment market is estimated at USD 584 million by 2021 and is expected to grow to USD 3 billion by 2027.

HE (Hepatic encephalopathy) is a serious disease with a high unmet medical need, affecting up to 1 percent of the population in the US and EU. Over a five-year period, developed HE results in a mortality rate of 22–35 percent.

GOING FORWARD

- Topline data from the Phase 2 study of golexanolone in patients with PBC are expected to be available in 2024.

SVF Vaccines AB

New technology for the treatment of viral diseases

Project (First-in-class)
SVF-001

Primary indication
Hepatitis B and D
SARS-CoV-2 and
other Corona virus

Development phase
Preclinical

Holding in company*
Karolinska Development 35 %

Origin
Karolinska Institutet

* Fully-diluted ownership based on current investment plans.

SVF Vaccines (formerly Svenska Vaccinfabriken Produktion, Solna, Sweden) develops therapeutic proteins and DNA vaccines against, among other things, hepatitis B and D, as well as vaccines to prevent infections by covid-19 and potential future Coronaviruses. Therapeutic vaccines, unlike preventative vaccines, have the potential to cure already infected patients.

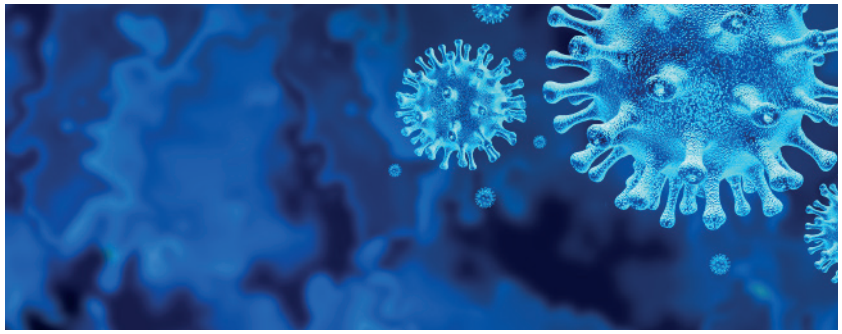
Despite the availability of preventative vaccines and antiviral treatments, over 250 million people live with a chronic hepatitis B infection. One million chronic carriers die each year due to complications caused by the virus, such as liver cirrhosis and liver cancer. The closely related hepatitis D virus infects 15-25 million hepatitis B carriers and exacerbates the progression of the disease.

SVF Vaccines uses a proprietary immunotherapy to produce a specific form of antibodies that blocks the ability of the hepatitis virus to invade human cells. The company has generated promising efficacy data in a preclinical animal model and is now continuing its preclinical development with the goal of enabling a phase 1 study to be initiated in 2024.

Although Coronavirus infections are usually mild, some virus types can lead to life-threatening conditions. To respond to and to prevent severe infections, SVF has also developed a platform that is expected to make it possible to create vaccines against both current and new forms of Coronaviruses for which a phase 1 study is expected to start in 2023. The company has been granted patents for chimeric antigens encompassing both genes and peptides that elicit an immune response against chronic hepatitis B and D infections and has filed a patent application linked to a potential covid-19 vaccine.

RECENT PROGRESS

- Richard Bethell is appointed new CEO in January 2022.
- The company presents preclinical study data indicating that the candidate therapeutic vaccine SVF-001 has the potential to elicit an immune response in a preclinical disease model of chronic hepatitis B at the EASL International Liver Congress™ in June 2022.
- The company changed its name to SVF Vaccines in January 2023.
- In February 2023, the company began a phase 1 clinical study with the company's universal vaccine against covid-19, SVF-002.



THE MARKET

SVF Vaccines is currently focusing its innovative vaccine platform on the market for therapeutic vaccines for hepatitis B and D, and preventative vaccines for respiratory viral diseases, such as Covid-19. The 2017 KuicK research report, "Global Hepatitis Drug Market & Clinical Trials Insight 2023" estimated the value of the annual global market for hepatitis B at between USD 4-5 billion, growing to USD 5-6 billion by 2023. The annual global market for hepatitis D, by contrast, is estimated at around USD 1 billion. Investors' interest in early vaccine companies and platforms similar to SVF Vaccines' has increased markedly in recent years. This is thought to be due to an increased awareness of the potential for the commercialization of vaccines based on next generation technology, such as RNA vaccines and DNA vaccines. Interest in therapies to treat hepatitis B and D has further intensified – two areas in which the unmet medical need is still significant.

EXPECTED MILESTONES

- The work to prepare the vaccine product against HBV / HDV for further development towards studies in humans is expected to be completed during H1 2023.
- Phase 1 studies of hepatitis B and D vaccines are expected to be initiated in 2024.

AnaCardio

Project
AC01

Primary indication
Heart failure

Development phase
Phase 2a

Holding in company*
Karolinska Development 21%

Origin
Karolinska Institutet
Karolinska University Hospital

More information
anacardio.com

* Fully-diluted ownership based on current investment plans.

AnaCardio
Protects heart tissue in heart failure

AnaCardio (Stockholm, Sweden) is developing a new form of drug concept that protects cardiac tissue in conjunction with heart failure. Heart failure occurs when the heart's ability to pump sufficient blood to meet the body's needs has deteriorated. The underlying condition often involves a weakening of the heart's musculature, resulting in an inability to pump the blood out of the heart's chambers. The condition arises as a sequela of high blood pressure or vasoconstriction and the chronic phase is characterized by diffuse symptoms, such as tiredness or breathlessness, which leads to the illness often being diagnosed at a late stage. Acute heart failure results in an individual's health status becoming critical, necessitating hospitalization, but a major issue with existing pharmaceuticals is that they are not designed for long-term treatment.

AnaCardio's clinical candidate drug is being developed to restore the heart's normal muscular function and blood circulation with ground-breaking and safer technique. The Company's goal is to develop an oral drug that in contrast to existing treatments can affect the underlying cause of disease. The drug candidate is based on research by Professor Lars Lund at Karolinska Institutet.

In September 2022, a series A financing round of SEK 150 million was closed in which Karolinska Development participated together with a group of reputable investors to finance a clinical phase 1b/2a study of the drug candidate AC01 in patients with heart failure.

THE MARKET

It is estimated that more than 6 million individuals in the United States and nearly 100 million globally suffer from heart failure. The risk of developing a cardiovascular disease increases with age, and 10-20 percent of the elderly population is now estimated to suffer from chronic heart failure, which is now the most common reason for hospitalization amongst the elderly. Heart failure not only causes considerable individual suffering, but it also has significant economic consequences for society in the form of both direct costs from in-patient care and indirect costs such as productivity losses. The increased medical need is reflected in the sales value of heart failure treatments, which is expected to increase from USD 6.8 billion by 2021 to USD 18.7 billion by 2028 in the world's seven largest pharmaceutical markets.

RECENT PROGRESS

- During February 2022, the company raised SEK 33 million through a convertible loan.
- In September 2022, a series A financing round of SEK 150 million (including the SEK 33 million convertible loan) was closed in which Karolinska Development participated together with a group of reputable investors, including Flerie Invest, Industrifonden and 3B Health Ventures. The proceeds from the investment round will finance a clinical phase 1b/2a study of the drug candidate AC01 in patients with heart failure.
- In November 2022, AnaCardio received regulatory approval to initiate the Phase 1b/2a study in the EU and the UK.
- In March 2023 AnaCardio's founder published an article that supports development of heart failure drug candidate AC01

EXPECTED MILESTONES

- Start of phase 1b/2a study of the drug candidate AC01.

PharmNovo

Innovative drug project for the treatment of nerve pain

Project (First-in-class)
PN6047

Primary indication
Allodyni/Hyperalgesi

Development phase
Phase 1

Holding in company*
Karolinska Development 13%

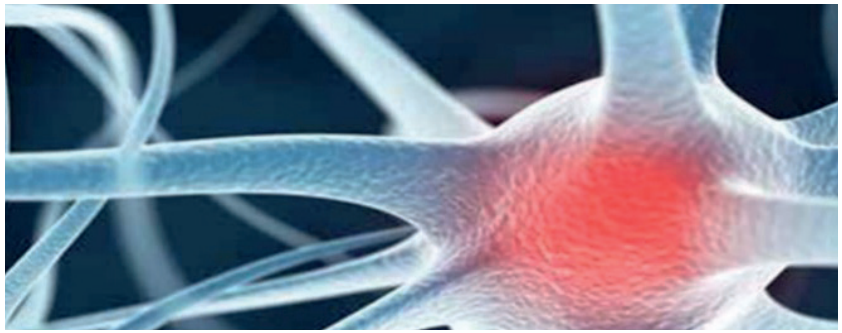
Origin
Start-up

More information
pharmnovo.com

* Fully-diluted ownership based on current investment plans.
** Co-ownership with KDev Investments

PharmNovo (Lund, Sweden) is developing innovative drugs for the treatment of nerve pain (neuropathic pain). Neuropathic pain is one of the most prevalent types of chronic pain and affects up to 10 percent of the population. Common causes include nerve damage from type 2 diabetes, shingles and can also arise from trauma (including surgery), cancer and cancer treatments. PharmNovo's lead candidate, PN6047, focuses on allodynia and hyperalgesia, two common forms of nerve pain, affecting 15-20 percent of neuropathic pain patients. Allodynia is pain due to a stimulus that does not usually provoke pain, while hyperalgesia is increased pain from a stimulus that usually provokes pain. These types of pain have highly detrimental effects on the quality of life; it impairs everyday activities and social functioning and has harmful physical effects (e.g., due to lack of mobility, energy, appetite, and sleep deprivation etc.). Current treatment options are deemed ineffective and are also associated with significant side-effects; particularly cardiovascular risks, a higher risk of suicide and drug abuse potential with gabapentinoids or conventional opioids.

PharmNovo's novel drug candidate, which is based on a drug development project from AstraZeneca, targets a different receptor than conventional opiate drugs do; the delta opiod receptor, and thereby decreases the chronical pain without some of the side-effects associated with the currently marketed opioids (constipation, physical dependence and, potentially, fatal respiratory depression). PN6047 has been tested in various mechanistic in vitro models and in animal models for neuropathic pain states, as well as for short term tolerance and dependence. In addition, initial safety pharmacology, pharmacokinetics, and regulatory toxicology studies have been performed.



THE MARKET

The need for improved treatments for nerve pain is enormous. Around 10 percent of the world's population currently suffers from conditions characterized by this form of pain, leading to a severely reduced quality of life for the individual and substantial costs for society – estimated at nearly EUR 440 billion annually in Europe alone. The estimated global market value for nerve pain drugs is nearly USD 6 billion and the market for allodynia alone is around USD 1.25 billion and is expected to continue to grow driven by an aging population and increased cancer survival.

RECENT PROGRESS

- In June 2022, the company raised SEK 67 million in a new share issue including investments from Karolinska Development. The new capital will be used to finance drug substance manufacture, the completion of a clinical phase 1 trial of the drug candidate PN6047, and continue the company's development.
- An additional rights issue of SEK 6 million was completed in August 2022.
- Phase 1 study with PN6047 initiated in August 2022.

EXPECTED MILESTONES

- Phase 1 study with PN6047 is ongoing and a first read out is planned in Q3 2023.

Project (First-in-class)
HEN-001

Primary indication
Hidradenitis suppurativa

Development phase
Preclinical

Holding in company*
Karolinska Development 14%

Other investors
Eir Ventures

Origin
Start-up

More information
henlez.com

* Fully-diluted ownership based on current investment plans.
** Co-ownership with KDev Investments

Henlez

Develops topical treatment against hidradenitis suppurativa

Henlez (Copenhagen, Denmark) is a privately owned company developing a topical enzyme-based treatment of hidradenitis suppurativa. The company was founded in 2019 by former Novozymes A/S scientist and current CEO Jeppe Mouritsen.

Henlez's pre-clinical lead development program, HEN-001, is an enzyme-based, topical application directed towards hidradenitis suppurativa – a highly stigmatizing and chronic inflammatory condition characterized by severe pain, malodorous wound fluid and permanent scarring of the armpits and groin. Despite an increasing number of drug trials, the available treatment options are still insufficient. Patients and key opinion leaders unanimously identify a large unmet need for novel treatments, a problem Henlez is poised to meet.

In October 2022, the company raised EUR 1 million in seed financing from Nordic venture capital firms Eir Ventures and Karolinska Development. The proceeds will cover the formulation development of topical HEN-001 to facilitate a forthcoming clinical evaluation of the product as well as an expansion of the patent portfolio.

RECENT PROGRESS

- In October 2022, Karolinska Development's seed financing of Henlez was made in syndication with the Nordic venture capital firm Eir Ventures, where both parties have contributed EUR 0.5 million each.

THE MARKET

An estimated 1 percent of the world's population is affected by hidradenitis suppurativa. The global market for therapeutic treatments of the disease is projected to reach USD 1.8 billion by 2028. Available medical treatment options for the condition mainly comprise repurposed, palliative drugs for systemic administration that are limited in both numbers, safety, and effect.

Biosergen AB

Broad treatment of systemic fungal infections

Project
BSG005

Primary indication
Systemic fungal infections

Development phase
Preclinical

Holding in company*
KDev Investments 2%

Other investors
Östersjöstiftelsen
Sintef Venture II AS
Rosetta Capital**

Origin
SINTEF och Norweigan University of Science and Technology

More information
biosergen.se

* Fully-diluted ownership based on current investment plans.
** Co-ownership with KDev Investments

Biosergen (Solna, Sweden) is conducting a development program, based on it's expertise in biosynthetic technology and targeting systemic fungal infections where a candidate drug, BSG005 has been nominated.

Patients whose immune systems are compromised due to cancer or treatment with immunosuppressive drugs have been shown to be particularly susceptible to systemic fungal infections.

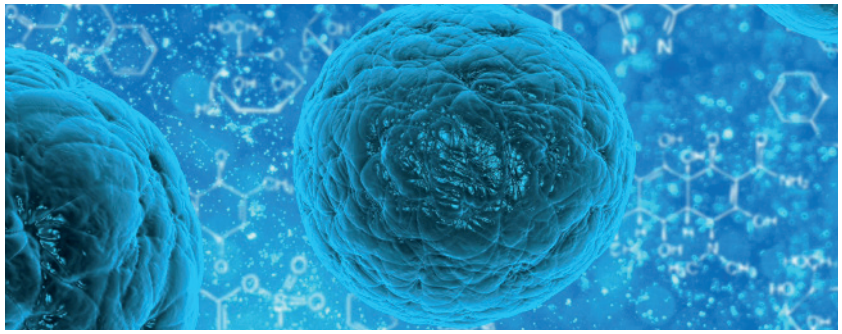
While effective pharmaceutical treatments are available, their use is limited due to serious side effects or an increasing incidence of drug resistance. Biosergen's candidate drug, BSG005, has demonstrated a wide spectrum of anti-mycotic effects in preclinical experimental models, and the candidate drug's properties have, to date, been shown to be far superior to those of conventional treatment in terms of effectiveness, toxicity, and pharmacokinetics.

RECENT PROGRESS

- In November 2022, the first participant in the MAD part of the company´s phase 1 study with BSG005 was dosed.
- In March 2023, positive results from a phase 1 study of its drug candidate against systemic fungal infection were presented.

EXPECTED MILESTONES

- Initiation of the phase 2 study is expected during 2023.



THE MARKET

Fungal infections kill more than 1.5 million globally each year and the numbers continue to increase. In the past 10 years, only one new anti-fungal product has been approved. Despite this, the use of anti fungals continues to increase and the WHO has drawn att enti on to multi-resistance as a serious global health threat. The total sales of anti fungals for human use were esti mated at approximately USD 16.7 billion in 2020. The Company expects the global annual sales potenti al for BSG005 to exceed USD 500 million.

OSSDSIGN®

OssDsign AB

Creating the next generation bone replacement products and skull implants

Project
OSSDSIGN® Cranial PSI and OSSDSIGN® Catalyst

Primary indication
Cranial implants
Bone grafts

Development phase
Marketed

Holding in company*
Karolinska Development 10%**

Other investors
SEB Venture Capital
Fouriertransform

Origin
Karolinska University Hospital
Uppsala University

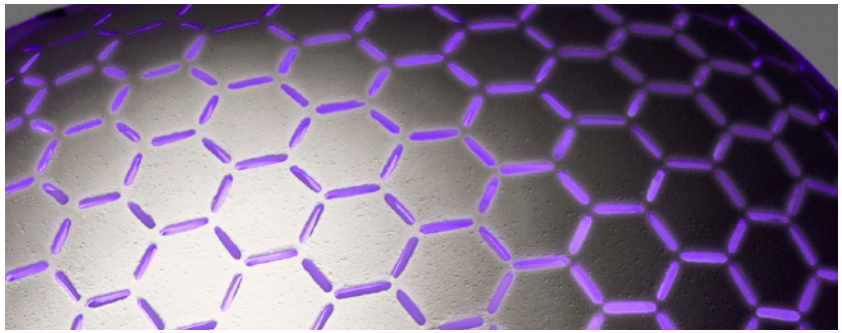
More information
ossdsign.com

* Fully-diluted ownership based on current investment plans.
** Includes indirect holdings through KCIF Co-Investment Fund

OssDsign (Uppsala, Sweden) is an innovative company that designs and manufactures implants and material technology for bone regeneration. The Company is focused on two particularly challenging areas where treatment results have so far been insufficient: cranial and spinal surgeries.

OssDsign Cranial PSI is an implant used for patients who have lost a large part of the cranium. The implant is constructed from 3D printed medical-grade titanium covered by a regenerative calcium phosphate composition. Long term follow-up data from nearly 2,000 patients with OssDsign Cranial PSI implants show an exceptional performance. Many cranial implant technologies are associated with high risks of costly complications that involve great suffering for patients and significant costs to society. Multiple studies report infection rates above 10 percent, leading to the removal of many implants. In comparison, the observed rate of explanations due to infections in patients who received OssDsign Cranial PSI was only 1.4 percent at a median follow-up time of 21 months. OssDsign Cranial PSI has regulatory approvals in Europe, USA and Japan.

Approximately 20 percent of surgeries for treating lower back pain are unsuccessful due to the lack of proper fusion between the implant and the spine. When surgeons perform the procedure, they use a combination of metal components to fixate the vertebrae and bone replacement material to stimulate bone growth. OssDsign Catalyst is an innovative synthetic bone graft composed of a proprietary nanocrystalline structure of calcium phosphate. Similar to the body's own bone mineral architecture, OssDsign Catalyst provides a favorable environment for rapid and reliable bone formation. OssDsign Catalyst is a high margin and scalable product with a large potential in the market for standard procedures, enabling extensive growth. OssDsign Catalyst received FDA clearance in 2020 and was launched in the U.S. in August 2021.



THE MARKET

The global market for cranial implants is estimated to USD 2.5 billion with an expected CAGR of 7 percent between 2021–2025, whereof the addressable market for OssDsign's implant products is estimated to USD 350 million. The U.S. market for synthetic bone grafts in spinal surgeries is valued at USD 1.8 billion.

RECENT PROGRESS

- OssDsign includes first patient in the prospective multi-center registry PROPEL for spinal fusion in the US in April 2022.
- In April 2022, OssDsign's clinical study TOP FUSION is fully enrolled and patient follow-up will continue over 24 months.
- In the same month, results from a long-term follow-up of OssDsign Catalyst were presented, showing a total absence of product-related complications.
- In November 2022, a directed share issue of SEK 65.6 million (before deduction of transaction costs) was carried out. The issue was subscribed for by Adrigo Small & Midcap and two of the company's largest owners, Karolinska Development and Lancelot Asset Management.
- In January 2023, a first patient report from the TOP FUSION clinical study will be published, showing a complete spinal fusion six months after surgery with OssDsign Catalyst.

Promimic
THINNER. FASTER. STRONGER.

Project
HA^{nano} Surface

Primary indication
Implant surface coatings

Development phase
Marketed

Holding in company*
Karolinska Development 2%
KDev Investments 14%

Other investors
K-Svets Ventures
ALMI Invest
Chalmers Ventures

Origin
Chalmers University of Technology

More information
promimic.com

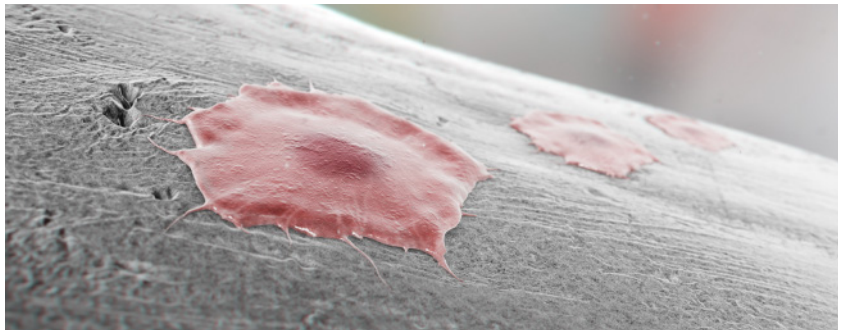
* Fully-diluted ownership based on current investment plans.

Promimic AB

Coatings to enhance the properties of medical implants

Promimic (Gothenburg, Sweden) is a biomaterials company that develops and markets HA^{nano} Surface, an innovative coating for medical implants that strengthens its anchorage in bone tissue. HA^{nano} Surface is a nanometre-thin coating that helps to stimulate the growth of bone cells and thereby improves bone healing. The coating is unique because it can be applied to any implant geometry and material, including porous materials and 3D structures. The technology on which HA^{nano} is based is FDA-approved, which means that a new implant coated with HA^{nano} Surface can receive marketing approval through the 510(k) route and reach a new market quickly. In the past two years, Promimic has gone from five to 26 different implants that are approved for clinical use with the company's coating technology.

Promimic has an established sales operation in the USA and a series of development and commercial partnerships, including one with Sistema de Implante Nacional (S.I.N), a leading provider of dental implants in Brazil, which is commercializing dental implants coated with HA^{nano} Surface. Promimic has gradually strengthened its position in the orthopedic market by entering collaboration with Onkos Surgical and INNOVASIS Inc. The collaboration with Onkos Surgical includes the development and commercialization of products treated with HA^{nano} Surface technology for hip cancer surgery. Innovasis Inc. manufactures and sells 3D-printed spinal implants treated with HA^{nano} Surface in order to improve osseointegration and stimulate new bone formation and bone growth on the implant surface.



THE MARKET

Promimic focuses on two main segments, namely the markets for orthopedic and dental implants. Together, these segments represent a global market opportunity for Promimic worth up to USD 600-800 million in 2025. Within these segments, the company's target group is medium to large sized implant companies and the main market is the United States.

RECENT PROGRESS

- In April 2022, Promimic successfully listed the company's share on Nasdaq First North Growth Market in a fully subscribed IPO offering.
- New preclinical results showing that the company's HA^{nano} Surface coating technology reduces the risk of adhesion by common pathogenic bacteria by up to 60% in June 2022.
- Promimic and Danco Medical form joint venture to better serve the US market in July 2022.

EXPECTED MILESTONES

- In 2023, the company is expected to pursue approximately 18 development projects and further product launches and license agreements will be finalized and announced.

Ownership structure

On December 31, 2022, Karolinska Development had 17,166 shareholders. International investors controlled approximately 66.1 percent of the share capital and approximately 60.9 percent of the votes. All class A shares (each of which carries 10 votes, compared to 1 vote for each class B share) are held by Insamlingsstiftelsen för Främjande & Utveckling av medicinsk forskning vid KI.

Share performance

The closing price on the first day of trading in 2022 was SEK 5.4, and at the year end, the share traded at SEK 1.7, a decrease of 68 percent. No dividends have been paid in 2022.

Share capital

At year-end 2022, the share capital amounted to SEK 2.7 million distributed among 270,077,594 shares. The nominal value is SEK 0.01 per sharer.

Ticker symbol and listing

Karolinska Development's share trades under the ticker symbol, KDEV. The share is listed on the NASDAQ Stockholm Exchange's Small Cap Index. The ISIN code is SE0002190926.

Shareholders	A-Shares	B-Shares	Cap %	Vote %
invoX Pharma Ltd	0	128,736,384	47.67%	43.93%
Worldwide International Investments Ltd	0	28,007,077	10.37%	9.56%
Swedbank Robur Microcap fond	0	8,750,000	3.24%	2.99%
Stift För Främjande & Utveckling	2,555,261	1,755,818	1.60%	9.32%
Coastal Investment Management LLC	0	2,470,541	0.91%	0.84%
Östersjöstiftelsen	0	2,203,746	0.82%	0.75%
SEB Investment Management	0	1,662,069	0.62%	0.57%
Adis Holding	0	1,200,000	0.44%	0.41%
Handelsbanken Fonder	0	1,189,769	0.44%	0.41%
Skandia Fonder	0	981,452	0.36%	0.33%
Sum Top 10 Shareholders	**2,555,261**	**176,956,856**	**66.47%**	**69.10%**
Sum Other Shareholders	**0**	**90,565,477**	**33.53%**	**30.90%**
SUM ALL SHAREHOLDERS	**2,555,261**	**267,522,333**	**100.00%**	**100.00%**

Björn Cochlovius

Board member since 2020 and Chairman since 2020.

Born 1968. Doctorate (Dr.rer.nat) from Universität des Saarlandes, Assoc. Prof Universität Heidelberg.

Current assignments: CEO Medraxa Therapeutics GmbH, Chairman of the Board of Directors of Sapreme Technologies BV, President at Biocure Technologies Ltd and General Manager at BC BioMed Consulting GmbH.

Previous assigments include i.a.: Chairman of the Board of Isogencia Ltd, Senior Director Development Asia-Pacific at Abbvie Inc., Head Oncology at Otsuka, Director Business Development Oncology at Roche AG, CEO at OnTarget Neurology AS, Head R&D at Affitech AS and SVP Business Development at Atriva Therapeutics GmbH.

Independent of the company, its executive management and independent in relation to the company's major shareholders.

No holdings in Karolinska Development.

Theresa Tse

Board Member since 2017.

Born 1992. Bachelor's Degree of Science in Economics from the Wharton School of University of Pennsylvania.

Other appointments: Chairwoman of the Board and Executive Director of Sino Biopharmaceutical Ltd (listed at the Hong Kong stock exchange) and member of the Board of Directors of invoX Pharma Ltd., France Investment (China 1) Group Limited, Chia Tai Life Technology Limited and Yun On Investment Holding Limited.

Independent of the company and its executive management. Not independent in relation to the company's major shareholders.

Holdings in Karolinska Development 128,736,384 shares (by related legal person).

Anna Lefevre Skjöldebrand

Board members since 2021.

Born 1969. Master of Law from Uppsala University.

Other appointments: CEO Swedish Medtech Service AB. Current board assignments include: Sweden Medtech4Health AB (chairwoman), Dedicare AB, Swecare and St Eriks ögonsjukhus.

Previous assignments include: Head of Legal Swedish Medtech Service AB, Advokat Delphi & Co, Advokat GLS Legal, Jurist Ernst & Young Law, Legal Counsel Front Capital Systems AB. Previous board assignments include i.a.: Dedicare AB, E-hälsomyndigheten, SIS AB, Medtech Europe and COCIR, Life Science office of Sweden. She has also been a member of the board in the Board for Public Procurement.

Independent of the company, its executive management and independent in relation to the company's major shareholders.

No holdings in Karolinska Development.

Ben Toogood

Board members since 2021.

Born 1976. Bachelor of Pharmacy from Rhodes University. MSc. from University of Witwatersrand and Executive MBA from University of Cambridge.

Other appointments: Head Global Business Development, Sino Biopharmaceuticals Limited, CEO invoX Pharma Limited, Director of Softhale BV and pHion Therapeutics.

