

A microscopic image of neurons, rendered in a blue and red color scheme. The neurons are shown with their cell bodies and branching processes, set against a light blue background. The overall image has a high-tech, scientific feel.

KAROLINSKA
DEVELOPMENT

Profit from Innovation

Annual Report **2013**



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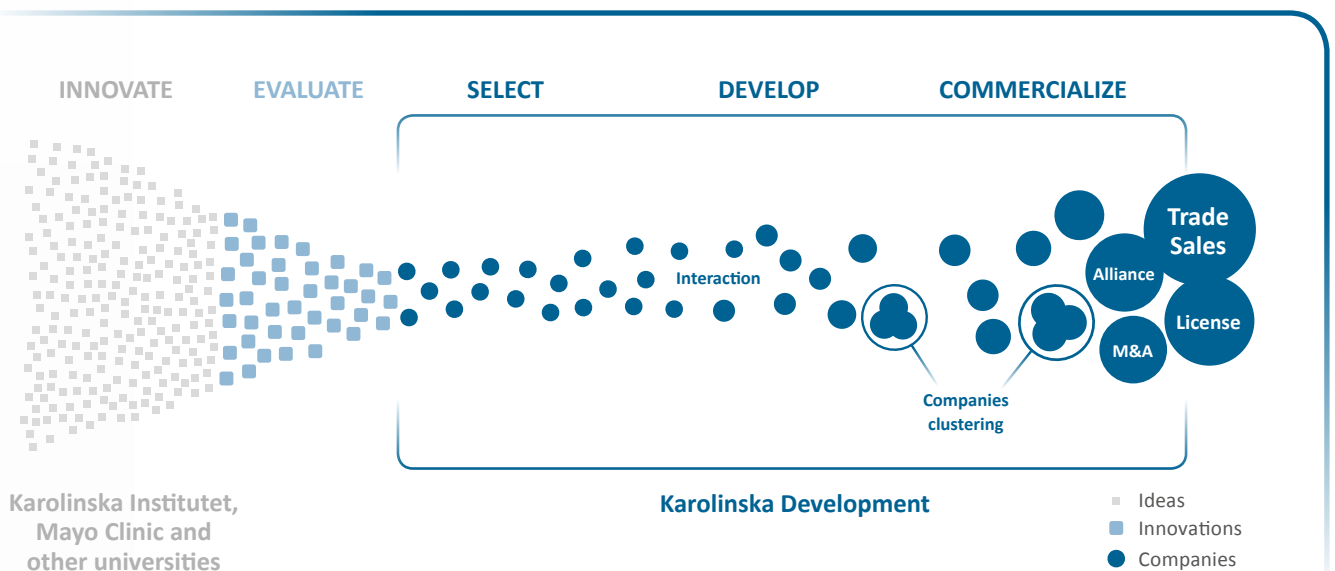
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Karolinska Development aims to create value for patients, researchers, investors and society by developing innovations from world class science into differentiated products that can be partnered.

The business model is to: **SELECT** the most commercially attractive medical innovations that can potentially satisfy unmet medical needs; **DEVELOP** innovations to the stage where the greatest return on investment can be achieved; and **COMMERCIALIZE** the innovations through the sale of companies or out-licensing of products.

An exclusive deal flow agreement with Karolinska Institutet Innovations AB, along with other cooperation agreements with leading universities, delivers a continuous flow of innovations. Today, the portfolio consists of 34 projects, of which 17 are in clinical development.



Significant events during the financial year

Karolinska Development AB

Closing of the SEK 220 strategic transaction

- Rosetta Capital IV LP acquired a minority share in Karolinska Development's holdings in 13 of its 25 portfolio companies for SEK 220m

Bo Jesper Hansen elected as new Chairman of the Board

- Bo Jesper Hansen was elected as new Board Member by the Annual General Meeting in May and to assume the position as Chairman of the Board on October 1, 2013

New collaborations with research centers

- During the year, Mayo Clinic in the US, Ospedale San Raffaele in Italy and the Medical University of Graz, Austria signed collaboration agreements with Karolinska Development to identify investment opportunities among life science projects

Karolinska Development invests in Forendo Pharma together with Novo A/S

- Forendo Pharma that develops novel treatments for endometriosis and low testosterone levels became the latest addition to Karolinska Development's portfolio

Portfolio companies

Pharmanest met efficacy and safety end points in Phase II study of SHACT

- In the Phase II-study, Pharmanest's pain-relieving product was tested in connection with intrauterine device insertion. The data show clinically and statistically significant lower pain and discomfort compared to placebo and no serious adverse events were reported.

Athera Biotechnologies entered into option agreement with Boehringer Ingelheim and received co-financing from the EU

- Athera was granted, through the EU's Seventh Framework Program, EUR 6 million to the development of PC-mAb for treatment of cardiovascular disease
- Boehringer Ingelheim entered into an agreement on Athera's antibody program with an option to acquire the program after Phase I

Umecrine Mood initiated Phase I/II study of premenstrual dysphoric disorder

- The first patient was dosed in a randomized, double-blind Phase I/II study of UC1010 for the treatment of premenstrual dysphoric disorder

Axelar announced data from Phase II study with AXL1717 in lung cancer

- The final Phase II data showed no statistically significant difference in the rate of progression-free survival between the patients treated with AXL1717 compared to the group treated with docetaxel

Clinical and commercial success by Pergamum

- A Phase I/II study completed in patients with chronic leg ulcers treated with LL-37 demonstrated a statistically significant improvement in healing rate compared to placebo
- Cadila Pharmaceuticals initiated a strategic collaboration with Pergamum where a novel therapeutic peptide, PXL181, will be further developed by Cadila
- Follow-up data from a Phase II trial of PXL01 at 6 and 12 months after hand surgery revealed a statistically significant improvement in functional hand recovery compared to placebo

Lipidor reported positive clinical data for a novel formulation in psoriasis treatment

- The Phase I/IIa study showed that Lipidor's spray formulation AKVANO has comparable efficacy compared to a marketed formulation of calcipotriol for the treatment of psoriasis

Dilaforette initiated Phase II study with sevuparin for treatment of severe malaria

- Together with the Mahidol Oxford Tropical Medicine Research Unit (MORU), Dilaforette initiated a Phase II study in India with sevuparin, which is developed to prevent infected cells from blocking blood vessels in patients with malaria

OssDsign initiated clinical study

- OssDsign completed a SEK 14 million financing round and initiated a multicenter clinical study with the company's cranial implant OssDsign Cranio PSI

Research grants of EUR 1 million to three portfolio companies

- Pergamum, Inhalation Sciences Sweden and XSpray Microparticles were awarded research grants from the EU within the framework of the international research project FORMAMP, with the goal to develop treatments for infectious diseases and reduce the problem of antibiotic resistance

Significant events after the balance sheet date

Karolinska Development AB

Christian Tange appointed as new CFO

- Christian Tange, who has over 15 years' experience in international growth companies and as an advisor to private equity funds and corporate finance advisors in M&A deals within life science, was appointed as Chief Financial Officer

Portfolio companies

Dilafor signed license agreement with Lee's Pharmaceutical

- The companies will jointly develop tafoxiparin for obstetrical and gynecological indications while Lee's Pharmaceutical will conduct and finance clinical Phase II and Phase III trials in China

Positive results from Pharmed study in hysteroscopies

- The results indicates that SHACT may be used in outpatient hysteroscopy procedures

NovaSAID initiated partnership with Cadila Pharmaceuticals

- NovaSAID and Cadila initiated a strategic partnership to develop drugs for inflammation and pain for diseases such as rheumatoid arthritis based on a number of drug candidates developed by NovaSAID

Other news in the portfolio during 2013

- Patient recruitment completed in the Phase I/II study of Umechrine Mood's UC1010 for premenstrual dysphoric disorder
- Umechrine Cognition signed partnering agreement with CleveXel Pharma
- Athera Biotechnologies elected Dr. Gunnar Olsson as new Chairman of the Board
- Inhalation Sciences received US Patent Approval for Preciselnhale
- Athera Biotechnologies signed an agreement to transfer the Annexin A5 project to Medirista

- Aprea presented preclinical data at the American Association for Cancer Research (AACR) meeting showing strong synergistic effect with APR-246 and cisplatin
- Bioarctic Neuroscience's Alzheimer antibody entered into Phase IIb trial
- An investigator sponsored Phase I/II study of Axelar's AXL1717 in patients with brain tumors started in the US

News after the balance sheet date

- Aprea presented preclinical data at AACR – APR-246 re-sensitizes ovarian cancer cells to platinum compounds and doxorubicin
- Biogen Idec invested together with Eisai in BioArctic Neuroscience's antibody BAN2401 for treatment of Alzheimer's disease
- NephroGenex (NASDAQ: NRX) announced closing of Initial Public Offering
- Dilaforette announced the appointment of Christina Herder as new CEO
- Dr. Bernd R. Seizinger was elected to the Aprea Board of Directors

Message from the CEO

In 2013 Karolinska Development made commercial and scientific progress. In March, we completed the previously announced strategic transaction with Rosetta Capital, which acquired shares in a selection of our portfolio companies, at a premium of 23% to reported fair value, for SEK 220 million. A few months later, Boehringer Ingelheim agreed an option deal with Athera around the company's innovative potential new treatment of atherosclerosis. The agreement, which provides Boehringer Ingelheim an option to acquire the program on predetermined terms, is a concrete example of how we can create value in projects even in early development.

Our business strategy is to invest in world class innovation and to develop these to a point where they can be sold or licensed to partners and thereby create value to our shareholders. The main focus for management in 2014 continues to be business development. Importantly, we advanced the clinical development of the project portfolio in 2013 and received positive clinical data from Pergamum, Pharmanest and Lipidor. The positive clinical data obtained from two of Pergamum's projects and the very clear Phase II data from Pharmanest give us a good opportunity to create value through partnering or exits.

Axelar presented final data from its Phase II study with AXL1717 against lung cancer. The trial did not demonstrate that AXL1717 was superior to the comparator docetaxel. New and valuable data was however generated during the study, which supports that AXL1717 potentially can be developed for patients with advanced lung cancer who currently have no treatment options which we are currently exploring.

During the year, we also invested in a new portfolio company, Forendo Pharma, in syndication with Novo A/S. After the investment in Forendo, which is aiming at a cure for endometriosis, Karolinska Development now has 13 projects in clinical development in its active portfolio for diseases with clear unmet medical needs.

In early 2014, we announced a collaboration agreement for NovaSAID which will help the company to take the project through the next development phases. In addition, Dilafor signed a license agreement with Lee's Pharmaceutical in which the Hong Kong based company will finance the upcoming Phase II and Phase III program

with tafoxiparin aimed at reducing protracted labors. After the turn of the new year Pharmanest also presented additional positive study results, this time showing that the pain reducing drug candidate SHACT can successfully be used in connection with hysteroscopies.

We are looking forward to important clinical data from our portfolio during the first half of 2014. Data are expected from Umeocrine Mood's Phase I/II study with its candidate drug for severe premenstrual symptoms, from Dilaforette's Phase I/II study with sevuparin against malaria, from the multiple ascending dose part of Akinion's Phase I/II trial in acute myeloid leukemia, and from XSpray's Phase I trial with its reformulation of a protein kinase inhibitor to treat cancer. Furthermore, during 2014, Aprea is expected to initiate and complete the first part of its Phase I/II study in ovarian cancer. Each of these potential medicines could change the life of patients with severe diseases. This is the true value of investing in life science innovations.

In our ongoing efforts to create value for patients and for our shareholders, we will continuously seek partners to the portfolio companies for co-funding or development of projects in these companies to secure further and faster advancement towards the market.

Torbjörn Bjerke
Chief Executive Officer



Financial position in brief

Group profit/loss

The Group's **operating profit** amounted to **144 million** SEK which corresponds to an increase of **398 million** SEK compared to the previous year.

Profit after tax amounted to **188 million** SEK compared to **-230 million** SEK for 2012 or **4.1 SEK per share** for 2013 compared to **-4.4 SEK per share** for 2012.

The increase in operating profit was mainly due to the transaction with Rosetta Capital, affecting the operating profit by **405 million** SEK. The capital gain from the transaction amounted to **68 million** SEK and Rosetta's purchase price for **13.66%** of Karolinska Development's share in **13** portfolio companies exceeded the previously reported fair value in the same portfolio by **23 %**.

Revenues amounted to **10 million** SEK during the year, which is unchanged compared to 2012.

Investments, cash and cash equivalents

Investments in the portfolio in the amount of **266 million** SEK were made by Karolinska Development during 2013, compared to **291 million** SEK during 2012

At year-end total **cash, cash equivalents and short-term investments** amounted to **207 million** SEK compared to **291 million** SEK at year-end 2012. At the same time, total net cash from unconsolidated portfolio companies amounted to **112 million** SEK compared to **119 million** SEK compared to year-end 2012.

Portfolio valuation

The portfolio **Fair Value** amounted to **1,730 million** SEK by the end of 2013, a decrease of 97 million compared to the corresponding period last year when the Fair Value amounted to **1,827 million** SEK.

Equity ratio and net asset value

The company's **equity ratio** increased during the fiscal year by **8 percentage points to 99%**. The net asset value amounted to **40.8 SEK per share** at the year-end 2013, compared to **44.0 SEK per share** the previous year.

Accounting principles

Karolinska Development is an **investment entity** according to IFRS 10 Consolidated Financial Statements, which affects financial years beginning 1 January 2014 or later. This means that future consolidated accounts are compiled significantly different (including comparative figures 2013). The difference versus the 2013 Annual Report is that all portfolio companies, including subsidiaries, are measured at fair value. It will therefore be easier to follow the investment entity's net asset value and that the total value development of the portfolio over time affects the recognized results (see Note 50).

Group profit after tax

SEK 188m
(2012: SEK -230,2m)

Profit per share

SEK 4.1
(2012: SEK -4.4)

Investments in portfolio companies

SEK 266m
(2012: SEK 232m)

Total cash, cash equivalents and short-term investments

SEK 207m
(2012: SEK 291m)

Portfolio Fair Value

SEK 1,730m
(2012: SEK 1,827m)

Net asset value per share

SEK 40.8
(2012: SEK 44.0)

Strong innovation flow, clear investment criteria and active ownership

Each year, Karolinska Development evaluates over 200 innovations that originates from world class medical research. Only a few are selected from this innovation flow. The company has carefully formulated investment criteria for new and existing companies and investments are made on a milestone basis. The projects that do not reach their goals can quickly be terminated in favor of projects that have higher probabilities to achieve returns.

Steadily growing innovation flow

The foundation for Karolinska Development and large parts of the current portfolio originates from an exclusive deal flow agreement with Karolinska Institutet Innovations AB. The agreement ensures access to the flow of innovations from Karolinska Institutet, which ranks as one of the world's leading medical institutions. Moreover, Karolinska Development has during the year broadened the flow of innovation. As a complement to current close collaborations with numerous Nordic universities, partnership agreements were announced during the year with highly respected academic research institutions in the US and Europe. Through Mayo Clinic in the US, Ospedale San Raffaele in Italy and Medical University of Graz in Austria, Karolinska Development now has access to the innovation flow from a total of around 7,000 researchers and physicians. Adding to the flow academic projects, Karolinska Development also invests in slightly later phase projects as well. The latest addition to the portfolio, Forendo Pharma, is an example of one such investment.

Clearly defined criteria for successful portfolio

A thorough selection process in place for over a decade has produced a portfolio with several pharmaceutical projects in clinical phases and technology products that have now reached the market. The portfolio consists exclusively of projects based on prominent

research in specific fields that target well defined medical needs. Furthermore, commercial potential is possible only if there is patent protection or alternative forms of commercial protection in place. Intellectual property protection is therefore one of the cornerstones in Karolinska Development's investment criteria.

Active ownership with product focus

Karolinska Development's team consists of individuals with many years of experience in drug development from leading positions with major pharmaceutical companies. As a result, the company participates actively as an owner through every development stage in the portfolio companies, from early-stage research to clinical development and commercialization. In the same way, we see the innovators behind these companies as an important resource throughout the development process, normally as board members and scientific advisors. The portfolio companies are managed virtually with only a few employees, particularly during the early development of the companies. At the same time, much of the research and development work is outsourced. In these areas, Karolinska Development has established a number of framework agreements with carefully selected, qualified providers of research and development services.

Karolinska Development's investment criteria



Unique innovation

The innovations in Karolinska Development's portfolio are based on unique discoveries and technologies that originate from prominent research.



Commercial potential

The portfolio companies and their projects must have a commercial value and a potential to be partnered



Meets medical needs

The innovation must address a well defined medical need



Intellectual property protection

The innovations must be patent protected or have alternative commercial protection to have the potential to achieve commercial success.



World class research aimed at large medical needs within women's health

Forendo Pharma is Karolinska Development's latest addition to the portfolio. The company develops treatments that address sex hormone regulation and is yet another clear example of how academic research has resulted in innovative therapeutic approaches. One of the programs focus on endometriosis, a disease that affects hundreds of millions of women worldwide.

The development programs in Forendo Pharma is managed by an experienced team that recently saw their previous program result in a market launch for the drug Osphe[®] for the treatment of dyspareunia (pain during sexual intercourse). However the origins of the program now preparing for clinical development in endometriosis are traced back to Professor Matti Poutanen and fellow scientists at Turku University in Finland and scientists at Oulu University and Åbo Akademi in Turku for their discoveries around the novel therapeutic drug target.

"We are targeting an enzyme called HSD17B1 which is highly expressed in the endometrium and in abnormal endometriosis cells. This enzyme is responsible for formation of active estrogen which strongly promotes cell growth in endometrial cells. In a primate disease model we have seen that inhibition of this enzyme is efficacious in endometriosis. The proliferation of endometriosis cells is reversed without disturbing the natural hormone balance, which is a key factor for the intended therapeutic use", says Risto Lammintausta, CEO of Forendo Pharma.

Endometriosis is caused by the growth of endometrial cells outside of the uterus where they are normally found. It is estimated that 10% of all fertile women are affected by the disease. The large patient population and lack of good treatment alternatives places a large economic burden to society. A recent study estimated the societal economic burden to almost USD 70 billion in the US alone for this disease.

Risto Lammintausta explains the current situation for endometriosis patients, "The endometriosis lesions cause a lot of pain for these women, particularly during menstruation. In addition around a third of these patients suffer from infertility. Current hormonal treatments may give symptomatic relief, but they are not safe for long-term use for this chronic disease. Surgical interventions are also only effective for a while and then patients experience recurrence unless the affected reproductive organs are resected. I therefore believe we are undertaking a very important task to help the women affected to live a healthy life."

For more information on Forendo Pharma, see page 32



Focus in the clinical projects in the active portfolio



Akinion Pharmaceuticals

AKN-028 – Akinion is conducting the multiple ascending dosing part of a Phase I/II study with AKN-028. The compound is aimed at treating acute myeloid leukemia where very few treatment options are available today, especially among the many elderly patients that are affected by this hematological cancer disease. AKN-028 has the potential to be efficient in chemotherapy resistant patients as well as in synergy with chemotherapy.



Aprea

APR-246 – Aprea is planning to initiate a Phase I/II trial where APR-246 will be used in combination with platinum-based chemotherapy in patients with ovarian cancer. It represents a completely new class of targeted therapy with potential to treat tumors without any current treatment options and to improve the efficacy of existing chemotherapy.



Axelar

AXL1717 – During the end of 2013, Axelar presented final data from a Phase II study with AXL1717 in non-small cell lung cancer. The results did not show a statistically significant improvement of the rate of patients with progression free survival after 12 weeks with AXL1717 compared to docetaxel. The main side effect in both of the trial arms were neutropenias; 22% of patients treated with AXL1717 had at least one event of grade 3/4 neutropenias compared to 54% of the patients treated with docetaxel. Further clinical trials are required to properly position this growth factor and mitotic inhibitor.



Dilafor

Tafoxiparin – Data from a previous Phase II study with 263 women indicate that tafoxiparin has the potential to reduce the incidence of protracted labor in women who are induced. Based on these findings, the company is now planning the next clinical trial in induction of labor together with its license partner Lee's Pharmaceutical. The Hong Kong-based partner will conduct Phase II and Phase III trials with tafoxiparin.



Dilaforette

Sevuparin – The compound which is used to prevent infected blood cells from obstructing blood flow in malaria patients is presently undergoing a Phase I/II trial in Thailand and a Phase II trial in India. Based on its unique mechanism, sevuparin might improve survival of patients with severe malaria. Meanwhile, preparations ahead of clinical studies of sevuparin in patients with the hereditary hematological disorder sickle-cell disease are currently ongoing.



Pergamum

LL-37 – In October 2013 Pergamum presented positive final data from a Phase I/II study with LL-37 in 34 patients with hard-to-heal venous leg ulcers. The results showed a statistically significant increased healing rate compared to the patients who received placebo. LL-37's effect on healing rate could accelerate closure of chronic leg ulcers with important mitigation of patient suffering and significant health care savings at effective doses. Based on these results the company is working on finding a partner for the further development.

PXL01 – During the past year Pergamum also presented follow-up data from a Phase II study with PXL01 in patients that had undergone hand surgery with the aim to reduce debilitating scar tissue which reduces the range of motion after surgery. 6 and 12 month data after completed surgery showed a statistically significant improvement in hand function with PXL01 compared to placebo. The treatment was not associated with a safety issues nor an increase in tendon ruptures. PXL01 is the world's first pharmaceutical candidate to target post-surgical adhesion formation and scar prevention. Based on these results the company is working on finding a partner for the further development.



Pharmanest

SHACT – During the summer in 2013, Pharmanest announced that the company had met all end-points in the Phase II study investigating the efficacy and tolerability of the anesthetic product candidate SHACT in 218 women that had undergone intrauterine device (IUD) insertions. The results showed that women who received SHACT experienced statistically significant ($p < 0.0001$) less pain than the women in the placebo group. Patients who received SHACT also experienced less discomfort ($p < 0.05$) than women who received placebo. There are no effective pain management in IUD insertions approved today. The company is now working on widening the applicability for SHACT including use during hysteroscopies and other gynecological procedures. Pharmanest is working to find a partner that can take SHACT to the market.



Umecrine Mood

UC1010 – Umecrine Mood is currently completing a Phase II study of UC1010 among women suffering from premenstrual dysphoric disorder (PMDD). The compound is evaluated in 120 women and results from the study are expected during the second quarter of 2014. UC1010 is not expected to have the side effects of the currently approved drugs, which is contraceptive pills and anti-depressive treatment. UC1010 also has the potential to be significantly more effective by addressing a possible cause of the disease.



Unique drug candidate for improved cancer treatment

The portfolio company Aprea is a prominent example of basic academic research that has progressed into clinical development. The company's focus is on the protein p53, which is active in the control mechanisms that prevent uncontrolled cell division typically found in cancer. After completing a small clinical study in cancer patients, Aprea is now initiating a Phase II study in ovarian cancer with APR-246, which repairs this self-defense mechanism.

Professor Klas Wiman at Karolinska Institutet, who founded Aprea together with five other researchers, explains how the company's drug candidate could provide a breakthrough in cancer treatment:

"When the p53 gene mutates, which happens in around half of all cancer cases, the protein's structure changes in a way that it no longer works normally. Our research strategy was to utilize therapeutic means to structurally modify the mutated p53 protein to work as if the gene function was normal. This activates the cell death mechanisms in tumor cells, which are otherwise depleted and lead to uncontrolled growth. The drug candidate APR-246 has demonstrated this specific effect, as well as the ability to re-sensitize tumors to medication after they have stopped responding to treatment."

In tumor cells that previously have not shown evidence of functional p53, the protein has regained its original structure and function after treatment. Aprea has also evaluated the efficacy of APR-246 in ovarian cancer patient cells together with platinum based chemo-

therapy which is the standard treatment for many cancers. It has been clearly shown in these cases that APR-246 can break the treatment resistance common with this type of drug. The results now serve as the basis for the company's Phase II study in patients with advanced ovarian cancer.

"This patient group is in great need of a novel drug. Although platinum based chemotherapy may be effective initially, relapse rates are very high. At that point the tumors often become resistant to platinum treatment", says Aprea CEO Ulf Björklund. "This is a recurring pattern in many other types of cancer. We therefore feel that the study in ovarian cancer could mark the start of a broader application of our drug candidate to improve survival rates for many cancer patients."

For more information on Aprea, see page 23





Innovative approach to pain management ready for commercialization

Karolinska Development's many years of investment in women's health are now beginning to bear fruit. During the year, Pharmanest completed a clinical study with women who undergo intrauterine device insertion. The company has combined the proven pain relief agent lidocaine with a new innovative drug formulation and a proprietary applicator. The product is specifically designed to for use in connection with gynecological procedures.

The completed double-blind Phase II study involved 218 women that were randomized to either receive the active drug candidate SHACT or a placebo. Women who received SHACT treatment reported less pain which was a clear and statistically significant difference compared to placebo.

Pharmanest's CEO, Gunilla Lundmark, is positive about the data that were reported and the work ahead: "The results clearly indicate the potential of this product. SHACT contributed significantly to reduced pain and women who received SHACT reported similar adverse events, in terms of type and frequency, as women who received placebo treatment. In addition, it has also been confirmed that SHACT is active shortly after it is administered, which is necessary for the practical use in connection with this type of procedures. The way forward to market approval and acceptance among clinicians is therefore clearly laid out."

The company is active in a field where no products aimed towards pain relief have been developed specifically for gynecology and obstetrics. Women currently do not receive any pain relief in

connection with intrauterine device (IUD) insertion or are given topical gels that have never demonstrated their efficacy in this patient group or oral painkillers that has never been shown to ease pain during IUD insertions. There is also a widespread need for improved and simplified pain relief in several related indications.

"The data that have now been generated in no way give us reason to be complacent. SHACT can be applied to other gynecological procedures where short-term pain relief is needed. The first thing we are looking at is hysteroscopies, where current procedures include general anesthesia. The advantages for patients and the health economic gains by using localized pain relief cannot be mistaken", says Gunilla Lundmark.

At the same time that Pharmanest is expanding its development work to new indications and exploring potential partnerships.

For more information on Pharmanest, see page 30



PHARMANEST

Clear focus on business development produces results

Karolinska Development's focus on business development started to produce results in 2013. After the year began, a strategic deal with Rosetta Capital was finalized, where a small part of the portfolio was sold for SEK 220m, a premium of 23% to our reported fair value and more than twice the total investment by Karolinska Development. Later, the portfolio company Athera Biotechnologies entered into an option agreement with Boehringer Ingelheim on Athera's fully human monoclonal antibody intended for the treatment of patients with cardiovascular disease. According to the terms of the agreement, Athera will conduct defined preclinical development and a Phase I study for the antibody. Following completion of such a study, Boehringer Ingelheim will have an exclusive option to acquire substantially all of Athera's assets and rights relating to the program on market terms.

Karolinska Development also signed major cooperation agreements to expand its opportunities to invest in innovations outside the Nordic region as well. During the year, Karolinska Development established collaborations with Mayo Clinic in the US, Ospedale San Raffaele in Milan, Italy and the Medical University of Graz, Austria.

Business development efforts continued to produce results in 2014, when two portfolio companies reached agreements with partners. In January, NovaSAID entered into a collaboration with the Indian company Cadila Pharmaceuticals to develop novel treatments for inflammation and pain. Cadila is responsible for all costs up to Phase II development and has the right to future sales revenues in India, the Middle East and Africa. In February, Dilafor entered into an agreement with Lee's Pharmaceutical Holdings of China that grants Lee's Pharm the right to manufacture, develop and commercialize Dilafor's candidate drug tafoxiparin for obstetrics and gynecological indications in China, Hong Kong, Macau and Taiwan. Lee's Pharm will implement and finance Phase II and Phase III studies.

Karolinska Development remains highly focused, together with its portfolio companies, on finding the right partners with the goal of developing novel medicinal products and drugs to patients in great need of better treatment. In this way we create value for both patients, society and shareholders.

Commercial agreements in the portfolio



Athera and Boehringer Ingelheim have entered into an option agreement on Athera's antibody program in cardiovascular disease. After Athera completed a Phase I study, Boehringer has the right to acquire the program.



Lee's Pharmaceutical has licensed Dilafor's tafoxiparin for China and neighboring territories. Lee's Pharmaceutical will implement and finance Phase II and Phase III studies.



Pergamum has entered into a cooperation agreement with Cadila Pharmaceuticals on the preclinical candidate drug PXL181, in which Cadila is financing development through Phase II, while the global rights are shared by the companies.



Umecrine Cognition and Cleoxel Pharma entered into a partnering agreement on the development of a lead program in hepatic encephalopathy in 2013. Cleoxel is co-funding the development through investments in shares in Umecrine Cognition.



Lipidor and CerbiosPharma have signed an agreement to jointly develop Lipidor's formulation technology AKVANO. Initially, the companies will develop products for the treatment of psoriasis.



NovaSAID and Cadila Pharmaceuticals have entered into a strategic partnership on a number of drug candidates for inflammatory disease developed by NovaSAID.



XSpray Microparticles and CerbiosPharma are partnering on development and commercial manufacture where XSpray's RightSize technology can be applied to improve the clinical characteristics of drug formulations and simplify the manufacturing process.



Promising progress in treatment and prevention of cardiovascular disease

Founded as a result of the innovation flow from Karolinska Institutet, Athera Biotechnologies has transformed from an academic idea to a pharmaceutical development company that now has an agreement with a large pharma company. Furthermore, the company has received recognition through a 6 million euro EU grant as the company addresses one of the largest medical concerns in today's healthcare system.

When Johan Frostegård, now a professor at Karolinska Institutet, started his scientific career in medical research, he wanted to explore the inflammatory components in the development of plaque causing atherosclerosis and in particular the links to the immune system and modified phospholipids. Other groups had studied the atherosclerotic properties of lipids containing phosphorylcholine (PC), and the properties of antibodies against them (anti-PC) that develop naturally in mice. Frostegård teamed up with Ulf de Faire, professor in cardiology at Karolinska Institutet, and the duo started to investigate anti-PC in different populations - healthy individuals and patients. The team found that endogenous anti-PC is present at high levels already early in life and could also link low antibody levels to increased risk for cardiovascular disease. The company Athera Biotechnologies was founded with support from Karolinska Innovations AB to explore the diagnostic and therapeutic role of anti-PC.

PC containing phospholipids are major components in cell membranes. When cell membranes are damaged or modified, the 'cryptic' PC-group is exposed on the outside of the cell, with the function to give an 'eat-me' signal to the body, leading to clearance of the damaged cell. If the exposed PC on a cell is left unattended, it induces inflammation. The endogenous antibodies hence act to clean out the inflammation driven by disrupted cells.

"Athera's therapeutic approach is to enhance the protection against inflammation offered by endogenous anti-PC, especially in patients that have low levels of anti-PC, by providing the therapeutic antibody PC-mAb and thereby block the disease-promoting effects of exposed PC", says Gunnar Olsson, Chairman of the Board at Athera. "Currently, a target indication for PC-mAb is risk reduction in CVD patients following vascular interventions. Significant numbers of complications occur after these interventions. The aim for the PC-mAb therapy is to limit the risk of severe cardiovascular complications".

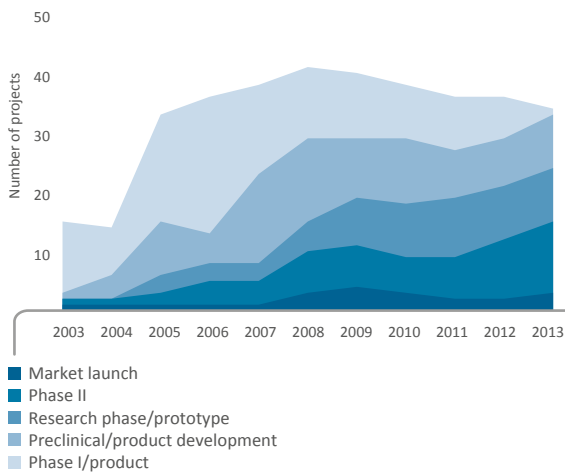
Today, Athera has developed the fully human monoclonal antibody PC-mAb that mimics the function of the endogenous antibodies. The current focus is on initiation of the first phase I study this year. "We are very pleased with the progress for Athera during last year, securing the CARDIMMUN grant from EU's seventh framework programme and signing an option agreement with Boehringer-Ingelheim", says Carina Schmidt, CEO of Athera. "The new board of directors, headed by Gunnar Olsson with decades of experience within cardiovascular product development, positions the company well for the next steps towards clinical testing of the product."

For more information on Athera Biotechnologies, see pages 33 and 40



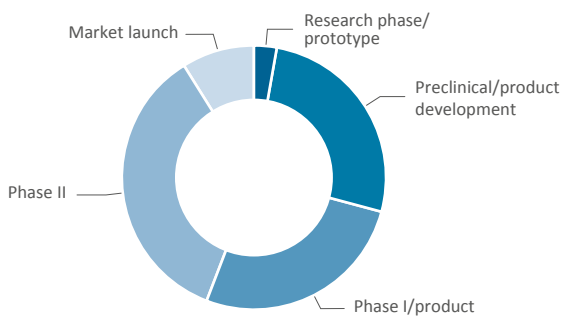
The portfolio

Since the inauguration in 2003, the number of projects in the Karolinska Development portfolio has increased from 15 to 34 projects today. At the same time the maturity of the portfolio has changed distinctly – while the portfolio was mainly made up of early development projects ten years ago, it today holds 17 clinical projects of which 12 are in Phase II. Consequently many projects are facing important milestones for pharmaceutical candidates at a stage where they are attractive for pharmaceutical companies aiming to take drugs to the market. The portfolio also consists of eight technology projects where development times are shorter but where the commercialization strategy usually means taking a product to the market and then sell the company or find a partner. Three technology products in the portfolio have reached the market stage and several are getting close to market launch.

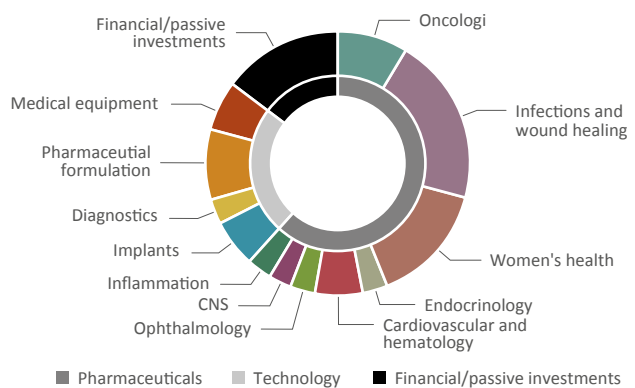


Since its inception in 2003, Karolinska Development's portfolio has grown from 15 early stage projects to a balanced portfolio of 34 projects today, ranging from research phase to clinical Phase II.

Projects by development phase

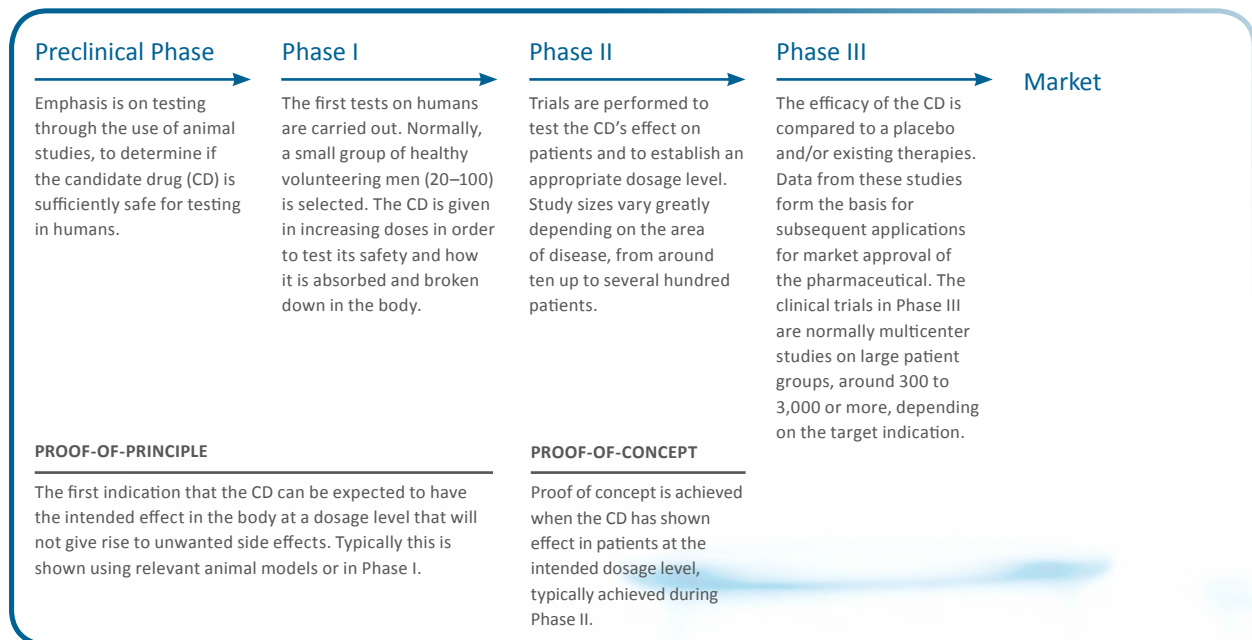


Project by area



Pharmaceutical process

The development of a pharmaceutical candidate into an approved product is a highly regulated process. This process typically covers eight to ten years of work from the time that the pharmaceutical candidate enters preclinical phase until approval. The regulatory authorities in the respective markets evaluate all the relevant data. If approved, the authority will also decide on detailed prescription guidance.



Progress in the portfolio during 2013 and 2014

A number of portfolio companies passed through major clinical milestones during 2013. Pharmanest showed good results from the Phase II study with SHACT for pain relief at IUD insertions. Pergamum reported data from two clinical programs; LL-37 in a Phase I/II study in patients treated for chronic venous leg ulcers and follow-up data from the Phase II study with PXL01 regarding hand function in patients that have undergone hand surgeries. Axelar completed its Phase II study in NSCLC which will guide the company in its continuing development work with AXL1717. Furthermore, Lipidor reported the results from their Phase I/II trial of the company's reformulation of the psoriasis drug calcipotriol.

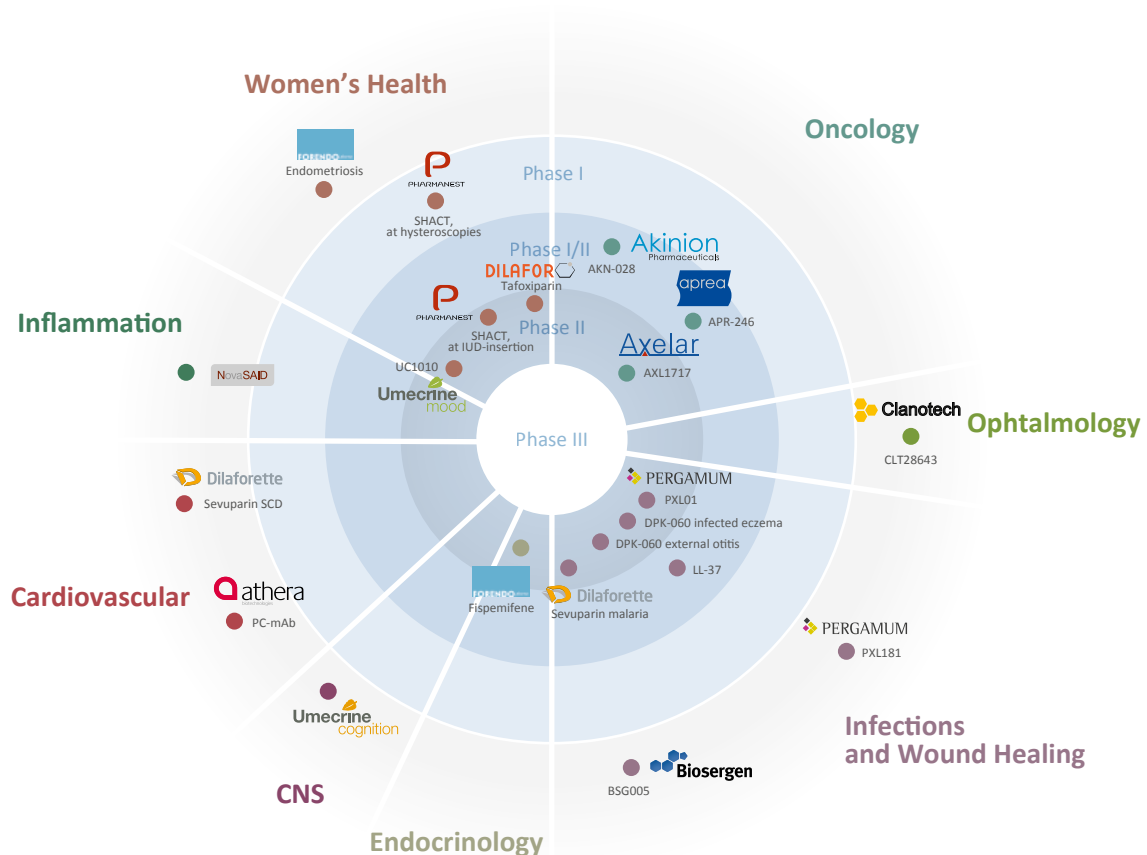
During 2014 Aprea will initiate a Phase I/II study in p53 mutated, recurrent ovarian cancer with APR-246. XSpray Microparticles will have concluded their Phase I study of a reformulation of an existing cancer drug. Pharmanest announced that the company has successfully completed a clinical study in hysteroscopies. We are expecting data from several other projects; Dilaforette is planning to complete a study with the company's candidate drug sevuparin in malaria and a new clinical study of sevuparin in sickle-cell disease is expected to start. Umecrine Mood that started its study of UC1010 in women suffering from premenstrual dysphoric disorder (PMDD) during 2013 is expected to finalize this study during the second quarter of 2014. Athera plans to initiate their first clinical studies with PC-mAb. Within oncology, first results are expected from Akinion's study in AML.

