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## Karolinska Development

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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, endometriosis, serious viral infections, bone defects, and hepatic encephalopathy. To date, two of the companies have launched their first products.

For further information, see [www.karolinskadevelopment.com](http://www.karolinskadevelopment.com)

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## Financial Update

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### Second quarter

- The net profit for the second quarter was SEK 216.4 million (SEK 2.1 million in the second quarter of 2020). Earnings per share totalled SEK 1.23 (SEK 0.01 in the second quarter of 2020). Net profit for the period January – June 2021 amounted to SEK 191.5 (-124.0) million.
- The result of the Change in fair value of shares in portfolio companies for the second quarter amounted to SEK 227.9 million (SEK 7.4 in the second quarter of 2020). The result is largely due to the positive change in the fair value of the holding in Dilafor, attributable to an external valuation in connection with the positive phase 2b study with Tafoxiparin. The result of the Change in fair value of shares in portfolio companies for the period January – June 2021 amounted to SEK 212.4 (-115.3) million.
- The total fair value of the portfolio was SEK 1,397.5 million at the end of June 2021, corresponding to an increase of SEK 465.7 million from SEK 931.8 million at the end of the previous quarter. The net portfolio fair value at that time was SEK 1 030.8 million, corresponding to an increase of SEK 272.7 million from SEK 758.1 million at the end of the previous quarter.
- Net sales totalled SEK 0.6 million during the second quarter of 2021 (SEK 0.6 million during the second quarter of 2020). Net sales for the period January – June 2021 totalled SEK 1.2 (1.7) million
- Karolinska Development invested a total of SEK 44.8 million in portfolio companies during the second quarter. Second quarter investments in portfolio companies by Karolinska Development and other specialised life sciences investors totalled SEK 339.9 million.
- Cash and cash equivalents decreased by SEK 40.8 million during the second quarter, totalling SEK 20.8 million on 30 June 2021. Karolinska Development has the opportunity to utilize a credit facility of up to approximately SEK 43.6 million to cover a possible short-term liquidity need.
- The Parent Company equity totalled SEK 991.8 (883.7) million on 30 June 2021.

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## Significant events during the second quarter

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- The portfolio company Dilafor announced that it has completed the inclusion of patients to its study of tafoxiparin – a drug candidate with the potential to shorten the delivery time in women receiving treatment to initiate labor (April 2021).
- The portfolio company Aprea Therapeutics announced that the U.S. Food and Drug Administration (FDA) has granted orphan drug designation to their drug candidate eprenetapopt for the treatment of acute myeloid leukemia (AML) (April 2021).
- The portfolio company Umecrine Cognition announced that they have published results from the recently conducted phase 2a study of the drug candidate golexanolone in the highly regarded scientific journal Journal of Hepatology (April 2021).
- At its Annual General Meeting, Karolinska Development voted to, among other things, re-elect Björn Cochlovius, Tse Ping, Anna Lefevre Sköldebrand, Ben Toogood and Theresa Tse to its Board of Directors, and to elect Björn Cochlovius Chairman of the Board (May 2021).
- The portfolio company OssDsign raises SEK 270 million through an oversubscribed rights issue (May 2021).
- The portfolio company Umecrine Cognition is preparing a listing on Nasdaq First North Growth Market in Stockholm during the fourth quarter 2021. The purpose of the planned IPO is to finance the development plan that the company has prepared based on the positive phase 2 results for golexanolone as a treatment of liver encephalopathy (May 2021).
- The portfolio company Dilafor announced that they have concluded a phase 2b study with its drug candidate tafoxiparin which showed a significant positive impact on cervical ripening in first-time mothers receiving treatment to induce labor. Based on an external valuation, Karolinska Development increased the book value of its holding in the portfolio company Dilafor. The external valuation, which has been risk-adjusted by Karolinska Development, has a positive effect of approximately SEK 450 million on the booked fair value of the holding in Dilafor that is indirectly owned via KDev Investments AB. This has a positive impact on the net result in Karolinska Development AB in the second quarter of 2021 amounting to approximately SEK 250 million, corresponding to ca SEK 1.42 per share (June 2021).
- The portfolio company Biosergen has completed a successful and fully subscribed unit offering bringing the company SEK 50 million and that Biosergen's share will be listed on Nasdaq First North Growth Market in Stockholm on June 24, 2021. The proceeds from the offering allow Biosergen to launch clinical trials of its antifungal drug candidate BSG005 with the ambition of filing for market approval in the United States and Europe by the end of 2025 (June 2021).
- The portfolio company Promimic announced its evaluation of the possibility of a listing of the company's share on Nasdaq First North Growth Market in 2022. Promimic's unique nanotechnology improves the properties of dental and orthopedic implants and the company has initiated commercialization through its own sales force in the US and in collaboration with solid partners (June 2021).
- The portfolio company Modus Therapeutics announces that they have entered into a collaboration agreement with Imperial College London to evaluate the effect of its drug candidate sevuparin in patients with severe malaria (June 2021).
- The portfolio company Aprea Therapeutics has reported positive outcomes in an ongoing Phase 1/2 study evaluating the efficacy of the company's candidate drug eprenetapopt in combination with venteoclax and azacitidine in patients treated for TP53 mutated acute myeloid leukemia, AML. The results show that the primary efficacy endpoint of complete remission was reached in 37% of patients (June 2021).
- Karolinska Development announced that the company has acquired approximately 21 percent of the shares in AnaCardio AB. The new portfolio company develops drugs for the treatment of heart failure, based on ground-breaking research from the Karolinska Institute. The company's most

advanced project is deemed to be ready for evaluation in clinical studies. Karolinska Development's initial investment in AnaCardio is intended to cover costs for necessary activities prior to a planned major capital raising to finance the first part of the project's clinical development (June 2021).

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## Significant post-period events

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- Karolinska Development announced that the company has sold its entire holding in the listed portfolio company Lipidor AB. In total, the transaction covers 0.95 percent of all outstanding shares in Lipidor and brings in net approximately SEK 4 million in cash to Karolinska Development (July 2021).
- The portfolio company Promimic has received a shared 501(k) clearance from the U.S. Food and Drug Administration (FDA) with the orthopedic company Oncos Surgical. The market clearance concerns the implant product BioGrip® Modular Porous Collars, developed by Onkos Surgical, which has been coated with HA<sup>nano</sup> Surface in order to treat implant loosening in orthopedic oncology and complex revision surgery (July 2021).
- The portfolio company Umechrine Cognition has carried out a directed new share issue of SEK 35.1 million to broaden the ownership base ahead of a planned IPO and to finance the continued clinical development of the company's drug candidate golexanolone. At the same time, Karolinska Development has chosen to convert loans totalling SEK 66.9 million into shares in Umechrine Cognition at the same subscription price as in the new share issue (July 2021).
- The portfolio company Modus Therapeutics has completed an oversubscribed issue (113% subscription rate), providing the company SEK 30 million after transaction costs. The newly raised capital will primarily be used to finance the continued clinical development of the company's drug candidate sevuparin for sepsis and septic shock. As the next step in the company's development, a successful listing of the company's share on Nasdaq First North in Stockholm has been completed with the 22<sup>nd</sup> of July as the first day of trading (July 2021).
- The portfolio company Aprea Therapeutics has reported positive results from a Phase 2 trial evaluating its drug candidate eprenetapopt with azacitidine for post-transplant maintenance therapy in patients with TP53 mutant myelodysplastic syndromes (MDS) and acute myeloid leukemia (AML). The relapse free survival at 1-year post-transplant was 58% and overall survival was 79% (July 2021).
- The US Food and Drug Administration (FDA) has issued a clinical hold for Aprea Therapeutics clinical program evaluating eprenetapopt with acalabrutinib or venetoclax and rituximab in lymphoid malignancies. The issue means there will be a pause in the patient enrollment until the agency reverses the decision. Aprea Therapeutics intends to work in close dialogue with the FDA to clarify and address the agency's concerns in order to resume activity in the clinical trial program as soon as possible (August 2021).
- The portfolio company OssDsign AB has launched OssDsign Catalyst in the U.S. The product is a synthetic bone graft that stimulates the formation of healthy bone tissue in spinal fusion surgeries. The launch constitutes an important step in the company's strategy to establish itself on the bone graft market in the largest geographic market for medical device innovations (August 2021).

### **Viktor Drvota, CEO of Karolinska Development, comments:**

"The second quarter saw two of our portfolio companies – Umechrine Cognition and Promimic – announce their intention to list their shares. A third portfolio company, Biosergen, was listed on the NASDAQ First North Growth Market in June, and then in July, yet another portfolio company, Modus Therapeutics, was listed on the NASDAQ First North Growth Market. The announcements reflect the companies' increased

maturity levels and future listings may facilitate the financing of their ongoing efforts to develop and commercialise ground-breaking products with the potential to improve patients' health and extend their lives".