Previous assignments: Head Global BD & M&A Sandoz AG, Group New Business Development Executive Aspen Pharmacare Holdings, Vice President Global Business Development Pharmathen SA, International Licensing Executive Niche Generics (Unichem Laboratories) and Regulatory Affairs Merck Generics (Mylan).

Independent of the company and its executive management. Not independent in relation to the company's major shareholders.

Holdings in Karolinska Development: 64,001 shares.

Philip Duong

Board member since 2022.

Born 1990. Bachelor's degree of Commerce from University of Toronto.

Other appointments: Head of Investments at Sino Biopharmaceuticals Limited and Head of Investments at invoX Pharma Limited. Current board assignments include Softhale BV and Treadwell Therapeutics.

Previous assignments: Vice President at Deutsche Bank AG (Hong Kong Branch).

Independent of the company and its executive management. Not independent in relation to the company's major shareholder.

No holdings in Karolinska Development.

Viktor Drvota

Chief Executive Officer
Appointed as CEO on June 1, 2017, and previously Chief Investment Officer since 2016.

Born 1965. M.D, Ph.D. Associate Prof. In Cardiology.

Viktor Drvota has over 20 years of Venture Capital experience with several investements, significant fundraisings, IPOs and exits. He was responsible for Life science at SEB Venture Capital 2002-2016. During his appointment at SEB VC he also served as a Board member in several biotech and Medtech companies such as Arexis AB, SBL Vaccin AB, Nuevolution AS, Index Pharma AB, Scibase AB, Airsonett AB among others. Before joining SEB, Dr Drvota worked as Senior Consultant and Associate Professor in Cardiology at the Karolinska Institutet/ hospital, Stockholm. Dr Drvota has experience from preclinical as well as clinical research in drug development and medical devices. Dr Drvota has 29 published research articles.

Holdings in Karolinska Development: 159,996 shares.

Johan Dighed

Chief Legal Officer and Deputy CEO
Appointed Chief Legal Officer 2020 and Deputy CEO 2021.

Born 1973. Master of Law.

Johan Dighed has over 18 years experience in financial and business law including positions as Head of Legal with the German bank SEB AG and legal counsel with SEB AB. Prior to joining the financial sector he worked with the international law firm Baker & McKenzie and in the Swedish Judiciary.

Holdings in Karolinska development: 250,192 shares.

Hans Christopher ”HC” Toll

Chief Financial Officer
Appointed 2022.

Born 1968. MSc in Business and Economics.

HC Toll has more than 25 years of experience as business controller and CFO, in different industries, both in Sweden and internationally. HC has i.a. been CFO in AIK Fotboll AB and QuiaPEG AB. HC is since 2021 part time CFO in the KD portfolio company Umecrine Cognition AB. In addition to life science, HC has experience in a range of industries, such as heavy manufacturing, retail, gaming, etc.

Holdings in Karolinska Development: 35,000 shares.

Per Aniansson

Investment Director
Appointed 2021.

Born 1966. MSc Engineering Physics and MBA.

Per Aniansson has more than 20 years of VC experience. Per has also been CEO of two medtech companies and CFO in another VC backed start-up. He has been responsible in several significant fundraisings, IPOs and exits. Between 2011-2019, Per was an Investment Director at Fouriertransform with a focus on medtech. During his appointment at Fouriertransform he also served as a Board member in OssDsign AB, Scibase AB, Renewcell AB, Powercell AB, SmartEye AB and AAC Clydespace AB. Prior to this Per has set up and been the CEO at Icon Medialab Capital and MD Nordics for Siemens Mobile Acceleration, two corporate VCs. He was also an investment director at Innovationskapital, Investment responsible within Life Science at Industrivärden and a management consultant at Arthur D Little and Accenture.

Current Board assignments: AAC ClydeSpace and Cure Cancer Foundation.

Holdings in Karolinska Development: 160,006 shares.

John Öhd

Chief Scientific Officer/Venture Partner
Appointed 2020.

Born 1971, M.D., Ph.D.

John Öhd has broad knowledge of and experience in drug development in several therapeutic areas, including CNS, cancer and blood disorders. He has held leadership roles within the research organizations of AstraZeneca, Shire Pharmaceuticals and Medivir. Before joining Karolinska Development he was the Chief Medical Officer of Modus Therapeutics. Prior to his drug development roles, John held various research and clinical positions at Lund University and Karolinska Institutet/University Hospital.

No holdings in Karolinska Development.

Elisabet Gimbringer

Financial Manager
Employed since November 2015.

Born 1965. Economics and Business education from Stockholm University.

Elisabet Gimbringer has worked as an approved public accountant for 10 years, and as a financial manager, business controller and financial controller for a number of different companies and fields for the last 20 years.

Holdings in Karolinska Development: 36,000 shares.

Eva Montgomerie

Head of Accounting
Employed since October 2013, employed within the group since 2007.

Born 1958. MSc in Business and Economics.

Eva Montgomerie has worked within the bank and finance sector for 12 years, 10 years within the food and clothing sector and 10 years within Life Science.

Other appointments: Finance manager in Dilafor AB and Pharmanest AB.

Holdings in Karolinska Development: 33,071 shares.

Linda Spahiu

Investment Manager
Born 1985. M.Sc. in Biotechnology, Ph.D.

Linda Spahiu has 13 years' experience from the Life Science industry, ranging from academic and laboratory work to go to market strategies and commercial due diligences. Before joining Karolinska Development she was CEO of VOC Diagnostics, a Swedish startup in cancer diagnostics. Linda also holds experience from management consulting at Boston Consulting Group, working with projects exclusively within MedTech and Life Science.

Holdings in Karolinska Development: 10,003 shares.

Mikaela Sörman

Analyst
Born 1990. M.Sc. in Public Health & Health Inequalities.

Mikaela Sörman has 9 years experience from the health care industry. Before joining Karolinska Development she worked at Boston Consulting Group, a management consultancy firm, where she focused exclusively on MedTech and Life Science projects. Mikaela also holds experience from project management after working several years in a health care social start-up, Stiftelsen Choice.

Holdings in Karolinska Development: 10,003 shares.

Yan Cheng

President Asia
Appointed 2020.

Born 1985. BSc in Business.

Yan Cheng has many years of experiences of Venture Capital in European life science companies and has been adviser to such companies on business development, especially on the Technology Transfer and Merges & Acquisitions activities between Asia and Europe. Yan Cheng also has experiences of fundraising from Fortune 500 companies, financial institutions, and family offices.

Holdings in Karolinska Development: 25,004 shares.

The Board of Directors and the CEO of Karolinska Development AB (publ), corporate identity number 556707-5048, hereby present the annual report for the Parent Company and the financial report for the Investment Entity regarding the 2022 financial year.

Karolinska Development AB (Nasdaq Stockholm: KDEV) is an investment company which offers a unique opportunity to share in the growth in value of a number of Nordic life science companies with substantial commercial opportunities. All of the portfolio companies are developing potentially groundbreaking treatments for medical conditions with a substantial need for improved therapies, including leukaemia, endometriosis, serious viral infections, sepsis and systemic inflammation, bone defects and hepatic encephalopathy. To date, two of the companies have launched their first products.

Karolinska Development's objective is for the portfolio companies operating in the pharmaceutical development sector to continue until proof-of-concept is demonstrated in phase II studies. The reasoning is that this is an attractive point in time for doing business. It is only then that it is possible to demonstrate that a candidate drug has the anticipated biological effect, thereby substantially reducing the ongoing development risk and significantly increasing the value of the project. Karolinska Development's objective for the holdings in portfolio companies within medtech is to divest at the point when the companies have launched their first product and become cash flow positive. At these times opportunities to enter into cash flow-generating license agreements, conduct IPOs or divest projects are evaluated.

Karolinska Development has access to world-class medical innovations at leading universities and research institutions in the Nordic region, including Karolinska Institutet. The company's management comprises individuals with extensive experience in investment operations, research and development, and entrepreneurship, all of whom have access to extensive global networks in the pharmaceutical industry and/or the scientific sector.

Important events during the financial year

Karolinska Development

- At the Extraordinary General Meeting of Karolinska Development held on January 12, 2022 , the following resolutions were passed: Election of a new member of the Board of Directors, Approval of the Board of Directors' resolution to issue shares with preferential rights for existing shareholders and amendment of the articles of association (January 2022).

- Karolinska Development publishes a prospectus which has been approved and registered by the Swedish Financial Supervisory Authority due to the upcoming rights issue (January 2022).

- Karolinska Development AB announces definitive outcome in rights issue. Karolinska Development's rights issue with preferential rights for shareholders is completed. The rights issue was subscribed to 76.9 percent and Karolinska Development will thereby receive SEK 378 million before transaction costs and set-off of loans. The issue proceeds will finance the continued development of existing investments, new investments, and general corporate purposes. In total, the rights issue was subscribed to 76.9 percent, of which 74.5 percent were subscribed with subscription rights and 2.4 percent without the support of subscription rights. No guarantee undertakings were claimed. Karolinska Development is grateful to existing shareholders for their participation in the rights issue and at the same time welcomes a number of new shareholders, including Swedbank Robur Microcap and Nyenburgh Holding B.V. The subscription price in the rights issue was SEK 4.00 per share. Through the rights issue, the share capital in Karolinska Development increases by SEK 944,121.85, through the issue of 1,052,163 shares of class A and 93,360,022 shares of class B, to a total of SEK 2,700,775.94 allocated to 270,077,594 shares, of which 2,555,261 shares are of class A and 267,522,333 shares are of class B (February 2022).

- Karolinska Development's annual general meeting decided, among other things, to adopt the profit and loss statement and the balance sheet, appropriation of the Company's result proposed by the Board of Directors and the CEO, re-elect the directors Björn Cochlovius, Theresa Tse, Anna Lefevre Skjöldebrand, Ben Toogood and Philip Duong and re-elect of Björn Cochlovius as Chairman of the Board of Directors (May 2022).

- Karolinska Development has invested SEK 20 million in PharmNovo, which is developing a novel treatment for nerve pain, a difficult-to-treat form of pain that often develops into a chronic condition. The drug candidate PN6047 from PharmNovo has shown very promising efficacy data in preclinical disease models and the first clinical trial is planned to start in late 2022. The market for nerve pain drugs is estimated to be worth close to USD 6 billion and continues to grow (July 2022).

- Karolinska Development has recruited Hans Christopher "HC" Toll to the position of Chief Financial Officer. He joined the company on October 1, 2022, and succeeds Per Aniansson, who will transition into a full-time position as Investment Director (September 2022).

- Karolinska Development participates in a seed financing of Henlez, a privately owned Danish company focusing on a development project directed towards the chronic dermatological condition hidradenitis suppurativa. The global market for treatments of hidradenitis suppurativa is projected to reach USD 1.8 billion by 2028 (October 2022).

Important events in the portfolio companies

AnaCardio

- AnaCardio raised SEK 33 million comprised of a convertible loan. Karolinska Development participated in this important funding, which enables AnaCardio to proceed with the clinical development plans for the company's lead asset AC01 (February 2022).
- AnaCardio has completed a series A investment round of SEK 150 million from a group of long-term and reputable investors, including Flerie Invest, Industrifonden and 3B Health Ventures. The successful financing means a clear external validation of the potential of the company's drug candidate AC01 (September 2022).

Aprea Therapeutics

- Aprea Therapeutics has completed the acquisition of the privately-held US-based biotechnology company Atrin Pharmaceuticals Inc. Aprea Therapeutics will now prioritize the development of Atrin Pharmaceuticals' drug candidates, which are being developed to fight cancer by affecting the proteins involved in the ability of tumors to repair damage to their DNA (May 2022).

Biosergen

- Biosergen is preparing a Phase 2 clinical trial of the company's lead compound BSG005, targeting systemic fungal infection from mucormycosis. The study is planned to be carried out in India, where there is an extensive outbreak of the disease (May 2022).

Dilafor

- Dilafor has enrolled the last patient to an extension of the clinical phase 2b trial with its drug candidate tafoxiparin, which generated positive results in June 2021. The purpose of the extension study is to document the effect of tafoxiparin at other doses (December 2022).

Modus Therapeutics

- Modus Therapeutics collaboration partner Imperial College London has included the first patient in the phase 1 clinical study SEVUSMART, which aims to evaluate the drug candidate sevuparin in pediatric patients with severe malaria (September 2022).
- Modus Therapeutics has completed the recruitment in a clinical phase 1b study of sevuparin, where the company's lead asset sevuparin is being evaluated for the treatment of sepsis and septic shock (September 2022).

OssDsign

- OssDsign has signed a long-term contract to deliver OssDsign Cranial PSI to the largest hospital network in France, Assistance Publique – Hôpitaux de Paris (AP-HP) (March 2022).
- OssDsign has enrolled the first patient to the company's multi-center, prospective spinal fusion registry in the U.S, PROPEL. The objective is to evaluate the use and outcome of OssDsign Catalyst in real-world clinical practice (April 2022).
- OssDsign has enrolled all patients in the clinical study TOP FUSION, which will primarily evaluate the safety and efficacy of OssDsign Catalyst in patients undergoing spinal fusion surgery (April 2022).
- OssDsign has completed a directed share issue of approximately SEK 65.6 million to a number of reputable institutional investors, including Adrigo Small & Midcap and Lancelot Asset Management. Karolinska Development is one of the major shareholders in OssDsign and subscribed its pro-rata share in the issue for an amount of approximately SEK 7.2 million. The purpose of the issue is to fund OssDsign's continued efforts to build a global bone graft business, accelerate growth in the US, expand the product portfolio and advance the clinical programs (November 2022).
- OssDsign has presented updated post-market surveillance from a long-term follow-up of OssDsign Cranial PSI, which is used in the treatment of cranial bone defects. The outcome exceeds previous follow-ups and highlights the exceptional performance of OssDsign Cranial PSI (December 2022).

PharmNovo

- PharmNovo has initiated the clinical phase 1 program with PN-6047, a candidate drug developed as a potential treatment of nerve pain (August 2022).

Promimic

- Promimic's IPO offering was fully subscribed. Promimic is now provided with SEK 80 million before deductions for issue costs, profoundly strengthening the company's position ahead of its continued growth journey. Trading in the company's shares is estimated to begin on Friday, April 29 on Nasdaq First North Growth Market (April 2022).
- Promimic presented preclinical results showing that the company's HA^{nano} Surface coating technology reduces the risk of adhesion by common pathogenic bacteria by up to 60 percent (June 2022).
- Promimic announced that they together with the US-based company Danco Medical form a joint venture for the Processing of Medical Implants in the US market. The strategic initiative is expected to have a major impact on Promimic's growth and profitability as early as next year (July 2022).

SVF Vaccines

(formerly Svenska Vaccinfabriken Produktion)

- Svenska Vaccinfabriken has appointed Richard Bethell as new CEO. He will assume the position immediately. Richard Bethell holds a D.Phil in Biological Chemistry from the University of Oxford and has thirty years of experience in the biopharmaceutical industry and has worked primarily in the development of new products for the treatment and prophylaxis of infectious diseases (January 2022).
- Svenska Vaccinfabriken has presented results from a preclinical study indicating that the company's candidate therapeutic vaccine SVF-001 has potential to elicit an immune response in a disease model of chronic hepatitis B. The results were presented on June 25 at the EASL International Liver CongressTM 2022 (June 2022).

Umecrine Cognition

- Umecrine Cognition has presented results from a preclinical study showing that the drug candidate golexanolone has a suppressive effect on neuroinflammation in the cerebellum, leading to the cessation of disease-related motor disturbances. The study further enhances understanding of golexanolone's mechanism of action and highlights its potential to treat symptoms related to movement and coordination. The study was carried out in collaboration with Dr Vincente Felipo at the Laboratory of Neurobiology, Centro de Investigación Principe Felipe, Valencia (January 2022).
- Umecrine Cognition has submitted a clinical trial application (CTA) to the Hungarian regulatory body OGÝEI for approval to initiate a Phase 2 clinical trial of its drug candidate golexanolone in patients suffering from primary biliary cholangitis. The study is planned to be conducted at several European clinical trial centers (May 2022).
- Umecrine Cognition has recruited Anders Karlsson as the new CEO. He succeeds Magnus Doverskog, who moves on to a position as Chief Scientific Officer in the company. The recruitment aims to strengthen and broaden the management team with additional competence in business development and commercialization for the next phase in the company's development. Anders Karlsson took office as CEO on September 1, 2022 (August 2022).
- Umecrine Cognition has secured funding of SEK 41 million for the start of a Phase 2 study of the drug candidate golexanolone in primary biliary cholangitis, a condition that occurs when the bile ducts in the liver are slowly destroyed. The financing is being implemented as a convertible loan with attached share options. Karolinska Development is investing SEK 15 million as part of an investor consortium that includes, among others, Abillity. The dilutive effect of the transaction will result in a negative earnings effect of SEK 49 million (7.7%) for Karolinska Development in the third quarter of 2022 (September 2022).
- Umecrine Cognition has presented new preclinical results that provide further support for the company's most advanced drug candidate golexanolone in the treatment of the rare autoimmune disease primary biliary cholangitis (PBC). Study data show that golexanolone has a significant positive effect on extreme fatigue in a validated test model. Umecrine Cognition plans to initiate a phase 2 clinical trial of golexanolone in patients suffering from PBC in the near future (September 2022).

Earn-out deals

Forendo Pharma's former shareholders are entitled to contingent earn-out payments totaling USD 870 million (linked to milestones in the development, registration and commercialization of Forendo Pharma's drug candidates). Additional payments are expected to be paid out during the period 2023 – 2034. Karolinska Development received SEK 5.4 million in 2022.

Karolinska Development shall pay a five percent earn-out in accordance with the transfer agreement with Industrifonden regarding Aprea Therapeutics. The earn-out will be paid when Karolinska Development (indirectly through KDev Investments AB) divest holdings in Aprea Therapeutics. No divestment was made during 2022, only SEK 0.3 million million paid from realization attributable to 2021.

Karolinska Developmet received during 2022, in connection with liquidation of Athera, SEK 0.2 million from the earn-out agreement regarding Athera.

Divestments

No divestments were made during 2022.

The Investment Entity and the Parent Company

The financial reporting is divided into financial reporting for the Parent Company and for the Investment Entity. The Parent Company and the Investment Entity are the same legal entity, but the reporting is divided in order to meet legal reporting requirements.

The Parent Company reports in accordance with the Swedish Annual Accounts Act and Swedish Financial Accounting Standards Council's recommendation RFR 2. The Investment Entity has to meet the requirements for a listed company and reports in accordance with IFRS, as adopted by the EU, and the Swedish Annual Accounts Act.

Financial Development for the Investment Entity in 2022 (SEK million)

Investments

As indicated above, Karolinska Development's investment strategy is to finance its portfolio companies to a significant value inflection point, when the companies can be exited. Karolinska Development also focuses on attracting external specialized life science investors to secure a broad investor base to support the development of the portfolio companies and manage risks as well as maximize the chances of success.

During 2022, investments from external investors and Karolinska Development totaled SEK 465 million. In 2019, 2020 and 2021, total investments in portfolio companies amounted to SEK 446 million, SEK 146 million and SEK 456 million respectively, giving a total investment amount of SEK 1,513 million in the four-year period 2019–2022.

Karolinska Development's investments in portfolio companies amounted to SEK 110.3 million, of which SEK 109.2 million were cash investments and SEK 1.1 million were non cash investments (accrued interest on loans).

Karolinska Development invested in nine companies: AnaCardio SEK 26.7 million, PharmNovo SEK 20.0 million, Umecrine Cognition SEK 15.1 million, Dilafor SEK 12.9 million, Modus Therapeutics SEK 11.8 million, OssDsign SEK 7.2 million, SVF Vaccines SEK 6.1 million, Henlez SEK 5.5 million and Promimic SEK 5.0 million.

Investments in Karolinska Development's portfolio companies in 2022

SEK million	Karolinska Development	External Investors	Totalt Invested 2022
AnaCardio[1)]	26.7	108.0	134.7
PharmNovo	20.0	6.7	26.7
Umecrine Cognition	15.1	26.0	41.1
Dilafor	12.9	19.6	32.5
Modus Therapeutics	11.8	0.0	11.8
OssDsign	7.2	58.4	65.6
SVF Vaccines	6.1	0.0	6.1
Henlez	5.5	5.5	11.0
Promimic	5.0	87.4	92.4
Biosergen	0.0	43.0	43.0
Total	**110.3**	**354.6**	**464.9**

1) This years total investments in AnaCardio consist of convertible loan from January 2022 of SEK 34.7 million and the first tranche of SEK 100 million (of total SEK 150 million) in a series-A finance from September 2022.

Portfolio Fair Value

Fair Value of the portfolio companies owned directly by Karolinska Development increased by SEK 53.6 million in 2022. Fair value increased mainly due to investmets in all portfolio companies but also due to fair value increase in AnaCardio. Fair value was reduced by the dilutive effect of the transaction in Umecrine Cognition and the downturn in share price in the listed holdings Modus Therapeutics, OssDsign and Promimic.

Fair value of the portfolio companies owned indirectly via KDev Investments decreased by SEK 34.3 million in 2022. The main reason for the decrease in fair value was the downturn in the share price of the listed holdings Aprea Therapeutics, Biosergen and Modus Therapeutics.

Total Fair Value of portfolio companies owned directly by Karolinska Development as well as indirectly via KDev Investments increased by SEK 19.4 million during 2022.

As a consequence of the decrease in Fair Value of the portfolio owned via KDev Investments, the potential distribution to Rosetta Capital decreased by SEK 14.4 million, resulting in a net increas in Net Portfolio Fair Value by SEK 33.8 million in 2022.

SEK million	2022-12-31	2021-12-31	2022 jmf 2021
Fair value in Karolinska Development portfolio (unlisted companies)	704.4	652.4	52.0
Fair value in Karolinska Development portfolio (listed companies)	75.5	73.9	1.6
Fair value in KDev Investments portfolio	532.5	566.8	-34.3
Total Portfolio Fair Value	**1,312.5**	**1,293.1**	**19.4**
Potential distribution to Rosetta Capital of fair value in KDev Investments	-328.5	-342.9	14.4
Net Portfolio Fair Value (after potential distribution to Rosetta Capital)	**984.0**	**950.2**	**33.8**

Total Portfolio Fair Value at 31 december 2022 amounted to SEK 1,312.5 million. After the potential distribution to Rosetta Capital of SEK 328.5 million, Net Portfolio Fair Value amounted to SEK 984.0 million at 31 December 2022.

Results 2022 (comparable figures refer to 2021)

Karolinska Development's revenues primarily consist of services provided to portfolio companies, which amounted to SEK 2.3 million 2022 (SEK 2.2 million).

The result of Changes in Portfolio Fair Value through profit or loss amounted to SEK -76.1 million (SEK 223.2 million) in 2022.

Other financial assets and liabilities, earn-out agreements, increased in fair value by SEK 20.4 million (SEK -33.9 million) in 2022. Other external expenses decreased to SEK 6.8 million (SEK 6.9 million). Personnel costs increased to SEK 26.6 million (SEK 23.2 million), mainly due to the strengthened personnel team during 2022.

Operating profit/loss was SEK -87.4 million (SEK 160.7 million) in 2022.

In 2022, debt financing was provided for four portfolio companies, and interest income amounted to SEK 1.1 million (SEK 6.4 million). After the rights issue the investment company has no interest-bearing debts at year-end 2022 (SEK 112.5 million). The interest expense decreased to SEK 0.8 million (SEK 6.3 million), the change in value of short term investments amounted to SEK -1.3 million (SEK 0.0 million). Net financial costs amounted to SEK -0.7 million (SEK 10.1 million) in 2022.

The Investment Entity's profit/loss before tax amounted to SEK -88.1 million (SEK 170.8 million) in 2022. The main reason for the negative result was the negative changes in fair value of the portfolio companies.

Financial position

The net profit/loss of SEK -88.1 million and the rights issue amounting to SEK 357.5 million led to an increase in retained earnings of SEK 270.4 million (increase of SEK 170.8 million), the share capital increased due to the rights issue by SEK 0.9 million (unchanged in 2021) and equity amounted to SEK 1,241.4 million (SEK 971.1 million) on 31 December 2022. Total assets amounted to SEK 1,251.6 million (SEK 1,109.3 million) at 31 December 2022 and the Investment Entity's equity to total assets ratio was 99 percent (88 percent).

The company's interest-bearing liabilities, which consisted of bridge loans from invoX Pharma (wholly owned subsidiary of Sino Biopharmaceutical, which took over previous loans from Sino Biopharmaceutical) were converted in the rights issue in 2022. After the rights issue was completed the investment company has no interest bearing liabilities on December 2022 (SEK 112.5 million).

Cash and cash equivalents (including short-term investments) amounted to SEK 189.8 million (SEK 92.4 million) on 31 December 2022.

See section "Financial risks" for the Board's view of the Company's financial situation.

Cash flow

Cash flow from operating activities before changes in working capital and operating investments amounted to SEK -31.3 million (SEK -27.9 million) in 2022, a reduced cash flow of SEK 3.4 million compared to 2021.

During 2022, Karolinska Development invested SEK 109.2 million (SEK 52.8 million) in cash in its portfolio companies, received SEK 5.4 million from earn-out deals (paid SEK 5.1 million), acquired short-term investments of SEK 10.0 million and recived SEK 0.0 million (SEK 56.4 million) in proceeds from the sale of shares. Together with changes in working capital, cash flow from operating activities amounted to SEK -146.3 million (SEK -32.8 million). Finacing activities in 2022 amounted to SEK 235.0 million (SEK -0.7 million) which provides a cash flow in 2022 of SEK 88.7 million (SEK -33.5 million) and cash and cash equivalents at the end of the year of SEK 131.1 million (SEK 42.4 million). Including short-term investments in the cash flow will increase the cash flow 2022 by SEK 10.0 million (SEK 5.0 million) to SEK 98.7 million (SEK 16.5 million), an improvement of SEK 82.2 million compared with 2021. Cash and cash equivalents together with short-term investments amounted to SEK 189.8 million at year-end 2022 (SEK 92.4 million).

Information on risks and uncertainties

Investment Entity and the Parent Company

The global impact of crises

Russia's invasion of Ukraine and the coronavirus's global spread affect the economy and society as a whole, including Karolinska Development and its portfolio companies. The general downturn in the stock market in 2022 and the increase in interest rates have shifted the financial market's focus from growth companies to companies with positive operating cash flows, which has led to lower valuations in many previously highly valued growth companies. This may affect Karolinska Development and its opportunities to not only finance its portfolio companies, but also to divest them at a suitable time for Karolinska Development.

The value of listed companies can decline, delays in clinical trial programs may occur and the opportunities for refinancing can be hampered. The Board monitors the evolvement of the crises closely and Karolinska Development is working intensively to minimize the impact on the value of our investments and continues with different financing alternatives to secure the long-term capital requirement and thereby increase the degree of strategic and operational headroom for the future.

After the initial payment from the sale of Forendo Pharma which was received in December 2021 and the rights issue carried out in February 2022 the company's long-term financial situation has been strengthened.

Risk of losing invested capital

Karolinska Development invests, among other things, in companies with projects at early stages, before beneficial effects have been proven, in animal testing or human testing, so-called "Proof of principle" and "Proof of concept", respectively. Accordingly, the business is associated with a high risk. Karolinska Development invests primarily in unlisted companies, which means that Karolinska Development may not be able to find suitable exit alternatives for its investments within the time frame expected by Karolinska Development, or at all. If Karolinska Development is unsuccessful in finding suitable exit opportunities for its investments, the Company's business, results, financial position, and growth could be adversely affected.

