KAROLINSKA DEVELOPMENT

INTERIM REPORT
Jan – Sep 2022

Q3

Karolinska Development

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

For further information, see www.karolinskadevelopment.com

Financial Update

- The net profit/loss for the third quarter was SEK -46.6 million (SEK -1.2 million in the third quarter of 2021). Earnings per share totaled SEK -0.17. (SEK -0.01 in the third quarter of 2021). Net profit/loss for the period January – September 2022 amounted to SEK -98.1 (190.3) million.
- The result of the Change in fair value of shares in portfolio companies for the third quarter amounted to SEK -50.3 million (SEK 27.5 in the third quarter of 2021). The result is largely due to the dilutive effect of the financing round in Umecrine Cognition but also the downturn in share price in the listed holdings which is owned directly and indirectly via KDev Investments. The dilutive effect of the transaction in Umecrine Cognition has resulted in a negative earnings effect of SEK 49 million. The result of the Change in fair value of shares in portfolio companies for the period January – September 2022 amounted to SEK -91.4 (240.0) million.
- The total fair value of the portfolio was SEK 1,283.4 million at the end of September 2022, corresponding to an increase of SEK 9.1 million from SEK 1,274.2 million at the end of the previous quarter. The net portfolio fair value at that time was SEK 953.0 million, corresponding to an increase of SEK 11.3 million from SEK 941.7 million at the end of the previous quarter. The increase is mainly the net effect of investments during the quarter and the dilutive effect in Umecrine Cognition in connection with the downturn in share price of the listed holdings.
- Net asset value amounted to SEK 1,237.7 million, per share SEK 4.6, at the end of September 2022 (SEK 995.2 million, per share SEK 5.7 at the end of September 2021).
- Net sales totaled SEK 0.5 million during the third quarter of 2022 (SEK 0.5 million during the third quarter of 2021). Net sales for the period January – September 2022 totaled SEK 1.7 (1.7) million.
- Karolinska Development invested a total of SEK 61.8 million in portfolio companies during the third quarter of 2022. Third quarter investments in portfolio companies by Karolinska Development and other specialized life sciences investors totaled SEK 180.6 million.
- Cash and cash equivalents (including short-term investments) decreased by SEK 66.9 million during the third quarter, totaling SEK 207.0 million on 30 September 2022.

Significant events during the third quarter

- Karolinska Development has completed the previously announced investment in PharmNovo, thereby including it among its portfolio companies. As of July 4, Karolinska Development's investment portfolio consists of ten companies (July 2022).
- The portfolio company Promimic announced that they and the US-based company Danco Medical formed 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).
- The Board of Directors of the portfolio company 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 over as CEO on 1st of September 2022 (August 2022).
- The portfolio company PharmNovo has initiated the clinical phase 1 program with PN-6047, a candidate drug developed as a potential treatment of nerve pain (August 2022).
- The portfolio company Modus Therapeutics' collaborator 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).
- Karolinska Development announced that the company has recruited Hans Christopher "HC" Toll to the position of Chief Financial Officer. He joined the company on October 1, 2022, and succeeded Per Aniansson, who has transitioned into a full-time position as Investment Director (September 2022).
- The portfolio company 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, which will shortly be evaluated in a clinical phase 1b/2a study in patients with heart failure (September 2022).
- The portfolio company 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 (PBC), 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, AB Ility. The dilutive effect of the transaction resulted in a negative earnings effect of SEK 49 million (7.7%) for Karolinska Development in the third quarter of 2022 (September 2022).
- The portfolio company Modus Therapeutics has completed the recruitment to its clinical phase 1b study of sevuparin, where the company's lead asset sevuparin is being evaluated in a model of sepsis and septic shock, preparing for the first patient studies in sepsis (September 2022).
- The portfolio company 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).

Significant post-period events

- Karolinska Development announced its participation 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).

Viktor Drvota, CEO of Karolinska Development, comments:

"The ability of our portfolio companies, AnaCardio and Umecrine Cognition, to complete funding rounds for SEK 150 million and SEK 41 million, respectively – given the prevailing gloomy market climate – is a sign of strength and underlines the innovative excellence of their development projects."

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Chief Executive's Report

Karolinska Development has established an extensive international network and a strong reputation amongst other specialist investors over the years, enhancing our potential for attracting and investing with expert operators in our portfolio companies. This ability acquires extra importance in times such as these when the financial market is characterized by high levels of uncertainty. Karolinska Development was involved in both AnaCardio's and Umecrine Cognition's processes for attracting capital for the ongoing development of their candidate drugs over the past quarter. The ability of these two companies to complete funding rounds for SEK 150 million and SEK 41 million, respectively – given the prevailing gloomy market climate – is a sign of strength and underlines the innovative excellence of their development projects.

AnaCardio raises SEK 150 million ahead of phase 1b/2a study launch

After successfully raising SEK 33 million in capital earlier this year, our portfolio company, AnaCardio, raised a further SEK 150 million in September this year to finance a clinical phase 1b/2a study of their AC01 candidate drug. Karolinska Development took part in the financing round, which was led by Flerie Invest and Industrifonden. Other investors include 3B Health Ventures and Fredrik and Ann-Helene Ljungström.

Ground-breaking research by the Karolinska Institute has shown that AC01's unique mechanism has the potential to improve the functioning of the heart muscle. The candidate drug has already undergone clinical trials and AnaCardio expects to be able to launch the planned phase 1b/2a study, which will be conducted in patients with heart failure, as early as this year. Heart failure is a potentially fatal disease and the most common cause of hospital admissions. Around 100 million people are estimated to be affected worldwide.

PharmNovo's candidate drug for the treatment of neuropathic pain advances to phase 1

In July, Karolinska Development went ahead with its investment in PharmNovo who is developing a completely new type of drug for the treatment of neuropathic pain – a condition that can result in a substantial reduction in quality of life for the individual and enormous costs to society. The global market for drugs to treat neuropathic pain is estimated at almost USD 6 billion and is continuing to grow, but the analgesics currently in use are not always sufficiently effective. They are also often associated with severe side effects and a risk of developing an addiction. PharmNovo's PN6047 candidate drug has shown convincing effects in well-established, preclinical disease models for neuropathic pain and a clinical phase 1 program, which is scheduled for completion in mid-2023, was launched in August.

Activity levels high in Umecrine Cognition ahead of clinical phase 2b study launch

In September, we welcomed Anders Karlsson as the new CEO of our portfolio company, Umecrine Cognition. Anders succeeds Magnus Doverskog, who after ten successful years as the CEO, can now focus exclusively on the company's research and development operations. The recruitment was designed to strengthen and expand the management group through the injection of additional expertise in business development and commercialization ahead of the next phase in the company's development.

Q3 saw Umecrine Cognition present new preclinical results that provide further support for the company's advanced candidate drug, golexanolone, for the treatment of primary biliary cholangitis (PBC) – a chronic autoimmune disease that attacks the bile ducts and can result in cirrhosis of the liver. The level of inflammation in the brain increases as the liver is attacked, which can lead to personality changes, confusion, reduced levels of consciousness, and extreme fatigue. There is currently no curative treatment

for this disease. The new results show that golexanolone has a significantly positive effect on extreme fatigue in a validated test model.

Umecrine Cognition is planning to launch a clinical phase 2b study of golexanolone in patients suffering from PBC shortly. The company raised SEK 41 million in funds in the form of a convertible loan during the quarter, in order to finance this important next step in the development of golexanolone. Karolinska Development's involvement comprised SEK 15 million.

Svenska Vaccinfabriken publishes promising preclinical results

Svenska Vaccinfabriken presented the results of preclinical disease models during the past quarter, showing that the company's therapeutic candidate vaccine against hepatitis B (SVF-001) and the prophylactic candidate vaccine against SARS-CoV-2 (SVF-002) can generate convincing T and B cell immunity. These positive results, which have been published in highly respected scientific journals, underline Svenska Vaccinfabriken's ability to develop both effective therapeutic vaccines and broader prophylactic vaccines offering longer term protection in the management of serious infectious diseases. The clinical development of the SVF-002 candidate vaccine is being partially financed by the EU under Karolinska Institute sponsorship, and a clinical phase 1 study is expected to launch before the end of the year.

