
Karolinska Development

Karolinska Development (Nasdaq Stockholm:KDEV) is an investment company which offers a unique opportunity to share in the growth in value of a number of Nordic life sciences companies with high commercial potential, nine of which have projects in the clinical development or early launch phase. Clinical phase II results are expected for presentation by six of the portfolio companies' projects in 2018 and early 2019, offering the potential for substantially increased opportunities for attractive divestments or licensing deals. Comparable candidate drugs have, in recent years, been out-licensed or sold for contract values of between SEK 1.6 and 5.3 billion for the individual projects. The portfolio companies have been strengthened in the past year through the recruitment of senior executives with a documented ability to close international business deals in the life sciences sector.

For further information, see www.karolinskadevelopment.com

Financial Update

Karolinska Development posted a positive full-year result for the first time since the company's strategy shift. The total fair value of the portfolio increased during the year by 76% to SEK 714 million.

Fourth quarter

- The net profit for the fourth quarter was SEK 32 million (SEK -23 million in the fourth quarter 2016). Earnings per share totalled SEK 0.50 (SEK -0.43 in the fourth quarter 2016).
- The result of the Change in fair value of shares in portfolio companies amounted to SEK 49.1 million. The increase was primarily due to result of a partial exit of BioArctic and the divestment of the holding in Xspray, received as an earn-out.
- The total fair value of the portfolio was SEK 714 million at the end of December 2017, an increase from SEK 674 million at the end of the previous quarter. At the same date, net portfolio fair value was SEK 448 million, an increase from SEK 410 million at the end of the previous quarter.
- Revenue totalled SEK 0.8 million during the fourth quarter of 2017 (SEK 3.7 million in the fourth quarter 2016).
- Karolinska Development invested a total of SEK 34.1 million in its portfolio companies during the fourth quarter. Fourth quarter investments in the portfolio companies by Karolinska Development and other specialised life sciences investors totalled SEK 271.3 million.
- Cash and cash equivalents increased by SEK 4.2 million during the fourth quarter, totalling SEK 169.6 million on 31 December 2017.

Full year

- The full-year net profit was SEK 179.6 million (SEK -216.8 million in 2016). Earnings per share totalled SEK 2.93 (SEK -4.08 in 2016).

- The full-year result for the change in the fair value of the portfolio amounted to SEK 252.1 million. The increase was primarily due to the revaluation of Umecrine Cognition amounting to SEK 196 million in connection with presented phase Ib data.
- The total fair value of the portfolio was SEK 714 million at the end of December 2017, an increase from SEK 405 million at the corresponding date in 2016. The net portfolio fair value was SEK 448 million, an increase from SEK 149 million at the corresponding date in 2016.
- Revenue totalled SEK 2.5 million for the full year of 2017 (SEK 5.4 million in 2016).
- Karolinska Development invested a total of SEK 91.9 million in its portfolio companies during the full year. Full-year investments in the portfolio companies by Karolinska Development and other specialised life sciences investors totalled SEK 396.8 million.
- Cash and cash equivalents decreased by SEK 78.5 million during the full year, totalling SEK 169.6 million on 31 December 2017.
- The Parent Company's equity on 31 December 2017 was SEK 267 million.
- The Board will not propose any dividend for the financial year 2017.

Significant events during the fourth quarter

- Karolinska Development announced that the value of its holdings in the portfolio company, Umecrine Cognition, increased as a result of positive phase Ib data. The increase in the book value positively impacted the third quarter 2017 profit by SEK 196 million (October 2017).
- Umecrine Cognition secured financing of SEK 20 million for clinical development of the GR3027 candidate drug for the treatment of idiopathic hypersomnia – a severe form of sleep disorder (October 2017).
- Aprea Therapeutics received the final tranche of SEK 188 million as part of the 2016 total financing programme of SEK 437 million (October 2017).
- Trading in the shares of the portfolio company BioArctic began on the NASDAQ Stockholm exchange (October 2017). Karolinska Development realised a value increase through a partial exit and received SEK 35 million (November 2017).
- Karolinska Development and KCIF Co-Investment Fund KB divested their holdings in Xspray, which they received as earn-out, realising a total of SEK 13.3 million for Karolinska Development (October 2017).
- The number of class B shares in Karolinska Development increased via the conversion of convertible loans (October 2017).
- Hans-Olov Olsson resigned from the Board of Karolinska Development at his own request (October 2017) and Theresa Tse was elected to the Board at an Extraordinary General Meeting (November 2017).
- Karolinska Development and KCIF Co-investment Fund KB received shares in Pharmanest AB as a result of the earn-out agreement entered into in conjunction with an earlier divestment of the holding (November 2017).

- Professor Hans Wigzell, Member of the Board of Karolinska Development since 2006, was appointed new Chairman of the Board after Niclas Adler, who resigned from this position for personal reasons (December 2017).

Significant post-period events

- No significant events

Viktor Drvota, CEO of Karolinska Development, comments:

"A number of the portfolio companies' projects have made significant progress in 2017, with positive subsequent effects, such as the substantial increase in the value of our holding in Umecrine Cognition. We have also realised a successful return on the partial exit of BioArctic as well as proving the potential to generate value from our earn-out agreements through the divestment of the holding in Xspray, which we received as an earn-out. This has enabled Karolinska Development to post another positive quarterly result and, for the first time since the strategy shift, to post a positive full-year result."

Contact information

For further information, please contact:

Viktor Drvota, Chief Executive Officer

+46 73 982 52 02

viktor.drkota@karolinskadevelopment.com

Fredrik Järrsten, Chief Financial Officer

+46 70 496 46 28

fredrik.jarsten@karolinskadevelopment.com

Chief Executive's Report

Investments in potentially ground-breaking treatments and technologies

Karolinska Development is an investment company which offers its shareholders a unique opportunity to share in the growth in value of a number of Nordic life sciences companies with high commercial potential, nine of which have projects in the clinical development or early launch phases.

Positive quarterly and full-year results

A number of the portfolio companies' projects have made significant progress in 2017, with positive subsequent effects, such as the substantial increase in the value of our holding in Umecrine Cognition. We have also realised a successful return on the partial exit of BioArctic as well as from the divestment of the holding in Xspray, which was received earlier as an earn-out payment. This has enabled Karolinska Development to post another positive quarterly result and, for the first time since the strategy shift, to post a positive full-year result.

