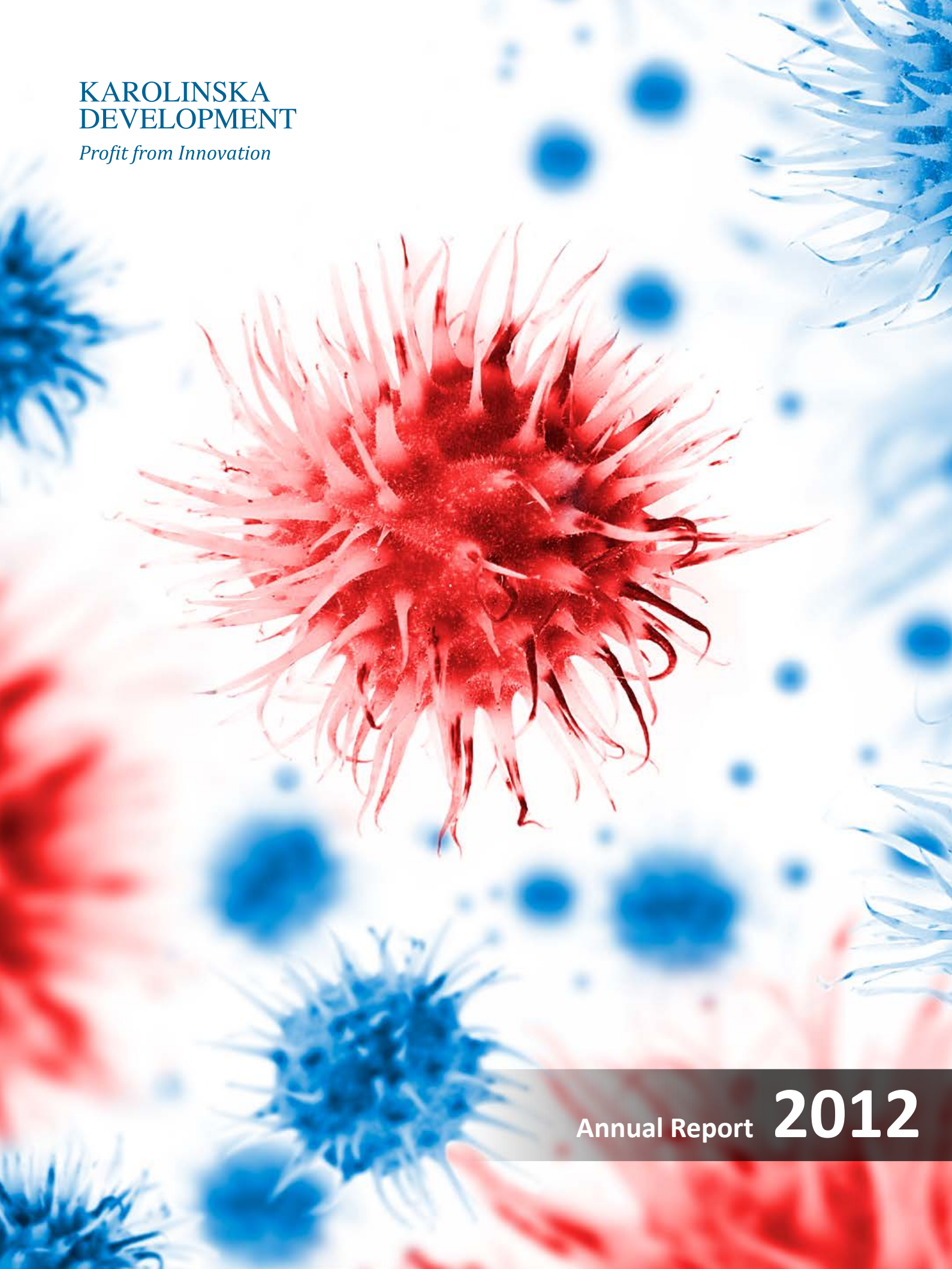
KAROLINSKA
DEVELOPMENT

Profit from Innovation



Annual Report 2012

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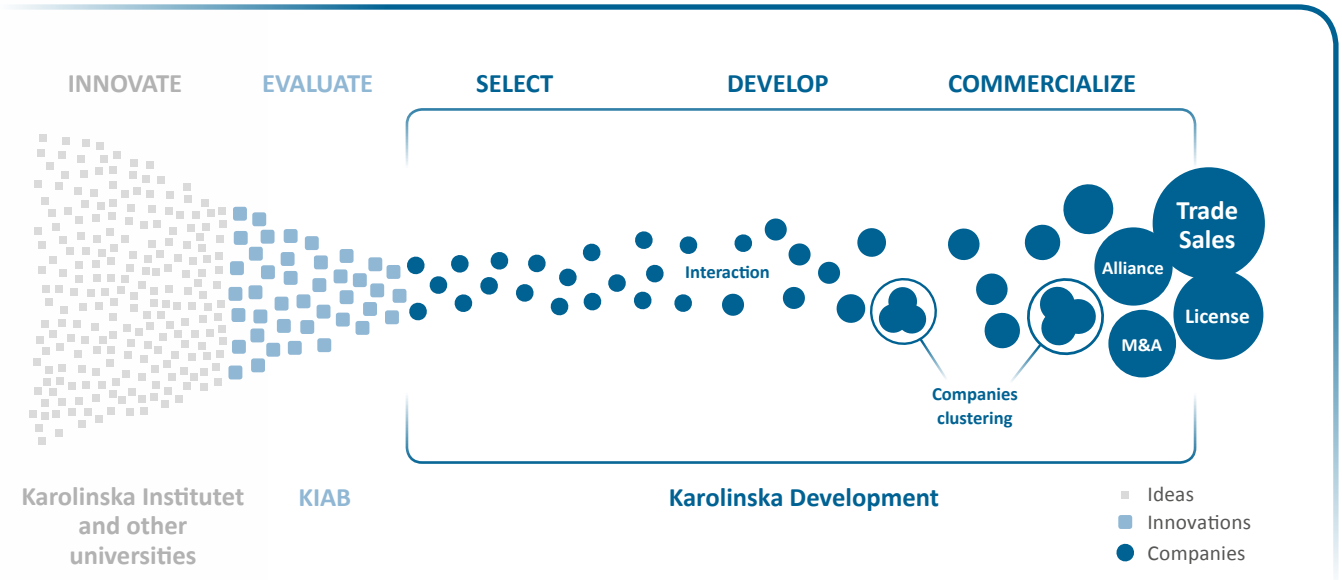
Karolinska Development aims to create value for patients, researchers, and investors by developing innovations from world class science into products that can be sold or out-licensed with high returns.