New progress for OssDsign and Modus Therapeutics

In September, an independent clinical research group in New York published clinical results from the biggest US case study to date of patients treated with OssDsign's patient-specific cranial implant. The study comprised 18 patients and demonstrated that the implant was successful in all cases. No implant-related complications were observed during a median follow-up period of six months. Modus Therapeutics also presented significant progress during the quarter: recruitment for their phase 1b study of sevuparin in a model for sepsis/septic shock was completed in just one month and the results are expected to be available before the end of the year.

After the end of the reporting period, we invested in the Danish company Henlez, which focuses on a development project aimed at the chronic dermatological condition hidradenitis suppurativa. The global market for hidradenitis suppurativa treatments is estimated to reach $1.8 billion in 2028. The investment portfolio now compromises eleven life science companies with innovative excellence and significant commercial potential.

HC Toll was recruited as the new CFO of Karolinska Development in early October, succeeding Per Aniansson, who had held the role of CFO in parallel with an engagement as Investment Director. HC Toll holds a degree in Business Administration and Economics from the Stockholm School of Economics and has previously worked as a CFO and Business Controller in numerous listed and unlisted companies. The fact that Per now has the opportunity to focus exclusively on his duties as an Investment Director will further expand our resources when it comes to supporting the portfolio companies while, at the same time, evaluating new investment opportunities – the core business that is the basis for our long-term value generation.

Solna, 18 November 2022

Viktor Drvota
Chief Executive Officer

Portfolio Companies

High potential for continued value inflection in portfolio

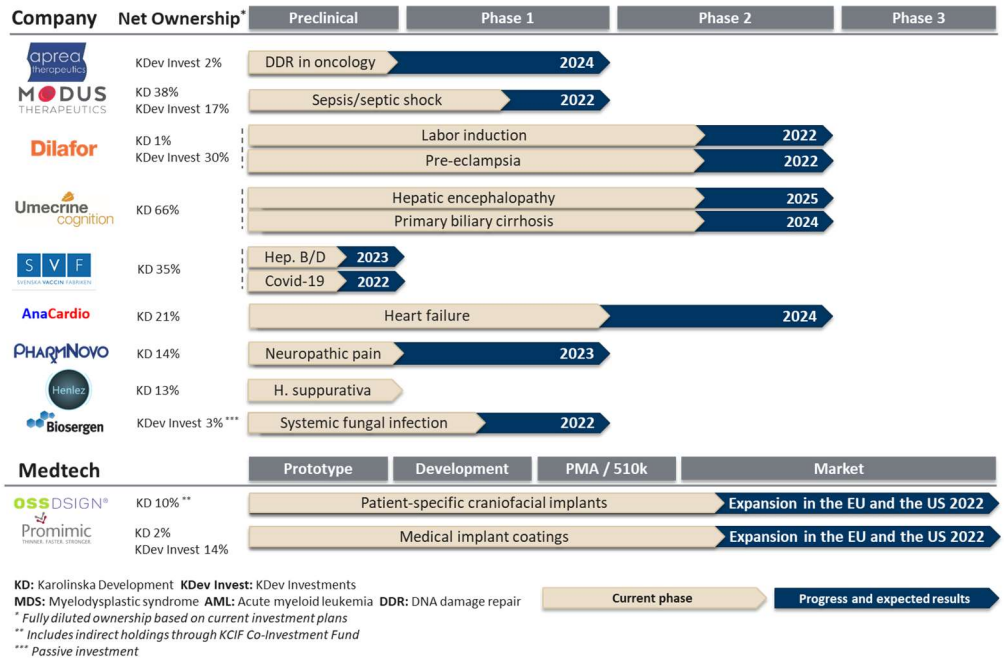
Karolinska Development's investments in therapeutic companies are conducted in syndicates with other professional life science investors, normally until proof-of-concept is demonstrated in phase 2 trials, at which point different exit options are evaluated. When engaging in medtech companies, the business 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 diseases that are life-threatening or involve a risk of severe disabilities and other medical conditions. 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 2022–2024, 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 team members with a documented ability to close international business deals in the life sciences sector.

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.

Our current portfolio – potential for value inflection



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

Primary indication
Solid tumor malignancies

Development phase
Preclinical

Holding in company*
KDev Investments 2%

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

Origin
Karolinska Institutet

More information
aprea.com

** Fully-diluted ownership based on current investment plans.*

Deal values for similar projects

- USD 469 million MEI Pharma (licensor) & Helsinn Group (licensee) 2016
- USD 483 million Calithera Biosciences (licensor) & Incyte (licensee) 2017

Aprea Therapeutics Inc

Combats cancer by targeting tumours' ability to repair damage to their DNA

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 tumours to repair damage to 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 programs, the company's focus is now on development of the ATR inhibitor ATRN-119, which will be studied as both a monotherapy and in combination with standard of care in Phase 1/2a clinical trials in solid tumor malignancies. 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. ATRN-119 has received FDA approval for a first-in-human clinical trial for cancer patients and this trial is expected to begin in the third quarter of 2022.

Aprea also is 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 anticipates commencing studies enabling application for first-in-human clinical trials in the second half of 2022.

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

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 received FDA Breakthrough Designation 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. There are currently three ATR-inhibitors in Phase 1/2 clinical trials, developed by Merck KGaA, AstraZeneca and Bayer.

Recent progress

- In May 2022, Aprea announced the acquisition of Atrin Pharmaceuticals.
- Following the Annual Meeting of Stockholders on July 28, Christian S. Schade transitioned to the role of Executive Chairman of the Board of Directors and Oren Gilad assumed the role of CEO.

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%

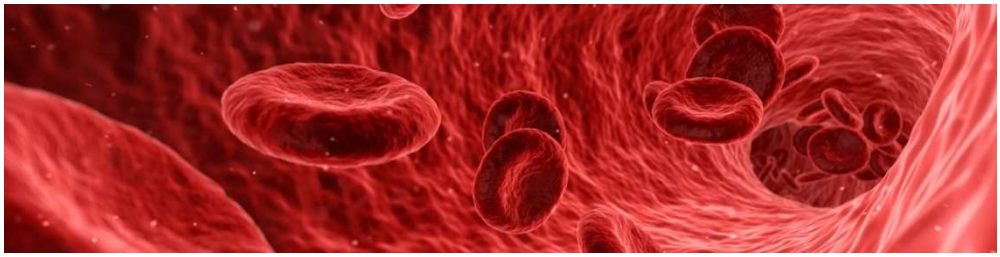
Other investors
John Öhd
Nordnet Pensionsförsäkring
Hans Wigzell

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 potentially 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 favourable safety profile.

In May 2022, Karolinska Development provided bridge financing of up to SEK 11.5 million to maintain the momentum in the clinical development of the company's lead asset.

In September 2022, the company completed its recruitment for the clinical phase 1b study of sevuparin. The randomized, placebo-controlled study will evaluate the effect of sevuparin on the symptoms in healthy individuals who have had the bacterial toxin lipopolysaccharide (LPS) injected into the skin (local inflammation) and into the blood (systemic inflammation). Data from the phase 1b study will form the basis for the design of a phase 2 study with sevuparin in patients with sepsis, with a planned start in 2023.

The market

Septic shock is a leading cause of death in intensive care units, with mortality rates typically exceeding 30 per cent. 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 22 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.

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.

Expected milestones

- Ongoing phase 1b LPS challenge study, with estimated completion date by end of 2022.
- Phase 2a trial in patients with sepsis with an estimated start during 2023.