ONCOLOGY	Axelar – AXL1717 for NSCLC	Complete Phase II	✓
	Aprea – APR-246 for Ovarian Cancer	Initiate Phase II	
	Akinion – AKN-028 for AML	Complete Phase I/II MAD Part	
	Aprea – APR-246 for Ovarian Cancer	Complete Part I of Phase II Study	
WOUNDS & INFECTION	Pergamum – PXL01 for Flexor Tendon Surgery	Final Phase II Data	✓
	Pergamum – LL-37 for Chronic Venous Leg Ulcers	Complete Phase I/II	✓
	Dilaforette – Sevuparin for Malaria	Complete Phase I/II	
WOMEN'S HEALTH	Umecrine Mood – Premenstrual Dysphoric Disorder	Initiate Phase I/II	✓
	Pharmanest – SHACT for pain relief at IUD insertion	Complete Phase II	✓
	Pharmanest – SHACT for Pain Relief at Hysterectomy	Complete Phase I/II	✓
	Umecrine Mood – Premenstrual Dysphoric Disorder	Complete Phase I/II	
CARDIOVASCULAR	Dilaforette – Sevuparin for SCD	Initiate Phase I/II	
	Athera – PC-mAb for ACS	Initiate Phase I	
TECHNOLOGY	Lipidor – AKVANO/calcipotriol for Psoriasis	Complete Phase I/II	✓
	XSpray – RightSize for Reformulation in Oncology	Initiate Phase I	

✓ = Implemented

Pharmaceuticals

Several projects are close to the clinical proof-of-concept, a stage when the substance has shown if it has the intended effect in patients



Karolinska Development has a broad-based portfolio with significant market potential

Oncology

Each year 6.5 million people are diagnosed with cancer and over four million die worldwide as a result. Karolinska Development's oncology portfolio includes several exciting new treatments that could lead to improvements in cancer care.

Women's Health

Within women's health, a number of medical needs are currently being poorly addressed, such as therapies for premenstrual dysphoric disorder (PMDD), protracted labor, pain in connection with gynecological procedures and endometriosis. Karolinska Development's portfolio companies within women's health are developing pharmaceuticals for these needs.

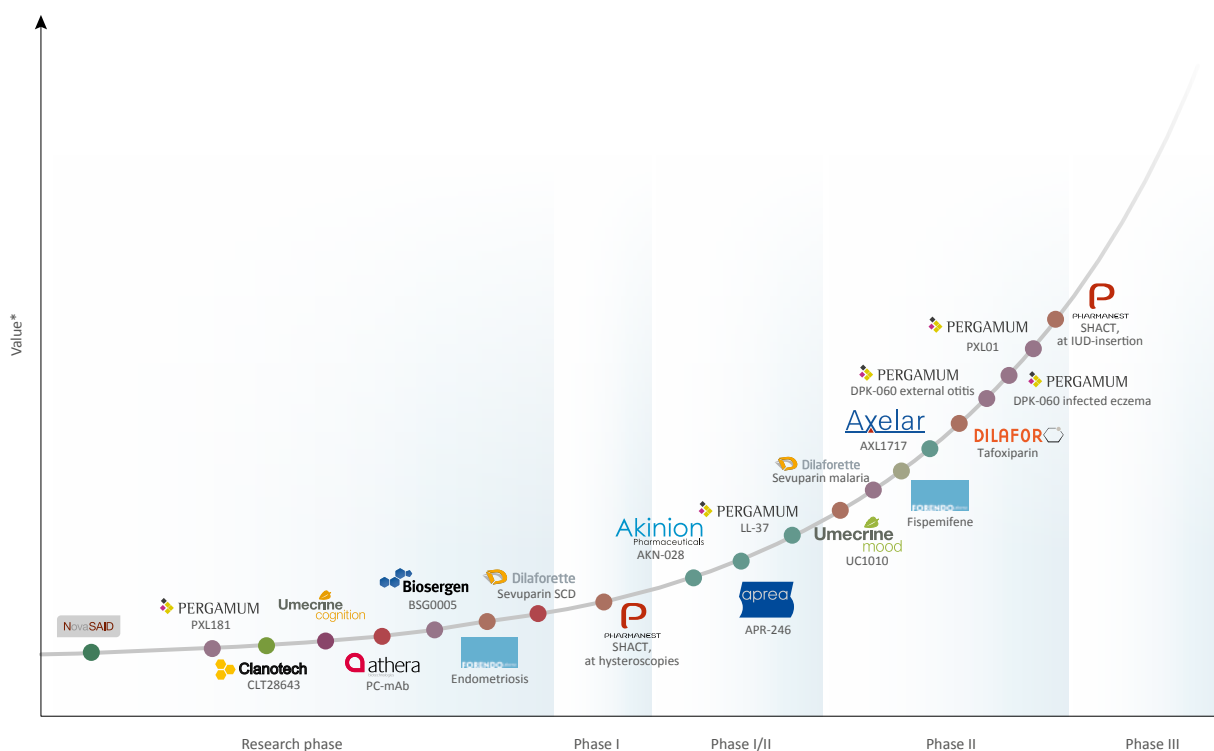
Infections and Wound Healing

Karolinska Development's infectious disease projects involve, among other areas, malaria, which causes one million deaths each year, mostly of children. Pergamum has a portfolio of therapeutic peptides targeting skin infections and wound healing. And products against the most common invasive fungal infections are also under development within Biosergen.

Cardiovascular

Cardiovascular diseases are the most common cause of death among people in the developed world. The portfolio company Athera Biotechnologies focuses on improvement of the treatment of heart disease through targeted measures against the kinds of inflammation that are often the basis cardiovascular disease.

The value increases significantly after a candidate drug has proven to be effective in patients. Many of Karolinska Development’s portfolio companies are currently in this phase or has recently completed it.



* The diagram illustrates conceptually how the value changes with the development phases. It cannot be used as a value ranking indication between projects.

Ophthalmology

Eye diseases cause very high socioeconomic costs and substantially diminished quality of life for those affected. Karolinska Development’s ophthalmology company, Clanotech, is developing treatments for macular degeneration and glaucoma. Both of these diseases are characterized by pathological ocular neovascularization, which is counteracted by the company’s therapeutic concept.

Inflammation

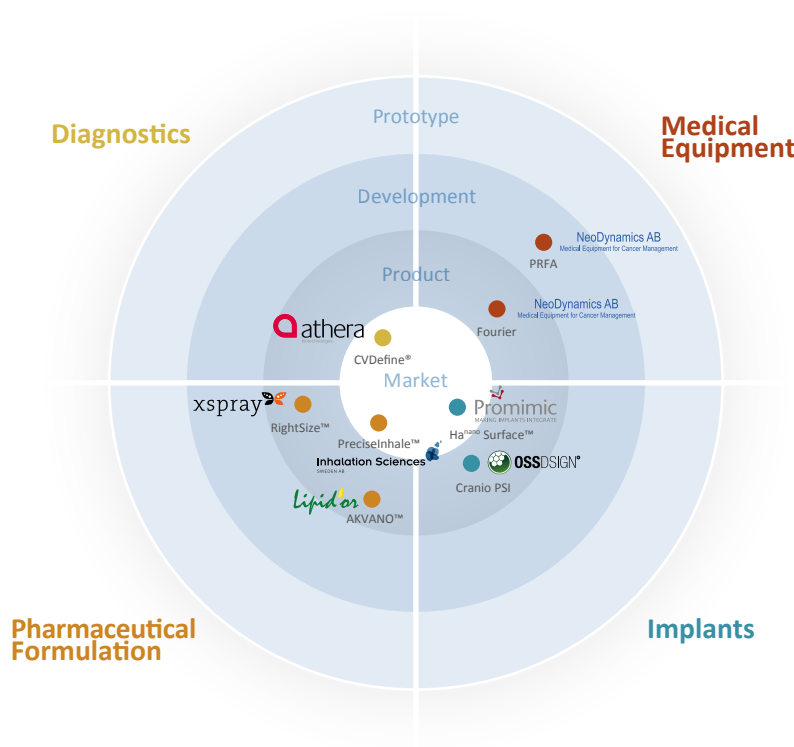
Inflammation-driven autoimmune reactions cause several diseases such as rheumatoid arthritis. The need to alleviate such reactions as well as autoimmune inflammation in transplantation is significant. NovaSAID has a project in this area with first-in-class potential.

CNS

The portfolio company Umechrine Cognition is active within the CNS field with its project to treat cognitive impairment as a result of chronic liver disease where there are no treatments today that addresses the neurological consequences of the disease

Technology

Karolinska Development's technology portfolio comprises a number of projects with important applications in diagnostics, pharmaceutical formulation, implants and medical equipment.



Karolinska Development has a mature technology portfolio where a number of companies have reached market launch and others are close to initiate sales of their products.

Implants

Successful application of bone and dental implants sets high demands on the materials used. The portfolio companies within the implants area have developed products with excellent properties for integration with body's bones. Therefore, the suffering for patients and the high costs for society that are associated with adverse event in connection with unsuccessful implant operations are avoided.

Diagnostics

To able to treat the great endemic diseases in the future, early and reliable diagnosis will be of great importance. The companies within the diagnostic area are therefore developing methods to detect signs for both cardiovascular disease and Alzheimer's disease.

Pharmaceutical Formulation

The companies within pharmaceutical formulation are focusing on three different forms of pharmaceutical delivery. Firstly, how the bioavailability of oral drugs can be optimized. Secondly, how topical drugs can be applied in the best way, and finally, how early development and validation of inhalation drugs can be improved.

Medical Equipment

Karolinska Development's projects within medical equipment is gathered in the company NeoDynamics that has two projects in development. Through its needle technology, the company is developing a method for safe biopsy of cancer cells and a method for treating smaller tumors in a safe and efficient way.

Portfolio Development

The portfolio as at April 9, 2014

Pharmaceuticals		Indication	Research Phase	Lead optimization	Preclinical development	Phase I	Phase II	Partner	Ownership*	Page
Oncology										
Axelar AB	AXL1717	Non-small cell lung cancer							43%	22
Aprea AB	APR-246	Ovarian cancer							62%	23
Akinion Pharmaceuticals AB	AKN-028	Acute myeloid leukemia							81%	24
Wound & Infections										
Dilafor AB	Sevuparin	Malaria							60%	25
Pergamum AB	DPK-060	Infected eczema							56%	26
Pergamum AB	DPK-060	External otitis							56%	26
Pergamum AB	PXL01	Surgical adhesions							56%	26
Pergamum AB	LL-37	Venous leg ulcers							56%	26
Biosergen AS	BSG005	Systemic fungal infection							60%	28
Pergamum AB	PXL181	Skin infection						Cadila Pharmaceuticals	56%	26
Women's Health										
Dilafor AB	Tafoxiparin	Protracted labor						Lee's Pharm	49%	29
Pharmanest AB	SHACT	Pain at IUD-insertion							63%	30
Umecrine Mood AB	UC1010	PMDD and severe PMS							38%	31
Pharmanest AB	SHACT	Pain at hysteroscopies							63%	30
Forendo Pharma Oy		Endometriosis							21%	32
Endocrinology										
Forendo Pharma Oy	Fispemifene	Hypogonadism							21%	32
Cardiovascular										
Athera Biotechnologies AB	PC-mAb	Acute coronary syndrome						Boehringer Ingelheim	65%	33
Dilafor AB	Sevuparin	Sickle-cell disease							60%	34
Ophthalmology										
Clanotech AB	CLT28643	Glaucoma surgery							79%	35
CNS										
Umecrine Cognition AB		Hepatic encephalopathy						Cleavel	63%	36
Inflammation										
NovaSAID AB		Inflammatory Pain						Cadila Pharmaceuticals	77%	37
Technology		Indication	Concept development	Prototype	Development	Product	Sales	Partner	Ownership*	Page
Implants										
Promimic AB	Ha ^{tno} Surface™	Bone implant surface							29%	38
OssDsign AB	Cranio PSI	Cranial implants							26%	39
Diagnostics										
Athera Biotechnologies AB	CVDefine®	Cardiovascular diagnostic kit							65%	40
Pharmaceutical Formulation										
Inhalation Sciences Sweden AB	PreciseInhale™	Respiratory precision dosing system							68%	41
Lipidor AB	AKVANO™	Topical drug delivery						Cerbios-Pharma	53%	42
XSpray Microparticles AB	RightSize™	Drug formulation technology						Cerbios-Pharma	63%	43
Medical Equipment										
NeoDynamics AB	Fourier	Fine needle biopsy							18%	44
NeoDynamics AB	PRFA	Tumor ablation							18%	44
Financial/Passive investments		Indication	Research Phase	Lead optimization	Preclinical development	Phase I	Phase II	Partner	Ownership*	Page
BioArctic Neurosciences AB	BAN2401	Alzheimer's						Eisai, Biogen Idec	3%	45
NephroGenex, Inc.	Pyridorin™	Kidney failure							<1%	45
Pergamum AB	Laurantis Pharma Oy, cis-UCA	Atopic dermatitis							3%	45
Pergamum AB	Laurantis Pharma Oy, cis-UCA	Bladder cancer							3%	45
Pergamum AB	Laurantis Pharma Oy, Lymfactin	Lymph edemas							3%	45

Dark color = completed phase Light color = ongoing phase

For some companies which run projects within different segments, the projects are noted separately. As a result, a company may be presented more than once.

Research phase means that a number of compounds that bind to the intended receptor have been identified. In the next step (lead optimization), attempts are made to optimize the characteristics of molecules to achieve the desired characteristics of a prospective pharmaceutical, e.g. increased specificity and solubility. The status of a project is defined as ongoing until it reaches the next milestone. For clinical phases the milestone is defined as when the first patient is dosed. Phase I-studies conducted in patients, where first signs of efficacy can be measured, are defined as ongoing in both Phase I and II.

* Including indirect ownership through for example co-investment companies

Axelar AB

The Challenge

Non-small cell lung cancer (NSCLC) is the most common form of lung cancer and it is among the most deadly of all cancers. Surgery, and to some extent radiotherapy, is used as a therapy for the very few patients with localized tumors. However, most NSCLC patients present with advanced metastatic disease already at the time of diagnosis, and the median survival time with first-line therapy is only around 10 months in spite of recent advances in treatment methods and introduction of new pharmaceuticals¹. The need for new effective targeted treatments is huge.

Axelar's Solution

Axelar has discovered a group of compounds that target the Insulin-like Growth Factor 1-receptor (IGF-1R) signaling pathway. IGF-1R is overexpressed on cancer cells and its signaling pathway is believed to be of great importance for cancer cell growth, tumor cell survival and resistance to therapy². The IGF-1R signaling pathway is therefore an excellent target for cancer drug development and a range of major tumors including NSCLC may be addressed through inhibition of this receptor. At the same time, AXL1717 also suppress tumor cell division by arresting cells in mitosis through a non-IGF-1R dependent mechanism.

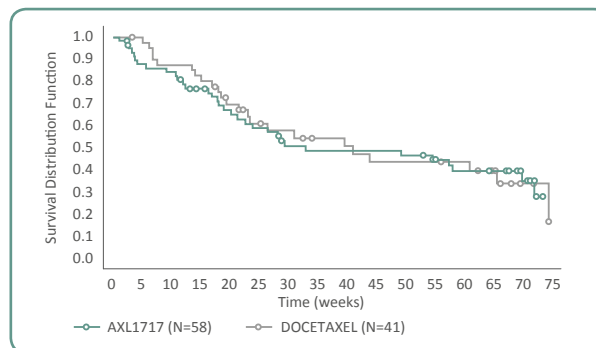
Competitive Advantages

Because IGF-1R is structurally closely related to the insulin receptor, most of the small molecule IGF-1R inhibitors in clinical development also inhibit the insulin receptor with ensuing adverse effects. Axelar's lead candidate AXL1717 is the first small molecule inhibitor of the IGF-1R signaling pathway in clinical development that clearly does not simultaneously inhibit the insulin receptor. AXL1717 has shown pronounced anti-tumor activity in a range of animal studies, demonstrating not only inhibited tumor growth, but also reduction of tumor size to the point of nondetectable size.

Based on promising Phase I/II data, a randomized, open-label Phase II study with AXL1717 versus standard regimen chemotherapy (docetaxel) was performed in NSCLC patients that had progressed from first line treatment. Results from this study showed no statistically significant difference in PFS, the primary endpoint, between the arms. Data indicated that patients with adenocarcinoma responded better to AXL1717 than patients with squamous cell carcinoma. The main side effect for both trial arms was neutropenia, reported in 22% of the patients treated with AXL1717 and 53% in those treated with docetaxel.

The Market

Each year 1.1 million patients are diagnosed with lung cancer in the world and the disease accounts for 950,000 deaths annually³. Around 85 % of those patients have NSCLC⁴. Axelar's lead product is focusing on the two most common types of NSCLC, squamous cell carcinoma and adenocarcinoma, which each year affect approximately 30 % each of the NSCLC patients⁵. In the United States alone, about 130,000 new patients with these types of lung cancers are diagnosed annually^{4,5}. This submarket in the US alone is potentially worth about USD 3.75bn per year, calculated on the same annual



Kaplan-Meier plot of the survival distribution in Axelar's Phase II study of AXL1717 compared to docetaxel.

price as Tarceva which is the latest drug to be approved for NSCLC treatment. Since other common cancers such as brain tumors, prostate, breast and colorectal cancer may also be targeted by AXL1717, the market is potentially much larger.

Status

- AXL1717 has shown potent anti-tumor effect against a wide range of tumors in various animal models
- In a Phase I/II study, AXL1717 demonstrated a good safety profile and signs that suggest clinical benefit in some patients with NSCLC were observed
- Results from a randomized Phase II clinical trial indicated that AXL1717 has activity in patients in NSCLC
- An investigator-led Phase I/II study in malignant brain tumors has been initiated at Rush University Medical Hospital in Chicago

Planned Milestones

- Further elucidation of the AXL1717 mechanism of action to be presented
- Continuation of the clinical program with AXL1717 together with a strategic partner

Patent Status

The lead compound in development, AXL1717, is protected by several patent families. Patents have been granted in the US and in Europe, as well as in other key territories.

Commercialization

Axelar intends to find one or more partners to continue the clinical development of AXL1717.

1) Source: Goffin et al., J Thorac Oncol. 5(2):260-274, 2010

2) Source: Pollak, Nat Rev Cancer. 8(12):915-928, 2008

3) Source: Globocan, 2010

4) Source: Datamonitor, Epidemiology: Non-Small Cell Lung Cancer, 2011

5) Source: Travis et al., Cancer. 75(12):2979, 1995

First-in-class potential

Project: AXL1717

Ownership: 43%

Contact:

Research Phase

Lead optimization

Preclinical development

Phase I

Phase II

Mikael von Euler, CEO

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mikael.voneuler@axelar.se

www.axelar.se

Aprea AB

The Challenge

Cancers develop and spread due to malfunction of the cells' normal growth control mechanisms. One such growth mechanism is the p53 tumor suppressor gene. De-activation of p53 results in uncontrolled growth of the cell that may lead to cancer development. Moreover, de-activation of p53 is also strongly associated with resistance to chemotherapy. Mutations of the p53 gene occur in around 50 % of tumors and can be found in almost all known human cancer indications. Therefore, normalization of the function of p53 is a very attractive approach to cancer therapy and to help overcome resistance to existing cancer chemotherapeutics.

Aprea has selected ovarian cancer as primary indication for its lead candidate APR-246. The most used first-line treatments are platinum-based chemotherapies that are mainly effective in treating the disease in its early stages. Most patients will relapse and the likelihood that a patient will respond to the reintroduction of a platinum-based regimen depends on the platinum-free interval (PFI). For example, for a PFI of 6–12 months, only 20–30 % of patients are likely to respond to the reintroduction of platinum-based chemotherapy. Thus, there is a great need for improved treatment of relapsed ovarian cancer.

Aprea's Solution

Aprea has identified small molecules that reactivate p53. The company's first candidate drug, APR-246, has been tested in a clinical Phase I/II trial with promising results, published in the Journal of Clinical Oncology¹. In preclinical studies, APR-246 has been shown to induce cell death in many cancer cell lines with varying p53 status. Aprea has also demonstrated that cells from platinum resistant cell lines that are treated with APR-246 can be re-sensitized to platinum based agents.

The company is now planning a proof-of-concept study where platinum will be reintroduced in combination with APR-246 in platinum sensitive ovarian cancer patients.

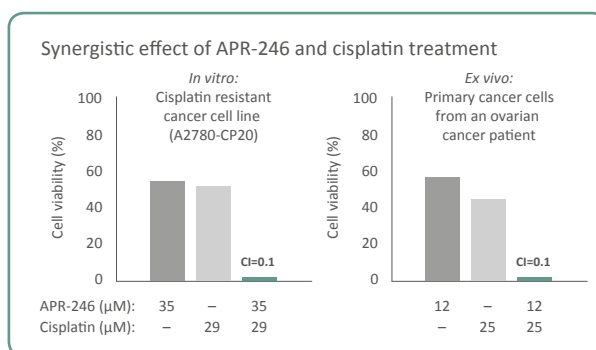
Competitive Advantages

To the company's knowledge, APR-246 is the only compound in clinical development that can restore normal function of the p53 protein and thereby induce efficient cancer cell death. The drug candidate has shown potential to be effective on many tumor types as a single agent and to be used in combination to overcome resistance to conventional chemotherapies.

APR-246 has been tested in a Phase I/II trial. Although this was primarily a safety and dose finding trial, the data also indicated that APR-246 has an anti-tumor effect. The candidate drug was well tolerated and the safety profile is different from traditional cytostatic drugs, an important feature since APR-246 is planned to be administered in combination with chemotherapy.

The Market

Oncology is still an area with large unmet medical needs and the general ageing of the population means that morbidity and mortality figures are expected to rise over the next few years. Each year 14 million people are diagnosed with cancer and more than eight million people die worldwide as a result². APR-246 has the potential to be used in many cancers as mutations in p53 are found in around 50% of all diagnosed cancers³.



The effect of treatment with APR-246 (dark grey bar), cisplatin (light grey bar) and the combination (green bar) on cell viability in a cisplatin-resistant ovarian cancer cell line carrying mutant p53 (left graph) and primary cancer cells from an ovarian cancer patient (right graph). The combination index (CI) is well below the threshold of 0.8, indicating that APR-246 in combination with cisplatin gives a strong synergistic effect.

The market potential in ovarian cancer alone is substantial. Currently, around 225,000 women are living with ovarian cancer in the seven major markets and 67,000 new patients are diagnosed each year in the seven major markets.⁴ Of those diagnosed annually, approximately 20,000 have stage III-IV, recurrent disease with mutated p53 which is the primary target population for APR-246. The ovarian cancer pharmaceutical market is by analysts expected to grow by more than 13 % annually to 2020, reaching a total market value at USD 2.3bn⁵.

Status

- Phase I/II dose finding study completed
- Data published in Journal of Clinical Oncology¹
- Phase I/II Extension study completed

Planned Milestones

- Initiate part one (Phase Ib) of proof-of-concept study in platinum sensitive ovarian cancer
- Initiate part two (Phase II) of proof-of-concept study in platinum sensitive ovarian cancer

Patent Status

APR-246 is protected by several patent families, and patents have been granted in the US and in Europe, as well as in other key territories.

Commercialization

Aprea will seek a strategic partner in order to complete the clinical program.

1) Source: Lehmann et al., J Clin Oncol. 30(29):3633-3639, 2012

2) Source: Stewart and Wild, IARC World Cancer Report 2014

3) Source: Soussi and Wiman, Cancer Cell 12:303-312, 2007

4) Source: Datamonitor, Epidemiology: Ovarian Cancer, 2012

5) Source: GlobalData, Ovarian Cancer Therapeutics – Global Drug Forecasts and Treatment Analysis 2020, 2012

First-in-class potential	Project: APR-246	Ownership: 62%	Contact:
Research Phase Lead optimization Preclinical development Phase I Phase II	Ulf Björklund, CEO Phone: +46 70 667 04 40 ulf.bjorklund@aprea.com www.aprea.com		

Akinion Pharmaceuticals AB

The Challenge

Acute Myeloid Leukemia (AML) is a hematological cancer caused by rapid growth of abnormal, leukemic white blood cells. As the leukemic cells outnumber normal white and red blood cells, an array of anemic and immunological deficiency symptoms ensues.

The median AML patient age is 67 years. The current treatment is chemotherapy and bone marrow transplantation. No targeted treatments are approved. Due to the limited duration of complete remission, mainly due to chemotherapy resistance of the tumor cells, 5-year survival rates are 34 % for adults aged below 65 and 4 % for patients aged 65 or older¹.

There is a very high unmet medical need for treatments with better anti-tumor effects as well as treatments with fewer side-effects.

Akinion's Solution

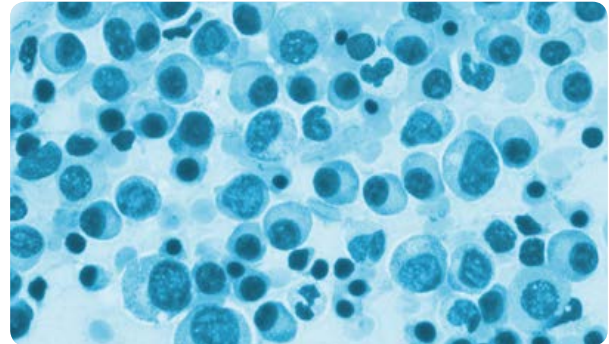
AKN-028 is a small molecule kinase inhibitor candidate drug developed for the treatment of AML. Preclinical results from *in vitro* and *in vivo* studies with AKN-028 show a unique efficacy against all primary AML tumor samples tested, even chemotherapy-resistant AML tumors. AKN-028 is administered as an oral capsule and clearly has a first-in-class potential.

Competitive Advantages

The unique competitive feature of AKN-028 is its efficacy on AML tumor cells resistant to chemotherapy. Since some of the AML patients are already chemotherapy-resistant at diagnosis and the majority develop chemotherapy resistance during therapy, a new drug that can overcome this resistance would be of great medical importance. In addition, preclinical results indicate a synergistic effect of AKN-028 given in combination with current standard-of-care chemotherapy. Consequently it is expected that AKN-028 could be administered both as monotherapy and in combination with chemotherapy.

The Market

About 42,000 new cases of Acute Myeloid Leukemia (AML) are diagnosed in the USA, Europe and Japan each year and deaths from AML total about 30,000². A new drug answering to the unmet needs in terms of efficacy and tolerability in AML is expected to have large commercial impact. The introduction of targeted therapies during the last decade in other types of hematological cancers has strongly pointed to this potential.



Status

- A Phase I/II clinical study is ongoing
- Preclinical efficacy data published in 2012, including promising effect on primary AML cells compared to competition in clinical development³

Planned Milestones

- Safety data and recommended Phase II dose from the ongoing study
- Proof-of-concept in AML

Patent Status

Akinion's compound in development is protected by patents in major territories.

Commercialization

The development program will be continued toward achieving clinical proof-of-concept. Akinion will then seek a strategic partner in order to complete the clinical program and bring a product to market.

1) Source: Surveillance, Epidemiology and End Results (SEER) Program from 1996 to 2002
 2) Source: National Comprehensive Cancer Network, 2009
 3) Source: Eriksson et al., Blood Cancer J. 3(2):e81, 2012

First-in-class potential	Project: AKN-028	Ownership: 81%	Contact:
Research Phase	Lead optimization	Preclinical development	Mikael von Euler, CEO
			Phone: +46 8 524 869 63
			mikael.voneuler@akinion.com
			www.akinion.com

Dilaforette AB, malaria

The Challenge

Severe malaria kills close to one million people annually and infects 250 million. In severe malaria, parasitized red blood cells block blood vessels, which gives rise to reduced blood flow to vital organs such as the brain. There is no specific therapy available to reverse or prevent this mechanical blockage.

The malaria parasite *Plasmodium falciparum* frequently gives rise to severe disease when parasitized erythrocytes bind and block capillaries in extremities or vital organs. One of the main causes of disease pathology and severity is hampered blood flow and associated reduced oxygen delivery with subsequent tissue damage. Blockage of the blood flow is due to the fact that parasitized erythrocytes adhere in the microcirculation: they bind both to the vascular endothelium (cytoadherence) and to uninfected erythrocytes (rosetting).

Dilaforette's Solution

Dilaforette's drug candidate, sevuparin, a proprietary polysaccharide drug derived from heparin, has been designed to retain the anti-adhesives effects of heparin, while reducing the anti-coagulant property. Sevuparin, with its strong anti-adhesive effects, could be of clinical use in several therapeutic conditions and is currently in development for severe malaria and sickle cell disease. Heparin has been successfully tried as an adjunctive treatment in severe malaria, but the use was discontinued due to severe bleeding complications related to its anticoagulant property. Dilaforette is developing the first adjunctive treatment for severe malaria that prevents and reverses the ability of the parasitized red blood cells to block blood vessels.

Competitive advantages

For severe malaria there is a large unmet medical. Sevuparin, which interferes with a pivotal culprit in malaria pathophysiology; blockage of the smallest blood vessels in vital organs, can potentially help to reduce mortality in cases of severe malaria where antimalarial treatment alone is not sufficient.

Market

The introduction of artemisinin-based therapies has revolutionized the care of patients with malaria, but severe disease still claims up to 1 million lives annually according to latest figures, and a proportion remain neurologically disabled after an episode of cerebral malaria¹. It is estimated that mortality in severe malaria in African children is around 10 % based on the numbers in the AQUAMAT trial with protocolized treatment, and probably higher in other settings². The total numbers of severe malaria cases are estimated to be around 10 million per year³.



Status

- Safety documentation of sevuparin has been successfully completed in a Phase I clinical trial
- A Phase I/II study in patients affected with uncomplicated falciparum malaria is ongoing in Thailand
- A Phase II study in moderate to severe malaria patients has been initiated in India

Planned Milestones

- Complete the Phase I/II study in uncomplicated falciparum malaria
- Complete the Phase II study in moderate to severe falciparum malaria

Patent Status

Dilaforette has submitted patent applications covering its lead program.

Commercialization

Dilaforette will seek a partner after the current proof-of-concept studies to develop and commercialize sevuparin.

- 1) Source: WHO World Malaria Report, 2011
- 2) Source: Murray et al., Lancet 379:413-431, 2012
- 3) Source: Dondorp et al., Lancet 376:1647-1657, 2010

First-in-class potential	Project: Sevuparin, malaria	Ownership: 60%	Contact:
Research Phase Lead optimization Preclinical development Phase I Phase II	Christina Herder, CEO Phone: +46 70 37 47 156 christina.herder@dilaforette.se www.dilaforette.se		

Pergamum AB



Pergamum is a clinical-stage biopharmaceutical company developing state-of-the-art products, based on therapeutic peptides, for local application for treatment of wounds and infections. The company's development projects are based on academic research from four leading Swedish universities; Karolinska Institutet, Lund University, University of Gothenburg and Chalmers University of Technology.

The company has three therapeutic peptides in clinical development, aimed as first in class treatments. These programs are targeting chronic leg wounds, post-surgical scars and adhesions as well as skin infections in atopic dermatitis and external otitis (outer ear infection). Pergamum is also co-developing a novel peptide in preclinical development with Cadila Pharmaceuticals Ltd.

First-in-class potential		Ownership: 56%				Contact:
Project	Research Phase	Lead optimization	Preclinical development	Phase I	Phase II	
DPK-060, infected eczema	██████████	██████████	██████████	██████████	██████████	Jonas Ekblom, CEO Phone: +46 8 524 891 01 jonas.ekblom@pergamum.com www.pergamum.com
DPK-060, external otitis	██████████	██████████	██████████	██████████	██████████	
PXL01	██████████	██████████	██████████	██████████	██████████	
LL-37	██████████	██████████	██████████	██████████	██████████	
PXL181	██████████	██████████	██████████	██████████	██████████	

The Challenge

Pergamum is addressing large unmet medical needs. In two of the areas where the company is developing products, there are no pharmacological products approved on the major markets.

Between 13 and 18 million patients have hard-to-heal ulcers in the developed world¹. Currently, there are no approved drug products for venous leg ulcers which is one of the most abundant forms of chronic wounds.

Post-surgical adhesions are scar tissues that frequently develop after many types of surgery. The adhesions are a response of the body's repair mechanism to the tissue damage caused by surgical trauma. There are more than 230 million surgical procedures conducted annually in the world², and the company estimates that permanent scars and adhesions occur in at least 20% of these procedures³.

Finally, uncomplicated skin and soft tissue infections (uSSTI:s) are among the most frequent indications for outpatient antibiotics. There is a need for new safe and effective topical treatments to prevent and cure uSSTI:s that do not further enhance the risk of antibiotics resistance. The overall estimated incidence of skin infections is close to 5% in the general US population⁴, and the estimated world-wide incidence of external otitis alone is equivalent to 10 million cases every year in the developed world⁵.

Pergamum's Solution

Pergamum has developed three clinical stage peptides – LL-37, PXL01 and DPK-060 – for topical administration for (i) treatment of chronic wounds, (ii) prevention of scars and adhesions and (iii) anti-infective treatment.

The common theme of therapeutic peptides for local application enables Pergamum to make use of network synergies.

The peptides in development are structurally derived from human molecules and optimized in terms of their biopharmaceutical properties. All of the peptides have multifunctional properties. These include broad antimicrobial action, modulation of inflammation, fibrinolysis and other immune functions, as well as wound healing.

The peptides in Pergamum's main programs are intended for topical application. Peptides generally have a low potential for crossing biological membranes and thus the risk for systemic adverse events is low. Moreover, since the peptides can be applied in relevant dosages at the intended site of action, the technical challenges associated with delivery and bioavailability in this treatment modality can be avoided.

Competitive Advantages

The main competitive advantages of Pergamum's therapeutic peptides are (i) safety, and (ii) multi-functional activity.

The peptide sequences are derived from endogenous human sequences. The treatments are applied topically, with a minimal systemic exposure. Consequently, the safety and tolerability is very high as compared with many new chemical entities.

With regards to efficacy, these peptides have multiple biological actions; it has been speculated that this is advantageous when addressing complex disease physiology such as in wounds and scars.

The Market

The global wound care market has a estimated annual sales of over EUR 10bn in US, EU and Japan. Many of the current therapies being either generics or branded versions of closely similar products.⁶

The fastest growth potential is within the segment where Pergamum operates; in the field of premium-priced advanced wound care products, which are designed to provide a therapeutic effect that actively aids wound healing and prevent scar formation. This segment makes up more than half of the total market place.

Status

- Final results from a Phase I/II trial of LL-37 for treatment of venous leg ulcers has been presented; (i) the primary safety and tolerability end-points were met and (ii) LL-37 had a significantly improved healing rate compared to placebo
- Final data from 6 and 12 months follow-up in a Phase II clinical trial of PXL-01 in prevention of post-surgical adhesions has been presented. The study showed a statistically significant improvement in functional hand recovery and the treatment was not associated with any safety issues
- A Phase II clinical trial of DPK-060 in outer ear infections showed a statistically significant improvement in 10-day cure rate compared to placebo and that DPK-060 is safe a tolerable. Moreover, the program is partly funded by an EU-grant for development of new advanced formulations of DPK-060.
- Co-development agreement signed with Cadila Pharmaceuticals Ltd. headquartered in Ahmedabad, India, around one of Pergamum's early stage development projects

Planned Milestones

- Identification of an acquirer of the corporate assets or entering one or several strategic development partnerships

Patent status

The company has filed patent applications covering composition of matter and formulations of different products, as well as medical use of several endogenous antimicrobial peptides. Currently, the company has several patent families for each program that are approved or pending approval.

Commercialization

Final reports from three clinical trials yielding Phase II data were obtained in the second half of 2013. Consequently, Pergamum's has initiated partnering discussions for its development programs. The intention is to find a strategic acquirer or to enter one or several collaborative alliances, with leading pharmaceutical companies in the field of advanced wound care and specialty dermatology.

Pergamum also evaluates other strategic partnering opportunities as they occur, and welcomes interest from potential partners in any ongoing project.

1) Source: Med Market Diligence, Worldwide Wound Management, 2009

2) Source: Weiser et al., Lancet. 372:139-144, 2008

3) Source: Pergamum's estimate

4) Source: Ray et al., BMC Infectious Diseases 13:252, 2013

5) Source: Rosenfeld et al., Otolaryngol Head Neck Surg. 134:s4-23, 2006

6) Source: Espicom, The Global Advanced Wound Care Market to 2015, 2010

Biosergen AS

The Challenge

Patients most susceptible to systemic fungal infections are those whose immune systems are compromised by diseases such as cancer and those who are receiving immunosuppressive therapy. While effective treatments are available, their use is usually limited by serious side-effects or an increasing incidence of drug resistance.

Biosergen's Solution

Biosergen has developed a drug candidate, BSG005, against systemic fungal infections by genetic modification of bacteria that produce antifungal substances. BSG005 has demonstrated good efficacy against *Aspergillus* and *Candida*, which cause the two main invasive fungal infections, as well as against many other pathogenic fungi.

Competitive Advantages

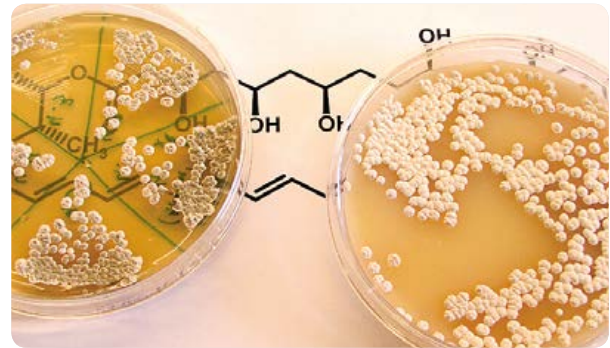
Biosergen's BSG005 is a new innovative drug candidate with a wide antifungal efficacy spectrum. BSG005 has so far shown superior properties compared to conventional treatment in terms of efficacy, toxicity and pharmacokinetics.

The Market

In 2011, the global market for systemic antifungals was estimated to be USD 4.5bn with annual growth of approximately 5%. Amphotericin B and liposomal formulations of amphotericin currently represent about 10% of the total market¹.

Status

- Based on efficacy studies in vitro and in vivo and toxicity studies in animal models, a candidate drug has been selected (BSG005)
- Technology transfers for scale-up of manufacturing process and preparations for GMP manufacturing are ongoing



Planned Milestones

- Complete preclinical documentation of BSG005 as a clinical candidate
- Start phase I clinical trials

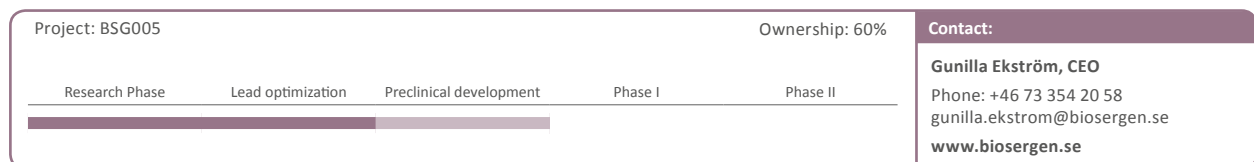
Patent Status

Biosergen's lead compound in development, BSG005, is protected by patents on key markets.

Commercialization

Biosergen intends to develop the candidate drug to proof-of-concept in a Phase II clinical trial, with a strategic partner that will be able to continue the development further.

¹) Source: Datamonitor



Dilafor AB

The Challenge

Insufficient labor – where the mother requires stimulation with oxytocin, occurs in more than half of all births and to an even higher degree among first-time mothers. In its most severe form, protracted labor, it can last more than 12 hours. It is the main cause of emergency surgical deliveries i.e. vacuum extraction and caesarian section, both of which are often associated with complications for both mother and child.

In pregnancies at risk for thrombosis, Low Molecular Weight Heparin (LMWH) was found to shorten labor time significantly compared with pregnant women who did not receive the treatment. However, LMWH is not appropriate for routine use in pregnant women due to the risk of bleeding.

Dilafor's Solution

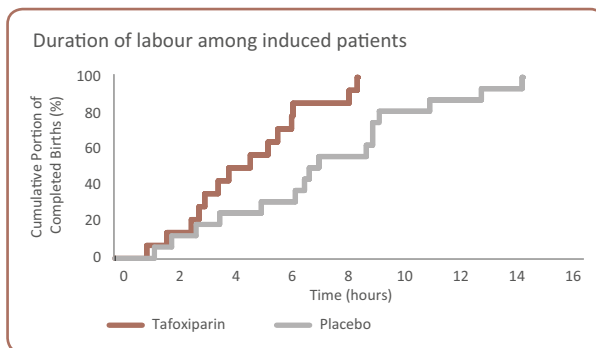
Dilafor's drug candidate, tafoxiparin, is based on a modification of LMWH that essentially eliminates the anti-coagulative effect and thus the heightened risk of bleeding. Tafoxiparin has been tested in a Phase IIa trial with 263 first-time mothers. A subgroup analysis of the study showed that significantly fewer women were in labor for more than twelve hours compared to placebo. It also indicated that labor times were shorter in induced labor conditions with tafoxiparin compared with placebo.

Competitive advantage

Tafoxiparin has a dual mode of action as it enhances ripening of the cervix and also improves the uterine contractility. It has the potential to provide an effective solution to the challenge of protracted labor. Since it lacks any clinically relevant anti-coagulative effect, it can be used together with standard pain management procedures such as epidural anesthesia.

Market

Existing pharmacological therapies that improve uterine contractions are usually insufficient. Consequently, there is strong interest in better treatments, such as tafoxiparin, that both strengthen contractions and ripen the cervix. Labor induction is currently used in more than 20 % of all deliveries¹. This indication - labor induction - is therefore considered as an appropriate target population for market entry. The next indication is labor arrest. In this instance the pregnant woman has a spontaneous onset of labor which later on weakens and results in labor arrest. These markets collectively cover about 25 % of all births at present, and further potential is provided by a strong preference to move to better therapies rather than continue with high numbers of both elective and emergency surgical deliveries, which are expensive and carry additional risks.



The picture illustrates duration of labor in a subgroup of women with induced deliveries that received either tafoxiparin or placebo. The notch in the curve represents birth.