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 universities, delivers a continuous flow of innovations. Today, the portfolio consists of 36 projects, of which 15 are in clinical development.



Significant events during the financial year

Karolinska Development AB

Strategic deal signed worth SEK 220m

- A syndicate led by Rosetta Capital Limited acquired a minority share in 13 of Karolinska Development's portfolio companies in exchange for SEK 220m

Share ownership exchange with Industrifonden

- Karolinska Development divested the shareholding in Oncopeptides AB in exchange for Industrifonden's shares in Aprea AB

Additions to the portfolio

- In strengthening scientific development and efficiently using resources within the oncology area, the fully owned subsidiary KDev Oncology AB was formed
- GliGene AB became the first investment within KDev Oncology AB
- First investment in Oss-Q AB was made for the development of the company's state-of-the-art bone implant technology

The Portfolio Companies

Akinion Pharmaceuticals initiated a clinical program

- A Phase I/II trial was initiated with the candidate drug AKN-028 aimed for treatment of acute myeloid leukemia

Important milestones in Pergamum

- A Phase II trial with Pergamums DPK-060 in outer ear infections was initiated and positive results were reported from the study by the end of the year
- Clinical development was initiated in a Phase I/II trial of LL-37 in patients with hard-to-heal venous leg ulcers
- Top line data from a Phase II trial with PXL01 for prevention of post-surgical scars did not meet the primary end point

Swift clinical progress in Pharmanest

- During the year the company started both a Phase I and a Phase II trial with SHACT designed for localized pain relief during gynecological procedures

Aprea reported positive Phase I/II data

- APR-246 was administered in escalating doses in patients with advanced cancers and showed good safety and tolerability data as well as signs of clinical efficacy

Significant events after the balance sheet date

Karolinska Development AB

Closing of the SEK 220m strategic transaction

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

Innovation agreement with Mayo Clinic

- Karolinska Development gains access to the innovation flow of another one of the world's leading medical research institutions

The Portfolio Companies

Axelar presents positive preliminary interim data

- Preliminary results from a Phase II study indicate that Axelar's candidate drug AXL1717 is effective in treatment of patients with non-small cell lung cancer that have not responded to standard treatment

Dilaforette starts Phase II study in severe malaria

- Dilaforette plan to enrol 50 patients in the study evaluating sevuparin in severe malaria patients

Pergamum in strategic collaboration with Cadila Pharmaceuticals

- Cadila Pharmaceuticals will finance the development of a novel therapeutic peptide discovered by Pergamum through Phase II

Message from the CEO

Karolinska Development has a business model based on investing in world-class innovations and developing them into life science products that benefit patients. In 2012, we strengthened our R&D team to support the portfolio companies actively with the right expertise at critical points in their development. Our focused attention to business development has also produced results; the deal with Rosetta announced in late 2012 demonstrates the value in our portfolio and gives us the opportunity to bring the portfolio to the next important milstones.

In March 2013, we finalized a strategic deal worth SEK 220m. As announced in December 2012, a syndicate of well-respected investors has acquired a minority share in Karolinska Development's holdings in 13 of our 25 portfolio companies. The transaction gives the 13 companies an implied value of SEK 1.5bn, about twice Karolinska Development's total investment in the same portfolio and a premium of 23 percent on the reported fair value on the date the agreement was signed. This demonstrates the value Karolinska Development has created in recent years, while also strengthening our financial position significantly.

In 2012, Karolinska Development's portfolio companies took several important steps forward. In total, eleven projects in our active portfolio are now in clinical development for disorders where current treatments fall short or are lacking. Pharmanest finalized a Phase I trial with SHACT for pain relief in connection with IUD insertion and launched a clinical Phase II trial during the year. Pergamum passed clinical milestones in three projects. A Phase I/II trial with LL-37 for venous leg ulcers now under way is expected to report later 2013. After the end of the year, Pergamum also entered into a strategic collaboration with Cadila Pharmaceuticals on an early-stage project where Cadila is financing the entire development through clinical Phase II and where the companies share the global marketing rights.