Dilafor

Project (First-in-class)
Tafoxiparin

Primary indication
Labor induction
Preeclampsia

Development phase
Phase 2b

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

Other investors
The Foundation for Baltic and East European Studies
Opocrin
Praktikerinvest
Rosetta Capital
Lee's Pharmaceutical

Origin
Karolinska Institutet

More information
dilafor.com

** Fully-diluted ownership based on current investment plans.*

Deal values for similar projects

- USD 397 million Velo Bio (seller) & AMAG Pharmaceuticals (buyer) 2018
- USD 465 million Palatin Technologies (licensor) & AMAG Pharmaceuticals (licensee) 2017

Dilafor AB

Reducing complications with childbirth

Dilafor (Solna, Sweden) is developing tafoxiparin for obstetric indications, with particular reference to protracted labor and associated complications. About one quarter 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 per cent 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. Tafoxiparin could eliminate patient suffering and save valuable health care resources.

In 2021, the results of a placebo-controlled phase 2b study were presented which show 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 plans to extend the phase 2b study, in order to document the effect of tafoxiparin also in two lower doses than what has been studied thus far. Based on an external valuation, Karolinska Development increased the book value of its holding in the portfolio company by SEK 450 million as a result of the positive results in the phase 2b study.

The market

Approximately one quarter of all pregnant women require labor induction. The current standard treatment includes administration of prostaglandins and oxytocin, but in over 50 per cent 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.

Recent progress

- Dilafor enrolled the first patient in a clinical Phase 2a study with tafoxiparin in pregnant women diagnosed with preeclampsia (October 2021).

Expected milestones

- Continued phase 2b study with lower dosage according to plan.

Umecrine cognition

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

Primary indications
Hepatic encephalopathy
Primary biliary cholangitis

Development phase
Phase 2a

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.*

Deal values for similar projects

- USD 397 million Aerial Biopharma (licensor) & Jazz Pharmaceuticals (licensee) 2014
- USD 201 million Vernalis (licensor) & Corvus Pharmaceuticals (licensee) 2015

Umecrine Cognition AB

A new approach to treating cognitive impairment

Umecrine Cognition (Solna, Sweden) is developing golexanolone (GR3207) – a candidate drug in a new class of pharmaceuticals that affect the GABA system (gamma-aminobutyric acid, the chief inhibitory neurotransmitter in the central nervous system). An over-activation of the inhibitory GABA system is suspected in conjunction with liver disease, causing very serious clinical symptoms. The over-activation is also thought to lay behind certain cognitive impairments and sleep disturbances. $GABA_A$-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 favourable. 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).

The market

HE is a serious disease with a large unmet need that affects up to 1 per cent of the population in the USA and EU. 180,000– 290,000 patients are hospitalised every year in the USA due to complications of HE. Once HE develops, mortality reaches 22–35 per cent after five years. HE is also associated with substantial societal costs.

Recent progress

- In May 2022, the company submitted a clinical trial application for a Phase 2 study of golexanolone in patients with PBC. The clinical trial is planned to be performed at multiple medical centers in several European countries, and the first submission was made to the Hungarian regulatory body OGÝEI.
- Anders Karlsson recruited as new CEO and Magnus Doverskog remains as CSO in August 2022.
- In September 2022, funding of SEK 41 million was secured for a phase 2b study of golexanolone in primary biliary conlangitis.
- Presents positive preclinical data supporting golexanolone's potential to alleviate severe chronic symptoms in patients suffering from primary biliary cholangitis in September 2022.

Going forward

- The development work continues according to plan both in the HE and PBC studies.

Project (First-in-class)
SVF-001

Primary indication
Hepatitis B and D
SARS-CoV-2
and other Coronaviruses

Development phase
Preclinical

Holding in company*
Karolinska Development 31%

Origin
Karolinska Institutet

More information
svenskavaccinfabriken.se

**Fully-diluted ownership based on current investment plans*

Svenska Vaccinfabriken Produktion AB

New technology for the treatment of viral diseases

Svenska Vaccinfabriken (SVF, Solna, Sweden) develops therapeutic proteins and DNA vaccines against hepatitis B and D, as well as vaccines to prevent infections by SARS-CoV-2 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.

Svenska Vaccinfabriken uses an in-house developed vaccine platform 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 regarding hepatitis and is now continuing its preclinical development with the goal of enabling a phase 1 study to be initiated in 2023.

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 enable an opportunity to quickly develop and produce vaccines against both current and new forms of Coronasviruses. The company has granted patents for chimeric 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.

The market

Svenska Vaccinfabriken 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 Svenska Vaccinfabriken’s has increased markedly in recent years. This is thought to be due to an increased awareness of the potential for the commercialisation 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.

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.

Expected milestones

- The work of selecting the hepatitis B and D vaccine product for development in humans is expected to be completed in 2022.
- Phase 1 study with COVID vaccine expected to be initiated in 2022 (under Karolinska Institutet sponsorship).
- Phase 1 studies of hepatitis B and D vaccines are expected to be initiated in 2023.

AnaCardio

Project (First-in-class)
Peptide

Primary indication
Heart failure

Development phase
Phase 2a

Holding in company'
Karolinska Development 21%

Other investors
Flerie Invest
Industrifonden
3B Health Ventures

Origin
Karolinska Institutet
Karolinska University Hospital

More information
anacardio.com

**Fully-diluted ownership based on current investment plans*

Deal values for similar projects

- USD 2.1 billion Cardioxyl Pharmaceuticals (licensor) & Bristol-Myers Squibb (licensee), 2015
- USD 620 million Corthera (licensor) & Novartis (licensee), 2012

AnaCardio AB

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 previous cardiovascular complications, such as high blood pressure or vasoconstriction. Chronic heart failure often presents with diffuse symptoms, such as tiredness or breathlessness, and delayed diagnosis is consequently a common problem. Acute heart failure results in an individual's health status becoming critical, necessitating hospitalization. At the same time, one of the major issues 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

An estimated 26 million people suffer from chronic heart failure globally, and around 3 million people are hospitalized to treat it every year. The risk of developing cardiovascular disease increases with age, and 10-20 per cent 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, it also has significant economic consequences for society in the form both of direct costs from in-patient care and of indirect costs such as productivity losses and reductions in tax revenues. The increased medical need is reflected in the sales value of heart failure treatments, which is expected to increase from USD 3.8 billion to USD 16.1 billion by 2026 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 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.

Expected milestones

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

PHARMNOVO

Project (First-in-class)
PN6047

Primary indication
Allodynia/ Hyperalgesia

Development phase
Phase 1

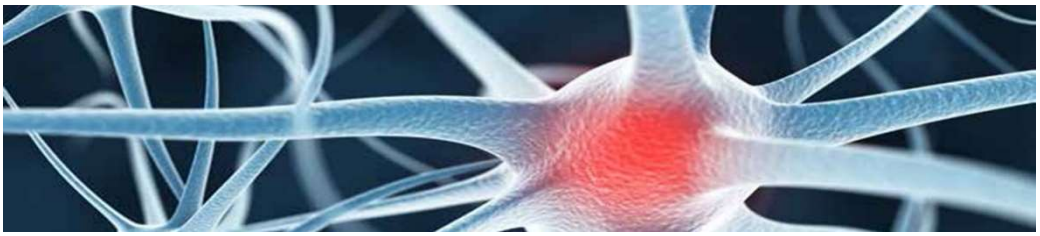
Holding in company'
Karolinska Development 13%

Origin
Start-up

More information
pharmnovo.com

**Fully-diluted ownership based on current investment plans*

PharmNovo AB



Innovative drug project for the treatment of nerve pain

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 10per cent 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 candite, PN6047, focuses on allodynia and hyperalgesia, two common forms of nerve pain, affecting 15-20 per cent 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 and appetite, sleep deprivation etc.). Current treatment options are deemed ineffective and are also associated with significant side-effects; particularly cardiovascular and suicide risks with antidepressants and drug abuse potential with gabapentinoids or conventional opioids.

PharmNovo's novel drug candidate, based on a drug development project at AstraZeneca targets a different receptor than conventional opioid drugs; the delta opioid receptor, and thus reduces chronic pain without any of the unwanted effects of 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 liability. In addition, initial safety pharmacology, pharmacokinetics, and regulatory toxicology studies have been performed.