The portfolio company, BioArctic, was listed on the NASDAQ Stockholm exchange in the fourth quarter. The valuation of Karolinska Development's holding in conjunction with the listing equated to 80 times our investment in the company. After the listing, we realised part of this increase in value through a partial exit from which we received SEK 35 million. We also divested the holding in XSpray during the period for a total return of SEK 13.3 million, proving how our strategy of earn-out agreements in conjunction with divestments of portfolio companies can generate value. In November, we announced that Karolinska Development will receive new shares as a result of an earn-out agreement in Pharmanest – a company developing a therapy for the treatment of pain in conjunction with gynaecological procedures. An additional earn-out agreement was recently signed in conjunction with the divestment of our holding in Lipidor, whose ongoing development we will, of course, be following closely.

2017's progress may pave the way for important clinical results in 2018

The successful development work by our portfolio companies over the past year is expected to enable the generation of important phase II results for a number of the pharmaceutical projects as early as 2018. Assuming the outcomes are positive, these results may form the basis for negotiations with commercial partners or parties interested in acquiring the companies. A third alternative for realising the value of our investments is, of course, to list the companies. Below, we provide three examples of portfolio companies that are planning to complete phase II studies over the next 12-month period:

Aprea is expected to present data from a phase Ib/II study of patients with platinum-resistant ovarian cancer – the most lethal form of gynaecological cancer – in 2018. The company's candidate drug has shown itself capable of reactivating mutant p53 protein – an endogenous substance that, under normal conditions, inhibits uncontrolled cell division. In 2016, Aprea secured one of the biggest financing programmes ever by a Swedish biotechnology company, when international specialist investors invested a combined total of over SEK 400 million in the company.

A licensing deal involving a similar pharmaceutical project was signed a few years ago with a contract value of almost SEK 4 billion.

Modus' candidate drug, sevuparin, is being developed to help patients with the disabling and life-threatening disease, sickle cell anaemia, live longer with a better quality of life. Sickle cell anaemia can result in life-threatening conditions and there is currently no treatment for the acute phases of the disease, other than analgesics. Modus is expected to complete a phase II study of its candidate drug in this patient group in 2018.

Two partnership agreements for pharmaceutical projects in the same developmental phase for the treatment of sickle cell anaemia have been signed in recent years with contract values of over SEK 5 billion and almost SEK 3 billion, respectively.

Umeocrine Cognition is, as far as we know, the only company with a candidate drug in development for reducing the risk of disturbances in consciousness and other serious CNS-related symptoms in conjunction with hepatic encephalopathy. Positive results from a phase Ib study were presented in September, resulting in an increase of SEK 196 million in the value of Karolinska Development's holding. Phase IIa results are expected to become available in 2018 or early 2019.

Two licensing deals involving similar pharmaceutical projects were signed in recent years with contract values of over SEK 3 billion and SEK 1.6 billion, respectively.

Working actively to balance risk

Karolinska Development works single-mindedly to reduce the risks inherent in its investments without thereby reducing the projects' commercial potential. The risk of a project failing to achieve the expected biological results is addressed by means of, amongst other things, professionally designed clinical trials, and by expanding the development work to include more than one therapeutic indication area. Aprea's broad clinical development programme, which includes numerous different forms of cancer, is one example of this approach, as is the decision by Umeocrine Cognition to launch a separate study of patients with severe sleep disorders.

Another risk is, of course, the financial one. Here, we are pleased to note a substantial strengthening in Karolinska Development's equity over the past year, partly due to the positive result and partly due to the set-off issue carried out during the first quarter. At the end of the quarter, our cash position totalled SEK 170 million and our market capitalisation was approximately SEK 370 million. We are also pleased to note that trading in Karolinska Development's share increased markedly during the final quarter of the year, resulting in the holding becoming more liquid even for larger investors.

Senior executives focusing on both business and science

Both Karolinska Development and several of our portfolio companies have made changes to their executive management and Boards in 2017. I took over as CEO of Karolinska Development in June 2017, and in December, Fredrik Järsten was appointed as our new CFO. Promimic and Modus recruited new CEOs in January and April respectively, both of whom have lengthy and successful careers in the life sciences sector.

Karolinska Development will continue its efforts to enhance the expertise of its portfolio companies in both the scientific and commercial fields. I am convinced, firstly, that by combining a sound commercial approach with the professional development of innovative life science projects, we will maximise the potential for generating value for our owners, and secondly, that conditions are favourable for continued success in that:

- our portfolio companies have six projects where phase II data is expected to become available in 2018 or early 2019;
- based on available data, the potential for positive phase II data from the projects in question is between 27 and 50%, depending on therapeutic indication area¹;
- a number of deals have been completed for comparable projects where the contract values of the individual projects totalled SEK 1.6 to 5.3 billion.

Karolinska Development has ended the year strongly, with a positive quarterly result demonstrating the healthy growth in value of our portfolio and the returns we have generated through divestments. And based on our success over the past year, both we and our portfolio companies are well-positioned to post strong value growth figures for 2018 too.

Solna, 15 February 2018

Viktor Drvota
CEO

¹ Phase II success rates per disease area. Source: Hay, Michael, et al. "Clinical development success rates for investigational drugs." *Nature biotechnology* 32.1 (2014): 40.