Future financing requirements

In order to secure financing for investments in current and new portfolio companies, Karolinska Development may seek additional financing in the future. Such additional financing may not be available to Karolinska Development on acceptable terms, or at all. If Karolinska Development is unable to obtain funding on time, the Company may be required to significantly curtail its investments, meaning that the Company's business, results, financial position, and growth could be adversely affected.

In addition, loan financing, if available, may be expensive and may involve restrictive covenants or may otherwise constrain the Company's financial flexibility, which could adversely affect the Company's business, results, financial position, and growth.

Future capital needs

Future investments in new and existing portfolio companies will require capital. There is no guarantee that capital can be obtained on favorable terms or in sufficient amounts to finance the operations in accordance with the business plan, or that such capital can be obtained at all.

Key employees at Karolinska Development and in the portfolio companies

It is vital that Karolinska Development succeeds in retaining its key employees and is able to recruit new employees when needed. Therefore, high demands will be placed on the Company's professional leadership, that Karolinska Development's distinctive profile is preserved, and that the forecasted development is met. Karolinska Development faces competition for personnel from other companies, investment funds, universities, public and private research centers as well as government entities and other organizations. If Karolinska Development is unsuccessful in its efforts to retain and recruit relevant personnel, the Company's business, results, financial position, and growth could be adversely affected.

Furthermore, a key factor for the portfolio companies is to succeed in retaining and recruiting individuals with experience in fundraising, company development and exits, and/or expertise in research and technology on which these companies are built. Equally important is a skillful leadership and that the staff considers the workplace stimulating. To achieve this, high demands will be placed on the portfolio companies' leadership. In addition to an interesting work environment, attractive employment conditions are important. The portfolio companies may fail in their efforts to retain and recruit staff with the appropriate skills, which may adversely affect the portfolio companies and the Company's business, results, financial position, and growth.

Cooperation with the portfolio companies and co-investors

Karolinska Development usually has a representative on the Board of Directors of its portfolio companies. The aim on a strategic level is to be able to assist these portfolio companies in matters concerning their development. The boards of directors of the portfolio companies are also composed of representatives of other investors as well as independent directors. Cooperation on these boards is dependent on effective communication and good relationships between the directors and the management of the portfolio companies. Karolinska Development's board representatives are in a minority position on the boards of the portfolio companies and their influence at board meetings may be limited. Moreover, it is necessary for Karolinska Development and its Executive Management to succeed in reaching agreements with other investors which can contribute to the portfolio companies' further development. Karolinska Development also often holds a minority position in the portfolio companies. Karolinska Development and its board representatives may not be able to meet these requirements, which could adversely affect the portfolio companies' further development and the Company's business, results, financial position, and growth.

Access to new investment opportunities

Karolinska Development handpicks the majority of its investments from the flow of medical innovations that comes from the Karolinska Institute and other highly respected universities and research institutions in the Nordic region. Karolinska Development is, therefore, dependent on its relationships with universities, innovation centres, entrepreneurs, and investors for access to this business flow.

Karolinska Development may, potentially, also be unable to identify suitable deals in which to invest.

Complicated ownership structures in the portfolio companies

Karolinska Development's holdings in the portfolio companies are in some cases direct, and in others indirect via, for example, KDev Investments AB and/or KCIF Co-Investment Fund KB ("KCIF"), and sometimes the Company has a combination of direct and indirect holdings. The Company makes investments in the portfolio companies on a regular basis, normally through new issues of shares in the portfolio companies, but also through loans or other financial instruments. This means that the ownership structure of the portfolio companies change regularly. Furthermore, from time to time transfers of ownership are made in connection with exits, partial exits or due to restructurings. There is a risk that necessary waivers from pre-emption or preferential rights according to portfolio companies' articles of association or according to shareholders' agreements regarding the portfolio companies are not obtained, or not documented in the correct order. If anyone were to dispute the Company's holdings in the portfolio companies and succeed with such a claim in a legal proceeding, it could result in an unexpected decrease in the value of the Company's holdings in portfolio companies, which could adversely affect the Company's operations, results, financial position, and growth.

The development work of the portfolio companies

The majority of the portfolio companies' projects are in clinical phase stages of development and further research and development work is required before the innovations and technologies of the companies can be commercialized. Examples of such work are testing of drugs on patients to assess the candidate drugs' effect and safety. Problems or delays may occur and the development work may not be able to be conducted successfully, or at all.

Future product development of the portfolio companies is subject to the risk of failure inherent in the development of pharmaceutical, other biotechnological products or techniques, and medical devices. This includes the possibility that any or all of the portfolio companies' product candidates will show a lack of effect, be toxic or otherwise fail to either meet applicable regulatory standards, fail to receive necessary regulatory approvals or clearances, or turn out to be difficult to develop into commercially viable products.

Cash flow from the exit or licensing of projects is subject to the objectives of the portfolio companies' projects being achieved. Each outcome has a direct impact on the potential value of a portfolio company. Other factors that may have an impact on the cash flow from the portfolio companies are competitors' successes and demands from potential buyers at a given point in time.

Most of the portfolio companies' projects may not be commercialized to the extent necessary in order for Karolinska Development's investment in the project to be profitable, or even for Karolinska Development to recover the capital invested in the portfolio company in question. Karolinska Development has a relatively narrow portfolio, limiting the potential that one or more projects can be commercialized successfully enough to cause significant dividends or exit proceeds to Karolinska Development. If none of the portfolio companies are able to achieve such commercial success, it could adversely affect the portfolio companies' and the Company's business, results, financial position, and growth.

The challenge of innovation

The markets for pharmaceuticals, diagnostics, bio technology, and medical devices are characterized, inter alia, by long periods of research and development, rapid technological development, regulatory challenges, and a large number of competing product launches. The existing and potential customers of the portfolio companies often work within established reference models and standard practices. The portfolio companies conduct business with highly advanced research and pioneering technologies. If the portfolio companies cannot successfully, and within set time frames, break into these markets and establish their products and technologies, the portfolio companies' and the Company's business, results, financial position, and growth could be adversely affected.

Long time before products can be launched

The time it takes before a product candidate has completed the entire research and development process, established strong patent protection, satisfied all regulatory requirements, and found strong marketing and distribution partners, is often underestimated.

Moreover, the market introduction of new products and technologies often starts slowly. Introducing new products and technologies, which are not previously known and accepted, or have predetermined reimbursement models, takes time. This could lead to delays in milestone payments and royalty income, or that they lapse entirely, which could adversely affect the portfolio companies' and the Company's business, results, financial position, and growth.

Competition for the portfolio companies

The markets for the product candidates and new technologies of the portfolio companies are exposed to fierce competition. The portfolio companies' direct and indirect competitors are in many cases major international companies. Such actors are already established in the markets of the portfolio companies and may hold competitive advantages. Furthermore, they can normally react rapidly to new research and development or new market requirements. They may also, compared to the portfolio companies, have greater financial resources and expertise in research and development, clinical trials, better opportunities in obtaining regulatory approvals, and superior marketing.

Competitors may develop more effective, more affordable and more suitable products, or may achieve patent protection earlier or be able to commercialize their products earlier than Karolinska Development's portfolio companies. These competing products may render the portfolio companies' product candidates obsolete or otherwise limit the ability of the portfolio companies to generate revenues from their product candidates, which could adversely affect the portfolio companies' and the Company's business, results, financial position, and growth.

Market and technology development

The portfolio companies frequently operate in markets characterized by rapid development. New and competing products and technologies may pose a threat to the products developed by the portfolio companies. Moreover, new products and actors result in increased competition, which may negatively impact both price and market penetration. The future prospects of the portfolio companies will to a large extent depend on their ability to develop their business and to produce high-quality products and technologies. The portfolio companies' development work may not proceed without problems. Problems in the development work may lead to delays in set timetables and that products and technologies, once they are fully developed, will not satisfy the market requirements and demands and/or will not achieve broad market acceptance. Changes in pricing principles may impair the value of the products, technologies, and services developed by the portfolio companies, which in turn could adversely affect the portfolio companies' and Karolinska Development's business, results, financial position, and growth.

Product liability of the portfolio companies

The portfolio companies that are in commercial phases are in many cases exposed to the risk of product liability claims that may be inherent due to flaws in manufacturing, studies, or marketing of certain pharmaceuticals or diagnostics, biotechnology, and medical devices. The portfolio companies may not be able to obtain or maintain insurance protection for such claims on acceptable terms, or at all. Moreover, insurance that the portfolio companies do obtain may not provide adequate protection against a potential claim. This could adversely affect the portfolio companies' and the Company's business, results, financial position, and growth.

Need for strategic partners

Most of the portfolio companies have a great need to enter into partnerships or ally themselves with larger international companies to market their products. The portfolio companies may not be successful in attracting third parties to enter into such partnerships with, and, if such partnerships are entered into, they may not develop as planned. If a strategic partner does not fulfill its contractual obligations or commitments or fails to keep to expected time limits, or if a partner has to be replaced or if the clinical information that the partner receives for some reason appears to be of poor quality or incorrect, planned clinical trials may be extended, delayed, or terminated, which could have a negative impact on the business of the portfolio company and its ability to license or commercialize its products, which in turn could adversely affect the portfolio companies' and the Company's business, results, financial position, and growth.

Intellectual property rights of the portfolio companies

The success of the portfolio companies is to a large extent dependent on the portfolio companies' ability to protect methods and technologies that they develop with patent protection and other intellectual property rights in order to prevent competitors from using their innovations and other protected information. Since patent applications in general are confidential for 18 months from the date of the application, third parties may have filed patent applications for methods and technologies covered by a portfolio company's pending patent applications without the portfolio company being aware of such applications. Consequently, the portfolio company's patent application may not have priority, which in turn could result in the patent protection being considerably less extensive than applied for. The fact that a patent has been granted does not provide absolute protection during the term of the patent. Patents may later be declared invalid by court or an authority, which leads to insufficient patent protection vis-à-vis other innovations. In addition, granted patents must be properly transferred from the inventor/inventors to the portfolio company in question. Moreover, the extent of the patent protection is dependent on patent category and the wording of the patent application. The different patent categories and the wording of the patent application are of importance to the strength of a patent and may vary from case to case.

Because of the formulation of the patent legislation, the application of an innovation in accordance with a portfolio company's patent may be governed by the technology in another patent on which the portfolio company's patent is dependent. In such a situation, the portfolio company may not be able to ensure the right

to use such technology at reasonable conditions to the portfolio company, or at all.

A third party may sue a portfolio company for infringing its patent rights. Likewise, a portfolio company may need to resort to litigation against a third party to enforce a patent granted to the portfolio company or to determine the scope and invalidity of third-party proprietary rights. Patent litigations often take several years and the issue may, depending on the rules of the country in question, be tried in several courts. The cost of pursuing intellectual property litigation, even if resolved in the portfolio company's favor, could be substantial. Litigation could also divert the portfolio company's focus from the portfolio company's ordinary business. Uncertainty resulting from pursuing litigation could limit a portfolio company's ability to continue its operations. If any party should claim that a portfolio company's product or use of methods or technologies infringes upon such party's intellectual property rights, the portfolio company may be forced to pay damages and cease the infringing activity.

In many countries, prohibitory injunctions may be announced at an early stage of legal proceedings. As prohibitory injunctions often require that security is provided, the portfolio companies may not have sufficient financial resources to pursue prohibitory injunctions.

It is not certain that the patents of the portfolio companies entail sufficient legal or commercial protection against financially strong competitors that, despite the patent, may use the portfolio company's methods and technologies. Furthermore, the patents of the portfolio companies may not entail sufficient legal or commercial protection against similar products which the market assesses to be replaceable with the portfolio company's product. Only a few of the portfolio companies may have registered trademarks. Without accurate registration, it might be difficult, or at least time and resource consuming, to prevent a third party from using the respective portfolio company's trade name or brands, as applicable. If any of the risks related to the intellectual property of the portfolio companies were to materialize, it could adversely affect the portfolio companies' and the Company's business, results, financial position, and growth.

Trade secrets of the portfolio companies

Each portfolio company may be dependent on trade secrets, which are not protected by patents or other intellectual property, being safeguarded. Such trade secrets could include, but are not limited to, information in relation to inventions for which patent protection has not been sought yet or to information in relation to manufacturing processes or methods for which patent protection cannot be sought. Employees and collaboration partners of the respective portfolio company do generally have an obligation of confidentiality towards the portfolio company. However, it can happen that someone, with access to information of great value for the portfolio company in question, discloses or uses the information in a manner that impairs the portfolio company's position on the market, which could adversely affect the relevant portfolio company's and the Company's business, results, financial position, and growth.

Future financing requirements of the portfolio companies

Research and development activities and marketing efforts in the life science industry are capital-intensive. The portfolio companies may not be able to obtain further capital on advantageous terms, and the capital which may be obtained may not be sufficient to finance the activities in accordance with the portfolio companies' respective business plans. Any inability of Karolinska Development to participate in future investment rounds in a portfolio company could lead to the portfolio company having to curtail its business and/or to Karolinska Development's holding in the company being diluted by other investors. Even in situations where Karolinska Development would be able and willing to participate, co-investors may not be willing to participate on the same terms and conditions. If any of these risks were to materialize, it could adversely affect the portfolio companies' and the Company's business, results, financial position, and growth.

Dependency on obtaining regulatory approvals

In order to obtain regulatory approvals for commercial sales of the portfolio companies' products, the portfolio companies and their collaborating partners will be required to complete clinical trials to demonstrate the safety and efficacy of the products. The portfolio companies and their collaborating partners may fail to obtain approvals from regulatory authorities to commence or complete such clinical trials. If approval is obtained, such clinical trials may prove that the products are not safe or effective to the extent necessary to obtain marketing authorizations from regulatory authorities. Positive results demonstrated in development studies and clinical trials that the portfolio companies and their collaborating partners finalize may not be confirmed in results obtained in future clinical trials.

The portfolio companies and their collaborating partners will not be able to market any of their products without first obtaining the requisite authorizations from the appropriate regulatory authorities. The regulatory process to obtain marketing authorization for a new pharmaceutical product may take many years and usually requires significant financial and other resources. If the portfolio companies and their collaborating partners do not obtain the required authorizations to market their product candidates, it could adversely affect the portfolio companies' and the Company's business, results, financial position, and growth.

Environmental regulations

Because of the chemical ingredients in pharmaceutical products and the nature of their manufacturing process, the pharmaceutical industry is subject to extensive environmental regulation and the portfolio companies are subject to the risk of incurring liability for damages or costs of remediation, renovation or control of environmental problems. The portfolio companies may not be able to obtain the operating licenses necessary to conduct their business. In addition, if the portfolio companies fail to comply with environmental regulations relating to the proper use or disposal of hazardous materials or otherwise fail to comply with conditions attached to operating licenses, such licenses could be

revoked. The portfolio companies can also be subject to legal sanctions and substantial liability and costs, or could be required to suspend or modify their operations, which could adversely affect the portfolio companies' and the Company's business, results, financial position, and growth.

Financial risks

Financial risks are described in Note 17.

Financial Development for the Parent Company in 2022

(Amounts in SEK million, comparable figures refer to 2021)

During 2022, the Parent Company's operating profit/loss amounted to SEK -87.5 million (SEK 160.7 million), a decrease of SEK 248.2 million compared to 2021. The Parent Company's net profit/loss for the year amounted to SEK -88.1 million (SEK 170.8 million).

The equity increased from SEK 971.1 million at 31 December 2021 to SEK 1,241.5 million at 31 December 2022. The rights issue carried out during the year led to an increase in equity of SEK 358.5 million but with the profit/loss of SEK -88.1 million the net increase in equity amounted to SEK 270.4 million in 2022.

Corporate governance report

The Corporate Governance Report, which is separate from the annual report, is presented on page 91–95.

Guidelines for Remuneration to the CEO and other Executive Management as well as other conditions

The Guidelines for Remuneration to Executive Management are prepared by the Board of Directors for adoption by the Annual General Meeting. The 2022 decided guidelines apply and can be found in Note 5.

Share capital and ownership

Karolinska Development's share capital at the end of the financial year amounted to SEK 2.7 million, distributed among 270,077,594 shares with a par value of SEK 0.01, of which 2,555,261 were A shares (with 10 votes each) and 267,522,333 were B shares (with one vote each). The largest shareholders were invoX Pharma Ltd with a total of 128,736,384 B shares representing 47.67 percent of the capital and 43.93 percent of the votes, Worldwide International Investments Ltd with a total of 28,007,077 B shares representing 10.37 percent of the capital and 9.56 percent of the votes, Swedbank Robur Microcap fond with a total of 8,750,000 B shares representing 3.24 percent of the capital and 2.99 percent of the votes, Insamlingsstiftelsen för främjande och utveckling av medicinsk forskning vid KI with 2,555,261 A shares and 1,755,818 B shares representing 1.06 percent of the capital and 9.32 percent of the votes, Nyenburgh holding B.V. with a total of 2,580,000 B-shares representing 0.96 percent of the capital and 0.88 percent of the votes.

Holding of treasury shares

At year-end, the Company held 244,285 treasury shares, corresponding to SEK 2,443 of the share capital, and the consideration paid totaled SEK 4.7 million. Share repurchases were made in previous financial year for the purpose of covering social security costs related to the PSP incentive programs. No repurchases or transfers occurred during the year.

The Annual General Meeting's authorization to the Board

The Annual General Meeting 2022 authorized the Board, for the period up until the next Annual General Meeting, to decide, whether on one or several occasions without pre-emption rights for the shareholders, to issue new series B shares up to a maximum of 20 percent of the share capital.

The Annual General Meeting also authorized the Board to decide on the transfer of 244,285 previously acquired series B shares to cover social security costs in PSP 2015.

Future development

Karolinska Development has a focused portfolio of therapeutic and medtech companies with significant value-generating potential. The portfolio companies are developing highly differentiated and commercially attractive products that have the potential to deliver both compelling clinical and health economic benefits and attractive returns on investment. The majority of Karolinska Development's portfolio companies are well-financed for ongoing development and commercialisation work and well positioned to deliver key value-generating milestones within the next two years.

Environment and responsibilities

Karolinska Development's operations do not involve any special environmental risks and do not require any special environmentally related permits or authorizations from authorities. Karolinska Development undertakes its operations according to applicable health and safety regulations and offers its employees a safe and sound working environment.

Multi-year summary for the Investment Entity

SEKm	2022	2021	2020	2019	2018	2017	2016
Income statement							
Revenue	2	2	3	3	3	2	5
Result from change in fair value	-56	189	-172	387	100	255	-147
Operating expenses	-34	-31	-33	-42	-29	-37	-33
Operating profit/loss	**-87**	**161**	**-202**	**348**	**74**	**221**	**-174**
Financial net	-1	10	-5	-45	-44	-41	-43
Profit/loss after financial items	**-88**	**171**	**-207**	**303**	**31**	**180**	**-217**
Balance sheet							
Tangible non-current assets	1	1	1	1	–	–	–
Shares in portfolio companies	984	950	770	1,048	619	448	149
Loans receivable from portfolio companies	-	–	–	2	5	3	1
Other financial assets	60	62	–	–	27	41	38
Total non-current assets	**1,044**	**1,013**	**771**	**1,050**	**651**	**492**	**188**
Other current assets	18	4	43	64	58	2	2
Short-term investments	59	50	–	–	70	150	238
Cash and cash equivalents	131	42	76	52	16	19	11
Total current assets	**207**	**97**	**119**	**117**	**143**	**171**	**250**
Total assets	**1,252**	**1,109**	**890**	**1,167**	**794**	**663**	**438**
Equity	1,241	971	800	1,008	296	267	30
Long-term liabilities	-	–	–	–	11	384	399
Current liabilities	10	138	90	159	487	12	9
Total liabilities and equity	**1,252**	**1,109**	**890**	**1,167**	**794**	**663**	**438**
Cash flow							
Cash flow from operating activities and investing activities	-146	-32	25	50	-3	11	-9
Cash flow from financing activities	235	-1	-1	-14	0	-3	0
Cash flow for the year	**89**	**-33**	**24**	**36**	**-3**	**9**	**-9**

Multi-year summary cont.

SEKm	2022	2021	2020	2019	2018	2017	2016
Key ratios[1)]							
Net asset value	1,249	978	806	1,027	247	277	33
Net debt	-190	32	0	38	393	210	150
Capital employed	1,241	1,096	876	1,008	307	651	429
Return on equity	-7%	18%	-26%	30%	10%	66%	-729%
Return on capital employed	-7%	16%	-24%	30%	10%	27%	-51%
Equity to total assets ratio	99%	88%	90%	86%	37%	40%	7%
Average number of employees	8	7	7	7	7	7	6
Data per share							
Profit/loss after tax, SEK, after dilution	-0.34	0.97	-1.18	4.10	0.48	2.93	-4,08
Profit/loss after tax, SEK, before dilution	-0.34	0.97	-1.18	4.10	0.48	2.93	-4,08
Equity, SEK	4,6	5,5	4,6	15,7	4,6	4,2	0,6
Net asset value, SEK	4,6	5,6	4,6	5,9	3,8	4,3	0,7
Share price at year-end, SEK	1,7	5,3	1,8	3,5	6,2	5,8	6,0
Dividend, SEK	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Share price/Equity per share	37%	96%	40%	23%	135%	139%	1,076%
Share price/Net asset value per share	37%	95%	39%	60%	162%	133%	854%
Number of shares at year-end	270,077,594	175,665,409	175,665,409	175,665,409	64,361,206	64,361,206	53,464,998
Weighted average number of shares before dilution	257,417,460	175,421,124	175,421,124	73,874,552	64,136,941	61,243,234	53,210,223
Weighted average number of shares after dilution	257,417,460	175,421,124	175,421,124	73,874,552	64,136,941	61,300,516	53,210,223

1) Definitions of key ratios, see page 97

Proposed appropriation of the profit of the Parent Company (SEK)

The following earnings are available for appropriation by the Annual General Meeting:

SEK	2022-12-31
Retained loss	-1,409,002,017
Share premium reserve	2,735,903,004
Net profit/loss for the year	-88,101,122
Total	**1,238,799,865**

The Board of Directors proposes that profits brought forward be appropriated as follows:

SEK	2022-12-31
Share premium	2,735,903,004
Retained loss	-1,497,103,139
To be carried forward	**1,238,799,865**

For information regarding the operating results and financial position of the Investment Entity and the Parent Company, refer to the following income statements, balance sheets, statements of cash flow and accompanying notes. Unless otherwise stated, all amounts are reported in thousands of Swedish kronor (SEK 000).

Income statement for the Investment Entity

SEK 000	Note	2022	2021
Revenue	2	2,300	2,170
Change in fair value of shares in portfolio companies	17	-76,083	223,203
Change in fair value of other financial assets and liabilities	17	20,435	-33,891
Other expenses	3, 4	-6,798	-6,887
Personnel costs	5	-26,585	-23,205
Depreciation of right-of-use assets	4	-690	-690
Operating profit/loss		**-87,421**	**160,700**
Interest income		1,416	6,406
Interest expenses	6	-844	-6,284
Other financial gains and losses	6	-1,273	9,997
Financial net		**-701**	**10,119**
Profit/loss before tax		**-88,122**	**170,819**
Taxes	7	-	-
NET PROFIT/LOSS FOR THE YEAR		**-88,122**	**170,819**

Statement of comprehensive income for the Investment Entity

SEK 000	Note	2022	2021
Net profit/loss for the year		-88,122	170,819
Total comprehensive income/loss for the year		**-88,122**	**170,819**

Earnings per share

SEK 000	Note	2022	2021
Earnings per share, weighted average, before dilution		-0.34	0.97
Number of shares, weighted average before dilution	13	257,417,460	175,421,124
Earnings per share, weighted average, after dilution		-0.34	0.97
Number of shares, weighted average after dilution	13	257,417,460	175,421,124

Statement of financial position for the Investment Entity

SEK 000	Note	2022-12-31	2021-12-31
Assets			
Tangible non-current assets			
Right-of-use assets	4	690	690
Financial non-current assets			
Shares in portfolio companies at fair value through profit or loss	8	983,995	950,170
Other financial assets	9, 17	59,537	61,799
Total non-current assets		**1,044,222**	**1,012,659**
Current assets			
Receivables from portfolio companies		211	505
Other financial assets	9, 17	15,970	-
Other current receivables	10	673	768
Prepaid expenses and accrued income	11	750	2,940
Short-term investments at fair value through profit or loss	12, 17	58,742	50,005
Cash and cash equivalents	17	131,078	42,398
Total current assets		**207,424**	**96,616**
TOTAL ASSETS		**1,251,646**	**1,109,275**
Equity and liabilities			
Equity	13		
Share capital		2,701	1,757
Share premiun reserve		2,735,903	2,378,373
Accumulated losses including net profit/loss for the year		-1,497,166	-1,409,044
Total equity		**1,241,438**	**971,086**
Current liabilities			
Current interest-bearing liabilies to related party	15	-	124,603
Other financial liabilities	14, 17	191	1,756
Accounts payable		439	1,674
Lease liabilities	4	753	732
Other current liabilities		654	2,156
Accrued expenses and prepaid income	16	8,171	7,268
Total current liabilities		**10,208**	**138,189**
Total liabilities		**10,208**	**138,189**
TOTAL EQUITY AND LIABILITIES		**1,251,646**	**1,109,275**

Statement of changes in the Investment Entity's equity

		Equity attributable to the Investment Entity's shareholders			
SEK 000	Note	Share capital	Share premium reserve	Accumulated losses	Total
Opening equity at 1 Jan 2022	13	**1,757**	**2,378,373**	**-1,409,044**	**971,086**
Net profit/loss for the year				-88,122	-88,122
Total comprehensive income/loss for the year				-88,122	-88,122
Rights issue		944	357,530		358,474
Closing equity at 31 Dec 2022		**2,701**	**2,735,903**	**-1,497,166**	**1,241,438**
Opening equity at 1 Jan 2021	13	**1,757**	**2,378,373**	**-1,579,863**	**800,267**
Net profit for the year				170,819	170,819
Total comprehensive income for the year				170,819	170,819
Closing equity at 31 Dec 2021		**1,757**	**2,378,373**	**-1,409,044**	**971,086**

Statement of cash flows for the Investment Entity

SEK 000	Note	2022	2021
Operating activities			
Operating profit/loss		-87,421	160,700
Adjustments for non-cash items			
Depreciation	4	690	690
Change in fair value	17	55,648	-189,312
Other items		-206	-
Cash flow from operating activities before changes in working capital and operating investments		**-31,289**	**-27,922**
Cash flow from changes in working capital			
Increase (-)/Decrease (+) in operating receivables		416	-1,461
Increase (+)/Decrease (-) in operating liabilities		-1,661	46,084
Cash flow from operating activities		**-32,534**	**16,701**
Investing activities			
Partial payment for earn-out deal		5,358	-3,121
Sale of shares in portfolio companies		-	56,427
Acquisitions of shares in portfolio companies, loans to portfolio companies	33	-109,166	-52,759
Acquisitions of short-term investments [1]	12, 17	-10,000	-50,005
Cash flow from investing activities		**-113,808**	**-49,458**
Financing activities			
Amortization of lease liabilities	4	-714	-714
Cash from rights issue		254,911	-
Prospectus costs		-19,175	-
Cash flow from financing activities		**235,022**	**-714**
Cash flow for the year		**88,680**	**-33,471**
Cash and cash equivalents at the beginning of the year	17	42,398	75,869
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR[1]	17	**131,078**	**42,398**

1) Surplus liquidity in the Investment Entity is invested in interest-bearing instruments and is recognized as short-term investments with a maturity exceeding three months. These investments are consequently not reported as cash and cash equivalents and are therefore not included in the statement of cash flows from operating activities. Cash and cash equivalents and short-term investments amounts to SEK 189.8 million (SEK 92.4 million) at the end of the period.