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## Chief Executive's Report

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The second quarter saw three of our portfolio companies – Umecrine Cognition, Biosergen and Promimic – announce their intention to list their shares, and by June, Biosergen's share was being traded for the first time on the NASDAQ First North Growth Market. Modus Therapeutics had already announced and completed the same with the start of trading on 22 July. The announcements reflect the companies' increased maturity levels and future listings may facilitate the financing of their ongoing efforts to develop and commercialise ground-breaking products with the potential to improve patients' health and extend their lives. The listings may also help increase the liquidity of Karolinska Development's assets, enhancing our potential in the longer term for realising increases in the value of the holdings and thereby financing new investments. It should, however, be stressed that Karolinska Development is a long-term investor who usually remains involved in its portfolio companies for many years after their listing.

### **Positive results from Dilafor's phase 2 study of tafoxiparin**

Approximately one quarter of all pregnant women receive labour induction treatment, but the desired effect is only achieved in half of these cases. This leads to a prolonged birth process that increases the risk of complications in both mother and child. Dilafor recently presented positive results from a phase 2b study of 170 first-time mothers, where the company's candidate drug, tafoxiparin, demonstrated the ability to ripen the cervix, which was the primary objective of the study. Dilafor will now continue to progress the project by studying the effect of lower doses than those used to date. Market analyses show that a drug that can induce cervical ripening has the potential to reach annual sales in excess of USD 1 billion in the US market alone. Based on an external assessment, which has been risk-adjusted by Karolinska Development, a positive effect on the book holding of ca. SEK 250 million (corresponding to approximately SEK 1.42 per share) was posted for the second quarter as a consequence of the positive study results.

### **OssDsign raises SEK 270 million ahead of aggressive strategic undertaking**

OssDsign raised SEK 270 million in May from an oversubscribed rights issue. The aim of the issue was to finance an ambitious strategic plan targeting net sales of SEK 300-400 million by 2025 and a positive cash flow by 2024. OssDsign develops and markets implants that reduce the risk of complications after orthopaedic surgery. The company has its own, established sales forces in the USA, Germany, and the UK, and collaborates with well-resourced distribution partners elsewhere in the world. OssDsign is listed on the NASDAQ First North Growth Market and Karolinska Development has a 10% holding in the company.

### **New investment in potentially ground-breaking heart failure drug project**

The broad network that Karolinska Development has built up in the Nordic life sciences sphere, and which it is continuously expanding, is one of the cornerstones of our commercial strategy. This network enables us to identify and invest in ground-breaking drug and mediotech projects at an early stage in their development. Our investment in AnaCardio, an unlisted company which is developing a completely new type of treatment for heart failure, based on research by the Karolinska Institute, is the most recent example of this approach. The project is deemed to be ready for the start of evaluation in clinical studies, and with a holding of 21%, we are looking forward to supporting the company and sharing in its future growth in value.

### **Follow-on investment in Svenska Vaccinfabriken Produktion**

In June KD invested SEK 3 million in its portfolio company Svenska Vaccinfabriken Produktion AB. The proceeds will be used for development of the protein component in SVF-001, the company's vaccine project addressing HBV/HDV (Hepatitis B & D).

### **A stronger starting point for ongoing value creation**

To summarise, it is clear that the second quarter yielded a significantly positive growth in the value of our portfolio, that we have successfully secured an investment in another highly innovative pharmaceutical project, and that several of our portfolio companies have achieved a degree of maturity that enables them to prepare for listing. The effects of the COVID-19 pandemic on our operations have been limited, and the market climate for life science companies continues to be favourable, so we believe we have every chance of strengthening our financial situation in a way that will, in the long term, enable us to optimise our value creation opportunities for both patients worldwide and our shareholders.

Solna, 19 August 2021

Viktor Drvota  
Chief Executive Officer

## Portfolio Companies

### High potential for continued value generation

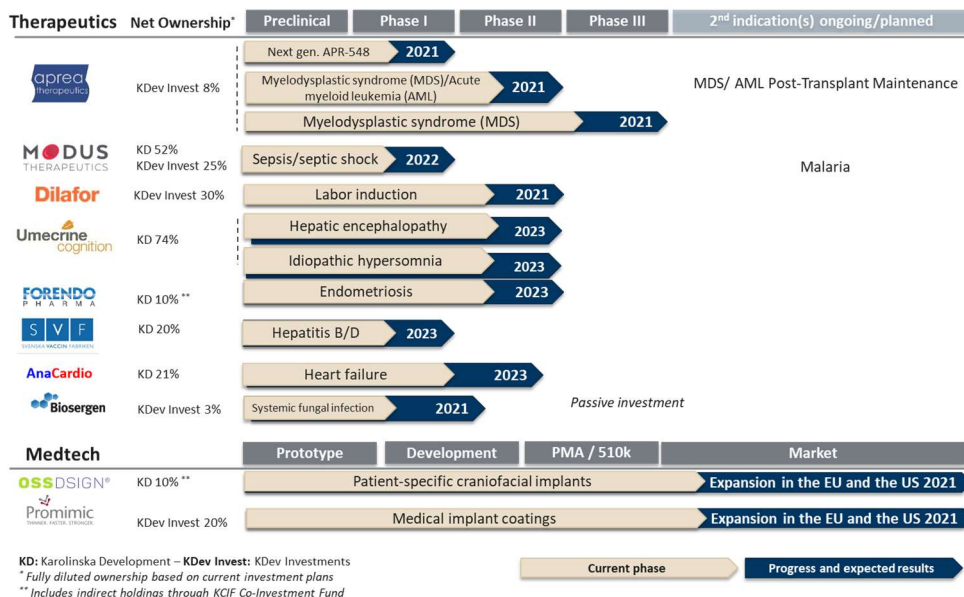
Karolinska Development's investments in therapeutic companies are conducted in syndicates with other professional life science investors, normally until proof-of-concept is demonstrated in Phase 2 trials, at which point different exit options are evaluated. For medtech companies, the business model is to finance the companies beyond break-even before realizing the investments.

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 compelling clinical and health economic benefits, as well as attractive returns on investment.

During the past years, Karolinska Development has optimized the clinical programs of the portfolio companies to reach clinically meaningful value-inflection points. The majority of Karolinska Development's portfolio companies are well-financed for their ongoing development and commercialisation work and are well-positioned to meet decisive value-generating milestones over the next two years. The ongoing pandemic has affected the portfolio companies to varying degrees, but the majority have been able to develop in accordance with previously set timetables.

In addition to its active value creation in nine portfolio companies, Karolinska Development has passive investments in one portfolio company and retained economic interests in the form of earn out-agreements in two additional life science companies.

### Our current portfolio – potential for value-inflection



### Earn-out agreements





**Project (First-in class)**  
APR-246

**Primary indication**  
MDS

**Development Phase**  
Phase III

**Holding in company\***  
KDev Investments 8.4%

**Other investors**  
HealthCap,  
Consonance Capital,  
Versant Ventures,  
Redmile Group,  
Fidelity Management &  
Research Co

**Origin**  
Karolinska Institutet

**More information**  
 [aprea.com](http://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



### Unique approach to treating a broad range of cancers

Aprea Therapeutics (Boston, USA and Stockholm, Sweden) develops novel anticancer drugs targeting the tumour suppressor protein, p53. Mutations of the p53 gene occur in around 50% of all human tumours and are associated with poor overall survival. Aprea's candidate drug, eprenetapopt (APR-246), has shown an ability to reactivate mutant p53 protein, inducing programmed cell death in many cancer cells. Early this year, eprenetapopt received a Breakthrough Therapy Designation from the American Food and Drugs Administration, the FDA.

The FDA approved an Investigational New Drug (IND) application for APR-548 – a next generation candidate drug being developed for oral administration – during 2020. The company is now initiating a clinical development programme for APR-548 in the treatment of TP53-mutated MDS.

Top-line data from a phase 3 study of eprenetapopt in patients with p53-mutated myelodysplastic syndrome (MDS) were reported in December 2020. The percentage achieving complete remission was higher (33%) in the experimental arm that received a combination of eprenetapopt and azacitidine than in the arm that only received azacitidine (22.4%). The difference did not, however, achieve statistical significance and an in-depth data analysis will now be conducted ahead of any decision on the further development of the candidate drug. A separate study to document the effect of eprenetapopt as maintenance treatment in MDS patients who have undergone stem cell transplantation is also ongoing.

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

#### The market

Eprenetapopt has the potential for use in many different types of cancer as mutations in p53 are found in around 50% of all diagnosed cancers. The lead target indications thus far include blood tumours such as MDS and AML. MDS is an orphan disease and represents a spectrum of hematopoietic stem cell malignancies. Approximately 30-40% of MDS patients progress to AML and mutations in p53 are found in up to 20% of MDS and AML patients, which is associated with poor overall prognosis.