Status

- Phase I clinical showed high tolerability and safety
- Phase IIa trial with tafoxiparin in 263 women completed
- Planning of the continued clinical development underway together with the license partner Lee's Pharmaceutical

Planned Milestones

Initiate Phase IIb dose escalation studies with the primary goal to reduce labor time and to prevent protracted labor in pregnant women 1) Subjected to Labor Induction or 2) Developing a Labor Arrest after a spontaneous onset of labor. The studies will be conducted in both nulliparous women (first time mothers) and multiparous women.

Patent Status

Dilafor has built a patent portfolio around tafoxiparin and its use.

Commercialization

Dilafor has signed a licence agreement with Lee's Pharmaceutical that will conduct and finance the clinical Phase II and Phase III program in China. The studies will be conducted so that the results can be used as the basis for additional development in the rest of the world.

1) Source: National Vital Statistics Reports, 2006

First-in-class potential	Project: Tafoxiparin	Ownership: 49%	Contact:
Research Phase	Lead optimization	Preclinical development	Phase I
<div style="display: flex; justify-content: space-between; width: 100%;"> <div style="width: 80%; height: 10px; background: linear-gradient(to right, #8B4513 80%, #D2691E 80%);"></div> </div>			Phase II
Lena Degling Wikingsson, CEO Phone: +46 70 790 02 07 lena.wikingsson@dilafor.com www.dilafor.com			

Pharmanest AB

The Challenge

Experiences of pain in connection with gynecological procedures and in childbirth are well documented. Effective local pain relief in gynecology and obstetrics is very limited. Millions of women undergo gynecological procedures with no or insufficient pain relief.

Pharmanest's Solution

Pharmanest is developing unique new formulations based on well documented active substances. The formulations are applied topically in the cervix and uterus using applicators developed by Pharmanest. Pain relief is obtained immediately, no advanced instrumentation is required and the systemic effect is minimized.

Competitive advantages

Pharmanest's first product candidate SHACT has been developed for pain relief in connection with gynecological procedures. There are few local pain relief products with documented efficacy on the market at present.

With its candidate products, Pharmanest hopes to be able to offer effective local pain relief which is advantageous from both the patient and health economics perspectives.

A randomized, double-blind Phase II study with SHACT including 218 women undergoing IUD insertion has been finalized. The study showed that the women receiving SHACT experienced a reduction in pain and less discomfort compared to placebo. The effects were highly statistically significant and clinically meaningful. No serious adverse events were reported in the study. In addition, a feasibility study in outpatient hysteroscopies has been completed with results indicating that SHACT could benefit women undergoing this procedure.

The clinical data generated so far clearly suggest that SHACT may play an important role in pain management within the gynecological procedure segment.

The Market

Some 150 million women around the world have an IUD¹. The medical need for local pain relief in connection with IUD insertions and outpatient hysteroscopies has been confirmed by recently conducted market surveys². A majority of the surveyed physicians found the product to be very favorable and rated a high likelihood of use. A previous study showed that around two-thirds of women with experience of IUDs who were interviewed would choose this type of product if it was available.

Pharmanest's product candidates also offer potential in other indications such as pain relief in connection with dilation and curettages, abortions and obstetric pain.



Status

- A Phase II clinical trial in IUD insertion has been completed that showed a statistically significant reduction in pain vs placebo, statistically significantly less discomfort vs placebo and no difference in adverse events between the study arms
- A feasibility study in outpatient hysteroscopies has been completed that found no safety or tolerability issues recorded and that SHACT is not interfering with the examination

Planned Milestones

- Initiate Phase II study in hysteroscopies
- Scale-up and preparation for commercial manufacturing

Patent Status

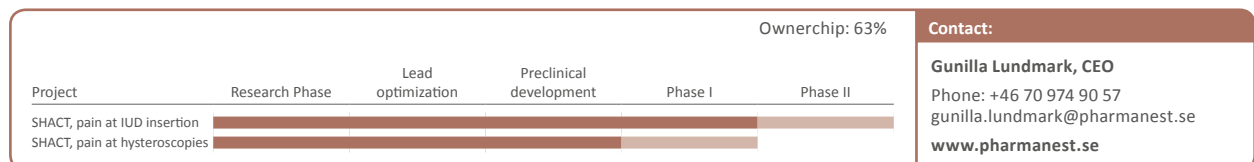
Pharmanest's patent applications regarding the formulation technology are pending in the national phase

Commercialization

As the Company progresses SHACT through development, Pharmanest is evaluating its strategic options for further development and global commercialization in IUD insertion, hysteroscopy and additional indications. SHACT is a promising asset for a strategic partner or acquirer.

1) Source: United Nations, World Contraceptive Use 2011

2) Source: Market research



Umechrine Mood AB

The Challenge

Premenstrual dysphoric disorder (PMDD) affect over 5 % of all fertile women¹. These women suffer from recurrent depression, irritability, mood swings and anxiety, which adversely affect their ability to work and live a normal life. Symptoms occur the week before menstruation due to the effects of endogenous CNS-active steroids from the corpus luteum that affects the GABA system in the brain's emotional center.

Umechrine Mood's Solution

Umechrine Mood is developing pharmaceuticals that inhibit the action of the provoking CNS-active steroids in the brain's emotional center. The first drug candidate is a non-hormonal GABA-A modulating steroid antagonist (GAMSA). It is designed to mitigate the action of the CNS-active steroids responsible for the negative pre-menstrual mood changes in women with PMDD.

Competitive Advantages

Umechrine Mood's treatment is being developed specifically for PMDD. Current treatment offered to sufferers of PMDD are mainly anti-depressants. Their efficacy is moderate and usually has side effects, causing many patients to discontinue treatment. Umechrine Mood's discovery represents a novel treatment principle and the drug candidate is the first in its class.

The Market

More than seven million women suffer from PMDD in Europe and the US alone². From a health economics perspective, an effective treatment for this condition can be expected to be well received. As such, there is significant market potential for a new treatment within this segment.

Status

- A drug candidate UC1010 and two back-up compounds have been identified and are in development
- The mechanism of action has been established
- Proof-of-principle has been demonstrated *in vitro* and in animal models for anxiety and PMDD. It has also been shown clinically using a biomarker for PMDD in healthy women
- Phase I studies have shown that UC1010 has an excellent safety profile
- A double-blind, multicenter Phase II study with UC1010 in 120 patients with PMDD is ongoing



Planned Milestones

- Results from the Phase II clinical study in the second quarter of 2014

Patent Status

UC1010 is protected by several patent families, and patents have been granted in the US and in Europe, as well as in other important territories.

Commercialization

Umechrine Mood will continue its development program up to proof-of-concept to demonstrate the effect of treatment of PMDD in clinical Phase II. The company will seek a strategic partnership for continued Phase II/III trials and the market launch of the product.

1) Source: American Congress of Obstetricians and Gynecologists, 2009

2) Source: Datamonitor, Strategic Perspectives: CNS Disorders in Women, Premenstrual Syndrome/Premenstrual Dysphoric Disorder, 2002

First-in-class potential	Project: UC1010	Ownership: 38%	Contact:
Research Phase	Lead optimization	Preclinical development	Karin Ekberg, CEO
	Phase I	Phase II	Phone: +46 70 458 00 45
			karin.ekberg@umecrine.se
			www.umecrine.se

Forendo Pharma Oy

The Challenge

Endometriosis affects women in reproductive age and is caused by cells normally lining uterus being present outside of the uterine cavity. Typically these endometrial cells can be found lining the outside of the womb, ovaries and fallopian tubes but will spread on to the peritoneum beyond the reproductive organs in the abdominal cavity. The disease is manifested in many diverse ways; it often causes particularly painful menstruations or chronic pelvic pain and in many cases it causes infertility e.g. due to the adhesions and cysts that are developed in the female reproductive organs. There are currently no curative treatments for endometriosis.

Forendo Pharma's Solution

Forendo Pharma focuses on the endocrine origins of endometriosis as growth of cells in endometrial lesions are highly influenced by estrogens as a growth factor. The molecular target, 17 β HSD1, is an enzyme that converts estrone (E1) to the much more potent estrogen estradiol (E2) and is counteracted by the related 17 β HSD2 enzyme. 17 β HSD1 is constantly expressed in endometriosis lesions whereas 17 β HSD2 is constantly low resulting in an increased E2/E1 ratio in endometriosis throughout the menstrual cycle. By inhibiting 17 β HSD1 Forendo aims to reach the same effect in endometriosis cells as the systemic estrogen elimination therapies, but without inducing systemically adverse effects that are common in conventional hormone therapy.

Competitive Advantages

The current approach to treating endometriosis involves pharmaceuticals that suppress estrogen synthesis alongside pain and inflammatory control drugs (NSAIDs). Surgical intervention is also used but the procedures have either a high recurrence rate using minimal-invasive methods or causes infertility if the uterus, ovaries or fallopian tubes need to be removed. The existing drug therapies work by ameliorating the symptoms of endometriosis but are also associated with adverse events that limit the use of these therapies. For example, menopause-like events such as hot flashes and loss of libido are common as well as depression and other adverse cognitive events. The risk of osteoporosis is also well known in association with estrogen elimination therapies. The 17 β HSD1 program is aimed at eliminating endometriosis without disturbing the systemic estrogen balance. In a primate disease model Forendo's 17 β HSD1 inhibitors cause regression of endometriosis and relief of the associated inflammatory pain while maintaining the normal hormonal cycles.

The Market

It is estimated that 10% of all fertile women are affected by endometriosis. This corresponds to a total of 176 million women in the world.^{1,2} Endometriosis has a detrimental effect on the well-being of the women affected and the socio-economic burden of the disease from e.g. sick leaves is profound due to the lack of safe and effective treatment. Forendo's approach to treat endometriosis therefore has a high potential to substantially impact future treatment regimens.



Status

- Proof-of-principle in eliminating endometriosis by 17 β HSD1 inhibition shown in preclinical studies
- Selection process of clinical candidate is currently underway
- Forendo is also developing fispemifene for the treatment of secondary hypogonadism - the drug candidate has shown significant efficacy in two Phase II trials

Planned Milestones

- Finalize the preclinical program and select the clinical candidate drug
- Demonstrate the hormonal proof-of-concept and the effective dose in healthy women in clinical Phase I studies

Patent Status

The company has filed patents covering several compound classes.

Commercialization

The development program will be continued in order to demonstrate proof-of-concept in the clinical setting. The company is aiming to form a strategic partnership or seek to license the project, in order to complete the clinical program and to bring the product to market. The company also aims to enter a strategic partnership in order to advance the clinical development of fispemifene.

1) Source: Rogers et. al., Reproductive Sciences. 16(4):335-346, 2001

2) Source: Endometriosis.org

First-in-class potential			Ownership: 21%			Contact:		
Project	Research Phase	Lead optimization	Preclinical development	Phase I	Phase II	Risto Lammintausta, VD		
Endometriosis	██████████		██████████	██████████	██████████	Phone: +358 40 310 8010		
Fispemifene	██████████		██████████	██████████	██████████	risto.lammintausta@forendo.com		
						www.forendo.com		

Athera Biotechnologies AB

The Challenge

Treatment and prevention of cardiovascular diseases (CVD) have improved significantly over recent decades. However, morbidity and mortality are still high and there is a significant need for better care of CVD patients. Inflammation is a recognized component of CVD and is not addressed by current treatments. A treatment that inhibits the inflammatory response associated with CVD has the potential to improve survival and morbidity significantly in these patients.

Athera's Solution

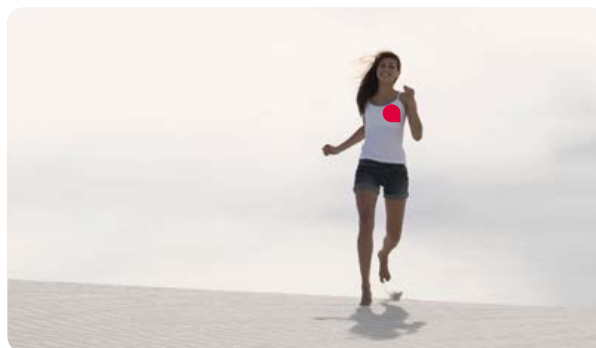
Studies of healthy individuals and patients with CVD suggest that naturally-occurring antibodies to phosphorylcholine (PC) have anti-inflammatory properties and protect against CVD. PC-mAb is a fully human monoclonal antibody that binds to PC and is being developed to restore cardio-protective levels of PC antibodies and prevent secondary CVD events.

Competitive Advantages

Athera's product candidate target the inflammatory component of acute cardiovascular disease, where current therapies are considered to be inadequate. This therapeutic approach has proven preclinical efficacy as PC-mAb was shown to be effective in 3 different animal models of CVD. Furthermore, the company's biomarker, CVDefine® kit, makes it possible to identify high risk patients with CVD that are most likely to benefit from antiinflammatory treatment.

The Market

More than 500 million individuals suffer from various types of CVD, the leading cause of death in the developed world accounting for over 40 % of all deaths¹. Several of the world's most prescribed drugs are used for the treatment of cardiovascular diseases with USD 100bn sales².



Status

- A candidate drug has been selected for the PC-mAb program and is currently in preclinical development
- A manufacturing process has been developed for PC-mAb and has been used in production of material for toxicology and clinical studies

Planned Milestones

- Finalize preclinical development of PC-mAb
- Initiate first-in-man clinical Phase I development

Patent Status

Patent applications have been submitted for therapeutic and diagnostic innovations. The European, Australian and U.S. Patent Offices have granted key patents for PC-mAb. Additional patent applications have been filed for diagnostic and therapeutic innovations.

Commercialization

Athera will conduct preclinical development and a Phase I study with PC-mAb and, following the completion of such study, allow a pharma partner pursue further clinical development. Athera has an exclusive option agreement with Boehringer Ingelheim.

1) Source: WHO, The Global Burden of Disease: 2004 Update, 2008

2) Source: Datamonitor, PharmaVita Explorer

First-in-class potential	Project: PC-mAb	Ownership: 65%	Contact:
Research Phase Lead optimization Preclinical development Phase I Phase II	Carina Schmidt, CEO Phone: -46 761 93 81 90 c.schmidt@athera.se www.athera.se		

Dilaforette AB, SCD

The Challenge

Sickle cell disease (SCD) is a genetic disorder caused by mutation in the hemoglobin gene. This causes red blood cells to assume an abnormal 'sickle' form. In SCD sickled red blood cells adhere to the lining of the blood vessels, restricts blood flow and results in episodes of severe pain. These Vaso Occlusive Crisis (VOC) is the clinical hallmark of the disease. In SCD, pain occurs in more than 50% of days and 90% of hospital admissions are for acute pain¹. On average VOC causes around 1 hospitalization per patient and year² and the average life expectancy of males and females with SCD is only 42 and 48 years, respectively³. There is currently no approved therapy for treatment of acute VOC besides pain management.

Dilaforette's Solution

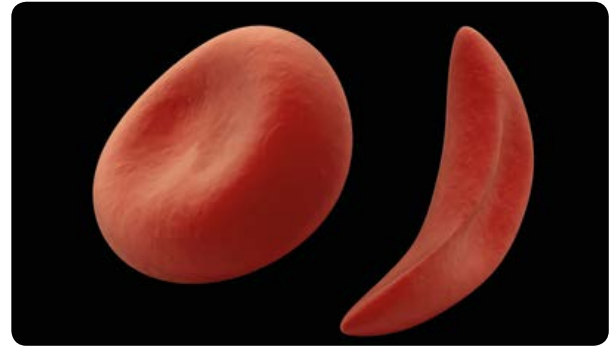
Dilaforette's drug candidate, sevuparin, a proprietary polysaccharide-based drug derived from heparin, has been designed to retain the anti-adhesive effects of heparin, while reducing the anti-coagulant property. Sevuparin, with its strong anti-adhesive effects, could be of clinical use in several therapeutic conditions and is currently in development for severe malaria and SCD. In SCD, sevuparin has the potential to be a disease-modifying treatment for the painful VOC by restoring normal blood flow through several adhesion mechanisms, thereby inhibiting the abnormal adhesion of blood cells.

Competitive Advantages

Preclinical experiments have shown that sevuparin has the potential to reduce time to resolution of the crisis, to reduce need of analgesics as well as hospitalization time. Thereby, Dilaforette's treatment has the potential to lower the severe debilitating pain that many SCD patients experience and also have a health economics benefit by reducing hospitalization.

Market

In the US and in Europe, SCD is an orphan disease with approximately 80,000 and 30,000 patients, respectively.^{4,5} In addition, SCD is very common in Middle East and Africa with around 300,000 – 400,000 born with the disease each year. By successfully limiting severity of VOCs, sevuparin could potentially fill a therapeutic void that could decrease hospital stay and the use of analgesics. The commercial impact of such a treatment is therefore expected to be substantial.



Status

- Safety documentation of sevuparin has been successfully completed in a Phase I clinical trial
- Planning is underway for a Phase II trial in SCD

Planned Milestones

- Initiate clinical studies of sevuparin in SCD

Patent Status

Dilaforette has submitted patent applications for sevuparin and its medical use in key markets.

Commercialization

Dilaforette will seek a partner at the proof-of-concept stage to further to develop and commercialize sevuparin.

1) Source: Orringer et. al., 2001. JAMA. 286(17):2099-2106
 2) Source: Brousseau et al., 2010. JAMA. 303(13):1288-1294
 3) Source: Platt et al., N Engl J Med. 325:11-16, 1991
 4) Source: WHO, 2001
 5) Source: Hassel, Am J Prev Med. 38(4 Suppl):S512-21, 2010

First-in-class potential	Project: Sevuparin, SCD	Ownership: 60%	Contact:
<p>Research Phase Lead optimization Preclinical development Phase I Phase II</p>	<p>Christina Herder, CEO Phone: +46 70 37 47 156 christina.herder@dilaforette.se www.dilaforette.se</p>		

Clanotech AB

The Challenge

Increase of intraocular pressure (IOP) and retinal neovascularization are the most common causes of blindness in an ageing population. Clanotech's target populations are severe glaucoma and wet age related macular degeneration (wAMD) patients. Severe glaucoma patients are refractory to IOP lowering medications undergo surgical intervention that creates a flap helping the eye to drain liquid more effectively and lowering IOP. Correct healing of the flap is mandatory for the long term success of the procedure. Cytotoxic antimetabolite (Mitomycin-C) is used today to prevent closure of the flap, but is associated with significant side effects. The current treatments for wAMD are anti-angiogenic treatments based on inhibition of the vascular endothelial growth factor (VEGF) that needs to be administered by frequent injections in the eye to maintain the vision.

Clanotech's Solution

Clanotech's lead candidate is antagonist of the $\alpha_5\beta_1$ -integrin receptor present in fibroblast and on vascular endothelial cells. $\alpha_5\beta_1$ -integrin is strongly up-regulated in fibroblast in scars after glaucoma surgery. Moreover, $\alpha_5\beta_1$ -integrin stimulates the formation of new blood vessels through pathways that are partly complementary and partly interrelated with the VEGF pathway. This indicates that $\alpha_5\beta_1$ -integrin antagonism is a potentially promising area of research for adjuvant in glaucoma surgery techniques reducing fibrosis and for the treatment of eye neovascularization.

Competitive Advantages

Clanotech's $\alpha_5\beta_1$ -integrin antagonist has shown to have anti-angiogenic, anti-fibrotic and anti-inflammatory properties. Clanotech's aim is to develop a product that offers a safe and efficacious adjuvant therapy in glaucoma surgery avoiding intra- and postoperative problems experienced with the cytotoxic anti-metabolite used today. Moreover, Clanotech's $\alpha_5\beta_1$ -integrin antagonist has the potential to become a complementary treatment with the standard of care for wAMD patients resulting in a long lasting effect given in combination with anti-VEGF.

The Market

The market for a new anti-fibrotic agent in glaucoma surgery as $\alpha_5\beta_1$ -integrin antagonist is estimated to reach USD 1bn in 2025¹. This is an orphan drug opportunity with the potential of early registration.

The total global financial burden of AMD is estimated at USD 350bn each year² and there are around 4 million people suffering from the wet form of AMD worldwide³. Lucentis, an anti-angiogenic product indicated for this disease, achieved sales close to USD 4bn in 2012⁴.



Status

- The lead candidate is in preclinical development

Planned Milestones

- Completion of regulatory toxicology studies
- Start of phase I clinical study

Patent Status

Patent applications claiming Clanotech's lead compound are pending on key markets.

Commercialization

Clanotech's business objective is to develop candidate drugs to the point of establishing proof of concept in man. Clanotech is seeking a partner to secure the clinical development of the product to market.

- 1) Source: Market research
- 2) Source: Access Economics, The Global Economic Cost of Visual Impairment, 2010
- 3) Source: AMD Alliance International, Increasing Understanding of Wet Age-Related Macular Degeneration (AMD) as a Chronic Disease, 2011
- 4) Source: MedTrack, 2012

First-in-class potential		Project: CLT28643		Ownership: 79%		Contact:	
Research Phase	Lead optimization	Preclinical development	Phase I	Phase II	Patrizia Caldirola, CEO Phone: +46 70 374 71 79 patrizia.caldirola@clanotech.se www.clanotech.se		
████████████████████		████████████████████		████████████████████			

Umecrine Cognition AB

The Challenge

Hepatic encephalopathy (HE) is a serious neuropsychiatric and neurocognitive complication in acute and chronic liver disease. HE is characterized by impairments of the sleep-wake cycle, consciousness, cognition, memory, decreased energy levels, personality change and reduced motor skills. The disorder therefore has detrimental effects on health related quality of life as a consequence of these diverse and debilitating symptoms. The pathophysiology of HE is driven by reduced liver function through cirrhosis as this increases the ammonia load in the systemic circulation and neuroinflammation. The main symptoms arise in the brain where impaired neural signaling and subsequent cerebral edema gives the characteristic symptoms of HE. An increase in the inhibitory GABA system in the CNS is a plausible main driver for the clinical signs and symptoms.

Umecrine Cognition's Solution

Umecrine Cognition is developing pharmaceuticals to treat acute life-threatening HE and long-term maintenance in minimal HE caused by endogenous CNS-active steroids (GABA-steroids). Certain neuroactive steroids are key drivers of this increased GABA signaling, causing cognitive impairment. This makes neurosteroid-antagonists a credible therapeutic class to explore for novel treatments in HE. The expected effects of treatment include shortened hospital stay and need for intensive care with improved and maintained cognitive function resulting in improved quality of life and reduced social costs.

Competitive Advantages

A therapy based on this mode of action is the first potential treatment that directly addresses the neurocognitive signs and symptoms of HE. Treatment would only be required when motivated by a worsening of these symptoms, whereas present options all require prophylactic use to reduce the risk of recurrent episodes by aiming to indirectly control hyperammonemia. Currently, there are no drugs available directly addressing the signs and symptoms of HE. The treatment can therefore potentially be combined with present standard of care. Umecrine Cognition's innovation represents a unique and novel treatment principle and no similar substances exist that targets the effects of endogenous and exogenous CNS-steroids.

The Market

HE is a severe disorder with a large unmet need. In total, liver cirrhosis affects up to 1% of the US and EU populations^{1,2}. Between 125,000 and 200,000 patients with cirrhosis in the US are hospitalized due to complications of HE³. Once HE develops, mortality reaches 22-35% after 5 years^{4,5}. HE is also associated with large societal and individual costs. The total cost for hospitalizations with HE in the US was recently estimated to have increased from \$1.6bn in 2005 to \$2.0bn in 2009, at a total charge of \$7.2bn in 2009⁶. Umecrine Cognition's strategy is to focus on short-term treatment in hospitalized patients with severe HE. An effective novel treatment within this indication is likely to make a major contribution for the treatment of this disorder.



Status

- A candidate drug with druglike properties and scalable for manufacturing has been nominated for preclinical development
- Mechanism of action has been established regarding the GABA-steroid modulating approach to improving cognitive function
- Proof-of-principle has been demonstrated by normalizing cognitive and motor function in validated experimental models of hepatic encephalopathy

Planned Milestones

- Exploratory studies to verify the pharmacological properties of the nominated candidate drug
- Finalize Regulatory toxicology studies to support clinical development
- GMP manufacturing to support clinical development

Patent Status

Umecrine Cognition is actively securing its IP position and patents are granted or pending in all major markets for all of the company's lead compounds.

Commercialization

Once proof of principle in man has been achieved, Umecrine Cognition will seek commercial partnering with a pharmaceutical company capable of providing appropriate commercial development and marketing strength.

- 1) Source: Schuppan and Afdhal, Lancet. 371: 838-851, 2008
- 2) Source: Blachier et. al., J. Hepatol. 58: 593-608, 2013
- 3) Source: HCU pnet, Healthcare Cost and Utilization project, 2006
- 4) Source: Yoneyama et. al., Dig. Dis. Sci., 49: 1174-1180, 2004
- 5) Source: Yoneyama et. al., Dig. Dis. Sci., 49: 1174-1180, 2004
- 6) Source: Stepanova et al., Clin. Gastroenterol. Hepatol. 10:1034-1041, 2012

First-in-class potential				Ownership: 63%		Contact:
Research Phase	Lead optimization	Preclinical development	Phase I	Phase II		Magnus Doverskog, CEO
						Phone: +46 73 039 20 52
						magnus.doverskog@umecrine.se
						www.umecrine.se

NovaSAID AB

The Challenge

Inflammatory diseases such as rheumatoid arthritis and osteoarthritis are characterized by joint pain and swelling. These symptoms are mediated by prostaglandin E2 (PGE2). Current drugs act by reducing prostaglandins, but they are not selective for PGE2 and reduce other, physiologically important prostaglandins and thromboxins leading to side effects, particularly with long term use. The most frequent side effects are gastrointestinal bleedings and cardiovascular damage.

A drug that would selectively inhibit PGE2, the target most associated with inflammatory pain, should be effective in reducing pain and joint swelling while avoiding the side effects associated with current treatments.

NovaSAID's Solution

NovaSAID's approach is to prevent the pathological formation of PGE2 selectively, through the development of inhibitors of microsomal prostaglandin E synthase-1 (mPGES-1), the enzyme that is responsible for the formation of PGE2 during inflammation. NovaSAID has discovered several selective mPGES-1 inhibitors, and has also demonstrated that these are effective in animal models for pain and inflammation.

mPGES-1 inhibition offers a novel approach for inhibiting pathological PGE2 production without adversely affecting other important prostanoids.

Competitive Advantages

- Unique compounds that are potent inhibitors across species verified in vivo (and are active in rat and mouse) that allows testing in several animal models
- Strong technology with methods that allow testing throughout discovery, and unique target knowledge within the company

The Market

Significant medical needs exist in several indications. The numbers of patients with osteoarthritis and rheumatoid arthritis in the world's seven largest markets total around 80 million and 6 million, respectively¹. NovaSAID's compounds have the potential to replace both COX-2 inhibitors and NSAIDs, which currently have combined sales of more than USD 12bn². Furthermore, a product based on a new mode of action, offering improved efficacy and reduced side effects, is likely to lead to increased prescription, thereby increasing the market potential.



Status

- Proof-of-principle has been demonstrated with oral formulations of inhibitors of mPGES-1 in animal models of several species corresponding to human inflammatory diseases
- Several druggable compounds are in late optimization phase. Current data show that safety is supported by highly selective inhibition of mPGES-1
- A strategic partnership was initiated in January 2014 with Cadila Pharmaceuticals to collaborate around preclinical and clinical development of drug candidates that have been developed by NovaSAID and the development will be conducted at the Cadila Pharmaceuticals facility in Ahmedabad, India.

Planned Milestones

- Enter preclinical development with the first candidate drug

Patent Status

Patent applications for compounds in development are pending.

Commercialization

According to the agreement signed with Cadila Pharmaceuticals, all revenue generated from the sale and marketing in India, Middle East and Africa of products covered by the agreement will be retained by Cadila and net sales in all other countries will be shared by the two companies.

1) Source: Business Insights, Autoimmune Market Outlook to 2012, 2007
 2) Source: Business Insights, The Pain Market Outlook to 2011, 2006

First-in-class potential				Ownership: 77%	Contact:
Research Phase	Lead optimization	Preclinical development	Phase I	Phase II	Tomas Odergren, Chairman
					Phone: +46 72 562 80 88
					tomas.odergren@karolinskadevelopment.com
					www.novasaid.se

Promimic AB

The Challenge

The implant industry is driven by a constant search for improved materials and better implant surfaces in order to improve clinical results and develop new products. The progress in recent years has led to the development of several new implant materials; such as PEEK, zirconia and pyrocarbon. These materials have mechanical properties that make them similar to bone, but they do not have the same ability to integrate with the bone as traditional titanium implants.

Promimic's Solution

Promimic is a biomaterials company that develops and markets a unique implant coating – HA^{nano} Surface. The 20 nm thin coating of hydroxyapatite, HA, accelerates osseointegration and increases the anchoring strength of implants. The HAnano Surface can convert any implant to a material that resembles human bone and thereby create an improved osteoconductive interface between human tissue and implant.

Competitive Advantages

HAnano Surface can be applied on all implant materials, including metals, ceramics, pyrocarbon and polymers – regardless of its dimensions and structure. 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. Furthermore, the nanometer thin coating improves the hydrophilicity of the implant which increases the possibility for bone cells to attach to the surface. The surface has been evaluated in both in vitro and in vivo studies, which have shown that the surface can reduce healing time of an implant. The coating process is easy to implement on an industrial scale.

The Market

The implant industry is a high growth business with high profit margins. The competition amongst implant manufacturers is fierce and each market segment is dominated by four to eight global companies. Many of these follow a strategy of licensing new technology in order to strengthen their product portfolio and market position. This has created an opportunity for innovations from small companies to enter the market. To take advantage of this Promimic has a business model where its technology is out-licensed to implant manufacturers and incorporated into their line of production.



Status

- HA^{nano} Surface has received FDA approval for a dental implant
- Ongoing collaboration discussions with several leading implant companies

Planned Milestones

- Launch of an implant with HA^{nano} Surface
- Industrialization of process
- Increased market presence

Patent Status

Patents for the company's primary innovation are currently pending on all major markets worldwide and patents have been granted in Sweden, USA, Russia, China, Israel, Australia, and South Africa. The company is also proactively strengthening its patent portfolio with new applications.

Commercialization

Through collaborations and licensing, Promimic aims to become the implant industry's preferred supplier of synthetic bone interfaces between implant and human tissue. The HA^{nano} Surface has successfully been sold on the biosensor market since 2007.

Product: HA ^{nano} Surface	Ownership: 29%	Contact:
<div style="display: flex; justify-content: space-between; width: 100%;"> Concept development Prototype Development Product Sales </div>		Ulf Brogren, CEO Phone: +46 31 772 80 22 info@promimic.se www.promimic.se

OssDsign AB

The Challenge

The mission of OssDsign addresses every day challenges in implant treatment of bone defects, particularly complicated defects that heal poorly. Materials such as plastics, polymers and metals show limited or no tissue integration and are a lifetime risk for skin penetration and infection¹. When such complications occur, treatment choices are few, subsequent failure rates increase exponentially and treatment costs soar. A recent study of 1,200 patients demonstrates hospital costs are more than five times higher in patients with complications after advanced surgery as compared to complication-free surgery².

OssDsign's Solution

The vision is to make OssDsign the foremost cutting-edge supplier worldwide of solutions for better bone repair. In order to realize the vision, OssDsign has developed Cranio PSI - a patient-specific implant intended for use in permanent cranial reconstruction.

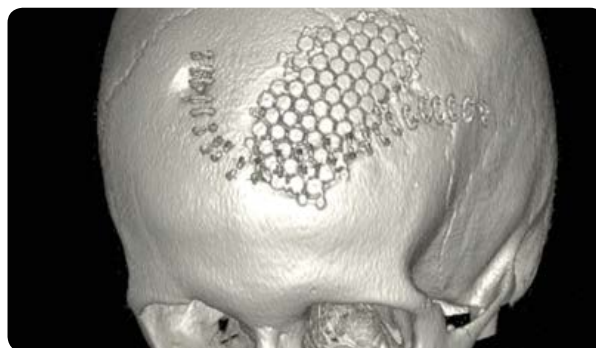
OssDsign is made of calcium phosphate bioceramic tiles, interconnected by a thin titanium mesh. The implant is designed in a spacious pattern that allows free circulation of blood and tissue fluids, while providing a mechanical scaffold for bone healing. The product has so far shown excellent clinical results in complex cases.

Competitive Advantages

A high percentage of cranioplasties fail when patients have large defects and risk factors such as poor circulation. Such failures lead to difficult and expensive clinical complications. Testing so far of OssDsign® patient-specific implant has resulted in very promising clinical outcomes in this patient group. The key competitive advantage of the cranial implant is to reduce the complication rate, leading to improved quality of life for patients and reduced costs for hospitals.

The Market

The market for biomaterials products in orthopedics was worth €1.5bn in 2013. The market for OssDsign's lead product in cranioplasty alone is expected to amount to approximately €100m in 2017. In addition, OssDsign has several projects in its product portfolio, significantly expanding the company's commercial potential. The market is attractive as these procedures are carried out in a limited number of hospitals, easily identifiable and reached. In addition the price sensitivity is moderate for products with proven efficacy.



Status

- Registration certificate obtained from the Swedish Medical Product Agency for patient-specific devices
- Documentation that bone grows on OssDsign bioceramic published in peer-reviewed journal³
- Own manufacturing in place; ISO 13485 certification
- Lead product launched in Germany and the Nordic countries
- Prospective, multi-center clinical study ongoing
- First US regulatory file submitted to the Food and Drug Administration

Planned milestones

- CE marking of first follow-up products
- Finalize the clinical study

Patent Status

Currently 11 patent families granted or under review and three patents are granted in the US. Patents cover new designs, materials and process aspects of the technology platform.


Commercialization

The strategy to establish a leading market position involves establishing the use of OssDsign for cranioplasty among neurological and craniofacial surgeons. Launch a flow of follow-up bone repair products to the same target group based on the technology platform and, in collaboration with strategic partners, take clinically and commercially established product concepts and launch them on attractive musculoskeletal markets, such as trauma, spine and oral surgery.

1) Source: Marchac & Greensmith, JPRAS. 61(7):744-752, 2008

2) Source: Vonlanthen et. al., Annals of Surgery. 254(6):907-913, 2011

3) Source: Engstrand et. al., Journal of Neurosurgery 120: 273-277, 2014

Project: Cranio PSI		Ownership: 26%	Contact:
Concept development	Prototype	Development	Bo Qwarnström, CEO
			Phone: +46 76 899 85 87
			bq@ossdsign.com
			www.ossdsign.com

Athera Biotechnologies AB

The Challenge

There is a great need for better tools for risk evaluation of cardiovascular disease (CVD) patients in order to select the most appropriate treatment. Current markers in clinical practice are insufficient for guiding therapy.

Athera's Solution

Athera has developed a test for measurement of IgM antibodies against phosphorylcholine (anti-PC) in blood – CVDefine® kit. Low levels of anti-PC indicate a risk for future development of cardiovascular disease. Anti-PC is also suggested as a marker to identify CVD patients at high risk for secondary events after revascularization. The company also has two biopharmaceutical product candidates in this area, PC-mAb and Annexin A5. CVDefine has a potential to become a companion diagnostic, i.e. used to identify the patients who would benefit mostly from treatment with the therapeutic antibody PC-mAb.

Competitive Advantages

CVDefine adds important independent information to currently available risk assessment tools.

The Market

CVD is the leading cause of mortality in the western world and more than half a billion people suffer from different forms of the disease, globally.

Status

The CVDefine kit is on the market in Europe (CE-certified) and the USA (Research Use Only).



Planned Milestones

Encourage additional international clinical studies in collaboration with key opinion groups, with focus to establish the companion diagnostics approach in CVD.

Patent Status

Key patents have been granted in Europe and USA. New applications for additional patents have been filed for diagnostic innovations.

Commercialization

Athera is actively seeking an established diagnostics partner with the aim to secure broader market accessibility, both for the general clinical diagnostics market, and the research market.

Product: CVDefine® kit

Ownership: 65%

Contact:

Concept development Prototype Development Product Sales



Carina Schmidt, CEO
 Phone: +46 761 93 81 90
 c.schmidt@athera.se
 www.athera.se

Inhalation Sciences Sweden AB

The Challenge

Technologies to facilitate drug discovery and early development of inhaled drugs currently limit development of drugs that can be administered to the lungs.

Inhalation Sciences' Solution

Inhalation Sciences Sweden has developed a patented research and development platform which provide the possibility for companies developing inhaled drugs to generate key go, no-go data at an early stage of development. The precision dosing system called PreciseInhale™ offers the possibility of administering respirable aerosols prior to any formulation and inhaler device development.

Competitive Advantages

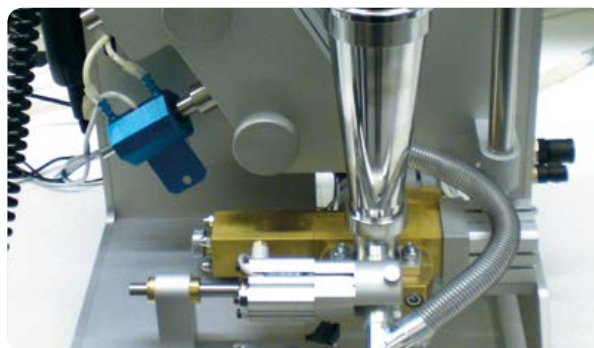
The technology platform requires only minimal processing of a compound before testing. Only small amounts – often less than 100 mg – of an active substance are needed to generate all aerosol exposures necessary in order to complete the critical first screening of a lead compound for its potential as an inhalable drug.

The PreciseInhale system handles dry powder as well as nebulized solutions, small molecules as well as biologics. The pharmacokinetic data derived enables poor-performing NCEs and new formulations to be discarded early on in the development process. Hence, the most promising projects can be advanced into the clinic at a much earlier stage than previously possible. Also, the risk of expensive late-stage product attritions, due to poor clinical properties (pharmacokinetics, absorption, distribution, metabolism and excretion).

The Market

Recent growth in the asthma and chronic obstructive pulmonary disease (COPD) market, within the seven major markets, has been driven mainly by the uptake of more expensive inhaled corticosteroids or long acting combination products. The asthma/COPD market is expected to reach sales of almost USD 25bn in 2017¹.

Systemic delivery by inhalation of small-molecular-weight drugs aimed at treating systemic disease represent an area of significant opportunity. This is of particular advantage for diseases that require treatments with fast onset of action, dose reliability and titration, minimal side-effects, and/or a means by which to bypass firstpass metabolism in the liver. Conditions such as migraine, nausea, anxiety and sexual dysfunction may benefit from rapid adsorption of drug and immediate therapeutic effect.



Status

- Pharmacokinetic validation studies on generic and biologic drugs in the isolated perfused lung (IPL) have been successfully completed
- Development of the first spray dryer prototype for micronizing small amounts of substance with high yields has been completed and is now ready for commercialization
- Three collaboration agreements have successfully been completed with larger pharmaceutical companies

Planned Milestones

- Validation of the PreciseInhale system for clinical use

Patent Status

Six patent family applications have been filed in the US, EU, Canada, Russia, China, India and Japan covering the important aspects of the technology. Patents in the US have recently been granted.

Commercialization

The company's vision is to make the PreciseInhale platform a gold standard tool for inhalation drug research and development. The business model includes tech transfer of the platform or selected modules but also CRO services to companies not having in house R&D capabilities. An important short term objective is to increase awareness and use of the system in the industry and to have the first tech transfer agreements in place.

1) Source: Datamonitor, Forecast Insight: Asthma/COPD, 2008

Project: PreciseInhale™		Ownership: 68%	Contact:
Concept development	Prototype	Development	Fredrik Sjövall, CEO
			Phone: +46 8 508 845 80
			fredrik.sjovall@inhalation.se
			www.inhalation.se

Lipidor AB

The Challenge

Topical administration of pharmaceuticals is common in many severe dermal diseases such as psoriasis and eczema. Unfortunately, many of today's topical treatments suffer from low patient compliance. Many formulations are perceived as greasy, causing discomfort and staining on clothes, leading to reduced patient compliance to treatment, which reduces the likelihood of a successful therapy outcome. Products that could offer improved qualities in terms of application and convenience will most likely lead to better treatment outcomes.

Lipidor's Solution

Lipidor have developed AKVANO™, a water-free lipid spray formulation. The AKVANO formulation is safe, free from irritants, dries quickly and feels pleasant on the skin. Hence, AKVANO allows for fast administration and has excellent cosmetic qualities; addressing key barriers behind today's low compliance rates seen with topical drug therapies. The AKVANO technology is not limited to a specific indication or a specific pharmaceutical ingredient. AKVANO is suitable for healthy, irritated, injured, or diseased skin, as well as mucous membranes.

Competitive Advantages

AKVANO has many advantages compared to cream and ointments:

- Spray formulation – low viscosity enables spray formulation which offers accurate dosing and no needs for rubbing of the skin after spraying
- Excellent cosmetic qualities – quick drying, feels pleasant on the skin, free from irritants
- Stable condition – adapts immediately to the properties of the skin surface creating stable conditions for the incorporated active ingredient
- Simple to formulate and manufacture – well-known components offers a cost-effective delivery system
- Long term physical and chemical stability and without preservatives

The Market

Lipidor's AKVANO technology offers many exciting and diverse opportunities across dermatology, wounds and burns, and skin care markets. As a lead product, Lipidor aims at investigate the safety and clinical efficacy of AKVANO containing calcipotriol in patients with psoriasis. These patients are known for suffering from low compliance rates, reported at as low as 50% for ointment formulations. It is estimated that in 2011 some 2.5 million psoriasis patients in the US and EU received topical treatments against psoriasis.^{1,2}



Status

- Placebo tolerability study (skin irritation in healthy volunteers) has been performed with very positive results
- A non-clinical user test has been carried out. Three of every four psoriasis patient preferred the AKVANO (placebo) formulation over Daivonex® ointment or cream, a commonly used topical anti-psoriasis treatment
- Results from a clinical Phase I/IIa with the AKVANO/calcipotriol-spray formulation in patients with psoriasis showed a clear and significant antipsoriatic effect comparable with a marketed formulation of calcipotriol with no safety issues noted in the study
- A partnership with Cerbios-Pharma SA (Switzerland) has been established for supplying calcipotriol, providing stability data and supplying clinical trial material

Planned Milestones

Prepare for an out-licensing of the product or sale of the company

Patent Status

Lipidor has built a patent portfolio around its lipid formulation technology, and several patent applications are pending in the national, regional and international phase respectively.