Portfolio Companies

A Focused Portfolio with High Commercial Potential

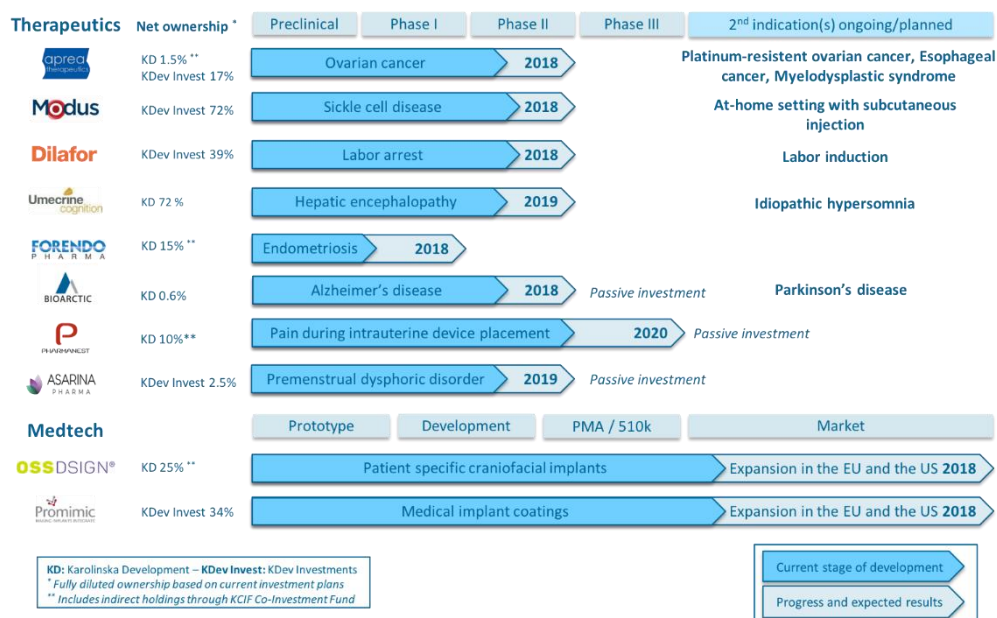
Karolinska Development's investments in therapeutic companies are conducted in syndicates with other professional life science investors until proof-of-concept is demonstrated in Phase II trials, at which point different exit options are evaluated. For medtech companies, the business model is to finance 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 in 2018. Experienced leadership has been recruited to the management and boards 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, several of Karolinska Development's portfolio companies now are financed and well positioned to deliver key value-generating clinical or commercial milestones over the next 12-18 months.

The therapeutics companies' next key value-generating milestones are expected in 2018, when several of the companies are supposed to present Phase II proof-of-concept data. The medtech companies OssDsign and Promimic are revenue generating and have significant milestones mapped out in 2018/2019 regarding execution of their commercial strategies.

Our current portfolio - significant value-inflection in 12 – 18 months



Earn-out agreements





Project (First-in class)
APR-246

Primary indication
Ovarian cancer

Development Phase
Phase IIa

Holding in company*
Karolinska Development 1.5%**
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*

Deal values for similar projects

- USD 469 million MEI
Pharma (licensor) &
Helsinn Group (licensee)
- USD 467 million Array
Biopharma (licensor) &
Novartis AG (licensee)

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 enroll 200 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 three Phase Ib/II studies in myelodysplastic syndrome, platinum-resistant HGSOC and esophageal cancer.

The market

The lead target indication for APR-246 is ovarian cancer. As the 6th 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), Phase Ib/II study in platinum-resistant HGSOC (August 2017) and in Phase Ib/II study in esophageal cancer (October 2017).
- Received the last tranche of SEK 188 million in a financing round of totally SEK 437 million from 2016 (October 2017).

Expected milestones

- 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 (First-in-class)
Sevuparin


Primary indication
Sickle cell disease (SCD)

Development Phase
Phase II

Holding in company*
KDev Investments 72%

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*

Deal values for similar projects

- USD 665 million Novartis AG (buyer) & Selexys Pharmaceuticals (seller)
- USD 340 million GlycoMimetics (licensor) & Pfizer (licensee)

Modus Therapeutics AB



Targeting relief for sickle cell disease patients

Modus Therapeutics (Stockholm, Sweden) is developing sevuparin, an innovative, disease-modifying drug which has the potential to become a first-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 sevuparin in hospitalized SCD patients experiencing VOC, the results of which are expected in 2018. The trial is targeting 160 patients who are 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 end-points 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 (February 2017).
- Ellen K. Donnelly, Ph.D., appointed as Chief Executive Officer (April 2017).
- Phase I/II data demonstrating anti-adhesive properties of sevuparin published in the scientific journal PLOS ONE (December 2017).

Expected milestones

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



Project (First-in-class)
GR3027


Primary indication
Hepatic encephalopathy

Development Phase
Phase IIa

Holding in company*
Karolinska Development 72%

Other investors
Norrlandsfonden,
Fort Knox Försäkring AB,
PartnerInvest

Origin
Umeå University

More information
 umecrinecognition.com

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

Deal values for similar projects

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

Umechrine Cognition AB



Unique treatment approach to CNS-related disorders

Umechrine Cognition (Solna, Sweden) is developing a therapy that represents a new target class for several major CNS-related disorders. The lead compound GR3027 is presently in clinical development for hepatic encephalopathy (HE), a serious neuropsychiatric and neurocognitive complication in acute and chronic liver disease (including cirrhosis). The drug candidate is also being clinically evaluated as a new treatment of idiopathic hypersomnia (IH), which is a severe orphan disease characterized by chronic excessive daytime sleepiness despite normal sleep.

An increase in the inhibitory GABA system in the CNS is believed to be a main driver for the clinical signs and symptoms in a wide range of cognitive and sleep disorders, including HE and IH. This makes GABA-receptor modulating steroid antagonists that act on the neurosteroid enhancement of GABA receptor activation, as developed by Umechrine Cognition, a credible therapeutic class to explore.

GR3027 has been shown to restore different types of neurological impairments in experimental models. The drug candidate enters the CNS and reverses the inhibitory effects of the neurosteroid allopregnanolone on brain function in humans. Positive Phase Ib data from the ongoing combined Phase Ib/IIa study in HE shows that GR3027 is well tolerated, does not cause any dose-limiting side effects and has a favorable pharmacokinetic profile. GR3027 is now being advanced into the phase IIa part of the study, from which results are expected in 2019. A Phase IIa study in IH has been initiated, with data readout expected in 2018.

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 180,000 and 290,000 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.

There are no approved treatments for IH but several wake-promoting agents are used off-label. However, they are inadequate to alleviate symptoms in most patients, and refractory or intolerance symptoms occur in one-quarter of patients.

Recent progress

- First patient included in clinical Phase Ib/IIa study with GR3027 for HE (March 2017).
- Dr. Thomas P. Blackburn appointed to the Board of Directors and as Senior Development Advisor (September 2017).
- Positive Phase Ib data for GR3027 presented (September 2017).
- SEK 20 million raised from existing investors to fund a Phase IIa study in IH (October 2017).
- First patient included in clinical Phase IIa study in patients with IH (November 2017).

Expected milestones

- Results from the Phase IIa part of the combined Phase Ib/IIa study in HE expected in 2019.
- Results from Phase IIa study in IH expected in 2018.

Dilafor

Project (First-in-class)

Tafoxiparin

Primary indication

Labor arrest

Development Phase

Phase IIb

Holding in company*

KDev Investments 39%

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.

