Q2

# Karolinska Development

Karolinska Development AB (Nasdaq Stockholm: KDEV) is a Nordic life sciences investment company. The company focuses on identifying breakthrough medical innovations in the Nordic region that are developed by entrepreneurs and leadership teams. The Company invests in the creation and growth of companies that advance these assets into commercial products that are designed to make a difference to patients' lives while providing an attractive return on investment to shareholders.

Karolinska Development has access to world-class medical innovations at the Karolinska Institutet and other leading universities and research institutes in the Nordic region. The Company aims to build companies around scientists who are leaders in their fields, supported by experienced management teams and advisers, and co-funded by specialist international investors, to provide the greatest chance of success.

Karolinska Development has established a portfolio of nine companies targeting opportunities in innovative treatment for life-threatening or serious debilitating diseases.

The Company is led by an entrepreneurial team of investment professionals with a proven track record as company builders and with access to a strong global network.

# Financial Update

- The Total Portfolio Fair Value of Karolinska Development's portfolio at the end of June 2017 was SEK 445.0 million, an increase from the Total Portfolio Fair Value of SEK 431.7 million at the end of March 2017. Net Portfolio Fair Value at the end of June 2017 was SEK 180.9 million, an increase of SEK 8.3 million compared to the end of March 2017.
- The Result of Change in Portfolio Fair Value amounted to SEK -3.5 million. The decrease was
  mainly driven by increased potential distribution to Rosetta Capital due to the investment in Modus
  Therapeutics.
- Revenue amounted to SEK 0.6 million in the second quarter (SEK 0.6 million in the second quarter 2016). Net loss amounted to SEK 11.4 million (loss of SEK 64.9 million in second quarter 2016). Earnings per share amounted to SEK -0.34 (SEK -1.43 in second quarter 2016).
- Karolinska Development's investments in portfolio companies during the second quarter amounted to SEK 11.9 million. Total investments in the portfolio companies by other specialized life science investors during the second quarter amounted to SEK 9.6 million.
- Cash, cash equivalents and short term liquidity investments decreased by SEK 22.2 million during the second quarter and amounted to SEK 189.1 million as of June 30, 2017.
- Equity in the Parent Company amounted to SEK 41.2 million at the end of June 2017.

# Karolinska Development – Q2 Highlights

- Karolinska Development announced the results of the set-off issue (April 2017) aimed at strengthening the Company's equity position and improving the Company's overall financial risk profile. The offered subscription price for the set-off issue was SEK 6.17 per new B share and convertible holders accepted to offset SEK 67 million of the convertible debt. As a result, 10,871,698 new B shares were issued.
- The Company announced leadership changes with Viktor Drvota being promoted to CEO, replacing Jim Van heusden, who decided to step down (April 2017). At the same time, Chairman Bo Jesper Hansen also decided to step down, and board member Niclas Adler was elected as new chairman at the General Meeting in May 2017.
- Further changes were made to the Karolinska Development board of directors at the General Meeting, with Hans-Olov Olsson, Anders Härfstrand and Magnus Persson elected as directors bringing significant board, executive and investment experience from the biopharmaceutical and other global industries.
- Umecrine Cognition presented promising results from its Phase I study with GR3027 at the EASL International Liver Congress 2017 (April 2017).
- Modus Therapeutics announces appointment of Ellen K. Donnelly, Ph.D. as CEO (April 2017).

### Post Period Events

- Aprea Therapeutics announced the first patient enrolled in Phase Ib/II clinical study of APR-246 for the treatment of platinum-resistant high-grade serous ovarian cancer (HGSOC) (August 2017).
- Xspray Pharma announced a planned listing on Nasdaq First North. Karolinska Development and KCIF Co-Investment Fund KB is eligible to receive shares in Xspray Pharma should the listing and shar issue complete successfully. Karolinska Development is eligible to receive 462,115 shares and to receive a further 29,691 shares base on its participation in KCIF (August 2017).
- Karolinska Development announced that it has appointed Fredrik Järrsten as Chief Financial
  Officer. Mr Järrsten, will join the Company towards the end of 2017. Mr Järrsten will replace
  Christian Tange who, after 4 years with Karolinska Development, has decided to pursue other
  opportunities. Mr Tange will remain with the Company until after Mr Järrsten's arrival to ensure a
  smooth and orderly hand over period (August 2017).

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

"I am very pleased to present my first set of interim results as CEO of Karolinska Development. With our portfolio companies progressing according to their development plans, we are working closely with the management teams to ensure they are well prepared and well positioned to capture the value that we anticipate being created from a series of important commercial and clinical milestones in the next 12-18 months. These events also present multiple opportunities for Karolinska Development to crystallize value and generate return on investment for our investors."

#### **Contact details**

For more information please contact:

Viktor Drvota, Chief Executive Officer

+46 73 982 52 02

viktor.drvota@karolinskadevelopment.com

**Christian Tange** Chief Financial Officer

+46 73 712 14 30

christian.tange@karolinskadevelopment.com

# Chief Executive's Report

### Karolinska Development

Karolinska Development's strategy and efforts over the past two years have focused on ensuring its portfolio companies are equipped with strong, experienced leadership and the necessary funding to reach defined value-inflection points, either commercial or clinical. The Company believes that its companies are now well positioned to reach these crucial milestones in the next 12-18 months, at which point multiple opportunities for value creation and value crystallization are expected (e.g. via further financings, licensing agreements, acquisition, or public flotations).

The next priority for Karolinska Development therefore, and an area of increasing focus and activity in recent months, is to work closely with its portfolio company management teams to prepare them for these milestones and ensure they are best placed to capitalize on them when they occur.

Karolinska Development's portfolio companies are in good shape and making steady progress according to their development plans, which are designed to:

- Advance pipeline candidates through clinical development towards Phase 2 clinical proof of concept (therapeutics companies); and
- Execute their commercialization plans and drive sales of innovative products (medtech companies).

Longer term, Karolinska Development aims to identify new investment opportunities across the Nordic region, to expand and diversify its portfolio into broader areas of life sciences with near-term value-inflection points, such as medical technologies, diagnostics or digital health. The Company will also seek to make investments in under-valued companies on the public markets in the region and in more mature investments, where returns may be realized more quickly than from early stage companies. Karolinska Development will look to syndicate investments with experienced life science investors.

In addition, the Company continues to believe it can generate value from divested companies through its earn-out agreements.

#### Set-off issue

In April 2017 Karolinska Development announced the results of the set-off issue aimed at strengthening the Company's equity position and improving the Company's overall financial risk profile. The offered subscription price for the issue was SEK 6.17 per new B share and convertible holders accepted to offset SEK 67 million of the Company's SEK 451 million convertible debt. As a result, 10,871,698 new B shares were issued.

#### **New leadership**

During the second quarter, Karolinska Development announced changes to its executive leadership and board of directors. In April, the Company's Chief Investment Officer and Deputy CEO Viktor Drvota was promoted to Chief Executive Officer and formally took over as CEO on 1 June 2017. He replaces Jim Van heusden, who decided to step down and is leaving on terms in line with his employment agreement and the Guidelines for compensation for senior executives.

Also in April, Chairman Bo Jesper Hansen decided not to stand for re-election, and board member Niclas Adler was elected as new chairman at the General Meeting in May 2017. In addition, Khalid Islam, Carl Johan Sundberg and Henrijette Richter all left the board at the General Meeting and were replaced by Hans-Olov Olsson, Anders Härfstrand and Magnus Persson, who together bring significant board, executive and investment experience from the biopharmaceutical and other global industries.

Hans-Olov Olsson is the former Chairman of Volvo Cars and Senior Vice President of Ford Motor Company, and is on the board a several Swedish companies and industry organizations.

Anders Härfstrand has significant experience in the biopharmaceutical sector. He was a senior commercial advisor to HBM Partners, a global leader in healthcare-focused investing, and has held CEO roles at a number of biotech companies, including BBB Therapeutics BV, Humabs BioMed SA and Nitec Pharma AG. Mr. Härfstrand also worked previously in various executive and management roles at pharmaceutical companies Serono, Pfizer and Pharmacia.

Magnus Persson is a former Partner at Healthcap, a leading European venture capital firm based in Sweden and investing exclusively and globally in life sciences. He is also chairman of Galecto Biotech AS, SLS Invest AB, Health Innovation Platform AB, Cantargia AB and Inititator Pharma; and a board member of Albumedix AS, Immunicum AB and Medical Prognosis Institute AS.