Commercialization

Lipidor is looking to establish an out-licensing agreement with a partner for finalizing development of the AKVANO-calcipotriol treatment and bring a product to market. The company is also open to discussing other commercial opportunities relating to partnerships and licensing of additional product concepts, as well as technology licensing or sale of the company.

1) Source: Datamonitor, Epidemiology: Psoriasis, 2012

2) Source: Datamonitor, Treatment Algorithms: Psoriasis, 2012

Project: AKVANO™	Ownership: 53%	Contact:
Concept development Prototype Development Product Sales		Anders Carlsson, CEO Phone: +46 73 778 06 43 anders.carlsson@lipidor.se www.lipidor.se

XSpray Microparticles AB

The Challenge

Many promising drug candidates fail in the drug development process due to formulation issues. In addition, formulation challenges limit the use of some existing drug molecules. New technology is needed to improve and enhance drug formulation and reformulation and to increase efficiency throughout the drug development process.

XSpray's Solution

XSpray's patented RightSize™ technology is able to formulate challenging drug substances including poorly water-soluble compounds, inhaled compounds and biopharmaceuticals, providing full control over particle properties in the nanometer to micrometer size range.

The RightSize process employs supercritical fluid technology. The supercritical fluid is used as an antisolvent for controlled precipitation of an active pharmaceutical ingredient (API) with or without the addition of excipients. The process is scalable from mg quantities at lab scale to drug manufacturing volumes.

XSpray has shown approximately 26 times better solubility and approximately 8 times better bioavailability for a marketed tyrosine kinase inhibitor (TKI) with Right Size. The majority of TKIs are poorly soluble and challenging to formulate.

Competitive Advantages

XSpray's RightSize technology is able to formulate challenging drug substances, offering significantly improved bioavailability and/or other critical pharmaceutical properties that translate into clear medical benefit. Dissolution improvement has been shown for a variety of compounds when compared with more traditional technologies. Due to low solubility many of today's marketed TKI therapies suffer from low absorption and high risk of adverse events due to sudden increase of exposure.

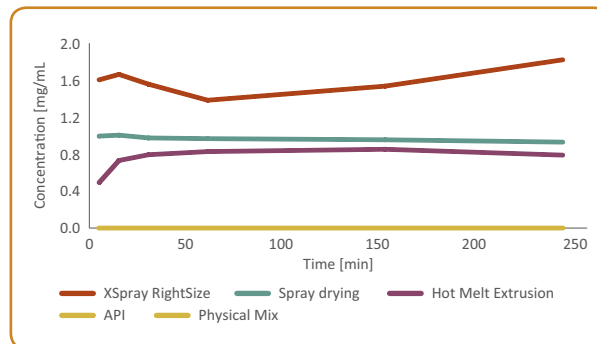
Cancer patients on many of the TKI treatments need carefully adjusted food intakes to avoid safety concerns – a high impact on quality of life.

The Market

PKIs include a number of commercially successful brands such as Tasigna which had sales of USD 1bn in 2012¹. PKIs are the second leading class of targeted cancer therapies having sales of USD 9bn in 2011, equivalent to 30% of total oncology sales in the seven major markets².

Over the next five years it is estimated that more than USD 267bn of branded pharmaceutical sales are at risk from generic competition³. The pharmaceutical industry is experiencing difficulties in developing new pharmaceuticals at the same rate as the expiration rate of patents on many important pharmaceuticals.

This is increasing the demand on effective life cycle management of successful products and access to external projects, resulting in more licensing deals and acquisitions.



Dissolution testing of itraconazole when compared with more traditional technologies, dissolution improvement has been shown for a variety of compounds.

Status

- Fully functional service laboratory is in place
- GMP production facility supporting Phase I and II clinical trials is validated and ready for production
- Animal studies demonstrate significantly improved bioavailability of RightSize formulation
- Stability for 14 months of RightSize formulation demonstrated
- Entered partnership with Cerbios-Pharma
- First Phase I trial ongoing with an improved formulation of an approved TKI

Planned Milestones

- Complete Phase I study

Patent Status

XSpray has a strong patent portfolio across major territories in key areas, including production technology for nanoparticles, scale up of nanoparticle production, and a production method for adaptation of particle size distribution to a desired range.


Commercialization

XSpray has entered into commercial agreements with customers since 2008. The company is seeking to build its revenue stream through new customer development projects, the sale of cGMP produced particles, and technology licensing. Proprietary drug products based on the RightSize technology are being developed, and will be offered to pharmaceutical companies engaged in life cycle management, or alternatively to generic pharmaceutical companies.

1) Source: EP Vantage, December 2012

2) Source: Datamonitor, Market and Product Forecasts: Targeted Cancer Therapies 2011–21, 2012

3) Source: Pharmaceutical Executive, Managing Product Lifecycle, June 2011

Project: RightSize™		Ownership: 63%	Contact:
Concept development	Prototype	Development	Product
Sales			
		Per Andersson, CEO Phone: +46 8 730 37 00 per.andersson@xspray.com www.xspray.com	

NeoDynamics AB

The Challenge

The primary cause of death from cancer is the spread of metastases within the body from the original primary tumor. Early diagnosis and treatment is therefore essential to minimize the risk of cancer cells spreading or seeding early, in order to reduce mortality.

NeoDynamic's Solution

NeoDynamics is developing two principal methods for safe gentle biopsy sampling and safe, early, minimally-invasive cancer treatment.

Fourier – With the company's projection-free inertia-stabilized versatile core needle biopsy device, core needle biopsies of different diameters and tissue lengths can be removed and numerous tissue blocks can be extracted through the same needle channel.

Preferential Radiofrequency Ablation (PRFA) – A new method for primary treatment of breast cancer with dedicated equipment activated by radiofrequency energy. The electrode is positioned centrally in the tumor by ultrasound guidance. Unique Fourier Power Assistance helps to position the electrode precisely even in small very hard or fibrous tumors.

Competitive Advantages

Fourier: The company's Fourier method for biopsy sampling delivers high yield biopsies from fewer insertions. This facilitates a secure diagnosis and minimizes the dissemination of tumor cells into the body. Force-proportional oscillatory micro-movements are used to slowly and evenly insert the biopsy needle. This enables gentle insertion, decreasing biopsy bleeding and seeding and unnecessary damage to tissue at the rear of the tumor. Furthermore, the unique Fourier technology enables physicians to navigate inside the tumor.

PRFA: Allows high-precision penetration of the treatment electrode into the tumor. As a day surgery involving only local anesthesia and very short treatment time it minimizes patient inconvenience and health care costs.

The Market

The cancer diagnostic and therapeutic market is expected to experience a steady growth due to demographic changes. The global biopsy market is estimated at USD 1bn. More than 10,000 biopsies per million of population are carried out for suspected cancer in the developed world. The largest indications for biopsies are suspected breast and prostate cancer.

The market for minimally-invasive treatment of cancer and more benign changes in the breast is established and growing, and is expected to reach USD 200m in the USA soon¹.

Status

Fourier

- In final product development phase
- A new proprietary equipment has been developed for Core Needle Biopsy



- Core Needle Biopsy is going through market-acceptance testing
- A clinical study on the anti-seeding technology was published in the British Journal of Cancer².

PRFA

- Results from the first clinical study have been published
- A second clinical study is ongoing (outpatient surgery)
- A new treatment equipment has been developed for tumor ablation
- The current focus is on elderly patients

Planned Milestones

Fourier

- Perform clinical multi-centre evaluation study
- Obtain CE-marking during 2014
- Market launch

PRFA

- Complete the ongoing study
- Enter a new generation of treatment equipment into clinical use

Patent Status

NeoDynamics has 46 patents granted and 7 patents pending for the company's various technologies and medical applications.

Commercialization

The company aims to launch diagnostic procedures in selected European countries during 2015.

1) Source: European Market for Biopsy Devices, Frost and Sullivan, 20 May 2008 / U.S. Market for Diagnostic and Therapeutic Prostate Disorder Management Products, Medinsight, August 2007 / WHO World Health Organization, Data and Statistics

2) Source: Wiksell et al., Br J Cancer. 103:1706-1709, 2010

						Ownership: 18%
Project	Concept development	Prototype	Development	Product	Sales	
Fourier						Contact: Peter Sellei, CEO Phone: +46 70 624 21 89 peter.sellei@neodynamics.se www.neodynamics.se
PRFA						

Karolinska Development's share and shareholders in 2013

Ownership structure

On December 31, 2013, Karolinska Development had 3,210 shareholders. International investors owned 36% of the share capital and 28% of the votes. On the same date, institutional investors held 92% of the share capital and 94% of the votes. All series A shares (each of which carries 10 votes, compared with 1 vote for each B share) are held by Karolinska Institutet Holding AB.

Share performance

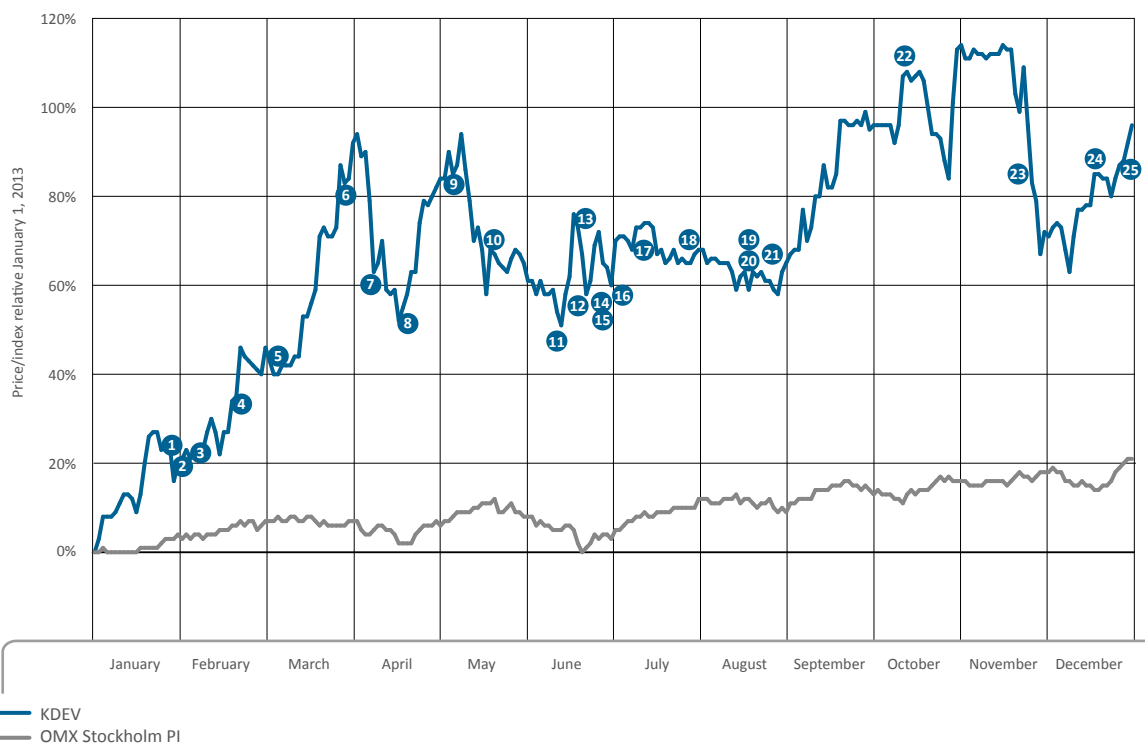
The closing price on the first trading day was SEK 15.8, and at year-end 2013 the share traded at SEK 30.9, an increase of 96%. No dividend was paid in 2013.

Share capital

At year-end 2013, the share capital amounted to SEK 24.3m distributed among 48.5 million shares. The quota value is SEK 0.50 per share. The net asset value amounted to SEK 40.8 per share.

Ticker symbol and listing

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



Significant events 2013

- 1 Dilaforette – Phase II study with sevuparin for the treatment of severe malaria initiated
- 2 Karolinska Development signs agreement with Mayo Clinic
- 3 Pergamum AB announces a strategic collaboration with Cadila Pharmaceuticals Ltd
- 4 Karolinska Development AB (publ) – Year-End Report 2012
- 5 Karolinska Development and Rosetta Capital Announce the Closing of their SEK 220 Million Strategic Transaction
- 6 Preliminary results of a Phase II study indicates that Axelar's AXL1717 is efficacious in 2nd line treatment of patients with lung cancer
- 7 Bo Jesper Hansen proposed as new Chairman of the Board
- 8 Pergamum announces last visit of last patient in a Phase I/II trial of a potential new treatment for hard-to-heal wounds

- 9 Karolinska Development AB (publ) - Interim report January - March 2013
- 10 First patient dosed in the Phase I/II study of Umecline Mood's candidate drug for premenstrual dysphoric disorder
- 11 EU grants EUR 6m to the clinical development of Athera's cardiovascular disease antibody therapy
- 12 Athera and Boehringer Ingelheim enter into an option agreement on a novel therapy for Atherosclerosis
- 13 Karolinska Development invests in Forendo Pharma
- 14 Pergamum reports positive follow-up data from a Phase II clinical trial of PXL-01 for prevention of post-surgical adhesions
- 15 Karolinska Development initiates collaborations with Ospedale San Raffaele and Medical University of Graz
- 16 Pergamum reports positive preliminary efficacy results from a Phase I/II study of LL-37 in patients with chronic leg ulcers
- 17 Oss-Q completes financing, initiates clinical study and changes name to OssDsign

- 18 Pharmanest meets efficacy and safety end points in Phase II study of SHACT
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- 20 Purchase of own shares to cover social security fees related to incentive program
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- 24 EU research grants awarded to three of Karolinska Development's portfolio companies
- 25 Axelar announces final data from Phase II study with AXL1717 in lung cancer

LARGEST SHAREHOLDERS

	A-shares	B-shares	Cap%	Vote%
Third Swedish National Pension Fund	0	4,678,500	9.6	7.5
Karolinska Institutet Holding AB	1,503,098	2,126,902	7.5	27.6
Coastal Investment Management LLC	0	3,470,541	7.2	5.6
The Foundation for Baltic and East European Studies	0	3,345,537	6.9	5.4
Insamlingsstiftelsen för främjande och utveckling av medicinsk forskning vid Karolinska Institutet	0	1,397,354	2.9	2.3
Foundation Asset Management AB	0	1,392,035	2.9	2.2
Jarla Investeringar AB	0	1,389,322	2.9	2.2
OTK Holding A/S	0	1,300,000	2.7	2.1
Ramsbury Invest AB	0	1,261,278	2.6	2.0
Länsförsäkringar Group	0	1,009,670	2.1	1.6
Fourth Swedish National Pension Fund	0	808,837	1.7	1.3
SBSB Innovation AB	0	700,000	1.4	1.1
KL Ventures AB	0	680,000	1.4	1.1
Holberg Funds	0	450,000	0.9	0.7
Ruffer Funds	0	450,000	0.9	0.7
Swedbank Robur Funds	0	408,074	0.8	0.7
Skagen Funds	0	397,603	0.8	0.6
Gälö Foundation	0	375,535	0.8	0.6
Nordea Funds	0	320,631	0.7	0.5
Lingfield AB	0	281,989	0.6	0.5
Sum. listed shareholders	1,503,098	26,243,808	57.2	66.5
Sum. other shareholders	0	20,784,511	42.8	33.5
Sum. all shareholders	1,503,098	47,028,319	100.0	100.0

As at December 31, 2013
Source: Euroclear



Board

BOARD OF DIRECTORS



BO JESPER HANSEN

Chairman and Board member since 2013. **Born** 1958. **MD, PhD. Other appointments** Chairman of Swedish Orphan Biovitrum AB and Topotarget A/S. Board member of Hyperion Therapeutics Inc., GenSpera Inc., Newron SA, Ablynx NV, Orphazyme A/S and CMC Kontrast AB. Previous appointments include various positions in Swedish Orphan International AB since 1993, including CEO 1998–2010. Medical advisor for Synthelabo, Pfizer, Pharmacia and Yamanouchi. Founder of Scandinavian Medical Research. **No holdings in Karolinska Development.**



CHARLOTTE EDENIUS

Board member since 2012. **Born** 1958. **PhD., Medical Degree. Other appointments** Executive VP Development at Medivir AB. Previous appointments include Senior VP Preclinical & Clinical R&D at Orexo AB, CSO at Biolipox AB, several positions within Clinical R&D at Astra-Zeneca, academic research at Karolinska Institutet and Board Member of Karolinska Institutet Innovations AB and Qlucore AB. **No holdings in Karolinska Development.**



HANS WIGZELL

Board member since 2006. **Born** 1938. **Professor of Immunology and MD. Other appointments** Chairman of Rhenman & Partner Asset Management AB. Board member of Sarepta Pharmaceuticals, SOBI AB, Valneva AS, Cadila Pharmaceuticals Svenska AB och Raysearch Laboratories AB. Member of The Royal Swedish Academy of Engineering Sciences and of the Royal Swedish Academy of Sciences. Previous assignments include, among others, the President of Karolinska Institutet's Nobel Committee, and President of Karolinska Institutet and Director General of Smittskyddsinstitutet. **Holdings in Karolinska Development** 8,491 shares.



KLAUS WILGENBUS

Boardmember since 2012. **Born** 1962. **MD. Other appointments** Corporate Senior Vice President Business Development / Licensing & Strategy of Boehringer Ingelheim GmbH. Previous appointments include several management positions within Boehringer Ingelheim GmbH, including Senior Vice President Licensing, Vice President R&D Licensing and Director for Exploratory Research in Oncology at Boehringer Ingelheim's R&D Centre in Vienna as well as academic research at Stanford University and the German Cancer Research Centre, Heidelberg. **No holdings in Karolinska Development.**



RUNE FRANSSON

Board member since 2006. **Born** 1947. **B.Sc. in Economics. Other appointments** Chairman of Karolinska Institutet Holding AB and Karolinska Institutet Housing AB. Previous assignments include, among others, Board member of KI Health Management. **No holdings in Karolinska Development.**



VLAD ARTAMONOV

Board member since 2012. **Born** 1978. **MBA, B.Sc. Other appointments** Board Member of Redbank Energy Ltd. and of Coastal Capital International Ltd., Managing Partner at Coastal Capital International Ltd. Previous appointments include Investment Analyst at Greenlight Capital Inc., position in the Global Merger & Acquisition Group at Merrill Lynch in New York. **Holdings in Karolinska Development** 3,470,541 shares (by related legal person).



PER-OLOF EDIN

Board member since 2007. **Born** 1940. **Professor. Other appointments** Board member of Axelar AB on behalf of the Baltic Sea Foundation. Previous assignments include, among others, Vice Chairman of the Seventh AP Fund, Chairman of Södertörn University College and the Baltic Sea Foundation. **No holdings in Karolinska Development**

Management and employees

MANAGEMENT



TORBJÖRN BJERKE
Chief Executive Officer

Appointed in 2011. **Born** 1962. **MD.** Torbjörn Bjerke has over 20 years of experience in the pharmaceutical industry, including as President and CEO of Orexo AB, a position he held from 2007 until January 2011, President and CEO of Biolipox AB and Director of Pharmacology at AstraZeneca. He has also served as Executive Vice President of R&D at ALK-Abello. **Other appointments** Chairman of Pergamum AB and Board member of Neodynamics AB, Aprea AB, DBV Technologies and TXP Pharma. **Holdings in Karolinska Development** 61,375 shares.



BENJAMIN NORDIN
Investor Relations Officer & Head of Business Analysis

Appointed in 2011 and **Head of Business Analysis** since 2008. **Born** 1974. **MSc in Molecular Biology.** Benjamin Nordin has over 10 years experience as an analyst in the life science sector, including as Sector Head, Health Care, Equity Research at Kaupthing Bank, and positions at Karolinska Institutet Centre for Medical Innovations and JP Nordiska. **Other appointments** Board member of Biosergen AS. **Holdings in Karolinska Development** 4,800 shares.



TERJE KALLAND
Chief Scientific Officer

Appointed in 2011 and **Deputy CEO** since 2012. **Born** 1951. **MD, PhD.** Terje Kalland has over 20 years experience from senior positions in the pharmaceutical industry, including as Senior Vice President, Biopharmaceuticals Research at Novo Nordisk (2005-2011), CSO of Biovitrum (2002-2005) and Global Head of Oncology Research at Pharmacia Corporation (1988-2002). Terje Kalland is a member of the Royal Swedish Academy of Engineering Sciences. **Other appointments** Chairman of KDev Oncology AB and Akinion Pharmaceuticals AB. Board member of ARTs Biologics A/S and Axelar AB. **Holdings in Karolinska Development** 35,000 shares.



ULF RICHENBERG
General Counsel

Appointed in 2008. **Born** 1955. **Master of Laws.** Ulf Richenberg has 25 years experience in business law, including positions as legal counsel of KIHAB, Esselte AB and Vattenfall, General Counsel of AB Stokab and Scribona AB and business law consultant at FOI. **Other appointments** Chairman of KCIF Fund Management AB. Board member of KD Incentive AB. **Holdings in Karolinska Development** 4,596 shares personally and through related parties.



CHRISTIAN TANGE
Chief Financial Officer

Appointed in 2014. **Born** 1966. **MSc in Economics and Business Administration.** Christian Tange has over 15 years' experience in international growth companies including 12 years within life science as global CFO for CMC Biologics from 2003-2012 and Business Controller for Warner Lambert Nordic from 1997-2000. Christian Tange has also acted as an industrial advisor and consultant for Private Equity Funds and Corporate Finance Advisors in M&A deals within life science. **Other appointments** Board member of Dilafor AB and KDev Investments AB. **No holdings in Karolinska Development.**

RESEARCH AND DEVELOPMENT

TERJE KALLAND

Chief Scientific Officer

See "Management" on page 49



GUNILLA EKSTRÖM

Vice President Operations

Appointed in June 2012. **Born** 1958. **MD, PhD, Associate Professor at Karolinska Institutet.** Gunilla Ekström has over 20 years of experience from senior positions in the pharmaceutical industry, including as Senior Vice President at Orexo AB and Global Product Director at AstraZeneca R&D. **Other appointments** Board member of Lipidor AB, Pharmanest AB, and CEO of Biosergen AS. **Holdings in Karolinska Development** 6,650 shares.



ANN-SOFIE STERNÅS

Vice President IPR

Appointed in June 2012. **Born** 1961. **European Patent Attorney, MSc in Chemical Engineering.** Ann-Sofie Sternås has almost 20 years of IP experience from large pharmaceutical companies and has held senior IPR positions within Astra and AstraZeneca. During many years, Ann-Sofie was heavily involved in IP litigation of several block-buster drugs. Ann-Sofie is specialized in IP-strategic matters with a heavy focus on the US legislation, particularly IP in the interface between patent law and regulatory law. **Other appointments** Part of a number of management teams within the Karolinska Development portfolio companies. **Holdings in Karolinska Development** 5,600 shares.



TOMAS ODERGREN

Vice President Clinical Development

Appointed in October 2012. **Born** 1959. **MD, PhD, Specialist in neurology.** Tomas Odergren has over 16 years of experience from senior positions at AstraZeneca R&D, including Vice President for Project Management for the CNS and Pain Innovative Medicines and Global Vice President for Onglyza franchise. **Other appointments** Charman of Dilaforette Holding AB, NovaSAID AB and board member of Athera Biotechnologies AB, Dilaforette AB, Forendo Pharma Oy and Umecline Cognition AB. **Holdings in Karolinska Development** 2,000 shares.



MICHAEL SUNDSTRÖM

Vice President Discovery Research

Appointed in September 2011. **Born** 1963. **PhD.** Michael Sundström has nearly 20 years of international experience from pharmaceutical and biotechnology organizations. He has held senior positions at Pharmacia, Structural Genomics Consortium at Oxford University and Novo Nordisk Foundation Center for Protein Research, where he held the position as Managing Director. Adjunct Professor at Aalborg University. **Holdings in Karolinska Development** 10,000 shares.

BUSINESS DEVELOPMENT

TORBJÖRN BJERKE
Chief Executive Officer
See "Management" on page 49

CHRISTIAN TANGE
Chief Financial Officer
See "Management" on page 49



OTTO SKOLLING
Vice President Business Development
Appointed in 2012 and employed since 2007. **Born** 1961. **MSc in Chemical Engineering.** Otto Skolling has 20 years experience in the pharmaceutical industry and medical technology, including at Novozymes, Siemens Life Support Systems and Pharmacia&Upjohn. **Other appointments** Chairman of Umecrine AB and Board member of Athera Biotechnologies AB, Inhalation Sciences Sweden AB, KCIF Fund Management AB, NeoDynamics AB, OssDsign AB, Promimic AB, Stockholm BiotechBuilders Association, Umecrine Cognition AB, Umecrine Mood AB and XSpray Microparticles AB. **Holdings in Karolinska Development** 6,591 shares and 21,840 warrants.

BENJAMIN NORDIN
Investor Relations Officer & Head of Business Analysis
See "Management" on page 49



DANIEL BOLANOWSKI
Business Analyst
Employed since August 2010. **Born** 1982. **MSc in Molecular Biotechnology Engineering, MSc in Business and Economics.** Daniel Bolanowski has worked for Karolinska Development for more than three years since joining as a university graduate. **Other appointments** Part of the business development teams in Axelar AB and Akinion Pharmaceuticals AB.

FINANCE AND ADMINISTRATION

CHRISTIAN TANGE
Chief Financial Officer
See "Management" on page 49



MICHAEL OWENS
Controller
Controller since 2007 and employed since 2010. **Born** 1956. **BsBA in accounting.** Michael Owens was an auditor at Arthur Andersen & Co. and Authorized Public Accountant at Ernst & Young and held the position as CFO for 12 years at Vitamex AB. Several years of experience as Management consultant. **Other appointments** Advisor to Portfolio companies. **Holdings in Karolinska Development** 5,888 shares



EVA MONTGOMERIE
Head of Accounting
Employed since October 2013, Employed within the group since 2007. **Born** 1958. **MSc in Business and Economics.** Eva Montgomerie has worked within the bank and finance sector for 12 years, 10 years within the food and clothing sector and 7 years within life science. **Other appointments** Finance manager in Dilafor AB and Pharmanest AB.



MARIA FERM
Executive Assistant
Employed since December 2011. **Born** 1969. Maria Ferm has previously had Executive Assistant and Office Manager roles including at Vectura Consulting, Manpower and Spray.

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Directors' report

The Board of Directors and CEO of Karolinska Development AB (publ), corporate identity number 556707-5048, hereby present their annual report on the operations of the Parent Company and the Group for the fiscal year 2013.

SIGNIFICANT EVENTS DURING THE FINANCIAL YEAR

Karolinska Development AB

Strategic transaction worth SEK 220m finalized

On March 7, 2013, Rosetta Capital IV LP acquired a minority share in Karolinska Development's holdings in 13 of its 25 portfolio companies for SEK 220m, in line with a deal announced on 21 December 2012.

In February 2013, Karolinska Development transferred 13 of its portfolio company holdings to KDev Investments AB. There were a total of 1,073,300 outstanding shares in KDev Investments AB, of which 1,000,000 were common shares and 73,300 were preference shares. Both classes of stock have the same voting rights per share. At closing, Rosetta had acquired 73,300 of the common shares and all the preference shares in KDev Investments AB from Karolinska Development.

Karolinska Development received the first tranche of EUR 23m at closing, which is approximately SEK 190 million at the current exchange rate. The balance up to SEK 220m falls due for payment when the total accumulated return from KDev Investments AB has reached that amount.

Innovation collaboration with Mayo Clinic

A cooperation agreement gives Karolinska Development the opportunity to evaluate and invest in innovations from Mayo Clinic. Investments in commercially interesting innovations may be made by both parties, jointly or independently. Mayo Clinic is a globally recognized innovation powerhouse in life sciences and new treatment methods.

Bo Jesper Hansen elected new Chairman of the Board

At the Annual General Meeting of Karolinska Development AB held on 14 May 2013, the shareholders passed the resolutions in accordance with the proposals presented. Bo Jesper Hansen was elected as a new Board member. On 1 October 2013, he succeeded Hans Wigzell as Chairman of the Board at the same time that Hans Wigzell retained a Board position.

Collaborations with Ospedale San Raffaele and Medical University of Graz

Two more world-class research centers teamed up with Karolinska Development. Deal flow agreements were signed with the Italian university hospital Ospedale San Raffaele in Milan and the Medical University of Graz in Austria, which enable Karolinska Development to identify investment opportunities among life science innovations emanating from these leading medical research institutions.

Karolinska Development invests in Forendo Pharma

Together with Novo Seeds and Finnvera, Karolinska Development invested in the Finnish drug development company Forendo Pharma Oy. The stepwise funding commitments are expected to reach EUR 10m over a period of three years, of which Karolinska Development will invest up to EUR 3.0m. In the first round of investment, Karolinska Development invested EUR 1.2m, giving it an ownership interest of 21% including indirect ownership. The company is developing a treatment for endometriosis, a common disease affecting up to 10% of young and middle-aged women worldwide and causing painful symptoms and infertility. The portfolio also includes a potentially new treatment for patient with low testosterone levels.

Share repurchase to cover social security fees related to incentive program

In August, Karolinska Development announced that its Board of Directors, within the authorization from the Annual General Meeting on 14 May 2013, decided to repurchase a maximum of 93,685 Series B shares. The repurchase of 93,685 shares took place on 3 September 2013 on NASDAQ OMX Stockholm at a price of SEK 26.50 per share, within the current price interval for the share. The share price interval is the interval between the highest buying price and the lowest selling price. The purpose of the repurchase was to cover social security fees under the PSP 2013 incentive program that was resolved at the Annual General Meeting on 14 May 2013. Together with previous share repurchases, Karolinska Development holds 244,285 of its own shares.

Portfolio companies

Pharmanest met efficacy and safety end points in Phase II study of SHACT

In August, Pharmanest AB published positive results from a Phase II study investigating the efficacy and tolerability of SHACT. The data show that SHACT is effective in reducing pain in connection with intrauterine device insertion. Women who received SHACT during IUD insertion experienced less pain, measured on a visual analogue scale (VAS), a statistically significant effect compared to patients who received placebo. Patients who received SHACT also experienced less discomfort than women who received placebo. No serious adverse events were reported in the study. Women who received SHACT reported similar adverse events, in terms of type and frequency, as those who received placebo treatment.

Athera Biotechnologies entered into an option agreement with Boehringer Ingelheim and received co-funding from the EU

Athera Biotechnologies AB announced that had entered into an option agreement with Boehringer Ingelheim International GmbH on Athera's monoclonal antibody PC-mAb and a related diagnostics kit, CVDefine, whereby Athera granted Boehringer Ingelheim an exclusive option to acquire the entire program. Athera will conduct defined preclinical development and a Phase I study of the antibody. Following completion of such a study, Boehringer Ingelheim will have an exclusive option to acquire substantially all of Athera's assets and rights relating to the program.

In a related development, Athera announced that the European Union's Seventh Framework Programme for Research (FP7) is providing EUR 6m in co-funding for future development of PC-mAb up until proof-of-concept.

Umechrine Mood initiated Phase I/II study of candidate drug for premenstrual dysphoric disorder

Umechrine Mood AB announced that dosing was initiated in a randomized Phase I/II study of UC1010 for the treatment of patients with premenstrual dysphoric disorder (PMDD). The double-blind, multicenter study is evaluating the safety and efficacy of the product in a total of 120 individuals. PMDD is a debilitating disorder that affects daily life and relationships with other people. The symptoms occur when a breakdown product of a sex hormone affects the brain's emotional center. Umechrine Mood is the first company to successfully develop compounds that are proven to reduce the activity of the breakdown product in healthy individuals. Later in the year, the company announced that patient recruitment for the study had been completed.

Axelar announced data from Phase II study with AXL1717 in lung cancer
The final results from the Phase II study of AXL-003 in patients with non-small cell lung cancer (NSCLC) showed no statistically significant difference in rate of progression-free survival (PFS) between the patients treated with AXL1717 compared with the group treated with docetaxel, confirming the previously communicated preliminary data. The clinical data taken, together with new data on a second mechanism of action, suggest that AXL1717 has the potential to be developed for patients that have relapsed after taking docetaxel for this difficult to treat indication with an obvious medical need.

Clinical and commercial advances by Pergamum

Pergamum announced it had finalized the Clinical Study Report of a randomized Phase I/II trial of LL-37 for treatment of venous leg ulcers. Patients treated with LL-37 had a statistically significant improved healing rate compared with placebo and no safety or tolerability concerns were noted. The clinical trial report thereby confirms the positive top-line data reported in July 2013.

The company also announced during the year that several study endpoints had been met in a randomized Phase II trial of PXL-01 for prevention of adhesions following hand surgery. Follow-up data from the Phase II clinical trial of PXL-01 post-surgery revealed a statistically significant improvement in functional hand recovery compared to placebo. Treatment was not associated with any safety issues or increase in the rate of tendon rupture.

Pergamum and Cadila Pharmaceuticals Ltd announced a strategic collaboration to develop a novel treatment for infections with a unique targeting mechanism clearly distinguished from classical antibiotics. The two companies will collaborate on the preclinical and clinical development of a novel therapeutic peptide developed by Pergamum AB. The development will be conducted at the facilities of Cadila Pharmaceuticals Ltd in Ahmedabad, India. Cadila will be responsible for all costs related to the development of the product up to Phase II and global rights will be shared between the companies.

Lipidor reported positive clinical data for novel psoriasis preparation

Lipidor announced positive results from a Phase I/IIa study investigating the efficacy and tolerability of its AKVANO®/calcipotriol spray formulation for the treatment of psoriasis vulgaris, the most common form of psoriasis. Data from the recently concluded Phase I/IIa clinical study in 24 psoriasis vulgaris patients revealed that the AKVANO®/calcipotriol spray formulation had clear and significant antipsoriatic effects compared to placebo. The effects were comparable to a marketed formulation of calcipotriol. This means that the primary objective of the trial was met. In the study, the patients received 10 topical treatments over 12 days. No safety issues were noted.

Dilaforette initiated Phase II study with sevuparin for treatment of severe malaria

Dilaforette announced it had received approval from the regulatory authority in India to start a Phase II study with sevuparin in patients with moderate to severe malaria. Dilaforette and its collaborator, the Mahidol Oxford Tropical Medicine Research Unit (MORU), plan to enroll 50 patients in India, where severe malaria remains an important problem. The primary objective of the study is to evaluate safety along with several efficacy parameters

OssDsign initiated clinical trial

The clinical trial with OssDsign Cranio PSI is being conducted on patients for whom previous treatments have failed. The positive results so far suggest that OssDsign Cranio PSI could be an important new option for this patient category, especially if the skull injuries are severe. The study also evaluated quality of life and health economics. At the same time, the company announced that it had closed a SEK 13.7m financing round and had changed its name from Oss-Q AB.

EU research grants awarded to three portfolio companies

The portfolio companies Pergamum, Inhalation Sciences Sweden and XSpray Microparticles were awarded research grants totaling more than EUR 1 million within the framework of the international research project FORMAMP. The goal is to develop new ways to treat infectious diseases in order to reduce the problem of antibiotic resistance.

SIGNIFICANT EVENTS AFTER THE BALANCE SHEET DATE

Karolinska Development AB

Christian Tange appointed new Chief Financial Officer

Christian Tange succeeded Robin Wright, who left the company at the end of February. Christian Tange (b. 1966) has over 15 years' experience in international growth companies. In recent years, he has acted as an industrial advisor and consultant for private equity funds and corporate finance advisors in M&A deals within life science. During the period 2003-2012, he worked as global CFO of CMC Biologics, an international biotech contract manufacturing company. Christian Tange holds a master's degree in economics and law from Copenhagen Business School.

Portfolio companies

NovaSAID initiated partnership with Cadila Pharmaceuticals to develop innovative treatments in inflammation and pain management

NovaSAID and Cadila Pharmaceuticals announced a collaboration around preclinical and clinical development of a number of drug candidates developed by NovaSAID. The development will be conducted at Cadila Pharmaceuticals' facility in Ahmedabad, India. All revenue generated from the sale in India, Middle East and Africa of products covered by the agreement will be retained by Cadila and net sales in all other countries will be shared by the two companies. Cadila will bear all costs associated with the program through Phase II.

Dilafor entered into license and partnership agreement with Lee's Pharmaceutical

Pursuant to the terms of the agreement, Dilafor and Lee's Pharmaceutical will jointly develop tafoxiparin for obstetrical and gynecological indications. The joint clinical development program of tafoxiparin will initially be focused on reducing labor times for patients who do not start labor spontaneously and are induced. Dilafor will receive an upfront cash payment as well as future payments in connection with development and sales milestones and royalties on sales of the product, which will be manufactured and sold by Lee's Pharmaceutical in China, Hong Kong, Macau and Taiwan. Lee's Pharmaceutical will conduct and finance Phase II and Phase III trials in China, so that the results can be used as the basis for additional development outside the countries where Lee's Pharmaceutical has its license.

Pharmanest announced trial data suggesting that SHACT could benefit women undergoing hysteroscopies

The primary objective of the study was to obtain information about the feasibility of administering SHACT to patients in conjunction with hysteroscopy. It was a non-comparative open label study at Södersjukhuset in Stockholm, Sweden. Secondary objectives included safety, tolerability and handling properties of SHACT and its instillation device. Ten patients were included in the trial and parameters such as visibility for the examiner, ease of application and time required for use of SHACT were documented. The results indicate that SHACT is not interfering negatively with the examination and that the product can be used in the outpatient setting to ease women's pain and discomfort. No safety or tolerability issues were recorded in the study. The potential pain relief offered by SHACT was not evaluated in this particular study and therefore has to be confirmed in a forthcoming clinical trial.

FINANCIAL DEVELOPMENT FOR THE GROUP IN 2013 (SEKM)

Revenue

Consolidated revenue during the year amounted to SEK 9.9m (SEK 9.9m). Consolidated revenue is comprised of compensation for services provided to portfolio companies, amounting to SEK 8.8m (SEK 5.1m) and grants received by portfolio companies, amounting to SEK 1.1m (SEK 4.8m).

Results

During the year, the Group's operating profit amounted to SEK 144.3m (SEK -253.8m), a change of SEK 398.1m compared with the previous year. The positive change is mainly due to the transaction with Rosetta Capital IV LP, which was finalized on 7 March 2013. The transaction's effect on results was SEK 404.6m, of which SEK 68.2m relates to capital gains and the remaining SEK 336.4m to the revaluation to effective fair value of Karolinska Development's holding, 86.34%, in the KDev Investments Group based on the deal consideration. Following the transaction, the KDev Investments Group is classified as a joint venture with changes in fair value recognized through profit or loss (Note 24). The portion of the change in fair value of other holdings affecting results amounted to SEK -156.0m (SEK -86.8m) during the year excluding the fair value change related to the Rosetta transaction as described above.

The negative change in fair value is mainly due to delays in three portfolio companies, which shifts the estimated free cash flows in the risk-adjusted present value calculations to later quarters. The Group has switched from a valuation based on the deal consideration for KDev Investments Group to a valuation based on risk adjusted net present value (rNPV) calculations.

The Group's profit before tax during the year amounted to SEK 185.2m (SEK -276.0m), mainly consisting of the result from the transaction with Rosetta Capital IV LP of SEK 404.6m (SEK 0m), Parent Company costs of SEK -58.7m (SEK -55.8m), subsidiary costs of SEK -46.4m (SEK -111.2m), fair value changes of SEK -156.0m (SEK -86.8m), the sale of KDev Exploratory AB of SEK 0.8m (SEK 0m) and net financial items of SEK 40.9m (SEK -22.2m) which includes the reversal of previously impaired loans and interest to Pergamum AB in connection with a share conversion in the amount of SEK 32.0m.

Financial position

The Group's equity to total assets ratio was 99% (91%) on 31 December 2013 and equity amounted to SEK 1,870.3m (SEK 2,024.2m).

The increase in the value of shares in joint ventures and associated companies is mainly due to the classification of the sub-group KDev Investments as a joint venture following the transaction with Rosetta Capital IV LP (Note 24). As a consequence, portfolio companies included in the transaction which previously were consolidated as subsidiaries are now accounted for at fair value.

Cash, cash equivalents and short-term investments in the Group amounted to SEK 207.0m (SEK 291.2m), of which SEK 178.1m is provisionally allocated for expected follow-on investments in the KDev Investments Group (Note 24). Total assets amounted to SEK 1,895.7m (SEK 2,215.0m).

Cash flow

Cash flow for the Group amounted to SEK -135.0m (SEK 13.3m) in 2013. Cash flow from operating activities amounted to SEK -82.0m (SEK -152.6m), while cash flow from investing activities amounted to SEK -54.2m (SEK 164.4m). Through financing activities, subsidiaries received SEK 3.8m (SEK 4.1m) from non-controlling interests in connection with new issues and shares were repurchased for SEK -2.5m (SEK -2.2m). Cash flow from financing activities thus amounted to SEK 1.3m (SEK 1.5m).

Investments in portfolio companies

Investments in portfolio companies during the year amounted to SEK 266.2m (SEK 231.6m) of which SEK 198.1m (SEK 153.8m) affected cash flow.

The largest investments during the year were in KDev Investments Group at SEK 185.5m (comprised of Karolinska Development's 90% interest in KDev Investments Group's investments in Pergamum AB, SEK 48.1m; Axelar AB, SEK 24.1m; Akinion Pharmaceuticals AB, SEK 23.5m; Aprea AB, SEK 19.7m; Clanotech AB, SEK 15.3m; Dilafor AB, SEK 10.8m; Biosergen AS, SEK 10.1m; Dilaforette Holding AB, SEK 9.0m; Umecrine Mood AB, SEK 8.2m; NeoDynamics AB, SEK 7.5m; Inhalation Sciences Sweden AB, SEK 5.4m; Promimic AB, SEK 2.7m; and KDev Investments AB, SEK 1.1m), as well as in XSpray Microparticles AB, SEK 17.4m, and Forendo Pharma Oy, SEK 9.5m.