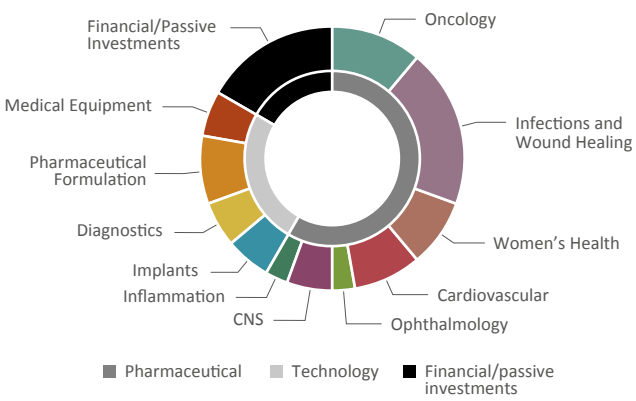
In our oncology portfolio, clinical trials are under way in Axelar and Akinion. Aprea announced positive Phase I/II data with APR-246, which now serves as the basis for the continued clinical development program. In addition Dilaforette announced in early 2013 that it had taken the next step in the development of sevuparin against severe malaria, a disease that kills about one million each year. Major progress is also being made among our technology companies. One example is Oss-Q, which is developing new cranioplasty implants. Pilot studies on patients are under way with very promising results to date. The company continues the evaluation of the product and has its sight set on a market launch.

Our deal flow agreement with Karolinska Institutet Innovations AB, as well as agreements with other leading universities in the Nordic region, gives us the opportunity to evaluate a significant number of medical innovations in this region. In February 2013, we announced that Karolinska Development has started a collaboration with Mayo Clinic in the US. This is the first step in expanding our inflow of new life science innovations from the best research institutions outside the Nordic region as well.

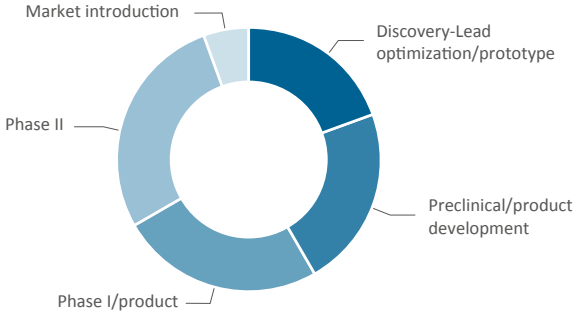
During the year, Karolinska Development worked intensely to push the portfolio companies' projects forward, identified attractive new investments and entered into an important commercial collaboration. As a whole, this improves our ability to build further value and to reach the point where we can line up collaborations with pharmaceutical companies or exit portfolio companies. It is gratifying that we received positive preliminary results from Axelar's ongoing Phase II study of AXL1717 in lung cancer after the year end. Our assessment is that AXL1717 has the potential to become an important treatment for lung cancer and a valuable asset for Karolinska Development.

Torbjörn Bjerke
Chief Executive Officer

Projects by area



Projects by development phase



Karolinska Development has access to a unique innovation flow

Karolinska Development was founded with the goal of developing promising medical innovations originating from academic research to meet major medical needs. The aim is to develop new medical treatments that significantly improve the lives of patients around the world. Michael Sundström, VP Discovery Research, is responsible for identifying and evaluating new projects. Here he describes how the company identifies the most promising innovations and how Karolinska Development works with new startup companies.

Access to top-class innovations

The foundation for our strong, broad-based portfolio has been established through our ability to identify commercially attractive ideas from the academic medical research. Through an exclusive deal flow agreement with Karolinska Institutet Innovations AB, Karolinska Development has access to the flow of innovations from Karolinska Institutet, which ranks as one of the world's leading medical institutions. Moreover, Karolinska Development has collaborations with many prominent universities in the Nordic region and we are is working actively to expand the inflow of business ideas from new channels, as illustrated by the recently signed collaboration agreement with Mayo Clinic, a leading US research institution. The goal is to access the best research ideas regardless of where in the world they come from, which also includes projects run by biotech companies. Thanks to this philosophy, more than 20 of our current projects are based on substances that targets diseases in completely new ways compared to the established therapies of today.

Risk minimization through careful selection and breadth

Each year Karolinska Development evaluates more than hundred projects, of which we normally invest in only two or three. Effective screening and selection of new projects is critical to Karolinska Development, and the model we use for evaluation of early-stage innovations has been optimized during the past ten years. The key to successful investments is choosing the most promising ideas from this portfolio of project opportunities. To justify an investment, the innovation must be unique and competitive, be derived from prominent research, address a specific medical need with commercial potential and offer intellectual property protection (see opposite). These criteria also serve as the basis for further investments after the projects have been added to the portfolio. In this way, we can allocate investments to the most promising innovations.

Our investment process

When Karolinska Development has decided to proceed with an innovation, the project normally undergoes a trial period under the direction of, and with financing from, Karolinska Development. During this period, the project must reach determined goals in a given time frame before a company can be founded. Initially, the portfolio companies are managed virtually with only a few employees and by outsourcing much of the research and development work. Karolinska Development actively participates in the recruitment of the CEO and other key employees of the portfolio companies. At the same time, the expertise of the innovators and founders are vital to each company's continued work and progress. Therefore the innovators to the research ideas normally serve as board members and scientific advisers throughout the development process.

> "The foundation for a commercially strong life science portfolio is close collaboration with academic researchers and a carefully designed process to identify and further develop ideas that make a true medical difference.

Michael Sundström,
VP Discovery Research

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.