### A portfolio with blockbuster potential

At the end of June 2017, Karolinska Development's portfolio comprised nine companies. These 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.

Important commercialization or clinical development milestones are expected for these companies during the next 12-18 months, which if positive would create significant value that we are focused on realizing for Karolinska Development and its shareholders. These are:

#### Medtech companies (2017-2018)

- OssDsign Launch and commercial roll out of products in the US and Europe through a dedicated distributor network, also targeting regulatory approvals in Japan.
- Promimic further product launches and license agreements with major manufacturers.

#### Therapeutics companies (2018)

- Dilafor Phase II results with tafoxiparin in obstetric indications.
- Forendo Pharma Phase I results with its HSD17B1 enzyme inhibitor for the treatment of endometriosis.
- Modus Therapeutics Phase II results with sevuparin in sickle cell disease.
- Aprea Therapeutics Phase II results from the PiSARRO study of APR-246 in relapsed highgrade serous ovarian cancer patients.
- Umecrine Cognition: Phase IIa results in hepatic encephalopathy
- BioArctic Phase II results with BAN2401, a monoclonal antibody for the treatment of Alzheimer's disease.

A key objective for Karolinska Development is to ensure that its companies are financed to achieve these value-inflection points, and new funds have been raised through the syndication of deals with experienced international life sciences investors.

### **Key Portfolio Developments**

In April, Umecrine Cognition presented positive clinical results from a Phase I study investigating GR3027 for the treatment of hepatic encephalopathy (HE) demonstrating safety, tolerability and target engagement. HE is a serious complication in acute and chronic liver disease, including cirrhosis, and there are no treatments available today that directly target the brain abnormalities in HE.

Also in April, Dr. Ellen Donnelly was appointed as CEO of Modus Therapeutics. Dr. Donnelly previously held numerous leadership positions at Pfizer in Clinical Operations; Project and Portfolio Management; and Research. Most recently she was responsible for Clinical Operations for Pfizer's Neuroscience and Pain therapeutic area. Dr. Donnelly also brings biotech and consulting experience to the CEO role, having worked in positions within U.S. biotech and management consulting prior to her time at Pfizer.

#### **Outlook**

Karolinska Development's portfolio companies are in good shape and making steady progress according to their development plans. Karolinska Development is focusing on supporting and preparing these companies to capture the maximum value from a series of important milestones they are poised to deliver over the next 12-18 months. Achieving these milestones is expected to generate multiple opportunities for value creation and value crystallization, through further financings, licensing agreements, acquisition, or public flotations. Given the strength of its investee portfolio and the progress it is making, the Company is enthusiastic and optimistic about its future.

# Portfolio Companies

### A Focused Portfolio with Exciting Potential

Karolinska Development has a focused portfolio of nine therapeutic and medtech companies with exciting 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 year, Karolinska Development has optimized the clinical programs of the portfolio companies to reach clinical meaningful value inflection points in 2018. Experienced leadership has been attracted to the management and board of the portfolio companies. Furthermore, Karolinska Development has supported the financing of the portfolio companies through syndication with experienced international and domestic professional life science investors. As a result, the majority of the companies in the portfolio are now well-financed and in a good position to deliver key value-generating clinical or commercial milestones over the next 12-18 months.

The illustration below gives an overview of the portfolio. The therapeutics companies' next key value-generating milestones are expected in 2018, when the majority of the companies are expected to obtain Phase II proof-of-concept data. The medtech companies OssDsign and Promimic are revenue generating and have significant milestones mapped out in 2017/2018 regarding execution of their commercial strategies.

Karolinska Development's investment model for its therapeutic companies is to invest in syndicates with other professional life science investors until proof-of-concept is demonstrated in Phase II trials, at which point the investor syndicate will look at options such as trade sales, IPOs or licensing deals with potential buyers to monetize the investments. For medtech companies, the aim is to finance the companies until break-even and then look at options such as trade sales, IPOs or licensing deals with potential buyers to monetize the investments.





Project APR-246

Primary indication Ovarian cancer

**Development Phase** Phase IIa

Holding in company\*
Karolinska Development 1%\*\*
KDev Investments 17%

#### Other investors

Versant Ventures (US), 5AM Ventures (US), HealthCap (Sweden), Sectoral Asset Management (Canada), KCIF Co-Investment Fund KB

#### Origin Karolinska Institutet

More information aprea.com

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

# Aprea Therapeutics AB



# A unique approach to treating broad range of cancers

Aprea Therapeutics (Stockholm, Sweden and Boston, US) is a biotech company developing novel anticancer compounds targeting the tumor suppressor protein p53. Mutations of the p53 gene occur in around 50% of all human tumors. These mutations are often associated with resistance to anticancer drugs and poor overall survival, representing a major unmet medical need in the treatment of cancer. Aprea's lead drug candidate APR-246 is a first-in-class compound that reactivates mutant p53 protein, inducing programmed cell death in human cancer cells.

APR-246 is currently in a Phase IIa trial of a combined Phase Ib/IIa clinical study (the PiSARRO study), investigating the drug candidate's safety and efficacy in combination with chemotherapy in second-line treatment of patients with platinum-sensitive high-grade serous ovarian cancer (HGSOC). The Phase Ib component is complete and has established safety, tolerability and pharmacokinetics of APR-246 in combination with standard chemotherapy. The Phase IIa portion of the PiSARRO study will enrol 250 up to 400 relapsed platinum-sensitive HGSOC patients in Europe and the US. Patients will be randomized between carboplatin and pegylated liposomal doxorubicin with or without APR-246; the primary endpoint for the study is progression-free survival.

In addition to the ongoing Phase IIa clinical trial in platinum-sensitive HGSOC, Aprea is enrolling a Phase Ib/II study in myelodysplastic syndrome, a Phase Ib/II study in platinum-resistant HGSOC and is expecting to initiate additional clinical studies of APR-246 in other indications in 2017.

#### The market

The lead target indication for APR-246 is ovarian cancer. As the 6<sup>th</sup> most common cancer in women, over 60,000 new patients are diagnosed worldwide each year. High-grade serous ovarian cancer (HGSOC) accounts for 70-80% of all deaths from ovarian cancer. Over 90% of these patients are Stage III/IV and median survival is less than 4 years. Approximately 60% of ovarian cancer patients, and ≥95% of HGSOC patients, have p53 mutations at diagnosis. Therefore, combination treatment of APR-246 with chemotherapy could provide significant benefit.

#### Recent progress

- Research collaboration initiated with Memorial Sloan Kettering Cancer Center in US to further evaluate APR-246 with multiple other cancer agents across multiple tumor types (March 2017).
- First patient enrolled in Phase Ib/II study in myelodysplastic syndrome (May 2017) and in Phase Ib/II study in platinum-resistant HGSOC (August 2017)

- Complete recruitment into the Phase IIa part of the PiSARRO study in 2018.
- Results of Phase IIa part of PiSARRO study expected in 2018.



#### Project

Sevuparin

#### Primary indication Sickle cell disease (SCD)

**Development Phase** Phase II

# Holding in company\* KDev Investments 73%

### Other investors

The Foundation for Baltic and East European Studies, Praktikerinvest

#### Origin

Karolinska Institutet, Uppsala University

### More information

modustx.com

\*Fully-diluted ownership based on current investment plans

# Modus Therapeutics AB



# Targeting relief for sickle cell disease patients

Modus Therapeutics (Stockholm, Sweden) is developing sevuparin, an innovative, disease-modifying drug which has potential to become the best-in-class treatment for sickle cell disease (SCD).

Sevuparin's anti-adhesive mechanism means it has the potential to prevent and resolve the microvascular obstructions experienced by SCD patients. These obstructions cause the severe pain experienced by patients during Vaso-Occlusive Crises (VOCs) and result in high morbidity through organ damage as well the risk of premature death.

Modus is conducting a Phase II study of sevapurin in hospitalized SCD patients experiencing VOC, the results of which are expected in 2018. The trial is targeting 150 evaluable patients who will have been randomized to receive either an intravenous infusion of sevuparin or placebo on top of standard pain medication. This proof-of-concept study is designed to demonstrate reduced time to resolution of VOC, defined as freedom from parenteral opioid use and readiness for discharge from hospital. Secondary endpoints include pharmacokinetics and safety. The study is taking place in Europe and the Middle East under a co-development deal with Ergomed, which co-invests into the trial in return for an equity stake in Modus.