FINANCIAL DEVELOPMENT FOR THE PARENT COMPANY IN 2013 (SEKM)

Revenue

The Parent Company's revenue during the year amounted to SEK 4.9m (SEK 4.0m).

Results

During the year, the Parent Company's operating profit amounted to SEK 7.5m (SEK -132.7m), a change of SEK 140.2m year-on-year. Operating profit includes capital gains on the sale of shares in KDev Investments AB (to Rosetta as part of the Rosetta transaction) of SEK 123.7m and KDev Exploratory AB of SEK 0.7m as well as capital losses on the holdings in BioChromix Pharma AB SEK -29.8m and BioChromix AB SEK -3.7m. During the year, impairment losses were recognized on the holdings in KDev Exploratory AB, SEK -15.1m; KDev Oncology AB, SEK -5.3m; CytoGuide ApS, SEK -3.3m; Limone AB, SEK -0.2m; KD Incentive AB, SEK -0.2m; and KCIF Fund Management AB, SEK -0.2m; as well as the share of the result in KCIF Co-Investment Fund KB, SEK -0.4m. Impairment losses during the year totaled SEK -24.7m (SEK -120.1m).

The financial net includes the reversal of previously impaired loans and interest to Pergamum AB in connection with a share conversion in the amount of SEK 32.0m.

The Parent Company's profit after tax during the year amounted to SEK 47.3m (SEK -152.7m).

Remuneration guidelines for the CEO and other senior executives as well as other conditions

Remuneration guidelines for senior executives are prepared and approved by the Board of Directors. The guidelines are adopted by the Annual General Meeting (Note 6).

Holding of treasury shares

The Annual General Meeting 2013 decided to allow the repurchase of 150,800 Class B shares during the period until the next Annual General Meeting. The objective of the share repurchase is to cover social security costs related to incentive program PSP 2013 (Note 6).

During the year, 93,685 shares were repurchased for incentive program PSP 2013. At year-end, the company held 244,285 treasury shares, corresponding to SEK 122,143 of the share capital, and the consideration paid totaled SEK 4.7m.

Future development

Karolinska Development's operating costs are estimated at SEK 50m per year. Historically, Karolinska Development has financed its operations through equity, which is also the intent going forward. Long-term capital requirements are increasingly expected to be covered by cash flow generated from exits from certain portfolio companies and licensing agreements.

Karolinska Development does not provide any forecasts on divestments of portfolio companies.

Environment and responsibilities

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

Information on risks and uncertainties

Project development risks

Risks and uncertainties are primarily associated with investments in portfolio companies and the development of projects in these companies. The operations of the portfolio companies consist of the development of early stage pharmaceutical projects. By their very nature such operations are distinguished by very high risk and uncertainty in terms of results.

Financial risks

Financial risks consist of investments in portfolio companies as well as risks in the management of liquid assets.

Future financing needs

Future investments in new and current portfolio companies will require capital. There is no guarantee that such capital can be obtained on favorable terms or that such capital can be obtained at all.

Valuation risks

Companies active in pharmaceutical development and medical technology at an early phase are, by their very nature, difficult to value, as lead times are very long and development risks are high. Due to the uncertainty in these assessments, the estimated value of the portfolio may deviate substantially from future generated value. This is largely due to sensitivities in the valuation calculations to movement of expected milestone or exit dates, costs of trials and similar assumptions, which are not necessarily accounted for in arriving at an actual deal value in negotiations with partners

Uncertainty in forecasts

Judgments and assumptions about the future outcome of development projects involving pharmaceuticals and medical technology are always associated with great uncertainty. There are no guarantees of the accuracy of forecasted developments.

For a detailed description of risks and uncertainties, see page 73.

Corporate Governance Report

The Corporate Governance Report is presented on pages 98–101.

Five-year summary

Amounts in SEKm	Group				
	2013	2012	2011	2010	2009
Income statement					
Net sales	10	10	10	14	30
Operating expenses	-115	-177	-167	-133	-74
Result from change in fair value	-156	-87	-244	-226	30
Result from sale of portfolio companies	405	0	0	0	0
Operating profit/loss	144	-254	-401	-345	-14
Financial net	41	-22	-5	6	11
Profit/loss after financial items	185	-276	-406	-339	-3
Statement of financial position					
Intangible and tangible non-current assets	9	15	705	182	4
Shares in joint ventures and associated companies	1,605	219	980	1,221	1,450
Other long-term securities holdings	25	27	25	25	33
Loans receivable joint ventures and associated companies	6	13	4	0	0
Other financial assets	38	9	0	0	0
Total non-current assets	1,683	283	1,714	1,428	1,487
Other current assets	5	9	12	102	36
Short-term investments	165	174	457	137	121
Cash and cash equivalents	42	117	163	107	394
Assets which have been transferred to KDev Investments Group	-	1,632	-	-	-
Total current assets	213	1,932	632	346	551
Total assets	1,895	2,215	2,346	1,774	2,038
Equity	1,870	2,024	2,174	1,717	1,998
Deferred tax liabilities	0	0	144	34	0
Long-term liabilities	9	11	2	2	0
Current liabilities	16	15	26	20	40
Liabilities attributable to assets which have been transferred to KDev Investments Group	-	165	-	-	-
Total equity and liabilities	1,895	2,215	2,346	1,773	2,038
Cash flow					
Cash flow from operating activities	-82	-152	-133	-98	-34
Cash flow from investing activities	-54	164	-430	-182	2
Cash flow from financing activities	1	1	620	-7	417
Cash flow for the year	-135	13	57	-287	385
Key ratios					
Capital employed	1,879	2,035	2,176	1,719	1,998
Return on equity	10%	-14%	-19%	-20%	0%
Return on capital employed	10%	-14%	-19%	-20%	0%
Equity to total assets ratio	99%	91%	93%	97%	98%
Average number of employees	24	46	47	37	30
Data per share					
Profit/loss after tax, SEK	4.08	-4.39	-8.07	-9.79	-0.10
Equity, SEK	38.54	41.71	44.79	51.51	61.27
Net asset value, SEK	40.82	44.01	44.70	53.51	62.73
Share price at year-end, SEK	30.9	15.3	24.0	-	-
Dividend, SEK	0.0	0.0	0.0	0.0	0.0
Share price/Equity per share	80%	37%	54%	-	-
Share price/Net asset value per share	76%	35%	54%	-	-
Number of shares at year-end	48,531,417	48,531,417	48,531,417	33,331,417	32,609,993
Weighted average number of shares before and after dilution	48,350,016	48,529,767	43,908,951	33,263,938	27,001,275

Proposed appropriation of profit (SEK)

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

Retained loss	-550,566,474
Share premium reserve	1,778,253,602
Net profit for the year	47,314,022
Total	1,275,001,150

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

To be carried forward	1,275,001,150
Total	1,275,001,150

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

Financial statements

Consolidated income statement

Amounts in SEK 000	Note	2013	2012
Revenue	3	9,940	9,943
Other external expenses	4,5	-53,772	-108,980
Personnel costs	6	-58,745	-62,818
Depreciation and amortization of tangible and intangible non-current assets	10,11	-2,627	-5,163
Change in fair value of shares in joint ventures and associated companies	2	-153,711	-87,694
Change in fair value of other long-term securities holdings	2	-2,289	902
Result from sale of subsidiary		834	0
Result from transaction with Rosetta Capital IV LP	24	404,646	0
Operating profit/loss		144,276	-253,810
Interest income		5,924	5,827
Interest expenses		-72	-57
Other financial gains and losses	7	35,038	-27,931
Financial net		40,890	-22,161
Profit/loss before tax		185,166	-275,971
Deferred taxes	8	2,926	45,807
NET PROFIT/LOSS FOR THE YEAR		188,092	-230,164
Attributable to:			
Parent Company's shareholders		197,163	-212,852
Non-controlling interests		-9,071	-17,312
TOTAL		188,092	-230,164

Consolidated statement of comprehensive income

Amounts in SEK 000	Note	2013	2012
Net profit/loss for the year		188,092	-230,164
Total comprehensive income for the year		188,092	-230,164
Attributable to:			
Parent Company's shareholders		197,163	-212,852
Non-controlling interests		-9,071	-17,312
TOTAL		188,092	-230,164

Earnings per share

Amounts in SEK 000	Note	2013	2012
Earnings per share attributable to Parent Company's shareholders, weighted average, before and after dilution		4.08	-4.39
Number of shares, weighted average	17	48,350,016	48,529,767

Consolidated statement of financial position

Amounts in SEK 000	Note	31-dec-13	31-dec-12
ASSETS			
Non-current assets			
Intangible non-current assets	9	8,340	9,864
Tangible non-current assets	10	529	4,985
Shares in joint ventures and associated companies	11	1,605,469	219,173
Other long-term securities holdings	12	24,568	26,949
Loans receivable joint ventures and associated companies	13	5,894	12,856
Other financial assets	21	38,113	8,907
Total non-current assets		1,682,913	282,734
Current assets			
Accounts receivable	14	258	513
Other short-term receivables	15	3,803	3,955
Prepaid expenses and accrued income	16	1,767	4,578
Short-term investments	21	165,334	174,16
Cash and cash equivalents		41,639	117,033
Total current assets		212,801	300,239
Assets which have been transferred to KDev Investments Group	25	-	1,632,025
TOTAL ASSETS		1,895,714	2,214,998
EQUITY AND LIABILITIES			
Equity			
Share capital	17	24,266	24,266
Share premium		1,768,179	1,768,179
Retained earnings including net profit/loss for the year		74,380	-122,547
Equity attributable to Parent Company's shareholders		1,866,825	1,669,898
Non-controlling interests		3,514	354,294
Total equity		1,870,339	2,024,192
Long-term liabilities			
Deferred taxes	8	0	0
Interest-bearing liabilities	18	0	0
Other financial liabilities		9,438	10,889
Total long-term liabilities		9,438	10,889
Current liabilities			
Interest-bearing liabilities	18	0	0
Accounts payable		3,779	4,215
Other current liabilities	19	2,636	2,775
Accrued expenses and prepaid income	20	9,522	8,166
Total current liabilities		15,937	15,156
Liabilities attributable to assets which have been transferred to KDev Investments Group	25	-	164,761
Total liabilities		25,375	190,806
TOTAL EQUITY AND LIABILITIES		1,895,714	2,214,998

Consolidated statement of changes in equity

Amounts in SEK 000	Note	Equity attributable to Parent Company's shareholders			Total	Non-controlling interests	Total equity
		Share capital	Share premium	Retained earnings incl. current year result			
Opening equity at 1 Jan 2013		24,266	1,768,179	-122,547	1,669,898	354,294	2,024,192
<i>Net profit/loss for the year</i>				197,163	197,163	-9,071	188,092
Total comprehensive income for the year		0	0	197,163	197,163	-9,071	188,092
Change in non-controlling interests				350	350	4,378	4,728
Share repurchase				-2,483	-2,483		-2,483
Share rights incentive programs PSP 2012, PSP 2013				1,897	1,897		1,897
Non-controlling interests transferred to KDev Investments Group					0	-346,087	-346,087
Closing equity at 31 Dec 2013	17	24,266	1,768,179	74,380	1,866,825	3,514	1,870,339
Opening equity at 1 Jan 2012		24,266	1,768,179	86,442	1,878,887	295,041	2,173,928
<i>Net profit/loss for the year</i>				-212,852	-212,852	-17,312	-230,164
Total comprehensive income for the year		0	0	-212,852	-212,852	-17,312	-230,164
Acquisition of subsidiary					0	78,435	78,435
Change in non-controlling interests				6,106	6,106	-1,870	4,236
Share repurchase				-2,243	-2,243		-2,243
Closing equity at 31 Dec 2012	17	24,266	1,768,179	-122,547	1,669,898	354,294	2,024,192

Consolidated statement of cash flows

Amounts in SEK 000	Note	2013	2012
Operating activities			
Operating profit/loss		144,276	-253,810
Adjustments for depreciation and amortization	9,10	2,627	5,163
Adjustments for changes in fair value	2	156,000	86,792
Result from transaction with Rosetta Capital IV LP	24	-404,646	0
Realized change in value of short-term investments		1,062	9,868
Interest paid		-70	-56
Interest received		5,353	3,345
Other items not affecting cash flow		2,171	0
Cash flow from operating activities before changes in working capital		-93,227	-148,698
Cash flow from changes in working capital			
Increase (-)/Decrease (+) in operating receivables		8,421	-2,516
Increase (+)/Decrease (-) in operating liabilities		2,779	-1,431
Cash flow from operating activities		-82,027	-152,645
Investing activities			
Investments in intangible non-current assets		-879	-1,963
Investments in tangible non-current assets		-1,018	-5,233
Sale of tangible non-current assets		4,000	0
Sale of subsidiaries		4,031	0
Acquired/divested cash and cash equivalents in subsidiaries		-2,548	5,363
Investments in shares in joint ventures and associated companies	40	-176,330	-70,564
Investments in other long-term securities	41	-8	-1,460
Cash and cash equivalents which have been transferred to KDev Investments Group		-51,723	0
Change in short-term investments		7,105	278,555
Sale of shares in portfolio companies		190,893	3,217
Loans provided to associated companies		-27,750	-43,467
Cash flow from investing activities		-54,227	164,448
Financing activities			
Non-controlling interests' share of subsidiary issue		3,757	4,137
Amortization of interest-bearing liabilities		0	-425
Share repurchase		-2,483	-2,243
Cash flow from financing activities		1,274	1,469
Cash flow for the year		-134,980	13,272
Cash and cash equivalents at beginning of the year	21	176,619	163,347
Cash and cash equivalents which have been transferred to KDev Investments Group	25	0	-59,586
CASH AND CASH EQUIVALENTS AT YEAR-END	21	41,639	117,033

Supplemental disclosure

Amounts in SEK 000	Note	2013	2012
Cash and cash equivalents at year-end		41,639	117,033
Cash and cash equivalents which have been transferred to KDev Investments Group		0	59,586
Short-term investments, market value at closing date		165,334	174,160
CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS AT YEAR-END		206,973	350,779

Income statement for the Parent Company

Amounts in SEK 000	Note	2013	2012
Net sales	29	4,948	3,986
Revenue		4,948	3,986
Other external expenses	30,31	-25,293	-28,156
Personnel costs	32	-38,290	-31,650
Depreciation of tangible non-current assets		-114	-6
Impairment losses on shares in subsidiaries, joint ventures, associated companies and other long-term securities holdings	33	-24,701	-120,078
Result from sale of shares in portfolio companies	34	90,909	43,269
Operating profit/loss		7,459	-132,635
Interest income and similar income	35	39,999	11,989
Interest expenses and similar expenses	36	-144	-32,065
Financial net		39,855	-20,076
Taxes	37	0	0
NET PROFIT/LOSS FOR THE YEAR		47,314	-152,711

Statement of comprehensive income for the Parent Company

Amounts in SEK 000	Note	2013	2012
Net profit/loss for the year		47,314	-152,711
Total comprehensive income for the year		47,314	-152,711

Statement of financial position for the Parent Company

Amounts in SEK 000	Note	31 Dec 2013	31 Dec 2012
ASSETS			
Non-current assets			
Machinery and equipment	38	529	9
Financial assets			
Shares in subsidiaries	39	32,875	440,479
Shares in joint ventures	40	997,972	475,302
Shares in associated companies	40	31,036	30,621
Other long-term securities holdings	41	8,714	15,841
Loans receivable joint ventures and associated companies	42	5,894	12,856
Other financial assets		32,522	2,623
Total non-current assets		1,109,542	977,731
Current assets			
Accounts receivable	44	202	409
Group receivables		55	260
Other receivables	45	3,225	2,476
Prepaid expenses and accrued income	46	1,477	2,463
Short-term investments		165,334	174,160
Cash and bank balances		35,323	108,680
Total current assets		205,616	288,448
TOTAL ASSETS		1,315,158	1,266,179
EQUITY AND LIABILITIES			
Equity			
<i>Restricted equity</i>			
Share capital	17	24,266	24,266
<i>Unrestricted equity</i>			
Share premium reserve		1,778,253	1,778,253
Retained earnings		-550,566	-397,269
Net profit/loss for the year		47,314	-152,711
Total equity		1,299,267	1,252,539
Long-term liabilities			
Pension obligations		3,315	2,623
Total long-term liabilities		3,315	2,623
Current liabilities			
Accounts payable		2,426	2,510
Group liabilities		442	474
Other current liabilities	47	1,594	1,512
Accrued expenses and prepaid income	48	8,114	6,521
Total current liabilities		12,576	11,017
Total liabilities		15,891	13,640
TOTAL EQUITY AND LIABILITIES		1,315,158	1,266,179

Pledged assets and contingent liabilities

Amounts in SEK 000	Note	31 Dec 2013	31 Dec 2012
Pledged assets	22	3,315	2,623
Contingent liabilities	22	0	1,200
Total		3,315	3,823

Statement of changes in equity for the Parent Company

Amounts in SEK 000	Note	Restricted equity	Unrestricted equity			Total equity
		Share capital	Share premium reserve	Retained earnings	Net profit/loss for the period	
Opening equity at 1 Jan 2013		24,266	1,778,253	-397,269	-152,711	1,252,539
Appropriation of loss				-152,711	152,711	0
Net profit/loss for the year					47,314	47,314
Total		24,266	1,778,253	-549,980	47,314	1,299,853
Share repurchase				-2,483		-2,483
Share rights incentive programs PSP 2012-2013				1,897		1,897
Closing equity at 31 Dec 2013	17	24,266	1,778,253	-550,566	47,314	1,299,267
Opening equity at 1 Jan 2012		24,266	1,778,253	-207,281	-187,745	1,407,493
Appropriation of loss				-187,745	187,745	0
Net profit/loss for the year					-152,711	-152,711
Total		24,266	1,778,253	-395,026	-152,711	1,254,782
Share repurchase				-2,243		-2,243
Closing equity at 31 Dec 2012	17	24,266	1,778,253	-397,269	-152,711	1,252,539

Statement of cash flows for the Parent Company

Amounts in SEK 000	Note	2013	2012
Operating activities			
Operating profit/loss		7,459	-132,635
Adjustments for depreciation, amortization and impairment losses		24,815	120,084
Capital gains/losses on sales of associated companies		-90,909	-43,269
Realized change in value of short-term investments		1,062	9,868
Interest paid		-4	-4
Interest received		5,316	2,146
Other items not affecting cash flow		1,897	0
Cash flow from operating activities before changes in working capital		-50,364	-43,810
Cash flow from changes in working capital			
Increase (-)/Decrease (+) in operating receivables		2,406	-704
Increase (+)/Decrease (-) in operating liabilities		1,559	2,636
Cash flow from operating activities		-46,399	-41,878
Investing activities			
Investments in tangible non-current assets		-634	0
Investments in subsidiaries	39	-21,782	-81,799
Investments in shares in joint ventures and associated companies	40	-176,330	-70,564
Investments in other long-term securities	41	-8	-1,460
Change in short-term investments		7,105	278,555
Sale of shares in subsidiaries		4,031	3,217
Sale of shares in joint ventures and associated companies		190,893	0
Loans provided to associated companies		-27,750	-43,467
Cash flow from investing activities		-24,475	84,482
Financing activities			
Share repurchase		-2,483	-2,243
Cash flow from financing activities		-2,483	-2,243
Cash flow for the year		-73,357	40,361
Cash and cash equivalents at beginning of the year		108,680	68,319
CASH AND CASH EQUIVALENTS AT YEAR-END		35,323	108,680

Supplemental disclosure

Amounts in SEK 000	Note	2013	2012
Cash and cash equivalents at year-end		35,323	108,680
Short-term investments, market value at closing date		165,334	174,160
CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS AT YEAR-END		200,657	282,840

Notes to the financial statements

Note 1 Accounting policies

OPERATIONS IN GENERAL

Karolinska Development AB ("Karolinska Development," the "Company" or the "Parent Company," and together with its subsidiaries, the "Group") aims to create value for investors, patients and researchers by developing innovations from world-class science into products that can be sold or out-licensed with high returns. The business model is to SELECT the most commercially attractive medical innovations, DEVELOP innovations to the stage where the greatest return on investment can be achieved, and COMMERCIALIZE the innovations through the sale of companies or out-licensing of products. An exclusive deal flow agreement with Karolinska Institutet Innovations AB, along with other cooperation agreements with leading Nordic universities, delivers a continuous flow of innovations. Today, the portfolio consists of 33 projects, of which 16 are in clinical development. The Company has a broad portfolio in which each product has high potential, but is also associated with high risk.

COMPLIANCE WITH GENERALLY ACCEPTED ACCOUNTING POLICIES AND LAW

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) and the interpretations of the IFRS Interpretations Committee, as adopted by the EU. Furthermore, recommendation RFR 1 Supplementary Accounting Regulations for Groups and statements UFR 3-9 from the Swedish Financial Reporting Board have been applied.

The annual accounts and consolidated accounts were approved by the Board of Directors on 10 April 2014. The consolidated income statement and statement of financial position and the Parent Company's income statement and statement of financial position are subject to approval at the Annual General Meeting (AGM) on 14 May 2014.

The Parent Company applies the same accounting policies as the Group except in the cases listed below in the section "the Parent Company's accounting policies." The Parent Company has prepared its annual accounts in accordance with the Annual Accounts Act (1995:1554) and the Swedish Financial Reporting Board's recommendation RFR 2 Accounting for Legal Entities. The differences that exist between the Parent Company's and the Group's principles are due to limitations in the ability to apply IFRS in the Parent Company due to the Annual Accounts Act and the Safeguard Act and in certain cases for tax reasons.

CONDITIONS WHEN PREPARING THE CONSOLIDATED FINANCIAL STATEMENTS

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

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

Non-current assets and disposal groups held for sale are measured at the lower of the previous carrying amount and fair value less costs to sell.

The preparation of the financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the application of accounting policies and carrying amounts of assets, liabilities, revenue and expenses. The estimates and assumptions are based on historical experience and

various other factors which are considered appropriate under prevailing conditions. The results of these estimates and assumptions are then used to assess the carrying amounts of assets and liabilities that are not otherwise evident from other sources. The actual result may differ from these estimates and assessments.

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

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

AMENDMENTS TO THE ACCOUNTING POLICIES AND DISCLOSURES

New and amended standards applied by the Group

The Group applies IFRS 13 Fair Value Measurement as of 1 January 2013. The purpose of the standard is to make fair value measurements more consistent and less complex by providing an exact definition and common source in IFRS for fair value measurements and related disclosures. The standard provides guidance on fair value measurements for all types of assets and liabilities, financial and non-financial. The requirements do not expand the area of application for fair value, but provide guidance on how it is applied when other IFRS already require or allow fair value measurements. The new standard has not had a significant impact on the measurement of assets and liabilities at fair value but affects disclosures, since it contains more extensive requirements on disclosures of fair value measurements, particularly for fair values on Level 3 in the fair value hierarchy.

Other new or revised IFRS standards and interpretations by IFRIC have had no impact on the Group or, to the extent that these recommendations are applied to legal entities, on the Parent Company's income or financial position.

New standards, amendments and interpretations of current standards that have not yet been adopted and have not been applied in advance by the Group

A number of new standards and amendments to interpretations and current standards affect financial years beginning after 1 January 2014 and have not been applied in the preparation of the Group's financial reports. None of them are expected to have a significant impact on the Group's financial reports with the following exceptions:

Karolinska Development considers itself to be an investment entity according to IFRS 10 Consolidated Financial Statements, which affects financial years beginning 1 January 2014 or later. The rules for investment companies require Karolinska Development to prepare separate financial reports instead of consolidated accounts for the investment entity (the Group), where subsidiaries, joint ventures, associated companies and other long-term securities holdings are measured at fair value in the statement of financial position with changes in value in profit or loss in accordance with IAS 39 Financial Instruments: Recognition and Measurement. According to the Swedish Financial Reporting Board, these separate financial statements meet the requirements for consolidated financial statements according to the Annual Accounts Act. Karolinska Development will also apply the other new and amended standards in the "package of five" standards on consolidation as of 1 January 2014: IFRS 11 Joint Arrangements, IFRS 12 Disclosures of Interest in Other Entities, IAS 27 Consolidated and Separate Financial Statements and IAS 28 Investments in Associates and Joint Ventures. Management has analyzed the effects of the application of the rules for investments companies. The effects are disclosed in note 50.

IFRS 9 Financial Instruments covers the classification, measurement and recognition of financial liabilities and assets. IFRS 9 was issued in November 2009 for financial assets and in October 2010 for financial liabilities and replaces the parts of IAS 39 related to the classification and measurement of financial instruments. IFRS 9 requires financial assets to be classified in two categories: at fair value or accrued cost. The classification is determined upon initial measurement based on the Company's business model and the characteristics of contractual cash flows. For financial liabilities, there are no major changes compared with IAS 39. The

largest change relates to liabilities at fair value, where part of the change in fair value attributable to the liability's credit risk will be recognized in other comprehensive income rather than profit or loss, provided this does not cause inconsistency in the accounts. The Group intends to apply the new standard no later than the financial year beginning 1 January 2018 and has not yet evaluated the effects. The Group will evaluate the effects of the remaining stages of IFRS 9 when they are completed by the IASB.

None of the other IFRS or interpretations that have not yet been adopted are expected to significantly impact the Group.

SIGNIFICANT ACCOUNTING POLICIES

Classification, etc.

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

Operating segments

An operating segment is a component of a company engaged in a business activity from which it may earn revenue and incur expenses, whose operating income is regularly reviewed by the Company's chief operating decision maker, and for which there is separate financial information. Karolinska Development's reporting of operating segments complies with the internal reporting to the chief operating decision maker. The chief operating decision maker has the function of assessing the profit/loss of the operating segments and determining the allocation of resources. In Karolinska Development's assessment, the Board constitutes the chief operating decision maker.

CONSOLIDATING PRINCIPLES

The consolidated financial statements include the Parent Company, Karolinska Development AB (publ), and the companies in which the Parent Company has controlling interest (subsidiaries). Controlling interest implies a right to establish strategies for an economic activity in order to obtain economic benefits and is satisfied, in the standard case, when the Parent Company, directly or indirectly, owns shares representing more than 50% of the votes, with the exception of cases of agreed limits to influence, whereby the Company, directly or indirectly, exercises joint controlling interest or significant influence (see below).

Subsidiaries

Subsidiaries are companies in which the Parent Company, Karolinska Development AB (publ), has controlling interest. Controlling interest involves, directly or indirectly, a right to establish a company's financial and operational strategies in order to obtain economic benefits. In determining whether controlling interest exists, factors such as provisions in shareholder agreements and potential voting shares, which can be exercised immediately or converted, are taken into consideration.

The acquisition cost of shares in subsidiaries or businesses is measured as the fair value on the transaction date of the assets, liabilities that have arisen or been assumed, and equity instruments issued in exchange for the acquired net assets. Acquisition-related costs are expensed when they arise.

Subsidiaries are accounted for according to the purchase method. This means that the acquisition of a subsidiary is treated as a transaction whereby the Group indirectly acquires the subsidiary's assets and assumes its liabilities. The consolidated acquisition cost is established through an acquisition analysis conducted in conjunction with the acquisition. The analysis determines the acquisition cost of the shares or business and the fair value of identifiable assets acquired and liabilities assumed. The difference between the acquisition cost of the subsidiary's shares and the fair value of acquired assets and assumed liabilities represents goodwill on consolidation.

Associated companies

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

The acquisition cost of shares in associated companies is comprised of the fair value on the transfer date of the shares in the associated company.

Karolinska Development is an investment company and, in accordance with IAS 28, such a company's holdings in associated companies are recognized at fair value with changes in value through profit or loss in accordance with IAS 39 Financial Instruments. These holdings are measured at fair value with changes in fair value recognized through profit or loss for the period in which the changes occur.

Based on an accounting assessment according to IAS 27 and the content of shareholder agreements entered into with certain associated companies, Karolinska Development's assessment is that even when voting rights exceed 50%, it does not have controlling interest in certain portfolio companies. Consequently, the holdings in these portfolio companies, even with a voting share exceeding 50%, are recognized as associated companies or joint ventures at fair value with changes in value through profit or loss. When the level of influence in a portfolio company changes from significant to controlling due to additional investments or changes in underlying shareholder agreements, IFRS 3 is applied and consideration for the business combination is deemed to be the fair value of the investment on the acquisition date, plus any other assets received or liabilities assumed and equity instruments issued in relation to the transaction.

Joint ventures

According to IAS 31 Investments in Joint Ventures, a joint venture is a contractual relationship in which two or more parties jointly engage in an economic activity and have joint control over operations. Joint control means that two or more parties have, by contract, regulated the common practice of control over an economic activity. This occurs only when the parties who share controlling interest must give their consent to financial and operational decisions related to the business.

The acquisition cost of shares in joint ventures consists of the fair value of the shares in joint ventures at the transaction date.

Karolinska Development's holdings in joint ventures are recognized at fair value with changes in value through profit or loss according to IAS 31, p. 1, holdings in joint ventures that can be classified as shares in risk capital operations. The holdings are recognized in accordance with IAS 39, which means that the accounting policies for Karolinska Development's joint ventures comply with the recognition of shares in associated companies.

Transactions eliminated in consolidation

Intercompany receivables and liabilities, revenue and expenses arising from intercompany transactions between Group companies, are eliminated in full when preparing the consolidated financial statements.

Non-controlling interests (minority interests)

Non-controlling interests are the part of the income and net assets of a jointly owned company which belongs to other owners. Non-controlling interests' share of profit is included in the consolidated income statement after taxation. The share of net assets is included in equity in the consolidated statement of financial position but disclosed separately from the equity attributable to shareholders in the Parent Company.

SIGNIFICANT ASSUMPTIONS AND ASSESSMENTS

The consolidated financial statements are based on various assumptions and judgments made by the Board of Directors. These assumptions affect the carrying amounts of assets and liabilities, revenue and expenses, and contingent liabilities. Judgments may deviate from future results. The assumptions and judgments that the Board deems most important are as follows.

Influence over the portfolio companies

Karolinska Development's ownership interests in its portfolio companies ranges from a few percent up to nearly 90%. A relatively large proportion of Karolinska Development's share of the portfolio companies lies within the range of 40–60% and in some cases fluctuates over time through investments that increase or dilute Karolinska Development's holdings.

Karolinska Development commonly enters into shareholder agreements with other shareholders. Where shareholder agreements ensure other investors or founders of influence, Karolinska Development is not considered to have con-

trolling interest, even if its ownership interest formally exceeds 50%. Karolinska Development has therefore concluded that in these situations the holdings should be accounted for as investments in associated companies or joint ventures, depending on the degree of influence. If the shareholder agreements or the Group's ability to influence the associated company or joint venture changes, this may result in the consolidation of the impacted entity in a future period.

Valuation of portfolio companies

As a complement to the application of IFRS 13, fair value is measured according to the fundamental valuation methodology based on International Private Equity and Venture Capital Valuation Guidelines (IPEV Guidelines).

Valuation method

Each portfolio company is regularly evaluated based on interviews with the companies' CEOs, market and competitor analyses based on information from databases, public material, interviews with scientists and physicians, etc. The portfolio valuation is a so-called "sum-of-the-parts" (SOTP) of risk-adjusted net present value (rNPV) from the DCF valuations, valuations based on third party transactions and other recorded company values in the portfolio. Cash flows are discounted with two different discount rates. One reflects the risk in a small company ("Biotech WACC") and a lower discount rate from the time of licensing of a project to a global pharmaceutical company ("Pharma WACC"). The following are important factors when determining fair value:

Discounted cash flow

- DCF valuation is used for the majority of the companies
- Estimated income generally consists of one-time payments and royalty payments on sales.
- Costs are estimated for each phase of development based on the companies' information or according to industry standards.
- Costs and revenue are probability adjusted based on the phase of development
- A WACC of 11.90% (11.68%) was used regarding biotechnological companies and 8.20% (7.78%) regarding pharma companies. Both of these discount rates are calculated based on the risk-free interest rate, market risk premiums and in biotech's case the risk premium for small companies.

Price of related investments

- Significant events occurring after the date of valuation according to the previous paragraph have been taken into account in the valuation to the extent that such events would have affected the value on the closing date.

General valuation principles

Market analysis

- Estimates are made regarding total population, target population, prevalence and treatable patients in the U.S., Europe and the Japanese market. These markets represent approximately 80% of global pharmaceutical sales in 2010 (IMS). As a precautionary principle, other markets are excluded in the valuation.

License agreement/exit

- Estimates are made regarding product launch year and time of exit
- Licensing is usually assumed to be carried out after Phase II
- For medical technology companies, an exit is usually assumed after launch of the product.

Peak sales and royalty rates

- Estimates are made regarding market penetration, market share and total annual treatment cost for each market.
- A sales curve is generated based on an estimation of peak sales, time to peak and decline in sales after patent expiry.
- The estimated royalty rates depend on the time of licensing, product type and market potential.
- All sales are adjusted downwards by the estimated probability of not reaching the market.

Value of contracts and value distribution

- The estimated contract value (including royalties) is based on an estimate of sales potential and the buyer's development, manufacturing and marketing costs for the particular project.
- Contract value is based on a value allocation principle in which the seller's portion of the total value increases with the maturation of the project.
- In the model, the portfolio company receives approximately 40% of total rNPV after Phase II.
- Payments are probability adjusted based on the development phase the project is in at the time of the contract.

Costs

- Estimates are made of the cost of each phase of development based either on the companies' forecasts or according to industry standards.
- For pharmaceutical projects, the costs are probability adjusted depending on the phase of development.
- For medical technology companies, no probability adjustment of development costs is made.

Probability adjustment

- The probability of reaching each phase of development is estimated.
- Recognized statistics are used as a reference.

A change in any of these assumptions would affect the valuation and may have a significant impact on the Group's results of operations.

FOREIGN CURRENCIES

Transactions in foreign currencies

Transactions in foreign currencies are translated into the functional currency at the exchange rate prevailing on the transaction date. Monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the exchange rate prevailing on the closing date. Exchange differences arising on translation are recognized through profit or loss. Non-monetary assets and liabilities measured at historical cost are translated into the exchange rate on the transaction date. Non-monetary assets and liabilities carried at fair value are translated into the functional currency at the rate prevailing on the date when the fair value was determined. The exchange rate change is then recognized in the same manner as other changes in the value of the asset or liability.

The functional currency of the Parent Company and all of the subsidiaries, as well as the Group's reporting currency, is Swedish kronor.

Revenue

Revenue is measured at the fair value of the remuneration received or receivable, net of value added tax.

Sales of services

Revenue primarily consists of invoiced services rendered to portfolio companies. These services consist of management, communication, finance and administration, also including legal and analytical operations. Revenue for services rendered is recognized in the period in which the service is rendered.

Sales of shares in portfolio companies

In the case of sales of shares in portfolio companies, revenue is recognized when the following conditions are met: the principal risks and benefits associated with share ownership have been transferred to the buyer, the Company does not retain any involvement in the ongoing management and does not exercise any real control over the company sold, the income can be reliably measured, it is probable that the economic benefits that the Company will receive from the transaction will flow to the Company, and the expenditure incurred or that is expected to be incurred as a result of the transaction can be measured reliably.

State subsidies

State subsidies are recognized when there is reasonable security that Karolinska Development's portfolio company will satisfy the conditions associated with the subsidy, and that the subsidy will be received.

State subsidies are systematically recognized through profit or loss in the same periods as the costs that the subsidies are intended to compensate.

The benefit of a state loan at a lower rate than the market rate of interest is treated as a state subsidy. The loan is recognized and measured in accordance with IAS 39 Financial Instruments: Recognition and Measurement. The benefit of a below-market interest rate is measured as the difference between the loan's original recognized value in accordance with IAS 39 and the received amount.

OPERATING EXPENSES AND FINANCIAL INCOME AND EXPENSES

Operating leases

Costs for operating leases are recognized through profit or loss on a straight line basis over the leasing period.

Financial income and expenses

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

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

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

Issue expenses and similar direct transaction costs for raising loans are distributed over the term of the loan.

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

Expenses for research and development

The Group's research and development activities are divided into a research phase and a development phase. Expenditure during the research phase is expensed as incurred.

Costs associated with the development phase are recognized as an intangible asset from the time when spending is likely to result in future economic benefits, which implies that it is technically possible to complete the intangible asset, the Company has the intention and ability to complete it and use or sell it, there are adequate resources to complete development and sales, and the remaining costs can be measured reliably.

Impairment tests are carried out annually for development projects not yet in use. Amortization of capitalized expenses for development work starts from the date when the asset is put into service and is recorded on a straight line basis over the estimated useful life. If the criteria for recognizing expenses for development as an asset are not met, costs are expensed as incurred.

Earnings per share

Earnings per share before dilution are calculated by dividing the net profit/loss for the year attributable to the Parent Company's shareholders by a weighted average number of shares outstanding during the period. Through its subsidiary, KD Incentive AB, Karolinska Development has issued warrants on three occasions at market value according to the Black & Scholes option model. This will lead to a dilution for current owners to the extent that the market price of the shares exceeds the issue price of the shares for which the warrants are eligible. There was no dilution for the financial years 2013 and 2012.

The weighted average number of outstanding shares is calculated by adjusting the number of shares outstanding at the beginning of the period for share issues and repurchases made during the period, multiplied by the number of days that

the shares were outstanding in relation to the total number of days in the period. For diluted earnings per share, the number of shares is adjusted for all dilutive potential shares, which include warrants. The warrants are dilutive if the exercise price is less than the estimated fair value of the shares of the Company and this reduces earnings per share after dilution.

FINANCIAL INSTRUMENTS

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

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

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

A financial asset is derecognized from the statement of financial position when the contractual rights are realized, expire or the Company loses control over them. The same applies to part of a financial asset. A financial liability is derecognized from the statement of financial position when the contractual obligation is fulfilled or otherwise extinguished. The same applies to part of a financial liability.

The acquisition and disposal of financial assets are recognized on the trade date, i.e., the date the Company pledges to acquire or dispose of the asset, except in the cases where the Company acquires or disposes of listed securities, in which case settlement date accounting applies.

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

IAS 39 classifies financial instruments in categories. The classification depends on the purpose of the acquisition of the financial instrument. Management determines the classification at the original purchase date. The classification determines how the financial instrument is valued after initial accounting.

The categories are as follows:

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

This category has two subgroups: held for trading and financial assets designated at FVTPL. Financial assets in this category are measured continuously at fair value with changes in value recognized through profit or loss.

This group includes shares in joint ventures, associated companies, other long-term securities, other financial assets and short-term investments. Karolinska Development has chosen, in accordance with IAS 28 and IAS 31, to account for shares in associated companies where Karolinska Development has a significant influence, joint ventures where Karolinska Development has joint control, and other long-term securities holdings according to IAS 39 at fair value through profit or loss.

Financial assets held for trading

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

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

Fixed income funds and corporate bonds have been assessed to belong to this category.

Held-to-maturity investments

Investments with fixed payments and maturity dates that the Company intends and is able to hold to maturity are classified as held-to-maturity investments. Held-to-maturity investments are measured at amortized cost using the effective interest method less any impairment. Karolinska Development does not have any financial assets within this category.

Loan receivables and accounts receivable

Loan receivables and accounts receivable are financial assets that are not derivatives, have fixed or determinable payments and are not quoted on an active market. Assets in this category are measured at amortized cost. Amortized cost is determined from the effective interest rate calculated on the acquisition date. Accounts receivable are recognized at the amount that is expected to be received after an allowance for impaired receivables. As the expected maturity time is short, the nominal value is recognized without discounting. Cash and cash equivalents, including short-term investments with a maximum three-month term, as well as other short-term receivables, have been assessed to belong to this category.

Cash and cash equivalents

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

Available-for-sale financial assets (AFs)

The category available-for-sale financial assets includes financial assets which are not classified in any other category or financial assets that the Group has chosen to classify in this category. Karolinska Development does not have any financial assets classified in this category.

Financial liabilities at fair value through profit or loss

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

Other financial liabilities

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

TANGIBLE NON-CURRENT ASSETS

Owned assets

Tangible non-current assets are recognized as assets on the statement of financial position if it is probable that future economic benefits will accrue to the Company and the cost of the asset can be reliably measured.

Equipment is measured at acquisition cost less accumulated depreciation and impairment losses.

Acquisition cost includes the purchase price, costs directly attributable to the acquisition and expenditure to prepare the asset until it is ready to enter service. The carrying amount of a tangible non-current asset is derecognized upon disposal or sale or when no future economic benefits are expected from the use or disposal of the asset. The gain or loss arising on the disposal of an asset is the difference between the sales price and the asset's carrying amount, net of direct selling costs. Gains and losses are recognized as other operating income/expense.

Tangible non-current assets consisting of parts with different useful lives are treated as separate components of tangible non-current assets.

Leased assets

IAS 17 is applied to leased assets. Leases are classified in the consolidated accounts as either finance or operating leases. A finance lease occurs when the financial risks and benefits associated with ownership are essentially transferred to the lessee; if this is not the case it is classified as an operating lease.

Operating leasing means that the leasing fees are expensed over the term on the basis of use, which may differ from the de facto amount of lease payments during the year.

Assets held for sale

Non-current assets (or disposal groups) are classified as held for sale if their book value is recovered principally through sales transactions and not by permanent use. Non-current assets held for sale are carried at the lower of book value and fair value less costs to sell, except regarding deferred tax assets and financial assets that are measured in accordance with the respective standard.

Additional expenses

Additional expenses are included only in equipment, fixtures and fittings or recognized as a separate asset when it is probable that future economic benefits attributable to the item will benefit the Group and the cost of such items can be reliably measured. All other repairs, maintenance and additional expenses are recognized through profit or loss for the period in which they arise.

Depreciation principles

Depreciation of equipment is expensed so that the asset's value is equal to the estimated residual value at the end of the asset's useful life. This amount is depreciated on a straight-line basis over the estimated useful life of the asset. The Group applies component depreciation, which means that the estimated useful life of the components is the basis for depreciation.