Meets medical needs

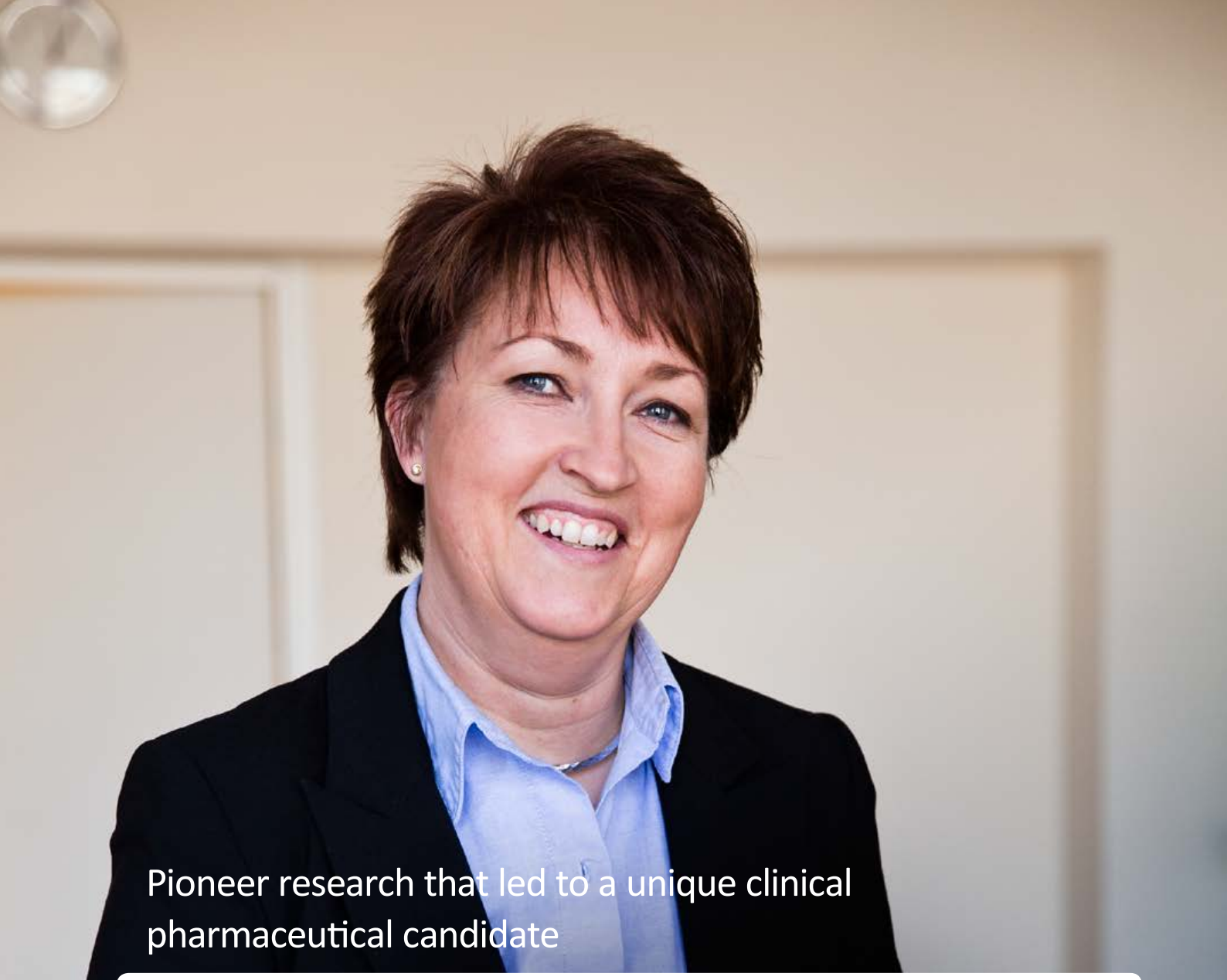
The innovation must be designed to help patients who currently do not receive sufficient care in their respective therapy areas.

Commercial potential

The portfolio companies and their projects must have the potential to be sold or out-licensed with high returns to global partners.

Intellectual property protection

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



Pioneer research that led to a unique clinical pharmaceutical candidate

In the early 1970's, Torbjörn Bäckström, who was studying medicine at the time, also worked with vulnerable people in society. He came into contact with a young woman who became so violent each month that she either wound up in jail or a psychiatric emergency room. After having consulted the very brief description of premenstrual symptoms in his textbook on physiology, Torbjörn began to realize the source of the problem.