Deal values for similar projects

- USD 940 million ACADIA Pharmaceuticals (acquirer) & CerSci Therapeutics (acquired), 2020
- USD 312 million Novartis (acquirer) & Spinifex Pharmaceuticals (acquired), 2015

The market

The need for improved treatments for nerve pain is enormous. Around 10 per cent 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 growing 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, implement 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 Q2 2023.

Henlez ApS

Project (First-in-class)
HEN-001

Primary indication
Hidradenitis suppurativa

Development phase
Preclinical

Holding in company*
Karolinska Development 13%

Other investors
Eir Ventures

Origin
Start-up

More information
henlez.com

** Fully-diluted ownership based on current investment plans.*

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 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 drainage 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.

Deal values for similar projects

- USD 750 million Janssen (buyer) & XBiotech (seller), 2019
- USD 760 million LEO Pharma (buyer) & PellePharm (seller), 2018

The market

An estimated 1% 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.

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.

OSSDSIGN®

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

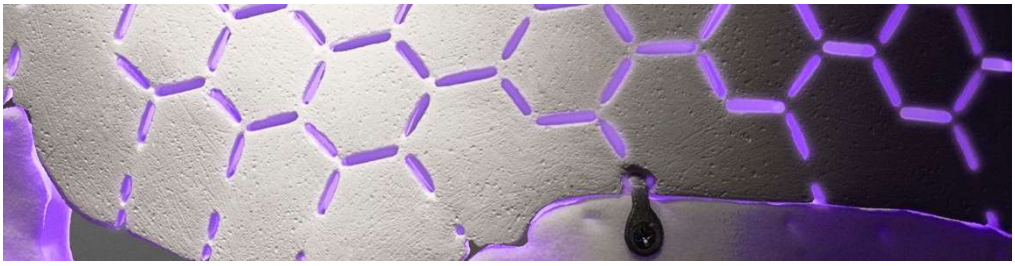
** Fully-diluted ownership based on current investment plans*

*** Includes indirect holdings through KCIF Co-Investment Fund*

Deal values for similar projects

- USD 330 million Baxter International (buyer) & ApaTech (seller) 2010
- USD 360 million Royal DSM (buyer) & Kensey Nash (seller) 2012

OssDsign AB



Developing and commercializing next generation bone replacement products

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 the success rate is far from acceptable today: 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 over 1000 patients with OssDsign Cranial PSI implants, show an exceptional performance. Many cranial implant technologies are associated with high rates of costly complications and patient suffering. Multiple studies report infection rates above 10 per cent, 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 1.6 per cent at a median follow-up time of 22 months. OssDsign Cranial PSI has regulatory approvals in Europe, USA and Japan.

Approximately 20 per cent 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 hardware 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 bone biology 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 per cent 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

- In March 2022, a long-term agreement to deliver OssDsign Cranial PSI to France's largest hospital network, Assistance Publique - Hôpitaux de Paris until October 2025 was signed.
- 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.
- The company established a Strategic Surgeon Advisory Board in the US to assist with guidance and advice on strategic matters in June 2022.

Expected milestones

- Financing for continued roll-out of the products internationally.

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*

Deal values for similar projects

- USD 95 million Nobel Biocare (buyer) & AlphaBioTec (seller) 2008
- USD 120 million MAKO surgical (buyer) & Pipeline Biomedical (seller) 2013

Promimic AB

Coatings to enhance the properties of medical implants

Promimic (Gothenburg, Sweden) is a biomaterials company that develops and markets a unique coating for medical implants called HA^{nano} Surface, which increases their integration into bone and anchoring strength. HA^{nano} Surface is a nanometre-thin coating that helps stimulate the growth of bone cells and thereby improves 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. Since 2021 eight such approvals were granted for spinal cages.

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, and one with Danco Anodizing, which has established a manufacturing facility for implants with HA^{nano} Surface, targeting the US and Chinese markets. 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. The shares are traded under the short name “PRO”.
- 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

- During 2022, further product launches and license agreements are expected to be closed and announced.
- In 2022, the company expects to run approximately 15 development projects.

Financial Development

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

The Parent Company is reporting in accordance with the guidelines under the Swedish Annual Accounting Act and Swedish Financial Accounting Standards Council, RFR 2. The Investment Entity is required to meet the reporting requirements of listed companies and thus in accordance with IFRS adopted by the EU and the Swedish Annual Accounts Act

Amounts with brackets refer to the corresponding period previous year unless otherwise stated.

Financial development in summary for the Investment Entity

SEKm	2022 Jul-Sep	2021 Jul-Sep	2022 Jan-Sep	2021 Jan-Sep	2021 Full-year
Condensed income statement					
Change in fair value of shares in portfolio companies	-50.3	27.5	-91.4	240.0	223.2
Net profit/loss	-46.6	-1.2	-98.1	190.3	170.8
Balance sheet information					
Cash and cash equivalents	207.0	45.3	207.0	45.3	92.4
Net asset value (Note 1)	1,237.7	995.2	1,237.7	995.2	978.0
Net debt (Note 1)	-207.0	77.3	-207.0	77.3	32.2
Share information					
Earnings per share, weighted average before dilution (SEK)	-0.2	0.0	-0.4	1.1	1.0
Earnings per share, weighted average after dilution (SEK)	-0.2	0.0	-0.4	1.1	1.0
Net asset value per share (SEK) (Note 1)	4.6	5.7	4.6	5.7	5.6
Equity per share (SEK) (Note 1)	4.6	5.6	4.6	5.6	5.5
Share price, last trading day in the reporting period (SEK)	1.8	2.9	1.8	2.9	5.3
Portfolio information					
Investments in portfolio companies	61.8	21.1	94.7	69.2	69.2
Of which investments not affecting cash flow	0.3	5.6	0.7	16.4	16.4
Portfolio companies at fair value through profit or loss	953.0	1,075.5	953.0	1,075.5	950.2

Financial Development for the Investment Entity in 2022

Investments *(comparable numbers 2021)*

Investments in the portfolio in the third quarter 2022 by external investors and Karolinska Development amounted to SEK 180.6 (106.1) million, whereof 66% (80%) by external investors.

Karolinska Development invested during the third quarter SEK 61.9 (21.1) million, of which SEK 61.5 (15.5) million was cash investments. Investments were made in PharmNovo SEK 20.0 million, AnaCardio SEK 15.3 million, Umecrine cognition SEK 15.0 million and in Modus Therapeutics with SEK 11.6 million. Non-cash investments (accrued interest on loans) amounted to SEK 0.3 (5.6) million.

Investments by external investors in the portfolio companies during the third quarter amounted to SEK 118.7 (85.0) million and were made in PharmNovo, AnaCardio and Umecrine Cognition.

During the year, Karolinska Development and external investors have made investments in the portfolio companies as follows:

SEKm	Karolinska Development	External Investors	Total Invested Q1-Q3 2022
AnaCardio[1]	26.7	108.0	134.7
PharmNovo	20.0	6.7	26.7
Umecrine Cognition	15.0	26.0	41.0
Dilafor	12.9	19.6	32.5
Modus Therapeutics	11.6	0.0	11.6
Promimic	5.0	75.0	80.0
Svenska Vaccinfabriken Produktion	3.5	0.0	3.5
Total	**94.7**	**235.3**	**330.0**

[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 had a net increase by SEK 15.1 million during the third quarter 2022. The main reason was the investments in PharmNovo, AnaCardio, Umecrine Cognition and Modus Therapeutics but also the increased value in AnaCardio. Fair value was reduced by the dilutive effect of the transaction in Umecrine Cognition and the downturn in share price in all listed holdings.

Fair Value of the portfolio companies owned indirectly via KDev Investments decreased by SEK 6.0 million during the third quarter 2022.The main reasons for the decrease in Fair value of the portfolio companies was the downturn in share price in all listed holdings.

Total Fair Value from portfolio companies owned directly by Karolinska Development and indirectly via KDev Investments increased by SEK 9.1 million in the third quarter 2022.

As a consequence of the decrease in Fair Value of the part of the portfolio owned via KDev Investments, the potential distribution to Rosetta Capital decreased by SEK 2.1 million, resulting in Net Portfolio Fair Value increasing by SEK 11.3 million in the third quarter 2022.