**Deal values for similar
projects**

- USD 595 million
Neurocrine Biosciences
(licensor) & AbbVie
(licensee)
- USD 465 million Palatin
Technologies (licensor) &
AMAG Pharmaceuticals
(licensee)

Dilafor AB



Reducing complications with childbirth

Dilafor (Solna, 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, enrolling 360 pregnant women.

Insufficient, slow progress of labor occurs in at least forty percent of all births and to an even higher degree among first-time mothers. In its most severe form, known as protracted labor, it can last more than 12 hours. Protracted labor 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, which carries a high risk of being followed by protracted labor.

Dilafor has a license and partnership agreement with Lee's Pharmaceutical, which have the right to manufacture, develop and commercialize tafoxiparin for obstetrics and gynecological indications in China, Hong Kong, Macau and Taiwan.

The market

It has been estimated that as many as 40% of all 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 (January 2017).

Expected milestones

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

OSSDSIGN®

Project

OSSDSIGN® Cranial and
OSSDSIGN® Facial

Primary indication

Cranial implants

Development Phase

Marketed

Holding in company*

Karolinska Development 25%**


Other investors

SEB Venture Capital,
Fouriertransform

Origin

Karolinska University Hospital,
Uppsala University

More information

 ossdsign.com

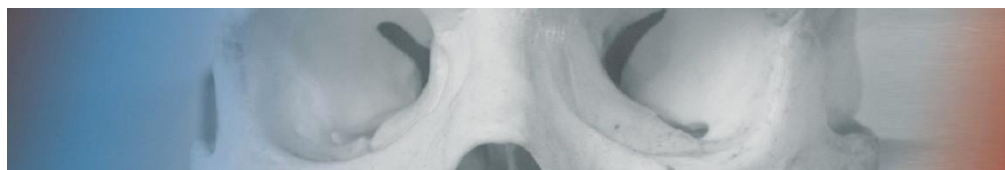
* Fully-diluted ownership based on
current investment plans

** Includes indirect holdings through
KCIF Co-Investment Fund

Deal values for similar projects

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

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 on 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 a US subsidiary has been established to strengthen the market presence. OssDsign 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 billion 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 approximately 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

- US subsidiary established (January 2018)
- 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 (February 2017).
- 510(k) clearance granted by US FDA to market OSSDSIGN® Cranial in the US (January 2017).
- European distributor network expanded with partnerships signed in five countries (January 2017).

Expected milestones

- Launch of OSSDSIGN® Cranial and OSSDSIGN® Facial on new EU markets and selected markets outside of Europe during 2018.

KAROLINSKA DEVELOPMENT



Project

HA^{nano} Surface

Primary indication

Implant surface coatings

Development Phase

Marketed

Holding in company*

KDev Investments 34%


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*

Deal values for similar projects

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

Promimic AB



Coatings to enhance the properties of medical implants

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

The HA^{nano} Surface is nanometer thin, which helps preserve the micro-structure of the implant and reduces the risk of cracks in the coating. The coating is unique because it can be applied to any implant geometry and material, including porous materials and 3D structures. Furthermore, the HA^{nano} coating technology offers a fast way to market since the technology that the coating is based on has been approved by FDA, whereby a new implant coated with HA^{nano} Surface can receive marketing approval through the 510(k) route. 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. S.I.N. is presently preparing a US launch of dental implants coated with HA^{nano} Surface, which has been cleared for use by the FDA. Promimic has also signed an agreement with Amendia Inc. (US) which allows Amendia to develop the HA^{nano} Surface technology for use with Amendia's patient-focused spinal implants.

A manufacturing facility for HA^{nano} coated implants to supply the US and Chinese markets has been established by the Promimic'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^{nano} 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 (January 2017).
- 510(k) clearance granted by US FDA to market dental implants coated with Ha^{nano} Surface (December 2017).

Expected milestones

- Further product launches and license agreements with major manufacturers during 2018.

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	2017 Oct-Dec	2016 Oct-Dec	2017 Full-year	2016 Full-year
Condensed income statement				
Change in fair value of shares in portfolio companies	49.1	-5.8	252.1	-146.5
Net profit/loss	32.0	-23.0	179.6	-216.8
Balance sheet information				
Cash, cash equivalents and short-term investments	169.6	248.1	169.6	248.1
Share information				
Earnings per share, weighted average, before and after dilution (SEK)	0.5	-0.4	2.9	-4.1
Net asset value per share (SEK) (Note 1)			4.3	0.7
Equity per share (SEK) (Note 1)			4.2	0.6
Share price, last trading day in the reporting period (SEK)			5.8	6.0
Portfolio information				
Investments in portfolio companies	34.1	4.8	91.9	28.9
Of which investments not affecting cash flow	1.6	0.5	4.6	1.9
Portfolio companies at fair value through profit or loss	447.8	149.4	447.8	149.4

Financial Development for the Investment Entity in 2017

Investments (comparable numbers 2016)

Investments in the portfolio in the fourth quarter 2017 by external investors and Karolinska Development amounted to SEK 271.3 (40.4) million, whereof 87% (88%) by external investors.

Karolinska Development invested SEK 34.1 (4.8) million, of which SEK 32.5 (4.3) million was cash investments and SEK 1.6 (0.5) million was non-cash investments (accrued interest on loans). Investments by external investors amounted to SEK 237.1 (35.6) million. Karolinska Development's cash investments were made in the portfolio companies Umecline Cognition, SEK 15.3 million, OssDsign, SEK 13.8 million, Modus Therapeutics, SEK 5.0 million and Pharmanest, SEK 0.1 million.

In addition, external investors invested in Umecline Cognition, SEK 6.7 million, OssDsign, SEK 16.2 million and Modus Therapeutics, SEK 2.0 million. BioArctic also raised SEK 600 million in a new share issue in connection with the company's listing on the Nasdaq Stockholm exchange.