Modus is also aiming to develop a presentation of sevuparin that could be self-administered by SCD patients in a timely manner to prevent VOCs developing.

#### The market

SCD is an orphan disease with approximately 100,000 patients in the US and 35,000 patients in Europe. In addition to this, there is a large patient pool in the Middle East, India, South America and Africa. The average number of VOCs per patient seeking hospital care is in the order of one VOC per year. The commercial impact of a SCD treatment that reduces hospital stay and the use of opioid analgesics is expected to be substantial. A label expansion to include also the preventive treatment would expand the market size significantly.

#### Recent progress

- SEK 32 million (USD 3.6 million) raised from existing investors (Feb 2017).
- Ellen K. Donnelly, Ph.D., appointed as Chief Executive Officer (April 2017).

- Complete recruitment into Phase II proof-of-concept trial in 2018.
- Results from Phase II trial expected in 2018.



Project GR3027

Primary indication
Hepatic encephalopathy

**Development Phase** Phase Ib/IIa

Holding in company\* Karolinska Development 68%

Other investors Norrlandsfonden, Fort knox förvaring AB, Partnerinvest

**Origin** Umeå University

More information

umecrine cognition.com

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

# **Umecrine Cognition AB**



### Unique approach to hepatic encephalopathy treatment

Umecrine Cognition (Solna, Sweden) is developing a therapy that represents a new target class for several major CNS-related disorders. The primary focus is on hepatic encephalopathy (HE), which is a serious neuropsychiatric and neurocognitive complication in acute and chronic liver disease (including cirrhosis). The disorder has detrimental effects on health-related quality of life as a consequence of diverse and debilitating symptoms. An increase in the inhibitory GABA (a neurotransmitter) system in the CNS is believed to be a main driver for the clinical signs and symptoms. Certain neuroactive steroids are key drivers of this increased GABA signaling, causing impaired cognitive and motor function. This makes neurosteroid-antagonists as developed by Umecrine Cognition, a credible therapeutic class to explore for novel treatments in HE.

Umecrine Cognition's exciting drug candidate GR3027 is a first-in-class drug to treat acute life-threatening HE and long-term maintenance in minimal HE caused by endogenous GABA-steroids. In 2016, the company announced positive data from a Phase la trial with the drug candidate, demonstrating safety, tolerability and CNS target engagement. GR3027 is now undergoing a combined Phase Ib/IIa clinical study aiming to evaluate the safety and pharmacokinetics in healthy adults and patients with cirrhosis, assess the potential efficacy of the GR3027 on cognitive function in patients with cirrhosis and HE, and determine the Phase IIb dose.

#### The market

HE is a severe disorder with a large unmet need. In total, liver cirrhosis affects up to 1% of US and EU populations. Between 125,000 and 200,000 patients with cirrhosis in the US are hospitalized due to complications of HE. Once HE develops, mortality reaches 22-35% after five years. HE is also associated with large societal and individual costs. The total cost for hospitalizations with HE in the US is estimated to around USD 2 billion.

#### Recent progress

- First patient included in clinical Phase Ib/IIa study with GR3027 for HE (March 2017).
- Promising results from the Phase la study presented at the International Liver Congress, the annual meeting of the European Association for the Study of the Liver, in Amsterdam (April 2017)

- Complete recruitment into the Phase Ib portion of combined study in 2017.
- Results from combined Phase Ib/IIa study expected in 2018.



# **Project** Tafoxiparin

### **Primary indication**

Protracted labor

### Development Phase

Phase II

#### Holding in company\* KDev Investments 35%

### Other investors

The Foundation for Baltic and East European Studies, Praktikerinvest, Rosetta Capital, Lee's Pharma

#### Origin

Karolinska Institutet

### More information

Dilafor.com

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

### Dilafor AB



### Reducing complications with childbirth

Dilafor (Stockholm, Sweden) is a drug development company focusing on developing tafoxiparin for obstetric indications. The company's primary goal with tafoxiparin is to decrease the incidence of slow progress of labor both after induction of labor and after spontaneous onset of labor. Tafoxiparin has shown in a Phase II clinical trial encouraging evidence that it can decrease the proportion of women with labor more than 12 hours. A Phase IIb dose-finding study is underway.

Protracted labor (i.e. labor that lasts more than 12 hours) is the main cause of emergency surgical deliveries, such as caesarian section. The condition is often associated with complications for both mother and child, which lead to serious short and long-term consequences and substantial health care costs.

The Phase IIb study aims to test tafoxiparin/placebo in addition to standard care (oxytocin infusion) in term-pregnant first-time mothers that, after spontaneous onset of labor, require labor augmentation due to primary slow progress or labor arrest. The target is to enroll 360 pregnant women into the study in Europe.

Dilafor has a license and partnership agreement with Lee's Pharmaceutical, which will conduct and finance clinical Phase II and Phase III programs of tafoxiparin in China.

#### The market

It has been estimated that up to 40% of pregnant women run into complications during childbirth in the form of protracted labor, where pharmaceutical therapy is relevant. This number represents the primary target population for tafoxiparin, which indicate a substantial market potential. Existing pharmacological therapies that improve uterine contractions are usually insufficient, as they are not working well enough in up to 50% of cases. Consequently, there is strong interest in better treatments such as tafoxiparin, which has "first-in-class" potential.

#### Recent progress

• Initiated a Phase IIb dose-finding study with tafoxiparin in Europe (Jan 2017).

- Complete recruitment into Phase IIb dose-finding trial in 2017.
- Results from Phase IIb trial expected 2018.



#### **Project**

OSSDSIGN® Cranial and OSSDSIGN® Facial

#### Primary indication Cranial implants

Craniai impiants

#### **Development Phase** Marketed

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

#### Other investors

SEB Venture Capital, Fouriertransform

#### Origin

Karolinska University Hospital, Uppsala University

#### More information ossdsign.com



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

# OssDsign AB



# Commercializing the best craniofacial implants

OssDsign (Uppsala, Sweden) is an innovator, designer and manufacturer of 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, as well as selected non-European markets including Singapore and Israel. The Company is commercializing its cranial implant in the US, and is also undertaking regulatory and commercial activities in Japan.

OssDsign's commercial strategy is focused on building sales of its innovative products through a combination of its internal sales organization and distribution partnerships, and the Company is well-funded to support this strategy.

OssDsign's personalized bone regeneration technology provides improved healing properties that are clinically proven to enhance patient outcomes. By combining a regenerative ceramic material reinforced with titanium, with tailored patient-specific designs enabled by state-of-the-art computer-aided design, 3D printing and moulding techniques, the technology platform aims to contribute to the permanent healing of a range of bone defects. Enhanced healing means a better implant solution for patients and cost savings for hospitals.

#### The market

OssDsign is focusing on the market for craniomaxillofacial (CMF) implants. The total market size was estimated to USD 1,8 billon in 2016 and is expected to grow at an CAGR of 5-9% worldwide over the five next years. The market for OssDsign's lead product in cranioplasty alone is estimated to amount to approximately to USD 200 million. OssDsign pursues a focused business strategy on a well-defined patient population. The advantages are that the targeted procedures are carried out in a limited number of easily identifiable hospitals around the world. The indications are relatively price insensitive and easy to access on many markets from a regulatory perspective.

#### Recent progress

- Launch of OSSDSIGN® Cranial in the US (April 2017)
- OSSDSIGN® Cranial presented at the American Association of Neurological Surgeons (AANS) scientific yearly meeting in Los Angeles (April 2017).
- Agreement with Matador Medical for US distribution of OSSDSIGN® Cranial (Feb 2017).
- 510(k) clearance granted by US FDA to market OSSDSIGN® Cranial in the US (Jan 2017).
- European distributor network expanded with partnerships signed in five countries (Jan 2017).

#### **Expected milestones**

 Launch of OSSDSIGN® Cranial and OSSDSIGN® Facial on new EU markets and selected markets outside of Europe during 2017.



**Project** HA<sup>nano</sup> Surface

Primary indication Implant surface

**Development Phase** Marketed

Holding in company\* KDev Investments 35%

Other investors
ALMI Invest,
K-Svets Venture,
Chalmers Ventures

**Origin**Chalmers University of Technology

More information

Promimic.com

\*Fully-diluted ownership based on current investment plans

### Promimic AB



# Coatings to enhance the properties of medical implants

Promimic (Gothenburg, Sweden) is a biomaterials company that develops and markets a unique coating for medical implants called HA<sup>nano</sup> Surface, which increases their integration into bone and anchoring strength.