SEKm	30 Sep 2022	30 Jun 2022	Q3 2022 vs Q2 2022
Karolinska Development Portfolio Fair Value (unlisted companies)	696.1	679.6	16.5
Karolinska Development Portfolio Fair Value (listed companies)	49.4	50.8	-1.4
KDev Investments Portfolio Fair Value	537.8	543.9	-6.0
Total Portfolio Fair Value	**1,283.4**	**1,274.2**	**9.1**
Potential distribution to Rosetta Capital of fair value of KDev Investments	-330.4	-332.5	2.1
Net Portfolio Fair Value (after potential distribution to Rosetta Capital)	**953.0**	**941.7**	**11.3**

Profit development 2022 (comparable numbers 2021)

During the third quarter 2022, Karolinska Development's revenue amounted to SEK 0.5 (0.5) million and consists primarily of services provided to portfolio companies.

Change in fair value of shares in portfolio companies of in total SEK -50.3 (27.5) million includes the difference between the change in Net Portfolio Fair Value during the third quarter 2022 with SEK 11.3 million, the investment in portfolio company of SEK 61.8 million. Change in fair value of other financial assets and liabilities amounted to SEK 8.5 (-25.6) million and are the consequence of changes in valuation of earn-out deals. For the period January - September 2022, the change in fair value of shares in portfolio companies amounted to SEK -91.4 (240.0) million and the change in fair value of other financial assets amounted to SEK 19.3 (-40.8) million.

During the third quarter 2022 other expenses amounted to SEK 1.3 (2.2) million and personnel costs amounted to SEK 4.4 (5.5) million. For the period January – September 2022 other expenses amounted to SEK 4.8 (5.6) million and personnel cost amounted to 20.6 (16.5) million

The operating profit/loss in the third quarter 2022 amounted to SEK -47.1 million compared to SEK -5.3 million in the third quarter 2021. The operating profit/loss for the period January - September 2022 amounted to -96.2 (178.2) million.

The financial net during the third quarter 2022 amounted to SEK 0.5 compared to SEK 4.1 million int the third quarter of 2021. The high financial net in the third quarter of 2021 was due to an adjusted interest income from loans to portfolio companies. For the period January - September 2022 the financial net amounted to SEK -1.9 (12.1) million.

The Investment Entity's Net profit/loss amounted to SEK -46.6 (-1.2) million in the third quarter 2022. Net profit/loss for the period January - September 2022 amounted to SEK -98.1 (190.3) million.

Financial position

The Investment Entity's equity to total assets ratio amounted to 99% on 30 September 2022, compared to 88% on 30 September 2021.

The investment company's equity on 30 September 2022, amounted to SEK 1,231.4 million, compared to SEK 1,278.0 million on 30 June 2022. The decrease is a consequence of the profit/loss for the period of SEK -46.6 million.

The company has no interest-bearing liabilities as of 30 September 2022 (SEK 122.6 million as of 30 September 2021).

After paying operational costs and investments for the third quarter 2022, cash and cash equivalents (including short term investments) amounted to SEK 207.0 million on 30 September 2022 compared to SEK 45.3 million on 30 September 2021. Net debt (negative net debt/ net cash) amounted to SEK -207.0 million on 30 September 2022 compared to the net debt of SEK 77.3 million on 30 September 2021.

The company is going concern. The company's ability to continue operations (going concern) has strengthened. The report is prepared on the basis of the assumption of continued operation.

Financial Development – Parent Company

The Parent Company refers to Karolinska Development AB (comparable numbers 2021).

During the third quarter 2022, the Parent Company's Net profit/loss amounted to SEK -46.6 (-1.2) million. Net profit/loss for the period January - September 2021 amounted to SEK -98.1 (190.3) million.

The negative result for the third quarter of 2022 led to a decrease in equity of SEK -46.6 million from SEK 1,278.1 million as of 30 June 2022 to SEK 1,231.5 million 30 September 2022.

Shares

The share and share capital

Trade in the Karolinska Development share takes place on Nasdaq Stockholm under the ticker symbol "KDEV". The last price paid for the listed B share on 30 September 2022 was SEK 1.76, and the market capitalization amounted to SEK 479 million.

The share capital of Karolinska Development on 30 September 2022 amounted to SEK 2.7 million divided into 2,555,261 A shares, each with ten votes (25,552,610 votes) and 267,522,333 B shares, each with one vote

(267,522,333 votes). The total number of shares and votes in Karolinska Development on 30 September 2022 amounted to 270,077,594 shares and 293,074,943 votes.

Ownership

On 30 September 2022, Karolinska Development had 17,576 shareholders.

Shareholder	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%
Östersjöstiftelsen	0	3,889,166	1.44%	1.33%
Handelsbanken Fonder	0	2,747,435	1.02%	0.84%
Nyenburgh Hohlding B.V.	0	2,580,000	0.96%	0.94%
Coastal Investment Management LLC	0	2,470,541	0.91%	0.88%
SEB Investment Management	0	1,662,069	0.62%	0.57%
Adis Holding	0	1,190,000	0.44%	0.41%
Sum Top 10 Shareholders	2,555,261	181,788,490	68.26%	70.75%
Sum Other Shareholders	0	85,733,843	31.74%	29.25%
Sum All Shareholders	**2,555,261**	**267,522,333**	**100.00%**	**100.00%**

Information on Risks and Uncertainties

Investment Entity and Parent Company

Financial risks

Russia’s invasion of Ukraine and the coronavirus's global spread affects the economy and society as a whole, including Karolinska Development and its portfolio companies. 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.

For a detailed description of other risks and uncertainties, see the Annual report 2021.

Signing of the report

Solna, 18 November 2022

Viktor Drvota
CEO

Review report

Karolinska Development AB, corporate identity number 556707-5048

Introduction

We have reviewed the condensed interim report for Karolinska Development AB, the Investment Entity, as at September 30, 2022 and for the nine months period then ended. The Board of Directors and the Managing Director are responsible for the preparation and presentation of this interim report in accordance with IAS 34 and the Swedish Annual Accounts Act. Our responsibility is to express a conclusion on this interim report based on our review.

Scope of review

We conducted our review in accordance with the International Standard on Review Engagements, ISRE 2410 *Review of Interim Financial Statements Performed by the Independent Auditor of the Entity*. A review consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and other generally accepted auditing standards in Sweden. The procedures performed in a review do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the interim report is not prepared, in all material respects, in accordance with IAS 34 and the Swedish Annual Accounts Act regarding the Investment Entity, and in accordance with the Swedish Annual Accounts Act regarding the Parent Company.

Solna, 18 November 2022

Ernst & Young AB

Oskar Wall

Authorized Public Accountant

Dates for Publication of Financial Information

Year-End Report January – December 2022	17 February 2023
Annual Report 2022	24 March 2023
Interim Report January – March 2023	28 April 2023
Annual meeting 2023	16 May 2023
Interim Report January – June 2023	25 August 2023
Interim Report January – September 2023	18 November 2023

Karolinska Development is required by law to publish the information in this interim report. The information was published on 18 november 2022.

This interim report, together with additional information, is available on Karolinska Development's website: www.karolinskadevelopment.com.

Note: This report is a translation of the Swedish interim report. In case of any discrepancies, the official Swedish version shall prevail.