#### Recent progress

- The U.S. Food and Drug Administration (FDA) has granted orphan drug designation to Aprea Therapeutics drug candidate eprenetapopt for the treatment of acute myeloid leukemia (AML) (April 2021).
- The portfolio company Aprea Therapeutics has reported positive results from a Phase 2 trial evaluating its drug candidate eprenetapopt with azacitidine for post-transplant maintenance therapy in patients with TP53 mutant myelodysplastic syndromes (MDS) and acute myeloid leukemia (AML). The relapse free survival at 1-year post-transplant was 58% and overall survival was 79% (July 2021).
- The US Food and Drug Administration (FDA) has issued a clinical hold for Aprea Therapeutics clinical program evaluating eprenetapopt with acalabrutinib or venetoclax and rituximab in lymphoid malignancies. The issue means there will be a pause in the patient enrollment until the agency reverses the decision. Aprea Therapeutics intends to work in close dialogue with the FDA to clarify and address the agency's concerns in order to resume activity in the clinical trial program as soon as possible.

#### Expected milestones

- The results from the phase 1 study of APR 548 is expected in the second half of 2021.



**Project (First-in-class)**

Sevuparin

**Primary indication**

Sepsis/Septic shock

**Development Phase**

Phase II

**Holding in company\***

Karolinska Development 38%

KDev Investments 33%

**Other investors**

The Foundation for Baltic and

East European Studies,

Praktikerinvest

**Origin**

Karolinska Institutet, Uppsala

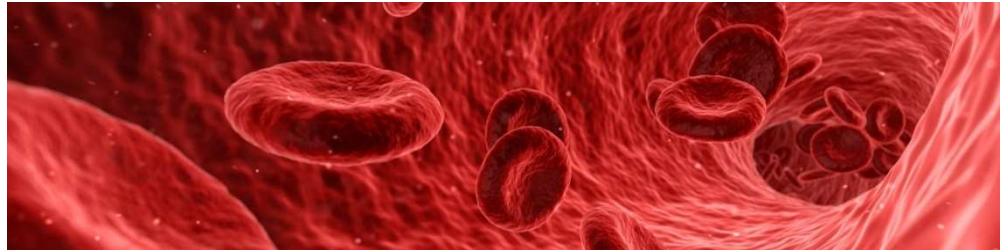
University

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

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## Modus Therapeutics AB

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### Establishing new treatments of sepsis/septic shock

Modus Therapeutics (Stockholm, Sweden) is developing sevuparin as a treatment of sepsis/septic shock, a potentially life-threatening condition that is currently lacking efficient pharmaceutical therapies. Patients that are affected by sepsis are exposed to a risk of developing multi-organ failure and – in severe cases – decease. Sevuparin is a polysaccharide drug candidate with a multimodal mechanism of action, including anti-inflammatory, anti-adhesive and anti-aggregate effects. It acts by interfering with the harmful agents generated by white blood cells during systemic inflammation. This interference could potentially break the molecular chain of events that lead to vascular damage and plasma leakage in patients with sepsis/septic shock and other systemic inflammatory manifestations. Data from pre-clinical animal 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 March 2021, Modus Therapeutics announced its intention to initiate a clinical development program in sepsis/septic shock. Sevuparin is believed to have a beneficial effect on the severe systemic inflammation that characterizes this condition. The company intends to finance the development within the new indication through a rights issue in connection with the listing at the Nasdaq First North Growth Market. Modus also continues to collaborate with academic partners to identify additional indications where sevuparin has potential to create substantial therapeutic value.

#### The market

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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 in-patient care costs for patients with sepsis was estimated to 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.

#### Recent progress

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- Modus Therapeutics announced an updated strategy that sees the Company focus on the clinical development of sevuparin as a new, important potential treatment for sepsis/septic shock, and possibly other severe inflammatory complications (March 2021).
- A successful listing of the company's share on Nasdaq First North in Stockholm were made and the newly raised capital will primarily be used to finance the continued clinical development of the company's drug candidate sevuparin for sepsis and septic shock (July 2021).

#### Expected milestones

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- Phase 1b LPS challenge study, with Q4 2021/ Q1 2022 as the estimated start date.
- Phase 2 proof-of-concept (PoC) for sepsis/septic shock with an estimated start date of Q3/Q4 2022.

# Dilafor

**Project (First-in-class)**  
Tafoxiparin


**Primary indication**  
Labor induction

**Development Phase**  
Phase IIb

**Holding in company\***  
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](http://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% 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.

Subcutaneous administration of tafoxiparin in an earlier phase IIa study showed a significantly positive effect with a shortened time to delivery and an enhanced ripening of the cervix in patients delivered after induction. A soft and ripe cervix is a prerequisite of successful labor induction. Tafoxiparin is now being evaluated in a phase IIb study with a larger patient base in order to document the effects of treatment with subcutaneously administered tafoxiparin.

It is thought that it is tafoxiparin's interaction with the body's immune system that causes the candidate drug to have a certain suppressive effect in conjunction with viral infections that can trigger a hyperinflammatory condition. Dilafor accordingly entered into a partnership with Liverpool University in the second quarter, studying the effect of tafoxiparin as a treatment for COVID-19.

#### 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% of cases, the induction fails, leading to protracted labour, emergency caesarean sections, or other maternal and foetal complications.

#### Recent progress

Dilafor concluded a phase 2b study with its drug candidate tafoxiparin which showed a significant positive impact on cervical ripening in first-time mothers receiving treatment to induce labor.

#### Expected milestones

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



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

**Primary indications**  
Hepatic encephalopathy  
Idiopathic hypersomnia

**Development Phase**  
Phase IIa

**Holding in company\***  
Karolinska Development 72%

**Other investors**  
Norrlandsfonden,  
Fort Knox Förvaring AB,  
PartnerInvest

**Origin**  
Umeå University

**More information**  
 [umecrinecognition.com](http://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



### Unique treatment approach for CNS-related disorders

Umecrine Cognition (Solna, Sweden) is developing golexanolone (GR3207) – a candidate drug in a new class of pharmaceuticals that affect the GABA system. An over-activation of the inhibitory GABA system in the CNS is suspected in conjunction with liver failure, causing very serious clinical symptoms. The over-activation is also thought to lay behind certain cognitive impairments and sleep disturbances. GABA-receptor modulating steroid antagonists, such as golexanolone, counter the increased activation of the GABA system and hence constitute a promising group of candidate drugs.

Golexanolone GR3027 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 on brain function in humans.

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 – was conducted during the last year. 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 signalling, with a correlated positive effect on extreme daytime fatigue. There was no significant effect, however, on other secondary outcome measures. In December, the company announced that, based on these study results, it had established a plan for the further development of the candidate drug.

#### The market

HE is a serious disease with a large unmet need that affects up to 1% 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% after five years. HE is also associated with substantial societal costs.

#### Recent progress

- Umecrine Cognition presented positive phase 2a data for the candidate drug, golexanolone, for the hepatic encephalopathy indication at The Liver Meeting Digital Experience™, between 13 and 16 November 2020.
- Umecrine Cognition announced that they have published results from the recently conducted phase 2a study of the drug candidate golexanolone in the highly regarded scientific journal *Journal of Hepatology* (April 2021).
- Umecrine Cognition announced that they have the intention to list the company in order to finance the phase 2b study.

#### Going forward

- Planned listing in Q4 2021.



**Project (First-in-class)**  
FOR-6219


**Primary indication**  
Endometriosis

**Development Phase**  
Phase 1b

**Holding in company\***  
Karolinska Development 10%\*\*

**Other investors**  
Novo Seeds,  
Novartis Venture Fund,  
Merck Ventures,  
Vesalius Biocapital,  
Innovestor, Novartis

**Origin**  
University of Turku, Finland

**More information**  
 forendo.com

\* Fully-diluted ownership based on current investment plans

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

#### Deal values for similar projects

- USD 853 million Astellas (buyer) & Ogeda (seller) 2017
- USD 595 million Neurocrine Biosciences (licensor) & AbbVie (licensee) 2010

## Forendo Pharma Ltd



### Novel therapies for women's health.

Forendo (Turku and Oulu, Finland) is developing a new treatment for eliminating endometriosis while at the same time maintaining normal hormonal cycles. The company is also active in the field of hepatic disease.

Endometriosis is an oestrogen dependent disease that affects women in reproductive age and is caused by cells normally lining the uterus being present outside of the uterine cavity, which induces chronic inflammation in the surrounding tissue. The disease is manifested in many diverse ways and it often causes particularly painful menstruations or chronic pelvic pain. The existing drug therapies ameliorate the symptoms by suppressing oestrogen synthesis, but one clear disadvantage of these types of treatment is that they disrupt the systemic oestrogen balance, giving rise to osteoporosis and other serious side effects that hinder their long-term usage.

Forendo's candidate drug, FOR-6219, inhibits the HSD17B1 enzyme – a previously unresearched but powerful drug target for tissue-specific regulation of hormone activity. Forendo has demonstrated proof of mechanism in preclinical models in which the candidate drug has been shown to block the local formation of oestrogen in the endometrium (the uterus' surface tissue). This may enable a regression of the endometriosis and relief in the associated inflammatory pain without impacting systemic oestrogen levels. Forendo announced in March 2021 the successfully completed Phase 1 program for FOR-6219 – a candidate drug aimed for the treatment of endometriosis. Based on the positive results generated in this program, Forendo Pharma is now preparing a Phase 2 study in the US.