Income statement for the Parent Company

SEK 000	Note	2022	2021
Net sales	23	2,300	2,170
Revenue		**2,300**	**2,170**
Change in fair value of shares in portfolio companies	24	-76,083	223,203
Change in fair value of other financial assets and liabilities	25	20,435	-33,891
Other external costs	26, 27	-7,513	-7,601
Personnel costs	28	-26,585	-23,205
Operating profit/loss		**-87,446**	**160,676**
Interest income and similar income	29	1,416	16,403
Interest expenses and similar expenses	30	-2,071	-6,239
Financial net		**-655**	**10,164**
Taxes	31	-	-
NET PROFIT/LOSS FOR THE YEAR		**-88,101**	**170,840**

Statement of comprehensive income for the Parent Company

SEK 000	Note	2022	2021
Net profit/loss for the year		-88,101	170,840
Total comprehensive income/loss for the year		**-88,101**	**170,840**

Balance sheet for the Parent Company

SEK 000	Note	2022-12-31	2021-12-31
Assets			
Financial non-current assets			
Shares in subsidiaries	32	588,798	0
Shares in joint ventures	33	202,020	870,271
Shares in associated companies	33	100,568	29,329
Other long-term securities holdings	34	90,609	50,570
Other financial assets	36	59,537	61,799
Total non-current assets		**1,043,532**	**1,011,969**
Current assets			
Receivables from portfolio companies		211	505
Other financial assets	36	15,970	-
Other current receivables	37	673	768
Prepaid expenses and accrued income	37	750	2,940
Short-term investments at fair value through profit or loss	38	58,742	50,005
Cash and cash equivalents		131,078	42,398
Total current assets		**207,424**	**96,616**
TOTAL ASSETS		**1,250,956**	**1,108,585**
Equity and liabilities			
Equity			
Restricted equity			
Share capital	12	2,701	1,757
Unrestricted equity	39		
Share premium reserve		2,735,903	2,378,373
Accumulated losses		-1,409,002	-1,579,842
Net profit for the year		-88,101	170,840
Unrestricted equity		1,238,800	969,371
Total equity		**1,241,501**	**971,128**
Current liabilities			
Current interest liabilties to related parties	41, 43	-	124,603
Other financial liabilities	40	191	1,756
Accounts payable		439	1,674
Other current liabilities		654	2,156
Accrued expenses and prepaid income	42	8,171	7,268
Total current liabilities		**9,455**	**137,457**
Total liabilities		**9,455**	**137,457**
TOTAL EQUITY AND LIABILITIES		**1,250,956**	**1,108,585**

Statement of changes in equity for the Parent Company

		Restricted equity	Unrestricted equity			
SEK 000	Note	Share capital	Share premium reserve	Accumulated losses	Net profit/loss for the year	Total equity
Opening equity at 1 Jan 2022	13	**1,757**	**2,378,373**	**-1,579,842**	**170,840**	**971,128**
Appropriation of profit				170,840	-170,840	0
Net profit/loss for the year					-88,101	-88,101
Rights issue		944	357,530			358,474
Closing equity at 31 Dec 2022		**2,701**	**2,735,903**	**-1,409,002**	**-88,101**	**1,241,501**
Opening equity at 1 Jan 2021	13	**1,757**	**2,378,373**	**-1,372,376**	**-207,466**	**800,288**
Appropriation of loss				-207,466	207,466	0
Net profit for the year					170,840	170,840
Closing equity at 31 Dec 2021		**1,757**	**2,378,373**	**-1,579,842**	**170,840**	**971,128**

Statement of cash flows for the Parent Company

SEK 000	Note	2022	2021
Operating activities			
Operating profit		-87,446	160,676
Adjustments for non-cash items			
Change in fair value		55,648	-189,312
Other items	24, 25	-205	-
Cash flow from operating activities before changes in working capital and operating investments		**-32,003**	**-28,636**
Cash flow from changes in working capital			
Increase (-)/Decrease (+) in operating receivables		416	-1,461
Increase (+)/Decrease (-) in operating liabilities		-1,661	46,084
Cash flow from operating activities		**-33,248**	**15,987**
Investing activities			
Partial payment for earn-out deal		5,358	-3,121
Sale of shares in portfolio companies	34	-	56,427
Acquisitions of shares in portfolio companies, loans to portfolio companies	33	-109,166	-52,759
Acquisitions of short-term investments [1]	38	-10,000	-50,005
Cash flow from investing activities		**-113,808**	**-49,458**
Financing activities			
Cash from rights issue		254,911	-
Prospectus costs		-19,175	-
Cash flow from financing activities		**235,736**	**0**
Cash flow for the year		**88,680**	**-33,471**
Cash and cash equivalents at the beginning of the year		42,398	75,869
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR[1]		**131,078**	**42,398**

1) Surplus liquidity in the Investment Entity is invested in interest-bearing instruments and is recognized as short-term investments with a maturity exceeding three months. These investments are consequently not reported as cash and cash equivalents and are therefore not included in the statement of cash flows from operating activities. Cash and cash equivalents and short-term investments amounts to SEK 189.8 million (SEK 92.4 million) at the end of the period.

Note 1 Accounting policies

Operations in general

Karolinska Development AB (publ) ("Karolinska Development," "Investment Entity" or the "Company") is a Nordic life sciences investment company. The Company, with Corporate Identity Number 556707-5048, is a limited liability company with its registered office in Solna, Sweden. The Company's address is Tomtebodavägen 23A, S-171 65 Solna and the principal place of business is also Tomtebodavägen 23A, S-171 65 Solna. The Company focuses on identifying medical innovations and investing in the creation and growth of companies ("portfolio companies") that develop these assets into differentiated products that will make a difference to patients' lives and provide an attractive return on investment to its shareholders. The annual report includes the parent company (Karolinska Developemt AB (publ)) as well as the financial reporting for the Investment Entity. The Company's series B shares are traded on Nasdaq Stockholm.

Compliance with generally accepted accounting policies and law

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) and the interpretations of the IFRS Interpretations Committee, as adopted by the EU. Furthermore, recommendation RFR 1 Supplementary Accounting Regulations for Groups and statements UFR 7 and 9 from the Swedish Financial Reporting Board have been applied.

Conditions when preparing the financial statements

This is an English translation of the Swedish annual report. In the event of any discrepancy between the content of the two versions, the Swedish version shall prevail.

The Company's functional currency is Swedish kronor, which is also the reporting currency of the Investment Entity. This means that the financial statements are presented in Swedish kronor. All figures, unless otherwise indicated, are rounded to the nearest thousand. Assets and liabilities are recognized at historical cost, except for certain financial assets and liabilities measured at fair value. Financial assets and liabilities measured at fair value consist of holdings in subsidiaries, joint ventures and associated companies, other securities holdings, other financial assets and liabilities, and short-term investments classified as financial assets held for sale.

The preparation of the financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the application of accounting policies and carrying amounts of assets, liabilities, revenue and expenses. The estimates and assumptions are based on historical experience and various other factors which are considered appropriate under prevailing conditions. The results of these estimates and assumptions are then used to assess the carrying amounts of assets and liabilities that are not otherwise evident from other sources. The actual result may differ from these estimates and assessments.

Estimates and assumptions are reviewed periodically. Changes in estimates are recognized in the period the change is made if the change only affects that period or in the period the change is made and future periods if the change affects both the current period and future periods.

The following accounting policies for the Investment Entity have been applied consequently to all periods presented in the financial statements, unless otherwise stated below.

New and amended standards applied by the Investment Entity

New or amended IFRS standards and interpretations from the IFRS Interpretations Committee have not had any significant impact on the Investment Entity. None of the other IFRS or interpretations that have not yet entered into force are expected to a have a material impact on the Investment Entity.

Significant accounting policies

Classification

The Investment Entity's non-current assets and long-term liabilities are essentially limited to amounts that are expected to be recovered or settled more than twelve months after the closing date. Current assets and current liabilities of the Investment Entity comprise amounts that are expected to be recovered or settled within twelve months of the closing date.

Operating segments

An operating segment is a component of a company engaged in a business activity from which it may earn revenue and incur expenses, whose operating income is regularly reviewed by the Company's chief operating decision maker, and for which there is separate financial information. The Investment Entity's reporting of operating segments complies with the internal reporting to the chief operating decision maker. The chief operating decision maker has the function of assessing the profit/loss of the operating segments and determining the allocation of resources. In the Investment Entity's assessment, the management constitutes the chief operating decision maker. In internal reporting, the management evaluates the Investment Entity's result, but does not analyze the results for various parts of the Investment Entity. Consequently, the Investment Entity is considered a single reportable operating segment.

Consolidating policies

Karolinska Development has determined that it meets the definition of an investment entity. An investment entity does not consolidate its subsidiaries, IFRS 10 Consolidated Financial Statements, or apply IFRS 3 Business Combinations when it obtains control over another company, with the exception of subsidiaries that provide services associated with the investment entity's investing operations. An investment entity instead measures its holdings in portfolio companies at fair value through profit or loss in accordance with IAS 9 "Financial Instruments". Karolinska Development does not have any holdings in other investment entities that will be consolidated in any of the reporting periods.

Note 1 continued

Subsidiaries

Subsidiaries are companies under the control of the Investment Entity. Consequently, an investor controls an investee only if the investor has:

a) power over the investee;
b) exposure, or rights, to variable returns from its involvement with the investee; and
c) the ability to use its power over the investee to affect the amount of the investor's returns.

Karolinska Development considers all the facts and circumstances in assessing whether it controls an investee. The Company reassesses whether control exists if the facts and circumstances suggest that one or more of the controlling factors have changed.

Associated companies

An associated company is an entity over which the Investment Entity exercises significant influence through the ability to participate in decisions related to the financial and operational strategies of the business. This situation normally occurs when the Investment Entity, directly or indirectly, owns shares representing 20–50 percent of the votes, or receives significant influence through agreements.

Karolinska Development is an investment entity in accordance with IAS 28 Investments in Associates and Joint Ventures and has chosen to recognize its holdings in associated companies at fair value with changes in value through profit or loss in accordance with IFRS 9 Financial Instruments. The accounting policy for financial assets at fair value through profit or loss is described in the section on financial instruments below.

Joint ventures

A joint venture is a joint arrangement whereby two or more parties that share joint control of the arrangement have the rights to its net assets. Joint control means contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

Karolinska Development normally enters into shareholder agreements with other shareholders in the portfolio companies. Where shareholder agreements assure other investors or founders of influence, Karolinska Development is not considered to have control, even if its ownership interest formally exceeds 50 percent.

Karolinska Development has chosen to recognize its holdings in joint ventures at fair value with changes in value through profit or loss, which is permitted in accordance with IAS 28 Investments in Associates and Joint Ventures.

Significant assessments in the application of the accounting policies

The following section describes the most significant assessments, besides those containing estimates (see below), which management has made in the application of the Investment Entity's accounting policies and which have the most significant impact on the amounts recognized in the financial statements.

Qualification as an investment entity

In Karolinska Development's assessment, the Company meets the criteria for an investment entity. An investment entity is a company that meets the following criteria:

a) it obtains funds from one or more investors for the purpose of providing the investor(s) with investment management services;
b) it commits to its investor(s) that its business purpose is investing funds solely for returns from capital appreciation, investment income, or both; and
c) it measures and evaluates the performance of substantially all its investments on a fair value basis.

In Karolinska Development's assessment, the Company also has the following typical characteristics to qualify as an investment entity:

a) it has more than one investment;
b) it has more than one investor;
c) it has investors that are not related parties of the entity; and/or
d) it has ownership interests in the form of equity or similar interests.

Karolinska Development has investments in several portfolio companies, has several investors that are not related parties to the Company and the investments are in equities.

The following significant assessments have been made in determining whether the Company qualifies as an investment entity:

- Karolinska Development invests in portfolio companies for the purpose of generating a return in the form of capital appreciation and investment income. Karolinska Development does not receive, nor does it have as its aim to receive, benefits from the Company's investments that are not available to other parties not related to the investee. The commercial purpose is not to develop medical products as such, but rather to invest to create and maximize the return. An important factor in the assessment is Karolinska Development's involvement in the investees operations, since the Company provides certain services to support the development projects in the portfolio investments. Because of its influence as a shareholder, Karolinska Development normally appoints one or more board members of the portfolio companies. Despite that it provides certain services to the portfolio companies, Karolinska Development has reached the conclusion that it meets the criteria for an investment entity.

Note 1 continued

- Moreover, the primary metric to evaluate the portfolio companies is based on fair value. Although Karolinska Development also monitors the portfolio companies through studies and clinical trials, for instance, the primary purpose of monitoring these key indicators is to better understand changes in fair value and assess the need for additional future investments
- The Company has a documented exit strategy for all its portfolio companies. Karolinska Development's investment strategy is to retain investments for a limited period. In every decision whether to invest in a company, the company and/or development project in question must have clear potential for a final exit, e.g., through a sale to an outside party, that the asset can be transferred or that there is a potential that the project (portfolio company) will be licensed to an outside party with a high return to global partners. The exit strategies are taken into consideration in the valuations.

Influence over the portfolio companies

Karolinska Development's ownership interests in its portfolio companies range from a few percent up to 73 percent. A relatively large proportion of Karolinska Development's share of the portfolio companies lies within the range of 17–73 percent and in some cases fluctuates over time through investments that increase or dilute Karolinska Development's holdings.

Karolinska Development normally enters into shareholder agreements with other shareholders in the portfolio companies. Where shareholder agreements assure other investors or founders of influence, Karolinska Development is not considered to have control, even if its ownership interest formally exceeds 50 percent. Karolinska Development has therefore chosen to recognize its holdings at fair value through profit or loss as holdings in associated companies or joint ventures depending on the degree of control.

Valuation of portfolio companies

The calculation of the Portfolio Fair Value is based on IFRS 13 standards of deciding and reporting fair value and the International Private Equity and Venture Capital Valuation Guidelines (IPEV Valuation Guidelines) established by the IPEV, which represent the current best practice on the valuation of private equity investments.

The Portfolio Fair Value is divided into Total Portfolio Fair Value and Net Portfolio Fair Value.

Total Portfolio Fair Value: The aggregated proceeds that would be received by Karolinska Development and KDev Investments if the shares in their portfolio companies were sold in an orderly transaction between market participants at the measurement date.

Net Portfolio Fair Value (after potential distribution to Rosetta Capital) is the net aggregated proceeds that Karolinska Develop ment would receive after KDev Investments' distribution of proceeds to Rosetta Capital and is designated in the Investment Entity's balance sheet as Shares in portfolio companies at fair value through profit or loss.

A detailed description of the impact of the portfolio valuation of the agreement with Rosetta Capital is provided in Note 17.

Valuation method for portfolio companies

The valuation of the Company's portfolio is based on the International Private Equity and Venture Capital Valuation Guidelines (IPEV) and IFRS 13 Fair Value Measurement. Based on the valuation criteria provided by these rules, an assessment is made of each company to determine a valuation method at each reporting period. This takes into account whether the companies have recently been financed or involved in a transaction that includes an independent third party or a valuation from an external independent valuation and if the companies recently have met significant milestones. If there is no valuation available based on a recently refinancing or other third-party valuation and there is no valuation available based on a similar transaction or an external independent valuation, internal discounted cash flow models (DCF) valuation through sales multiples, or valuation at net worth of the portfolio companies whose projects are suitable for this type of calculation, are used. Companies whose shares are listed on an active market for the same instruments are valued at the share price on the final trading day in the reporting period and reported at Level 1 in the fair value hierarchy, in accordance with IFRS 13.

- Early-stage companies, defined as pharmaceutical assets prior to phase III development and technology assets prior to establishing targeted and sustainable sales revenues can be valued using a variety of different methods:

i. Companies recently financed through a transaction that includes a third-party investor are valued in accordance with the price in conjunction with the most recent investment, known as post-money valuation. An increase in value may then occur through add-on investments in the form of capital or loans made, including interest.
ii. Companies who have recently achieved significant milestones can be valued using a valuation from an external, independent valuation institute. A change in value may then occur through add-on investments in the form of capital or loans made including interest, for example.
iii. Early-stage companies, which have not recently been financed by a transaction involving a third-party investor, are valued at the price of the most recent investment, corresponding to the last post-money valuation of the portfolio company. Companies in such early stages of development typically show relatively flat value appreciation through the financing rounds as they complete preclinical and early clinical milestones. Significant value appreciation is unlikely during this period and the post-money valuation, despite not being validated by an external investor, is considered a good approximation of fair value.

Should a new investor join an investment round, the valuation method will fall under a higher valuation priority, although the actual metric – post-money valuation – still can be the same as if only existing owners participate.

Note 1 continued

Should Karolinska Development opt out of an investment round with no intention to participate in later rounds, the price in the most recent investment may still be a valid valuation method, provided that these circumstances lead to a disproportionate post-money valuation because of the loss of negotiating power over pricing (and Karolinska Development's ownership may be drastically diluted). Karolinska Development's unwillingness to invest may reflect a lower perceived value compared to previous post-money valuations, a lowering of value is often a good indication of fair value in such cases. An opt out of an investment can of course also be due to Karolinska Development's ability to invest, without it being due to the fair value of the portfolio company.

As the share price of internal financing rounds is decided by existing investors, caution is taken to ensure that the share price is not artificially deflated or inflated. In each quarterly fair value assessment, the post-money valuation by internal investment rounds is benchmarked against portfolio company progress (e.g., reached or failed milestones), comparable values for peer companies, bids from external investors and other applicable valuation methods to ensure that the post-money valuation is at an appropriate level to be considered fair value.

The cautious approach is particularly applied if an investment round is followed by a round that includes a then third-party investor. An increase in fair value may be merited if, e.g., milestones have been reached during the time between investments, although in certain cases a large increase may not be considered. In these cases, the total amount invested since the investment round with third-party investors corresponds to the appreciation in value, while additional increases in value are not be included until the valuation is validated by new third-party investors.

- DCFs (internal discounted cash flow models) of the underlying business consider all of the forecasted cash flows of a portfolio company, which are then discounted with an appropriate rate and also risk-adjusted to take the development risks in pharmaceutical development into consideration. Revenue streams are approximated from epidemiological data on the intended therapeutic indication and a number of assumptions such as pricing per patient and year, market share and market exclusivity (from IPR and regulatory market protection). As described in the IPEV Valuation Guidelines, the inputs in the DCF models are constructed with a high level of subjectivity. Hence, this method is only suitable for late-stage assets, either pharmaceutical companies with lead projects in late-stage (phase III) development or technology projects with an established market presence and where revenues can be projected with a higher degree of confidence than in products in earlier stages of development. As of 31 december 2022, there are no portfolio companies valued by internal DCFs.
- Companies with an established revenue stream may be valued by sales multiples. The multiples should be derived from current market-based multiples for comparable companies. As with DCF valuations, this method requires that the company has a mature market presence and its sales forecasts can be made with sufficient certainty. As this method only considers revenue streams, the IPEV Valuation Guidelines stipulate that non-operating assets or liabilities need to be taken into account when applying this method. As of 31 December 2022, there are no portfolio companies valued according to sales multiples.
- Net asset value, defined as a portfolio company's assets minus its liabilities, is used as the fair value of portfolio companies without current operations. This typically occurs in companies considered financial assets as a consequence of discontinued development projects or withdrawn products. In essence, these companies are valued by their liquidation value. As of 31 December 2022, there are no companies valued according to net asset value.

Revenue

IFRS 15 Revenue from Contracts with Customers specifies how and when revenue is recognized, but also contains rules on providing more informative, relevant disclosures in the financial statements. Karolinska Development does not have any contracts with customers that are changed by the introduction of IFRS 15, so the introduction has not changed the impact compared to previous reporting.

Revenue consists of invoiced services rendered to portfolio companies for management, communication, finance and administration, including legal and analytical operations. Revenue for services rendered is recognized in the period in which the service is rendered and recognized as the fair value of the consideration that has been or will be received, less value-added tax.

Operating expenses and financial income and expenses

Financial income and expenses

Financial income and expenses consist of interest income on bank deposits, receivables and interest-bearing securities, interest on loans, dividend income, foreign exchange differences, and unrealized and realized gains on financial deposits.

Interest income on receivables and interest on debt are recognized over their term to maturity using the effective interest method. The effective interest rate is the rate that makes the present value of all estimated future cash payments and disbursements over the expected interest rate duration equal to the carrying amount of the receivable or liability.

Interest income includes accrued transaction costs and any discounts, premiums and other differences between the original value of the claim and the amount received at maturity.

Direct transaction costs for raising loans are distributed over the term of the loan and are included in effective interest rate as described above.

Dividend income is recognized when the shareholder's right to receive payment is established.

Note 1 continued

Earnings per share

Earnings per share before dilution are calculated by dividing the net profit for the year attributable to Karolinska Development's shareholders by a weighted average number of shares outstanding during the period.

The weighted average number of outstanding shares is calculated by adjusting the number of shares outstanding at the beginning of the period for share issues and repurchases made during the period, multiplied by the number of days that the shares were outstanding in relation to the total number of days in the period. For diluted earnings per share, the number of shares is adjusted for all dilutive potential shares, which include warrants. The warrants are dilutive if the exercise price is less than the estimated fair value of the Investment Entity's shares and this reduces earnings per share after dilution.

Recognition and measurement of financial instruments

IFRS 9 Financial Instruments covers the recognition of financial assets and liabilities and requires financial assets to be classified in different categories and that the measurement is made at fair value or amortized cost. The classification is determined upon initial recognition based on the Company's business model and the characteristics of contractual cash flows. The portfolio companies will continue to be measured at fair value through profit or loss, which also applies to financial assets, short-term investments and financial liabilities. Karolinska Development has no predicted credit losses.

Financial instruments recognized in the balance sheet include, on the asset side, shares and participations, other financial assets, loans, accounts receivable, short-term investments, cash and cash equivalents. The liability side consists of borrowings, other financial liabilities and accounts payable.

Financial instruments that are not derivatives are initially recognized at amortized cost, corresponding to the instrument's fair value plus transaction costs for all financial instruments except those belonging to the category financial assets at fair value through profit or loss, which are measured at fair value, net of transaction costs. Subsequent measurement depends on how they are classified as below.

A financial asset or financial liability is recognized in the balance sheet when the Investment Entity becomes a party according to the instrument's contractual terms. Accounts receivable are recognized in the balance sheet once the invoice has been sent. Liabilities are recognized when the counterparty has performed and a contractual obligation to pay exists, even if the invoice has not yet been received. Accounts payable are recognized when the invoice is received.

A financial asset is derecognized from the balance sheet when the contractual rights are realized, expire or the Investment Entity loses control over them. The same applies to part of a financial asset. A financial liability is derecognized from the balance sheet when the contractual obligation is fulfilled or otherwise extinguished. The same applies to part of a financial liability. The acquisition and disposal of financial assets are recognized on the trade date, i.e., the date when the Investment Entity pledges to acquire or dispose of the asset, except in the cases where the Investment Entity acquires or disposes of listed securities, in which case settlement date accounting applies.

The fair value of listed financial assets corresponds to the asset's quoted purchase price on the closing date.

Classification of financial instruments

IFRS 9 classifies and measures financial instruments. The classification depends on the purpose of the acquisition of the financial instrument. Management determines the classification at the original purchase date. The classification determines how the financial instrument is measured after initial recognition.

See table below, "Classification of financial assets and liabilities according to IFRS 9," for Karolinska Development.

Financial assets

The following three measurement categories apply to financial assets:

- Amortized cost
- Fair value through other comprehensive income (FVTOCI)
- Fair value through profit or loss (FVTPL)

A financial asset is measured at amortized cost if:

- The financial asset is held within a business model whose objective is to realize the financial asset's cash flows by collecting contractual cash flows, and
- The contractual cash flows consist solely of repayments of principal and interest on the principal amount outstanding.

Karolinska Development has assessed the following assets as belonging to this category:

Financial assets held for trading

A financial asset is classified as held for trading if it:

- has been acquired principally for the purpose of selling it or buying back in the near term;
- on initial recognition is part of a portfolio of identified financial instruments that are managed together and has a recent actual pattern of short-term profit-taking; or
- is a derivative that is not designated as an effective hedging instrument.

This category includes short-term investments.

Note 1 continued

Loans receivable and receivables from subsidiaries

Loans receivable and receivables from subsidiaries are financial assets that are not derivatives, have fixed or determinable payments and are not quoted on an active market. Assets in this category are measured at amortized cost. Amortized cost is determined from the effective interest rate calculated on the acquisition date. Receivables from subsidiaries are recognized at the amount that is expected to be received after an allowance for impaired receivables. As the expected duration is short, the nominal value is recognized without discounting. Loans receivable from portfolio companies and receivables from subsidiaries have been assessed as belonging to this category.

Cash and cash equivalents

Cash and cash equivalents include cash and bank balances and other short-term liquid investments that are readily convertible to cash and are subject to an insignificant risk of changes in value. To be classified as cash and cash equivalents, the duration may not exceed three months from the date of acquisition. Cash and bank balances are categorized as "Loans receivable and accounts receivable," which are measured at amortized cost. Because the bank balances are payable upon demand, amortized cost corresponds to the nominal amount.

Financial assets at fair value through other comprehensive income (FVTOCI)

- The financial asset is held within a business model whose objective is to realize the financial asset's cash flows by both collecting contractual cash flows and selling the asset, and
- The contractual cash flows consist solely of repayments of principal and interest on the principal amount outstanding.

Karolinska Development has no financial assets in this category.

Financial assets at fair value through profit or loss (FVTPL)

All other financial assets are measured at fair value with the changes recognized in profit or loss. This category consists of two subgroups: held for trading and financial assets designated at FVTPL.

This category includes shares in portfolio companies and other financial assets.

Financial liabilities

Financial liabilities are measured at either amortized cost or at fair value through profit or loss.

Financial liabilities at amortized cost

This category includes loans and other financial liabilities, e.g., convertible loans, short-term interest-bearing liabilities and accounts payable. Loans are measured at amortized cost. Amortized cost is based on the effective interest rate calculated when the liability was incurred. As the expected duration of accounts payable is short, the nominal value is recognized without discounting.

Financial liabilities at fair value through profit or loss (FVTPL)

This category comprises financial liabilities held for trading and derivatives that are not used for hedge accounting. Liabilities in this category are measured at fair value with changes in value recognized through profit or loss. Other financial liabilities have been assessed as belonging to this category.

Impairment testing of financial assets

Impairment is calculated and recognized for financial assets at amortized cost and for financial assets at fair value with changes in value recognized in other comprehensive income. An allowance for impaired receivables is recognized and calculated as needed. Karolinska Development has no allowance for expected impaired receivables.

Note 1 continued

Share capital
Shares issued by the company are classified as equity.

When shares are repurchased, the amount of the consideration paid is recognized as a deduction from equity net of any tax effect. Repurchased shares are classified as treasury shares and are presented as a deduction from total equity. When treasury shares are sold or subsequently reissued, the amount received is recognized as an increase in equity and the resulting surplus or deficit on the transaction is transferred to or from other paid-in capital.

Dividends
Dividends are recognized as a liability after the AGM has approved the dividend.

Employee benefits

Short-term benefits
Short-term benefits to employees are calculated without discounting and are reported as an expense when the related services are obtained. A provision is reported for the expected cost for bonus payments and profit-sharing programs when the company has an applicable obligation to make such payments as a result of the services received from employees and the obligation can be calculated reliably.

Defined contribution pension plan
Obligations stemming from defined contribution pension plans are expensed through profit or loss as incurred.