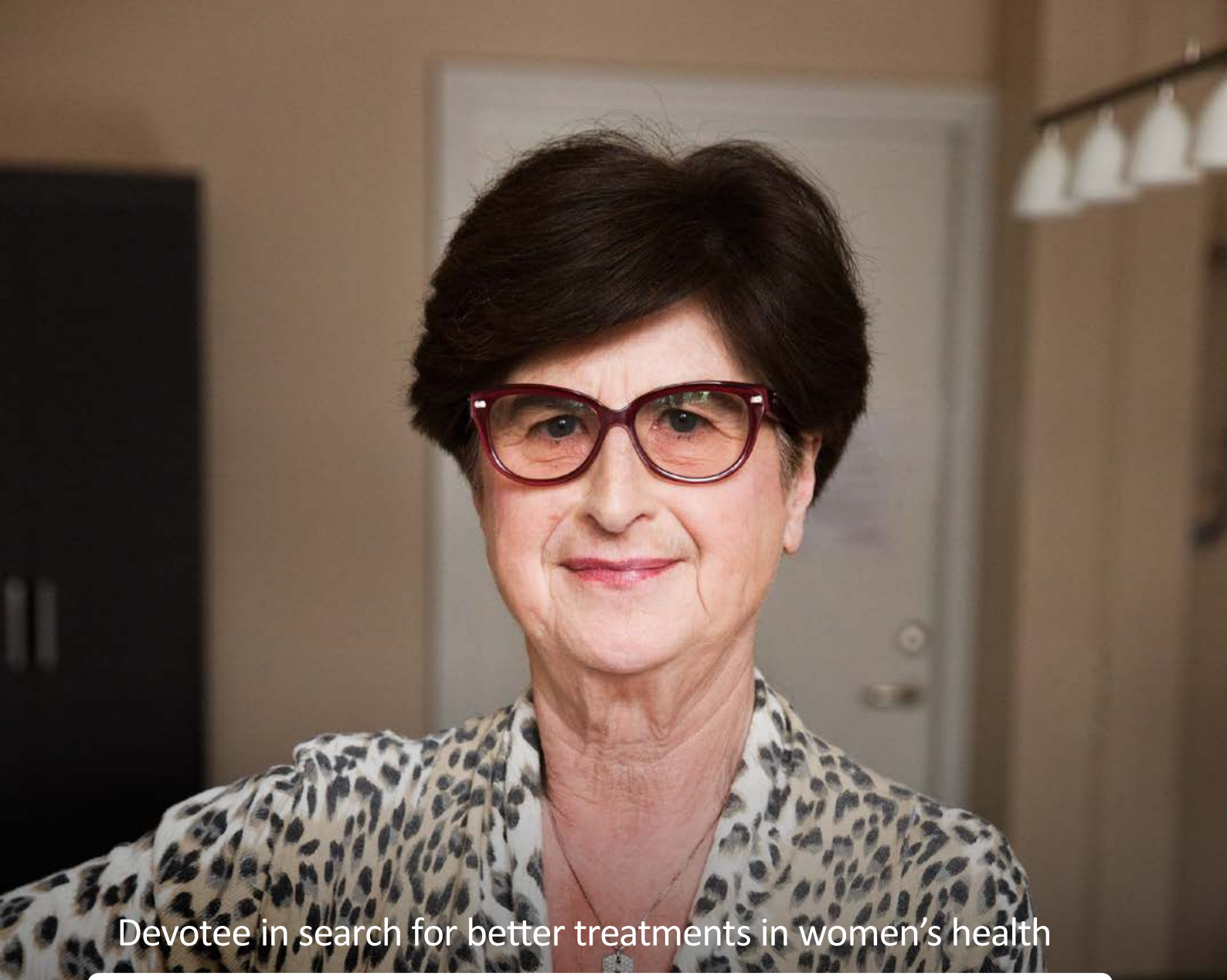
Torbjörn Bäckström is currently a professor at the Department of Clinical Science, Obstetrics and Gynecology at Umeå University and a board member and part-owner of Umecrine Mood AB. The interest he took in severe premenstrual syndrome back in the early 1970's has developed over the years into a pharmaceutical project to help patients with Premenstrual Dysphoric Disorder (PMDD). The company has clearly been able to show that the severe and often incapacitating symptoms that arise during the luteal phase of the menstrual cycle in this patient group is due to a steroid that affects the brain's emotional center, which regulates aggression and depression. Based on its intelligence, Umecrine Mood is the first company to successfully develop compounds that have proven to mitigate the action of the steroid in healthy trial subjects. The next step is to begin a clinical Phase II trial, which is expected in 2013.

"Five percent of women of fertile age suffer from PMDD. The current treatment consists largely of antidepressants, which are not always effective and often have side effects," says Karin Ekberg, CEO of Umecrine Mood. "Preclinical and early clinical data strongly suggest that our drug candidate works in the way we had hoped, and the regulatory path ahead is well defined. Another strength of our drug candidate is that it's based on an endogenous substance, which reduces the risk of side effects."

There is little question that patients with PMDD are in need of an effective, targeted treatment, nor that the health benefits of helping the target group would be significant. Assuming positive data from the clinical trial on patients, Umecrine Mood hopes to form a collaboration with a major pharmaceutical company prior to further development.

For more information on Umecrine Mood, see page 34

Umecrine mood



Devotee in search for better treatments in women's health

Karolinska Development has a strong engagement within the therapeutic area of women's health. Two of the portfolio companies – Pharmanest and Dilafor – have a common denominator in professor Gunvor Ekman-Ordeberg. Her practical experience as an obstetrician and gynecologist has been combined with enduring basic research during decades. This has resulted in two projects that are now getting closer to the final phases for the clinical development process. If successful and both of the compounds reach the market, this can result in less discomfort at gynecological procedures and fast childbirths with less pain and complications for mothers and children.

The portfolio company Pharmanest develops SHACT, a patented product for pain relief that is applied locally in connections with smaller gynecological procedures, such as IUD insertion. A Phase II study which will enroll 200 patients is currently ongoing at the Karolinska University Hospital in Solna, Sweden. Today, the most common form of pain relief is giving the patient a regular painkilling pill before the procedure and the need for efficient therapies is large.

"The start of the project came from frustration of not being able to offer our patients adequate pain relief. To solve the problem, extensive basic research was necessary, for example to understand the nerves impact on the uterus. Our clinical experience facilitated the basic research and we could quick translate the results to practical use", explains Gunvor Ekman-Ordeberg.

In the same way was the situation when Gunvor decided to develop a pharmaceutical against protracted labor. One in four births today results in unplanned cesareans and/or complications for the mother or the child because of protracted labor. During the last 60 years, oxytocin has been the only available drug to accelerate labor. If given in too high doses, this drug may jeopardize the child's health. The shortcomings of the available treatment were obvious in her daily work and focused research gave a platform for a new type of therapy, and today the compound tafoxiparin is in Phase II trials run by the portfolio company Dilafor.