The company has also, since late 2019, been developing new pharmaceuticals for the treatment of chronic hepatic disease in partnership with the pharmaceutical company, Novartis. The development programme is evaluating the effect of the company's HSD inhibitor in the treatment of gynaecological conditions and is currently in the preclinical discovery phase.

#### The market

It is estimated that 10% of all fertile women are affected by endometriosis. This corresponds to a total of 176 million women in the world. Endometriosis has a detrimental effect on the well-being of the women affected and the socio-economic burden of the disease from e.g. sick leaves is profound due to the lack of safe and effective treatment. Forendo's approach to treat endometriosis therefore has a high potential to substantially impact future treatment regimens.

#### Recent progress

- Novartis enters into license and collaboration agreement and invests in Forendo (December 2019).
- Successfully completed Phase 1 program for FOR-6219 – a candidate drug aimed for the treatment of endometriosis. Based on the positive results generated in this program, Forendo Pharma is now preparing a Phase 2 study in the US (March 2021)

#### Expected milestones

- Initiation of Phase 2 study in endometriosis at the end of 2021.

**OSSDSIGN®**
**Project**

OSSDSIGN® Cranial and  
OSSDSIGN® Facial

**Primary indication**

Cranial implants

**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**

**Commercializing the best craniofacial implants**

OssDsign (Uppsala, Sweden) is an innovative company that designs and manufactures implants and material technology for bone regeneration. Its lead products, OSSDSIGN® Cranial and OSSDSIGN® Facial, are already being sold in several European markets, including Germany, the UK, and the Nordic region. The company is commercialising its cranial implant in the USA and is currently preparing commercial activities in Japan after the approval of the company's OSSDSIGN® Cranial PSI product. Upon completion of a successful and over-subscribed share issue that yielded SEK 65 million, OssDsign acquired Sirakoss Ltd, a company operating in the field of bone graft substitutes. This strategic acquisition means a fivefold increase in the company's addressable market.

During the year, the company worked intensively to increase sales. The US subsidiary has been actively working since 2019 on strengthening the company's position in the USA through long-term, sound customer relationships. A recent patent application from the US Patent Office further enhances OssDsign's potential for future growth in the USA.

OssDsign's clinically proven bone regeneration technology has better healing properties than similar products. The company uses cutting edge 3D printing, moulding, and regenerative medicine technology to customise solutions for individual patients. The result is a patient-specific, titanium-reinforced implant made from a ceramic material with regenerative properties that accelerates the natural tissue formation and enables permanent healing of a bone defects. The regenerative effect of the ceramic material helps ensure a shorter healing process and entails both reduced suffering for the patient and cost savings for hospitals.

**The market**

OssDsign focuses on the market for craniomaxillofacial (CMF) implants. The total market size was estimated to USD 1.8 billion in 2016 and is expected to grow at an CAGR of 5-9% worldwide over the next five years. The market for OssDsign's lead product in cranioplasty alone is estimated to approximately USD 200 million. OssDsign's products target a well-defined patient population – the relevant type of operation is performed at a limited – and easily identifiable – number of hospitals worldwide. The price sensitivity is low, and the products are relatively easy to register in multiple markets.

**Recent progress**

- OssDsign acquires Sirakoss Ltd – a company operating in the field of bone graft substitutes. The acquisition brings with it a fivefold increase in OssDsign's addressable.
- OssDsign has carried out a fully guaranteed rights issue of SEK 240 million in combination with over-allotment options of approximately SEK 30 million – a total of approximately SEK 270 million. The purpose of the financing is, among other things, to accelerate the company's development through the new strategy program ASCENT25 (May 2021).
- OssDsign AB has launched OssDsign Catalyst in the U.S. The product is a synthetic bone graft that stimulates the formation of healthy bone tissue in spinal fusion surgeries (August 2021).

**Expected milestones**

- Financing for continued roll-out of the product internationally and market introduction of the Sirakoss product.


**Project**

 HA<sup>nano</sup> Surface

**Primary indication**

Implant surface coatings

**Development Phase**

Marketed

**Holding in company\***

KDev Investments 20%

**Other investors**

K-Svets Ventures,


ALMI Invest,

Chalmers Ventures

**Origin**

Chalmers University of

Technology

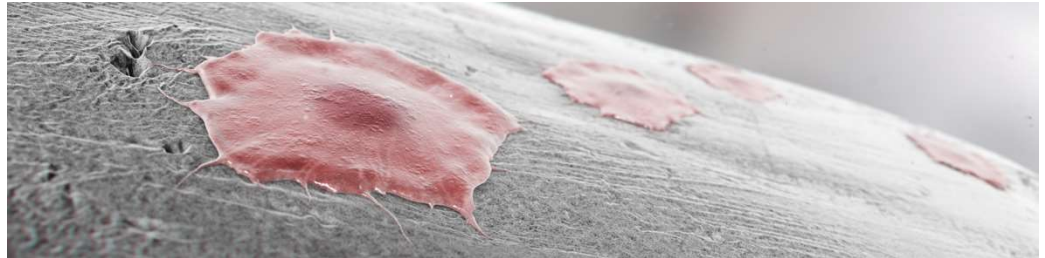
**More information**
 promimic.com

*\*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<sup>nano</sup> Surface, which increases their integration into bone and anchoring strength.

HA<sup>nano</sup> Surface is a sustainable, nanometre-thin coating that helps preserve the surface structure of the implant by reducing the risks of cracking. 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<sup>nano</sup> is based is FDA-approved, which means that a new implant coated with HA<sup>nano</sup> Surface can receive marketing approval through the 510(k) route and reach a new market quickly. The coating process is easy to implement in the industrial scale production of implants.

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 commercialising dental implants coated with HA<sup>nano</sup> Surface, and one with Danco Anodizing, which has established a manufacturing facility for implants with HA<sup>nano</sup> Surface, targeting the US and Chinese markets. Promimic strengthened its position in the orthopaedic market in 2019 and 2020 by entering into partnerships with Onkos Surgical and INNOVASIS Inc. The partnership with Onkos Surgical includes the development and commercialisation of products treated with the HA<sup>nano</sup> Surface technology for limb salvage surgery. INNOVASIS Inc. manufactures and sells 3D-printed spinal implants treated with HAnano Surface® in order to improve osseointegration and stimulate new bone formation and bone growth on the implant surface.

#### The market

Promimic is focusing on the markets for dental and orthopaedic implants, which collectively represent a worldwide market opportunity of USD 600 - 800 million. The competition amongst implant manufacturers is fierce and each market segment is dominated by four to eight global companies. Promimic's business model is centred on out-licensing the HA<sup>nano</sup> Surface technology to leading implant manufacturers.

#### Recent progress

- Entered into partnership with the US company Onkos Surgical (March 2019).
- The company's first spinal device utilizing HA<sup>nano</sup> Surface to improve osseointegration has been 510(k) approved by the FDA (August 2019).
- Promimic's business partner Innovasis Inc. received 510(k) FDA clearance of a series of 3D printed implants used in spinal fusion surgery (August 2020).

#### Expected milestones

- Further product launches and license agreements with major manufacturers during 2021
- Possibility of a listing of the company's share on Nasdaq First North Growth Market in 2022



**Project (First-in-class)**  
SVF-001

**Primary indication**  
Hepatit B och D  
SARS-CoV-2 and other Corona  
virus

**Development Phase**  
Preclinical

**Holding in company\***  
Karolinska Development 20%

**Origin**  
Karolinska Institutet

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

#### Deal values for similar projects

- USD 546 million Affinivax raises Series B and C financing 2020
- USD 1.4 billions MYR Gmbh (acquired) & Gilead Sciences Inc (buyer) 2020

## Svenska Vaccinabriken Produktion AB



### Developing therapeutic proteins and DNA vaccines

Svenska Vaccinabriken Produktion AB ("SVF") develops therapeutic proteins and DNA vaccines against hepatitis B and hepatitis 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 Vaccinabriken is using 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 and is now continuing its preclinical development with the goal of enabling a phase 1 study to be initiated in 2021.

Although Coronavirus infections are usually mild, some virus types can lead to life-threatening conditions. This has been the case in the outbreaks of SARS-CoV in 2003, MERS-CoV in 2012, and during the ongoing Covid-19 pandemic. SVF has also developed a platform to address and prevent severe infections of this kind and which is expected to afford the potential for quickly developing and producing vaccines against both existing and new forms of Coronaviruses. The company submitted a patent application specifically linked to a potential Covid-19 vaccine during the year.

#### The market

Svenska Vaccinabriken 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 and 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. There is substantial competition between vaccine developers, who comprise both smaller biotech companies and international pharmaceutical companies. Svenska Vaccinabriken's business model is based on guiding their vaccine projects to the clinical development phase and then licensing them out global pharmaceutical companies with established distribution networks. Investors' interest in early vaccine companies and platforms similar to Svenska Vaccinabriken'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

- Karolinska Development invested in SVF in March and October 2020. Karolinska Development's ownership, after the add-on investment, now totals 20%.
- SVF granted US-patent regarding chimeric genes for immunotherapy against chronic hepatitis B and D virus infections (February 2021).