The HA<sup>nano</sup> Surface is nanometer thin, which helps preserve the micro-structure of the implant and reduces the risk of cracks in the coating. Furthermore, the coating improves the hydrophilicity of the implant, which increases the possibility for bone cells to attach to the surface. The HA<sup>nano</sup> Surface has been evaluated in both *in vitro* and *in vivo* studies, which have shown that it can reduce healing times. The coating process is easy to implement in the industrial scale production of implants.

Promimic has established a sales operation in the US and a series of development and commercial partnerships, including with Sistema de Implante Nacional (S.I.N), a leading provider of dental implants in Brazil, which launched the first product using Promimic's technology in January 2016. Promimic has also signed an agreement with Amendia Inc. (US) which allows Amendia to develop the HA<sup>nano</sup> Surface technology for use with Amendia's patient-focused spinal implants.

A manufacturing facility for HA<sup>nano</sup> coated implants to supply the US and Chinese markets has been established by the Company's partner, Danco Anodizing.

#### The market

Promimic is focusing on the markets for dental and orthopedic implants, which collectively represents a worldwide market opportunity for Promimic of USD 600 - 800 million. The implant industry is a large, high-growth market which delivers high profit margins. The competition amongst implant manufacturers is fierce and each market segment is dominated by four-to-eight global companies. The strategies of many of these companies rely on in-licensing new technologies in order to differentiate their products and strengthen their market position. Promimic has a business model designed to meet these needs. It is centered on out-licensing its HA<sup>nano</sup> Surface technology to leading implant manufacturers so that they can incorporate it into their products.

#### Recent progress

 Magnus Larsson appointed as Chief Executive Officer, replacing Ulf Brogren, who relocated to the US to lead Promimic Inc. as Head of Sales (Jan 2017).

#### **Expected milestones**

Further product launches and license agreements with major manufacturers during 2017.

# 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 is 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. The financial reporting for the Parent company and the Investment Entity has been equated in the second quarter 2017 by the Parent company's voluntary change of accounting principles to valuation at fair value through profit or loss.

The change has been implemented in order to make the accounting more efficient and promote transparency by improving correspondence with the financial reporting in the Investment Entity. Restated comparative figures in note 5.

Amounts with brackets in refer to the corresponding period during the prior year unless otherwise stated.

### Financial development for the Investment Entity in summary

SEK000	2017 Apr-Jun	2016 Apr-Jun	2017 Jan-Jun	2016 Jan-Jun	2016 Full- year
Condensed income statement					
Result of change in fair value in portfolio companies	-3.5	-58.9	-9.2	-141.1	-147.0
Net profit/loss	-21.3	-75.8	-46.4	-175.9	-216.8
Balance sheet information					
Cash, cash equivalents and short-term investments <b>Share information</b>	189.1	268.4	189.1	268.4	248.1
Earnings per share, weighted average, before and after dilution (SEK)	-0.3	-1.4	-0.8	-3.3	-4.1
Net asset value per share (SEK) (Note 1)			0.7	1.4	0.7
Equity per share (SEK) (Note 1)			0.6	1.3	0.6
Share price, last trading day in the reporting period (SEK)			4.9	7.3	6.0
Portfolio information					
Investments in portfolio companies	11.8	9.4	40.7	17.2	28.9
Of which investments not affecting cash flow	1.1	0.4	1.8	8.0	1.9
Fair value of portfolio holdings	180.9	143.7	180.9	143.7	149.4

### Financial Development for the Investment Entity in 2017

#### Investments

Investments in the portfolio in second quarter 2017 by external investors and Karolinska Development amounted to SEK 21.4 million, whereof 45% by external investors.

Karolinska Development invested SEK 11.8 million, of which SEK 10.7 million was cash investments and SEK 1.1 million was non-cash investments (accrued interest on loans). Investments by external investors amounted to SEK 9.6 million.

Karolinska Development's cash investments were made one portfolio company: Modus Therapeutics SEK 10.7 million.

External investors invested in two portfolio companies: Biosergen SEK 3.3 million and Modus Therapeutics SEK 6.3 million.

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

SEK 000	Karolinska Development	External Investors	Total Invested Q1-Q2 2017
Umecrine Cognition	12.3	4.2	16.5
OssDsign	10.2	27.5	37.7
Modus Therapeutics	17.9	9.2	27.1
KCIF	0.3	0.8	1.1
Dilafor	0.0	13.7	13.7
Lipidor	0.0	2.4	2.4
Biosergen	0.0	3.3	3.3
Total	40.7	61.1	101.8

#### Portfolio Fair Value

Fair Value of the portfolio companies owned directly via Karolinska Development increased by SEK 1.3 million during second quarter 2017. The main reason for the increase was interest on loans in Umecrine Cognition and OssDsign.

Fair Value of the portfolio companies owned via KDev Investments increased by SEK 12.1 million during second quarter 2017, due to the investments in Modus Therapeutics.

Total Fair Value from portfolio companies owned directly by Karolinska Development and via KDev Investments increase by SEK 13.3 million in second quarter 2017.

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 was increased by SEK 5.1 million, resulting in Net Portfolio Fair Value increasing by SEK 8.3 million in second quarter 2017.

SEK 000	2017-06-30	2017-03-31	Q2 vs Q1 2017
Karolinska Development Portfolio Fair Value	163.8	162.6	1.3
KDev Investments Portfoilio Fair Value	281.2	269.1	12.1
Total Portfoilio Fair Value	445.0	431.7	13.3
Potential distribution to Rosetta Capital of fair value of			
KDev Investments	264.1	259.0	5.1
Net Portfolio Fair Value (after potential distribution to			
Rosetta Capital)	180.9	172.6	8.3

Total Portfolio Fair Value at 30 June 2017 amounted to SEK 445.0 million and the potential distribution to Rosetta Capital amounted to SEK 264.1 million. Net Portfolio Fair Value at 30 June 2017 amounted to SEK 180.9 million.

#### Results second quarter 2017 (comparable numbers second quarter 2016)

During second quarter 2017 Karolinska Development's revenue remained at the same level as in second quarter 2016 – SEK 0.6 million. The revenue primarily consists of services provided to portfolio companies. Revenue for the period January – June 2017 amounted to SEK 1.2 million.

Other expenses decreased with SEK 0.8 million in second quarter 2017 compared to second quarter 2016. A significant part of the reduced costs was, as previous quarter, decreased costs for premises. Other expenses for the period January – June 2017 amounted to SEK 5.7 million.

Personnel Costs amounted to SEK 5.3 million in second quarter 2017. The SEK 2.7 million increase compared to same period 2016 was due to extraordinary low cost in 2016 as the costs for the 2013 share program (PSP2013) was lower than original accrued for. Personnel cost during second quarter 2017 was at the same level as the first quarter 2017. The personnel cost for the period January – June amounted to SEK 11.0.

As Net Portfolio Fair Value increased with SEK 8.3 million when investments in the portfolio amounted to SEK 11.8 million the Result of Change in Portfolio Fair Value in the profit and loss statement amounted to SEK -3.5 million in second quarter 2017. The main reason for this was the increased potential distribution to Rosetta Capital due to the investment in Modus Therapeutics.

The Operational profit/loss for second quarter 2017 amounted to SEK -11.4 million which was in line with expectations. The Operational profit/loss for the period January – June amounted to SEK -24.7 million.

Financial costs decreased in second quarter 2017 compared to first quarter 2017. This was a consequence of a part of the convertibles being set-off to shares at the set-off offering in first quarter 2017.

With Operational profit/loss of SEK -11.4 million (SEK -64.9 million) and Financial net of SEK -9.8 million (SEK -10.9 million), the Investment Entity's Profit/loss before tax amounted to SEK -21.3 million in second quarter 2017 (loss of SEK -75.8 million). The Profit/loss before tax for the period January – June amounted to SEK -46.4 million.

#### Financial position (comparable numbers refer to 31 December 2016)

The Investment Entity's equity amounted to SEK 41.2 million at 30 June 2017 compared to SEK 29.8 million on 31 December 2016. The increase was a combination of the SEK -21.3 million Profit/Loss and the increase in equity from the set-off issue.