Financial Statements

Condensed income statement for the Investment Entity

SEK 000	Note	2022 Jul-Sep	2021 Jul-Sep	2022 Jan-Sep	2021 Jan-Sep	2021 Full-year
Revenue		527	497	1,738	1,701	2,170
Change in fair value of shares in portfolio companies	2,3	-50,308	27,548	-91,397	239,973	223,203
Change in fair value of other financial assets and liabilities		8,490	-25,567	19,346	-40,845	-33,891
Other expenses		-1,306	-2,179	-4,849	-5,596	-6,887
Personnel costs		-4,376	-5,448	-20,559	-16,519	-23,205
Depreciation of right-of-use assets		-172	-172	-517	-517	-690
Operating profit/loss		**-47,145**	**-5,321**	**-96,238**	**178,197**	**160,700**
Financial net		522	4,126	-1,906	12,116	10,119
Profit/loss before tax		**-46,623**	**-1,195**	**-98,144**	**190,313**	**170,819**
Taxes		-	-	-	-	-
NET PROFIT/LOSS FOR THE PERIOD		**-46,623**	**-1,195**	**-98,144**	**190,313**	**170,819**

Condensed statement of comprehensive income for the Investment Entity

SEK 000	Note	2022 Jul-Sep	2021 Jul-Sep	2022 Jan-Sep	2021 Jan-Sep	2021 Full-year
Net profit/loss for the period		-46,623	-1,195	-98,144	190,313	170,819
Total comprehensive income/loss for the period		**-46,623**	**-1,195**	**-98,144**	**190,313**	**170,819**

Earnings per share for the Investment Entity

SEK	Note	2022 Jul-Sep	2021 Jul-Sep	2022 Jan-Sep	2021 Jan-Sep	2021 Full-year
Earnings per share, weighted average before dilution		-0.17	-0.01	-0.39	1.08	0.97
Number of shares, weighted average before dilution		269,833,309	175,421,124	253,233,364	175,421,124	175,421,124
Earnings per share, weighted average after dilution		-0.17	-0.01	-0.39	1.08	0.97
Number of shares, weighted average after dilution		269,833,309	175,421,124	253,233,364	175,421,124	175,421,124

Condensed balance sheet for the Investment Entity

SEK 000	Note	30 Sep 2022	30 Sep 2021	31 Dec 2021
ASSETS				
Tangible assets				
Right-of-use assets		862	862	690
Financial assets				
Shares in portfolio companies at fair value through profit or loss	2,3	953,043	1,075,495	950,170
Other financial assets	4	78,045	0	61,799
Total non-current assets		**1,031,950**	**1,076,357**	**1,012,659**
Current assets				
Receivables from portfolio companies		319	2,510	505
Other financial assets		-	722	-
Other current receivables		1,224	1,224	768
Prepaid expenses and accrued income		1,035	895	2,940
Short-term investments, at fair value through profit or loss		88,156	-	50,005
Cash and cash equivalents		118,844	45,320	42,398
Total current assets		**209,578**	**50,671**	**96,616**
TOTAL ASSETS		**1,241,528**	**1,127,028**	**1,109,275**
EQUITY AND LIABILITIES				
Total equity		**1,231,416**	**990,601**	**971,086**
Long-term liabilities				
Long-term liabilities to related parties	5	-	122,611	-
Total long-term liabilities		**0**	**122,611**	**0**
Current liabilities				
Current interest liabilities to related parties	5	-	-	124,603
Other financial liabilities		416	3,742	1,756
Accounts payable		728	690	1,674
Liability to make lease payment		922	880	732
Other current liabilities		1,437	1,343	2,156
Accrued expenses and prepaid income		6,609	7,161	7,268
Total current liabilities		**10,112**	**13,816**	**138,189**
Total liabilities		**10,112**	**136,427**	**138,189**
TOTAL EQUITY AND LIABILITIES		**1,241,528**	**1,127,028**	**1,109,275**

Condensed statement of changes in the Investment Entity's equity

SEK 000	Not	2022-09-30	2021-09-30	2021-12-31
Opening balance, equity		**971,086**	**800,267**	**800,267**
Share capital		2,701	1,757	1,757
Share premium		2,735,903	2,378,373	2,378,373
Retained earnings		-1,507,188	-1,389,529	-1,409,044
Closing balance, equity		**1,231,416**	**990,601**	**971,086**

Condensed statement of cash flows for the Investment Entity

SEK 000	Note	2022 Jan-Sep	2021 Jan-Sep
Operating activities			
Operating profit/loss		-96,238	178,197
Adjustments for items not affecting cash flow			
Depreciation		517	517
Change in fair value		72,051	-199,128
Other items		-448	-
Cash flow from operating activities before changes in working capital and operating investments		**-24,118**	**-20,414**
Cash flow from changes in working capital			
Increase (-)/Decrease (+) in operating receivables		-496	-2,590
Increase (+)/Decrease (-) in operating liabilities		-2,151	44,179
Cash flow from operating activities		**-26,765**	**21,175**
Investment activities			
Part payment from earn-out deal		1,956	-2,370
Acquisitions of shares in portfolio companies		-93,946	3,941
Acquisitions of short-term investments		-40,000	-52,759
Cash flow from investment activities		**-131,990**	**-51,188**
Financing activities			
Cash from rights issue		254,911	-
Prospectus costs		-19,175	-
Amortization of lease liabilities		-535	-536
Cash flow from financing activities		**235,201**	**-536**
Cash flow for the period		**76,446**	**-30,549**
Cash and cash equivalents at the beginning of the year		42,398	75,869
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD		**118,844**	**45,320**

Condensed income statement for the Parent Company

SEK 000	Note	2022 Jul-Sep	2021 Jul-Sep	2022 Jan-Sep	2021 Jan-Sep	2021 Full-year
Revenue		527	497	1,738	1,701	2,170
Change in fair value of shares in portfolio companies	2,3	-50,308	27,548	-91,397	239,973	223,203
Change in fair value of other financial assets and liabilities		8,490	-25,567	19,346	-40,845	-33,891
Other expenses		-1,484	-2,357	-5,384	-6,131	-7,601
Personnel costs		-4,376	-5,448	-20,559	-16,519	-23,205
Operating profit/loss		**-47,151**	**-5,327**	**-96,256**	**178,179**	**160,676**
Financial net		532	4,136	-1,870	12,152	10,164
Profit/loss before tax		**-46,619**	**-1,191**	**-98,126**	**190,331**	**170,840**
Tax		-	-	-	-	-
NET PROFIT/LOSS FOR THE PERIOD		**-46,619**	**-1,191**	**-98,126**	**190,331**	**170,840**

Condensed statement of comprehensive income for the Parent Company

SEK 000	Note	2022 Jul-Sep	2021 Jul-Sep	2022 Jan-Sep	2021 Jan-Sep	2021 Full-year
Net profit/loss for the period		-46,619	-1,191	-98,126	190,331	170,840
Total comprehensive income/loss for the period		**-46,619**	**-1,191**	**-98,126**	**190,331**	**170,840**

Condensed balance sheet for the Parent Company

SEK 000	Note	30 Sep 2022	30 Sep 2021	31 Dec 2021
ASSETS				
Financial non-current assets				
Shares in portfolio companies at fair value through profit or loss	2,3	953,043	1,075,495	950,170
Other financial assets	4	78,045	-	61,799
Total non-current assets		**1,031,088**	**1,075,495**	**1,011,969**
Current assets				
Receivables from portfolio companies		319	2,510	505
Other financial assets	4	-	722	-
Other current receivables		1,224	1,224	768
Prepaid expenses and accrued income		1,035	895	2,940
Short-term investments at fair value through profit or loss		88,156	-	50,005
Cash and cash equivalents		118,844	45,320	42,398
Total current assets		**209,578**	**50,671**	**96,616**
TOTAL ASSETS		**1,240,666**	**1,126,166**	**1,108,585**
EQUITY AND LIABILITIES				
Total equity		**1,231,476**	**990,619**	**971,128**
Long-term liabilities				
Long-term liabilities to related parties	5	-	122,611	-
Total long-term liabilities		**0**	**122,611**	**0**
Current liabilities				
Current interest liabilities	5	-	-	124,603
Other financial liabilities		416	3,742	1,756
Accounts payable		728	690	1,674
Other current liabilities		1,437	1,343	2,156
Accrued expenses and prepaid income		6,609	7,161	7,268
Total current liabilities		**9,190**	**12,936**	**137,457**
Total liabilities		**9,190**	**135,547**	**137,457**
TOTAL EQUITY AND LIABILITIES		**1,240,666**	**1,126,166**	**1,108,585**

Condensed statement of changes in equity for the Parent Company

SEK 000	Not	30 Sep 2022	30 Sep 2021	31 Dec 2021
Opening balance, equity		**971,128**	**800,287**	**800,287**
Share capital[2]		2,701	1,757	1,757
Share premium reserve		2,735,903	2,378,373	2,378,373
Retained earnings		-1,507,128	-1,389,511	-1,409,002
Closing balance, equity		**1,231,476**	**990,619**	**971,128**

Notes to the Financial Statements

NOTE 1 Accounting policies

This report has been prepared in accordance with the International Accounting Standard (IAS) 34 Interim Financial Reporting and the Annual Accounts Act. The accounting policies applied to the Investment Entity and the Parent Company correspond, unless otherwise stated below, to the accounting policies and valuation methods used in the preparation of the most recent annual report.