#### Expected milestones

- The establishment of a cooperation agreement with one or more international partners during 2021 ahead of the continued development of the products.
- Phase 1 studies of hepatitis D and B vaccines could potentially be initiated in 2022.

## AnaCardio

**Project (First-in-class)**  
Peptid

**Primary indication**  
Heart failure

**Development Phase**  
Phase 2a

**Holding in company'**  
Karolinska Development 21%

**Origin**  
Karolinska Institutet  
Karolinska universitetssjukhuset

*\*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



### A safer long-term treatment for heart failure

AnaCardio (Stockholm, Sweden) is developing a new form of peptide drug 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 hospitalisation. One of the major issues with existing pharmaceuticals is that they are not designed for long-term treatment, due to a degree of toxicity that results in the breakdown of cardiac tissue and consequent side effects, such as arrhythmia, low blood pressure, ischemia, and an increased risk of premature mortality.

AnaCardio's clinical candidate drug is being developed to restore the heart's normal muscular function and blood circulation, without causing tissue breakdown. The candidate drug works by increasing the cardiac muscle's sensitivity to calcium – one of the most important signal molecules in normal muscular functioning. 30 heart failure patients were treated with an infusion of AnaCardio's candidate drug as part of an earlier clinical phase 2a study whose results showed a robust safety profile and a favourable pharmacological effect on cardiac function. The company is now preparing a clinical phase 2a study of a peroral treatment in order to increase the candidate drug's user-friendliness and, hence, its commercial potential.

### The market

Heart failure is a global disease with a substantial unmet medical need for safe, effective drugs. Cardiovascular diseases are becoming more widespread as a result of the sedentary lifestyle and growing problems with obesity that are following in the wake of increasing global affluence. An estimated 20 million people suffer from chronic heart failure and around 3 million people are hospitalised to treat it every year. The risk of developing cardiovascular disease increases with age, and 10-20% of the elderly population is now estimated to suffer from chronic heart failure, which is now the most common reason for hospitalisation 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 in the form of 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

- Karolinska Development invested in AnaCardio in June 2021. Karolinska Development's ownership totals 21%.
- New board of directors were appointed.

### Expected milestones

- During the third quarter, the establishment of the company's new management and organization is expected.



## 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 in order 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	2021 Apr-Jun	2020 Apr-Jun	2021 Jan-Jun	2020 Jan-Jun	2020 Full-year
<b>Condensed income statement</b>					
Change in fair value of shares in portfolio companies	227.9	7.4	212.4	-115.3	-215.4
Net profit/loss	216.4	2.1	191.5	-124.0	-207.5
<b>Balance sheet information</b>					
Cash and cash equivalents	20.8	46.1	20.8	46.1	75.9
Net asset value (Note 1)	995.5	891.3	995.5	891.3	805.8
Net debt (Note 1)	-57.8	-23.9	-57.8	-23.9	0.0
<b>Share information</b>					
Earnings per share, weighted average before dilution (SEK)	1.2	0.0	1.1	-0.7	-1.2
Earnings per share, weighted average after dilution (SEK)	1.2	0.0	1.1	-0.7	-1.2
Net asset value per share (SEK) (Note 1)	5.7	5.1	5.7	5.1	4.6
Equity per share (SEK) (Note 1)	5.7	5.0	5.7	5.0	4.6
Share price, last trading day in the reporting period (SEK)	2.9	3.0	2.9	3.0	1.8
<b>Portfolio information</b>					
Investments in portfolio companies	44.8	7.7	48.1	7.7	40.0
Of which investments not affecting cash flow	10.4	1.0	10.8	1.0	0.9
Portfolio companies at fair value through profit or loss	1,030.8	885.2	1,030.8	885.2	770.3

### Financial Development for the Investment Entity in 2021

#### Investments (comparable numbers 2020)

Investments in the portfolio in the second quarter 2021 by external investors and Karolinska Development together amounted to SEK 339.9 (7.6) million, whereof 87% (0%) by external investors.

Karolinska Development invested during the second quarter SEK 44.8 (7.6) million, of which SEK 34.4 (7.9) million was cash investments. Investments were made in OssDsign SEK 28.4 million, Modus Therapeutics SEK 10.0 million, AnaCardio SEK 3.0 million, Svenska Vaccinfabriken Produktion SEK 3.0 million and Umechrine Cognition SEK 0.4. Non-cash investments (financing fee and accrued interest on loans) amounted to SEK 10.4 (-0.3) million.

Investments by external investors in the portfolio companies during the second quarter amounted to SEK 295.2 (0.0) million and were made in OssDsign, Biosergen and AnaCardio.

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

<b>SEKm</b>	<b>Karolinska Development</b>	<b>External Investors</b>	<b>Total Invested Q1-Q2 2021</b>
OssDsign	28.4	242.2	270.5
Modus Therapeutics	10.0	0.0	10.0
AnaCardio	3.0	3.0	6.0
Svenska Vaccinfabriken Produktion	3.0	0.0	3.0
Dilafor	2.9	6.2	9.1
Umecrine Cognition	0.8	0.0	0.8
Biosergen	0.0	50.0	50.0
<b>Total</b>	<b>48.1</b>	<b>301.4</b>	<b>349.4</b>

### **Portfolio Fair Value**

Fair Value of the portfolio companies owned directly by Karolinska Development increased by SEK 29.1 million during the second quarter 2021. The main reason for the increase in Fair value of the portfolio companies were the investments in OssDsign, AnaCardio and Svenska Vaccinfabriken Produktion.

Fair Value of the portfolio companies owned indirectly via KDev Investments increased by SEK 436.7 million during the second quarter 2021. The main reasons for the increase in Fair value of the portfolio companies was the positive change in Fair value attributable to the external valuation of Dilafor which increased the Fair value of the holding by SEK 450.2 million.

Total Fair Value from portfolio companies owned directly by Karolinska Development and indirectly via KDev Investments increased by SEK 465.7 million in the second quarter 2021.

As a consequence of the increase in Fair Value of the part of the portfolio owned via KDev Investments, the potential distribution to Rosetta Capital increased by SEK 193.0 million, resulting in Net Portfolio Fair Value increasing by SEK 272.2 million in the second quarter 2021.

<b>SEKm</b>	<b>30 Jun 2021</b>	<b>31 Mar 2021</b>	<b>Q2 2021 vs Q1 2021</b>
Karolinska Development Portfolio Fair Value (unlisted companies)	731.8	733.2	-1.4
Karolinska Development Portfolio Fair Value (listed companies)	55.4	24.9	30.5
KDev Investments Portfolio Fair Value	610.4	173.7	436.7
<b>Total Portfolio Fair Value</b>	<b>1,397.5</b>	<b>931.8</b>	<b>465.7</b>
Potential distribution to Rosetta Capital of fair value of KDev Investments	-366.7	-173.7	-193.0
<b>Net Portfolio Fair Value (after potential distribution to Rosetta Capital)</b>	<b>1,030.8</b>	<b>758.1</b>	<b>272.7</b>

### **Profit development 2021 (comparable numbers 2020)**

During the second quarter 2021, Karolinska Development's revenue amounted to SEK 0.6 (0.6) million and consists primarily of services provided to portfolio companies.

Change in fair value of shares in portfolio companies of in total SEK 227.9 (7.4) million includes the difference between the change in Net Portfolio Fair Value during the second quarter 2021 with SEK 272.7 million and the net of investments in the portfolio companies of SEK 44.8 million. Change in fair value of other financial assets and liabilities amounted to SEK -13.7 (5.3) million and are the consequence of changes in valuation of earn-out deals. For the period January - June 2021, the change in fair value of shares in portfolio companies amounted to SEK 212.4 (-115.3) million and the change in fair value of other financial assets amounted to SEK -15.3 (9.3) million.

During the second quarter 2021 other expenses amounted to SEK 1.6 (3.0) million and personnel costs amounted to SEK 5.6 (6.3) million. For the period January – June 2021 other expenses amounted to SEK 3.4 (5.3) million and personnel cost amounted to 11.1 (11.6) million.

The operating profit/loss in the second quarter 2021 amounted to SEK 207.4 million compared to SEK 3.9 million in the second quarter 2020. The operating profit/loss for the period January - June 2021 amounted to -183.5 (-121.6) million.

Financial net improved during the second quarter 2021 compared to the second quarter 2021 due to a financing fee from Modus Therapeutics, this receivable has been converted into shares in the same company. The financial net during the second quarter amounted to SEK 9.0 (-1.8) million. For the period January - June 2021 the financial net amounted to SEK 8.0 (-2.4) million.

The Investment Entity's Net profit/loss amounted to SEK 216.4 (2.1) million in the second quarter 2021. Net profit/loss for the period January June 2021 amounted to SEK 191.5 (-124.0) million.

### **Financial position**

The Investment Entity's equity to total assets ratio amounted to 92% on 30 June 2021, compared to 88% on 30 June 2020.