KAROLINSKA DEVELOPMENT

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

SEKm	Karolinska Development	External Investors	Total Invested Q1-Q4 2017
Umecrine Cognition	44.8	15.0	59.8
OssDesign	24.5	43.7	68.2
Modus Therapeutics	22.9	11.2	34.1
Pharmanest	0.1	17.1	17.2
KCIF	-0.5	-1.4	-1.9
Aprea	0.0	188.4	188.4
Dilafor	0.0	13.9	13.9
Asarina Pharma	0.0	11.9	11.9
Biosergen	0.0	3.3	3.3
Lipidor	0.0	1.8	1.8
Total	91.9	304.9	396.8

Portfolio Fair Value

Fair Value of the portfolio companies owned directly by Karolinska Development increased by SEK 34.4 million during the fourth quarter 2017. The main reason for the increase was investments in Umecrine Cognition and OssDesign and that Pharmanest was included in the Fair value after Karolinska Development in November 2017, received shares in Pharmanest AB as a result of the earn-out agreement entered into in conjunction with an earlier divestment of the holding. The divestment of Lipidor affected Fair Value negatively with SEK 3.6 million.

Fair Value of the portfolio companies owned indirectly via KDev Investments increased by SEK 5.6 million during the fourth quarter 2017. The investment in Modus Therapeutics affected Fair Value positively.

Total Fair Value from portfolio companies owned directly by Karolinska Development and indirectly via KDev Investments increased by SEK 40.0 million in the fourth 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 increased by SEK 2.4 million, resulting in Net Portfolio Fair Value increasing by SEK 37.5 million in the fourth quarter 2017.

SEKm	2017-12-31	2017-09-30	Q4 vs Q3 2017
Karolinska Development Portfolio Fair Value (non listed companies)	413.8	378.3	35.6
Karolinska Development Portfolio Fair Value (listed companies)	14.1	15.3	-1.2
KDev Investments Portfolio Fair Value	286.1	280.5	5.6
Total Portfolio Fair Value	714.0	674.0	40.0
Potential distribution to Rosetta Capital of fair value of KDev Investments	266.2	263.9	2.4
Net Portfolio Fair Value (after potential distribution to Rosetta Capital)	447.7	410.2	37.5

Total Portfolio Fair Value on 31 December 2017 amounted to SEK 714.0 million and the potential distribution to Rosetta Capital amounted to SEK 266.2 million. Net Portfolio Fair Value on 31 December 2017 amounted to SEK 447.7 million. Compared with the Total Portfolio Fair Value on 31 December 2016, it represents an increase of SEK 309 million and compared with the Net Portfolio Fair Value, it represents an increase of SEK 299 million.

Results fourth quarter 2017 (comparable numbers 2016)

During the fourth quarter 2017, Karolinska Development's revenue amounted to SEK 0.8 (3.7) million and consists primarily of services provided to portfolio companies. The revenue for the full year 2017, amounted to SEK 2.5 (5.4) million.

Other expenses decreased by SEK 0.7 million during the fourth quarter 2017 compared to the fourth quarter 2016 and amounted to SEK 4.5 million. For the full year 2017, other expenses amounted to SEK 13.2 (15.4) million.

Personnel Costs amounted to SEK 6.4 million in the fourth quarter 2017. The increase by SEK 1.6 million compared to the fourth quarter 2016, is mainly due to outcome of bonus schemes. For the full year, personnel costs amounted to SEK 23.3 (17.3) million. The increase for the full year also includes accrued severance package related to the change of CFO.

Change in fair value of shares in portfolio companies includes the difference between the increase in Net Portfolio Fair Value during the fourth quarter 2017 with SEK 37.5 million and investments in the portfolio of SEK 34.1 million. In addition, it includes the divestments of the holding in Xspray and the partial exit of BioArctic. In total, the result of Change in fair value of shares in portfolio companies in the profit and loss statement amounted to SEK 49.1 (-5.8) million in the fourth quarter 2017. For the full year 2017, the result from Change in fair value of shares in portfolio companies amounted to SEK 252.1 (-146.5) million. The main reason for this, in addition to the divestments in the fourth quarter, is the SEK 196.0 million re-valuation of Umeocrine Cognition due to Phase Ib data.

Karolinska Development ended up with a positive result in the fourth quarter with operating profit/loss amounting to SEK 41.4 (-12.1) million. The Operating profit/loss for the full year 2017 was also positive and amounted to SEK 220.5 (-174.0) million.

Financial net decreased during the fourth quarter 2017 compared to the fourth quarter 2016 and amounted to SEK 9.5 (10.9) million, which is the consequence of a part of the convertible debt being reduced in the set-off offering in the first quarter 2017. For the full year 2017, the financial net amounted to SEK 40.9 (42.8) million.

The Investment Entity's Net profit/loss amounted to SEK 32.0 (-23.0) million in the fourth quarter 2017. For the full year 2017, the Investment Entity's Net profit/loss amounted to SEK 179.6 (-216.8) million.

Financial position

The Investment Entity's equity amounted to SEK 267.1 million on 31 December 2017 compared to SEK 29.8 million on 31 December 2016. The increase was a combination of the SEK 179.6 in Net profit/Loss for the full year 2017 and the increase in equity due to the set-off issue carried out in the first quarter.

The Investment Entity's equity to total assets ratio increased by 33 percentage points and amounted to 40% on 31 December 2017 compared to 7% on 31 December 2016.

After paying operational costs and investments in the fourth quarter 2017, cash and cash equivalents together with short-term investments, amounted to SEK 169.6 million on 31 December 2017.

Financial Development – Parent Company

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

During the fourth quarter 2017, the Parent Company's Net profit/loss amounted to SEK 32.0 million (SEK -23.0 million), an improvement of SEK 55.0 million compared to the fourth quarter 2016. Accumulated for the year, Net profit/loss amounted to SEK 179.6 million.

Due to the positive result for the fourth quarter 2017, the equity increased from SEK 235.1 million 30 September 2017 to SEK 267.1 million 31 December 2017.

Shares

The share and share capital

Trade in the Karolinska Development share takes place on Nasdaq Stockholm under the ticker symbol "KDEV". The last price paid for the listed B share on 29 December 2017 was SEK 5.75, and the market capitalization amounted to SEK 370 million.

The share capital of Karolinska Development on 31 December 2017 amounted to SEK 0.6 million divided into 1,503,098 A shares, each with ten votes (15,030,980 votes) and 62,858,108 B shares, each with one vote (62,858,108 votes). The total number of shares and votes in Karolinska Development on 31 December 2017 amounted to 64,361,206 shares and 77,889,088 votes.