Information on the Parent Company

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 focuses on identifying medical innovations and investing in the creation and growth of companies developing these assets into differentiated products that will make a difference to patients' lives and provide an attractive return on investment to its shareholders. Investments are made in companies whose sole purpose is to generate a return through capital appreciation and investment income. These temporary investments, which are not investment entities, are designated "portfolio companies" below.

New and revised accounting principles 2022

No new or revised IFRS standards or recommendations from IFRS Interpretations Committee has had significant impact on the Investment Entity.

Related party transactions

The bridge loans, including accrued interest, totalling SEK 124.9 million was converted into shares in Karolinska Development's rights issue in February 2022. No further transactions with owners.

Definitions

Interim period: The period from the beginning of the financial year through the closing date.

Reporting period: January – September 2022.

Alternative Performance Measures

The Company presents certain financial measures in the interim 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 where Karolinska Development has made investments (subsidiaries, joint ventures, associated companies and other long-term securities holdings) which are active in pharmaceuticals, medtech, theranostics and formulation technology.

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 Development will receive after KDev Investments' distribution of proceeds to Rosetta Capital.

rNPV: "risk-adjusted net present value" is a method to value risky future cash flows. rNPV is the standard valuation method in the drug development industry, where sufficient data exists to estimate success rates for all R&D phases.

Equity per share: Equity on the closing date in relation to the number of shares outstanding on the closing date.

Net debt: Interest-bearing liabilities (SEK 0.0 million) reduced with cash and cash equivalents (including short-term investments) (SEK 207.0 million).

Equity to total assets ratio: Equity divided by total assets.

Net asset value as of 30 September 2022:

SEK 000	Number of shares	Fair value	Part of Karolinska Developments' net asset value SEK per share[3]	Part of Karolinska Developments' net asset value percentage
Listed assets				
Modus Therapeutics	6,144,821	25,526	0.09	2.1%
OssDsign	5,812,638	20,257	0.08	1.6%
Promimic	312,500	3,656	0.01	0.3%
Total listed assets		**49,438**	**0.18**	**4.0%**
Unlisted assets				
AnaCardio		45,138	0.17	3.6%
Dilafor		24,026	0.09	1.9%
PharmNovo		20,000	0.07	1.6%
Svenska Vaccinfabriken Produktion		10,346	0.04	0.8%
Umecrine Cognition		588,633	2.18	47.6%
KCIF Co-Investment Fund KB[1]		7,999	0.03	0.6%
KDev Investments[1]		207,462	0.77	16.8%
Total unlisted assets		**903,605**	**3.35**	**73.0%**
Net of other liabilities and debts[2]		**284,629**	1.05	**23.0%**
Total net asset value		**1,237,672**	**4.59**	**100.0%**

[1]The company has both listed and unlisted assets.
[2] Includes SEK 207.0 million cash and cash equivalents (including short-term investments).
[3] In relation to the number of shares outstanding (269,833,309) on the closing date.

NOTE 2 Shares in portfolio companies, at fair value through profit or loss

Change in fair value of portfolio companies

SEK 000	2022 Jan-Sep	2021 Jan-Sep	2021 Full-year
Result level 1			
Listed companies, realized	-	-433	-433
Listed companies, unrealized	-41,058	-26,479	-27,159
Total level 1	**-41,058**	**-26,912**	**-27,592**
Result level 3			
Unlisted companies, realized	402	-936	7,243
Unlisted companies, unrealized	-50,741	267,821	243,552
Total level 3	**-50,339**	**266,885**	**250,795**
Total	**-91,397**	**239,973**	**223,203**

Shares in portfolio companies, at fair value through profit or loss

SEK 000	2022-09-30	2021-09-30	2021-12-31
Accumulated acquisition cost			
At the beginning of the year	950,170	770,320	770,320
Investments during the year	94,653	69,154	69,154
Sales during the year	-389	-3,952	-112,507
Changes in fair value in net profit/loss for the year	-91,397	239,973	223,203
Closing balance	**953,043**	**1,075,495**	**950,170**

NOTE 3 Fair value

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, either directly or indirectly
Level 3- Fair value determined based on valuation models where significant inputs are based on non-observable data

Fair value as of 30 September 2022

SEK 000	Level 1	Level 2	Level 3	Total
Financial assets				
Shares in portfolio companies, at fair value through profit or loss	49,438	-	903,605	953,043
Other financial assets	-	-	78,045	78,045
Cash and cash equivalents and short-term investments	207,000	-	-	207,000
Total	**256,438**	**0**	**981,650**	**1,238,088**
Financial liabilities				
Other financial liabilities	-	-	416	416
Total	**-**	**0**	**416**	**416**

Fair value as of 30 September 2021

SEK 000	Level 1	Level 2	Level 3	Total
Financial assets				
Shares in portfolio companies, at fair value through profit or loss	74,601	-	1,000,894	1,075,495
Loans receivable from portfolio companies	-	2,510	-	2,510
Other financial assets	-	-	722	722
Cash, cash equivalents and short-term investments	45,320	-	-	45,320
Total	**119,921**	**2,510**	**1,001,616**	**1,124,047**
Financial liabilities				
Other financial liabilities	-	-	3,742	3,742
Total	**-**	**0**	**3,742**	**3,742**

Fair value (level 3) as of 30 September 2022

SEK 000	Shares in portfolio companies	Other financial assets	Other financial liabilities
At beginning of the year	876,250	61,799	1,756
Acquisitions	78,083	-	-
Compensations	-389	-2,082	-324
Gains and losses recognized through profit or loss	-50,339	18,328	-1,016
Closing balance 30 September 2022	**903,605**	**78,045**	**416**
Realized gains and losses for the period included in profit or loss	402	-	-
Unrealized gains and losses in profit or loss for the period included in profit or loss	-50,741	18,328	1,016

Fair value (level 3) as of 30 September 2021

SEK 000	Shares in portfolio companies	Other financial assets	Other financial liabilities
At beginning of the year	732,554	41,181	5,726
Transfers from level 3	-36,752	-	-
Acquisitions	38,207	-	-
Compensations	-	-	-2,370
Gains and losses recognized through profit or loss	266,885	-40,459	386
Closing balance 30 September 2021	**1,000,894**	**722**	**3,742**
Realized gains and losses for the period included in profit or loss	-1,369	-	-
Unrealized gains and losses in profit or loss for the period included in profit or loss	268,254	-40,459	386

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.

Shares in portfolio companies (Level 3) as of 30 September 2022

SEK 000	Ownership	Market value	Valuation model[1]
AnaCardio	20.7%	45,138	Last post money
Dilafor	1.5%	24,026	Last post money
PharmNovo	13.1%	20,000	Last post money
Svenska Vaccinfabriken Produktion	34.8%	10,346	Last post money
Umecrine Cognition	72.6%	588,633	External valuation[2]
KCIF Co-Investment Fund KB	26.0%	7,999	A combination of share price listed company and fair value of financial asset[3]
KDev Investments	90.1%	207,462	A combination of last post money and share price listed company[4]
Total level 3		**903,605**	

[1]See The Annual Report 2021 Valuation of portfolio companies at fair value, for a description of valuation models.
[2]Risk adjusted external valuation by an independent valuation institute in December 2020. The external valuation resulted in an rNPV value which has been risk adjusted to reflect an assumed pricing in conjunction with an IPO and the need to secure development financing, the dilutive effect of the investment transaction also effects the value. See below.
[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, at fair value through profit or loss, attributable to earn-out in the sale of Forendo Pharma.
[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, accounts for 91% of the total fair value in KDev Investments.