The net profit/loss of SEK 216.4 million for the second quarter resulted in the equity on 30 June 2021 increasing to SEK 991.8 million compared to SEK 775.4 million on 31 March 2021.

Interest-bearing liabilities consisted of a bridge loan including accrued interest amounting to SEK 78.7 million on 30 June 2021 (in April 2021 extended to 31 December 2022), compared to SEK 73,0 million on 30 June 2020.

After paying operational costs and investments for the second quarter 2021, cash and cash equivalents amounted to SEK 20.8 million on 30 June 2021 compared to SEK 46.1 million on 30 June 2021. Net debt amounted to SEK 57.8 million on 30 June 2021 compared to SEK 23.9 million on 30 June 2020.

Karolinska Development has the opportunity to utilize a credit facility of up to approximately SEK 43.6 million to cover a possible short-term liquidity need.

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## Financial Development – Parent Company

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*The Parent Company refers to Karolinska Development AB (comparable numbers 2020).*

During the second quarter 2021, the Parent Company's Net profit/loss amounted to SEK 216.4 (2.1) million.

Due to the positive result for the second quarter 2021, the equity increased from SEK 775.4 million as of 31 March 2021 to SEK 991.8 million 30 June 2021.

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## Shares

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### **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 June 2021 was SEK 2.9, and the market capitalization amounted to SEK 511 million.

The share capital of Karolinska Development on 30 June 2021 amounted to SEK 1.8 million divided into 1,503,098 A shares, each with ten votes (15,030,980 votes) and 174,162,311 B shares, each with one vote (174,162,311 votes). The total number of shares and votes in Karolinska Development on 30 June 2021 amounted to 175,665,409 shares and 189,193,291 votes.

## Ownership

On June 30, 2021, Karolinska Development had 9,556 shareholders.

Shareholder	A-Shares	B-Shares	Cap %	Vote %
Sino Biopharmaceutical Limited	0	75,727,285	43.11%	40.03%
Worldwide International Investments Ltd	0	32,276,620	18.37%	17.06%
Stift För Främjande & Utveckling	1,503,098	2,641,389	2.36%	9.34%
Östersjöstiftelsen	0	3,889,166	2.21%	2.06%
Coastal Investment Management LLC	0	2,470,541	1.41%	1.31%
Karolinska Institutet Holding AB	0	1,700,000	0.97%	0.90%
Adis Holding AB	0	700,000	0.40%	0.37%
Gälöstiftelsen	0	668,661	0.38%	0.35%
Synskadades riksförbund	0	494,939	0.28%	0.26%
Praktiker tjänst	0	434,283	0.25%	0.23%
<b>Sum Top 10 Shareholders</b>	<b>1,503,098</b>	<b>121,002,884</b>	<b>69.74%</b>	<b>71.90%</b>
<b>Sum Other Shareholders</b>	<b>0</b>	<b>53,159,427</b>	<b>30.26%</b>	<b>28.10%</b>
<b>Sum All Shareholders</b>	<b>1,503,098</b>	<b>174,162,311</b>	<b>100.00%</b>	<b>100.00%</b>

## Information on Risks and Uncertainties

### Investment Entity and Parent Company

#### Financial risks

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 that the opportunities for refinancing can be hampered. The Board monitors the evolvement of the crisis 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.

For a detailed description of other risks and uncertainties, see the Annual report 2020.

## Signing of the report

Solna, 19 August 2021

Björn Cochlovius  
Chairman

Tse Ping

Anna Lefevre Sköldebrand

Ben Toogood

Theresa Tse

Viktor Drvota  
CEO

This report has not been reviewed by the Company's auditors.

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## Dates for Publication of Financial Information

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Interim Report January – September 2021	18 November 2021
Year-end report January – December 2021	11 February 2022

Karolinska Development is required by law to publish the information in this interim report. The information was published on 19 August 2021.

This interim report, together with additional information, is available on Karolinska Development's website: [www.karolinskadevelopment.com](http://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	2021 Apr-Jun	2020 Apr-Jun	2021 Jan-Jun	2020 Jan-Jun	2020 Full-year
Revenue		575	589	1,204	1,693	2,651
Change in fair value of shares in portfolio companies	2,3	227,943	7,387	212,425	-115,342	-215,378
Change in fair value of other financial assets and liabilities		-13,744	5,345	-15,278	9,258	43,077
Other expenses		-1,557	-2,982	-3,417	-5,294	-8,466
Personnel costs		-5,629	-6,285	-11,071	-11,586	-23,620
Depreciation of right-of-use assets		-172	-176	-345	-352	-690
<b>Operating profit/loss</b>		<b>207,416</b>	<b>3,878</b>	<b>183,518</b>	<b>-121,623</b>	<b>-202,426</b>
Financial net		8,980	-1,779	7,990	-2,421	-5,061
<b>Profit/loss before tax</b>		<b>216,396</b>	<b>2,099</b>	<b>191,508</b>	<b>-124,044</b>	<b>-207,487</b>
Taxes		-	-	-	-	-
<b>NET PROFIT/LOSS FOR THE PERIOD</b>		<b>216,396</b>	<b>2,099</b>	<b>191,508</b>	<b>-124,044</b>	<b>-207,487</b>

### Condensed statement of comprehensive income for the Investment Entity

SEK 000	Note	2021 Apr-Jun	2020 Apr-Jun	2021 Jan-Jun	2020 Jan-Jun	2020 Full-year
Net profit/loss for the period		216,396	2,099	191,508	-124,044	-207,487
<b>Total comprehensive income/loss for the period</b>		<b>216,396</b>	<b>2,099</b>	<b>191,508</b>	<b>-124,044</b>	<b>-207,487</b>

### Earnings per share for the Investment Entity

SEK	Note	2021 Apr-Jun	2020 Apr-Jun	2021 Jan-Jun	2020 Jan-Jun	2020 Full-year
Earnings per share, weighted average before dilution		1.23	0.01	1.09	-0.71	-1.18
Number of shares, weighted average before dilution		175,421,124	175,421,124	175,421,124	175,421,124	175,421,124
Earnings per share, weighted average after dilution		1.23	0.01	1.09	-0.71	-1.18
Number of shares, weighted average after dilution		175,421,124	175,421,124	175,421,124	175,421,124	175,421,124

**Condensed balance sheet for the Investment Entity**

SEK 000	Note	30 Jun 2021	30 Jun 2020	31 Dec 2020
<b>ASSETS</b>				
<b>Tangible assets</b>				
Right-of-use assets		1,035	1,055	690
<b>Financial assets</b>				
Shares in portfolio companies at fair value through profit or loss	2,3	1,030,827	885,215	770,320
Loans receivable from portfolio companies		-	1,772	-
<b>Total non-current assets</b>		<b>1,031,862</b>	<b>888,042</b>	<b>771,010</b>
<b>Current assets</b>				
Accounts receivable		1	114	3
Receivables from group company		-	-	80
Receivables from portfolio companies		2,108	1,232	243
Other financial assets		26,007	64,264	41,181
Other current receivables		1,041	1,040	768
Prepaid expenses and accrued income		784	868	929
Cash and cash equivalents		20,838	46,132	75,869
<b>Total current assets</b>		<b>50,779</b>	<b>113,650</b>	<b>119,073</b>
<b>TOTAL ASSETS</b>		<b>1,082,641</b>	<b>1,001,692</b>	<b>890,083</b>
<b>EQUITY AND LIABILITIES</b>				
<b>Total equity</b>		<b>991,796</b>	<b>883,695</b>	<b>800,267</b>
<b>Long-term liabilities</b>				
Long-term liabilities to related parties	4	78,680	-	-
<b>Total long-term liabilities</b>		<b>78,680</b>	<b>0</b>	<b>0</b>
<b>Current liabilities</b>				
Current interest liabilities to related parties	4	-	70,000	75,864
Other financial liabilities		3,459	36,123	5,726
Accounts payable		964	989	617
Liability to make lease payment		1,049	1,091	711
Other current liabilities		1,289	1,926	1,373
Accrued expenses and prepaid income		5,404	7,868	5,525
<b>Total current liabilities</b>		<b>12,165</b>	<b>117,997</b>	<b>89,816</b>
<b>Total liabilities</b>		<b>90,845</b>	<b>117,997</b>	<b>89,816</b>
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>1,082,641</b>	<b>1,001,692</b>	<b>890,083</b>

**Condensed statement of changes in the Investment Entity's equity**

SEK 000	Note	2021-06-30	2020-06-30	2020-12-31
<b>Opening balance, equity</b>		<b>800,267</b>	<b>1,007,732</b>	<b>1,007,732</b>
Net profit/ loss for the period		191,508	-124,044	-207,487
<b>Closing balance, equity</b>		<b>991,796</b>	<b>883,695</b>	<b>800,267</b>