The Investment Entity's equity to total assets ratio was 10% on 30 June 2017 compared to 7% on 31 December 2016.

After paying operational costs and investments in second quarter 2017 cash and cash equivalents together with short-term investments 30 June 2017 amounted to SEK 189.1 million.

# Financial Development - Parent Company

The Parent Company refers to Karolinska Development AB (comparable numbers second quarter 2016).

During the second quarter, a voluntary change of accounting principle has been made for the Parent company due to that investments in portfolio companies, loan and equity, and other financial assets and liabilities are now valuated at fair value through profit or loss. The impact of the Net profit/ loss is SEK 16.3 million, of which SEK 15.5 million on Retained earnings and SEK 0.8 million on the Profit/loss for this year. In the balance sheet, this leads to an increase in the fair value of the portfolio with SEK 12.2 million and an increase of other financial assets with SEK 8.9 million, but also a decrease of financial liabilities with SEK 4.8 million. Comparable numbers are restated, see below.

During second quarter 2017, the Parent Company's Net profit/loss amounted to SEK -21.3 million (SEK -66.8 million), a change of SEK 45.5 million compared to second quarter 2016. Accumulated for the year, Net profit/loss amounted to SEK -46.4 million.



The result in second quarter 2017 and the effect of accounting principles being equated to the Investment Entity's accounting principles decreased equity from SEK 46.5 million 31 March 2017 to SEK 41.2 million 30 June 2017.

### Information on Risks and Uncertainties

### **Investment Entity and Parent Company**

#### Financial risks

On 6 February 2017 Karolinska Development announced that it had to strengthen its equity position, thereby reducing its overall financial risk profile and ensure the requirements regarding the size of the equity in the Swedish Companies Act (Aktiebolagslagen). Therefore, Karolinska Development launched a set-off issue of B-shares, with approval from shareholders granted at an Extraordinary General Meeting held on 8 March 2017. Convertible holders accepted to offset SEK 67 million of the company's convertible debt, and as a result equity in the Parent Company increased from SEK 14.3 million end of December 2016 to SEK 46.5 million end of March 2017. The reduction in risk was less than anticipated,

No new risk areas have been identified since 31 December 2016. For a detailed description of risks and uncertainties, see the annual report 2016.

The Board of Directors and the CEO hereby certify that this interim report gives a true and fair view of the operations, financial position and results of operations of the Parent Company and the Investment Entity and describes the material risks and uncertainties faced by the company.

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

Solna, 29 August 2017

Niclas Adler Tse Ping Vlad Artamonov

Chairman

Anders Härfstrand

Hans-Olov Olsson Magnus Persson

Hans Wigzell Viktor Drvota

CEO

### Dates for Publication of Financial Information

Interim Report January-September 2017 31 October 2017 (new date)

Karolinska Development is required by law to publish the information in this interim report. The information was published on 29 August 2017.

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 Swedish version shall prevail.

# **Financial Statements**

### Condensed income statement for the Investment Entity

SEK 000	Note	2017 Apr-Jun	2016 Apr-Jun	2017 Jan-Jun	2016 Jan-Jun	2016 Full-year
Dividend <sup>1</sup>		-	-	-	-	3,333
Other revenue		560	607	1,176	1,215	2,027
Revenue		560	607	1,176	1,215	5,360
Other expenses		-3,185	-3,995	-5,650	-7,425	-15,415
Personnel costs Depreciation of tangible non-current		-5,291	-2,613	-11,003	-7,555	-17,344
assets		-	-53	-	-106	-106
Result of change in fair value of shares in portfolio companies Result from sale of shares in portfolio	2	-3,497	-58,894	-9,222	-141,146	-146,988
companies		-	-	=	-	444
Operating profit/loss		-11,413	-64,948	-24,699	-155,017	-174,049
Financial net		-9,837	-10,893	-21,740	-20,923	-42,783
Profit/loss before tax		-21,250	-75,841	-46,439	-175,940	-216,832
Taxes		-	-	-	-	-
NET PROFIT/LOSS FOR THE PERIOD		24 250	7E 044	-46,439	-175,940	246 922
FOR THE PERIOD		-21,250	-75,841	-40,439	-175,940	-216,832

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

SEK 000	Note	2017 Apr-Jun	2016 Apr-Jun	2017 Jan-Jun	2016 Jan-Jun	2016 Full-year
Net/profit loss for the period		-21,250	-75,841	-46,439	-175,940	-216,832
Total comprehensive income/loss for the period		-21,250	-75,841	-46,439	-175,940	-216,832

### **Earnings per share for the Investment Entity**

SEK	Note	2017 Apr-Jun	2016 Apr-Jun	2017 Jan-Jun	2016 Jan-Jun	2016 Full-year
Earnings per share, weighted average, before and after dilution		-0.34	-1.43	-0.80	-3.31	-4.08
Number of shares, weighted average		63,375,596	53,205,335	58,326,207	53,205,335	53,210,223

<sup>&</sup>lt;sup>1</sup> Dividend from BioArctic



### Condensed balance sheet for the Investment Entity

SEK 000	Note	30 Jun 2017	30 Jun 2016	31 Dec 2016
ASSETS				
Tangible assets				
Tangible non-current assets		-	-	-
Financial assets				
Shares in portfolio companies at fair value				
through profit or loss	2	180,899	143,690	149,408
Loans receivable from portfolio companies		967	951	957
Other financial assets		38,113	38,113	38,113
Total non-current assets		219,979	182,754	188,478
Current assets				
Receivables from portfolio companies		778	1,287	229
Other current receivables		242	1,025	660
Prepaid expenses and accrued income		903	612	806
Short-term investments, at fair value through profit or loss		177,506	257,761	237,545
Cash and cash equivalents		11,621	10,613	10,602
Total current assets		191,050	271,298	249,842
TOTAL ASSETS		411,029	454,052	438,320
EQUITY AND LIABILITIES		,	,	,
Total equity		41,180	70,660	29,815
Long-term liabilities				
Convertible loan	3	357,550	371,821	394,438
Other financial liabilities		4,807	4,798	4,798
Total long-term liabilities		362,357	376,619	399,236
Current liabilities				
Accounts payable		950	974	1,460
Liabilities to portfolio companies		-	513	-
Other current liabilities		767	552	960
Accrued expenses and prepaid income		5,775	4,734	6,849
Total current liabilities		7,492	6,773	9,269
Total liabilities		369,849	383,392	408,505
TOTAL EQUITY AND LIABILITIES		411,029	454,052	438,320

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

SEK 000	Note	2017-06-30	2016-06-30	2016-12-31
			restated	restated
Share capital		26,732	26,725	26,725
Share premium <sup>1</sup>	1	1,884,310	1,884,310	1,884,310
Retained earnings <sup>1</sup>	1	-1,881,227	-1,663,154	-1,663,154
Opening balance, equity		29,815	247,881	247,881
Net profit/ loss for the period		-46,439	-175,940	-216,832
Effect of incentive programs		-123	-1,281	-1,241
Set-off issue <sup>2</sup>		57,927	-	-
Reduction of share capital <sup>3</sup>		-	-	-
Share issue		-	-	7
Share capital		643	26,725	26,732
Share premium		1,970,736	1,884,310	1,884,310
Retained earnings		-1,930,199	-1,840,375	-1,881,227
Closing balance, equity		41,180	70,660	29,815

<sup>&</sup>lt;sup>1</sup> Correction of error has been made between Share premium (+) and Retained earnings (-) in June 2017 with SEK 10.1 million, recalculated 2016. See note 1.

 $<sup>^2</sup>$  Increase of Share capital with SEK 5.4 million and share premium with SEK 54.9 million, decrease of retained earnings with SEK 2,4 million.

<sup>&</sup>lt;sup>3</sup> Reduction of Share capital has been made with SEK 31.5 million towards Share premium.