Estimated useful lives:

Plant and machinery	3–5 years
Equipment	3–5 years

An asset's residual value and useful life are tested annually.

INTANGIBLE ASSETS

Patents, licenses and other rights

Patents, licenses and other rights acquired separately are recognized at acquisition cost less accumulated amortization and any impairment losses.

Patents, licenses and other rights acquired in a business combination are identified and recognized separately from goodwill when they satisfy the definition of an intangible asset and their fair values can be measured reliably. The acquisition cost of such intangible assets consists of their fair value at the acquisition date. Ongoing development projects identified in a business combination are taken up at fair value and amortized from the date on which the project can begin to generate revenue. Until then, an annual impairment test is conducted.

Internally generated intangible assets – expenditure on research and development

Research activities are expensed in the period in which they arise. Internally generated intangible assets are only recognized if an identifiable asset has been created, it is probable that the asset will generate future economic benefits and the costs of developing the asset can be reliably measured.

If it is not possible to recognize an internally generated intangible asset, development expenditure is expensed in the period in which it arises.

Other intangible assets

Other intangible assets acquired by the Group are measured at cost less accumulated amortization (see below) and impairment losses (see accounting policies).

Costs incurred for internally generated goodwill and internally generated trademarks are recognized through profit or loss as incurred.

Additional expenses

Additional expenditure on capitalized intangible assets is recognized as an asset in the statement of financial position only when it increases the future economic benefits of the specific asset to which they relate. All other expenditure is expensed as incurred.

Amortization

Amortization is recognized through profit or loss using the straight line method based on the intangible asset's estimated useful life, unless the useful life is indefinite. Amortizable intangible assets are amortized from the date they are made available for use. The estimated useful lives are:

Patents, licenses and other rights	5 years
Other intangible assets	5 years

IMPAIRMENT

Impairment of tangible and intangible assets, as well as shares in subsidiaries, joint ventures, associated companies and other long-term securities holdings
Goodwill and other intangible assets with indefinite useful lives and intangible assets not ready for use are tested annually for impairment.

If a single asset's independent cash flows cannot be determined, assets should be grouped at the lowest level where substantially independent cash flows are identifiable (a so-called cash-generating unit) for impairment testing. An impairment loss is recognized when an asset or cash-generating unit's carrying amount exceeds its recoverable amount. An impairment loss is charged against profit or loss.

Impairment of assets related to a cash-generating unit (group of units) is allocated primarily to goodwill, then pro rata to other assets included in the unit (group of units).

Calculation of recoverable amount

The recoverable amount of assets categorized as loans and receivables which are measured at amortized cost is calculated as the present value of future cash flows discounted using the effective rate prevailing when the asset was initially recognized. Assets with a short duration are not discounted.

The recoverable amount of other assets is the higher of fair value less costs to sell and value in use. In calculating value in use, future cash flows are discounted using a discount rate which takes into account risk-free interest and the risk associated with the specific asset. For an asset that does not generate cash flows which are largely independent of other assets, the recoverable amount is calculated for the cash-generating unit to which the asset belongs.

Reversal of impairments

Impairment losses on loans and trade receivables measured at amortized cost are reversed if a subsequent increase in the recoverable amount can be objectively attributed to an event occurring after the impairment was made.

Impairment losses on other assets are reversed if there are indications that the impairment no longer exists and that there has been a change in the assumptions underlying the calculation of the recoverable amount.

An impairment loss is reversed only to the extent that the asset's carrying amount after reversal does not exceed the carrying amount the asset would have had if no impairment had been made, taking into account the depreciation that would have been made.

Impairment losses on goodwill are not reversed.

Impairment testing of financial assets

At each reporting date, the Company tests whether there is objective evidence that a financial asset or group of financial assets should be impaired. For equity instruments classified as available for sale, a significant and prolonged decline in fair value under the instrument's acquisition cost is required before impairment is recognized. If impairment exists for an asset in the category of assets available for sale, any accumulated impairment loss recognized directly against equity is transferred to profit or loss. Impairment of equity instruments recognized through profit or loss may not be later reversed through profit or loss.

SHARE CAPITAL

Dividends

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

EMPLOYEE BENEFITS

Defined contribution pension plans

Obligations regarding defined contribution pension plans are expensed through profit or loss as incurred.

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

Share-based payment

The Performance and Matching Share Rights allotted to senior executives are measured at fair value on the allotment date. The fair value of Performance and Matching Share Rights on the allotment date has been established by the Black-Scholes pricing model. For more information on the valuation, see Note 6.

The fair value set on the allotment date is expensed with a corresponding adjustment in equity distributed over the vesting period, based on the Group's estimate of the number of Performance and Matching Share Rights it expects to be vested. On each closing date, the Group reevaluates its estimate of the number of Performance and Matching Share Rights it expects to be vested. If a previous estimate is revised, the effect is recognized in income with a corresponding adjustment in equity.

Social security costs attributable to share-based payment are expensed over the vesting period.

PROVISIONS

A provision is recognized in the statement of financial position when the Group has an existing legal or constructive obligation as a result of a past event and it is probable that an outflow of economic resources will be required to settle the obligation and a reliable estimate of the amount can be made.

Where the timing of the expected payment is material, provisions are calculated by discounting the expected future cash flows at an interest rate before tax that reflects current market assessments of the time value of money and, if appropriate, the risks associated with the debt.

TAXATION

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

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

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

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

that sufficient taxable profit will be available to allow all or part of the asset to be recovered.

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

CONTINGENT LIABILITIES

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

INFORMATION ON RISKS AND UNCERTAINTIES

Group

Risks and uncertainties primarily consist of risks associated with the Group's investment activities and indirectly of operational risks in the portfolio companies' development operations, and financial risks.

Future financing needs

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

Risks concerning availability of new investment opportunities

Sweden's so-called teacher's exemption means that researchers own their inventions, not the university or graduate school where they work. A number of universities and graduate schools have also established organizations or companies that focus on evaluating, developing and financing innovations from their own researchers to support them in their work. Karolinska Institutet, for example, has established Karolinska Institutet Holding AB (KIHAB) as a holding company for such investments and Karolinska Institutet Innovations AB (KIAB) to evaluate business opportunities originating from the researchers' innovations. A change in or elimination of the teacher's exemption could affect Karolinska Development's access to investment opportunities.

The availability of new investment opportunities for Karolinska Development is highly dependent upon the flow of business expected to be provided by KIAB according to the so-called deal flow agreement, which is described on page 85.

Karolinska Development is indirectly dependent on KIAB's ability to attract researchers with new projects and the competency of staff to evaluate the investment opportunities effectively. To be exposed to new ideas, KIAB must maintain a strong position in academic circles and the business community, act professionally and demonstrate a merit list of successful commercialization. Even if KIAB is successful in these respects, there are no guarantees that the cooperation between KIAB and Karolinska Development will be successful. If the cooperation fails as planned, it can be assumed that this will have a significant negative impact on Karolinska Development's access to business opportunities, and therefore on the Company's business prospects.

Uncertainties in future assessments

Judgments and assumptions about the future outcome of development projects involving pharmaceuticals and medical technology are always associated with great uncertainty. There are no guarantees of the accuracy of forecasted developments.

Development of portfolio companies

The majority of portfolio companies are at an early stage of development. In spite of the fact that the portfolio companies, in the opinion of Karolinska Development, have great commercial potential and in many cases have completed significant development work, additional research and development remains necessary before the companies' innovations and technologies can be commercialized. The results of future research and development will be crucial to the portfolio companies' product candidates. The portfolio companies' product development may fail, just like all development of pharmaceuticals or other biotechnological products, e.g., if one or all of the portfolio companies' product candidates lack the targeted effect, give rise to side effects or otherwise fail to meet regulatory requirements, or fail to obtain regulatory approvals or licenses.

Expected positive cash flow from the sale of portfolio companies is dependent upon the scientific results of development projects. Such results may be a successfully demonstrated target profile, failure or a partially demonstrated target profile. Each result has a direct impact on the potential value of a portfolio company. Other factors affecting the future cash flow are the success of competitors and demand from potential buyers at any given point in time.

Long time to product launch

The time it takes for a product candidate to pass through the whole research and development process, establish strong intellectual property rights, meet all regulatory requirements and find strong marketing and distribution partners is often underestimated. Introducing previously unknown or accepted products and technologies with unknown compensation models takes time and involves significant marketing and sales costs.

Competitors

The market for the portfolio companies' product candidates and new technologies is subject to fierce competition and is rapidly changing. Competitors of the portfolio companies are often large multinationals. These companies are already established in the portfolio companies' markets and may have competitive advantages. They can swiftly allocate major resources to new research and development and to new market conditions. They may also, in contrast with the portfolio companies, have superior financial resources and expertise in research and development, clinical trials, obtaining regulatory approvals and marketing. However, it is worth noting that these companies can also function as strategic partners or customers of the portfolio companies.

Competitors may develop more effective, cheaper or more suitable products, obtain patent protection more rapidly, or manage to commercialize their products faster than Karolinska Development's portfolio companies. These competing products may make the portfolio companies' product candidates obsolete or limit the portfolio companies' opportunities to generate profits from their product candidates.

Risks concerning the portfolio companies intellectual property rights

The success of the portfolio companies rests in large part on their ability to protect the methods and technologies they develop with patents and other intellectual property rights. Even if the portfolio companies obtain patents, they eventually may not provide comprehensive protection or be effective in claims against third parties.

Risks regarding valuations

Companies active in pharmaceutical development and medical technology at an early stage are, by their very nature, difficult to value, since the lead times are very long and development risks are significant. Due to the uncertainty inherent in forecasts, the estimated portfolio value may deviate greatly from the actual future outcome. This is mainly due to the sensitivity of valuation estimates to changes in anticipated milestones and planned sales, study costs and similar assumptions which do not necessarily have an effect on the actual value of a transaction in negotiations with partners.

Interest rate risk

Interest rate risk is the risk that changes in market interest rates could affect cash flow or the fair value of financial assets or liabilities. Karolinska Development has no significant loans or other long-term debt, so the Group's interest rate risk is primarily attributable to excess liquidity. Surplus liquidity in the Group is invested in money market funds or interest-bearing instruments; see also Note 21.

Risk diversification

Karolinska Development invests in early stage projects, which are generally associated with higher risk than investments in mature companies. Karolinska Development's ambition is to diversify this risk by investing in a broad portfolio of biotechnology, diagnostics and medical technology companies at different stages of maturity.

Note 2 Operating segments

The Board of Directors is the function that determines the allocation of resources to investments in portfolio companies and to the Parent Company. The Board of Directors monitors each investment at the project level as well as the Parent Company's results and financial position.

Karolinska Development's investments are primarily steered to companies that yield the best returns. Regardless of a project's maturity, therapeutic area and whether the company is active in pharmaceuticals or medical technology, each company's projects are evaluated by Karolinska Development in the same manner, because of which Karolinska Development has aggregated all the portfolio companies into a single reportable segment.

Karolinska Development's measure of profit is the aggregate change in the fair value of its shares in the portfolio companies, including those that are consolidated as subsidiaries. The Board of Directors and management monitor the investments based on changes in their fair value independently of the company's level of influence. Consequently, the Board of Directors and management monitor subsidiaries, associated companies, joint ventures and other holdings based on changes in their fair value and not on their historical acquisition costs as subsidiaries recognized in the consolidated financial statements. The accounting policies applied in the internal reporting otherwise correspond to the Group's accounting policies as described in Note 1.

Profit/loss per segment and reconciliation between the aggregate result from the change in fair value of portfolio companies and consolidated profit/loss before tax

Amounts in SEK 000	Profit/loss from change in fair value of portfolio companies	
	2013	2012
<i>Subsidiaries</i>		
Change in fair value	1,287	208,201
<i>Joint ventures and associated companies</i>		
Change in fair value	-153,711	18,847
Impairment losses ¹	0	-106,541
<i>Other long-term securities holdings</i>		
Change in fair value	1,011	902
Impairment losses ¹	-3,300	0
Change in fair value of total portfolio holdings	-154,713	121,409
<i>Group eliminations</i>		
Less change in fair value of subsidiaries	-1,287	-208,201
Net result from changes in fair value	-156,000	-86,792
Capital gain on transaction with Rosetta (Note 24)	68,232	-
Fair value increase transaction with Rosetta (Note 24)	336,414	-
Consolidated revenue and other expenses (including financial net)	-63,480	-189,179
Consolidated profit/loss before tax	185,166	-275,971

¹ In the Group's internal follow-up the change in the value of discontinued projects is recognized as impairments.

The aggregate result from changes in the fair value of the portfolio companies amounted to SEK -154.7m (SEK 121.4m) during the year, which includes a positive change in the fair value of subsidiaries of SEK 1.3m (SEK 208.2m). The change in the fair value of subsidiaries is not recognized in the consolidated profit or loss or statement of financial position, since the subsidiaries are consolidated and therefore are not measured at fair value. The Group's reported result from changes in the fair value of joint ventures, associated companies and other long-term securities holdings amounted to SEK -156.0m (SEK -86.8m).

Assets per segment

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
<i>Fair value of total portfolio holdings</i>		
Subsidiaries	99,428	1,010,663
Joint ventures and associated companies	1,605,469	789,578
Other long-term securities holdings	24,568	26,949
Total fair value of total portfolio holdings	1,729,465	1,827,190
Less fair value of subsidiaries	-99,428	-1,010,663
Less fair value of joint ventures and associated companies which have been transferred to KDev Investments Group	-	-570,405
Group	1,630,037	246,122

Shares in portfolio companies at fair value

Amounts in SEK 000	Subsidiaries	Joint ventures/Associated companies	Other long-term securities	Total portfolio investments
Accumulated fair value				
Opening balance at 1 Jan 2012	542,001	980,276	24,587	1,546,864
Investments (Notes 11,12,39)	81,949	148,189	1,460	231,598
Reclassifications	178,512	-178,512	0	0
Sale of shares	0	-72,681	0	-72,681
Changes in fair value	208,201	-87,694	902	121,409
Closing balance at 31 Dec 2012	1,010,663	789,578	26,949	1,827,190
Accumulated fair value				
Opening balance at 1 Jan 2013	1,010,663	789,578	26,949	1,827,190
Investments (Notes 11,12,39)	21,786	244,379	8	266,173
Reclassifications ¹	-930,277	930,277	0	0
Sale of shares	-4,031	-205,054	-100	-209,185
Changes in fair value	1,287	-153,711	-2,289	-154,713
Closing balance at 31 Dec 2013	99,428	1,605,469	24,568	1,729,465

¹ The reclassification relates to KDev Investments Group, which after the transaction with Rosetta IV LP is recognized as a joint venture with changes in fair value recognized through profit or loss.

Reconciliation between aggregate fair value of portfolio companies for segments and consolidated total assets

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Aggregate fair value of total portfolio holdings	1,729,465	1,827,190
Less fair value of subsidiaries	-99,428	-1,010,663
Other consolidated assets	265,677	1,398,471
Consolidated total assets	1,895,714	2,214,998
Equity	1,870,339	2,024,192
Consolidated liabilities	25,375	190,806
Consolidated equity and liabilities	1,895,714	2,214,998

Note 3 Revenue distribution

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

Subsidies received relate to state subsidies received by Karolinska Development's portfolio companies during the financial year.

Revenue per significant revenue source

Amounts in SEK 000	2013	2012
Services rendered	8,603	3,156
Subsidies received	1,125	5,082
Other revenue	212	1,705
Total revenue	9,940	9,943

Note 4 Other external expenses

Development expenses

Through the portfolio companies, the Karolinska Development Group engages in early-stage research and development. R&D expenses in the Group amounted to SEK 17,749 thousand (SEK 63,515 thousand). No portion has been capitalized other than application fees for patents, which in 2013 amounted to SEK 878 thousand (SEK 1,943 thousand).

Fees and remuneration to the Group's auditors

Amounts in SEK 000	2013	2012
<i>Deloitte</i>		
Audit services	760	901
Audit related services	352	323
Tax consulting	797	579
Other services	0	137
<i>Other auditors</i>		
Audit services	0	55
Audit related services	0	5
Tax consulting	0	0
Other services	0	0
Total	1,909	2,000

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

Note 5 Operating leases

The Group has chosen to finance certain assets through operating leases. During the year, lease payments for premises and equipment rentals were expensed in the equivalent amount of SEK 3,860 thousand (SEK 4,773 thousand). Future leasing payments will be paid according to the table.

Amounts in SEK 000	2013	2012
Within one year	1,603	3,851
Between one year and five years	2,182	312
Total	3,785	4,163

Note 6 Employees and personnel costs

Average number of employees

Full-time equivalent	2013	Of whom men	2012	Of whom men
Parent Company	14	79%	16	75%
Subsidiaries	10	40%	30	27%
Total	24	63%	46	54%

Remuneration expenses for employees

Amounts in SEK 000	2013	2012
Salaries and remuneration	33,997	39,561
Social security expenses	12,454	13,742
Pension expenses	8,172	7,611
Total	54,623	60,914

Salaries, other remuneration and social security expenses

Amounts in SEK 000	2013	2012		
	Salaries and remuneration	Social security expenses	Salaries and remuneration	Social security expenses
Parent Company	26,908	8,085	23,811	6,812
(of which pension expenses)	5,792	1,405	4,502	1,092
Subsidiaries	15,261	4,369	23,361	6,930
(of which pension expenses)	2,380	577	3,109	754

Defined contribution pension plans

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

Remuneration to senior executives

The remuneration guidelines for senior executives are prepared and determined by the Board. The guidelines are adopted by the AGM. In accordance with the resolution of the 2013 AGM, the main features of the remuneration guidelines adopted for senior executives are as follows. Karolinska Development will maintain the remuneration levels and terms required to recruit and retain senior executives with the competence and experience needed for the Company to achieve its operational goals. Total remuneration to senior executives must be competitive, reasonable and appropriate. The fixed basic salary is determined based on the individual's area of responsibility and experience. Variable salary (i) is formulated with the aim of encouraging Karolinska Development's long-term value creation; (ii) is governed by criteria which are predetermined, clear, measurable and which can be influenced; (iii) has established limits for the maximum outcome; and (iv) is not pensionable income. If terminated by the Company, the CEO has a six-month term of notice and other senior executives have a maximum nine-month term of notice. Severance pay applies only to the CEO.

The table below shows the remuneration to the CEO and other senior executives during the financial year.

2013	Basic salary ¹ / Board fee	Variable remuneration	Other benefits and remuneration	Pension costs	Total remuneration
Amounts in SEK 000					
Torbjörn Bjerke, CEO	3,472		255	731	4,458
Terje Kalland, Deputy CEO	2,162		5	713	2,880
Bo Jesper Hansen, Chairman	175				175
Hans Wigzell, Board member (former Chairman)	350		5		355
Per-Olof Edin, Board member	200				200
Rune Fransson, Board member	48				48
Raymond Hill, former Board member	83				83
Klaus Wilgenbus, Board member	200				200
Charlotte Edenius, Board member	200				200
Vlad Artamonov, Board member	200				200
Other senior executives (9 persons)	11,743		113	3,289	15,145
Total	18,833	0	378	4,733	23,944

¹ Base salary excluding vacation compensation

2012	Basic salary ¹ / Board fee	Variable remuneration	Other benefits and remuneration	Pension costs	Total remuneration
Amounts in SEK 000					
Torbjörn Bjerke, CEO	3,472		391	726	4,589
Gunnar Casserstedt, former Deputy CEO	1,019			212	1,231
Terje Kalland, Deputy CEO	2,040		3	653	2,696
Hans Wigzell, Chairman	350		6		356
Per-Olof Edin, Board member	195				195
Rune Fransson, Board member	52				52
Ulrika Slåne, former Board member	79				79
Peter Sjöstrand, former Board member	79				79
Michael Rosenlew, former Board member	79				79
Raymond Hill, Board member	195				195
Klaus Wilgenbus, Board member	117				117
Charlotte Edenius, Board member	117				117
Vlad Artamonov, Board member	117				117
Other senior executives (9 persons)	8,245		62	2,197	10,504
Total	16,156	0	462	3,788	20,406

¹ Base salary excluding vacation compensation

Gender distribution of Board and Management

The data refers to the ratio at closing.

	2013	2012
Board		
Men	6	6
Women	1	1
CEO and other senior executives		
Men	9	9
Women	2	2
	11	11

CEO compensation

Pension terms

The CEO's contractual pension amounts to 21 percent of his gross salary, which is comprised of a premium-based provision.

Severance terms

Torbjörn Bjerke is entitled to severance equivalent to his salary for twelve months if he is terminated by the Company (with the exception of termination due to breach of agreement) if a change in ownership occurs and Torbjörn Bjerke no longer remains CEO or in the case of a significant breach of contract by the Company.

Other senior executives

Severance terms

No severance agreements are in place for other senior executives of Karolinska Development.

Variable remuneration

Karolinska Development has three programs with variable salaries. One is a combined warrant and profit-sharing program for senior executives, consisting of three program stages, which was adopted by the AGM's in 2008, 2009 and 2010. (The 2008 and 2009 warrant program has expired without any subscriptions by participants.) In 2012 and 2013, the AGM's resolved to introduce Performance Share Programs, PSP 2012 for senior executives and PSP 2013 for all personnel.

2008-2010 programs

Warrant program

Through the subsidiary KD Incentive AB, Karolinska Development has issued share warrants in three separate programs. These warrants have been allocated to participating employees in the program at market value, calculated according to the Black & Scholes option pricing model and are not associated with any vesting conditions. The 2008 warrant program expired in 2012 and the 2009 warrant program expired during the year without any subscriptions by participants.

Warrant program	Number	Allocation date ²	Redemption period	Issue price per warrant	Redemption price per share
Warrant program 2010	63,888	2010	1 Oct 2014– 31 Dec 2014	5.07	124
Supplemental warrant I 2010 ¹	25,013	2011	1 Oct 2014– 31 Dec 2014	1.17	66
Weighted redemption price	88,901				107.68

¹ Due to an increase in the number of shares in Karolinska Development, participants in the programs were invited to subscribe for "supplemental warrants" to compensate for dilution. The warrants carry similar terms as the other warrants in issue.

² The warrants have been allocated by each year's AGM.

Amounts in SEK 000	2013		2012	
	Number of warrants	Weighted redemption price	Number of warrants	Weighted redemption price
At beginning of the year	185,772	104.00	442,790	93.01
Repurchased warrants program 2009	-	-	-11,250	-
Repurchased warrants program 2009(2)	-	-	-5,130	-
Repurchased warrants program 2010	-	-	-15,000	-
Repurchased warrants program 2010(1)	-	-	-6,840	-
Expired warrant program 2008-2009	-96,871	-100.63	-218,798	-81.88
Closing balance	88,901	107.68	185,772	104.00

The Company is obligated to offer warrant holders the opportunity to subscribe for supplemental warrants in connection with the issuance of new shares as protection against dilution. The maximum number of shares that can be issued as part of these programs corresponds to 1% of the total number of shares in issue.

Profit-sharing programs for senior executives

The profit-sharing plan is based on annual sub-plans, similar to the warrant portion of the incentive program. The first sub-plan relates to Karolinska Development's investment portfolio as of 31 December 2007. The subsequent sub-plans relate to the investments in Karolinska Development as of December 31 which the Company completed during the calendar year immediately preceding the issuance of the respective sub-plan.

Each profit sharing plan lasts 15 years and provides entitlement to a certain portion of return proceeds from divested investments to which the plan refers. The first settlement will take place after the fifth year of the term; this payment takes into account the returns during years 1-5 of the term. Thereafter, payments are made annually, retroactively until all the investments that the sub-plan refers to have finally been disposed of or until the 15-year limit is reached and the sub-plan matures. Payments must be made as soon as possible after the AGM has been held.

Each sub-plan provides entitlement to a cash payment equivalent to a total of 5 percentage points of the portion of returns realized from the investments that the sub-plan relate to, in excess of a threshold rate of 6 percent for the years 2008-2012 and 8 percent for the year 2013 onwards.

Disbursement pursuant to each sub-plan should be limited as follows: To the extent that returns exceed an annual return of 35 percent, the portion that exceeds the returns accruing to participants in the profit-sharing plan will be halved (i.e., if the rate was previously 5 percent, as indicated above, it will in this part instead be 2.5 percent). To the extent that returns exceed 50 percent, the amount in excess of 50 percent will be further halved (i.e., if the rate was previously 2.5 percent, as indicated above, it will in this part instead be 1.25 percent). Excess returns above 60 percent are not eligible for profit-sharing.

All investment managers (including the CEO and CFO) who were employed during all, or part of, the preceding calendar year, and who are still employed and have not been terminated on the issue date of the sub-plan, participate in the sub-plan. Participation in each sub-plan is proportionate to participation in the portion of the warrant program issued in conjunction therewith, in accordance with the above, whereby 50 percent participation in a portion of the warrant program leads to full participation in the profit-sharing plan. Conny Bogentoft and Ola Flink will participate in the profit-sharing plan as described above even after termination of employment under the same conditions as in the warrant program, with the corresponding increase in the total profit-sharing space that this can lead to after a successor has been hired.

Termination of employment during the term: Unearned profit-sharing expires automatically. Each sub-plan is vested at a rate of 20 percent per year from issuance. For Conny Bogentoft and Ola Flink, vesting occurs even after the termination of employment provided that they are still active in the Company on a consulting basis.

The cooperation with the European Investment Fund entitles Karolinska Development to a share in the profits of the co-investment structure beyond

Karolinska Development's capital input in the structure, provided that 37.5 percent of this profit is further distributed through Karolinska Development's profit-sharing plan. This redistribution has been implemented in the profit-sharing plan so that this right to profit-sharing is divided between the sub-plans for 2010, 2011 and 2012 in relation to the size of the plans. The right to profit-sharing through the cooperation with the European Investment Fund therefore applies beyond the profit-sharing based on excess returns as described above. Because of the limited returns to date, this approach has not had any accounting effects.

Performance Share Program 2012 (PSP 2012)

On 23 May 2012, the Annual General Meeting decided on a Performance Share Program for senior executives based on the participants acquiring shares ("Saving Shares") on the open market. For each Savings Share, participants will be allotted, free of charge, one Matching Share Right and a maximum of five Performance Share Rights. The maximum number of Performance and Matching Share Rights is 480,000. The program comprises a maximum of ten participants.

Each Performance and Matching Share Right is entitled to the allocation of one subscription option. Each subscription option entitles its holder to acquire one series B share at a subscription price corresponding to the share's par value and assuming that the option is exercised as soon as possible after receiving the subscription option. Subscription options will be allocated after publication of the company's interim report for the first quarter 2015, though no earlier than three years after the agreement on PSP 2012 was signed (vesting period).

There are no performance conditions for the Matching Share Rights, but each participant must remain an employee during the vesting period and may not have sold their Savings Shares. The Performance Share Rights have the same terms as the Matching Share Rights. In addition, there is a target related to Karolinska Development's share price performance and a comparison between the so-called Start Price and End Price. The Start Price is measured as the average over ten trading days. The Board of Directors determines the measurement period. However, the measurement must be made not later than 23 November 2012. The established measurement period was 27 August 2012 through 7 September 2012. The Start Price was set at SEK 15.70. The End Price is measured as the average over 10 trading days beginning on 2 May 2015. For any allotment to be made, the share price must rise by six percent annually. For a maximum allotment (five Performance Shares per Saving Share), the share price must rise by 30 percent. Within this span, allotments will be made proportionately. Allotments are capped at ten times the Start Price, after which the number of allotted Performance Share Rights is reduced. The participants will be compensated in cash for dividends paid during the period.

In December 2012, the participants acquired 80,000 Savings Shares. The fair value of a Matching Share Right on the allotment date in December 2012 has been set that SEK 14 based on the Black-Scholes option pricing model. The inputs in the model were a share price of SEK 14.65, an exercise price of SEK 0.5, an anticipated maturity 3.1 years, an anticipated volatility of 42.5%, an anticipated dividend of zero percent and a risk-free rate of interest of 0.87%. The fair value of a Performance Share Right on the allotment date in December 2012 was set at SEK 7.20 based on a Monte Carlo simulation. The inputs in the model were a share price of SEK 14.65, an exercise price of SEK 0.5, an anticipated maturity 3.1 years, an anticipated dividend of zero percent and a risk-free rate of interest of 0.87%. The condition related to share price performance has been taken into account in the valuation of the Performance Share Rights. Anticipated volatility is based on historical volatility and comparisons with similar companies.

The company has covered social security contributions related to the program by acquiring 150,600 of its own shares.

Performance Share Program 2013 (PSP 2013)

On 14 May 2013, the Annual General Meeting decided on a Performance Share Program for all employees where participants acquire shares ("Saving Shares") on the open market. For each Savings Share participants receive, free of charge, a maximum of one Matching Share Right and five Performance Shares. The maximum number of Performance Shares and Matching Share Rights is 480,000. The program comprises a maximum of seventeen participants.

Each Performance and Matching Share Right is entitled to the allotment of one subscription option. Each subscription option entitles its holder to acquire one series B share at a subscription price corresponding to the share's par value and assuming that the option is exercised as soon as possible after receiving the subscription option. Subscription options will be allotted after publication of the company's interim report for the first quarter 2016, though no earlier than three years after the agreement on PSP 2013 was signed (the vesting period).

There are no performance conditions for the Matching Share Rights, but each participant must remain an employee during the vesting period and may not have sold their Saving Shares. The Performance Shares have the same terms as the Matching Share Rights. In addition, there is a target related to Karolinska Development's share price performance and a comparison between the so-called Start Price and End Price. The Start Price is measured as an average over ten trading days. The Board of Directors determines the measurement period. However, the measurement must be made not later than 14 November 2013. The established measurement period was 27 June 2013 through 10 July 2013. The Start Price was set at SEK 26.44. The End Price is measured as the average over 10 trading days beginning on 2 May 2016. For an allotment to be made, the share price must rise by six percent annually. For a maximum allotment (five Performance Shares per Savings Share), the share price must rise by 30 percent. Within this span, allotments are made proportionately. Allotments are capped at twenty times the Start Price, after which the number of allotted Performance Shares is reduced. Participants will be compensated in cash for dividends paid during the period.

In September 2013, participants acquired 49,700 Saving Shares. The fair value of a Matching Share Right on the allotment date in September 2013 was set at SEK 26.12 based on the Black-Scholes option-pricing model. The inputs in the model were a share price of SEK 26.60, an exercise price of SEK 0.5, an anticipated maturity of 3.1 years, an anticipated volatility of 42.5%, an anticipated dividend of zero percent and a risk-free rate of interest of 1.47%. The fair value of a Performance Share on the allotment date in September 2013 was set at SEK 14.98 based on a Monte Carlo simulation. The inputs in the model were a share price of SEK 26.60, an exercise price of SEK 0.5, an anticipated maturity of 3.1 years, an anticipated dividend of zero percent and a risk-free rate of interest of 1.47%. The condition related to share price performance has been taken into account in the valuation of the Performance Share Rights. Anticipated volatility is based on historical volatility and comparisons with similar companies.

The Board's proposal to the 2014 Annual General Meeting for decision on guidelines for remuneration to senior executives

Karolinska Development will maintain the remuneration levels and terms required to recruit and retain senior executives with the competence and experience needed for the Company to achieve its operational goals. Total remuneration to senior executives must be competitive, reasonable and appropriate. The fixed basic salary is determined based on the individual's area of responsibility and experience. Variable salary (i) is formulated with the aim of encouraging Karolinska Development's long-term value creation; (ii) is governed by criteria which are predetermined, clear, measurable and which can be influenced; (iii) has established limits for the maximum outcome; and (iv) is not pensionable income. If terminated by the Company, the CEO has a six-month term of notice and other senior executives have a maximum nine-month term of notice. Severance pay applies only to the CEO.

Note 7 Other financial gains and losses

Amounts in SEK 000	2013	2012
Change in value of short-term investments	1,078	7,334
Foreign currency exchange rate gains and losses	149	-1,307
Revaluation of financial liability related to Aprea	1,451	-1,982
Impairment of receivables from joint ventures and associated companies	31,976	-31,976
Other financial income	384	0
Total	35,038	-27,931

Note 8 Taxes

Reconciliation of effective tax rate

Amounts in SEK 000	%	2013	%	2012
Profit/loss before tax		185,166		-275,971
Income tax expense calculated at applicable rate in the Parent Company	22.0%	-40,737	26.3%	72,580
<i>Tax effect of</i>				
Non-deductible expenses		-6,892		-8,860
Tax-exempt revenue		96,552		1
Changes in fair value, non-taxable		-34,320		-22,826
Capitalization of deferred tax losses carried forward in subsidiaries		-2,926		-13,778
Increase in tax losses carried forward without corresponding capitalization of deferred taxes		-11,677		-27,117
Recognized current tax	0.0%	0	0.0%	0
Change in deferred tax		2,926		45,807
Recognized deferred tax	1.6%	2,926	16.6%	45,807
Total recognized tax	1.6%	2,926	16.6%	45,807

Recognized in statement of financial position

Temporary differences arise in cases where the carrying amounts of assets and liabilities differ from their fiscal values.

The Group's temporary differences have resulted in deferred tax assets and tax liabilities for the following items:

Deferred tax in statement of financial position

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Intangible non-current assets ¹	0	-217,810
Tax losses carried forward ²	0	66,532
Less liabilities attributable to assets which have been transferred to KDev Investments Group	0	151,278
Deferred tax assets/tax liabilities, net	0	0

¹ Refers to deferred tax liability related to adjustments in the fair value of ongoing development projects in connection with the acquisition of subsidiaries.

² Deferred tax assets related to fiscal deficits are recognized to the extent they can be offset against deferred tax liabilities related to surplus values in the Group.

Deferred tax liabilities

Amounts in SEK 000	Intangible assets	Tax losses carried forward
At beginning of 2012	182,343	-38,758
Acquired subsidiaries	77,807	-24,307
Recognized through profit or loss	-42,340	-3,467
<i>Of which effect of tax rate change</i>	<i>-(42,340)</i>	<i>(10,310)</i>
Less liabilities attributable to assets which have been transferred to KDev Investments Group	-217,810	66,532
Closing balance 2012	0	0
At beginning of 2013	0	0
Closing balance 2013	0	0

Unrecognized deferred tax assets and liabilities

Deductible temporary differences and tax losses carried forward for which deferred tax assets have not been recognized through profit or loss and the statement of financial position primarily relate to losses generated by the Parent Company. Deferred tax assets have not been recognized for these losses, since it is unlikely that Karolinska Development AB will be able to utilize the tax losses carried forward to offset against future taxable profits, despite that there is no time limit on these tax losses carried forward. Unrecognized deferred tax assets amounted to SEK 74,171 thousand (SEK 64,337 thousand) at year-end 2013, of which SEK 64,337 thousand (SEK 60,492 thousand) relates to deficits that are restricted by Group contributions and mergers.

Note 9 Intangible non-current assets

Ongoing development projects

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Accumulated acquisition cost		
At beginning of the year	6,862	715,977
Acquisitions of subsidiaries	0	306,811
Less assets which have been transferred to KDev Investments Group	0	-1,015,926
Closing balance	6,862	6,862
Accumulated amortization and impairments		
At beginning of the year	0	-22,656
Less assets which have been transferred to KDev Investments Group	0	22,656
Closing balance	0	0
Carrying amount	6,862	6,862

Patents, licenses and similar rights

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Accumulated acquisition cost		
At beginning of the year	4,704	14,280
Acquisitions of subsidiaries	0	374
Acquisitions during the year	879	1,963
Sales and disposals	-1,741	-2,706
Less assets which have been transferred to KDev Investments Group	0	-9,207
Closing balance	3,842	4,704
Accumulated amortization and impairments		
At beginning of the year	-1,702	-4,644
Acquisitions of subsidiaries	0	-50
Amortization for the year	-1,091	-3,650
Sales and disposals	429	2,941
Less assets which have been transferred to KDev Investments Group	0	3,701
Closing balance	-2,364	-1,702
Carrying amount	1,478	3,002

Note 10 Tangible non-current assets

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Accumulated acquisition cost		
At beginning of the year	10,650	6,960
Acquisitions of subsidiaries	0	458
Acquisitions during the year	1,018	5,233
Sales and disposals	-10,931	-581
Reclassifications	0	922
Less assets which have been transferred to KDev Investments Group	0	-2,342
Closing balance	737	10,650
Accumulated amortization and impairments		
At beginning of the year	-5,665	-5,297
Depreciation for the year	-1,536	-1,513
Acquisitions of subsidiaries	0	-428
Sales and disposals	6,993	-407
Less assets which have been transferred to KDev Investments Group	0	1,980
Closing balance	-208	-5,665
Carrying amount	529	4,985

Finance leases

The Group did not enter into any finance leases in 2013, 2012 or any prior period.

Note 11 Shares in joint ventures and associated companies

Amounts in SEK 000	2013	2012
Accumulated acquisition cost		
At beginning of the year	219,173	980,276
Acquisitions during the year (Note 40)	244,379	148,189
Reclassifications	1,500,682	-178,512
Sales of associated companies	-205,054	-72,681
Change in fair value in profit/loss for the year	-153,711	-87,694
Less assets which have been transferred to KDev Investments Group	-	-570,405
Closing balance	1,605,469	219,173

Note 12 Other long-term securities holdings

Amounts in SEK 000	2013	2012
Accumulated acquisition cost		
At beginning of the year	26,949	24,587
Acquisitions during the year (not 41)	8	1,460
Sale of other long-term securities holdings	-100	0
Change in fair value in profit/loss for the year	-2,289	902
Total fair value	24,568	26,949

Note 13 Loans receivable joint ventures and associated companies

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Loans receivable joint ventures and associated companies		
At beginning of the year	12,856	3,675
Loans provided	34,712	45,942
Reversal of impairments	30,000	0
Conversions	-66,897	-4,240
Repayments	-4,777	-2,475
Impairment losses	0	-30,000
Exchange rate differences	0	-46
Total	5,894	12,856

Karolinska Development normally invests in portfolio companies, but in certain cases other financing solutions can be arranged. The loans are interest bearing and mature or are converted to shares within 12 months.

Note 14 Accounts receivable

Maturity structure

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Receivables not past due	258	614
Overdue receivables without provision		
1-30 days	0	201
31-90 days	0	0
91-180 days	0	0
>180 days	0	0
Less assets which have been transferred to KDev Investments Group	-	-302
Total	258	513

No provisions for bad debt were considered necessary for any of the years above.

Note 15 Other current receivables

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Tax receivable	2,328	1,614
VAT receivable	716	2,851
Other	759	1,530
Less assets which have been transferred to KDev Investments Group	-	-2,040
Total	3,803	3,955

Note 16 Prepaid expenses and accrued income

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Prepaid rental expenses	37	923
Accrued interest income	828	715
Insurance premiums	415	592
Accrued income	0	1,689
Other	487	1,214
Less assets which have been transferred to KDev Investments Group	-	-555
Total	1,767	4,578

Note 17 Equity

Changes in share capital

Year	Transaction	Number of shares	Share capital	Number of A shares	Number of B shares	Subscription price	Par value
Total per 1 Jan 2011		33,331,417	16,665,709	1,503,098	31,828,319	0.5	0.5
April 2010	Share issue	15,200,000	7,600,000	0	15,200,000	40	0.5
Total per 31 Dec 2011		48,531,417	24,265,709	1,503,098	47,028,319		0.5
Total per 31 Dec 2012		48,531,417	24,265,709	1,503,098	47,028,319		0.5
Total per 31 Dec 2013		48,531,417	24,265,709	1,503,098	47,028,319		0.5

Net asset value per share

Amounts in SEK 000	Group	
	31 Dec 2013	31 Dec 2012
<i>Net assets</i>		
Cash and cash equivalents	41,639	117,033
Short-term investments	165,334	174,160
Loans receivable joint ventures and associated companies	5,894	12,856
Financial assets/liabilities	28,675	-1,982
Total net assets	241,542	302,067
Estimated fair value of portfolio companies including subsidiaries	1,729,465	1,827,190
Total net asset value	1,971,007	2,129,257
Number of shares	48,287,132	48,380,817
Net asset value per share	40.82	44.01

Group

The number of shares amounts to 48,531,417, of which 1,503,098 are series A shares and 47,028,319 are series B shares. Series A shares carry ten votes per share and series B shares carry one vote per share. All shares have an equal right to the Company's assets in the case of liquidation and regarding profit distributions. All series B shares have been listed for trading on the main list of NASDAQ OMX since 15 April 2011.

During the fourth quarter 2012, the Parent Company and Group repurchased 150,600 shares with a par value of SEK 0.5 for consideration amounting to SEK 2,243,879. The shares were repurchased to cover the social security expenses in the incentive program PSP 2012 resolved by the Annual General Meeting in 2012.

During the third quarter 2013, the Parent Company and Group repurchased 93,685 shares with a par value of SEK 0.5 for consideration amounting to SEK 2,483,025. The shares were repurchased to cover the social security expenses in the incentive program PSP 2013 resolved by the Annual General Meeting in 2013.

The Group and the Parent Company are holding 244,285 treasury shares. This represents a total of SEK 122,143 of the share capital, and the consideration paid amounts to SEK 4,726,904.

Other contributed capital

Relates to capital contributed by the owners.

Retained earnings incl. net profit/loss for the year

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

Number of shares basic and diluted

Through its subsidiary, KD Incentive AB, Karolinska Development has issued warrants in three separate program stages at market value according to Black & Scholes (see detailed description in Note 6). The warrant program 2008 expired in 2012 and the warrant program 2009 expired during the year without any subscriptions by participants. As of 31 December 2013, 88,901 warrants have been acquired through the remaining program. This will lead to a dilution for current owners to the extent that the market price of the shares exceeds the issue price of the shares for which the warrants are eligible. The number of shares issuable through these programs is limited to a maximum of 1% of total shares in issue.

Issued options are not included in diluted earnings per share, since they did not give rise to dilution in 2013 or 2012.