**Condensed statement of cash flows for the Investment Entity**

SEK 000	Note	2021 Jan-Jun	2020 Jan-Jun
<b>Operating activities</b>			
Operating profit/loss		183,518	-121,623
<b>Adjustments for items not affecting cash flow</b>			
Depreciation		345	352
Change in fair value		-197,147	106,084
Other items		-	-357
<b>Cash flow from operating activities before changes in working capital and operating investments</b>		<b>-13,284</b>	<b>-15,544</b>
<b>Cash flow from changes in working capital</b>			
Increase (-)/Decrease (+) in operating receivables		-1,905	-1,375
Increase (+)/Decrease (-) in operating liabilities		142	-33,614
<b>Cash flow from operating activities</b>		<b>-15,047</b>	<b>-50,533</b>
<b>Investment activities</b>			
Part payment from earn-out deal		-2,370	-3,114
Proceeds from sale of shares in portfolio companies		-	62,287
Acquisitions of shares in portfolio companies		-37,257	-14,640
<b>Cash flow from investment activities</b>		<b>-39,627</b>	<b>44,533</b>
<b>Financing activities</b>			
Amortization of lease liabilities		-357	-
<b>Cash flow from financing activities</b>		<b>-357</b>	<b>0</b>
<b>Cash flow for the period</b>		<b>-55,031</b>	<b>-6,000</b>
Cash and cash equivalents at the beginning of the year		75,869	52,132
<b>CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD</b>		<b>20,838</b>	<b>46,132</b>



**Condensed income statement for the Parent Company**

SEK 000	Note	2021 Apr-Jun	2020 Apr-Jun	2021 Jan-Jun	2020 Jan-Jun	2020 Full-year
Revenue		575	589	1,204	1,693	2,651
Change in fair value of shares in portfolio companies		227,943	7,387	212,425	-115,342	-215,378
Change in fair value of other financial assets and liabilities		-13,744	5,345	-15,278	9,258	43,077
Other expenses		-1,735	-3,161	-3,774	-5,651	-9,180
Personnel costs		-5,629	-6,285	-11,071	-11,586	-23,620
<b>Operating profit/loss</b>		<b>207,410</b>	<b>3,875</b>	<b>183,506</b>	<b>-121,628</b>	<b>-202,450</b>
Financial net		8,992	-1,766	8,016	-2,394	-5,016
<b>Profit/loss before tax</b>		<b>216,402</b>	<b>2,109</b>	<b>191,522</b>	<b>-124,022</b>	<b>-207,466</b>
Tax		-	-	-	-	-
<b>NET PROFIT/LOSS FOR THE PERIOD</b>		<b>216,402</b>	<b>2,109</b>	<b>191,522</b>	<b>-124,022</b>	<b>-207,466</b>

**Condensed statement of comprehensive income for the Parent Company**

SEK 000	Note	2021 Apr-Jun	2020 Apr-Jun	2021 Jan-Jun	2020 Jan-Jun	2020 Full-year
Net profit/loss for the period		216,402	2,109	191,522	-124,022	-207,466
<b>Total comprehensive income/loss for the period</b>		<b>216,402</b>	<b>2,109</b>	<b>191,522</b>	<b>-124,022</b>	<b>-207,466</b>

**Condensed balance sheet for the Parent Company**

SEK 000	Note	30 Jun 2021	30 Jun 2020	31 Dec 2020
<b>ASSETS</b>				
<b>Financial assets</b>				
Shares in portfolio companies at fair value through profit or loss	2,3	1,030,827	885,215	770,320
Loans receivable from portfolio companies		-	1,772	-
<b>Total non-current assets</b>		<b>1,030,827</b>	<b>886,987</b>	<b>770,320</b>
<b>Current assets</b>				
Accounts receivable		1	114	3
Receivables from group companies		-	-	80
Receivables from portfolio companies		2,108	1,232	243
Other financial assets		26,007	64,264	41,181
Other current receivables		1,041	1,040	768
Prepaid expenses and accrued income		784	868	929
Cash and cash equivalents		20,838	46,132	75,869
<b>Total current assets</b>		<b>50,779</b>	<b>113,650</b>	<b>119,073</b>
<b>TOTAL ASSETS</b>		<b>1,081,606</b>	<b>1,000,637</b>	<b>889,393</b>
<b>EQUITY AND LIABILITIES</b>				
<b>Total equity</b>		<b>991,810</b>	<b>883,731</b>	<b>800,288</b>
<b>Long-term liabilities</b>				
Long-term liabilities to related parties	4	78,680	-	-
<b>Total long-term liabilities</b>		<b>78,680</b>	<b>0</b>	<b>0</b>
<b>Current liabilities</b>				
Current interest liabilities	4	-	70,000	75,864
Other financial liabilities		3,459	36,123	5,726
Accounts payable		964	989	617
Other current liabilities		1,289	1,926	1,373
Accrued expenses and prepaid income		5,404	7,868	5,525
<b>Total current liabilities</b>		<b>11,116</b>	<b>116,906</b>	<b>89,105</b>
<b>Total liabilities</b>		<b>89,796</b>	<b>116,906</b>	<b>89,105</b>
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>1,081,606</b>	<b>1,000,637</b>	<b>889,393</b>

**Condensed statement of changes in equity for the Parent Company**

SEK 000	Not	30 Jun 2021	30 Jun 2020	31 Dec 2020
<b>Opening balance, equity</b>		<b>800,288</b>	<b>1,007,753</b>	<b>1,007,753</b>
Net profit/ loss for the period		191,522	-124,022	-207,466
<b>Closing balance, equity</b>		<b>991,810</b>	<b>883,731</b>	<b>800,288</b>

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## Notes to the Financial Statements

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### 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 2020

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 loan of SEK 70 million from Sino Biopharmaceutical was during April 2021 extended until 31 December 2022, otherwise on the same terms.

Karolinska Development has the opportunity to utilize a credit facility from Sino Biopharmaceutical of up to approximately SEK 43.6 million (USD 5 million), with the same terms as the bridge loan, to cover a possible short-term liquidity need.

#### Definitions

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

**Reporting period:** January – June 2021.

#### Alternative Performance Measures

The Company presents certain financial measures in the year-end 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 78.7 million) reduced with cash and cash equivalents (SEK 20.8 million).

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

**Net asset value as of 30 June 2021:**

SEK 000	Number of shares	Fair value	Part of Karolinska Developments' net asset value	
			SEK per share <sup>3</sup>	Percent
<b>Listed assets</b>				
Lipidor	270,000	4,374	0.02	0.4%
OssDesign	5,812,638	50,977	0.29	5.1%
<b>Total listed assets</b>		<b>55,351</b>	<b>0.32</b>	<b>5.6%</b>
<b>Unlisted assets</b>				
AnaCardio		3,000	0.02	0.3%
Forendo		40,224	0.23	4.0%
Modus Therapeutics		36,752	0.21	3.7%
Svenska Vaccinfabriken Produktion		6,827	0.04	0.7%
Umecrine Cognition		640,054	3.65	64.3%
KCIF Co-Investment Fund KB <sup>1</sup>		4,938	0.03	0.5%
KDev Investments <sup>1</sup>		243,681	1.39	24.5%
<b>Total unlisted assets</b>		<b>975,476</b>	<b>5.56</b>	<b>98.0%</b>
<b>Net of other liabilities and debts<sup>2</sup></b>		<b>-35,294</b>	<b>-0.20</b>	<b>-3.5%</b>
<b>Total net asset value</b>		<b>995,533</b>	<b>5.68</b>	<b>100.0%</b>

<sup>1</sup>The companies have both listed and unlisted assets.

<sup>2</sup> Includes SEK 20.8 million cash and cash equivalents.

<sup>3</sup> In relation to the number of shares outstanding (175,421,124) 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	2021 Jan-Jun	2020 Jan-Jun	2020 Full-year
<b>Result level 1</b>			
Listed companies, realized	-	-7,214	-12,109
Listed companies, unrealized	-10,777	-31,635	-24,542
<b>Total level 1</b>	<b>-10,777</b>	<b>-38,849</b>	<b>-36,651</b>
<b>Result level 3</b>			
Unlisted companies, realized	-887	146	8,215
Unlisted companies, unrealized	224,089	-76,639	-186,942
<b>Total level 3</b>	<b>223,202</b>	<b>-76,493</b>	<b>-178,727</b>
<b>Total</b>	<b>212,425</b>	<b>-115,342</b>	<b>-215,378</b>

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

SEK 000	2021-06-30	2020-06-30	2020-12-31
<b>Accumulated acquisition cost</b>			
At the beginning of the year	770,320	1,047,600	1,047,600
Investments during the year	48,082	13,970	39,954
Sales during the year	-	-61,012	-101,856
Changes in fair value in net profit/loss for the year	212,425	-115,342	-215,378
<b>Closing balance</b>	<b>1,030,827</b>	<b>885,215</b>	<b>770,320</b>

### 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 June 2021

SEK 000	Level 1	Level 2	Level 3	Total
<b>Financial assets</b>				
Shares in portfolio companies, at fair value through profit or loss	55,351	-	975,476	1,030,827
Receivables from portfolio companies	-	2,108	-	2,108
Other financial assets	-	-	26,007	26,007
Cash and cash equivalents	20,838	-	-	20,838
<b>Total</b>	<b>76,189</b>	<b>2,108</b>	<b>1,001,483</b>	<b>1,079,780</b>
<b>Financial liabilities</b>				
Other financial liabilities	-	-	3,459	3,459
<b>Total</b>	<b>-</b>	<b>0</b>	<b>3,459</b>	<b>3,459</b>