"Already during the eighties, I saw that women who were given the anticoagulant heparin often had a quick and successful labor. Now we have developed tafoxiparin, that has the same good qualities – but without the anticoagulant effect – and that we have tested of women in labor with promising results", says Gunvor Ekman-Ordeberg.

For more information on Dilafor and Pharmanest, see page 32 and 33

DILAFOR PHARMANEST

We develop products that provide significant benefits for patients

Karolinska Development's CSO, Terje Kalland, is responsible for the company's research and development team. Here he describes how Karolinska Development works with the portfolio companies in order for the projects to achieve their intended benefits for patients and societies

Expert R&D group

Since its IPO, Karolinska Development has built a unique organization to support its companies' development work through a dedicated R&D team. At every stage of a project's lifecycle, Karolinska Development's experts support the companies at every level. This is done through representation on their boards,by working on the portfolio companies' management teams, and also by serving as a sounding board for the day-to-day challenges the companies face. The common denominator for all persons on the R&D team is their extensive experience from senior positions with pharmaceutical and biotechnology companies. As a whole, the team represents over 100 years of relevant experience in drug development!

We provide support from concept to product

In 2012, Karolinska Developments recruited the last key members of the new R&D team. As the portfolio matures, greater demands are also placed on clinical development expertise. Consequently, Tomas Odergren was recruited to take charge of this work. During the year, Gunilla Ekström was hired as well to take responsibility for the operating activities in the portfolio. During the last two decades, Tomas and Gunilla have worked in senior product-oriented positions at major pharmaceutical companies. An important activity in 2012 was the selection of preferred providers among patent attorneys and contract research organizations. In this way, the portfolio companies gain access to better quality at lower prices than they could obtain individually.

With responsibility to the development of early-stage projects, Michael Sundström is already in place and has been joined by by Hans Postlind. He has previously done preclinical development work at pharmaceutical companies in Sweden and internationally.

IP strategies are very important in pharmaceutical development and varies depending on the scientific field, origin of the innovation and competitive environment. It was very valuable therefore to add Ann-Sofie Sternås to the R&D team during the year. She began her tenure at Karolinska Development by coordinating the IP portfolio and working with patent offices. Ann-Sofie has spent nearly 20 years with these issues for AstraZeneca, among others.

Karolinska Development now has an R&D team with the expertise and experience needed to actively steer the projects in the portfolio in a direction which leads to successful products that clearly benefit both patients and society.

> "Our team members have experience that spans every step of the development process. With our support, the portfolio companies can develop the projects quicker and more efficiently in the right direction.

Terje Kalland,
CSO

Clinical projects in the active portfolio

Akinion Pharmaceuticals

AKN-028 – A Phase I/II trial is under way with this compound to treat acute myeloid leukemia, where very few treatment alternatives are available today, especially for many older people who suffer from this form of blood cancer.

Aprea

APR-246 – After positive Phase I/II results, preparations are now under way for a Phase II trial with APR-246 in patients who have become resistant to the standard treatment for ovarian cancer.

Axelar

AXL1717 – In March, 2013, Axelar presented positive preliminary interim data from a randomized Phase II study in non-small cell lung cancer that compared AXL1717 with docetaxel, a well-established anti-cancer treatment. In addition, an independent US clinic has launched a pilot study with the drug candidate in patients with brain tumors.

Dilafor

Tafoxiparin – After an initial clinical Phase II-trial demonstrated shorter labor times among women who induced labor, preparations are now under way for a follow-up trial in parallel with discussions with potential partners.

Dilaforette

Sevuparin – The compound, which is used to prevent sick blood cells from blocking the blood flow in malaria patients, has been undergoing Phase II trials in severe malaria since January 2013. At the same time, preparations are being made for clinical trials of sevuparin in sickle cell anemia.

Pergamum

DPK-060 – After promising trial results in infected eczema and external otitis, the company is now evaluating further trials with DPK-060 together with a partner.

LL-37 – In 2012, clinical trials were started to treat patients with venous leg ulcers with this antimicrobial peptide, which has natural wound healing properties.

PXL01 – Final data are being analyzed from a study conducted on patients who have undergone flexor tendon repair procedures with this substance, which in preclinical trials reduced post-surgical adhesions and improved mobility in damaged tendons.

Pharmanest

SHACT – A Phase II trial is now being conducted with Pharmanest's product for pain relief in connection with gynecological procedures, which is designed for immediate relief when applied locally.

Umecrine Mood

UC1010 – A Phase II trial is expected to begin shortly with UC1010 on women who suffer Premenstrual Dysphoric Disorder (PMDD). The compound targets the CNS steroids that lie behind the mood changes associated with PMDD.

Targeting one of the key cancer drivers

Cancers develop and spread due to the malfunction of the cells' normal growth control mechanisms. The best known endogenous substance is the p53 tumor suppressor protein. In about half of all tumors, p53 no longer functions normally due to a gene mutation. This increases the risk that the tumor will grow unimpeded. Aprea is the first company to successfully develop substances that can restore the cells' natural growth control function by normalizing p53 and thereby preventing uncontrolled cell division.

Aprea's drug candidate, APR-246, has been evaluated in a small group of patients with cancer who have not responded to existing treatments. The substance is well-tolerated, and the tumors shrank in several patients. Aprea is now preparing a Phase II trial in patients with advanced ovarian cancer, after which its aim is to find a strategic partner to finalize the clinical program.