Certain individual pension undertakings have been guaranteed in the form of Company-owned endowment insurance policies. The Investment Entity has no further obligation to cover possible shortfalls in the endowment insurance or to pay any amount in excess of deposited premiums, which is why these pension plans are accounted for as defined contribution pension plans. Accordingly, the payment of premiums corresponds to a final settlement of the undertaking vis-à-vis the employee. In accordance with IAS 19 and the regulations for defined contribution pension plans, the Investment Entity therefore reports no assets or liabilities, with the exception of specific payroll taxes related to these endowment insurance policies.

Taxation
Income tax comprises current and deferred taxes. Income taxes are recognized through profit or loss except when the underlying transaction is recognized through other comprehensive income against equity or directly against equity, whereby the associated tax effect is recognized through other comprehensive income or directly against equity.

Current tax is tax to be paid or received for the current year, applying the tax rates enacted or substantively enacted by the closing date. This includes adjustments to current tax attributable to prior periods.

Deferred tax is calculated on the difference between recognized tax and tax values of the Investment Entity's assets and liabilities. Deferred tax is accounted for using the balance sheet liability method. Deferred tax liabilities are generally recognized for all taxable temporary differences, while deferred tax assets are recognized to the extent it is probable that the amounts can be offset against future taxable profits.

Deferred tax assets for deductible temporary differences and tax losses carried forward are recognized only to the extent it is probable that they will be utilized. The value of deferred tax assets is reduced when it is no longer considered probable that they can be utilized. The carrying amount of deferred tax assets is tested at each closing date and reduced to the extent it is no longer probable that sufficient taxable profit will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same authority and the Investment Entity intends to settle the tax on a net basis.

Contingent liabilities
A contingent liability is recognized when there is a possible obligation as a result of past events and whose existence is confirmed only by one or more uncertain future events, or when there is a commitment that is not recognized as a liability or provision because it is not probable that an outflow of resources will be required.

Note 2 Revenue distribution

Services rendered are comprised of invoiced services provided to portfolio companies in Sweden. These services consist of management, communication, finance and administration, including legal and analytical operations.

Revenue per significant source

SEK 000	2022	2021
Invoiced services	2,300	2,170
Total revenue	**2,300**	**2,170**

Note 3 Other external expenses

Fees and remuneration to the Investment Entity's auditors

SEK 000	2022	2021
EY		
Audit services	1,319	1,334
Audit related services	120	125
Tax consulting	-	67
Total	**1,439**	**1,526**

The audit fee refers to the auditor's reimbursement for execution of the statutory audit. This work includes the audit of the annual report and annual accounts, the administration of the Board of Directors and the CEO, and fees for advice offered in connection with the audit assignment. Audit related services primarily involve quality assurance services other than the statutory audit.

Note 4 Leases

The Investment Entity has chosen to finance premises and equipment through leases. Future contractual leasing payments are indicated below.

SEK 000	2022-12-31	2021-12-31
Future leasing payments		
Short-term - Within one year	711	711
Long-term - Between one year and five years	-	-
Total future leasing payments	**711**	**711**

Right-of-use assets

SEK 000	2022	2021
Accumulated acquisition cost		
At the beginning of the year	690	690
New periods	690	690
Depreciation	-690	-690
Closing balance	**690**	**690**

Lease liabilities

SEK 000	2022	2021
Accumulated acquisition cost		
At the beginning of the year	732	711
New periods	690	690
Amortization of lease liabilities during the year	-669	-669
Closing balance	**753**	**732**

The Company, which has only two leases (property lease and a lease of low value), the property lease is for one year with a one-year extension.

Note 5 Employees and personnel costs

Average number of employees

Full-time equivalent	2022	Of whom women	Of whom men	2021	Of whom women	Of whom men
Investment Entity	8	50%	50%	7	35%	65%
Total	**8**	**50%**	**50%**	**7**	**35%**	**65%**

Remuneration expenses for employees

Salaries, other remuneration and social security costs

	2022		2021	
SEK 000	Salaries and remuneration	Social security costs	Salaries and remuneration	Social security costs
Investment Entity	20,158	5,845	17,123	4,884
(of which pension expenses)	*2,999*	*727*	*2,485*	*603*

Defined contribution pension plans

The Investment Entity has defined contribution pension plans. Payments to these plans are made on an ongoing basis according to the rules of each plan.

Note 5 continued

Remuneration to Executive Management and the Board of Directors

Guidelines 2022 for Remuneration to Executive Management.

1 APPLICABILITY
The guidelines apply to salary and other forms of remuneration to the CEO and other management personnel (Executive Management) for contracts signed after the 2022 Extra General Meeting. The guidelines apply to all categories of remuneration and benefits, whether paid in cash, paid now or in the future, or if certain or uncertain. Not included, however, are expense compensation or the issuance of equities, warrants or convertibles covered by Chapter 16 of the Swedish Companies Act.

2 GUIDELINES FOR REMUNERATION
2.1 General
Remuneration to Executive Management comprises fixed salary, variable remuneration, pension and other customary benefits.

Karolinska Development shall maintain compensation levels and terms required to recruit and retain an Executive Management with the competence and experience necessary to meet the Company's operational goals. The total remuneration to Executive Management shall be competitive, reasonable, and appropriate.

Market term consultancy fees may be paid to directors who perform services for the Company outside the scope of the board work.

2.2 Fixed salary
Fixed salaries shall be based on each individual's field of responsibility and experience. Fixed salary shall be revised annually for each calendar year.

2.3 Variable remuneration
Variable remuneration shall be designed to promote Karolinska Development's long-term value creation; be based on criteria that are predetermined, clear, measurable, and can be influenced; if in form of variable salary, have a fixed cap; and not be included when calculating pension insurance premiums.

The CEO and other Executive Management are entitled to bonus based on exits in the portfolio. The compensation amounts to a total of four percent of the net amount paid to the company at the exit and the total maximum payment for the exit related bonus shall be limited to SEK 50 million per exit and calendar year. The bonus creates incentives to promote the company's business strategy, long-term interests and sustainability.

Annual short-term incentive programs (STI) based on set objectives are proposed by the Remuneration Committee and resolved by the Board of Directors for each calendar year. Remuneration is dependent on criteria based on the development of the portfolio and the development of the business model, which are set up to promote Karolinska Development's long-term value creation and create incentives to promote the company's business strategy, long-term interests and sustainability. The business goals consist of sub-goals, weighed in relation to each other depending on priority, which are clear, measurable and influenceable. The programs are evaluated after the end of the year by the remuneration committee and decisions on outcomes are made by the company's board. Payment to employees under a STI program shall be limited to the equivalent of six months' salary. The cost, including social security contributions, at a maximum payout for STI 2022 amounts to SEK 3.9 million.

Information on the exit bonus and about the STI and LTI programs can be found in note 5. Information is also available on the Company's website under Corporate Governance.

As stated above, the STI part's share of the fixed annual cash salary may not exceed 50 percent. Correspondingly, the fixed salary constitutes at least 66 percent of the total remuneration. Any exit bonus has not been included in this calculation.

Karolinska Development has established one long-term incentive program (LTI) for the years 2008–2010, which was resolved by the Annual General Meeting and thus not covered by these guidelines.

2.4 Pension
The Company's pension costs shall be paid during the employee's active time with the Company. Pension insurance premiums shall not be paid after an employee has retired. In addition to what is required under Swedish law, premiums are paid in accordance with the Company's adopted pension premium plan.

2.5 Other customary benefits
Executive Management is entitled to other customary benefits that apply to all employees at Karolinska Development, such as wellness subsidies, sick pay, occupational health services, etc. Thirty vacation days are paid.

Executive Management does not receive fees for serving as directors on the Board when also employed by or otherwise contributing to Karolinska Development. The Company does not provide company cars.

The termination period if terminated by the Company is not more than twelve months for the CEO and six months for other Executive Management. The termination period on the part of the CEO shall be at least six months and for other Executive Management at least six months. Severance pay may be paid only to the CEO. Fixed salary during the period of notice and severance pay aggregated are not to exceed an amount equivalent to fixed salary for two years.

Note 5 continued

2.6 Salaries and terms of employment for employees
In the preparation of the Board's proposal for the remuneration guidelines, salary and terms of employment for the company's employees have been taken into account in that information on employees' total remuneration, remuneration components and the increase and rate of increase of the remuneration over time have formed part of the Board's decision basis in the evaluation of the fairness of the guidelines and the restrictions that follow from them.

2.7 Preparations and decision-making
The Company´s Remuneration Committee is to prepare decisions related to salaries and other employment terms to executive management. The Board of Directors is to decide regarding salary to the CEO and principles for remuneration to other executive management. The Board must prepare a proposal for new guidelines at least every four years and present the proposal to the AGM for resolution. The Guidelines should apply until new guidelines are adopted by the General Meeting. The Board of Directors should also monitor and evaluate the program for variable remuneration to the executive management, the application of guidelines for remuneration to executive management and the applicable remuneration structures and levels in the Company. The members of the Remuneration Committee are independent in relation to the Company and executive management. When the Board of Directors prepare and decides on remunertionrelated matters, the CEO and other members of executive management do not attend the meetings to the extent they are affected by the matters.

3 EXCEPTIONS
The Board of Directors may on a case-by-case basis deviate from the guidelines, if in the individual case, and in accordance with what follows from the Swedish Companies Act, there are special reasons for this, and a deviation is necessary to satisfy the company's long-term interests, including its sustainability, or to ensure the company's economic viability. Circumstances that have been known or could be predicted when the guidelines where decided on normally cannot be accepted as reason for deviation. Exceptions shall be reported and explained at the following Annual General Meeting.

4 DEVIATIONS
There have been no deviations from the guidelines.

5 PREVIOUSLY DECIDED REMUNERATION NOT YET DUE FOR PAYMENT
At the time of the AGM, the Company did not have any approved remuneration to Executive Management that has fallen due for payment.

Note 5 continued

Remuneration to the Chief Executive Officer, other senior executives and the Board of Directors

The Executive Management includes the Chief Executive Officer, Chief Financial Officer, Investment director, Chief Scientific Officer and General Counsel. The table below shows the remuneration to the CEO, other senior executives and the Board of Directors during the financial year.

2022

SEK 000	Base salary/Board fee[1)]	Variable Remuneration	Other benefits and remuneration[2)]	Pension costs	Total remuneration
Viktor Drvota, VD	2,856	1,785	2	920	5,563
Other senior executives (3 persons), salaries etc	4,380	2,752	6	1,169	8,307
Other senior executives (1 person), invoiced fee	257				257
Total management	**7,493**	**4,536**	**8**	**2,089**	**14,127**
Björn Cochlovius, Chairman	400				400
Tse Ping, Board member	0				0
Anna Lefevre Skjöldebrand, Board member	200				200
Ben Toogood, Board member	200				200
Philip Doung, Board member	114				114
Theresa Tse, Board member	0				0
Total, Board of Directors	**914**				**914**
Total	**8,407**	**4,536**	**8**	**2,089**	**15,041**

1) Board fee is based on meeting attendance.
2) Referes to benefit value of health insurance.

2021

SEK 000	Base salary/Board fee[1)]	Variable Remuneration	Other benefits and remuneration[2)]	Pension costs	Total remuneration
Viktor Drvota, VD	2,766	1,410	2	772	4,949
Other senior executives (3 persons), salaries etc	4,236	2,330	5	1,013	7,584
Other senior executives (3 persons), invoiced fee	306				
Total management	**7,308**	**3,739**	**7**	**1,785**	**12,839**
Björn Cochlovius, Board member	367				367
Tse Ping, Board member	25				25
Anna Lefevre Skjöldebrand, Board member	75				75
Ben Toogood, Board member	75				75
Theresa Tse, Board member	25				75
Total, Board of Directors	**567**	**-**	**-**	**-**	**567**
Total	**7,875**	**3,739**	**7**	**1,785**	**13,406**

1) Board fee is based on meeting attendance.
2) Referes to benefit value of health insurance..

Note 5 continued

Gender distribution of senior executives and Board of Directors

Information as of closing date.

	2022	2021
Board of Directors		
Men	3	3
Women	2	2
Total	**5**	**5**
CEO and senior executives		
Men	4	4
Women	0	0
Total	**4**	**4**

Compensation to the CEO

Pension terms

The contractual pension amounts to 29 percent of gross salary and consists of premium-based compensation.

Variable remuneration to the CEO

The CEO is entitled to a bonus based on exits in the portfolio. The remuneration amounts to 1/3 of 4 percent of the net proceeds paid to the Company upon the exit. The remuneration includes all of the Company's costs in relation to the payment. The maximum payment, together with the payment to other senior executives reported in the first paragraph of the section "Variable remuneration to other senior executives", is limited to SEK 50 million per exit and calendar year. The CEO is also eligible for STI 2022 which is reported in the section "Annual incentive programs" below.

Severance, other senior executives

No senior executives are entitled to severance. According to the Guidelines for Remuneration to Executive Management, severance may only be paid to the CEO

Variable remuneration

Variable remuneration to other senior executives

Other senior executives are entitled to a bonus based on exits in the portfolio. The remuneration to other senior executives totals 45.5 percent of 4 percent of the net proceeds paid to the Company upon the exit. The remuneration includes all of the Company's costs in relation to the payment. The maximum payment, together with the payment to the CEO reported in the first paragraph of the section "Variable remuneration to the CEO," is limited to SEK 50 million per exit and calendar year. Other senior executives are eligible for STI 2022 in the section "Incentive programs" below.

Annual incentive programs

Karolinska Development's annual long-term incentive programs (LTI) for the years 2008–2010 and 2017–2020 and the Company's annual short-term incentive programs (STI) for the years 2021 and 2022 are described below.

Incentive programs 2008–2010

No current employees of the Company are covered by the program.

The program was designed as a combined warrant and profit-sharing program consisting of three annual stages for the years 2008–2010. The warrants have expired.

Each profit-sharing plan is related to appreciation in the value of the portfolio companies and extends 15 years. The 2008 profit-sharing program is related to the Company's investment portfolio as of 31 December 2007, while the 2009 and 2010 programs refer to investments that the Company made in the calendar year before the sub-plan.

Each sub-plan provides entitlement to a cash payment equivalent to a total of 5 percent of the portion of the return on the investments encompassed by the sub-plan, in excess of a threshold rate. The threshold rate consists of the initial value of the investments encompassed by a specific sub-plan, to the extent they have been exited, adjusted by an annual rate of 6 percent for the years 2008–2012 and 8 percent thereafter. On the "plus side" are the proceeds received from exits.

To the extent that returns exceed an annual return of 35 percent, the portion that exceeds the returns is halved to 2.5 percent. To the extent that returns exceed 50 percent, the amount in excess of 50 percent will be further halved to 1.25 percent. Excess returns above 60 percent are not eligible for profit-sharing.

In addition to the portion of excess returns as stated above, the sub-plan 2010 also provides entitlement to a total of 37.5 percent of KDAB Carried Interest, according to the limited partnership agreement the Company has entered into with the European Investment Fund ("EIF") related to KCIF Co-Investment Fund KB ("KCIF"). KDAB Carried Interest can be summarized as 20 percent of any return exceeding an annual threshold rate of 6 percent of – and after repayment of – the amounts that the Company and EIF have committed to KCIF. According to the agreement with EIF, Karolinska Development is entitled to the current portion of the KDAB Carried Interest only if it is included in the Company's profit-sharing plan. As a result, this portion of the profit-sharing plan essentially means that the Company, despite accounting costs that arise, is not foregoing any amount it otherwise would have had available, with the exception of the additional social security costs that this profit-sharing entails for the Company.

So far no payments have been made as part of the program.

Short Term Incentive Program STI 2021

In 2021, the Board of Directors decided on a Short Term Incentive Program, STI 2021, for senior executives based on a number of specific corporate goals established by the Board for 2021. The goals are designed to promote Karolinska Development's long-term value appreciation. The remuneration is dependent on whether one or more goals are met and has a fixed cap corresponding to six months' base salary for each participant. Goals were partly met, which rendered a cost of SEK 2.2 million (SEK 2.9 million including social security costs). The expense is included as variable remuneration in the table on previous page, year 2021.

Note 5 continued

Short Term Incentive Program STI 2022

In 2022, the Board of Directors decided on a Short Term Incentive Program, STI 2022, for senior executives based on a number of specific corporate goals established by the Board for 2022. The goals are designed to promote Karolinska Development's long-term value appreciation. The remuneration is dependent on whether one or more goals are met and has a fixed cap corresponding to six months' base salary for each participant. Goals were partly met, which rendered a cost of SEK 2.5 million (SEK 3.3 million including social security costs). The expense is included as variable remuneration in the table on page 64, year 2022.

Note 6 Interest expenses and other financial gains and losses

Interest income

SEK 000	2022	2021
Interest income, loans to portfolio companies	1,128	6,406
Interest income, other	288	-
Total	**1,416**	**6,406**

Interest expenses

SEK 000	2022	2021
Interest expenses, loans from related party	-799	-6,284
Interest expenses, other	-45	-
Total	**-844**	**-6,284**

Other financial gains and losses

SEK 000	2022	2021
Fair value change in short-term investments	-1,268	-
Finacing fee from portfolio company	-	10,000
Exchange rate gains and losses	-5	-3
Total	**- 1,273**	**9,997**

Note 7 Taxes

Reconciliation of effective tax rate

SEK 000	%	2022	%	2021
Profit or loss before tax		-88,122		170,819
Income tax expense at applicable rate in the Parent Company	20.6%	18,153	20.6%	-35,189
Tax effect of				
Non-deductible expenses		-369		-507
Tax-exempt revenue		13		8
Issue costs		3,502		448
Changes in fair value, non-taxable		-11,463		38,998
Increase in tax losses carried forward without corresponding capitalization of deferred taxes		-9,836		-3,759
Recognized current tax	**0.0%**	**0**	**0.0%**	**0**
Change in deferred tax	0.0%	-	0.0%	-
Recognized deferred tax	0.0%	-	0.0%	-
Total recognized tax	**0.0%**	**-**	**0.0%**	**-**

Unrecognized deferred tax assets

Deductible temporary differences and tax losses carried forward for which deferred tax assets have not been recognized through profit or loss and the balance sheet primarily relate to losses generated by the Parent Company. Any future gains on the sale of business-related shares and participations in the portfolio companies are tax-exempt profits. Deferred tax assets have therefore not been recognized for these losses, since it is unlikely that Karolinska Development AB will be able to utilize the tax losses carried forward to offset future taxable profits, despite that there is no time limit on these tax losses carried forward. Unrecognized deferred tax assets for Karolinska Development amounted to SEK 179,012 thousand (SEK 169,181 thousand) at 31 December 2022, and SEK 0 thousand (SEK 0 thousand) relates to deficits that are restricted by Group contributions and mergers.

Note 8 Shares in portfolio companies at fair value through profit or loss

SEK 000	2022-12-31	2021-12-31
Accumulated acquisition cost		
At the beginning of the year	950,170	770,320
Investments during the year	110,294	69,154
Sales during the year	-386	-112,507
Changes in fair value in net profit/loss for the year	-76,083	-223,203
Closing balance	**983,995**	**950,170**

Specification of holdings in portfolio companies 31 december 2022

Company	Registered office	Corporate Identity Number	Number of shares
Karolinska Development			
AnaCardio Holding AB	Stockholm	559343-3559	530
Dilafor AB	Stockholm	556642-1045	19,861
Henlez ApS	Köpenhamn	40632026	9,259
Modus Therapeutics Holding AB	Stockholm	556851-9523	6,144,821
OssDsign AB	Uppsala	556841-7546	7,381,093
PharmNovo AB	Lund	556739-7368	543,478
Promimic AB	Göteborg	556657-7754	312,500
SVF Vaccines AB, formerly Svenska Vaccinfabriken Produktion AB	Stockholm	559001-9823	275
Umecrine Cognition AB	Umeå	556698-3655	10,777,564
KCIF Co-Investment Fund KB	Solna	969744-8810	26
OssDsign AB	Uppsala	556841-7546	461,184
KDev Investments AB	Solna	556880-1608	2,239,340
Aprea Therapeutics Inc	Boston	7312119	1,180,691
Biosergen AB	Solna	559304-1295	901,334
Dilafor AB	Stockholm	556642-1045	403,970
Modus Therapeutics Holding AB	Stockholm	556851-9523	2,752,516
Promimic AB	Göteborg	556657-7754	2,523,920

Specification of shares in portfolio companies, at fair value through profit or loss 31 december 2022

SEK 000	Shares	Acquisition cost[1], acc	Value change through profit/loss[2], acc	Closing balance/fair value[3]
Listed companies (level 1)				
Modus Therapeutics	6,144,821	68,257	-39,308	28,951
OssDsign	7,381,093	88,616	-45,660	42,958
Promimic	312,500	5,000	-1,375	3,625
Total listed companies (level 1)		**161,873**	**-86,343**	**75,534**
Unlisted companies (level 3)				
AnaCardio		29,675	15,465	45,139
Dilafor		24,026	-	24,026
Henlez		5,506	80	5,586
PharmNovo		20,000	-	20,000
SVF Vaccines		12,540	327	12,867
Umecrine Cognition		212,930	375,868	588,798
KCIF Co-Investment Fund KB[4]		-7,944	15,973	8,025
KDev Investments		554,372	-350,352	204,020
Total unlisted companies (level 3)		**845,599**	**57,688**	**908,461**
Closing balance den 31 december		**1,007,472**	**-28,655**	**983,995**

1) Refers to original acquisition values, additional investments, conversions and sales.
2) Refers to both realized and unrealized value changes through profit/loss.
3) See Note 1 Valuation of portfolio companies at fair value and Note 17 Fair value, for a description of valuation models
4) Acquisition cost, acc: Net of acquisition cost of 10 198 KSEK and received payments of -18 142 KSEK.

Specification of shares in portfolio companies, at fair value through profit or loss 31 december 2021

SEK 000	Shares	Acquisition cost[1], acc	Value change through profit/loss[2], acc	Closing balance/fair value[3]
Listed companies (level 1)				
Modus Therapeutics	6,144,821	56,452	-33,103	23,350
OssDsign	5,812,638	81,401	-30,832	50,570
Total listed companies (level 1)		**137,853**	**-63,935**	**73,920**
Unlisted companies (level 3)				
AnaCardio		3,000	389	3,389
Dilafor		12,014	-	12,014
Svenska Vaccinfabriken Produktion		6,500	327	6,827
Umecrine Cognition		197,804	425,244	623,048
KCIF Co-Investment Fund KB[4]		-7,749	14,848	7,099
KDev Investments		553,457	-329,584	223,873
Total unlisted companies (level 3)		**765,026**	**111,224**	**876,250**
Closing balance den 31 december		**846,427**	**47,289**	**950,170**

1) Refers to original acquisition values, additional investments, conversions and sales.
2) Refers to both realized and unrealized value changes through profit/loss.
3) See Note 1 Valuation of portfolio companies at fair value and Note 17 Fair value, for a description of valuation models.
4) Acquisition cost, acc: Net of acquisition cost of 10 198 KSEK and received payments of -17 947 KSEK.

Note 9 Other financial assets

	2022-12-31			
SEK 000	Earn-out agreement Forendo Pharma, non-current asset	Earn-out agreement Forendo Pharma, current asset	Earn-out agreement Oncopeptides	Total
At the beginning of the year	61,799	-	0	61,799
Partial payment	-5,485	-	-	-5,485
Current part of non-current financial asset	-15,970	15,970	-	-
Change in fair value in net profit or loss for the year	19,193	-	-	19,193
Closing balance	**59,537**	**15,970**	**0**	**75 ,507**

	2021-12-31			
SEK 000	Earn-out agreement Forendo Pharma	Earn-out agreement Oncopeptides	Receivable Rosetta Capital	Total
At the beginning of the year	-	40,459	722	41,181
Acquisitions	56,079	-		56,079
Compensation received	-	-	-722	-722
Change in fair value in net profit/loss for the year	5,720	-40,459	-	-34,739
Closing balance	**61,799**	**0**	**0**	**61,799**

Earn-out agreement Forendo Pharma

Karolinska Development estimates the risk-adjusted net present value (rNPV) of future cash flows (earn-outs), after the initial payment in December 2021 and payments during 2022, to SEK 75.5 million (SEK 61.8 million). The earn-outs are expected to be paid during the period 2023–2034, and renewed rNPV valuations will be performed continuously. Forendo Pharma's previous shareholders are entitled to additional future payments totalling USD 870 million upon the achievement of certain development, registration and commercial milestones pertaining to Forendo Pharma's drug candidates. in 2023, SEK 16.0 million is expected to be received, which is why they are considered as current.

Earn-out agreement Oncopeptides

Karolinska Development is entitled to a 5 percent earn-out payment according to an agreement with Industrifonden regarding the previous holding Oncopeptides. The earn-out payment is received when Industrifonden divests its holding in Oncopeptides. The value is estimated as of the end of the accounting period to SEK 0.0 million, maximum residual value amounts to SEK 40,6 million.

Note 10 Other current receivables

SEK 000	2022-12-31	2021-12-31
Tax assets	673	673
Other	-	95
Total	**673**	**768**

Note 11 Prepaid expenses and accrued income

SEK 000	2022-12-31	2021-12-31
Insurance premiums	297	314
Rights issue costs	-	2,172
Other	453	454
Total	**750**	2,940

Note 12 Short-term investments at fair value through profit or loss

SEK 000	2022-12-31	2021-12-31
At the beginning of the year	50,005	-
Acquisitions of short-term interest funds with low risk	10,000	50,000
Change in fair value in net protif or loss	-1,263	5
Total	**58,742**	**50,005**

Note 13 Equity

Changes in share capital

Year	Transaction	Number of shares	Share capital	Number of A shares	Number of B shares	Subscription price	Par value
Total per 1 Jan 2011		**33,331,417**	**16,665,709**	**1,503,098**	**31,828,319**		**0,5**
April 2011	Share issue	15,200,000	7,600,000	0	15,200,000	40	0,5
Total per 31 Dec 2011		**48,531,417**	**24,265,709**	**1,503,098**	**47,028,319**		**0,5**
Total per 31 Dec 2012		**48,531,417**	**24,265,709**	**1,503,098**	**47,028,319**		**0,5**
Total per 31 Dec 2013		**48,531,417**	**24,265,709**	**1,503,098**	**47,028,319**		**0,5**
December 2014	Share issue	4,853,141	2,426,570		4,853,141	13	0,5
Total per 31 Dec 2014		**53,384,558**	**26,692,279**	**1,503,098**	**51,881,460**		**0,5**
December 2015	Share issue	65,082	32,541		65,082	0.50	0,5
Total per 31 Dec 2015		**53,449,640**	**26,724,820**	**1,503,098**	**51,946,542**		**0,5**
September 2016	Share issue	15,358	7,679		15,358	0.50	0,5
Total per 31 Dec 2016		**53,464,998**	**26,732,499**	**1,503,098**	**51,961,900**		**0,5**
April 2017	Share issue	10,871,698	5,435,849		10,871,698	6.17	0,5
June 2017	Reduction in share capital	0	-31,524,981		–		0,01
July 2017	Share issue	564	6		564	22	0,01
August 2017	Share issue	23,840	238		23,840	0.01	0,01
October 2017	Share issue	106	1		106	22	0,01
Total per 31 Dec 2017		**64,361,206**	**643,612**	**1,503,098**	**62,858,108**		**0,01**
Juni 2018	Share issue	57,531	575		57 531	0.01	0,01
Total per 31 Dec 2018		**64,418,737**	**644,187**	**1,503,098**	**62,915,639**		**0,01**
November 2019	Share issue	78,770,586	787,706		78,770,586	3.74	0,01
December 2019	Share issue	32,476,086	324,761		32,476,086	3.74	0,01
Total per 31 Dec 2019		**175,665,409**	**1,756,654**	**1,503,098**	**174,162,311**		**0,01**
Total per 31 Dec 2020		**175,665,409**	**1,756,654**	**1,503,098**	**174,162,311**		**0,01**
Total per 31 Dec 2021		**175,665,409**	**1,756,654**	**1,503,098**	**174,162,311**		**0,01**
February 2022	Share issue	94,412,185	944,122	1,052,163	93,360,022	4	0,01
Total per 31 Dec 2022		**270,077,594**	**2,700,776**	**2,555,261**	**267,522,333**		**0,01**

Note 13 continued

Net asset value per share

	Investment Entity	
SEK 000	**2022-12-31**	**2021-12-31**
Net assets		
Cash and cash equivalents	131,078	42,398
Short-term investments	58,742	50,005
Net financial assets and liabilities	75,316	60,043
Current interest liabilities	-	-124,603
Total net assets	**265,136**	**27,843**
Estimated fair value of portfolio companies	983,995	950,170
Total net asset value	**1 249,131**	**978,013**
Number of shares	**269,833,309**	**175,421,124**
Net asset value per share	**4.63**	**5.58**

Share structure

The number of shares amounts to 270,077,594, of which 2,555,261 are series A shares and 267,522,333 are series B shares. Series A shares carry ten votes per share and series B shares carry one vote per share. All shares have an equal right to the Company's assets in the case of liquidation and profit distributions. All series B shares have been listed for trading on the main list of Nasdaq OMX since 15 April 2011.