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

SEK 000	Note	2017	2016
		Apr-Jun	Apr-Jun
Operating activities			
Operating profit/loss		-24 699	-155 017
Adjustments for items not affecting cash flow			
Depreciation		-	106
Change in fair value	2	9 222	141 146
Other items		126	-1 683
Proceeds from short-term investments		-200	181
Interest paid/received		12	-1
Cash flow from operating activities before changes in			
working capital and operating investments		-15 539	-15 268
Cash flow from changes in working capital			
Increase (-)/Decrease (+) in operating receivables		-1 047	6 263
Increase (+)/Decrease (-) in operating liabilities		-1 777	-5 162
more access ( ), in operating national			0.02
Operating investments			
Acquisitions of shares in portfolio companies		-37 779	-16 219
Proceeds from sale of short-term investments <sup>1</sup>		59 571	21 410
Investments in short-term investments <sup>1</sup>		-	-
Cash flow from operating activities		3 429	-8 976
Financing activities			
Share issue		_	_
Convertible debentures issue		-2 410	_
Issue costs			_
Cash flow from financing activities		-2 410	0
Ocale flows for the mode d		4 040	0.070
Cash flow for the period		1 019	-8 976
Cash and cash equivalents at the beginning of the year		10 602	19 589
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD		11 621	10 613
		1, 52.	
Supplemental disclosure¹			
CASH AND CASH EQUIVALENTS AT THE END OF			
THE PERIOD		11 621	10 613
Short-term investments, market value at closing date		177 506	257 761
CASH, CASH EQUIVALENTS AND SHORT-TERM			
INVESTMENTS AT THE END OF THE PERIOD		189 127	268 374

<sup>1</sup>Surplus liquidity in the Investment Entity is invested in interest-bearing instruments and is recognized as short-term investments with a maturity exceeding three months. These investments are consequently not reported as cash and cash equivalents and are therefore included in the statement of cash flows from operating activities. The supplemental disclosure is presented to provide a total overview of the Investment Entity's available fund including cash, cash equivalents and short-term investments described here.

### **Condensed income statement for the Parent Company**

SEK 000	Note	2017 Apr-Jun	2016 Apr-Jun restated	2017 Jan-Jun	2016 Jan-Jun restated	2016 Full-year restated
Dividend <sup>1</sup>		-	-	-	-	3,333
Other revenue		560	607	1,176	1,215	2,027
Revenue		560	607	1,176	1,215	5,360
Other expenses		-3,185	-3,995	-5,650	-7,425	-15,415
Personnel costs		-5,291	-2,614	-11,003	-7,555	-17,344
Depreciation of tangible non- current assets		-	-53	-	-106	-106
Result of change in fair value of shares in portfolio companies	5	-3,497	-58,894	-9,222	-141,146	-146,988
Result from sale of shares in portfolio companies		-	-	-	-	444_
Operating profit/loss		-11,413	-64,949	-24,699	-155,017	-174,049
Financial net	5	-9,837	-10,893	-21,740	-20,923	-42,783
NET PROFIT/LOSS FOR THE PERIOD	5	-21,250	-75,842	-46,439	-175,940	-216,832

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

SEK 000	Note	2017 Apr-Jun	2016 Apr-Jun restated	2017 Jan-Jun	2016 Jan-Jun restated	2016 Full-year restated
Net profit/loss for the period	5	-21,250	-75,842	-46,439	-175,940	-216,832
Total comprehensive income/loss for the period	5	-21,250	-75,842	-46,439	-175,940	-216,832

<sup>&</sup>lt;sup>1</sup> Dividend from BioArctic

### **Condensed balance sheet for the Parent Company**

SEK 000	Note	30 Jun 2017	30 Jun 2016	31 Dec 2016
			restated	restated
ASSETS				_
Tangible assets				
Machinery and equipment		-	-	-
Financial assets				
Shares in portfolio companies at fair value				
through profit or loss	2,5	180,899	143,690	149,408
Loans receivable from portfolio companies	5	967	951	957
Other financial assets	5	38,113	38,113	38,113
Total non-current assets		219,979	182,754	188,478
Current assets				
Receivables from portfolio companies		778	1,287	229
Other current receivables		242	1,025	660
Prepaid expenses and accrued income	5	903	612	806
Short-term investments at fair value through				
profit or loss		177,506	257,761	237,545
Cash and cash equivalents		11,621	10,613	10,602
Total current assets		191,050	271,298	249,842
TOTAL ASSETS		411,029	454,052	438,320
EQUITY AND LIABILITIES				
Total equity	5	41,180	70,660	29,815
Long-term liabilities				
Convertible loan	3	357,550	371,821	394,438
Other financial liabilities	5	4,807	4,798	4,798
Total long-term liabilities		362,357	376,619	399,236
Current liabilities				
Accounts payable		950	974	1,461
Liabilities to portfolio companies		-	513	-
Other current liabilities		767	552	959
Accrued expenses and prepaid income		5,775	4,734	6,849
Total current liabilities		7,492	6,773	9,269
Total liabilities		369,849	383,392	408,505
TOTAL EQUITY AND LIABILITIES		411,029	454,052	438,320

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

SEK 000	Not	30 Jun 2017	30 Jun 2016	31 Dec 2016
			restated	restated
Share capital		26,732	26,725	26,725
Share premium reserve	5	1,884,310	1,884,310	1,884,310
Reratined earnings	5	-1,881,227	-1,676,548	-1,676,548
Opening balance, equity		29,815	234,487	234,487
Net profit/ loss for the period	5	-46,439	-160,320	-218,926
Effect of incentive programs		-123	-1,282	-1,241
Set-off issue <sup>1</sup>		57,927	=	-
Reduction of share capital <sup>2</sup> Effect off voluntary change of		0	-	-
accounting principle	5	0	-2,225	15,488
Share issue		-	-	7
Share capital		643	26,725	26,732
Share premium reserve		1,970,736	1,884,310	1,884,310
Reratined earnings		-1,930,199	-1,840,375	-1,881,227
Closing balance, equity	5	41,180	70,660	29,815

<sup>&</sup>lt;sup>1</sup> Increase of Share capital with SEK 5.4 million and Share premium with SEK 54.9 million, decrease of Retained earnings with SEK 2,4 million.

 $<sup>^{2}</sup>$  Reduction of Share capital has been made towards Share premium reserve with SEK 31.5 million.

### 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 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. The Company, with Corporate Identity Number 556707-5048, is a limited liability company with its registered office in Solna, Sweden. Future investments will be sourced via the deal flow agreement with Karolinska Institutet Innovations AB, through an extended network of contracts at research institutions across the Nordic region, and through relationships with other specialist life sciences investors.

#### Changes in accounting principles and information's 2017

No changes in accounting principles and information has been made for the Investment Company.

The accounting principles regarding investments in portfolio companies (subsidiaries, associate companies, joint ventures and other financial liabilities) has been changed for the parent company. All investments in portfolio companies are accounted at fair value through profit or loss both in the Investment Company and the Parent Company (previous at the lowest value of acquisitions cost or the fair value). The voluntary change has been made in order to make the financial reporting of the company's balance sheet as well as the profit and loss statement more efficient and promote transparency by improving correspondence with the financial reporting in the Investment Entity. The Parent Company has also changed accounting principles regarding pension obligations in accordance with the financial reporting in the Investment Entity that provides guarantee for the obligations. Comparable periods have been recalculated. See note 5.

#### New and revised accounting principles 2017

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

#### **Correction of error**

A correction of error has been made between Share premium and Retained earnings in the Investment Entity, see Condensed statement of changes in the Investment Entity's equity.

#### **Definitions**

**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.

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

Karolinska Development applies the accounting principles of fair value according to the International Private Equity and Venture Capital Valuation Guidelines and adheres to the guidance of IFRS 13 Fair Value Measurement and the Annual Accounts Act. Based on the valuation criteria provided by these rules, an assessment is made of each company to determine a valuation method. This takes into account whether the companies have recently been financed or involved with a transaction that includes an independent third party.

If there is no valuation available based on a similar transaction, risk adjusted net present value (rNPV) calculations are made of the portfolio companies whose projects are suitable for this type of calculation. In other cases, Karolinska Development's total investment is used as the best estimation of fair value.

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

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

**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 <u>after</u> KDev Investments' distribution of proceeds to Rosetta Capital (calculated as Total Portfolio Fair Value minus Potential Distribution to Rosetta Capital).

**Net asset value per share**: Fair value of the total portfolio (SEK 180,9 million), loans receivable from portfolio companies (SEK 1 million), short-term investments (SEK 177,5 million), cash and cash equivalents (SEK 11,6 million), and financial assets less interest-bearing liabilities (SEK 38,1 million minus SEK 362,4 million) in relation to the number of shares outstanding (64 092 411) on the closing date (30 June 2017).