The significant holding Umecrine Cognition

The fair value of the holding in Umecrine Cognition, as of 30 September 2022, totaled SEK 588.6 million (SEK 623.0 million as of 30 September 2021) and comprised 62% (58% as of 30 September 2021) of the portfolio's fair value.

After Umecrine Cognition presented positive phase 2a data in 2020 and established a plan for the continued clinical development of the golexanolone candidate drug in the field of hepatic encephalopathy, Karolinska Development has valued its holding in Umecrine Cognitions at the share of the rNPV produced by an external independent valuation institute. The external valuation is based on, amongst other things, pharmaceutical reference prices, market size, and market share, which have been discounted and resulted in an rNPV value. The rNPV value was then risk-adjusted to reflect both an assumed pricing in conjunction with a market flotation and the need to secure development financing.

In connection with Umecrine Cognition securing funding of SEK 41 million before the start of a phase 2 study of the drug candidate golexanolone in primary biliary cholangitis, (PCB, a condition that occurs when the bile ducts in the liver are slowly destroyed) in the form of a convertible loan with a convertible loan with attached share options, where of Karolinska Development invested SEK 15 million, which increases the fair value but the fair value reduces by SEK 49 million as a result of the dilution effect in the event that the options in the transaction are exercised.

Sensitivity analysis on fair value of Umecrine Cognition

The discount rates for the valuation conducted in 2020 are 13% – a fixed, standard parameter and one which takes into account the phase of the study in question. Karolinska Development is of the opinion that, after the discount rate – which is set in a standard way based on the then current project phase – the candidate drug price (which comprises prices from reference groups in the market) is the second most significant non-observable input data in the valuation model. The market size and market share have equivalent effects, but as these parameters are similarly proportional in the sensitivity analysis, the effect of all of these parameters can be grasped through the lens of the valuation date sensitivity, by simulating increases and decreases in the assumed price. The sensitivity analysis therefore relates to the change in the discount rate and the price of the candidate drug and shows the effect on Karolinska Development's value for Umecrine Cognition of various changes in the discount rate and the price. See tables below.

The amounts refer to changes in fair value in Umecrine Cognition:

Discount rate of 11, 12, 14 respectively 15% (13% is used in the valuation)

	11%		**12%**		**14%**		**15%**	
	Result/ equity		**Result/ equity**		**Result/ equity**		**Result/ equity**	
	MSEK	**SEK/share**	**MSEK**	**SEK/share**	**MSEK**	**SEK/share**	**MSEK**	**SEK/share**
Effect of a change in the discount rate[1]	154,984	0.88	48,577	0.28	-41,638	-0.24	-120,286	-0.69

[1]Sensitivity on the fair value (from the rNPV value which has been risk adjusted to reflect an assumed pricing in conjunction with an IPO and the need to secure development financing, the dilution effect in the new funding also effects the value, see above) on performed external valuation based on a change of +/- 1 respectively +/- 2 percentage points. The discount rate used in the valuation amounts to 13%.

The price of the drug candidate

	5%		**-5%**		**+/- 15%**		**+/- 30%**	
	Result/ equity		**Result/ equity**		**Result/ equity**		**Result/ equity**	
	MSEK	**SEK/share**	**MSEK**	**SEK/share**	**MSEK**	**SEK/share**	**MSEK**	**SEK/share**
Effect of a change in the price of the drug candidate[2]	32,385	0.18	-30,072	-0.17	+/- 94,841	+/- 0.54	+/- 189,682	+/- 1.08

[2]Sensitivity on fair value (from the rNPV value which has been risk adjusted to reflect an assumed pricing in conjunction with an IPO and the need to secure development financing, the dilution effect in the new funding also effects the value, see above) on performed external valuation based on a change in the assumed sales price (reference price) of the drug candidate which has been used in the valuation, the sensitivity analysis shows change at +/- 5%, +/- 15% and +/- 30% respectively.

Impact of Portfolio Fair Value

In the table below, "Total Portfolio Fair Value" is as defined in Note 1.

Impact on Portfolio Fair Value of the agreement with Rosetta Capital

"Potential distribution to Rosetta Capital", SEK 330.4 million, is the amount that KDev Investments according to the investment agreement between Karolinska Development and Rosetta Capital is obligated to distribute to Rosetta Capital from the proceeds received by KDev Investments (KDev Investments Fair Value). The distribution to Rosetta Capital will only happen when KDev Investments distribute dividends. KDev Investments will only distribute dividends after all eventual payables and outstanding debt has been repaid. Following dividends from KDev Investments during 2021 and 2022, all additional investments totalling SEK 44.2 million have been repaid to Rosetta Capital. In addition, SEK 1.3 million has been distributed, which reduce the first SEK 220 million in the waterfall structure. See also the annual report for 2021, note 17, for a description of the agreement with Rosetta Capital.

"Net Portfolio Fair Value (after potential distribution to Rosetta Capital)" is as defined in Note 1.

Expanded Portfolio Fair Value calculations taking the portfolio valuation and potential distribution to Rosetta Capital in consideration

SEK 000	30 Sep 2022	30 Sep 2021	31 Dec 2021
Karolinska Development Portfolio Fair Value (unlisted companies)	696,143	760,051	652,377
Karolinska Development Portfolio Fair Value (listed companies)	49,438	74,601	73,920
KDev Investments Portfolio Fair Value	537,843	605,988	566,807
Total Portfolio Fair Value	**1,283,424**	**1,440,640**	**1,293,104**
Potential distribution to Rosetta Capital of fair value of KDev Investments	-330,381	-365,145	-342,934
Net Portfolio Fair Value (after potential distribution to Rosetta Capital)	**953,043**	**1,075,495**	**950,170**

NOTE 4 Other financial assets

SEK000	30 Sep 2022	30 Sep 2021	31 Dec 2021
Other financial assets, non-current			
Earn-out agreement Forendo Pharma[1]	78,045	-	61,799
Earn-out agreement Oncopeptides[2]	0	0	0
Total	**78,045**	**0**	**61,799**
Other financial assets, current			
Receivable Rosetta Capital	-	722	-
Total	**-**	**39,996**	**-**

[1]Karolinska Development is entitled to earn-out payments according to the agreement with Organon regarding the sale of Forendo Pharma, se below.
[2]Karolinska Development is entitled to a 5% earn-out payment according to an agreement with Industrifonden. The earn-out payment is received when Industrifonden divests its holding in Oncopeptides. The value is estimated as of the balance sheet date at SEK 0.0 million. Maximum residual value amounts to KSEK 40,459.

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 a minor payment in May 2022, to SEK 78.0 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 previously shareholders are entitled to additional future payments totalling USD 870 million (approximate SEK 7,560 million) upon the achievement of certain development, registration and commercial milestones pertaining to Forendo Pharma's drug candidates.

NOTE 5 Liabilities to related parties

SEK 000	30 Sep 2022	30 Sep 2021	31 Dec 2021
Long-term liabilities to related parties			
InvoX Pharma Ltd[1]		70,000	-
InvoX Pharma Ltd[2]		42,500	-
Accrued interest Sino Biopharmaceutical		10,111	-
Current interest liabilities			
invoX Pharma Ltd[1]	-	-	70,000
invoX Pharma Ltd[2]	-	-	42,500
Accrued interest Sino Biopharmaceutical	-	-	12,103
Total	**0**	**122,611**	**124,603**

The bridge loans and accrued interest, in total SEK 124.9 million, was 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 6 Pledge assets and contingent liabilities

SEK 000	30 Sep 2022	30 Sep 2021	31 Dec 2021
Pledge assets			
Contingent liabilities			
Investment agreement in portfolio company	7,580	12,927	12,927
Summa	**7,580**	**12,927**	**12,927**