In 2012 and 2013, a total of 244,285 shares with a par value of SEK 0.01, corresponding to SEK 2,443 in share capital, were repurchased for SEK 4,726,904. The shares were repurchased to cover the social security costs in the PSP incentive programs.

Other contributed capital

Relates to capital contributed by the owners.

Retained earnings incl. net profit for the year

Retained earnings including current year results include retained earnings of the Parent Company. Previous allocations to the statutory reserve are included in this equity item.

Earnings per share basic and diluted

SEK 000	**2022**	**2021**
Net profit/loss for the year	-88,122	170,819
Weighted average number of shares before dilution	257,417,460	175,421,124
Earnings per share, SEK, before dilution	**-0.34**	**0.97**
Weighted average number of shares after dilution	257,417,460	175,421,124
Earnings per share, SEK, after dilution	**-0.34**	**0.97**

Note 14 Other financial liabilities

SEK 000	2022-12-31	Of which affect cash flow	2021-12-31	Of which affect cash flow
Earn-out agreement regarding Aprea Therapeutics				
Accumulated acquisition cost				
At the beginning of the year	1,756		5,726	
Paid compensations	-324	-324	-3,121	-3,121
Fair value change in net profit/loss for the year	-1,241		-849	
Closing balance	**191**	**-324**	**1,756**	**-3,121**

Earn-out agreement Aprea Therapeutics

At a divestment of Karolinska Developments holding in Aprea Therapeutics, Industrifonden, according to the share swap agreement, is entitled to 5 percent of Karolinska Developments revenue, with a cap of SEK 80 million. Residual value amounts to SEK 71.2 millions (SEK 71,5) at 31 December 2022.

Note 15 Short-term interest-bearing liabilities to related party

SEK 000	2022-12-31	2021-12-31
Short-term loan debt invoX Pharma Ltd	-	70,000
invoX Pharma Ltd	-	42,500
Accrued interest invoX Pharma Ltd	-	12,103
Total	**-**	**124,603**

The bridge loans, including accrued interest, were converted into shares in Karolinska Development's rights issue in February 2022.

Related parties refer to the main owner invoX Pharma Ltd, which in turn is a wholly owned subsidiary of the former main owner Sino Biopharmaceutical Ltd.

Note 16 Accrued expenses and prepaid income

SEK 000	2022-12-31	2021-12-31
Salaries and remuneration to personnel	4,564	3,676
Remuneration to Board of Directors	438	632
Auditor and consulting fees	707	813
Payroll tax and accrued pension costs	1,349	1,165
Social security costs	914	676
Other	199	306
Total	**8,171**	**7,268**

Note 17 Financial assets and liabilities, financial risk management

Financial assets and liabilities by category

2022

	Financial assets measured at:		Financial liabilities measured at:			
SEK 000	Fair value through profit or loss	Amortized cost	Fair value through profit or loss	Amortized cost	Total carrying amount	Fair value
Shares in portfolio companies at fair value through profit or loss	983,995				983,995	983,995
Other financial assets, non-current part	59,537				59,537	59,537
Other financial assets, current part	15,970				15,970	15,970
Receivables from portfolio companies		211			211	211
Short-term investments at fair value through profit or loss	58,742				58,742	58,742
Cash and cash equivalents		131,078			131,078	131,078
Total	**1,118,244**	**131,289**			**1,233,563**	**1,233,563**
Other financial liabilities			191		191	191
Accounts payable				439	439	439
Total			**191**	**439**	**630**	**630**

2021

	Financial assets measured at:		Financial liabilities measured at:			
SEK 000	Fair value through profit or loss	Amortized cost	Fair value through profit or loss	Amortized cost	Total carrying amount	Fair value
Shares in portfolio companies at fair value through profit or loss	950,170				950,170	950,170
Other financial assets	61,799				61,799	61,799
Receivables from portfolio companies		505			505	505
Short-term investments at fair value through profit or loss	50,005				50,005	50,005
Cash and cash equivalents		42,398			42,398	42,398
Total	**1,061,974**	**42,903**			**1,104,877**	**1,104,877**
Short-term interest-bearing liability to related party				124,603	124,603	124,603
Other financial liabilities			1,756		1,756	1,756
Accounts payable				1,674	1,674	1,674
Total			**1,756**	**126,277**	**128,033**	**128,033**

Note 17 continued

Short-term investments

Surplus liquidity that may temporarily arise in Karolinska Development is placed in fixed income funds or interest-bearing instruments and is recognized as short-term investments with a remaining duration exceeding 3 months.

Fair value measurement

The table below shows financial instruments measured at fair value based on the classification in the fair value hierarchy. The various levels are defined as follows:

Level 1 - Fair value determined on the basis of observed (unadjusted) quoted prices in an active market for identical assets and liabilities
Level 2 - Fair value determined based on inputs other than quoted prices included within Level 1 that are observable for the asset or liability, directly or indirectly
Level 3 - Fair value determined based on valuation models where significant inputs are based on non-observable data

The carrying amounts of financial assets and liabilities measured at amortized cost approximate their fair value.

Investment Entity's assets and liabilities at fair value as of 31 december 2022

SEK 000	Level 1	Level 2	Level 3	Total
Financial assets				
Shares in portfolio companies at fair value through profit or loss	75,534		908,461	983,995
Other financial receivables, non-current and current			75,507	75,507
Cash and cash equivalents and short-term investments	189,820			189,820
Total	**265,354**		**983,968**	**1,249,322**
Financial liabilities				
Other financial liabilities			191	191
Total			**191**	**191**

Investment Entity's assets and liabilities at fair value as of 31 december 2021

SEK 000	Level 1	Level 2	Level 3	Total
Financial assets				
Shares in portfolio companies at fair value through profit or loss	73,920		876,250	950,170
Other financial receivables			61,799	61,799
Cash and cash equivalents and short-term investments	92,403			92,403
Total	**166,323**		**938,049**	**1,104,372**
Financial liabilities				
Other financial liabilities			1,756	1,756
Total			**1,756**	**1,756**

The following describes the main methods and assumptions used to determine the fair value of financial assets and liabilities in the tables above.

Shares in portfolio companies (unlisted holdings)

The valuation of unlisted holdings is based on the International Private Equity and Venture Capital Valuation Guidelines. For a further description, see Note 1 Accounting policies, "Valuation of portfolio companies."

Financial assets and liabilities at fair value

A fair value estimate is made based on discounted future cash flows, where a discount rate reflecting the counterparty's credit risk is the most significant input. For other financial receivables in Level 3, earn-out agreement regarding the sale of Forendo to Organon, a rNPV calculation has been used with a discount rate of 13 percent. For other financial liabilities, there is no significant difference compared to the carrying amounts included in Level 3, so the carrying amounts are considered a good approximation of fair value.

Note 17 continued

Changes in financial assets and liabilities on Level 3 in 2022

SEK 000	Shares in portfolio companies	Other financial assets	Other financial liabilities
At the beginning of the year	876 250	61,799	1,757
Acquisitions	86 276	-	-
Disposals/compensation	-390	-5,485	-325
Gains and losses realized in profit or loss	-53 675	19,193	-1,241
Carrying amount at year-end	**908 461**	**75,507**	**191**
Realized gains and losses for the period included in profit or loss	751	-	-
Unrealized gains and losses for the period included in profit or loss	-54 426	19,193	1,241

There were no transfers between Level 1 and 2 in 2022.

Changes in financial assets and liabilities on Level 3 in 2021

SEK 000	Shares in portfolio companies	Other financial assets	Other financial liabilities
At the beginning of the year	732,554	41,181	5,726
Transfers from Level 3 to Level 1	-36,752	-	-
Acquisitions	38,207	56,079	-
Disposals/compensation	-108,554	-722	-3,121
Gains and losses realized in profit or loss	250,795	34,739	-849
Carrying amount at year-end	**876,250**	**61,799**	**1,756**
Realized gains and losses for the period included in profit or loss	6,338	-	5,094
Unrealized gains and losses for the period included in profit or loss	244,457	-34,739	849

There were no transfers between Level 1 and 2 in 2021.

The Investment Entity recognizes transfers between levels in the fair value hierarchy on the date when an event or changes occur that give rise to the transfer.

Change in fair value, gains and losses realized in profit or loss 2022

SEK 000	Shares in portfolio companies	Other financial assets and liabilities
Result level 1		
Listed companies, realized	-	
Listed companies, unrealized	-22,408	
Total level 1	**-22,408**	
Result level 3		
Unlisted companies, realized	751	
Unlisted companies, unrealized	-54,426	
Total level 3	**-53,675**	
Result level 3		
Other financial assets, unrealized		19,193
Other financial liabilities, unrealized		1,241
Total level 3		**20,435**
Gains and losses realized in profit or loss	**-76,083**	**20,435**

Change in fair value, gains and losses realized in profit or loss 2021

SEK 000	Shares in portfolio companies	Other financial assets and liabilities
Result level 1		
Listed companies, realized	-433	
Listed companies, unrealized	-27,159	
Total level 1	**-27,592**	
Result level 3		
Unlisted companies, realized	7,243	
Unlisted companies, unrealized	243,552	
Total level 3	**250,795**	
Result level 3		
Other financial assets, unrealized		-34,739
Other financial liabilities, unrealized		849
Total level 3		**-33,890**
Gains and losses realized in profit or loss	**223,203**	**-33,890**

Note 17 continued

Shares in portfolio companies (level 3) on 31 december 2022

KSEK	Ownership	Fair value	Valuation model[1]
AnaCardio	20.7%	45,138	Post-money valuation
Dilafor	1.5%	24,026	Post-money valuation
Henlez	13.5%	5,586	Post-money valuation
PharmNovo	13.1%	20,000	Post-money valuation
SVF Vaccines	34.8%	12,867	Post-money valuation
Umecrine Cognition	72.6%	588,799	External valuation[2]
KCIF Co-Investment Fund KB	26.0%	8,025	A combination of share price listed company and fair value of financial asset[3]
KDev Investments	90.1%	204,020	A combination of post-money valuation and share price listed company[4]
Total level 3		**908,461**	

1) See Note 1 Valuation of portfolio companies at fair value, for a description of valuation models.
2) Risk adjusted external valuation dated December 2022 by an independent valuation institute. The external valuation resulted in an rNPV value (see definitions page 97) which has been risk adjusted to reflect an assumed split in risk and revenues in conjunction with a license deal and also to incorporate the financial risk that Umecrine will not manage to finance fully the final parts of the reasearch program.
3) KCIF Co-Investment Fund KB holds listed shares which are valued in accordance with the closing rate on the final trading day of the period, and a financial asset (earn-out deal when divesting Fordendo Pharma) valued at fair value.
4) KDev Investments AB holds both listed shares which are valued in accordance with the closing rate on the final trading day of the period, and unlisted shares which are valued in accordance with the most recent transaction (post-money valuation), Dilafor, which is an unlisted company, corresponds to 91 percent of total fair value in KDev Investments. The potential distribution to Rosetta Capital of fair value is also taken into account.

Shares in portfolio companies (level 3) on 31 december 2021

KSEK	Ownership	Fair value	Valuation model[1]
AnaCardio	20.9%	3,389	Post-money valuation
Dilafor	0.7%	12,014	Post-money valuation
SVF Vaccines	30.8%	6,827	Post-money valuation
Umecrine Cognition	72.6%	623,048	External valuation[2]
KCIF Co-Investment Fund KB	26.0%	7,099	A combination of share price listed company and fair value of financial asset[3]
KDev Investments	90.1%	223,873	A combination of post-money valuation and share price listed company[4]
Total level 3		**876,250**	

1) See Note 1 Valuation of portfolio companies at fair value, for a description of valuation models.
2) Risk adjusted external valuation dated December 2020 by an independent valuation institute. The external valuation resulted in an rNPV value (see definitions page 97) which has been risk adjusted to reflect an assumed pricing in conjunction with an IPO and the need to secure development financing.
3) KCIF Co-Investment Fund KB holds both listed shares which are valued in accordance with the closing rate on the final trading day of the period, and a financial asset (earn-out deal when divesting Fordendo Pharma) valued at fair value.
4) KDev Investments AB holds both listed shares which are valued in accordance with the closing rate on the final trading day of the period, and unlisted shares which are valued in accordance with the most recent transaction (post-money valuation), Dilafor, which is an unlisted company, corresponds to 86 percent of total fair value in KDev Investments. The potential distribution to Rosetta Capital of fair value is also taken into account.

Sensitivity analysis of significant holdings, 31 december 2022

	5%		–5%		+/–15%		+/–30%	
	Result/equity		Result/equity		Result/equity		Result/equity	
SEK 000	MSEK	SEK/share	MSEK	SEK/share	MSEK	SEK/share	MSEK	SEK/share
Umecrine Cognition[1]	31,100	0.1	-34,732	-0.1	+/-99,811	+/-0.4	+/-198,560	+/-0.7
KDev Investments[2]	17,307	0.1	-17,307	-0.1	+/-51,934	+/-0.2	+/-103,849	+/-0.4

1) Sensitivity to rNPV value in performed external valuation based on the assumed sales price of the drug candidate.
2) Sensitivity in the value of KDev Investments, after potential distribution to Rosetta Capital.

Sensitivity analysis of significant holdings, 31 december 2021

	5%		–5%		+/–15%		+/–30%	
	Result/equity		Result/equity		Result/equity		Result/equity	
SEK 000	MSEK	SEK/share	MSEK	SEK/share	MSEK	SEK/share	MSEK	SEK/share
Umecrine Cognition[1]	36,086	0.2	-33,509	-0.2	+/-105,682	+/-0.6	+/-211,364	+/-1.2
KDev Investments[2]	18,435	0.1	-18,435	-0.1	+/-55,307	+/-0.3	+/-110,613	+/-0.6

1) Sensitivity to rNPV value in performed external valuation based on the assumed sales price of the drug candidate.
2) Sensitivity in the value of KDev Investments, after potential distribution to Rosetta Capital.

Note 17 continued

Impact on the portfolio's fair value of the agreement with Rosetta Capital

"Potential distribution to Rosetta Capital" is the amount of SEK 328.5 million that KDev Investments, according to the investment agreement between Karolinska Development and Rosetta Capital, is obliged to distribute to Rosetta Capital (on Rosetta Capital's preference and common shares) from the proceeds received by KDev Investments (KDev Investments' fair value). With its current shareholding, Karolinska Development's proportion of dividends will be 0 percent for accumulated dividends up to SEK 220 million, 65 percent for accumulated dividends between SEK 220 million and SEK 880 million, 75 percent for accumulated dividends between SEK 880 million and SEK 1,320 million, and 92 percent for accumulated dividends above SEK 1,320 million.

The distribution to Rosetta Capital will take place only when KDev Investments distributes a dividend. KDev Investments will only distribute dividends after all accounts payable and outstanding liabilities have been repaid.

KDev Investments' partial divestment of Aprea Therapeutics in December 2021, which yielded SEK 6.9 million for KDev Investments, enabled KDev Investments to pay a dividend to Rosetta Capital in 2022 of SEK 3.8 million. The dividend continued the winding down of the waterfall by a corresponding amount, SEK 2.4 million regarding additional investments and SEK 1.4 million against the first SEK 220 million wich should be distributed to Rosetta Capital.

Expanded fair value calculations taking into consideration the portfolio valuation and potential distribution to Rosetta Capital

SEK 000	2022-12-31	2021-12-31
Fair value of Karolinska Development portfolio (unlisted companies)	704,443	652,377
Fair value of Karolinska Development portfolio (listed companies)	75,534	73,920
Fair value of KDev Investments portfolio	532,547	566,807
Total Portfolio Fair Value[1]	**1,312,524**	**1,293,104**
Potential distribution to Rosetta Capital of fair value in KDev Investments[2]	-328,529	-342,934
Net Portfolio Fair Value (after potential distribution to Rosetta Capital)[3]	**983,995**	**950,170**

1) "Total Portfolio Fair Value" is indicated in Note 1.
2) SEK 328,5 million distribution of dividends on common and preference shares to Rosetta Capital.
3) "Net Portfolio Fair Value (after potential distribution to Rosetta Capital)" is indicated in Note 1.

Information on fair value measurement in level 3

The valuation of the Company's portfolio is based on the International Private Equity and Venture Capital Valuation Guidelines (IPEV) and IFRS 13 Fair Value Measurement. See Note 1 Accounting policies, Valuation methods.

Effect on earnings of change in price, currency and interest rate

	+/-5%		+/-15%		+/-30%	
	Earnings/equity		Earnings/equity		Earnings/equity	
Change in:	**MSEK**	**SEK/share**	**MSEK**	**SEK/share**	**MSEK**	**SEK/share**
Change in share price on shares in portfolio companies at fair value through profit or loss	56.3	0.2	168.9	0.6	449.7	1.7
Currency	0.4	0.0	1.3	0.0	2.6	0.0
Interest	0.0	0.0	0.0	0.0	0.0	0.0

Financial risks

Through its activities, the Investment Entity is exposed to various financial risks. Financial risks refer to fluctuations in operating results and cash flow as a result of changes in exchange rates, interest rates, refinancing and credit risks. Responsibility for the Investment Entity's financial transactions and risks rests with both the Parent Company's finance department and the local subsidiaries. The overarching objective of the finance function is to provide cost-effective financing and to minimize adverse effects on the Investment Entity's earnings from market fluctuations.

Price risk

The Investment Entity is exposed to share price risk on the Investment Entity's holdings in portfolio companies measured at fair value (shares in associated companies, joint ventures and other long-term securities holdings). The Investment Entity otherwise is not exposed to valuation risk.

Currency risk

Currency risk is the risk that changes in exchange rates will negatively impact the Investment Entity. The Investment Entity's foreign exchange exposure consists of transaction exposure resulting in exposure in foreign currency linked to the contractual cash flows and balance sheet items where changes in exchange rates affect the results and cash flows.

Interest risk

Interest risk is the risk that changes in market interest rates affect cash flow or the fair value of financial assets or liabilities. The Investment Entity's investment guideline regarding cash and cash equivalents are to invest in fixed income funds or interest-bearing instruments with low risk, because of which the risk associated with interest rate changes is low. The interest risks are due to short-term and long-term borrowing. Borrowing with floating interest rate exposes the Investment company to interest risk regarding cash flow. As of the end of the accounting period there are no loans with floating interest rate.

Note 17 continued

Credit risk

Credit risk is the risk that the counterparty to a transaction fails to fulfill its obligations under the contract and that any guarantee does not cover the Investment Entity's claim. Maximum credit risk exposure is equivalent to the book value of financial assets.

The credit risk on other financial assets is limited as the Investment Entity's counterpart is the global pharmaceutical company Organon. The credit risk in cash and cash equivalents and short-term investments are limited as the Investment Entity's counterparties are banks with high credit ratings. Therefore, is no reserve for expected credit losses on these made.

Assets exposed to credit risk

SEK 000	2022-12-31	2021-12-31
Other financial assets	75,507	61,799
Receivables from portfolio companies	211	505
Other current receivables	673	768
Short-term investments throug profit or loss	58,742	50,005
Cash and cash equivalents	131,078	42,398
Maximum exposure to credit risk	**266,211**	**155,475**

Liquidity risk

Liquidity risk is the risk that the Investment Entity cannot meet its short-term payment obligations. The Investment Entity's guidelines state that the liquidity reserve must remain at such a level that it meets the Investment Entity's ongoing liquidity requirements and requirements for investments in portfolio companies for the following 12 months.

2022 SEK 000	Within 3 month	3–12 month	1–5 years	Over 5 years	Total
Accounts payable	439				439
Other current liabilities	654				654
Total	**1,093**				**1,093**

2021 SEK 000	Within 3 month	3–12 month	1–5 years	Over 5 years	Total
Current interest liabilities		124,603			124,603
Accounts payable	1,674				1,674
Other current liabilities	2,156				2,156
Total	**3,830**	**124,603**	**-**	**-**	**128,433**

Management of capital risks

The Investment Entity's capital management objective is to ensure the Investment Entity's capacity to continue operations, generate reasonable returns for shareholders and provide benefits to other stakeholders. The Investment Entity's policy is to minimize the risks in asset management. In accordance with the Investment Entity's investment guidelines, surplus liquidity is managed by an external manager. The portfolio will maintain an average term of no longer than 1.5 years and invest in fixed income funds or interest-bearing instruments.

Note 18 Pledged assets and contingent liabilities

SEK 000	2022-12-31	2021-12-31
Pledged assets		
Contingent liabilities		
Investment commitment in portfolio companies	7,580	12,927
Total pledged assets	**7,580**	**12,927**

Endowment insurance

Individual pension undertakings have been guaranteed in the form of Company-owned endowment insurance policies regarding one previous employee. The Investment Entity (which includes the Parent Company) has no further obligation to cover possible shortfalls in the endowment insurance or to pay any amount in excess of the premiums paid, due to which the Investment Entity considers these pension plans to be defined contribution pension plans. Accordingly, payment of premiums corresponds to final settlement of the undertaking vis-à-vis the employee.

In accordance with IAS 19 and the regulations for defined contribution pension plans, the Investment Entity and the Parent Company therefore report neither assets nor liabilities, with the exception of special payroll contributions, related to these endowment insurance policies.

Note 19 Related parties

Affiliates

The Investment Entity has a related party relationship with its subsidiaries, joint ventures, associated companies and with all the companies that form part of invoX Pharma Group (invoX Pharma is a wholly owned subsidiary of Sino Biopharmaceutical Ltd).

Karolinska Development has rendered services to the portfolio companies in the areas of management, communication, finance and administration, including legal and analytical operations. Prices of services rendered have been market based.

Karolinska Development has a license to use the brand Karolinska, which expires December 2025.

In November 2009, Karolinska Development and the European Investment Fund ("EIF") entered into an agreement whereby EIF invests in parallel with Karolinska Development in portfolio companies. The investments are made through KCIF Co-Investment KB ("KCIF"). KCIF will invest in parallel with Karolinska Development at a ratio of 27:73 (KCIF: Karolinska Development) on the condition that certain stated investment criteria are fulfilled. The investors and limited partners in KCIF are EIF, which has committed EUR 12.9 million, and Karolinska Development, which has committed EUR 4.5 million. The amounts are paid to KCIF as needed to make investments, to cover KCIF's expenses, and to pay an annual management fee to KCIF Fund Management AB ("FMAB"), a limited partner responsible for the operation of KCIF. The management fee for the financial year 2022 amounted to SEK 128 thousand (SEK 128 thousand). As of 16 November 2021 liquidation of KCIF has started, whereby existing holdings will be distributed to Karolinska Development and EIF.

FMAB is currently 75 percent owned by Karolinska Development and 25 percent by KIAB. The parties have entered into a shareholder agreement regarding FMAB.

Compensation and profit distribution

FMAB is entitled to an annual management fee corresponding to 2.5 percent of the capital committed to KCIF during the investment period and 1 percent of invested capital thereafter. In practice, FMAB fulfills its obligations to manage the operations of KCIF by purchasing services from Karolinska Development according to a service agreement. The service agreement entitles Karolinska Development to annual compensation equivalent to what remains of the management fee after deducting FMAB's other expenses and a certain buffer for future expenses in FMAB. Any dividends from KCIF will essentially be distributed as follows. First, EIF and Karolinska Development will receive an amount corresponding to the portion of the committed capital paid to KCIF at the time of the dividend payment and annual interest of 6 percent on this amount. Secondly, 80 percent of the remaining funds will be distributed to EIF and Karolinska Development in proportion to their capital investment. The remaining 20 percent will be distributed to Karolinska Development on the condition that 25 percent of the amount is redistributed to KIAB and at least 37.5 percent is redistributed to the investment managers through Karolinska Development's profit-sharing program (which comprises only former employees). Through its ownership and managerial role, Karolinska Development has concluded that it controls FMAB and therefore considers FMAB to be a subsidiary. The indirect ownership in the portfolio companies through KCIF holding has been included in Karolinska Development's share of the portfolio companies, Note 33.

	2022				2021			
SEK 000	Sale of services	Interest income	Purchase of service	Interest expenses	Sale of services	Interest income	Purchase of service	Interest expenses
Associate relationship								
Owner: invoX Pharma Ltd[1)]				799				6,239
Portfolio companies	2,294	1,129			2,160	6,402		
Total	**2,294**	**1,129**	**-**	**799**	**2,160**	**6,402**	**-**	**6,239**

	2022-12-31		2021-12-31	
SEK 000	Liability to associates	Receivable from associates	Liability to associates	Receivable from associates
Associate relationship				
Owner: invoX Pharma Ltd[1)]			124,603	
Portfolio companies		30,579		4,303
Total	**-**	**30,579**	**124,603**	**4,303**

1) The Bridge loan amounting to SEK 70 million from Sino Biopharmaceutical has been transferred to the wholly owned subsidiary invoX Pharma Ltd. Both bridge loans, including accrued interest, has bean converted to shares in Karolinska Developments rights issue in February 2022. The interest rate amounted to 8 percent respectively 5 percent.

Note 20 Significant events after the closing date

Karolinska Development
- No significant news after the closing date

AnaCardio
- AnaCardio's founder, Professor Lars Lund, published an article that supports development of heart failure drug candidate AC01 (March 2023).

Aprea Therapeutics
- Aprea Therapeutics dosed the first patient in a clinical phase 1/2a study of the drug candidate ATRN-119, which is being evaluated as a treatment for advanced solid tumors by affecting a signaling pathway important for tumor DNA repair (January 2023).
- Aprea Therapeutics has closed an underwritten public offering of USD 5.5 million before deducting underwriting discounts, commissions, and offering expenses (February 2023).

Biosergen
- Biosergen has presented positive results from a clinical phase 1 study of its drug candidate BSG005, which is being developed as a treatment of fungal infection mucormycosis (March 2023)..

Dilafor
- Dilafor reported positive results from the extension of the clinical phase 2b study of the drug candidate tafoxiparin. The extension part of the study included 164 women and the results show a positive effect on cervical ripening and a clear dose-response relationship for the evaluated doses (February 2023).

Modus Therapeutics
- Modus Therapeutics presented positive results from the company's clinical phase 1b study of sevuparin, where the drug candidate's safety profile and efficacy were evaluated in a well-established disease model for sepsis and septic shock. The results of the study will be used to define a dose and determine the design of a planned phase 2 study of sevuparin expected to start during 2023(February 2023).