Ownership

On December 31, 2017, Karolinska Development had 3,925 shareholders

Shareholder	A-Shares	B-Shares	Cap %	Vote %
KAROLINSKA INSTITUTET HOLDING AB	1,503,098	2,126,902	5.64%	22.03%
TREDJE AP-FONDEN	0	7,764,000	12.06%	9.97%
SINO BIOPHARMACEUTICAL LIMITED	0	4,853,141	7.54%	6.23%
ÖSTERSJÖSTIFTELSEN	0	3,889,166	6.04%	4.99%
COASTAL INVESTMENT MANAGEMENT LLC	0	3,470,134	5.39%	4.46%
OTK HOLDING A/S	0	1,900,000	2.95%	2.44%
FÖRSÄKRINGSAKTIEBOLAGET AVANZA PENSION	0	1,605,551	2.49%	2.06%
RIBBSKOTTET AB	0	1,400,000	2.18%	1.80%
STIFT FÖR FRÄMJANDE&UTVECKLING AV FAM AB	0	1,397,354	2.17%	1.79%
	0	1,357,741	2.11%	1.74%
Sum Top 10 Shareholders	1,503,098	29,763,989	48.58%	57.51%
Sum Other Shareholders	0	33,094,119	51.42%	42.49%
Sum All Shareholders	1,503,098	62,858,108	100.00%	100.00%

Information on Risks and Uncertainties

Investment Entity and Parent Company

Financial risks

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 proposes that no dividend will be paid for financial year 2017.

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

Solna, 15 February 2018

Viktor Drvota
CEO

Dates for Publication of Financial Information

Annual Report 2017	20 March 2018
Interim Report January-March 2018	25 April 2018
Annual General Meeting 2018	26 April 2018
Interim Report January-June 2018	16 August 2018
Interim Report January-September 2018	31 October 2018

Karolinska Development is required by law to publish the information in this interim report. The information was published on 15 February 2018.

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

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

Financial Statements

Condensed income statement for the Investment Entity

SEK 000	Note	2017 Oct-Dec	2016 Oct-Dec	2017 Full-year	2016 Full-year
Dividend ¹		0	3,333	0	3,333
Other revenue		751	377	2,464	2,027
Revenue		751	3,710	2,464	5,360
Other expenses		-4,541	-5,200	-13,190	-15,415
Personnel costs		-6,376	-4,757	-23,319	-17,344
Depreciation of tangible non-current assets		0	0	0	-106
Change in fair value of shares in portfolio companies	2	49,104	-5,821	252,072	-146,544
Change in fair value of other financial assets		2,483	0	2,483	0
Operating profit/loss		41,421	-12,068	220,510	-174,049
Financial net		-9,470	-10,944	-40,915	-42,783
Profit/loss before tax		31,951	-23,012	179,595	-216,832
Taxes		-	-	-	-
NET PROFIT/LOSS FOR THE PERIOD		31,951	-23,012	179,595	-216,832

Condensed statement of comprehensive income for the Investment Entity

SEK 000	Note	2017 Oct-Dec	2016 Oct-Dec	2017 Full-year	2016 Full-year
Net/profit loss for the period		31,951	-23,012	179,595	-216,832
Total comprehensive income/loss for the period		31,951	-23,012	179,595	-216,832

Earnings per share for the Investment Entity

SEK	Note	2017 Oct-Dec	2016 Oct-Dec	2017 Full-year	2016 Full-year
Earnings per share, weighted average, before and after dilution		0.50	-0.43	2.93	-4.08
Number of shares, weighted average		64,116,903	53,220,713	61,243,234	53,210,223

¹ Dividend from BioArctic

Condensed balance sheet for the Investment Entity

SEK 000	Note	31 Dec 2017	31 Dec 2016
ASSETS			
Tangible assets			
Tangible non-current assets		-	-
Financial assets			
Shares in portfolio companies at fair value through profit or loss	2	447,783	149,408
Loans receivable from portfolio companies		3,436	957
Other financial assets		40,596	38,113
Total non-current assets		491,815	188,478
Current assets			
Receivables from portfolio companies		611	229
Other current receivables		531	660
Prepaid expenses and accrued income		666	806
Short-term investments, at fair value through profit or loss		150,329	237,545
Cash and cash equivalents		19,305	10,602
Total current assets		171,442	249,842
TOTAL ASSETS		663,257	438,320
EQUITY AND LIABILITIES			
Total equity		267,121	29,815
Long-term liabilities			
Convertible loan	3	379,184	394,438
Other financial liabilities		4,807	4,798
Total long-term liabilities		383,991	399,236
Current liabilities			
Accounts payable		1,155	1,460
Liabilities to portfolio companies		-	-
Other current liabilities		1,627	960
Accrued expenses and prepaid income		9,363	6,849
Total current liabilities		12,145	9,269
Total liabilities		396,136	408,505
TOTAL EQUITY AND LIABILITIES		663,257	438,320

Condensed statement of changes in the Investment Entity's equity

SEK 000	Not	2017-12-31	2016-12-31
			restated
Share capital		26,732	26,725
Share premium ¹		1,884,310	1,884,310
Retained earnings ¹		-1,881,227	-1,663,154
Opening balance, equity		29,815	247,881
Net profit/ loss for the period		179,595	-216,832
Effect of incentive programs		-15	-1,241
Set-off issue ²		57,713	-
Share issue		13	7
Share capital		644	26,732
Share premium		1,970,752	1,884,310
Retained earnings		-1,704,275	-1,881,227
Closing balance, equity		267,121	29,815

¹ Correction of error has been made between Share premium (+) and Retained earnings (-) in June 2017 with SEK 10.1 million, recalculated 2016.

² Increase of Share capital with SEK 5.4 million and Share premium with SEK 54.9 million, decrease of Retained earnings with SEK 2.6 million due to share issue costs.

³ Reduction of Share capital during 2017 has been made with SEK 31.5 million towards Share premium.