#### Fair value as of 30 June 2020

SEK 000	Level 1	Level 2	Level 3	Total
<b>Financial assets</b>				
Shares in portfolio companies, at fair value through profit or loss	62,921	-	822,294	885,215
Loans receivable from portfolio companies	-	1,772	-	1,772
Other financial assets	-	-	64,264	64,264
Receivables from portfolio companies	-	1,232	-	1,232
Cash, cash equivalents and short-term investments	46,132	-	-	46,132
<b>Total</b>	<b>109,053</b>	<b>3,004</b>	<b>886,558</b>	<b>998,615</b>
<b>Financial liabilities</b>				
Other financial liabilities	-	-	36,123	36,123
Accounts payable	-	989	-	989
<b>Total</b>	<b>-</b>	<b>989</b>	<b>36,123</b>	<b>37,112</b>

#### Fair value (level 3) as of 30 June 2021

SEK 000	Shares in portfolio companies	Other financial assets	Other financial liabilities
At beginning of the year	732,554	41,181	5,726
Acquisitions	19,720	-	-
Disposals/ compensations	-	-	-2,370
Gains and losses recognized through profit or loss	223,202	-1,185	350
<b>Closing balance 30 June 2021</b>	<b>975,476</b>	<b>39,996</b>	<b>3,706</b>
Realized gains and losses for the period included in profit or loss	-887	-	-
Unrealized gains and losses in profit or loss for the period included in profit or loss	224,089	-1,185	350

**Fair value (level 3) as of 30 June 2020**

SEK 000	Shares in portfolio companies	Other financial assets	Other financial liabilities
At beginning of the year	884,830	62,620	46,851
Acquisitions	15,245	-	-
Disposals/ compensations	-	-	-3,114
Gains and losses recognized through profit or loss	-77,781	1,644	-7,614
<b>Closing balance 30 June 2020</b>	<b>822,294</b>	<b>64,264</b>	<b>36,123</b>
Realized gains and losses for the period included in profit or loss	146	-	-
Unrealized gains and losses in profit or loss for the period included in profit or loss	-77,927	1,644	7,614

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 June 2021**

SEK 000	Ownership	Fair value SEK 000	Valuation method <sup>1</sup>
AnaCardio	21.4%	3,000	Last post-money valuation
Forendo	8.9%	40,224	Last post-money valuation
Modus Therapeutics	52.5%	36,752	Last post-money valuation
Svenska Vaccinfabriken Produktion	30.8%	6,827	Last post-money valuation
Umecrine Cognition	74.5%	640,054	External valuation <sup>2</sup>
KCIF Co-Investment Fund KB	26.0%	4,938	A combination of last post-money valuation and share price listed company <sup>3</sup>
KDev Investments	90.1%	243,681	A combination of last post-money valuation, share price listed company and external valuation <sup>4</sup>
<b>Total level 3</b>		<b>975,476</b>	

<sup>1</sup>See The Annual Report 2020 Valuation of portfolio companies at fair value, for a description of valuation models.

<sup>2</sup>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.

<sup>3</sup>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 unlisted shares which are valued in accordance with the most recent transaction, post-money valuation.

<sup>4</sup>KDev Investments AB holds both listed shares which are valued in accordance with the closing rate on the final trading day of the period, unlisted shares which are valued in accordance with the most recent transaction (post-money valuation) and unlisted shares valued in accordance with a risk adjusted external valuation made by an independent valuation institute in June 2021 (see below regarding Dilafor).

**The holdings in KDev Investments AB**

The Fair Value (Net Fair Value) of the holding in KDev Investments, as of 30 June 2021, totalled SEK 243.7 million (SEK 341.1 million as of 30 June 2020 and SEK 0.0 as of 31 December 2020). According to the investment agreement between Karolinska Development and Rosetta Capital (see below) the proceeds received by KDev Investments (KDev Investments' Fair Value) is obligated to be distributed in accordance with a "waterfall structure". As of 30 June 2021, the potential distribution to Rosetta Capital amounts to SEK 366.7 million which render a total fair value for KDev Investments of SEK 610.4 million.

KDev Investments comprises of five companies: Aprea Therapeutics Inc, Biosergen, Dilafor, Modus Therapeutics (owned both direct by Karolinska Development and indirect by KDev Investments) and Promimic.

**Dilafor**

The Fair Value of the holding in Dilafor, as of 30 June 2021, amounts to SEK 486.7 million (80% of the Total Fair Value of KDev Investments), as of 30 June 2020 SEK 33.2 million.

The increase in the book value of the holding by SEK 243.7 million is attributable to an external valuation in connection with the positive phase 2b study with Tafoxiparin. The phase 2b study showed a significant positive impact on cervical ripening, which was the primary end point of the study. Karolinska Development commissioned an external, independent valuation institute to conduct a valuation of Dilafor. The external valuation is based on, among 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 an assumed pricing to secure financing in the form of e.g. a market flotation or the valuation in an exit via divestment or license deal, but also for the need to secure development financing.

The discount rate for the valuation is 12%, a fixed, standard parameter 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 KDev Investments of various changes in the discount rate and the price. See tables below.

### Sensitivity analysis on fair value of KDev Investments, 30 June 2021

The amounts refer to changes in fair value in KDev Investments portfolio company Dilafor, the effect of the potential distribution to Rosetta Capital has been taken into account:

#### Discount rate of 10, 11, 13 respectively 14% (12% is used in the valuation)

	10%		11%		13%		14%	
	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 <sup>1</sup>	42,854	0.24	20,924	0.12	-18,811	-0.11	-36,617	-0.21

<sup>1</sup>Sensitivity on the fair value (from the rNPV value which has been risk adjusted to reflect an assumed pricing in conjunction with a financing round (in the form of e.g. a market flotation, divestment or license deal and the need to secure development financing) on performed external valuation based on a change of +/- 1 respectively +/- 2 percentage points. The discount rate used in the valuation amounts to 12%.

#### The price of the drug candidate

	5%		-5%		+ 15%		- 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 price of the drug candidate <sup>2</sup>	19,918	0.11	-18,811	-0.11	58,547	0.33	-58,547	-0.33

	30%		-30%	
	Result/ equity		Result/ equity	
	MSEK	SEK/share	MSEK	SEK/share
Effect of a change in the price of the drug candidate <sup>2</sup>	117,094	0.67	-116,994	-0.67

<sup>2</sup>Sensitivity on fair value (from the rNPV value which has been risk adjusted to reflect an assumed pricing in conjunction with an with a financing round (in the form of e.g. a market flotation, divestment or license deal and the need to secure development financing) 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 366.7 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 amount includes repayment of SEK 15.1 million that Rosetta Capital currently has invested in KDev Investments' portfolio companies and the distribution of dividends from Rosetta Capital's common and preference shares. 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.

"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 Jun 2021	30 Jun 2020	31 Dec 2020
Karolinska Development Portfolio Fair Value (unlisted companies)	731,794	481,161	732,554
Karolinska Development Portfolio Fair Value (listed companies)	55,351	62,921	37,766
KDev Investments Portfolio Fair Value	610,352	787,679	162,916
<b>Total Portfolio Fair Value</b>	<b>1,397,497</b>	<b>1,331,761</b>	<b>933,236</b>
Potential distribution to Rosetta Capital of fair value of KDev Investments	-366,670	-446,546	-162,916
<b>Net Portfolio Fair Value (after potential distribution to Rosetta Capital)</b>	<b>1,030,827</b>	<b>885,215</b>	<b>770,320</b>

\*SEK 15.1 million repayment of investments in KDev Investments made by Rosetta Capital and SEK 351.6 million distribution of dividends to preference shares and common shares.

## NOTE 4 Liabilities to related parties

SEK 000	2021-06-30	2020-06-30	2020-12-31
<b>Long-term liabilities to related parties</b>			
Sino Biopharmaceutical <sup>1</sup>	70,000	-	-
Accrued interest Sino Biopharmaceutical	8,680	-	-
<b>Current interest liabilities</b>			
Sino Biopharmaceutical <sup>1</sup>	-	70,000	70,000
Accrued interest Sino Biopharmaceutical	-	-	5,864
<b>Total</b>	<b>78,680</b>	<b>70,000</b>	<b>75,864</b>

<sup>1</sup> The bridge loan from Sino Biopharmaceutical has during April 2021 been extended to 31 December 2022. The interest rate amounts to 8% and falls due on 31 December 2022.

## NOTE 5 Pledge assets and contingent liabilities

SEK 000	2021-06-30	2020-06-30	2020-12-31
<b>Pledge assets</b>			
Capital Adequacy Guarantee for portfolio company	2,000	-	-
<b>Contingent liabilities</b>			
Investment agreement in portfolio company	-	3,950	-
<b>Summa</b>	<b>2,000</b>	<b>3,950</b>	<b>0</b>