OssDsign
- OssDsign published the first case report on a patient that underwent spinal fusion surgery with OssDsign Catalyst in the TOP FUSION study. The article is published in the Biomedical Journal of Scientific & Technical Research and shows a complete spinal fusion six months after the surgery (January 2023).

SVF Vaccines
- SVF Vaccines has initiated a clinical phase 1 study of the company's universal Covid-19 vaccine, SVF-002. The aim of the study is to evaluate the safety profile and immunogenicity of the vaccine candidate (February 2023).

Umecrine Cognition
- Umecrine Cognition presented promising preclinical data of the company's most advanced drug candidate golexanolone in a widely used model of Parkinson's disease. The results indicate that golexanolone could improve several symptoms of Parkinson's disease and further increase the understanding of the drug candidate's potential role in treating this progressive and debilitating central nervous system disease (January 2023).
- Umecrine Cognition was granted Orphan Drug Designation by the U.S. Food & Drug Administration (FDA) for the company's most advanced drug candidate golexanolone in Primary Biliary Cholangitis (PBC). The designation will play a vital role in the planned clinical development of golexanolone (January 2023).

Note 21 Parent Company's accounting policies

Parent Company's accounting policies
The parent company has prepared its annual report in accordance with the Annual Accounts Act (1995:1554) and the Swedish Financial Reporting Council's recommendation RFR 2 "Accounting for legal entities". Statements from the Swedish Financial Reporting Council, UFR 7 and 9, are also applied. Application of RFR 2 means that the parent company must apply all IFRS approved by the EU as far as this is possible within the framework of the Annual Accounts Act and the Insurance Act and take into account the connection between accounting and taxation. The principles described in note 1 regarding investment companies are also applied to the parent company, unless otherwise stated below. This means, among other things, that the following accounting principles have been applied:

Subsidiary
Shares in subsidiaries are reported at fair value through profit or loss in the parent company's financial reports.

Associated companies and joint ventures
Shares in associated companies and joint ventures are reported at fair value through profit or loss in the parent company's financial reports. Dividends are reported as income when these have been determined by the general meeting.

Other long-term securities
Shares in other long-term securities holdings are reported at fair value through profit or loss in the parent company's financial reports.

Change in fair value of shares in portfolio companies
The company reports holdings in subsidiaries, joint ventures, associated companies and other long-term securities holdings at fair value via the income statement. If holdings in subsidiaries, joint ventures, associated companies or other long-term securities holdings have a lower or higher value than the acquisition value on the balance sheet date, the holding is valued at fair value.

Note 22 Information on the Parent Company

Karolinska Development AB (publ), Corporate Identity Number 556707-5048, is a Swedish limited liability company with its registered office in Solna.

Subsequent notes relate to the Parent Company.

Note 23 Revenue distribution

Services rendered are comprised of invoiced services provided to portfolio companies in Sweden. These services consist of management, communication, finance and administration, including legal and analytical operations.

SEK 000	2022	2021
Other revenue	2,300	2,170
Total revenue	**2,300**	**2,170**

Note 24 Change in fair value of shares in portfolio companies

SEK 000	2022	2021
Change in fair value of shares in subsidiaries	-49,376	0
Change in fair value of shares in joint ventures and associated companies	-10,504	234,819
Change in fair value of other long-term securities holdings	-16,203	-11,616
Total	**-76,083**	**223,203**

Note 25 Change in fair value of other financial assets and liabilities

SEK 000	2022	2021
Change in fair value av other financial assets and liabilities	20,435	-33,891
Total	**20,435**	**-33,891**

Note 26 Other external expenses

Auditor fees

SEK 000	2022	2021
EY		
Audit services	1,319	1,334
Audit related services	120	125
Tax consulting	-	67
Total	**1,439**	**1,526**

Auditor fees refer to the auditor's remuneration for the statutory audit. The work includes the examination of the annual report and accounting records, the administration by the Board and the CEO, and fees for auditing advice in connection with the audit assignment. Audit related services primarily relate to quality assurance services other than the statutory audit.

Note 27 Leases

The Parent Company has chosen to finance premises through leases. The parent company applies the exemption rule in RFR 2 and recognises lease payments as a cost on a straight-line basis over the lease term. Expensed leasing payments and future contractual leasing payments are indicated below.

SEK 000	2022	2021
Expensed leasing payments during the period	714	714
Future leasing payments		
Within one year	711	711
Between one year and five years	–	–
Total future leasing payments	**711**	**711**

Note 28 Employees and personnel costs

See Note 5 for further information.

Average number of employees

	2022			2021		
Full-time equivalent	Number	Of whom women	Of whom män	Number	Of whom women	Of whom män
Investment Entity	8	50%	50%	7	35%	65%
Total	**8**	**50%**	**50%**	**7**	**35%**	**65%**

Employee benefits

SEK 000	2022	2021
Salaries and remuneration	17,160	14,638
Social security costs/payroll tax	5,840	4,884
Pension costs	2,999	2,485
Total	**26,004**	**22,007**

Salaries and other remuneration distributed between Board members, etc. and other employees

	2022		2021	
SEK 000	Board and CEO	Other employees	Board and CEO	Other employees
Salaries and remuneration[1)]	6,477	10,683	11,621	3,009
Pension costs[1)]	920	2,079	1,785	700
Total	**7,397**	**12,762**	**13,406**	**3,709**

1) In 2021, the board and the entire management are included in the column Board and CEO. Salaries and remuneration in 2021 to the Board and CEO amount to SEK 4,744 thousand and pension costs in 2021 amount to SEK 772 thousand, in total for 2021 SEK 5,516 thousand. Salaries and remuneration to other employees in 2021 amount to SEK 9,886 thousand and pension costs in 2021 amount to SEK 1,713 thousand, in total SEK 11,599 thousand.

Note 29 Interest income and similar income

SEK 000	2022	2021
Interest income from loans to portfolio companies	1,416	6,406
Financing fee	–	9,997
Total	**1,416**	**16,403**

Note 30 Interest expenses and similar expenses

SEK 000	2022	2021
Interest expense, loans from related parties	-799	-6,239
Fair value change in short-term investments	-1,272	–
Total	**-2,071**	**-6,239**

Not 31 Taxes

SEK 000	%	2022	%	2021
Profit before tax		-88,101		170,840
Income tax expense at applicable rate in the Parent Company	20.6%	18,149	20.6%	-35,193
Tax effect of				
Non-deductible expenses		-369		-507
Tax-exempt income		13		8
Issue costs		3,502		448
Fair value change, non-taxable		-11,463		38,998
Increase in tax losses carried forward without corresponding capitalization of deferred tax		-9,832		-3,754
Recognized tax	**0.0%**	**0**	**0.0%**	**0**

Unrecognized deferred tax assets

Deductible temporary differences and tax losses carried forward for which deferred tax assets have not been recognized through profit or loss or the balance sheet mainly refer to the deficits incurred in the Parent Company. Any future gains on the sale of business-related shares and participations in the portfolio companies are tax-exempt profit. Deferred tax assets have not been recognized for these deficits as it is unlikely that Karolinska Development AB will be able to offset the amounts against future taxable profits, despite that there is no time limit on the tax losses carried forward. Unrecognized deferred tax assets for Karolinska Development as of 31 December 2022 amounted to SEK 179,012 thousand (169,180), and SEK 0 thousand (SEK 0 thousand) refers to the tax effect of deficits that are restricted by Group contributions and mergers.

Note 32 Shares in subsidiaries

SEK 000	2022	2021
Accumulated book value		
At the beginning of the year	0	0
Reclassification from joint ventures	623,048	-
Sales during the year	15,126	-
Fair value measurement through profit or loss	-49,376	-
Closing balance, book value	**588,798**	**0**

Specification of holdings in subsidiaries

	Total holding		Book value in Parent Company	
SEK 000	2022-12-31	2021-12-31	2022-12-31	2021-12-31
Umecrine Cognition AB (reclassification from joint ventures)	72.6%	-	588,798	-
KCIF Fund Management AB	75.0%	75%	-	-
KD Incentive AB	100.0%	100%	-	-
Total book value			**588,798**	**0**

Investments in subsidiaries

SEK 000	2022	2021
Umecrine Cognition AB	15,126	-
Total investments	**15,126**	**-**

Where of non-cash investments in subsidiaries

SEK 000	2022	2021
Accrued interest		
Umecrine Cognition AB	166	-
Total non-cash investments	**166**	**-**

Note 33 Shares in joint ventures and associated companies

SEK 000	2022	2021
Accumulated book value		
At the beginning of the year	899 600	732 554
Investments during the year	50 941	40 792
Reclassification to shares in subsidiaries	-623 048	-
Reclassification to other long-term securities holding	-12 014	-
Divestments during the year	-199	-108 566
Fair value measurement through profit or loss	-10 692	234 820
Closing balance, book value	**304 588**	**899 600**

Note 33 continued

Specification of holdings in joint ventures

	Total holding	Fully diluted[1]	Total holding	Book value in Parent Company	
SEK 000	**2022-12-31**		**2021-12-31**	**2022-12-31**	**2021-12-31**
Karolinska Development portfolio					
Umecrine Cognition AB (reclassified to shares in subsidiaries)	–	–	72.6%	–	623,048
Modus Thrapeutics Holding AB (reclassified to joint ventures)	–	–	38.2%	–	23,350
KDev Investments AB[2]	90.1%		90.1%	204,020	223,873
Aprea Therapeutics Inc	2.2%	2.2%	5.5%		
Biosergen AB	2.1%	2.1%	3.2%		
Dilafor AB	29.8%	29.8%	30.3%		
Modus Therapeutics Holding AB	17.1%	17.1%	17.1%		
Promimic AB	13.7%	13.7%	20.4%		
Total book value				**204,020**	**870,271**

1) Ownership with full dilution according to current investment plans.
2) Karolinska Development owns 90.1 percent (90.1 percent) of KDev Investments, which in turn owns the shares in the portfolio companies.

Specification of holdings in associated companies

	Total holding	Fully diluted[1]	Total holding	Book value in Parent Company	
SEK 000	**2022-12-31**		**2021-12-31**	**2022-12-31**	**2021-12-31**
AnaCardio Holding AB	20.7%	20.7%	20.9%	45,139	3,389
Dilafor AB (reclassified to other long-term securities holdings)	–	–	0.7%	–	12,014
Henlez ApS	13.5%	13.5%	–	5,586	–
Modus Therapeutics Holding AB	38.2%	38.2%	–	28,951	–
SVF Vaccines AB	34.8%	34.8%	30.8%	12,867	6,827
KCIF Co-Investment Fund KB	26.0%		26.0%	8,025	7,099
OssDsign AB	0.6%	0.6%	0.8%		
Total book value				**100,568**	**29,329**

1) Ownership with full dilution according to current investment plans.

Investments in joint ventures and associated companies

SEK 000	2022	2021
AnaCardio Holding AB	26,675	3,000
Dilafor AB	–	12,014
Henlez ApS	5,506	–
KDev Investments AB	915	3,800
Modus Therapeutics Holding AB	11,805	12,575
SVF Vaccines AB	6,040	3,000
Umecrine Cognition AB	–	6,403
Total investments in joint ventures and associated companies	**50,941**	**40,792**

Where of non-cash investments in joint ventures and associated companies

SEK 000	2022	2021
Accrued interest		
Modus Therapeutics Holding AB	305	–
SVF Vaccines AB	21	–
Umecrine Cognition AB	–	6,403
Financing fee from		
Modus Therapeutics AB	–	10,000
Total non-cash investments	**326**	**16,403**

Not 34 Other long-term securities holdings

SEK 000	2022	2021
Accumulated book value		
At the beginning of the year	50,570	37,766
Investments during the year	44,227	28,362
Reclassification from associated companies	12,014	–
Divestments	–	-3,941
Fair value measurement	-16,203	-11,617
Closing balance, book value	**90,609**	**50,570**

Specification of holdings in other long-term securities

	Total holding		Book value in Parent Company	
Name	**2022-12-31**	**2021-12-31**	**2022-12-31**	**2021-12-31**
Dilafor AB	1.5%	–	24,026	–
OssDsign AB	10.4%	10.2%	42,958	50,570
PharmNovo AB	13.1%	–	20,000	–
Promimic AB	1.7%	–	3,625	–
Total book value			**90,609**	**50,570**

Where of non-cash investments in other long-term securities holdings

SEK 000	2022	2021
Reclassification from associated companies	-12,014	–
Fair value measurement	-16,203	-11,617
Total non-cash investments	**-28,217**	**-11,617**

Note 35 Parent Company's holdings in subsidiaries, joint ventures and associated companies

Company	Registered office	Corporate Identity Number	Number of shares	Equity, SEK 000	Profit/loss, SEK 000
Karolinska Development					
AnaCardio Holding AB	Stockholm	559343-3559	530	132,353	-2,661
Henlez ApS	Köpenhamn	40632026	9,259	9,637	-2,028
KD Incentive AB	Solna	556745-7675	100,000	149	–
KCIF Fund Management AB	Solna	556777-9219	75,000	220	–
Modus Therapeutics Holding AB	Stockholm	556851-9523	6,144,821	49,162	-24,546
SVF Vaccines AB	Stockholm	559001-9823	275	457	-10,634
Umecrine Cognition AB	Umeå	556698-3655	10,777,564	64,958	-46,886
KCIF Co-Investment Fund KB	Solna	969744-8810	26	32,122	1,342
OssDsign AB	Uppsala	556841-7546	461,184	226,734	-99,385
KDev Investments AB	Solna	556880-1608	2,239,340	532,022	-31,305
Aprea Therapeutics Inc	Boston	7312119	1,180,691	277,890[1)]	-1,149,141[2)]
Biosergen AB	Stockholm	559304-1295	901,334	-7,769[1)]	-27,474[2)]
Dilafor AB	Stockholm	556642-1045	403,970	5,293	-46,726
Modus Therapeutics Holding AB	Stockholm	556851-9523	2,752,516	49,162	-24,546
Promimic AB	Göteborg	556657-7754	2,523,920	81,318	-15,887

1) As of 30 september 2022
2) As of 1 Januari – 30 September 2022

Note 36 Other financial assets

Other financial assets, non-current

SEK 000	2022-12-31	2021-12-31
Receivable earn-out agreement Forendo Pharma Oy, see also note 9	59,537	61,799
Receivable earn-out agreement Oncopeptides, see also note 9	0	0
Total	**59,537**	**61,799**

Other financial assets, current

SEK 000	2022-12-31	2021-12-31
Receivable earn-out agreement Forendo Pharma Oy, see also note 9	15,970	–
Total	**15,970**	**–**

Note 37 Other current receivables and prepaid expenses and accrued income

Other current receivables

SEK 000	2022-12-31	2021-12-31
Tax assets	673	673
Other	–	95
Total	**673**	**768**

Prepaid expenses and accrued income

SEK 000	2022-12-31	2021-12-31
Prepaid rental expenses	–	179
Insurance premiums	297	314
Prepaid rights issue costs	–	2,172
Other	453	275
Total	**750**	**2,940**

Note 38 Short-term investments at fair value through profit or loss

SEK 000	2022-12-31	2021-12-31
At the beginning of the year	50,005	–
Aquisitioons of short-term interest funds with low risk	10,000	50,000
Fair value measurement	-1,263	5
Total	**58,742**	**50,005**

Note 39 Proposed appropriation of profit

SEK 000	2022-12-31
Retained loss	-1,409,002,017
Share premium reserve	2,735,903,004
Net profit for the year	-88,101,122
Total	**1,238,799,865**

The Board of Directors proposes that profits brought forward be appropriated as follows:

Share premium reserve	2,735,903,004
Retained loss	-1,497,103,139
To be carried forward	**1,238,799,865**

Note 40 Other financial liabilities

SEK 000	2022-12-31	2021-12-31
Liability earn-out payment regarding Aprea Therapeutics, see also note 14	191	1,756
Total	**191**	**1,756**

Note 41 Current interest-bearing liabilities to related party

SEK 000	2022-12-31	2021-12-31
Short-term loan debt invoX Pharma Ltd[1)]	–	70,000
Short-term loan debt invoX Pharma Ltd[1)]	–	42,500
Accrued interest invoX Pharmal Ltd[1)]	–	12,103
Total	**–**	**124,603**

1) See note 15, 19 and 43.

Note 42 Accrued expenses and prepaid income

SEK 000	2022-12-31	2021-12-31
Salaries and remuneration to personnel	4,564	3,676
Remuneration to Board of Directors	438	632
Auditor and consulting fees	707	813
Payroll tax and accrued pension costs	1,349	1,165
Social security costs	914	676
Other	199	306
Total	**8,171**	**7,268**

Note 43 Related parties

Affiliates

The Parent Company has a related party relationship with its subsidiaries, joint ventures, associated companies and the companies in the invoX Pharma Ltd Group (Sino Biopharmaceutical Ltd).

Karolinska Development has rendered services to portfolio companies on technical studies and administration. The prices of these services rendered are market based.

	2022				2021			
SEK 000	Sale of services	Interest income	Purchase of services	Interest expenses	Sale of services	Interest income	Purchase of services	Interest expenses
Associate relationship								
invoX Pharma Ltd				799				6 239
Subsidiaries	89				89			
Joint ventures and associated companies	2,205	1,129			2,071	6,402		
Total	**2,294**	**1,129**	**–**	**799**	**2,160**	**6,402**	**–**	**6,239**

	2022-12-31		2021-12-31	
SEK 000	Liability to associate	Receivable from associate	Liability to associate	Receivable from associate
Associate relationship				
Owner: Sino Biopharmaceutical Ltd			124,603	
Subsidiaries		15,126		
Joint ventures and associated companies		15,453		4,303
Total	**–**	**30,579**	**124,603**	**4,303**

Signing of the annual financial statements

The Board of Directors and CEO hereby certify that the annual report has been prepared according to the Annual Accounts Act and RFR 2 and provides a true and fair view of the Company´s financial position and results and that the administration report provides a true and fair overview of the Company´s operations, financial position and results, and that it describes significant risks and uncertainties facing the Company. The Board of Directors and CEO hereby certify that the Investment Entity report has been prepared according to the International Financial Reporting Standards (IFRS), as adopted by the EU, and provides a true and fair overview of the Investment Entity's financial position and results, and that the administration report for the Investment Entity provides a true and fair overview of the Investment Entity's operations, financial position and results, and that it describes significant risks and uncertainties facing the Investment Entity.

The annual report and the Investment Entity report have been approved for presentation by the Board, and signed by all, on 20 March 2023. The Investment Entity's and Parent Company's income statements and balance sheets will be presented for adoption by the Annual General Meeting of shareholders on 16 May 2023.

Björn Cochlovius Chairman	Anna Lefevre Skjöldebrand Board member	Benjamin Toogood Board member
Philip Duong Board member	Theresa Tse Board member	Viktor Drvota CEO

Our Auditor's Report was presented on 23 March 2023

Ernst & Young AB

Oskar Wall
Authorized Public Accountant

Auditor's report

To the general meeting of the shareholders of Karolinska Development AB (publ), corporate identity number 556707-5048

Report on the annual accounts for the parent company and the financial statements for the investment entity

Opinions

We have audited the annual accounts for the parent company and the financial statements for the investment entity of Karolinska Development AB (publ) for the year 2022. The annual accounts for the parent company and the financial statements for the investment entity are included on pages 33–86 this document.

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the parent company as of 31 December 2022 and its financial performance and cash flow for the year then ended in accordance with the Annual Accounts Act. The financial statement for the investment entity have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the investment entity as of 31 December 2022 and their financial performance and cash flow for the year then ended in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, and the Annual Accounts Act. The statutory administration report is consistent with the other parts of the annual accounts and the financial statement.

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

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

Basis for Opinions

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

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

Key Audit Matters

Key audit matters of the audit are those matters that, in our professional judgment, were of most significance in our audit of the annual accounts and financial statements of the current period. These matters were addressed in the context of our audit of, and in forming our opinion thereon, the annual accounts and financial statements as a whole, but we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying financial statements.

Valuation of shares in portfolio companies

Description

Carrying value for shares in portfolio companies, amounted to 984 MSEK as per 31 December 2022, corresponding to 79% of the Investment entity and parent entity's (hereafter collectively mentioned as Company) total assets.

The valuation of shares in portfolio companies is based on the International Private Equity, Venture Capital Valuation Guidelines (IPEV) and IFRS 13 Fair Value Measurement.

The Company has classified its shares in portfolio companies to fair value level 3 as defined by IFRS 13, which means that fair value is based on models where significant data is based on non-observable data or low market activity.

The process of valuation of unlisted shares in portfolio companies requires management assessment. Changes in ownership strategy, the development of the portfolio companies and ownership shares have consequences for the method of valuing these shares and thus the carrying amount. As changes in these judgements affect the carrying amount, we have considered this as a particular important area in the audit.

How our audit addressed this key audit matter

In our audit we have gained an understanding of the valuation process and the key controls in this process. We have verified the Company's ownership in the portfolio companies, reviewed internal models regarding calculation of fair value and tested that the methodology is in accordance with the International Private Equity, Venture Capital Valuation Guidelines (IPEV) and IFRS 13 Fair Value Measurement.

Information related to the Company's principles for accounting for shares in portfolio companies is described in Note 1 on pages 55–57 and in Note 17 on page 72–77 there is a detailed description of the valuation and classification of shares in portfolio companies.

Other Information than the annual accounts for the parent company and the financial statement for the investment entity

This document also contains other information than the annual accounts and financial statement and is found on pages 1–32 and 91–99. The Board of Directors and the Managing Director are responsible for this other information.

Our opinion on the annual accounts for the parent company and the financial statement for the investment entity accounts does not cover this other information and we do not express any form of assurance conclusion regarding this other information

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

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

Responsibilities of the Board of Directors and the Managing Director

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

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

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

Auditor's responsibility

Our objectives are to obtain reasonable assurance about whether the annual accounts for the parent company and the financial statement for the investment entity as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and generally accepted auditing standards in Sweden will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts and financial statement.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the annual accounts for the parent company and the financial statement for the investment entity, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of the company's internal control relevant to our audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Directors and the Managing Director.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting in preparing the annual accounts for the parent company and the financial statement for the investment entity. We also draw a conclusion, based on the audit evidence obtained, as to whether any material uncertainty exists related to events or conditions that may cast significant doubt on the parent company and investment entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the annual for the parent company and the financial statement for the investment entity or, if such disclosures are inadequate, to modify our opinion about the annual accounts for the parent company and the financial statement for the investment entity. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause a company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the annual accounts for the parent company and the financial statement for the investment entity, including the disclosures, and whether the annual accounts for the parent company and the financial statement for the investment entity represent the underlying transactions and events in a manner that achieves fair presentation.

We must inform the Board of Directors of, among other matters, the planned scope and timing of the audit. We must also inform of significant audit findings during our audit, including any significant deficiencies in internal control that we identified.

We must also provide the Board of Directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or related safeguards applied.

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

Report on other legal and regulatory requirements

Opinions

In addition to our audit of the annual accounts for the parent company and the financial statement for the investment entity, we have also audited the administration of the Board of Directors and the Managing Director of Karolinska Development AB (publ) for the year 2022 and the proposed appropriations of the company's loss.

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

Basis for opinions

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

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

Responsibilities of the Board of Directors and the Managing Director

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

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

Auditor's responsibility

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

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

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

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

As part of an audit in accordance with generally accepted auditing standards in Sweden, we exercise professional judgment and maintain professional scepticism throughout the audit. The examination of the administration and the proposed appropriations of the company's loss is based primarily on the audit of the accounts. Additional audit procedures performed are based on our professional judgment with starting point in risk and materiality. This means that we focus the examination on such actions, areas and relationships that are material for the operations and where deviations and violations would have particular importance for the company's situation.

We examine and test decisions undertaken, support for decisions, actions taken and other circumstances that are relevant to our opinion concerning discharge from liability. As a basis for our opinion on the Board of Directors' proposed appropriations of the company's loss we examined whether the proposal is in accordance with the Companies Act.

The auditor's examination of the ESEF report

Opinion

In addition to our audit of the annual accounts for the parent company and the financial statement for the investment entity, we have also examined that the Board of Directors and the Managing Director have prepared the annual accounts for the parent company and the financial statement for the investment entity in a format that enables uniform electronic reporting (the Esef report) pursuant to Chapter 16, Section 4(a) of the Swedish Securities Market Act (2007:528) for Karolinska Development AB (publ) for the financial year 2022.

Our examination and our opinion relate only to the statutory requirements.

In our opinion, the ESEF report has been prepared in a format that, in all material respects, enables uniform electronic reporting.

Basis for opinion

We have performed the examination in accordance with FAR's recommendation RevR 18 Examination of the ESEF report. Our responsibility under this recommendation is described in more detail in the Auditors' responsibility section. We are independent of Karolinska Development AB (publ) in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

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

Responsibilities of the Board of Directors and the Managing Director

The Board of Directors and the Managing Director are responsible for the preparation of the Esef report in accordance with Chapter 16, Section 4(a) of the Swedish Securities Market Act (2007:528), and for such internal control that the Board of Directors and the Managing Director determine is necessary to prepare the Esef report without material misstatements, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to obtain reasonable assurance whether the Esef report is in all material respects prepared in a format that meets the requirements of Chapter 16, Section 4(a) of the Swedish Securities Market Act (2007:528), based on the procedures performed.

RevR 18 requires us to plan and execute procedures to achieve reasonable assurance that the Esef report is prepared in a format that meets these requirements.

Reasonable assurance is a high level of assurance, but it is not a guarantee that an engagement carried out according to RevR 18 and generally accepted auditing standards in Sweden will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the Esef report.

The audit firm applies ISQC 1 Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and other Assurance and Related Services Engagements and accordingly maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with professional ethical requirements, professional standards and legal and regulatory requirements.

The examination involves obtaining evidence, through various procedures, that the Esef report has been prepared in a format that enables uniform electronic reporting of the annual and financial statement. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement in the report, whether due to fraud or error. In carrying out this risk assessment, and in order to design audit procedures that are appropriate in the circumstances, the auditor considers those elements of internal control that are relevant to the preparation of the Esef report by the Board of Directors and the Managing Director, but not for the purpose of expressing an opinion on the effectiveness of those internal controls. The examination also includes an evaluation of the appropriateness and reasonableness of assumptions made by the Board of Directors and the Managing Director.

The procedures mainly include a technical validation of the Esef report, i.e. if the file containing the Esef report meets the technical specification set out in the Commission's Delegated Regulation (EU) 2019/815 and a reconciliation of the Esef report with the audited annual accounts for the parent company and the financial statements for the investment entity.

Furthermore, the procedures also include an assessment of whether the Esef report has been marked with iXBRL which enables a fair and complete machine-readable version of the financial statement of financial performance, financial position, changes in equity and cash flow.

Ernst & Young AB, was appointed auditor of Karolinska Development AB by the general meeting of the shareholders on the 12 May 2022 and has been the company's auditor since the 20 May 2015.

Stockholm 23 March 2023
Ernst & Young AB

Oskar Wall
Authorized Public Accountant

Corporate Governance Report for 2022

This Corporate Governance Report has been prepared in accordance with the Swedish Code of Corporate Governance and the Swedish Annual Accounts Act.

Corporate Governance at Karolinska Development

Application of the Swedish Code of Corporate Governance

Karolinska Development complies with the Swedish Code of Corporate Governance (the Code), without deviations.

Information on the Company's website

On its website, the Company has a special section for corporate governance issues under the section Corporate Governance, https://www.karolinskadevelopment.com/en/corporate-governance

General meetings

Under the Swedish Companies Act, the general meeting is the Company's highest decision-making body. At the annual general meeting, which shall be held within six months from the end of the financial year, shareholders exercise their voting rights on issues such as the adoption of income statements and balance sheets, appropriation of the Company's profits or losses, resolutions to release the members of the board of directors and the chief executive officer from liability for the preceding financial year, the appointment of members of the board of directors and auditor and remuneration for the board of directors and the auditor.