Condensed statement of cash flows for the Investment Entity

SEK 000	Note	2017 Full-year	2016 Jan-Dec
Operating activities			
Operating profit/loss		220,510	-174,049
Adjustments for items not affecting cash flow			
Depreciation		0	106
Change in fair value	2	-254,555	146,544
Other items		18	-1,371
Proceeds from short-term investments		-405	-193
Interest paid/received		2	-
Cash flow from operating activities before changes in working capital and operating investments		-34,430	-28,963
Cash flow from changes in working capital			
Increase (-)/Decrease (+) in operating receivables		348	7,851
Increase (+)/Decrease (-) in operating liabilities		2,876	-2,665
Operating investments			
Proceeds from sale of shares in portfolio companies		45,565	444
Acquisitions of shares in portfolio companies		-89,775	-26,987
Proceeds from sale of short-term investments ¹		86,747	41,326
Investments in short-term investments ¹		-	-
Cash flow from operating activities		11,330	-8,994
Financing activities			
Convertible debentures issue		-2,628	-
Cash flow from financing activities		-2,628	7
Cash flow for the period		8,703	-8,987
Cash and cash equivalents at the beginning of the year		10,602	19,589
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD		19,305	10,602
Supplemental disclosure¹			
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD		19,305	10,602
Short-term investments, market value at closing date		150,329	237,545
CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS AT THE END OF THE PERIOD		169,634	248,147

¹Surplus 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 Oct-Dec	2016 Oct-Dec restated	2017 Full-year	2016 Full-year restated
Dividend ¹		0	3,333	0	3,333
Other revenue		751	377	2,464	2,027
Revenue		751	3,710	2,464	5,360
Other expenses		-4,545	-5,200	-13,190	-15,415
Personnel costs		-6,376	-4,757	-23,319	-17,344
Depreciation of tangible non-current assets		0	0	0	-106
Change in fair value of shares in portfolio companies	4	49,104	-5,821	252,072	-146,544
Change in fair value of other financial assets		2,483	0	2,483	0
Operating profit/loss		41,421	-12,068	220,510	-174,049
Financial net	4	-9,470	-10,944	-40,915	-42,783
Profit/loss before tax		31,951	-23,012	179,595	-216,832
Tax		-	-	-	-
NET PROFIT/LOSS FOR THE PERIOD	4	31,951	-23,012	179,595	-216,832

Condensed statement of comprehensive income for the Parent Company

SEK 000	Note	2017 Oct-Dec	2016 Oct-Dec restated	2017 Full-year 0	2016 Full-year restated
Net profit/loss for the period	4	31,951	-23,012	179,595	-216,832
Total comprehensive income/loss for the period	4	31,951	-23,012	179,595	-216,832

¹ Dividend from BioArctic

Condensed balance sheet for the Parent Company

SEK 000	Note	31 Dec 2017	31 Dec 2016 restated
ASSETS			
Tangible assets			
Machinery and equipment		-	-
Financial assets			
Shares in portfolio companies at fair value through profit or loss	2.4	447,783	149,408
Loans receivable from portfolio companies	4	3,436	957
Other financial assets	4	40,596	38,113
Total non-current assets		491,815	188,478
Current assets			
Receivables from portfolio companies		611	229
Other current receivables		531	660
Prepaid expenses and accrued income	4	666	806
Short-term investments at fair value through profit or loss		150,329	237,545
Cash and cash equivalents		19,305	10,602
Total current assets		171,442	249,842
TOTAL ASSETS		663,257	438,320
EQUITY AND LIABILITIES			
Total equity	4	267,121	29,815
Long-term liabilities			
Convertible loan	3	379,184	394,438
Other financial liabilities	4	4,807	4,798
Total long-term liabilities		383,991	399,236
Current liabilities			
Accounts payable		1,155	1,461
Liabilities to portfolio companies		-	-
Other current liabilities		1,627	959
Accrued expenses and prepaid income		9,363	6,849
Total current liabilities		12,145	9,269
Total liabilities		396,136	408,505
TOTAL EQUITY AND LIABILITIES		663,257	438,320

Condensed statement of changes in equity for the Parent Company

SEK 000	Not	31 Dec 2017	31 Dec 2016 restated
Share capital		26,732	26,725
Share premium reserve	4	1,884,310	1,884,310
Retained earnings	4	-1,881,227	-1,676,548
Opening balance, equity		29,815	234,487
Net profit/ loss for the period	4	179,595	-218,926
Effect of incentive programs		-15	-1,241
Set-off issue ¹		57,713	-
Effect off voluntary change of accounting principle	4	0	15,488
Share issue		13	7
Share capital ²		644	26,732
Share premium reserve		1,970,752	1,884,310
Retained earnings		-1,704,275	-1,881,227
Closing balance, equity	4	267,121	29,815

¹ Increase of Share capital with SEK 5.4 million and Share premium with SEK 54.9 million, decrease of Retained earnings with SEK 2,6 million due to share issue costs.

² Reduction of Share capital has been made during 2017 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, 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.

Changes in accounting principles 2017

No changes in accounting principles has been made for the Investment Company or the parent company during fourth quarter 2017. Restated figures due to the effect of the voluntary change in accounting principles during second quarter 2017, are shown in note 4.

New and revised accounting principles 2017 - 2018

No new or revised IFRS standards or recommendations from IFRS Interpretations Committee has had impact on the Investment Entity. The implementation of *IFRS 9 Financial* and *IFRS 15 Revenue from Contracts with Customers* did not have any influence on the financial reporting compared to the current reporting.

Definitions

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 – December 2017.

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 (calculated as Total Portfolio Fair Value minus Potential Distribution to Rosetta Capital).

Net asset value per share: Net Portfolio Fair Value of the total portfolio (SEK 447.8 million), loans receivable from portfolio companies (SEK 3.4 million), short-term investments (SEK 150.3 million), cash and cash equivalents (SEK 19.3 million), and financial assets less interest-bearing liabilities (SEK 44.7 million minus SEK 384 million), in relation to the number of shares outstanding (64 116 815) on the closing date (31 December 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 non-observable data

Fair value as of 31 December 2017

SEK 000	Level 1	Level 2	Level 3	Total
Financial assets				
Shares in portfolio companies, at fair value through profit or loss	14,083	-	433,700	447,783
Loans receivable from portfolio companies	-	3,436	-	3,436
Other financial assets	-	-	40,596	40,596
Receivables from portfolio companies	-	611	-	611
Cash, cash equivalents and short-term investments	169,634	-	-	169,634
Total	183,717	4,047	474,296	662,060
Financial liabilities				
Other financial liabilities	-	-	4,807	4,807
Accounts payable	-	1,155	-	1,155
Total	-	1,155	4,807	5,962

Fair value as of 31 December 2016

SEK 000	Level 1	Level 2	Level 3	Total
Financial assets				
Shares in portfolio companies, at fair value through profit or loss	-	-	149,408	149,408
Loans receivable from portfolio companies	-	957	-	957
Other financial assets	-	-	38,113	38,113
Receivables from portfolio companies	-	229	-	229
Cash, cash equivalents and short-term investments	248,147	-	-	248,147
Total	248,147	1,186	187,521	436,854
Financial liabilities				
Other financial liabilities	-	-	4,798	4,798
Accounts payable	-	1,460	-	1,460
Liabilities to portfolio companies	-	-	-	0
Total	-	1,460	4,798	6,258