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

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

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

Reporting period: January – June 2017.

### NOTE 2 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 nonobservable data

#### Fair value as of 30 June 2017

SEK 000	Level 1	Level 2	Level 3	Total
Financial assets				
Shares in portfolio companies, at fair value through profit or loss	-	-	180,899	180,899
Loans receivable from portfolio companies	-	967	-	967
Other financial assets	-	-	38,113	38,113
Receivables from portfolio companies	-	778	-	778
Cash, cash equivalents and short-term investments	189,127	-	-	189,127
Total	189,127	1,745	219,012	409,884
Financial liabilities				
Other financial liabilities	-	-	4,807	4,807
Accounts payable	-	950	-	950
Total	-	950	4,807	5,757

### Fair value as of 30 June 2016

SEK 000	Level 1	Level 2	Level 3	Total
Financial assets				
Shares in portfolio companies, at fair value through profit or loss	-	-	143,690	143,690
Loans receivable from portfolio companies	0	951	-	951
Other financial assets	-	-	38,113	38,113
Receivables from portfolio companies	-	1,287	-	1,287
Cash, cash equivalents and short-term investments	268,374	-	-	268,374
Total	268,374	2,238	181,803	452,415
Financial liabilities				
Other financial liabilities	-	-	4,798	4,798
Accounts payable	-	974	-	974
Liabilities to portfolio companies	=	513	=	513
Total	-	1,487	4,798	6,285

### Fair value (level 3) as of 30 June 2017

SEK 000	Shares in portfolio companies	Other financial assets	Other financial liabilities
At beginning of the year	149,408	38,113	4,798
Transfers to and from level 3	-	-	0
Acquisitions	40,712	-	-
Gains and losses recognized through profit or loss	-9,222	- ,	9
Closing balance 31 Mar 2017	180,898	38,113	4,807
Realized gains and losses for the period included in profit or			
loss	-48	-	-
Unrealized gains and losses in profit or loss for the period			
included in profit or loss	-9,174	-	-9

### Fair value (level 3) as of 30 June 2016

SEK 000	Shares in portfolio companies	Other financial assets	Other financial liabilities
At beginning of the year	267,651	38,113	4,798
Acquisitions	17,185	-	-
Gains and losses recognized through profit or loss	-141,146	=	-
Closing balance 31 Mar 2016	143,690	38,113	4,798
Realized gains and losses for the period included in profit or loss	-1,262	-	-
Unrealized gains and losses in profit or loss for the period included in profit or loss	-139,884	-	-

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.

#### 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" 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 34.7 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.

If Rosetta Capital has not received 2.5 times the amount invested in KDev Investments by Rosetta Capital by 7 March 2018, then Rosetta Capital may require within 60 days that Karolinska Development acquires Rosetta's shares in KDev Investments. The price payable for the KDev Investments shares is the fair market value of the shares, although capped at 10 % of the market capitalization of Karolinska Development at the time of the purchase, Karolinska Development can decide whether to pay the purchase price in cash or in the form of Karolinska Development shares. With the market capitalization of Karolinska Development at the end of the second quarter 2017 being SEK 309 million the price payable for the KDev Investments shares is capped to SEK 30.9 million.

"Net Portfolio Fair Value" 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 2017	30 Jun 2016	31 Dec 2016
Karolinska Development Portfolio Fair Value	163,828	134,198	143,657
KDev Investments Portfoilio Fair Value	281,154	266,808	261,586
Total Portfoilio Fair Value	444,982	401,006	405,243
Potential distribution to Rosetta Capital of fair value of KDev Investments	264,083	257,431	255,837
Net Portfolio Fair Value (after potential distribution to Rosetta Capital)	180,899	143,575	149,406

<sup>\*</sup> SEK 34.7 million repayment of investments in KDev Investments made by Rosetta Capital and SEK 229.4 million distribution of dividends to preference shares and common shares.

### Information on fair value measurement in level 3

The valuation of the company's portfolio is based on the International Private Equity and Venture Capital Valuation Guidelines (IPEV) and IFRS 13 Fair Value Measurement. Based on the valuation criteria provided by these rules, an assessment is made of each company to determine a valuation method. This takes into account whether the companies have recently been financed or involved with a transaction that includes an independent third party. If there is no valuation available based on a similar transaction, discounted cash flow models (DCF) may be used.

For detailed description, see the annual report 2016.

### NOTE 3 Convertible loan

Karolinska Development has issued convertible debentures, so called compound financial instruments, in which the holder has right to convert into shares, the number of shares to be issued are not affected by changes in fair value of the shares.

The debt portion of the compound financial instrument is initially recognized at fair value for a similar debt without a conversion right into shares. The equity portion is initially recognized as the difference between the total fair value of compound financial instrument and the fair value of the debt portion. Directly attributable transaction costs are allocated to the debt respectively equity portion based on their initial recognized values.

Post-acquisition the debt portion of the compound financial instrument is valued to amortized costs based on the effective interest method. The equity portion of the compound financial instrument is not revalued post-acquisition, except at conversion or redemption.

Karolinska Development issued convertible debentures with a nominal amount of SEK 387 million on 2 January 2015 which have a nominal interest rate of 8 percent. The nominal amount was reduced to SEK 329 million after the set-off issue in March 2017. The convertible debentures will fall due for payment on 31 December 2019 at the amount of SEK 484 million (as accrued interest is interest bearing), the convertibles grant a right to convert into shares at a conversion rate of 22 SEK per series B share. The value of the debt and equity part (conversion right) was determined on the date of issuance.

The convertible debentures are presented in the balance sheet as shown in the below table.

SEK 000	30 Jun 2017	30 Jun 2016	31 Dec 2016
Nominal amount of convertible debentures			
issued on 2 January 2015	386,859	386,859	386,859
Issue costs	-28,171	-28,171	-28,171
Equity portion	-49,528	-49,528	-49,528
Debt at issuance date 2 January 2015	309,160	309,160	309,160
Accrued interest costs	85,278	62,662	85,278
TOTAL	394,438	371,822	394,438
Set-off share issue 2017			
Converted nominal amount	-57,509	-	-
Converted part of issue costs	4,188	-	-
Converted part of equity portion	7,362	-	-
Converted part of accrued interest costs	-12,677	-	-
Debt prior this years interest	335,802	371,822	394,438
Accrued interes costs 2017	21,748	-	-
Total	357,550	371,822	394,438

### NOT 4 Related party transactions

Karolinska Development AB has entered into an agreement with a company related to the previous Chairman of the Board, OrfaCare Consulting GmbH, regarding consultations by the Chairman of the Board, Bo Jesper Hansen. The consultancy agreement covers other kind of consultancy services than what follows by his position as Chairman of the company. The agreement was in force from 1 March 2015 until the date of the Company's Annual General Meeting 2017. The consultancy fee is market based and amounted during the period January – June 2017 to SEK 0.5 million (SEK 0.6 million same period 2016 and SEK 1.3 million for the full year 2016).

## NOT 5 Voluntary change of accounting principle

For the Parent company a voluntary change of accounting principle regarding investments in portfolio companies (subsidiaries, joint ventures, associated companies and other long-term securities holdings) and other financial assets and liabilities has been made. All investments in shares in portfolio companies are now valuated at fair value through profit or loss in the Parent company as well as in the Investment Entity (previously at the lowest of cost of acquisition and fair value). Comparable numbers are restated, see below.

# Presentation of effect of change of accounting principle in profit/loss for comparative figures 2016 for the Parent company.

SEK000	Note	2016 Apr-Jun as previously reported	Effect of changed principle	2016 Apr-Jun restated	2016 Jan-Jun as previously reported	Effect of changed principle	2016 Jan-Jun restated	2016 Full-year as previously reported	Effect of changed principle	2016 Full-year restated
Dividend		-		-	-		-	3,333		3,333
Net sales		607		607	1,215		1,215	2,027		2,027
Revenue		607		607	1,215		1,215	5,360		5,360
Other expenses		-3,995		-3,995	-7,425		-7,425	-15,415		-15,415
Personal costs Depreciation of tangible		-2,614	1	-2,613	-7,555		-7,555	-17,344		-17,344
non-current assets Impairment losses on shares in subsidiaries, joint ventures, associated companies and other long-term		-53		-53	-106		-106	-106		-106
securities holdings Result of change in fair value of shares in		-49,879	49,879	0	-124,885	124,885	0	-148,440	148,440	0
portfolio companies Result from sale of shares in portfolio			-58,894	-58,894		-141,146	-141,146		-146,988	-146,988
companies		0		0	-		0	444		444
Operating profit/loss		-55,934	-9,014	-64,948	-138,756	-16,261	-155,017	-175,501	1,452	-174,049
Financial net		-10,892	-1	-10,893	-21,564	641	-20,923	-43,425	642	-42,783
NET PROFIT/LOSS FOR THE PERIOD		-66,826	-9,015	-75,841	-160,320	-15,620	-175,940	-218,926	2,094	-216,832

# Presentation of effects of change of accounting principle on statement of comprehensive income for comparative figures 2016 for the Parent Company.