"The importance of p53 in protecting the body against cancer has been described in more than 50,000 medical publications, but Aprea is the only company to have successfully taken a substance that can normalize the function of the protein p53 to the clinical development phase", says Aprea CEO Ulf Björklund.

Oncology is an area where great medical needs are not being met. Furthermore, mortality and morbidity rates are expected to rise in the years ahead as the population ages. Every year, 13 million people receive a cancer diagnosis and nearly eight million around the world die because of this disease. A lack of p53 is an important reason for tumor growth in the most common forms of cancer, besides which current chemotherapy usually works poorly in patients whose cells are no longer able to produce this anti-tumor protein. This is particularly true of ovarian cancer, which affects over 2 million women a year. The dominant treatment there is platina based chemotherapy, which many tumors develop a resistance to after a period of treatment.

"The properties of our drug candidate, APR-246, allow it to be used in combination with current chemotherapy treatment for ovarian cancer, for example. This also applies to patients who have already developed treatment resistance. Consequently, we have strong hopes that our development work will eventually reduce suffering and save lives in large patient groups", Ulf Björklund concludes.

For more information on Aprea, see page 25

aprea

Excellence within cancer develops a strong oncology portfolio

Every third person will sometime during their lifetime develop cancer and about one third of the affected with the disease are younger than 65 years. Karolinska Development is deeply committed in helping the development of new effective and well tolerated treatments against different types of cancers through the portfolio companies Axelar, Aprea, Akinion Pharmaceuticals, GliGene, XSpray Microparticles and NeoDynamics. During the last year, Karolinska Development through KDev Oncology has strengthened its competence within the oncology area by a number of key recruitments.

Dr. Mikael von Euler has during his time in the pharmaceutical industry been involved in bringing around fifteen new pharmaceuticals to the market. Since the fall of 2012 he is working as Vice President Clinical Development, Chief Medical Officer and Medical Adviser at several of Karolinska Development's portfolio companies within oncology with the task of supporting the companies in the clinical development of their projects.

"After having worked in global pharmaceuticals companies for more than twenty years it is inspiring to be able to support smaller companies in their ambition to development new groundbreaking treatments for cancer. Many promising ideas and projects have been developed over the years by Swedish researchers, but since none of the major pharmaceutical companies are conducting research within this field in Sweden it has historically been difficult to develop them into approved drugs. We believe that our portfolio companies, through a successful virtual workflow and central support from Karolinska Development, have good chances of reaching success", says Mikael von Euler.

New therapies against cancer can save lives, reduce suffering and reduce health care costs. Drugs against cancer is the largest category within the pharmaceutical market with total sales expected to reach USD 100bn dollars in a few years time. In Karolinska Development's portfolio there are three projects in clinical phase, all based on well-documented modes of action but with unique properties compared to compounds developed by other companies. During 2012, Aprea presented positive Phase I/II data for the drug candidate APR-246 on patients with advanced cancer and in April, 2013, Axelar presented preliminary data from a Phase II study that indicates that AXL1717 is efficacious in patients with lung cancer. During 2013 results are expected from a Phase I trial with Akinion's compound against acute myeloid leukemia. Assuming that the clinical trials are successful with these compounds, the interest from the major pharmaceutical companies is expected to be very large.

"Because I have been on the other side of the table in licensing and acquisition discussions, I have a good picture of what it takes for a project to attract large pharmaceutical companies. What I have seen from our portfolio companies is impressive and there is no doubt that the drug development in our companies is conducted in accordance with the major companies' demands and guidelines", explains von Euler.

KDev ONCOLOGY

Karolinska Development has just started to show its true potential

Karolinska Development recently finalized a strategic deal with Rosetta Capital in which a smaller part of the portfolio was sold for SEK 220m. This valued the 13 companies which were part of the deal at SEK 1.5bn, a premium of 23% to our reported fair value and more than twice the cash cost invested by Karolinska Development. The deal demonstrated clearly the potential in the whole portfolio and confirms that the Company's reported fair value are shared by outside experts. CFO and Head of Business Development Robin Wright explains why there is such strong demand for viable projects and how Karolinska Development's portfolio companies can meet this demand.

The agreement with Rosetta

The deal achieved two objectives: It confirmed that we are taking our portfolio in the right direction and established that our fair value estimates are achievable in external sales to quality expert buyers. Karolinska Development's reported fair value on the portion of the portfolio included in the agreement was validated with a significant premium by experts accustomed to assessing and valuing biotechnology assets[1]. Through the strategic deal with Rosetta we now have an expanded investment horizon that enables us to take more portfolio companies through pre-clinical and clinical stages to reach inflections points after which they can be partnered or sold to leading global buyers. Working with the Rosetta team will also help us in that development so that we can realize the full value of the assets in the portfolio.

A pharmaceutical sector in change

Since the early 2000s, the pharmaceutical companies' have been very aware of the need to replace big-selling drugs which were coming off patent, and the search for good replacements has led the number of licensing deals to increase gradually (see opposite). Their urgent need has also made pharmaceutical buyers more aware of the development risk, and they have tended to move their preferred stage of purchase or licensing from early clinical development to proof of concept in man. 2012 saw continued high levels of licensing, mergers and takeovers relative to previous years, as pharmaceutical companies try hard to rebuild their pipelines with the best new drug candidates from the biotech sector. Most large pharmaceutical companies have identified this need to add good quality late stage programs to their pipeline as a core part of their stated current strategies. As part of this drive towards later stage assets, pharma companies are also reducing their own discovery and early stage research, and instead are looking for better ways of accessing the best innovations from the best research organisations, including the Karolinska Institutet, the Mayo Clinic and many others who are collaboration partners with Karolinska Development.