Fair value (level 3) as of 31 December 2017

SEK 000	Shares in portfolio companies	Other financial assets	Other financial liabilities
At beginning of the year	149,408	38,113	4,798
Transfer to and from level 3	-14,083	-	-
Acquisitions	91,869	-	-
Disposals	-45,565	-	-
Gains and losses recognized through profit or loss	252,072	2,483	9
Closing balance 31 Dec 2017	447,783	40,596	4,807
Realized gains and losses for the period included in profit or loss	45,820	-	-
Unrealized gains and losses in profit or loss for the period included in profit or loss	206,252	2,483	-9

Fair value (level 3) as of 31 December 2016

SEK 000	Shares in portfolio companies	Other financial assets	Other financial liabilities
At beginning of the year	267,651	38,113	5,439
Acquisitions	28,797	-	-
Gains and losses recognized through profit or loss	-146,988	-	-641
Closing balance 31 Dec 2016	149,460	38,113	4,798
Realized gains and losses for the period included in profit or loss	-957	-	-
Unrealized gains and losses in profit or loss for the period included in profit or loss	-146,031	0	-641

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", SEK 266.2 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 35.3 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 fourth quarter 2017 being SEK 370 million the price payable for the KDev Investments shares is capped to SEK 37.0 million.

"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	31 Dec 2017	31 Dec 2016
Karolinska Development Portfolio Fair Value (non listed companies)	413,844	143,657
Karolinska Development Portfolio Fair Value (listed companies)	14,083	-
KDev Investments Portfolio Fair Value	286,070	261,586
Total Portfolio Fair Value	713,997	405,243
Potential distribution to Rosetta Capital of fair value of KDev Investments*	266,214	255,837
Net Portfolio Fair Value (after potential distribution to Rosetta Capital)	447,783	149,406

* SEK 35.3 million repayment of investments in KDev Investments made by Rosetta Capital and SEK 230.9 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 and if the companies recently have met significant milestones. If there is no valuation available based on a recently refinancing or other third-party valuation and there is no valuation available based on a similar transaction, 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 at any time 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	31 Dec 2017	31 Dec 2016
Nominal amount of convertible debentures issued on 2 January 2015	386,859	386,859
Issue costs	-28,171	-28,171
Equity portion	-49,528	-49,528
Debt at issuance date 2 January 2015	309,160	309,160
Accrued interest costs	85,278	85,278
TOTAL	394,438	394,438
Set-off share issue 2017		
Converted nominal amount	-57,522	-
Converted part of issue costs	4,189	-
Converted part of equity portion	7,364	-
Converted part of accrued interest costs	-12,680	-
Redemption of convertible	-93	-
Debt prior this year's interest	335,696	394,438
Accrued interest costs 2017	43,488	-
Total	379,184	394,438

NOT 4 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 valued 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.

KSEK	Not	2016 Oct-Dec		2016 Oct-Dec	2016 Full-year		2016 Full-year
		As previously reported	Effect of changed principle	Restated	As previously reported	Effect of changed principle	Restated
Dividend		3,333		3,333	3,333		3,333
Net sales		377		377	2,027		2,027
Revenue		3,710	0	3,710	5,360	0	5,360
Other expenses		-5,200		-5,200	-15,415		-15,415
Personnel costs		-4,757		-4,757	-17,344		-17,344
Depreciation of tangible non-current assets		0		0	-106		-106
Impairment losses on shares in subsidiaries, joint ventures, associated companies and other long-term securities holdings		-7,768	7,768	0	-148,440	148,440	0
Change in fair value of shares in portfolio companies			-5,821	-5,821		-146,544	-146,544
Result from sale of shares in portfolio companies		444	-444	0	444	-444	0
Operating profit/loss		-13,571	1,503	-12,068	-175,501	1,452	-174,049
Financial net		-10,945	1	-10,944	-43,425	642	-42,783
NET PROFIT/LOSS FOR PERIOD		-24,516	1,504	-23,012	-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.

KSEK	Not	2016 Oct-Dec		2016 Oct-Dec	2016 Full-year	0	2016 Full-year
		As previously reported	Effect of changed principle	Restated	As previously reported	Effect of changed principle	Restated
Net profit loss for the period		-24,516	1,504	-23,012	-218,926	2,094	-216,832
Total comprehensive Income/loss for the period		-24,516	1,504	-23,012	-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.

KSEK	Not	31 Dec 2016 As previously reported	Effect of changed principle	2016-12-31 Restated
ASSETS				
Tangible assets		0		0
Financial assets				
Shares in subsidiaries, joint ventures, associated companies and other long term- securities holdings		107 610	-107 610	0
Shares in portfolio companies at fair value through profit and loss			149 408	149 408
Loans receivable from portfolio companies		28 734	-27 777	957
Other financial assets		33 010	5 103	38 113
Total non-current assets		169 354	19 124	188 478
Current assets				
Receivables from portfolio companies		229		229
Other current receivables		660		660
Prepaid expenses and accrued income		3 448	-2 642	806
Short term investments at fair value through profit or loss		237 545		237 545
Cash and cash equivalents		10 602		10 602
Total current assets		252 484	-2 642	249 842
TOTAL ASSETS		421 838	16 482	438 320
EQUITY AND LIABILITIES				
Equity				
Restricted equity				
Share capital		26 732		26 732
Unrestricted equity				
Share premium reserve		1 884 310		1 884 310
Accumulated losses		-1 677 789	13 394	-1 664 395
Net profit/loss for the year		-218 926	2 094	-216 832
Total equity		14 327	15 488	29 815
Long-term liabilities				
Convertible loan	3	394 438		394 438
Pension obligations		3 804	994	4 798
Total long-term liabilities		398 242	994	399 236
Current liabilities				
Accounts payable		1 461	-1	1 460
Liabilities to portfolio companies		-		0
Other current liabilities		959	1	960
Accrued expenses and prepaid income		6 849		6 849
Total current liabilities		9 269	0	9 269
Total liabilities		407 511	994	408 505
TOTAL EQUITY AND LIABILITIES		421 838	16 482	438 320