SEK000	Not	2016 Apr-Jun as previously reported	Effect of changed principle	2016 Apr-Jun restated	2016 Jan-Jun as previously reported	Effect of changed principle	2016 Jan-Jun restated	2016 Full-year as previously reported	Effect of changed principle	2016 Full- year restated
Net profit/loss for the period		-66,826	-9,015	-75,841	-160,320	-15,620	-175,940	-218,926	2,094	-216,832
Total comprehensive income/loss for the period		-66,826	-9,015	-75,841	-160,320	-15,620	-175,940	-218,926	2,094	-216,832

# Presentation of effect of change of accounting principle in the balance sheet for comparative figures 2016 for the Parent company.

SEK000	Note	2016-06-30 as previously reported	Effect of changed principle	2016-06-30 restated	2016-12-31 as previously reported	Effect of changed principle	2016-12-31 restated
ASSETS							
Tangible assets							
Machinary and equipment		-		0	-		0
Financial assets Shares in subsidiaries, joint ventures, associated companies and other long term-securities holdings		111,509	-111,509	0	107,610	-107,610	C
Shares in portfolio companies at fair value through profit or loss		111,509	143,690	143,690	107,010	149,408	149,408
Loans receivable from portfolio companies		37,780	-36,829	951	28,734	-27,777	957
Other financial assets		33,159	4,954	38,113	33,010	5,103	38,113
Total non-current assets		182,448	306	182,754	169,354	19,124	188,478
Current assets							
Receivables from portfolio companies		1,287		1,287	229		229
Other current receivables		1,025		1,025	660		660
Prepaid expenses and accrued income Short-term investments at fair value		2,299	-1,687	612	3,448	-2,642	806
through profit or loss		257,761		257,761	237,545		237,545
Cash and cash equivalents		10,613		10,613	10,602		10,602
Total current assets		272,985	-1,687	271,298	252,484	-2,642	249,842
TOTAL ASSETS		455,433	-1,381	454,052	421,838	16,482	438,320
EQUITY AND LIABILITIES							
Equity							
Restricted equity							
Share capital		26,725		26,725	26,732		26,732
Unrestricted equity							
Share premium reserv		1,884,310		1,884,310	1,884,310		1,884,310
Accumulated losses		-1,677,830	13,395	-1,664,435	-1,677,789	13,394	-1,664,395
Net profit/loss for the period		-160,320	-15,620	-175,940	-218,926	2,094	-216,832
Total equity		72,885	-2,225	70,660	14,327	15,488	29,815
Long-term liabilities							
Convertible loan	3	371,822	-1	371,821	394,438		394,438
Pension obligations		3,953	845	4,798	3,804	994	4,798
Total long-term libilities		375,775	844	376,619	398,242	994	399,236
Curret liabilities							
Accounts payable		974		974	1,461	-1	1,460
Liabilities to portfolio companies		513		513	-		(
Other current liabilities		552		552	959	1	960
Accrued expenses and prepaid income		4,734		4,734	6,849		6,849
Total current liabilities		6,773	0	6,773	9,269	0	9,26
Total liabilities		382,548	844	383,392	407,511	994	408,505
TOTAL EQUITY AND LIABILITIES		455,433	-1,381	454,052	421,838	16,482	438,320

# Presentation of effect of change of accounting principle in profit/loss for first quarter 2016 and 2017 for the Parent company.

SEK 000	Note	2017 Jan-Mar as previously reportee	Effect of changed principle	2017 Jan-Mar restated	2016 Jan-Mar as previously reportee	Effect of changed principle	2016 Jan-Mar restated
Dividend		0		0	-		0
Other revenue		616		616	608		608
Revenue		616		616	608		608
Other expenses		-2,465		-1,849	-3,430		-3,430
Personal costs		-5,712		-5,712	-4,941	-1	-4,942
Depreciation of tangible non- current assets Impairment losses on shares in subsidiaries, joint ventures, associated companies and other long-term securities holdings Result of change in fair value of shares in portfolio companies		-6,521	6,521 -5,725	0 -5,725	-53 -75,006	75,006 -82,252	-53 0 -82,252
Result from sale of shares in portfolio companies		0		0	-		0
Operating profit/loss		-14,082	796	-13,286	-82,822	-7,247	-90,069
Financial net		-11,894	-9	-11,903	-10,672	642	-10,030
NET PROFIT/LOSS FOR THE PERIOD		-25,976	787	-25,189	-93,494	-6,605	-100,099

# Presentation of effects of change of accounting principles on statement of comprehensive income for first quarter 2016 and 2017 for the Parent Company.

SEK000	Note	2017 Jan-Mar as previously reportee	Effect of changed principle	2017 Jan-Mar restated	2016 Jan-Mar as previously reportee	Effect of changed principle	2016 Jan-Mar restated
Net profit/loss for the period		-25,976	787	-25,189	-93,494	-6,605	-100,099
Total comprehensive income/loss for the period		-25,976	787	-25,189	-93,494	-6,605	-100,099

# Presentation of effect of change of accounting principle in the balance sheet for first quarter 2016 and 2017 for the Parent company.

SEK000 Note	31 Mar 2017 as previously reportee	Effect of changed principle	31 Mar 2017 restated	31 Mar 2016 as previously reportee	Effect of changed principle	31 Mar 2016 restated
ASSETS						
Tangible assets						
Machinary and equipment	0		0	53		53
Financial assets Shares in subsidiaries, joint ventures, associated companies and other long term- securities holdings						
Shares in portfolio companies at fair value through profit or loss	102,257	70,371	172,628	161,388	31,764	193,152
Loans receivable from portfolio companies	55,764	-54,809	955	28,732	-27,809	923
Other financial assets	29,206	8,907	38,113	33,311	4,802	38,113
Total non-current assets	187,227	24,469	211,696	223,484	8,757	232,241
Omsättningstillgångar						
Receivables from portfolio companies	341		341	1,157		1,157
Other current receivables	309		309	1,614	1	1,615
Prepaid expenses and accrued income	4,144	-3,387	757	2,561	-1,275	1,286
Short-term investments at fair value through profit or loss	197,499	0,007	197,499	277,745	1,270	277,745
Cash and cash equivalents	13,819		13,819	9,834		9,834
Total current assets	216,112	-3,387	212,725	292,911	-1,274	291,637
TOTAL ASSETS	403,339	21,082	424,421	516,395	7,483	523,878
Restricted equity Share capital	32,168		32,168	26,725		26,725
Unrestricted equity	,		52,.55			,
Share premium reserv	1,939,212		1,939,212	1,884,310		1,884,310
Accumulated losses	-1,898,876	15,488	-1,883,388	-1,676,062	13,394	-1,662,668
Net profit/loss for the period	-25,976	787	-25,189	-93,494	-6,605	-100,099
Total equity	46,528	16,275	62,803	141,479	6,789	148,268
Long-term liabilities						
Convertible loan 3	346,676		346,676	360,514	-1	360,513
Pension obligations	0		0	4,106	-4,106	C
Other financial liabilities	0	4,807	4,807	0	4,798	4,798
Total long-term liabilities	346,676	4,807	351,483	364,620	691	365,311
Curret liabilities						
Accounts payable	1,542		1,542	1,232		1,232
Liabilities to portfolio companies	-		0	513		513
Other current liabilities	1,524		1,524	497	1	498
Accrued expenses and prepaid income	7,069		7,069	8,054	2	8,056
Total current liabilities	10,135	0	10,135	10,296	3	10,299
Total liabilities	356,811	4,807	361,618	374,916	694	375,610
TOTAL EQUITY AND LIABILITIES	403,339	21,082	424,421	516,395	7,483	523,878