Earnings per share basic and diluted

Amounts in SEK 000	2013	2012
Profit/loss for the year attributable to Parent Company's shareholders	197,163	-212,852
Weighted average number of shares	48,350,016	48,529,767
Earnings per share, SEK	4.08	-4.39

Note 18 Interest-bearing liabilities

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
<i>Long-term liabilities</i>		
Loans from Almi Företagspartner and Innovationsbron	0	1,375
Less liabilities attributable to assets which have been transferred to KDev Investments Group	0	-1,375
Total	0	0

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
<i>Current liabilities</i>		
Loans from Almi Företagspartner and Innovationsbron	0	200
Less liabilities attributable to assets which have been transferred to KDev Investments Group	0	-200
Total	0	0

Interest-bearing liabilities in 2012 relate to loans raised by the subsidiary Inhalation Science Sweden AB with customary interest conditions. The loan will be repaid within 5 years.

Note 19 Other current liabilities

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
VAT liabilities	272	195
Other taxes and fees	2,049	2,767
Other	315	2,374
Less liabilities attributable to assets which have been transferred to KDev Investments Group	-	-2,561
Total	2,636	2,775

Note 20 Accrued expenses and deferred income

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Salaries and remuneration to employees	2,239	3,462
Accrued remuneration to Board of Directors	912	2,363
Accrued auditor and consultant fees	774	3,236
Payroll tax and accrued pension costs	3,465	2,952
Accrued employer's contributions	690	436
Other	1,442	1,187
Less liabilities attributable to assets which have been transferred to KDev Investments Group	-	-5,470
Total	9,522	8,166

Note 21 | Financial assets and liabilities

Financial assets and liabilities by category

Amounts in SEK 000	Financial assets at fair value through profit or loss		Loan and receivables	Other financial liabilities	Total carrying amount	Fair value
	Financial assets designated at FVTPL	Held for trading				
2013						
Shares and participations	1,630,037				1,630,037	1,630,037
Other financial assets	38,113				38,113	38,113
Accounts receivable			258		258	258
Current loans receivable			5,894		5,894	5,894
Short-term investments		165,334			165,334	165,334
Cash and cash equivalents			41,639		41,639	41,639
Total	1,668,150	165,334	47,791	0	1,881,275	1,881,275
Other financial liabilities				9,438	9,438	9,438
Accounts payable				3,779	3,779	3,779
Total				13,217	13,217	13,217
2012						
Shares and participations	246,122				246,122	246,122
Other financial assets	8,907				8,907	8,907
Accounts receivable			513		513	513
Current loans receivable			12,856		12,856	12,856
Short-term investments		174,160			174,160	174,160
Cash and cash equivalents			117,033		117,033	117,033
Total	255,029	174,160	130,402	0	559,591	559,591
Interest-bearing liabilities				0	0	0
Other financial liabilities				10,889	10,889	10,889
Accounts payable				4,215	4,215	4,215
Total				15,104	15,104	15,104

Short-term investments

Surplus liquidity that may temporarily arise in Karolinska Development is placed in fixed-income funds or interest-bearing instruments and is recognized as short-term investments in such case they have a remaining duration at the acquisition date exceeding 3 three months.

Fair value measurement

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

Level 1- Fair value determined on the basis of observed (unadjusted) quoted prices in an active market for identical assets and liabilities

Level 2- Fair value determined based on valuation models based on observable data for the asset or liability other than quoted prices included in Level 1

Level 3- Fair value determined based on valuation models where significant inputs are based on non-observable data

Group's assets and liabilities at fair value as of 31 December 2013

Amounts in SEK 000	Level 1	Level 2	Level 3	Total
Financial assets				
Shares and participations	0	0	1,630,037	1,630,037
Other financial receivables	0	0	38,113	38,113
Accounts receivable	0	258	0	258
Current loans receivable	0	5,894	0	5,894
Short-term investments	165,334	0	0	165,334
Cash and cash equivalents	41,639	0	0	41,639
Total	206,973	6,152	1,668,150	1,881,275
Financial liabilities				
Other financial liabilities	0	0	9,438	9,438
Accounts payable	0	3,779	0	3,779
Total	0	3,779	9,438	13,217

Group's assets and liabilities at fair value as of 31 December 2012

Amounts in SEK 000	Level 1	Level 2	Level 3	Total
Financial assets				
Shares and participations	0	0	246,122	246,122
Other financial receivables	0	0	8,907	8,907
Accounts receivable	0	513	0	513
Current loans receivable	0	12,856	0	12,856
Short-term investments	174,160	0	0	174,160
Cash and cash equivalents	117,033	0	0	117,033
Total	291,193	13,369	255,029	559,591
Financial liabilities				
Other financial liabilities	0	0	10,889	10,889
Accounts payable	0	4,215	0	4,215
Total	0	4,215	10,889	15,104

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

Shares in joint ventures, associated companies and other long-term holdings (unlisted holdings)

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

Loans receivable, short-term related parties

Fair value is based on market prices and generally accepted methods, which means that future cash flows have been discounted at the current rate for the remaining term.

Financial assets and liabilities at amortized cost

A fair value estimate based on discounted future cash flows, where the most significant input is a discount rate that reflects the counterparty's credit risk, does not produce a significant difference compared with the carrying amounts of recognized financial assets and liabilities in Level 2. The carrying amounts of all financial assets and liabilities are therefore considered a good approximation of fair value.

Changes in financial assets on level 3 in 2013

Amounts in SEK 000	Shares in joint ventures/ associated companies	Other long-term securities holdings	Other financial assets	Total
At beginning of the year	219,173	26,949	8,907	255,029
Total recognized gains and losses	-153,711	-2,289	0	-156,000
Acquisitions	244,379	8	29,206	273,593
Disposals	-205,054	-100	-	-205,154
Reclassifications from subsidiaries	1,500,682	0	-	1,500,682
Carrying amount at year-end	1,605,469	24,568	38,113	1,668,150
Gains and losses in profit/ loss for the year for assets included in the closing balance				
Total unrealized gains and losses for the period included in profit/loss	-153,711	-2,289	0	-156,000
Total	-153,711	-2,289	0	-156,000

Changes in financial assets on level 3 in 2012

Amounts in SEK 000	Shares in joint ventures/ associated companies	Other long-term securities holdings	Other financial assets	Total
At beginning of the year	980,276	24,587	-	1,004,863
Total recognized gains and losses	-87,694	902	0	-86,792
Acquisitions	148,189	1,460	8,907	158,556
Disposals	-72,681	0	-	-72,681
Assets which will be transferred to KDev Investments Group	-570,405	0	-	-570,405
Reclassifications till subsidiaries	-178,512	0	-	-178,512
Carrying amount at year-end	219,173	26,949	8,907	255,029
Gains and losses in profit/ loss for the year for assets included in the closing balance				
Total unrealized gains and losses for the period included in profit/loss	-87,694	902	0	-86,792
Total	-87,694	902	0	-86,792

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. 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. At year-end 2012, 82% of the fair value was based on valuations of recent transactions. At year-end 2013 the corresponding number 0%. 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. Present value calculations are made with discounted cash flows which comprise:

- Estimated revenue, which generally consist of one-time milestone payments and royalty payments on sales. The estimated contract value (including royalties) is based on an estimate of sales potential and the buyer's development, manufacturing and marketing costs for the particular project. Contract value is based on a value allocation principle in which the seller's portion of the total value increases with the maturation of the project. In the model, the portfolio company receives approximately 40% of the total rNPV after Phase II.
- Sales forecasts are made by estimating the total patient population, target patient population, prevalence and treatable patients, market penetration and treatment costs in the US, Europe and the Japanese market. These markets represent approximately 80% of global pharmaceutical sales in 2010 (IMS).
- Estimates are made regarding product launch year and time of exit based on development plans. Drug licensing is usually assumed to be carried out after Phase II. For medical technology companies, an exit is usually assumed after launch of the product. Sales are then based on these estimated times together with the product's expected patent expiry, after which sales are assumed to decrease sharply.
- Estimates are made of the cost of each phase of development based either on the companies' forecasts or according to industry standards.
- Revenue and expenses are probability adjusted for each phase of development according to accepted statistics.
- Two different discount rates (WACC) are calculated to discount net cash flow from each project: a "Biotechnology WACC" for the in-house development period and a lower discount rate from the time the project is expected to be licensed to global pharmaceutical companies, a "Pharma WACC." The components of the discount rates are (i) the risk-free interest, represented by the Swedish Riksbank's 10-year government bond, (ii) the market risk premium, defined as the difference between the expected annuity quote and risk-free interest on the NASDAQ OMX stock exchange, and (iii) the premium supplement for private/small cap companies, which is a supplement to the market risk premium which represents the risk supplement for project companies with illiquid shares. The premium is collected from companies with a market capitalization under SEK 100m on the NASDAQ OMX stock exchange. The premium sup-

plement for private/small cap companies constitutes the difference between the Biotechnology WACC and Pharma WACC.

On 31 December 2013, the Biotechnology WACC was 11.90% (11.68%) and the Pharma WACC was 8.20% (7.78%).

To estimate the effect of changes in the discount rate on the portfolio valuation, WACC has been adjusted by -1 percent and +1 percent.

Sensitivity analysis WACC, 31 December 2013

Amounts in SEKm	WACC adjust- ment -1%		Biotech WACC: 11.90% Pharma WACC: 8.20%		WACC adjust- ment +1%	
	Fair value	Change	Fair value	Fair value	Change	Change
Fair value difference for shares in portfolio companies	1,935.3	205.9	1,729.5	1,549.6	-179.9	

- Current tax rates are used and exchange rates calculated according to historical averages.

A change in any of these assumptions affects the valuation and may if significant have a material effect on the Group's results.

The Group has a team responsible for the fair value measurements of the valuation of portfolio company holdings required for the financial reporting according to IPEV, including fair values according to Level 3. All valuations in Level 3 are based on assumptions and judgments that management considers reasonable under current circumstances. This team reports directly to the CFO. Significant events that have occurred since the above-mentioned time of measurement have been taken into account in the measurement to the extent they would have affected the value on the closing date. Companies that have not been valued after transactions that have included third parties or present value calculations have been valued either at net asset value or, for early-stage development projects, the amount invested by Karolinska Development.

Financial risks

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

Currency risk

Currency risk is the risk that changes in exchange rates will negatively impact the Group. The Group's foreign exchange exposure consists of transaction exposure resulting in exposure in foreign currency linked to the contractual cash flows and statement of financial position items where changes in exchange rates affect the results and cash flows. The Group's exposure to currency risk is not significant.

Credit risk

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

The credit risk in cash, cash equivalents and short-term investments is limited as the Group's counterparties are banks with high credit ratings.

Assets exposed to credit risk

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Accounts receivable	258	513
Other current receivables	3,803	3,955
Short-term investments	165,334	174,160
Cash and cash equivalents	41,639	117,033
Maximum exposure to credit risk	211,034	295,661

Price risk

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

Interest risk

Interest risk is the risk that changes in market interest rates affect cash flow or the fair value of financial assets or liabilities.

Liquidity risk

Liquidity risk is the risk that the Group cannot meet its short-term payment obligations. The Group's guidelines state that the liquidity reserve must remain at such a level that it meets the Group's ongoing liquidity requirements and requirements for investments in portfolio companies for the following six-month period. The Company's liquid funds on the closing date provide Karolinska Development with the scope to maintain an active strategy with regard to investments in the portfolio companies for 12 months. This makes it possible to retain current ownership interests in the portfolio companies.

Amounts in SEK 000	Within 3 months	3-12 months	1-5 years	Over 5 years	Total
2013					
Interest-bearing liabilities	0	0	0	0	0
Accounts payable and other liabilities	3,779	0	0	0	3,779
Other current liabilities	2,636	0	0	0	2,636
Total	6,415	0	0	0	6,415
2012					
Interest-bearing liabilities	0	0	1,575	0	1,575
Accounts payable and other liabilities	4,215	0	0	0	4,215
Other current liabilities	2,775	0	0	0	2,775
Total	6,990	0	1,575	0	8,565

Management of capital risks

The Group's capital management objective is to ensure the Group's capacity to continue operations, generate reasonable returns for shareholders and provide benefits for other stakeholders. The Group's policy is to minimize the risks in capital management. The Group's investment guidelines require surplus liquidity to be managed by an outside manager. The portfolio has an average maturity of no longer than 1.5 years and is invested in fixed income funds or interest-bearing instruments.

Note 22 Pledged assets and contingent liabilities

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Pledged assets		
Endowment insurance	3,315	2,623
Total pledged assets	3,315	2,623
Investment commitments		
Uminova	0	1,000
Biocelx	0	200
Total contingent liabilities	0	1,200
Total	3,315	3,823

Endowment insurance

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

In accordance with IAS 19 and the regulations for defined contribution pension plans, the Group therefore reports no assets or liabilities, with the exception of special payroll contributions, related to these endowment insurance policies. The Parent Company recognizes an asset and corresponding liability.

Other contingent liabilities

KIAB

In January 2008, Karolinska Development and Karolinska Institutet Innovations AB (KIAB) entered a deal flow agreement to ensure Karolinska Development's access to research projects through KIAB's flow of innovations from cutting-edge research at Karolinska Institutet and other seats of learning in the Nordic countries. According to the agreement, Karolinska Development has a right of first refusal to invest in projects evaluated by KIAB. The agreement runs through January 2018 and will be extended until further notice with a notice period of three years unless notice of termination has been given at least three years prior. For each in-depth evaluation, KIAB is entitled to compensation with a mark-up of 100 percent on KIAB's internal costs and a mark-up of 10 percent on external costs. In addition, KIAB is entitled to a success fee corresponding to 6 percent of Karolinska Development's estimated accumulated result before financial items and tax as of 1 January 2008, which includes a so-called threshold amount of SEK 652m. No success fee is paid before the accumulated result amounts to at least SEK 652m, after which only surplus amounts are used as the basis of calculation. To be used as a basis of calculation, the accumulated result must be cash positive. At year-end 2012, the accumulated deficit was SEK -1,301m.

The basis of calculation for the success fee was established after the 2013 AGM. Since the calculation for 2013 leads to a negative accumulated result, no success fee will be charged for 2013.

Note 23 Related parties

Affiliates

The Parent Company has a related party relationship with its subsidiaries, joint ventures, associated companies and the companies in the Karolinska Institute Holding AB Group.

The Company has entered into a deal flow agreement with KIAB (see description above under contingent liabilities), a wholly owned subsidiary of KIHAB, one of Karolinska Development's largest shareholders. Within the framework of the agreement, Karolinska Development has compensated KIAB for evaluation expenses during the reporting period. Furthermore, Karolinska Development has rendered services to both KIAB and the portfolio companies on technical studies and administration. During the reporting period, KIHAB rendered administrative and accounting services for Karolinska Development. The prices of these services rendered are market based.

Karolinska Development and the European investment fund ("EIF") have entered into an agreement whereby EIF invests in parallel with Karolinska Development in portfolio companies. The investments are made through KCIF Co-Investment KB ("KCIF"). In November 2009, KCIF entered into an agreement with Karolinska Development according to which KCIF will invest in parallel with Karolinska Development at a ratio of 27:73 (KCIF: Karolinska Development) on the condition that certain stated investment criteria are fulfilled. The investors and limited partners in KCIF are EIF, which has committed EUR 21.4m, and Karolinska Development, which has committed EUR 7.5m. The amounts are paid to KCIF as needed to make investments, to cover KCIF's expenses, and to pay an annual management fee to KCIF Fund Management AB ("FMAB"), a limited partner responsible for the operation of KCIF. The management fee for the financial year 2013 amounted to 75 (0) KSEK.

KMAB is 37.5 percent owned by Karolinska Development, 25 percent by KIAB and 37.5 percent by investment managers employed by Karolinska Development. The investment managers hold high-vote shares and together control a majority of the votes in KMAB. Karolinska Development, KIAB and the investment managers

have entered into a shareholder agreement regarding KMAB. The shareholder agreement includes a number of rules to protect the minority shareholders, Karolinska Development and KIAB.

Compensation and profit distribution

FMAB is entitled to an annual management fee corresponding to 2.5 percent of the capital committed to KCIF during the investment period and 1 percent of invested capital thereafter. In practice, FMAB fulfills its obligations to manage the operations of KCIF by purchasing services from Karolinska Development according to a service agreement. The service agreement entitles Karolinska Development to annual compensation equivalent to what remains of the management fee after deducting FMAB's other expenses and a certain buffer for future expenses in FMAB. Any dividends from KCIF will essentially be distributed as follows. First, EIF and Karolinska Development will receive an amount corresponding to the portion of the committed capital paid to KCIF at the time of the dividend payment and annual interest of 6 percent on this amount. Secondly, 80 percent of the remaining funds will be distributed to EIF and Karolinska Development in proportion to their capital investment. The remaining 20 percent will be distributed to Karolinska Development on the condition that 25 percent of the amount is redistributed to KIAB according to the deal flow agreement (see above) and at least 37.5 percent is redistributed to the investment managers through Karolinska Development's profit-sharing program.

Through its ownership and managerial role, Karolinska Development has concluded that it controls FMAB and therefore considers FMAB to be a subsidiary. The indirect ownership in the portfolio companies through KCIF holding has been included in Karolinska Development's share of the portfolio companies

Amounts in SEK 000	2013			2012		
	Sale of services	Interest income	Purchase of services	Sale of services	Interest income	Purchase of services
Associate relationship						
Owner: Karolinska Institutet Holding Group	97	0	2,877	230	0	8,002
(of which rental cost)			(2,375)			(1,961)
KCIF Co-Investment Fund KB	75	0	0	0	0	0
Other joint ventures and associated companies	3,291	3,786	0	821	2,828	0
Total	3,463	3,786	2,877	1,051	2,828	8,002

Amounts in SEK 000	31 Dec 2013		31 Dec 2012	
	Liability to associate	Receivable from associate	Liability to associate	Receivable from associate
Associate relationship				
Karolinska Institutet Holding Group	8	3	813	106
Joint ventures and associated companies	0	6,706	0	13,548
Total	8	6,708	813	13,654

Note 24 Capital gain on sale of shares in KDev Investments AB

About the transaction

During the period, Karolinska Development transferred 13 of its portfolio company holdings to the subsidiary KDev Investments AB. On 7 March 2013, Rosetta Capital IV LP acquired a 13.66% share in KDev Investments AB for a total purchase price of SEK 220m. Of a total of 1,073,300 shares outstanding in KDev Investments AB, 1,000,000 are common shares and 73,300 are preference shares. Rosetta Capital IV LP acquired 73,300 common shares and 73,300 preference shares in KDev Investments AB.

Portfolio companies in the transaction

KDev Investments Group comprises 13 companies representing development projects in various phases and various areas. Seven of the companies develop drugs and have projects in clinical trials: Akinion Pharmaceuticals AB, Aprea AB and Axelar AB, which are active in oncology; Dilafor AB and Umecrine Mood, which develop treatments in the area of women's health; Dilaforette Holding AB Group, which develops sevuparin for use against malaria and sickle cell anemia; and Pergamum AB, which develops Karolinska Development's wound healing and dermatology portfolio. Three companies have development projects in or entering preclinical development: Biosergen AS (systemic fungal infections), Clanotech AB (eye diseases) and NovaSAID AB (inflammatory diseases). Three companies are involved in the development of technology products: Inhalation Sciences Sweden AB, NeoDynamics AB and Promimic AB.

Consequences for financial reporting

Following the transaction, the sub-group KDev Investments is classified as a joint venture, as Karolinska Development and Rosetta Capital IV LP have joint control of KDev Investments, and is recognized at fair value with changes in value recognized through profit or loss.

Earnings impact

The earnings impact during the period attributable to the transaction amounted to SEK 404.6m, of which SEK 68.2m relates to a capital gain and the remaining SEK 336.4m to the revaluation to fair value of Karolinska Development's remaining holding (86.34%) in KDev Investments Group.

Recognized gain in connection with structural transaction involving KDev Investments AB

Amounts in SEK 000	Group Full-year
Purchase price 13.66% of KDev Investments AB	220,000 ¹
Fair value of remaining holding	1,295,689
Total	1,515,689

Less assets recognized prospectively in the joint venture KDev Investments Group

-1,111,043

Recognized gain **404,646**

¹ Of which the first tranche of SEK 190.8m was received at closing and the remaining SEK 29.2m is recognized in other financial assets.

Distribution of recognized gain between capital gain on sale and revaluation of remaining holding at fair value

Amounts in SEK 000	Group Full-year
Purchase price 13.66% of KDev Investments AB	220,000
Less 13.66% of net assets	-151,768
Capital gain on sale	68,232
Fair value of remaining holding	1,295,689
Less 86.34% of net assets	-959,275
Revaluation of remaining holding at fair value	336,414

Management of KDev Investments AB

Karolinska Development owns 86.98% of the shares in KDev Investments AB. Management of the company is governed by a shareholders' agreement. The parties have joint control of KDev Investments AB. Karolinska Development and Rosetta intend to invest in the portfolio companies in accordance with Karolinska Development's plans prior to the transaction.

Terms for the preference shares

Rosetta's preference shares will have preference to profit distributions as explained below, after which allocations will be made between holders of common shares.

- (i) 100% of total future returns up to SEK 220m after Karolinska Development has received the remainder of the purchase price amounting to SEK 29.2m
- (ii) 30% of total future returns between SEK 220m and SEK 880m
- (iii) 18.33% of total future returns between SEK 880m and SEK 1,320m
- (iv) 0% of total future returns over SEK 1,320m

Put option

According to the transfer agreement, Karolinska Development is obligated, under certain conditions, to redeem Rosetta's shares in KDev Investments AB on or after 7 March 2018. According to the terms, Rosetta has the right to request a redemption if Rosetta has not received a return equivalent to 2.5 times the capital it invested to acquire the shares in KDev Investments AB. The value of the put option is based on the fair value of the shares in KDev Investments which Rosetta owns at the time of redemption. The obligation is limited to a value corresponding to ten percent of the shares outstanding in Karolinska Development and can be fulfilled through the issuance of shares or is payable in cash. Karolinska Development has the right to choose the form of payment. Karolinska Development estimates the fair value of the put option in issue at the end of the reporting period to nil.

Cash and cash equivalents provisionally allocated for expected follow-on investments

According to the transfer agreement, Karolinska Development has provisionally allocated cash and cash equivalents for expected follow-on investments in KDev Investment's portfolio companies amounting to SEK 178.1m.

Note 25 Assets and liabilities which have been transferred to KDev Investments Group (year 2012)

On 21 December 2012, Karolinska Development signed an agreement with Rosetta Capital Limited on the sale of a minority share in Karolinska Development's holdings in 13 of its portfolio companies. The transaction was finalized during the first quarter 2013. Karolinska Development has transferred the holdings in 13 of its portfolio companies to a new investment company, KDev Investments AB. Karolinska Development is the majority owner of KDev Investments AB. The shareholders have entered into a shareholder's agreement on the management of KDev Investments AB, whereby Karolinska Development has relinquished controlling interest in the KDev Investments Group. After the transaction, Karolinska Development shares control with Rosetta, due to which the KDev Investments Group is a joint venture of Karolinska Development and is recognized at fair value in the consolidated statement of financial position. The assets and liabilities attributable to KDev Investment Group have been recognized separately in the statement of financial position, in accordance with accounting standard IFRS 5.

Assets which have been transferred to KDev Investments Group

Amounts in SEK 000	Group 31 Dec 2013
Intangible assets	998,776
Tangible assets	362
Shares in joint ventures and associated companies	570,405
Other current assets	2,896
Cash and cash equivalents	59,586
Total	1,632,025

Liabilities attributable to assets which have been transferred to KDev Investments Group

Amounts in SEK 000	Group 31 Dec 2013
Deferred taxes	151,278
Interest-bearing liabilities	1,575
Accounts payable	3,878
Other current liabilities	8,030
Total	164,761

Note 26 Significant events after the closing date

See Directors' report, page 54.

Note 27 The Parent Company's accounting policies

Parent Company's accounting policies

The Parent Company's annual report has been prepared in accordance with the Swedish Annual Accounts Act (1995:1554) and recommendation RFR 2 Accounting for Legal Entities from the Swedish Financial Reporting Board. Statements UFR 3-9 from the Swedish Financial Reporting Board have been applied as well. Application of RFR 2 means that the Parent Company will apply all EU-approved IFRS as far as possible within the framework of the Annual Accounts Act and the Pension Obligations Vesting Act with regard to the relationship between reporting and taxation. The policies described in Note 1 regarding the Group also apply to the Parent Company unless otherwise indicated below.

The following accounting policies for the Parent Company have been applied consistently to all periods presented in the Parent Company's financial statements.

Subsidiaries

Shares in subsidiaries are recognized at acquisition cost in the Parent Company's financial statements. Acquisition-related costs for subsidiaries, which are expensed in the consolidated financial statements, comprise a portion of the acquisition cost of shares in subsidiaries.

Associated companies and joint ventures

Shares in associated companies and joint ventures are recognized at cost in the Parent Company's financial statements. Dividends are recognized as revenue when these are adopted by the Annual General Meeting.

Other long-term securities holdings

Shares in other long-term securities holdings are recognized at cost in the Parent Company's financial statements.

Impairments

The Company reports holdings in subsidiaries, joint ventures, associated companies and other long-term securities holdings according to the cost method. If holdings in subsidiaries, joint ventures, associated companies or other long-term securities holdings are valued at below cost on the closing date, the holding is written down to the lower value.

Shareholder contributions

Shareholder contributions are recognized directly against shareholders' equity and in the shares and participations of the contributor to the extent that impairment is not required.

Pensions

In the Parent Company, the endowment insurance owned by the Company is recognized at acquisition cost in the statement of financial position as a financial asset. The pension obligation is recognized as a provision for an equal amount.

Changes in accounting policies

The changes in RFR 2 have not had a significant effect on the Parent Company's financial statements

Note 28 Information on the Parent Company

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

Note 29 Revenue distribution

Amounts in SEK 000	2013	2012
Service revenue from Group companies	4,908	2,695
Invoiced costs	40	1,291
Total revenue	4,948	3,986

Note 30 Other external expenses

Auditor and consultant fees

Amounts in SEK 000	2013	2012
<i>Deloitte</i>		
Audit services	665	680
Audit related services	311	323
Tax consulting	771	579
Other services	0	96
Total	1,747	1,678

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

Note 31 Operating leases

During the year, lease payments for premises have been expensed in an amount equivalent to SEK 1,708 thousand (1,482). Future leasing fees will be paid according to the table below.

Amounts in SEK 000	2013	2012
Within one year	1,455	1,148
Between one and five years	2,182	0
Total	3,637	1,148

Note 32 Employees and personnel costs

Average number of employees

Full-time equivalent	2013	Of whom men	2012	Of whom men
Parent Company	14	79%	16	75%
Total	14	79%	16	75%

Employee benefits

Amounts in SEK 000	2013	2012
Salaries and remuneration	21,116	19,309
Social security costs	8,085	6,812
Pension costs	5,792	4,697
Total	34,993	30,818

Salaries and other remuneration distributed between Board members and other employees

For further information regarding parent company compensation, see note 6.

Amounts in SEK 000	2013		2012	
	Board and CEO	Other employees	Board and CEO	Other employees
Salaries and remuneration	7,440	13,676	8,410	10,899
Pension costs	1,601	4,191	1,621	3,076
Total	9,041	17,867	10,031	13,975

Note 33 Impairment

Amounts in SEK 000	2013	2012
Impairment of shares in subsidiaries	-20,954	-13,537
Impairment of shares in joint ventures and associated companies	-447	-106,541
Impairment of other long-term securities holdings	-3,300	0
Total	-24,701	-120,078

Note 34 Result on sale of portfolio companies

Amounts in SEK 000	2013	2012
Capital gain/loss		
BioChromix AB	-3,734	0
BioChromix Pharma AB	-29,790	0
Independent Pharmaceutica AB	0	47
KDev Exploratory AB	755	0
KDev Investments AB	123,678	0
Oncopeptides AB	0	49,722
ProNoxis AB	0	-6,500
Gain/loss on sale of portfolio companies	90,909	43,269

The capital gain related to KDev Investments AB resulted from the sale of 13.66% to Rosetta Capital IV LP.

Note 35 Interest income and similar income

Amounts in SEK 000	2013	2012
Interest income	5,888	4,655
Change in value of short-term investments	1,078	7,334
Foreign currency exchange rate gains	673	0
Reversal of impaired loans receivable from joint ventures and associated companies	31,976	0
Other financial income	384	0
Total	39,999	11,989

Note 36 Interest expenses and similar expenses

Amounts in SEK 000	2013	2012
Interest expenses	-5	-4
Exchange rate losses	-139	-85
Impairment of receivables from joint ventures and associated companies	0	-31,976
Total	-144	-32,065

Note 37 Taxes

Amounts in SEK 000	%	2013	%	2012
Profit/loss before tax		47,314		-152,711
Income tax expense calculated at applicable rate in the Parent Company	22.0%	-10,409	26.3%	40,163
Tax effect of				
Non-deductible expenses		-14,254		-40,174
Tax-exempt income		34,497		11,476
Increase in tax losses carried forward without corresponding capitalization of deferred tax		-9,834		-11,465
Recognized tax	0.0%	0	0.0%	0

Unrecognized deferred tax assets

Deductible temporary differences and tax losses carried forward for which deferred tax assets have not been recognized through profit or loss or the statement of financial position mainly refer to the deficits incurred in the Parent Company. Deferred tax assets have not been recognized for these deficits as it is unlikely that Karolinska Development AB will be able to offset the amounts against future taxable profits, despite that there is no time limit on the tax losses carried forward. Unrecognized deferred tax assets for Karolinska Development as of 31 December 2013 amounted to SEK 74,171 thousand (SEK 64,337 thousand), of which SEK 64,337 thousand (SEK 60,492 thousand) refers to deficits that are restricted by Group contributions and mergers.

Note 38 Tangible non-current assets

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Accumulated acquisition cost		
At beginning of the year	25	422
Acquisitions during the year	634	0
Sales and disposals	0	-397
Closing balance	659	25
Accumulated amortization and impairments		
At beginning of the year	-16	-380
Depreciation for the year	-114	-6
Sales and disposals	0	370
Closing balance	-130	-16
Carrying amount	529	9

Note 39 Shares in subsidiaries

Amounts in SEK 000	2013	2012
Accumulated book values		
At beginning of the year	440,479	252,545
Acquisitions during the year	21,786	81,949
Reclassifications to/from joint ventures and associated companies	-405,036	119,522
Disposals	-3,400	0
Impairment	-20,954	-13,537
Closing balance, book value	32,875	440,479

Specification of holdings in subsidiaries

Name	Total holding ¹		Book value in Parent Company	
	31 Dec 2013	31 Dec 2012	31 Dec 2013	31 Dec 2012
Amounts in SEK 000				
Akinion Pharmaceuticals AB ²	-	90.32%	-	63,070
Aprea AB ²	-	69.43%	-	119,235
Aprea Personal AB ²	-	69.43%	-	-
Avaris AB	94.87%	94.87%	362	369
Axelar AB ²	-	45.29%	-	73,343
ClanoTech AB ²	-	88.85%	-	46,692
HBV Theranostica AB	100.00%	100.00%	27	50
Inhalation Sciences Sweden AB ²	-	74.72%	-	28,238
KCIF Fund Management AB	37.50%	37.50%	190	143
KD Incentive AB	100.00%	100.00%	175	200
KDev Exploratory AB	-	100.00%	-	7,500
KDev Investments AB	-	100.00%	-	50
KDev Oncology AB	100.00%	100.00%	319	4,000
Gligen AB	100.00%	34.65%	-	-
Limone AB	100.00%	100.00%	197	8
NovaSAID AB ²	-	88.91%	-	74,407
Pharmanest AB	62.99%	60.24%	31,605	23,174
Total book value			32,875	440,479

¹ Including indirect ownership interest through portfolio company. Ownership interest corresponds to formal voting rights according to the participating interest. In addition, a shareholder agreement has been entered into in some cases giving Karolinska Development controlling interest.

² These companies were transferred to KDev Investments Group during the first quarter 2013.

Investments in subsidiaries

Amounts in SEK 000	2013	2012
Akinion Pharmaceuticals AB	0	15,000
Axelar AB	0	25,000
ClanoTech AB	0	9,500
HBV Theranostica AB	4	200
Inhalation Sciences Sweden AB	0	4,000
KCIF Fund Management AB	200	100
KD Incentive AB	150	0
KDev Exploratory AB	11,000	13,000
KDev Investments AB	0	50
KDev Oncology AB	1,600	3,000
Limone AB	400	4,000
NovaSAID AB	0	0
Pharmanest AB	8,432	8,099
Total investments in subsidiaries	21,786	81,949

Non-cash investments in subsidiaries

Amounts in SEK 000	2013	2012
Other non-cash investments		
HBV Theranostica AB	4	150
Total non-cash investments	4	150

Note 40 Shares in joint ventures and associated companies

Amounts in SEK 000	2013	2012
Accumulated book value		
At beginning of the year	505,923	612,893
Acquisitions during the year	244,379	148,189
Reclassifications to/from subsidiaries	405,036	-119,522
Divestments	-125,883	-29,096
Impairment	-447	-106,541
Closing balance at book value	1,029,008	505,923

Specification of holdings in joint ventures

Amounts in SEK 000	Total holding ¹		Book value in Parent Company	
	31 Dec 2013	31 Dec 2012	31 Dec 2013	31 Dec 2012
Athera Biotechnologies AB	65.44%	65.02%	101,087	97,438
BioChromix Pharma AB (divested)	-	76.47%	-	27,850
Bioneris AB (in liquidation)	26.31%	26.31%	0	0
Biosergen AS ²	-	60.26%	-	21,370
Dilafor AB ²	-	55.86%	-	93,376
Dilaforette Holding AB ²	-	66.34%	-	24,438
Dilaforette AB ²	-	66.34%	-	-
Forendo Pharma Oy	20.70%	-	9,530	-
KDev Investments AB	86.98%	-	793,341	-
Akinion Pharmaceuticals AB	80.62%	-	-	-
Aprea AB	61.66%	-	-	-
Aprea Personal AB	61.66%	-	-	-
Axelar AB	43.26%	-	-	-
Biosergen AS	59.69%	-	-	-
Clanotech AB	79.29%	-	-	-
Dilafor AB	49.35%	-	-	-
Dilaforette Holding AB	59.92%	-	-	-
Dilaforette AB	59.92%	-	-	-
Inhalation Sciences Sweden AB	67.70%	-	-	-
NeoDynamics AB	18.02%	-	-	-
NovaSAID AB	77.34%	-	-	-
Pergamum AB	56.31%	-	-	-
DermaGen AB	56.31%	-	-	-
Laurantis Pharma Oy	3.13%	-	-	-
Lipo peptide AB	56.31%	-	-	-
XImmune AB	4.69%	-	-	-
Promimic AB	28.57%	-	-	-
Umecrine Mood AB	38.65%	-	-	-
Lipidor AB	52.55%	46.13%	18,239	12,998
NeoDynamics AB ²	-	20.72%	-	11,097
Pergamum AB ²	-	61.93%	-	104,400
DermaGen AB ²	-	61.93%	-	-
Laurantis Pharma OY ²	-	3.44%	-	-
Lipo peptide AB ²	-	61.93%	-	-
XImmune AB ²	-	5.16%	-	-
Umecrine Cognition AB	58.47%	54.17%	21,700	14,700
Umecrine Mood AB ²	-	42.54%	-	31,007
XSpray Microparticles AB	62.92%	61.81%	54,075	36,628
Total book value			997,972	475,302

¹ Including indirect ownership interest through portfolio company. Ownership interest corresponds to formal voting rights according to the participating interest. In addition, a shareholder agreement has been entered into in some cases giving Karolinska Development controlling interest.

² These companies were transferred to KDev Investments Group during the first quarter 2013.

Specification of holdings in associated companies

Amounts in SEK 000	Total holding ¹		Book value in Parent Company	
	31 Dec 2013	31 Dec 2012	31 Dec 2013	31 Dec 2012
KCIF Co-Investment Fund KB	26.00%	26.00%	21,181	13,871
OssDsign AB	25.81%	15.63%	9,855	3,650
Promimic AB ²	-	30.12%	-	13,100
Total book value			31,036	30,621

¹ Including indirect ownership interest through portfolio company. Ownership interest corresponds to formal voting rights according to the participating interest. In addition, a shareholder agreement has been entered into in some cases giving Karolinska Development controlling interest.

² Promimic was transferred to KDev Investments Group during the first quarter 2013.

Investments in joint ventures and associated companies

Amounts in SEK 000	2013	2012
Apra AB	0	72,636
Athera Biotechnologies AB	3,650	22,641
Avaris AB	0	444
BioChromix Pharma AB	2,000	8,500
Dilafor AB	0	4,545
Dilaforette Holding AB	0	17,250
Forendo Pharma Oy	9,530	0
KCIF Co-Investment Fund KB	7,756	3,360
KDev Investments AB	185,549	0
Lipidor AB	5,242	3,998
OssDsign AB	6,205	0
Promimic AB	0	5,000
ProNoxis AB	0	1,000
Umecrine Cognition AB	7,000	0
Umecrine Mood AB	0	5,895
XSpray Microparticles AB	17,447	2,920
Total investments in joint ventures and associated companies	244,379	148,189

Non-cash investments in joint ventures and associated companies

Amounts in SEK 000	2013	2012
Conversions of previously provided loans		
Dilafor AB	0	4,545
KDev Investments AB	64,264	0
XSpray Microparticles AB	3,785	0
Other non-cash investments		
Apra AB	0	72,636
Avaris AB	0	444
Total non-cash investments	68,049	77,625

Note 41 Other long-term securities holdings

Amounts in SEK 000	2013	2012
Accumulated book value		
At beginning of the year	15,841	14,381
Acquisitions during the year	8	1,460
Disposals	-3,835	0
Impairment	-3,300	0
Closing balance at book value	8,714	15,841

Specification of holdings in other long-term securities

Name	Total holding ¹		Book value in Parent Company	
	31 Dec 2013	31 Dec 2012	31 Dec 2013	31 Dec 2012
BioArctic NeuroScience AB	3.17%	3.17%	600	600
BioChromix AB (divested)	-	13.94%	-	3,834
BioChromix Newco AB	12.72%	-	8	-
BioResonator AB (in liquidation)	7.62%	7.62%	0	0
CytoGuide Aps (in liquidation)	9.06%	9.06%	0	3,300
NephroGenex Inc.	0.58%	0.58%	709	709
Umecrine AB	10.41%	10.41%	7,398	7,398
Total book value			8,715	15,841

¹ Including indirect ownership interest through portfolio company. Ownership interest corresponds to formal voting rights according to the participating interest. In addition, a shareholder agreement has been entered into in some cases giving Karolinska Development controlling interest.

Investments in other long-term securities

Amounts in SEK 000	2013	2012
BioChromix AB	0	1,460
BioChromix Newco AB	8	0
Total investments in other long-term securities	8	1,460

Note 42 Loans receivable joint ventures and associated companies

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Loans receivable joint ventures and associated companies		
At beginning of the year	12,856	3,675
Loans provided	34,712	45,942
Reversal of impairments	30,000	0
Conversions	-66,897	-4,240
Repayments	-4,777	-2,475
Impairment losses	0	-30,000
Exchange rate differences	0	-46
Total	5,894	12,856

Note 43 Parent Company's holdings in subsidiaries, joint ventures and associated companies

Company	Registered office	Corporate Identity Number	Number of shares	Equity, SEK 000	Profit/loss, SEK 000
Akinion Pharmaceuticals AB	Solna	556777-0978	39,450	27,077	-16,802
Aprea AB	Stockholm	556631-2285	537,488	15,570	-23,575
Aprea Personal AB	Stockholm	556771-4034	1,000	100	0
Athera Biotechnologies AB	Solna	556620-6859	866,300	8,133	22
Avaris AB	Huddinge	556614-2112	443,580	359	-31
Axelar AB	Stockholm	556623-6708	147,158	37,111	-23,732
Biosergen AS	Trondheim	NO 687622075	4,506,669	3,570	-3,797
ClanoTech AB	Solna	556706-6658	61,975	10,024	-12,217
Dilafor AB	Stockholm	556642-1045	217,589	-13,149	-21,994
Dilaforette Holding AB	Stockholm	556851-9523	526,237	42,057	-102
Forendo Pharma Oy	Åbo	FI 2520329-3	762	19,265	-12,182
HBV Theranostica AB	Stockholm	556664-7268	218,334	25	-6
Inhalation Sciences Sweden AB	Solna	556665-6038	361,482	270	-5,521
KCIF Fund Management AB	Solna	556777-9219	37,500	246	-22
KCIF Co-Investment Fund KB	Solna	969744-8810	26	81,446	-1,722
KD Incentive AB	Solna	556745-7675	100,000	172	-31
KDev Investments AB	Solna	556880-1608	1,054,992	901,422	-4,516
KDev Oncology AB	Solna	556683-9345	313,345	347	-4,938
Limone AB	Stockholm	556759-9211	170,000	179	-229
Lipidor AB	Stockholm	556779-7500	897	1,676	-5,874
NeoDynamics AB	Stockholm	556656-3341	8,495	27,711	-7,769
NovaSAID AB	Solna	556669-2181	530,505	775	-667
OssDsign AB	Uppsala	556841-7546	26,084	9,114	-8,139
Pergamum AB	Solna	556759-9203	13,046,138	59,402	-17,656
Pharmanest AB	Solna	556785-1158	266,849	2,388	-16,639
Promimic AB	Göteborg	556657-7754	119,221	14,008	-1,414
Umecrine Cognition AB	Umeå	556698-3655	1,593,783	4,920	-9,950
Umecrine Mood AB	Umeå	556698-0750	1,796,423	11,259	-12,581
XSpray Microparticles AB	Solna	556649-3671	739,720	6,464	-20,756

Note 44 Accounts receivable

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Trade receivables not past due	202	207
Overdue receivables not considered bad debts		
1-30 days	0	201
31-90 days	0	1
91-180 days	0	0
>180 days	0	0
Total	202	409

No provisions for bad debt were considered necessary for any of the years above.