Besides the annual general meeting, extraordinary general meetings may be convened. In accordance with the articles of association, all general meetings shall be convened through announcements in the Swedish Official Gazette (Sw. Post- och Inrikes Tidningar) and by posting the notice to the meeting on the Company's website. An announcement shall simultaneously be placed in Svenska Dagbladet with information that the meeting has been convened. Minutes from the general meetings are published on Karolinska Development's web page.

Shareholders who want to participate in shareholders' meetings and vote according to the number of shares they hold, shall be entered in the share register in accordance with aktiebolagslagen (the Swedish Companies Act), as well as notify the company at latest on the day which is specified in the notice to the meeting. Shareholders may attend general meetings in person or through a proxy and may also be accompanied by up to two assistants.

Composition of the Board and its' functions, etc.

The board of directors is the highest decision-making body after the general meeting. The board of directors' responsibility is regulated in the Swedish Companies Act, the Swedish Annual Accounts Act, the Company's articles of association, directions given by the general meeting and the procedure for the board of directors of the Company adopted by the board of directors. In addition, the board of directors shall comply with the Swedish Corporate Governance Code and Nasdaq Stockholm's Rule Book for Issuers, as well as other Swedish and foreign laws and regulations, as applicable.

Pursuant to the Swedish Companies Act, the board of directors is responsible for the Company's organization and the administration of the Company's affairs. Furthermore, the board of directors shall continuously assess the Company's and the group's financial situation, as well as see to that the Company's organization is formed in a way that the accounting, management of funds and the Company's financial conditions are controlled in a secure manner.

The assignments of the board of directors include, inter alia, to set objectives and strategies, see to that there are effective systems for follow-up and control of the Company's operations, and see to that there is a satisfactory control of the Company's compliance with laws and other regulations applicable to the Company's operations. The assignments of the board of directors also include to see to that required ethical guidelines are set for the Company's conduct and to see to that the Company's disclosure of information is characterized by transparency and is correct, relevant and reliable. In addition, the assignments of the board of directors include appointing, evaluating and if necessary, removing the chief executive officer.

Members of the board of directors are appointed annually by the annual general meeting for the period until the end of the next annual general meeting.

According to the Articles of Association, the general meeting shall appoint no less than three and no more than nine directors. Deputies shall not be appointed. At the annual general meeting 2022 five board members were appointed.

Regulations regarding the appointment and dismissal of directors and amendments to the Articles of Association

The Articles of Association contain no special regulations regarding the appointment and dismissal of directors and no special regulations regarding amendments to the Articles of Association.

Authorization to the Board to issue new shares or acquire its own shares

The Annual General Meeting 2022 authorized the board of directors to issue on one or several occasions without pre-emption rights for the shareholders new shares of series B up to a maximum of twenty percent of the share capital.

The Annual General Meeting also authorized the Board to decide on transfer of earlier acquired shares of series B amounting to 244,285.

Holdings of ten percent or more of the votes

There is one holding that represents more than one tenth of the voting rights for all shares in Karolinska Development, invoX Pharma Ltd with 43.93 percent of the votes (47.67 percent of the shares).

The chief executive officer

The chief executive officer reports to the board of directors. The chief executive officer's responsibility is governed by the Swedish Companies Act, the Swedish Annual Accounts Act, the Company's articles of association, directions given by the general meeting, the instruction for the chief executive officer and other internal directions and guiding principles adopted by the board of directors. In addition, the chief executive officer shall comply with the Swedish Corporate Governance Code and Nasdaq Stockholm's Rule Book for Issuers, as well as other Swedish and foreign laws and regulations, as applicable.

According to the Swedish Companies Act, the chief executive officer shall handle the day-to-day management pursuant to the board of directors' guidelines and instructions. In addition, the chief executive officer shall take any measures necessary in order for the Company's accounts to be maintained pursuant to law and that the management of funds is conducted in an appropriate manner. The division of work between the board of directors and the chief executive officer is described in the instruction for the chief executive officer.

The chief executive officer shall administrate the operative management and execute the resolutions passed by the board of directors. The chief executive officer shall control and supervise that the matters to be dealt with by the board of directors according to applicable legislation, the articles of association and internal instructions are presented to the board of directors, and shall continuously keep the chairman of the board of directors informed about the performance of the Company's operations, its earnings and financial position, as well as any other event, circumstances or condition that cannot be assumed to be irrelevant to the board of directors or the shareholders.

Nomination Committee

The nomination committee shall carry out its duties in accordance with the Swedish Corporate Governance Code. The nomination committee's main duties are to propose candidates for the positions as chairman of the board of directors and other members of the board of directors, as well as to propose fees and other remuneration to each member of the board of directors. The nomination committee is also to make proposals on the election of and remuneration to the auditor.

The five largest owners by voting rights, as set forth in the share register kept by Euroclear Sweden AB as of the last banking day August 2022), have the right each to appoint one member of the Nomination Committee for the Annual General Meeting 2023. The members of the Nomination Committee have elected the chairman of the Nomination Committee among themselves. The Nomination Committee consists of: Yan Cheng (Chairman), appointed by Worldwide International Investments Ltd; Jack Li, appointed by invoX Pharma Ltd; Jan Dworsky, appointed by Swedbank Robur Microcap fond; Hans Wigzell, appointed by Insamlingsstiftelsen för främjande och utveckling av medicinsk forskning vid KI; Mattias Klintemar, appointed by Östersjöstiftelsen.

If a member of the Nomination Committee resigns or is prevented from pursuing his/her assignment, the shareholder that has appointed that member shall appoint a new member. In the event that the shareholding in the Company is materially changed, before the Nomination Committee has completed its assignment, the Nomination Committee may decide to change the composition of the Nomination Committee, as determined by the Nomination Committee (considering the principles applicable for the appointment of the Nomination Committee). No fees shall be paid to the members of the Nomination Committee. Out of pocket expenses shall be reimbursed by the Company.

Board of Directors

Composition of the Board

The Company's Board consists of the following five directors: Björn Cochlovius (Chairman), Theresa Tse, Anna Lefevre Skjöldebrand, Ben Toogood and Philip Duong. Tse Ping was deputy Chairman and board member up and until January 12, 2022. None of the directors are employed by the company.

Information on remuneration to Board as determined by the Annual General Meeting, can be found in the annual report under the note 5 "Employees and costs for employees".

Elected directors

Björn Cochlovius. Chairman since 2020. Born 1968. Doctorate (Dr.rer.nat) from Universität des Saarlandes , Assoc. Prof Universität Heidelberg.

Other assignments: CEO Medraxa Therapeutics GmbH, Chairman of the Board of Directors of Sapreme Technologies BV, President at Biocure Technologies Ltd and General Manager at BC BioMed Consulting GmbH. Prior assignments include i.a.: Chairman of the Board of Isogencia Ltd, Senior Director Development Asia-Pacific at Abbvie Inc., Head Oncology at Otsuka, Director Business Development Oncology at Roche AG, CEO at OnTarget Neurology AS, Head R&D at Affitech AS and SVP Business Development at Atriva Therapeutics GmbH,.

No holdings in Karolinska Development.

Theresa Tse. Board Member since 2017. Born 1992. Bachelor's Degree of Science in Economics from the Wharton School of University of Pennsylvania.

Other appointments: Chairwoman of the Board and Executive Director of Sino Biopharmaceutical Ltd (listed at the Hong Kong stock exchange) and member of the Board of Directors of invoX Pharma Ltd., France Investment (China 1) Group Limited, Chia Tai Life Technology Limited and Yun On Investment Holding Limited.

Holdings in Karolinska Development 128,736,384 shares (by related legal person).

Anna Lefevre Skjöldebrand. Board Member since 2021. Born 1969. Master of Laws from Uppsala University.

Other appointments: CEO Swedish Medtech Service AB. Current board assignments include: Sweden Medtech-4Health AB (Chairwoman), Swecare and St Eriks ögonsjukhus.

Prior assignments include i.a.: Head of Legal Swedish Medtech Service AB, Advokat Delphi & Co, Advokat GLS Legal, Jurist Ernst & Young Law, Legal Counsel Front Capital Systems AB. Prevoius board assignments include i.a.: Dedicare AB, E-hälsomyndigheten, SIS AB, Medtech Europe and COCIR, Life Science office of Sweden. She has also been a member of the board in the Board for Public Procurement.

No holdings in Karolinska Development.

Ben Toogood. Board Member since 2021. Born 1976. Bachelor of Pharmacy from Rhodes University. MSc. from University of Witwatersrand and Executive MBA from University of Cambridge.

Other appointments: Head Global Business Development, Sino Biopharmaceuticals Limited, CEO invoX Pharma Limited, Director of Softhale BV and pHion Therapeutics.

Previous assignments: Head Global BD & M&A Sandoz AG, Group New Business Development Executive Aspen Pharmacare Holdings, Vice President Global Business Development Pharmathen SA, International Licensing Executive Niche Generics (Unichem Laboratories) and Regulatory Affairs Merck Generics (Mylan).

Holds 64,001 shares in Karolinska Development.

Philip Duong[1]. Board Member since 2022. Born 1990, Bachelor's degree of Commerce from University of Toronto.

Other appointments, Head of Investments at Sino Biopharmaceuticals Limited, member of the Board of Directors at Softhale BV and Treadwell Therapuetics.

Previous assignments: Vice President at Deutsche Bank AG (Hong Kong Branch).

No holdings in Karolinska Development.

1) Elected at the extra general meeting 2022.

Independence requirements

The table below shows which elected directors are considered independent in relation to the Company and its management as well as in relation to the Company's major shareholders, per definitions in the Code.

			Independent of:	
Name	**Function**	**Elected**	**Company/Mgmt.**	**Major holder**
Björn Cochlovius	chairman	2020	yes	yes
Theresa Tse	director	2017	yes	no
Anna Lefevre Skjöldebrand	director	2021	yes	yes
Ben Toogood	director	2021	yes	no
Philip Duong	director	2022	yes	no

A major holder means a holder controlling, directly or indirectly, at least ten percent of the shares or votes.

The Company meets the Code requirement that a majority of the elected directors must be independent in relation to the Company and its management and that a minimum of two of these must be independent in relation to major shareholders.

The Board's work etc.

According to the Rules of procedure, the Board shall normally meet six times per year. During 2022 the Board held 15 meetings. Björn Cochlovius, Ben Toogood and Anna Lefevre Skjöldebrand attended all meetings. Philip Duong attended all 14 meetings after he was elected board member. Tse Ping, member of the Board of directors up and until the extra general meeting January 12, 2022, has not attended any meeting. Theresa Tse has not attended any meeting.

The General Counsel of the company Johan Dighed is the secretary at the board meetings.

The Board annually adopts rules of procedure, an instruction on the delegation of work between the Board and the CEO, and an instruction on financial reporting to the Board. The Board also adopts policies, which constitute a foundation for the Company's internal control systems. These are the Information and Insider Policy, Equal Treatment Policy, Environmental Policy, HR Policy, Code of Ethics, Policy on Pre-Approval of Non-Audit Services by Auditor and Dividend Policy.

The board evaluation of the board work has been conducted through a questionnaire distributed to all directors. The aggregated result of the questionnaire has been distributed to the directors and has been subject to internal discussion. The full result of the evaluation has been submitted to the Nomination Committee.

The board has three committees, an Audit Committee, a Remuneration Committee and an Investment Committee.

Audit Committee

Karolinska Development´s Audit Committee consists of three members: Björn Cochlovius (Chairman), Anna Lefevre Skjöldebrand and Ben Toogood, each being independent in relation to the Company and its management.

The audit committee shall, without any other impact on the tasks and responsibilities of the board of directors:

- monitor the Company's financial reporting; and provide recommendations and suggestions to ensure the reliability of the reporting;
- in respect of the financial reporting, monitor the effectiveness of the Company's internal control, internal audit, and risk management;
- remain informed regarding the auditing of the group reporting and financial statements; and the conclusions of the Board of Auditors quality control;
- inform the board about the result of the audit and about how the audit contributed to the accuracy of the financial reporting and about the function of the Audit Committee;
- review and monitor the impartiality and independence of the auditor, and in that respect, pay particular attention to non-audit services provided by the auditor; and
- assist in the preparation of proposals to the annual general meeting's resolution regarding election of auditor.

The Audit Committee met 5 times during 2022 and all members were present at these meetings.

Remuneration Committee

Karolinska Development´s Remuneration Committee consists of three members: Björn Cochlovius (Chairman), Anna Lefevre Skjöldebrand and Ben Toogood, each being independent in relation to the Company and its management.

The remunerations committee's main tasks are to:

- prepare the board of directors' decisions on issues concerning principles for salary, remuneration and other terms of employment for the executive management;
- monitor and evaluate programs for variable remuneration for the executive management, and
- monitor and evaluate the application of the guidelines for remuneration to the management that the annual general meeting is legally obliged to decide on, as well as the current remuneration structures and levels in the Company.

The Remuneration Committee met 2 times during 2022 and all members were present at these meetings.

Investment Committee

Karolinska Development´s Investment Committee consists of three members: Björn Cochlovius (Chairman), Anna Lefevre Skjöldebrand and Ben Toogood, each being independent in relation to the Company and its management.

The main tasks of the Investment Committee are to prepare and analyze investment proposals and submit recommendations to the Board of Directors.

The Investment Committee met 6 times during 2022 and all members were present at these meetings.

Chief Executive Officer

Viktor Drvota. Appointed as CEO on June 1, 2017, and previously CIO since 2016. Born 1965 M.D, Ph.D. Associate Prof. In Cardiology. Viktor Drvota has over 20 years of Venture Capital experience in Life Science with several investments, significant fundraisings, IPOs and exits. He was responsible for Life Science at SEB Venture Capital 2002–2016. During his appointment at SEB VC he also served as a Board member in several biotech and Medtech companies such as Arexis AB, SBL Vaccin AB, Nuevolution AS, Index Pharma AB, Scibase AB, Airsonett AB among others. Before joining SEB, Dr Drvota worked as Senior Consultant and Associate Professor in Cardiology at the Karolinska Institutet/hospital, Stockholm. Dr Drvota has experience from preclinical as well as clinical research in drug development and medical devices. Dr Drvota has 29 published research articles. Holdings in Karolinska Development: 159,996 shares.

The main components of the Company's system for internal control and risk management in relation to financial reporting

Internal control and risk management at Karolinska Development

Internal control is designed to provide reasonable assurance as to the reliability of external financial reporting and compliance with the law, generally accepted accounting principles and rules for listed companies.

The key elements of the Company's system for internal control and risk management related to financial reporting are presented below. The Company's internal control comprises mainly the areas of Control Environment, Risk Assessment, Control Activities, Communications and Monitoring.

Control environment. The control environment constitutes the basis for the internal control. Karolinska Development has a flat organizational structure with a clear division of responsibilities and rights. There is an established system of governing documents in the form of Policies adopted by the board and Instructions adopted by the CEO. Within the framework of overarching policies, they govern decisions, authorization and processes involving purchases, payments and investments. Among these documents, the Valuation Guidelines, governing methods and processes for valuation of the portfolio, should be mentioned. The documentation is centrally accessible to all employees through the Company's internal IT network. The Company has employed personnel responsible for controlling and legal functions, who jointly work towards a well-functioning control environment as one of their specifically stated goals. These governing documents form the basis for how transactions should be handled, recorded and reported.

Risk assessment. The Company works continuously with a structured risk assessment with regard to issues which have an impact on the Company's financial position and result. Special attention is paid to the risk of irregularities and favoritism at the Company's expense. Risk assessment includes inter alia: (i) the existence, at a given date, of an asset or liability, (ii) that a business transaction or an event has occurred during the period and relates to the Company, (iii) that there are no assets, liabilities or business transactions which are not recorded or items for which the necessary information is missing, (iv) that each asset and liability is recorded and valued in accordance with law, generally accepted accounting principles and internal valuation rules; (v) that the business transactions are recorded at the correct amount and that profit and expenses are attributable to the correct period, (vi) that an asset or liability relates to the Company on a specified date and, (vii) that an item is classified and described in accordance with law, generally accepted accounting principles and listing rules.

Control Activities. The financial reporting is subject to control activities aimed at preventing, detecting and correcting errors and discrepancies. These consist of a specified allocation of work, documented and clearly described rules for how business transactions are to be approved as well as their traceability, the application of accounting and valuation principles, analytical monitoring, account reconciliation, monitoring of agreements, board resolutions, policies and certification procedures.

As relates to the portfolio, regular follow-ups are made of planned and implemented investments in terms of whether the companies have met the stipulated targets for further investments. Furthermore, evaluations are made, and priorities set among the companies' projects. Scientific results and business opportunities are both monitored. This is done continuously in regular management meetings.

There is also a monthly analysis of how different activities in portfolio companies affect the valuation of these in the parent company and the consolidated financial statements. Valuation effects are reported to and finally approved by the CFO and the CEO.

Communications. The internal financial reporting complies with stipulated reporting plans. The Company's rules of procedure and the instruction on reporting to the Board include detailed descriptions as to when and what should be reported to and handled by the Board. The Company's CFO, with the support of controllers, is responsible for the financial reporting to the Board, which includes information on the Company's results and financial position. Reporting plans are aimed at ensuring complete, accurate and timely information to the Company's management and the Board.

The Company has quite few employees, all active at the same workplace, which enables quick and accurate internal communication and information.

Monitoring. Internal rules on internal control and risk management are updated at least annually and when necessary. Assessment of compliance is performed on a detailed level. The Audit Committee meets prior to Board meetings where interim reports are to be discussed. The auditors are present at the meetings of the Audit Committee and meet annually with the directors without anyone from management present.

Specific assessment of the need for internal audit

Karolinska Development has no internal audit function. The Board is of the opinion that there is no need for an internal audit function at present. The reasons are that the Company has relatively few employees, its business is established in only one location, the majority of significant transactions are similar in character and relatively straightforward, and there is a clear internal accountability within the Company.

Solna February 2023

Board of Directors of Karolinska Development AB

Auditor's report on the corporate governance statement

To the general meeting of the shareholders of Karolinska Development AB (publ), corporate identity number 556707-5048

Engagement and responsibility

It is the Board of Directors which is responsible for the corporate governance statement for the year 2022 on pages 91–95 that it has been prepared in accordance with the Annual Accounts Act.

The scope of the audit

Our examination has been conducted in accordance with FAR's standard RevR 16 The auditor's examination of the corporate governance statement. This means that our examination of the corporate governance statement is different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinions.

Opinions

A corporate governance statement has been prepared. Disclosures in accordance with chapter 6 section 6 the second paragraph points 2–6 the Annual Accounts Act and chapter 7 section 31 the second paragraph in the same law are consistent with the annual accounts and the consolidated accounts and are in accordance with the Annual Accounts Act.

Stockholm 23 March 2023
Ernst & Young AB

Oskar Wall
Authorized Public Accountant

Definitions

Definitions of Key Terms

After-tax earnings per share
Profit/loss after tax attributable to the Parent Company´s shareholders divided by the weighted average number of shares before and after dilution.

Equity per share
Equity divided by the number of shares outstanding at year-end.

Net Portfolio Fair Value (after potential distribution to Rosetta Capital)
The net aggregated proceeds that Karolinska Development will receive after KDev Investments' distribution of proceeds to Rosetta Capital.

Alternative Performance Measures
The Company presents certain financial measures in the annual report that are not defined under IFRS. The Company believes that these measures provide useful supplemental information to investors and the company's management as they allow for the evaluation of the company's performance. Because not all companies calculate the financial measures in the same way, these are not always comparable to measures used by other companies. Therefore, these financial measures should not be considered as substitutes for measures as defined under IFRS.

Portfolio companies
Companies operating in life science and are wholly or partially owned by Karolinska Development.

Total Portfolio Fair Value
The aggregated proceeds that would be received by Karolinska Development and KDev Investments if the shares in their portfolio companies were sold in an orderly transaction between market participants at the year-end.

Capital employed
Total equity and interest-bearing liabilities.

Equity to total assets ratio
Equity divided by total assets.

Return on equity
Profit/loss after financial items divided by equity.

rNPV
(Risk adjusted Net Present Value) is a risk adjusted capital budgeting formula that calculates the present value of the cashflows of a project or potential investment.

Return on capital employed
Profit/loss after financial items divided by capital employed.

Net asset value and net asset value per share
Net Portfolio Fair Value of the total portfolio (SEK 984.0 million), cash and cash equivalents (SEK 131.1 million), short-term investments (SEK 58.7 million), net of financial assets and financial liabilities minus interest-bearing liabilities (SEK 75.3 million minus SEK 0.0 million). Net asset value per share: the net asset value in relation to the number of shares outstanding, excluded repurchased shares (269,833,309) on the closing date (31 December 2022).

Other definitions

Karolinska Development
Karolinska Development AB (publ.), Corporate Identity Number 556707-5048

Karolinska Institutet
Karolinska Institutet, Corporate Identity Number 202100-2973
Karolinska Institutet is one of the world's leading medical universities and awards the Nobel Prize in Physiology or Medicine.

KIAB
Karolinska Institutet Innovations AB, Corporate Identity Number 556528-3909
KIAB, which is owned (indirectly via KIHAB) by Karolinska Institutet, identifies projects with high commercial potential at an early stage by actively seeking new ideas from Karolinska Institutet and other Nordic universities. KIAB leads and also finances the project development in early phases, where the objective is to establish a licensing agreement or a start-up company.

KIHAB
Karolinska Institutet Holding AB, Corporate Identity Number 556525-6053
KIHAB is owned by Karolinska Institutet. KIHAB is the Parent Company of a group of five wholly owned subsidiaries, including Karolinska Institutet Innovations AB (KIAB).

Net debt
Interest bearing liabilities reduced with interest bearing assets, cash and cash equivalents and short-term investments.

Fair value
The NASDAQ Stockholm regulations for issuers require companies listed on NASDAQ Stockholm to apply the International Financial Reporting Standards, IFRS, in their consolidated financial statements. The application of company nature to apply so-called fair value in the calculation of the carrying amount of certain assets. These calculations are made on the basis of established principles and are not included in the opening accounts of the Group's legal entity, nor do they affect cash flows.

Karolinska Development applies the accounting principles of fair value according to the International Private Equity and Venture Capital Valuation Guidelines and adheres to the guidance of IFRS 13 Fair Value Measurement. Based on the valuation criteria provided by these rules, an assessment is made of each company to determine a valuation method. This takes into account whether the companies have recently been financed or involved with a transaction that includes an independent third party. If there is no valuation available based on a similar transaction, risk adjusted net present value (rNPV) calculations are made of the portfolio companies whose projects are suitable for this type of calculation. In other cases, Karolinska Development's total investment is used as the best estimation of fair value. In one other case, the valuation at the time of the last capital contribution is used.

The part of the Fair Value that is related to the value of Karolinska Development's portfolio companies is named Portfolio Fair Value or Fair Value of the portfolio. The calculation of the Portfolio Fair Value is based on IFRS 13 standards of deciding and reporting fair value and the International Private Equity and Venture Capital Valuation Guidelines (IPEV Valuation Guidelines) decided by the IPEV board that represent the current best practice, on the valuation of private equity investments.

The Portfolio Fair Value is divided into Total Portfolio Fair Value and Net Portfolio Fair Value (after potential distribution to Rosetta Capital).

Glossary

Antagonist
A drug that blocks or dampens the biological response of a receptor by binding to it.

Antimycotic
Active against fungal growth, antifungal.

Autoimmune (disease)
A condition in which the body's own immune system mistakenly attacks the body's own cells.

Biosynthetic
Process that is catalysed by proteins (so-called enzymes) in cells through which more complicated products are produced from simpler building blocks.

CNS
Central Nervous System (CNS), including the brain and spinal cord.

EEG
Electroencephalography (EEG) is a test of the electric activity of the cerebral cortex in the investigation of diseases of the central nervous system.

First-in-class
Drugs which use a new and unique mechanism of action to treat a medical condition. These products are innovative and offer new treatment options for patients.

GABA
Gamma aminobutyric acid is the most common inhibitory neurotransmitter in the central nervous system. It is one of the signal substances that moves the information of short-term memory to long-term memory.

Immunotherapy
Treatment that strengthens the immune system's inherent ability to attack foreign or diseased cells.

In vitro
From the Latin "in glass" refers to research or "test tube experiments" in a lab with e.g. cells or proteins.

Liver cirrhosis
Scarring of the liver caused by long-time liver damage, preventing the liver from working properly.

Malignant tumors
Severe tumor.

Monotherapy
Treatment with only one drug.

Mutation
An alteration in the genetic material of a cell of a living organism or a virus, which is more or less permanent and that can be transmitted to the cell's or the virus's descendants.

Neurological diseases
Neurological diseases concern diseases of the brain, brainstem, spinal cord and central nervous system that lead to a deterioration of cognitive (thinking) abilities.

Obstetrics
The field of study of pregnancy, childbirth, postpartum (time after birth) and related conditions during or after pregnancy and childbirth.

Orphan Drug Designation
A status given to certain drugs, which show promise in rare diseases affecting a very limited part of the population.

Oxytoxcin
Peptide hormone that is secreted in the central nervous system and acts on the cells of smooth muscles, e.g. in the womb. Oxytocin plays an important role in labor and is used as a medicine to accelerate a slow birth by augmenting uterine contractions.

Pharmacokinetics
The doctrine of drug uptake into, turnover in and elimination from the body, as well as description of drug effects.

Placebo controlled (study)
A clinical study testing a medical therapy in which, in addition to a group of subjects that receives the treatment to be evaluated, a separate control group receives a sham "placebo" treatment which is specifically designed to have no real effect.

Polysaccharide
Polysaccharides are carbohydrates that are made up of a large number of sugars (mono-saccharides).

Preeclampsia
Pregnancy complication characterized by high blood pressure during the latter half of pregnancy and effects on the foetus.

Proof-of-concept
Relates to clinical development and typically refers to the demonstration of a drug candidate's desired effect in a patient group, for example by the candidate having a certain effect and safety profile in patients.

Prostaglandins
Short-lived, hormone-like compounds that are fatty acid derivatives and regulate cell activity affecting e.g. blood pressure and smooth muscle control.

Protein
Large molecules built from sequences of amino acids. Proteins are used in many different ways in an organism; they provide structure for cells and tissues, they catalyse chemical reactions in the form of enzymes and they are involved in the signalling in and between cells.

Randomized (study)
A study in which the trial participants are randomly allocated into two or more treatment groups that are prescribed a specific treatment or placebo.

Receptor
A large molecule, usually a protein, which is attached to cell membranes and binds to a target molecule. The target molecule can be a hormone that has a certain effect on the cell to which it binds to.

Sepsis / Septic chock
Life-threatening condition triggered by a dysregulated response to infection, which affects the whole body and prevents important organs from functioning properly.

Steroids
Type of organic molecules that among other things include natural hormones.

Small molecule inhibitors
Chemical substance that can usually be taken orally (not antibody or protein) and which inhibits a receptor system, e.g. in cancer cells.

Subcutaneous (injection)
Anatomical term meaning "under the skin".

Systemic inflammation
A serious condition in which there is inflammation throughout the whole body.

Topical
Is given on body surfaces such as skin, mucous membranes and eyes.

Publication dates for financial information

Interim Report January – March 2023	28 April 2023
Interim Report January – June 2023	25 August 2023
Interim Report January – September 2023	17 November 2023
Year-end Report January – December 2023	February 2024
Annual Report 2023	March 2024

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