Note 45 Other current receivables

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Tax receivables	2,093	1,401
VAT receivables	374	1,057
Other	758	18
Total	3,225	2,476

Note 46 Prepaid expenses and accrued income

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Prepaid rental expenses	0	400
Accrued interest income	828	679
Insurance premiums	413	453
Other	236	931
Total	1,477	2,463

Note 47 Other current liabilities

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Other taxes and fees	1,546	1,490
Other	48	22
Total	1,594	1,512

Note 48 Accrued expenses and deferred income

Amounts in SEK 000	31 Dec 2013	31 Dec 2012
Salaries and remuneration to personnel	1,744	958
Remuneration to Board of Directors	911	1,089
Auditor and consulting fees	701	871
Payroll tax and accrued pension costs	3,109	3,011
Social security contributions	594	300
Other	1,055	292
Total	8,114	6,521

Note 49 Related parties

Affiliates

The Parent Company has a related party relationship with its subsidiaries, joint ventures and associated companies, as well as with the companies included in the Karolinska Institute Holding Group.

The Company has entered into a deal flow agreement with KIAB, a wholly owned subsidiary of KIHAB, one of Karolinska Development's largest shareholders. The agreement ensures the inflow of research projects which have been evaluated by KIAB. Within the framework of the agreement, Karolinska Development has compensated KIAB for development expenses during the reporting period. Furthermore, Karolinska Development has rendered services to both KIAB and the portfolio companies on technical studies and administration. During the reporting period, KIHAB rendered administrative and accounting services for Karolinska Development. The prices of these services rendered are market based.

Amounts in SEK 000	2013			2012		
	Sale of services	Interest income	Purchase of services	Sale of services	Interest income	Purchase of services
Associate relationship						
Owner: Karolinska Institutet Holding Group	97	0	1,912	230	0	6,754
(of which rental cost)			(1,708)			(1,144)
Subsidiaries	1,382	2	20	2,696	0	1
Joint ventures and associated companies	2,658	3,786	0	821	2,828	0
Total	4,137	3,788	1,932	3,747	2,828	6,755

Amounts in SEK 000	31 Dec 2013		31 Dec 2012	
	Liability to associate	Receivable from associate	Liability to associate	Receivable from associate
Associate relationship				
Owner: Karolinska Institutet Holding Group	8	3	813	106
Subsidiaries	0	497	0	474
Joint ventures and associated companies	0	6,665	0	13,548
Total	8	7,164	813	14,128

Note 50 Future changes in accounting policies

Karolinska Development considers itself to be an investment entity according to IFRS 10 Consolidated Financial Statements, which affects financial years beginning 1 January 2014 or later.

Karolinska Development AB aims to create value for investors, patients and researchers by developing innovations from world class science into products that can be sold or out-licensed with high returns. The business model is to SELECT the most commercially attractive medical innovations, DEVELOP innovations to the stage where the greatest return on investment can be achieved, and COMMERCIALIZE innovations through the sale of companies or out-licensing of products.

Karolinska Development AB obtains funds from investors/shareholders in connection with the issuance or sale of equity instruments/shares for the purpose of investing these funds in medical innovations and in that way generating a return to shareholders. Moreover, Karolinska Development monitors investments in all portfolio companies on the basis of fair value.

The rules for investment entities require Karolinska Development to prepare separate financial reports instead of consolidated accounts for the investment entity (the Group), where subsidiaries, joint ventures, associated companies and other financial investments are measured at fair value in the balance sheet with changes in value in profit or loss in accordance with IAS 39 Financial Instruments: Recognition and Measurement. According to the Swedish Financial Reporting Board, these separate financial statements meet the requirements for consolidated financial statements according to the Annual Accounts Act. Karolinska Development will also apply the other new and amended consolidation standards in the "package of five" as of 1 January 2014: IFRS 11 Joint Arrangements: IFRS 10 Consolidated Financial Statements, IFRS 12, Disclosure of Interests in Other Entities, IAS 27 Separate Financial Statements, and IAS 28 Investments in Associates and Joint Ventures. The change in accounting policy has been made in accordance with the transitional provisions in IFRS 10, whereby that the rules for investment companies are applied retroactively.

Amended accounting policy for shares in portfolio companies

Shares in portfolio companies as well as receivables from and liabilities to portfolio companies will be categorized as financial assets/liabilities at fair value through profit or loss. These assets and liabilities are recognized at estimated fair value on each closing date, while changes in value are recognized in the operating result. Transaction costs are recognized through profit or loss.

Summary of effects of change in accounting policy to investment company

The largest effects of the change in accounting policy are that:

- Investment companies do not consolidate subsidiaries. This means that the income statements, balance sheets and cash flows of previously consolidated subsidiaries are not included in the investment company's financial statements
- Deferred tax liabilities related to surplus values from subsidiary acquisitions are no longer recognized
- Karolinska Development no longer recognizes non-controlling interests, which amounted to SEK 354,294 thousand on 1 January 2013
- The portfolio companies' fair values are estimated based on Karolinska Development's ownership interest
- Of the previously recognized result from the transaction with Rosetta Capital IV LP of SEK 404,646 thousand, SEK 336,414 thousand relates to the revaluation to fair value of the remaining holdings. This amount is recognized by the investment company as an adjustment to opening equity at 1 January 2013, since all portfolio company holdings are measured at fair value
- The total effect of the transition to investment company recognized in opening equity at 1 January 2013 was SEK 37,798 thousand

The effects of the change in accounting policies on the Group's financial position, comprehensive income and cash flow at 1 January 2013 and 31 December 2013 are reported in the following tables.

Effects of change in accounting policy to investment company

Effects of change in accounting policy on income statement for full-year 2013

Amounts in SEK 000	2013 Full-year	Change in accounting policy	2013 Full-year (restated)
Revenue	9,940	-4,992	4,948
Other external expenses	-53,772	28,480	-25,292
Personnel costs	-58,745	20,455	-38,290
Depreciation and amortization of tangible and intangible non-current assets	-2,627	2,513	-114
Change in fair value of shares in portfolio companies	0	-154,713	-154,713
Change in fair value of shares in joint ventures and associated companies	-153,711	153,711	0
Change in fair value of other long-term securities holdings	-2,289	2,289	0
Result from sale of subsidiary	834	-834	0
Result from transaction with Rosetta Capital IV LP	404,646	-336,414	68,232
Operating profit/loss	144,276	-289,505	-145,229
Financial net	40,890	539	41,429
Profit/loss before tax	185,166	-288,966	-103,800
Deferred taxes	2,926	-2,926	0
Current taxes	0		0
NET PROFIT/LOSS FOR THE YEAR	188,092	-291,892	-103,800
Attributable to:			
Parent Company's shareholders	197,163	-300,963	-103,800
Non-controlling interests	-9,071	9,071	0
TOTAL	188,092	-291,892	-103,800

Effects of change in accounting policy on statement of comprehensive income for full-year 2013

Amounts in SEK 000	2013 Full-year	Change in accounting policy	2013 Full-year (restated)
Net profit/loss for the period	188,092	-291,892	-103,800
Total comprehensive income for the period	188,092	-291,892	-103,800
Attributable to:			
Parent Company's shareholders	197,163	-300,963	-103,800
Non-controlling interests	-9,071	9,071	0
TOTAL	188,092	-291,892	-103,800

Effects of change in accounting policy on earnings per share for full-year 2013

Amounts in SEK 000	2013 Full-year	Change in accounting policy	2013 Full-year (restated)
Earnings per share attributable to Parent Company's shareholders, weighted average, before and after dilution	4.08	-6.22	-2.15
Number of shares, weighted average	48,350,016		48,350,016

Effects of change in accounting policy on consolidated balance sheet for full-year 2013

Amounts in SEK 000	2013-01-01	Change in accounting policy	2013-01-01 (restated)	2013-12-31	Change in accounting policy	2013-12-31 (restated)
ASSETS						
Non-current assets						
Intangible non-current assets	9,864	-9,864	0	8,340	-8,340	0
Tangible non-current assets	4,985	-4,976	9	529		529
Shares in joint ventures and associated companies	219,173	-219,173	0	1,605,469	-1,605,469	0
Other long-term securities holdings	26,949	-26,949	0	24,568	-24,568	0
Shares in portfolio companies	0	1,773,675 ¹	1,773,675	0	1,729,465	1,729,465
Loans receivable portfolio companies	12,856		12,856	5,894		5,894
Other financial assets	8,907		8,907	38,113		38,113
Total non-current assets	282,734	1,512,713	1,795,447	1,682,913	91,088	1,774,001
Current assets						
Accounts receivable	513	-407	106	258	-255	3
Receivables from portfolio companies	0	563	563	0	254	254
Other short-term receivables	3,955	-2,495	1,460	3,803	-578	3,225
Prepaid expenses and accrued income	4,578	-2,115	2,463	1,767	-290	1,477
Short-term investments	174,160		174,160	165,334		165,334
Cash and cash equivalents	117,033	-8,353	108,680	41,639	-6,316	35,323
Total current assets	300,239	-12,807	287,432	212,801	-7,185	205,616
Assets which have been transferred to KDev Investments Group	1,632,025	-1,632,025	0	-	-	-
TOTAL TILLGÅNGAR	2,214,998	-132,119	2,082,879	1,895,714	83,903	1,979,617
EQUITY AND LIABILITIES						
Equity						
Share capital	24,266		24,266	24,266		24,266
Share premium	1,768,179		1,768,179	1,768,179		1,768,179
Retained earnings including net profit/loss for the year	-122,547	392,092	269,545	74,380	90,779	165,159
Equity attributable to Parent Company's shareholders	1,669,898	392,092	2,061,990	1,866,825	90,779	1,957,604
Non-controlling interests	354,294	-354,294	0	3,514	-3,514	0
Total equity	2,024,192	37,798	2,061,990	1,870,339	87,265	1,957,604
Long-term liabilities						
Other financial liabilities	10,889		10,889	9,438		9,438
Total long-term liabilities	10,889		10,889	9,438		9,438
Current liabilities						
Accounts payable	4,215	-1,705	2,510	3,779	-1,353	2,426
Liabilities to portfolio companies	0	473	473	0	442	442
Other current liabilities	2,775	-1,263	1,512	2,636	-1,043	1,593
Accrued expenses and prepaid income	8,166	-2,661	5,505	9,522	-1,408	8,114
Total current liabilities	15,156	-5,156	10,000	15,937	-3,362	12,575
Liabilities attributable to assets which have been transferred to KDev Investments Group	164,761	-164,761	0	-	-	-
Total liabilities	190,806	-169,917	20,889	25,375	-3,362	22,013
TOTAL EGET EQUITY AND LIABILITIES	2,214,998	-132,119	2,082,879	1,895,714	83,903	1,979,617

¹ Total fair value in the year-end report for 2012 amounted to SEK 1,827,190 thousand. Total fair value in the investment entity balance sheet is lower due to parts of the capital gain on the transaction with Rosetta occurred in Q1 2013.

Effects of change in accounting policy on statement of cash flows for full-year 2013

Amounts in SEK 000	2013 Full-year	Change in accounting policy	2013 Full-year (restated)
Operating activities			
Operating profit/loss	144,276	-289,505	-145,229
Adjustments for depreciation and amortization	2,627	-2,513	114
Adjustments for changes in fair value	156,000	-1,287	154,713
Result from transaction with Rosetta Capital IV LP	-404,646	336,414	-68,232
Realized change in value of short-term investments	1,062		1,062
Interest paid	-70	65	-5
Interest received	5,353	-36	5,317
Other items not affecting cash flow	2,171		2,171
Cash flow from operating activities before changes in working capital	-93,227	43,138	-50,089
Cash flow from changes in working capital			
Increase (-)/Decrease (+) in operating receivables	8,421	-7,305	1,116
Increase (-)/Decrease (+) in operating liabilities	2,779	-204	2,575
Cash flow from operating activities	-82,027	35,629	-46,398
Investing activities			
Investments in intangible non-current assets	-879	879	0
Investments in tangible non-current assets	-1,018	383	-635
Sale of tangible non-current assets	4,000	-4,000	0
Sale of subsidiaries	4,031	-4,031	0
Acquired/divested cash and cash equivalents in subsidiaries	-2,548	2,548	0
Investments in shares in portfolio companies	0	-198,120	-198,120
Sale of shares in portfolio companies	0	194,924	194,924
Investments in shares in joint ventures and associated companies	-176,330	176,330	0
Investments in other long-term securities	-8	8	0
Cash and cash equivalents which have been transferred to KDev Investments Group	-51,723	51,723	0
Change in short-term investments	7,105		7,105
Sale of shares in portfolio companies	190,893	-190,893	0
Loans provided to associated companies	-27,750		-27,750
Cash flow from investing activities	-54,227	29,751	-24,476
Financing activities			
Non-controlling interests' share of subsidiary issue	3,757	-3,757	0
Share repurchase	-2,483		-2,483
Cash flow from financing activities	1,274	-3,757	-2,483
Cash flow for the year	-134,980	61,623	-73,357
Cash and cash equivalents at beginning of the year	176,619	-67,939	108,680
CASH AND CASH EQUIVALENTS AT YEAR-END	41,639	-6,316	35,323

Signing of the annual financial statements

The Board of Directors and CEO hereby certify that the annual financial statements have been prepared according to the Annual Accounts Act and RFR 2 and that they provide a true and fair view of the Company's financial position and results and that the administration report provides a true and fair overview of the development of the Company's operations, position and results, and that it describes significant risks and factors of uncertainty factors facing the Company. The Board of Directors and CEO hereby certify that the consolidated accounts have been prepared according to International Financial Reporting Standards (IFRS), as adopted by the EU, and that they provide a true view of the Group's position and results and that the administration report provides

a true overview of the development of the Group's operations, position and results and that it describes significant risks and factors of uncertainty which the companies belonging to the Group face.

The annual financial statements and consolidated statements have been approved for presentation by the Board on 10 April 2014. The Group's income statement and statement of financial position and the Parent Company's income statement and statement of financial position will be presented for adoption by the Annual General Meeting of shareholders on 14 May 2014

Solna, 10 April 2014

Bo Jesper Hansen
Chairman

Per-Olof Edin
Board member

Rune Fransson
Board member

Klaus Wilgenbus
Board member

Charlotte Edenius
Board member

Vlad Artamonov
Board member

Hans Wigzell
Board member

Torbjörn Bjerke
CEO

Our Auditor's Report was presented on 10 April 2014

Deloitte AB

Thomas Strömberg
Authorized Public Accountant

Auditor's report

TO THE ANNUAL MEETING OF THE SHAREHOLDERS OF KAROLINSKA DEVELOPMENT AB (PUBL) CORPORATE IDENTITY NUMBER 556707-5048

Report on the annual accounts and consolidated accounts

We have audited the annual accounts and consolidated accounts of Karolinska Development AB (Publ) for the financial year 2013-01-01 – 2013-12-31. The annual accounts and consolidated accounts of the company are included in the printed version of this document on pages 53–96.

Responsibilities of the Board of Directors and the Managing Director for the annual accounts and consolidated accounts

The Board of Directors and the Managing Director are responsible for the preparation and fair presentation of these annual accounts in accordance with the Annual Accounts Act and of the consolidated accounts in accordance with International Financial Reporting Standards, as adopted by the EU, and the Annual Accounts Act, and for such internal control as the Board of Directors and the Managing Director determine is necessary to enable the preparation of annual accounts and consolidated accounts that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on these annual accounts and consolidated accounts based on our audit. We conducted our audit in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the annual accounts and consolidated accounts are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the annual accounts and consolidated accounts. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the annual accounts and consolidated accounts, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the company's preparation and fair presentation of the annual accounts and consolidated accounts in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Board of Directors and the Managing Director, as well as evaluating the overall presentation of the annual accounts and consolidated accounts.

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

Opinions

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the parent company as of 31 December 2013 and of its financial performance and its cash flows for the year then ended in accordance with the Annual Accounts Act. The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the group as of 31 December 2013 and of their financial performance

and cash flows for the year then ended in accordance with International Financial Reporting Standards, as adopted by the EU, and the Annual Accounts Act. The statutory administration report is consistent with the other parts of the annual accounts and consolidated accounts.

We therefore recommend that the annual meeting of shareholders adopt the income statement and balance sheet for the parent company and the group.

Report on other legal and regulatory requirements

In addition to our audit of the annual accounts and consolidated accounts, we have also audited the proposed appropriations of the company's profit or loss and the administration of the Board of Directors and the Managing Director of Karolinska Development AB (Publ) for the financial year 2013-01-01 – 2013-12-31.

Responsibilities of the Board of Directors and the Managing Director

The Board of Directors is responsible for the proposal for appropriations of the company's profit or loss, and the Board of Directors and the Managing Director are responsible for administration under the Companies Act.

Auditor's responsibility

Our responsibility is to express an opinion with reasonable assurance on the proposed appropriations of the company's profit or loss and on the administration based on our audit. We conducted the audit in accordance with generally accepted auditing standards in Sweden.

As a basis for our opinion on the Board of Directors' proposed appropriations of the company's profit or loss, we examined whether the proposal is in accordance with the Companies Act.

As a basis for our opinion concerning discharge from liability, in addition to our audit of the annual accounts and consolidated accounts, we examined significant decisions, actions taken and circumstances of the company in order to determine whether any member of the Board of Directors or the Managing Director is liable to the company. We also examined whether any member of the Board of Directors or the Managing Director has, in any other way, acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association.

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

Opinions

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

Stockholm, 10 April 2014
Deloitte AB
Signature on Swedish original

Thomas Strömberg
Authorized Public Accountant

Corporate Governance Report for 2013

INTRODUCTION

This Corporate Governance Report has been prepared in accordance with the Swedish Code of Corporate Governance, section 10, and the Swedish Annual Accounts Act, Chapter 6, §§ 6-9.

CORPORATE GOVERNANCE AT KAROLINSKA DEVELOPMENT

Application of the Code of Corporate Governance

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

Information on the Company's website

On its website, the Company has a special section for corporate governance issues under the section Corporate Governance (<http://www.karolinskadevelopment.com/en/ir/corporate-governance/>).

General meetings

The principles for the general meetings, decisions by the general meetings, the rights of the shareholders and how these rights are exercised, comply with applicable legal requirements.

Composition of the Board and functions, etc.

According to the Articles of Association, the Board shall consist of not less than three and not more than nine directors. Deputies shall not be appointed. Since the Annual General Meeting 2013, the Board consists of seven directors with no deputies.

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

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

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

The Annual General Meeting on May 14, 2013 authorized the Board, for the period up until the next annual general meeting to adopt decisions, whether on one or several occasions without pre-emption rights for the shareholders to issue new shares of series B up to a maximum of ten percent of the share capital. The authorization has not been exercised.

The Annual General Meeting also authorized the Board to decide on acquisition of up to 150,800 own shares to cover social security charges related to the PSP 2013 incentive program. The Board decided on August 21, 2013 to exercise the mandate. Repurchase of 93,685 shares was executed on September 3, 2013 at a price of SEK 26.50 per share. The company's total holding (including previous repurchase of 150,600 shares) is 244,285 shares.

Holdings of ten percent or more of the votes

There is one holding that represents more than one tenth of the voting rights for all shares in Karolinska Development, Karolinska Institutet Holding AB, the only holder of non-listed series A shares, with 27.65 percent of the votes (7.48 percent of the shares).

NOMINATION COMMITTEE

The five largest owners (as set forth in the share register kept by Euroclear Sweden AB as of 31 August 2013) have each appointed one member of the Nomination Committee. The members of the Nomination Committee have elected a chairman among themselves. The Nomination Committee for the Annual General Meeting 2014 consists of Gillis Cullin, Chairman, appointed by Östersjöstiftelsen (The Foundation of Baltic and East European Studies); Rune Fransson, appointed by Karolinska Institutet Holding AB; Peter Lundqvist, appointed by Tredje AP-fonden (Third Swedish National Pension Fund); Claes Kinell, appointed by Jarla Investeringar AB; and Todd Plutsky, appointed by Coastal Investment Management LLC.

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

BOARD OF DIRECTORS

Composition of the Board

The Company's Board consists of seven directors, Bo Jesper Hansen (Chairman), Hans Wigzell, Per-Olof Edin, Rune Fransson, Klaus Wilgenbus, Charlotte Edenius and Vlad Artamonov. None of the directors is employed by the Company

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

Elected directors

Bo Jesper Hansen Chairman and director since 2013. Born 1958. MD. PhD. Other appointments: Chairman of Swedish Orphan Biovitrum AB (publ), and Topotarget A/S. Board member of Hyperion Therapeutics Inc., GenSpera Inc., Newron SA., Ablynx NV., Orphazyme A/S and CMC Kontrast AB. Previous appointments include various positions in Swedish Orphan International AB since 1993, including CEO 1998–2010. Medical advisor for Synthelabo, Pfizer, Pharmacia and Yamanouchi. Founder of Scandinavian Medical Research. No holdings in Karolinska Development.

Hans Wigzell Director since 2006. Born 1938. MD and Professor of Immunology. Other appointments: Chairman of Rhenman & Partner Asset Management AB. Board member of AVI Biopharma Inc., Swedish Orphan Biovitrum AB (publ), Humalabs LLC, Intercell AG and RaySearch Laboratories AB (publ), member of The Royal Swedish Academy of Engineering Sciences and of the Royal Swedish Academy of Sciences. Previous assignments include, among others, the President of Karolinska Institutet's Nobel Committee, and President of Karolinska Institutet and Director General of the Smittskyddsinstitutet. Holdings in Karolinska Development 8,491 shares of series B.

Per-Olof Edin Director since 2007. Born 1940. Professor. Other appointments: Board member of Axelar AB. Previous assignments include, among others, Vice Chairman of the Seventh AP Fund, Chairman of Södertörn University College and the Baltic Sea Foundation. No holdings in Karolinska Development

Rune Fransson Director since 2006. Born 1947. BSc. in Economics. Other appointments: Chairman of Karolinska Institutet Holding AB and Karolinska Institutet Housing AB. Previous assignments include, among others, Board member of KI Health Management. No holdings in Karolinska Development.

Klaus Wilgenbus Director since 2012. Born 1962. MD. Other appointments: Corporate Senior Vice President Business Development / Licensing & Strategy of Boehringer Ingelheim GmbH. Previous appointments include several management positions within Boehringer Ingelheim GmbH, including Senior Vice President Licensing, Vice President R&D Licensing and Director for Exploratory Research in Oncology at Boehringer Ingelheim's R&D Centre in Vienna as well as academic research at Stanford University and the German Cancer Research Centre, Heidelberg. No holdings in Karolinska Development.

Charlotte Edenius Director since 2012. Born 1958. PhD., Medical Degree. Other appointments: Executive VP Development at Medivir AB. Previous appointments include Senior VP Preclinical & Clinical R&D at Orexo AB, CSO at Biolipox AB, several positions within Clinical R&D at AstraZeneca as well as academic research at Karolinska Institutet and Board Member of Karolinska Institutet Innovations AB and Qlucore AB. No holdings in Karolinska Development.

Vlad Artamonov Director since 2012. Born 1978. MBA, B.Sc. Other appointments: Board Member of Redbank Energy Ltd. and of Coastal Capital International Ltd., Managing Partner at Coastal Capital International Ltd. Previous appointments include Investment Analyst at Greenlight Capital Inc. and a position in the Global Merger & Acquisition Group at Merrill Lynch in New York. Holdings in Karolinska Development 3,470,541 shares of series B (through related legal person).

Independence requirements

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

Name	Function	Elected	Independent of:	
			company/ mgmt.	major holders
Bo Jesper Hansen	Chairman	2013	yes	yes
Hans Wigzell	director	2006	yes	yes
Per-Olof Edin	director	2007	yes	yes
Rune Fransson	director	2007	yes	no
Raymond Hill	director	2011	yes	yes
Klaus Wilgenbus	director	2012	yes	yes
Charlotte Edenius	director	2012	yes	yes
Vlad Artamonov	director	2012	yes	yes

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

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

The Board's work etc.

According to the Rules of procedure, the Board shall normally meet six times per year. During the year, the Board held one inaugural meeting, nine scheduled meetings and two extraordinary meetings. The extraordinary meetings were summoned mainly to deal with matters arisen between scheduled meetings.

Board members were present as follows: Bo Jesper Hansen 4 meetings, Hans Wigzell 12 meetings, Per-Olof Edin 10 meetings, Rune Fransson 10 meetings, Klaus Wilgenbus 10 meetings, Charlotte Edenius 11 meetings and Vlad Artamonov 11 meetings. Bo Jesper Hansen was elected at the AGM 2013 and has been present at all meetings following that. Bo Jesper Hansen was appointed Chairman as of October 1, 2013.

The Board annually adopts rules of procedure, an instruction on the delegation of work between the Board and the CEO, and an instruction on financial reporting to the Board. The Board also adopts policies, which constitute a foundation for the Company's internal control systems. These are the Information Policy, IT Security Policy, Gender Equality Policy, Environmental Policy, HR Policy, Ethics Policy, Investment Policy and Dividend Policy.

The Board has not decided on any specific allocation of work within the Board, save for the work of the Audit Committee and the Remuneration Committee.

Audit Committee

Karolinska Development's Audit Committee consists of four members: Bo Jesper Hansen (Chairman), Hans Wigzell, Per-Olof Edin and Klaus Wilgenbus, each being independent in relation to the Company and its management as well as in relation to the Company's major shareholders.

The main tasks of the Audit Committee are to

- monitor the company's financial reporting,
- monitor the efficiency of the Company's internal control, internal audit and risk management, with respect to financial reporting;
- remain informed about the audit of group reporting and financial statements,
- review and monitor the impartiality and independence of the auditor, and in that respect particularly pay attention to non-audit services provided by the auditor, and
- assist in the preparation of proposals to the Annual General Meeting regarding election of auditors.

The Audit Committee has met four times during the year. The members have been present at all meetings, and as regards Bo Jesper Hansen, all meetings since he was elected director.

Remuneration Committee

Karolinska Development's Remuneration Committee consists of four members: Bo Jesper Hansen (Chairman), Hans Wigzell, Rune Fransson and Vlad Artamonov, each being independent in relation to the Company and its management as well as in relation to the Company's major shareholders.

The main tasks of the Remuneration Committee are to

- prepare the board's decisions on issues concerning principles for remuneration, remunerations and other terms of employment for the executive management,
- monitor and evaluate programs for variable remuneration, both ongoing and those that have ended during the year, for the executive management, and
- monitor and evaluate the application of the guidelines for remuneration that the Annual General Meeting is legally obliged to establish, as well as the current remuneration structures and levels in the company.

The Remuneration Committee has met three times during the year. The members have been present at all meetings.

CEO

Torbjørn Bjerke (born 1962) has been the Company's CEO since 2011. MD. More than 20 years' experience in the pharmaceutical industry. Other assignments: Board member of DBV Technologies and TXP Pharma. Previous assignments include: President and CEO of Orexo AB, President and CEO of Orexo AB and Biolipox AB, Head of Pharmacology at AstraZeneca and head of R&D at ALK-Abello. Holding in Karolinska Development: 61,375 shares of series B.

DEPUTY CEO

Terje Kalland (Born 1951). MD, PhD. More than 20 years' experience in the pharmaceutical industry, Other assignments: Chairman of KDev Oncology AB and Akinion Pharmaceuticals AB. Board member of ARTs Biologics A/S and Axelar AB. Terje Kalland is a member of the Royal Swedish Academy of Engineering Sciences. Previous assignments Senior Vice President, Biopharmaceuticals Research at Novo Nordisk (2005-2011), CSO of Biovitrum (2002-2005) and Global Head of Oncology Research at Pharmacia Corporation (1988-2002). Holding in Karolinska Development 35,000 shares of series B.

THE MAIN COMPONENTS OF THE COMPANY'S SYSTEM FOR INTERNAL CONTROL AND RISK MANAGEMENT IN RELATION TO FINANCIAL REPORTING

Internal control and risk management at Karolinska Development

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

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

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

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

bility relates to the Company on a specified date and, (vii) that an item is classified and described in accordance with law, generally accepted accounting principles and listing rules.

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

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

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

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

The Company has only 15 employees, all active at the same workplace. Aside from the above-mentioned Management Meetings, regular information meetings are held, which enables quick and accurate internal communication and information.

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

Specific assessment of the need for internal audit

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

Solna, 10 April 2014

Board of Directors of Karolinska Development AB

Auditor's report on the Corporate governance report

TO THE ANNUAL GENERAL MEETING OF THE SHAREHOLDERS OF KAROLINSKA DEVELOPMENT AB (PUBL), CORPORATE IDENTITY NUMBER 556707-5048

Engagement and responsibility

We have audited the corporate governance report for the year 2013 included in the printed version of this document on pages 98–100. It is the Board of Directors who is responsible for the corporate governance report and that it has been prepared in accordance with the Annual Accounts Act. Our responsibility is to express an opinion on the corporate governance report based on our audit.

The scope of the audit

We conducted our audit in accordance with Far's auditing standard RevU 16 The auditor's examination of the corporate governance report. That standard requires that we have planned and performed the audit to obtain reasonable assurance that the corporate governance report is free of material misstatements. An audit includes examining, on a test basis, evidence supporting the information included in the corporate governance report. We believe that our audit procedures provide a reasonable basis for our opinion set out below.

Opinion

In our opinion, the corporate governance report has been prepared and is consistent with the annual accounts and the consolidated accounts.

Stockholm, April 10, 2014
Deloitte AB

Thomas Strömberg
Authorized Public Accountant

Definitions

DEFINITION OF KEY TERMS

Capital employed

Total equity and interest-bearing liabilities

Return on equity

Profit/loss after financial items divided by equity

Return on capital employed

Profit/loss after financial items divided by capital employed

Equity to total assets ratio

Equity divided by total assets

After-tax earnings per share

Profit/loss after tax attributable to the Parent Company's shareholders divided by the weighted average number of shares before and after dilution

Equity per share

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

Net asset value per share

Estimated fair value of total portfolio holdings, cash and cash equivalents, financial assets less interest-bearing liabilities in relation to the number of shares outstanding at year-end

DEFINITIONS:

Deal flow agreement

Agreement between Karolinska Development and KIAB giving Karolinska Development access to research projects that are evaluated by KIAB

Karolinska Institutet

Karolinska Institutet, Corporate Identity Number 202100-2973

Karolinska Institutet is one of the world's leading medical universities and awards the Nobel Prize in Physiology or Medicine

KIHAB

Karolinska Institutet Holding AB,

Corporate Identity Number 556525-6053

KIHAB is owned by Karolinska Institutet. KIHAB is the Parent Company of a group of five wholly owned subsidiaries, including Karolinska Institutet Innovations AB (KIAB) and Karolinska Institutet Science Park AB

KIAB

Karolinska Institutet Innovations AB,

Corporate Identity Number 556528-3909

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

Karolinska Development

Karolinska Development AB (publ.),

Corporate Identity Number 556707-5048

Portfolio companies

Companies that are wholly or partially owned by Karolinska Development (subsidiaries, associated companies and other long-term securities holdings) and are active in pharmaceuticals, medical technology, theranostics and formulation technology

Fair value

From the regulatory framework for issuers it is clear that companies listed on a public marketplace that constitute groups must apply the International Financial Reporting Standards, IFRS. These standards apply only to the consolidated financial statements. Application of these standards allows groups of an investment nature to apply fair value in the calculation of the assets' values. These calculations are made on the basis of established principles and are not included in the legal entities included in the Group's reporting and do not affect cash flow. This is exemplified by the fact that the Parent Company's assets are not recognized at acquisition cost rather than fair value.

Fair value is calculated according to the International Private Equity and Venture Capital Valuation Guidelines. Accordingly, fair value is calculated differently depending on what is considered to provide the best estimate of market value in the particular case. For Karolinska Development, this means that the fair value of many portfolio companies may be obtained by using a model for calculating the value of discounted and risk-adjusted cash flows. In other cases, Karolinska Development's total investment is used as the best estimate of fair value. In any further cases, the valuation in the most recent transaction is used.

Glossary

Adhesion (Surgical Adhesion)	Abnormal joining of otherwise separate tissues that arises in connection to wound healing.	CE-certified	Product certification within the EU and EEA that confirms that a product meets safety and function related criteria.
Adjuvant treatment	An add-on treatment in order to prevent disease relapse by increasing the overall efficacy of a treatment.	Cell line	A cell culture derived from tissue that is able to proliferate seemingly indefinitely given the right conditions. These cultures can be used to model living organs in the laboratory.
Amino acids	Amino acids are the chemical building blocks that can be combined in chains, or sequences, to form proteins and peptides.	Chemotherapy	See cytotoxics.
AML	Acute myeloid leukemia. A form of blood cancer that originates from the bone marrow. The disease results in high growth of defective white blood cells that stunt growth of normal white blood cells and thereby harming the immune response.	CMC	Chemistry, Manufacturing and Control. A collective name for the processes in which a drug's properties are verified with regard to structure, stability, solubility and more.
Analogue	Within the field of pharmacology, analogues are two or more compounds that are structurally different but have the same or similar function.	CML	Chronic Myeloid Leukemia. A blood cancer disease that causes a great increase in the number of white blood cells. Untreated CML transitions into AML when normal blood cells are no longer produced.
Antibodies	Proteins that are a part of the immune response system. Antibodies bind foreign agents (e.g. pathogens) thereby marking those agents for attack from the immune system.	Corpus luteum	Structure that remains in the ovaries after the egg cell has detached at ovulation. The corpus luteum excretes estrogen and progesterone.
Antifungal	Antibiotic-like substances used to treat fungal infection.	Cytotoxics	Pharmaceuticals that target fast growing cells, for example cancer cells. These compounds usually work by halting the cell division process. The treatment of a cancer patient with cytotoxics is referred to as chemotherapy.
Antimicrobial	A substance that has the ability to kill microorganisms (bacteria, fungus or parasites).	Diabetic ulcers	A type of wound that occurs in patients suffering from diabetes. These wounds are usually caused by damaged blood vessels or peripheral nerves in the foot.
Antithrombotic	Prevents blood clots (thrombosis).	Double blind (study)	A setup of a clinical study where neither the individuals participating in the study or the study staff know which treatment group the individuals are in.
Apoptosis	Programmed cell death.	Dysphoria	Sadness, malaise, irritability.
Atherosclerosis	Disease caused by fatty congestions of the walls of the arteries, hindering normal blood flow. Atherosclerosis may give rise to acute conditions such as heart attack.	Endogenous	Derived from Greek 'proceeding from within'. Substances that originates from within the own body.
Atopic dermatitis	Chronic skin disease that is characterized by eczema and intense itching, inflammation and dryness.	Endocrine system	The collection of glands of an organism that secrete hormones directly into the circulatory system to be carried toward a distant target organ.
Autoimmune reaction	When the immune system start attacking the body's own cells.	Endometrium	The inner mucous membrane of the mammalian uterus.
BID	From Latin 'bis in die', two times daily.	Epidural anesthesia	Pain relief that is injected into the spinal canal.
Bioavailability	A measurement of what portion of an administered pharmaceutical that reaches circulation and the intended target tissue.	EU5	Denotes the five largest pharmaceutical markets in the EU: United Kingdom, France, Germany, Spain and Italy.
Biomarker	Substance that indicates specific biological processes, for example diseases, and can therefore be used as a tool for diagnosis.	Ex vivo	From Latin, literally 'outside of the living'. Refers to studies done in laboratory settings, conducted on tissue separated from the organism.
Biopsy	Removal of tissue for sampling by genetic analysis and microscopy in order to determine a diagnosis.	Extracellular mechanism	Signaling, reactions and bonding that takes place outside of and in between cells.
Black-box-warning	A warning text issued by the FDA on drug labels of certain pharmaceuticals that addresses severe adverse effects (the text is enclosed by a black frame, hence the name 'black-box').	FDA	Food and Drug Administration. US authority that, among other things, is responsible for regulating pharmaceutical and medicinal technology products.
Blood-brain barrier	A protective layer of cells that separates the general blood flow from the blood flow of the brain.		

FLT-3	Fms-like Tyrosine Kinase-3. A receptor involved in cell survival and cell division among certain white blood cells. Mutations in FLT-3 can lead to development of leukemia.	Neurodegenerative diseases	Collective name for diseases where neuron cells are degraded in the brain, for example Parkinson disease and Alzheimer's disease.
GABA system	Receptors and target molecules in the brain that regulate mood and irritability.	Obstetrics	Medical branch that includes pregnancy and childbirth.
Glioblastoma	Glioblastoma multiforme. The most common type of brain cancers and one of the most aggressive.	Osteoarthritis	Disease that involves degradation of the cartilage in joints causing disfigurements, stiffness and pain when the affected joints are subjected to movement.
GMP	Good Manufacturing Practice. A quality assurance system and regulations that govern the manufacturing of pharmaceuticals, diagnostic tools and technology products.	Over-expressed gene or protein	An abnormal activation of a gene causing mass production of the protein product.
Heparin	A natural anticoagulant substance that prevents the formation of blood clots as well as the extension of existing blood clots.	Palliative treatment	Treatments that aim to reduce disease symptoms. The goal is to reduce pain and increase quality of life.
IgM antibodies	Antibodies that belong to the immune response that arises early at an infection.	Parenteral administration	From Greek para (beside) and enteron (intestine). Refers to administration via injection.
In vivo	From Latin, literally 'inside of the living'. Refers to studies conducted on living organisms.	Pathogen	Infectious agent that causes disease.
Intracellular	Inside cells.	PCT phase	Patent Cooperation Treaty. An international patent regulation law. International patent applications are said to be in PCT phase until the patent is granted or denied.
Intracerebral	Inside the brain (cerebrum).	Peptides	Short amino acid chains. Peptides have the same build-up as proteins but are smaller.
Intraocular	Inside the eye.	Pharmacokinetics	The study that includes absorption, distribution and metabolism of a pharmaceutical.
Intravenous injection	An injection directly into a vein using a needle.	Phosphorylcholine (PC)	A molecule that is present on the surface of red blood cells.
Invasive (surgery or procedure)	Involving a surgical opening into the body.	Placebo-controlled study	A clinical study that includes a control group that receives an inactive (placebo) treatment but is otherwise treated exactly like the group that receives the real treatment.
Kinase	A group of enzymes responsible for cell signaling, for example from receptors at the cell membrane to proteins inside the cell.	PMDD	Premenstrual Dysphoric Disorder. A more serious form of premenstrual syndrome (PMS) that affects 3–8% of all fertile women. PMDD arises in cycles in connection with menstruation and causes depression, anxiety, cyclic mood swings and fatigue.
Macrophages	A type of white blood cell that is a part of the non-specific immune response.	Pro-drug	A pharmaceutical that is administered in an inactive (or significantly less active) form but is metabolized inside the body into an active compound. The design of a pro-drug could help increase the bioavailability of the active form.
Malignant disease	A severe and progressively worsening disease (usually cancer).	Programmed cell death	A suicide mechanism a cell may go through if it is somehow damaged.
Malignant melanoma	A severe form of skin cancer.	Protein	Large molecules built from sequences of amino acids. Proteins are used in many different ways in an organism; they provide structure for cells and tissues, they catalyze chemical reactions in the form of enzymes and they are involved in the signaling in and between cells.
Monoclonal antibodies	Type of antibodies that are derived from identical parental cells and therefore have the same specificity.	Randomized (study)	A study in which the trial participants are randomly allocated into two or more treatment groups that are given different treatments or placebo.
Multicenter study	A clinical study that includes several hospitals. This setup makes it easier to recruit the desired amount of patients.		
Multifactorial	Diseases that arise as a consequence of several underlying causes are said to be multifactorial.		
Multiple myeloma	A type of cancer that affects those white blood cells that produce antibodies. The abnormal cells are accumulated in the bone marrow and obstruct the production of normal blood cells and antibodies, which leads to immune deficiency.		
Murine	Biological nomenclature for genera of rat and mouse species.		
Mutated gene	Changes in a cell's DNA that may change the function of a gene.		

Receptor	A large molecule, usually a protein, which is attached to cell membranes and binds to a target molecule. The target molecule can be a hormone that has a certain effect on the cell to which it binds to.
Recombinant	Gene that has been artificially introduced into a genome. The gene product and the organism that carries it are also called recombinant.
Refractory disease	Disease that is resistant to treatment.
Rheumatoid arthritis	An autoimmune disease affecting the body's joints. The disease is characterized by inflammatory reactions in cartilage, bone and joints which lead to disfigurements.
SCID mice	Severe combined immunodeficiency. A genetic disease which implies the lack of a functioning immune response. Mice with SCID are often used as animal models as it is easy to transplant cells or organs into them without rejection.
Skin barrier function	Corresponds to the skin's ability to keep microbes away from infecting the body.
Small molecule	Molecule with a low molecular weight. As opposed to large molecules like therapeutic proteins or antibodies, small molecules can be administered orally.
Steroids	Type of organic molecules that among other things include natural hormones.
Super-antigens	Substances that have the ability to trigger a powerful, non-specific immune reaction.
Supercritical fluids	A substance above its critical temperature and pressure where it normally either vaporizes or liquidizes. Supercritical fluids have physical properties in between those of gases and liquids.
Synergistic effect	When addition of two or more treatments gives an effect greater than the theoretical additive effect.
Systemic	Affecting multiple organs, systems, tissues, or the entire body.
Targeted therapy	Pharmaceuticals that are designed towards binding specifically to one or a group of target molecules in order to be more disease specific.
Therapeutic index	The ratio between the therapeutically effective dose and the toxic dose of a pharmaceutical.
Thrombosis	Formation of a blood clot in blood vessels.
Topical	Administration through body surfaces, usually through the skin.
Toxicology	Study of the poisonous effect of substances. In the pharmaceutical context, toxicology is mainly concerned with whether the substance is tolerable in its therapeutic dose.
Venous leg ulcers	Wounds that occur when blood valves are defective and cannot stop reflow of blood in the veins. This way pressure builds up and ulcers are formed.
Wild-type gene	A natural, normal (ie. non mutated or modified) gene.

Dates for publication of financial information



Interim report January-March 2014	8 May 2014
Interim report January - June 2014	21 August 2014
Interim report January – September 2014	20 November 2014
Year-end report January- December 2014	February 2015
Annual report 2014	April 2015



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