Karolinska Development's business model has been developed since our start in 2003 to be positioned to take advantage of the changes we are seeing in the sector. We have a leading model for capturing the best innovations from amongst the researchers we collaborate with, and to develop those innovations efficiently into products which can be commercialized for the benefit of patients, society, our inventors and our shareholders.

When we discuss potential transactions on portfolio companies with pharmaceutical and financial buyers, we can see that the quality of the assets we are building, holds up very well to outside scrutiny. This can be seen as achieving our goal of building assets which represent excellent potential for the buyer as well as good value for Karolinska Development and its co-investors and inventors.

1 For details regarding the Rosetta deal, please refer to page 57.

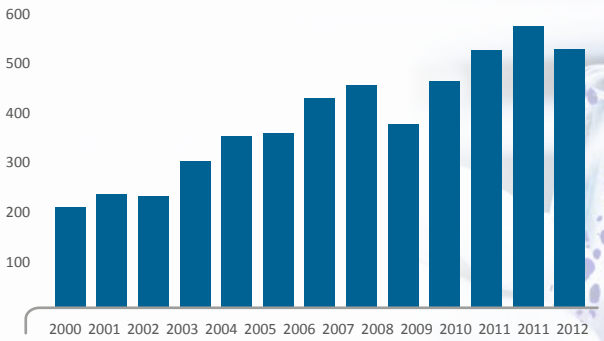
> "The Rosetta deal is a first indication of the values we have created. Our focus on highly innovative projects will create opportunities to realize value for years to come."
>
> Robin Wright,
> CFO and Head of Business Development

The large number of projects in our portfolio, and particularly the fact that they are being developed using the best standards of practice, increase the odds of successful projects finding development partners to establish valuable pharmaceutical products on the global market.

Several companies progressing toward critical milestones

As indicated in previous sections, Karolinska Development's model focuses on clearly-differentiated innovations with good intellectual property which when launched are likely to compete strongly with existing therapies as well as other companies' development projects in more advanced development stages which might reach the market first. Many of our projects are now being evaluated in clinical proof of concept studies, and are evaluated against the best standards of care. These studies are critical for the value of the projects as they represent a major part of the development risk. By continuous careful selection and development, Karolinska Development 's goal is to develop a new generation of effective and well-documented products that both patients and pharmaceutical companies need.

Number of licensing agreements for drug candidates through Phase II



Large pharmaceutical companies have shown steadily growing interest in investing in innovations from outside companies.

Source: MedTrack

Karolinska Development's strategic deal in summary

Investment of SEK 220m

Rosetta has invested SEK 110m in common shares in the new investment company KDev Investments AB and an additional SEK 110m in preference shares in KDev Investments AB. The terms of the preference shares provide for gradually reducing returns for Rosetta, limiting Rosetta's upside in return for partial protection of its downside[1].

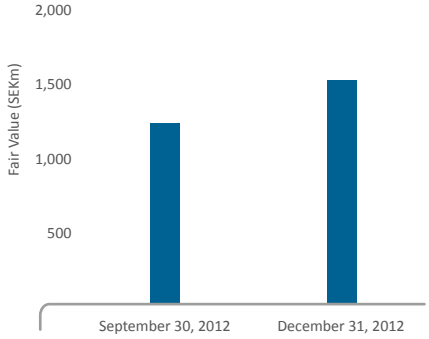
13 portfolio companies in the deal

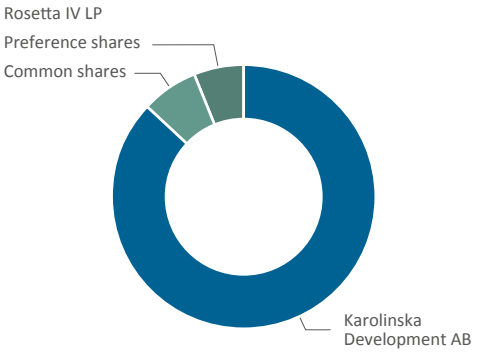
The companies included in the deal is in different stages of development and are active in different therapeutic areas within both pharmceuticals and technology

Akinion Pharmaceuticals, apreo, Axelar, Biosergen, Clanotech, DILAFOR, Dilaforette, Inhalation Sciences Sweden AB, NeoDynamics AB Medical Equipment for Cancer Management, NovaSAID, PERGAMUM, Promimic Making Implants Integrate, Umecrine mood

Validation of the portfolio value

The consideration in the deal, values the 13 companies at SEK 1,501m which is a premium of 23% compared to the reported value before the deal





Co-ownership through KDev Investments AB

The syndicate led by Rosetta Capital purchased 7.33% of the common shares in KDev Investments AB and preference shares that gives the syndicate´s holding company Rosetta IV LP a total ownership of 13.66%

1) For details on the deal structure, please refer to page 57.

Break-through in implant treatment of severe cranial injuries

Serious accidents and open brain surgery can cause major damages to the cranium. In order to treat these damages, different implant materials are used that today are based on plastics, polymers, or metals. These materials however, have limited properties to regrow with surrounding tissue, which lead to a lifelong risk for skin perforation and infection. When such complications occur the treatment alternatives are few, failure frequency increases exponentially and the treatment costs soar.

Plastic and reconstructive surgeon Thomas Engstrand at The Karolinska University Hospital has during many years been dealing with patients that because of cranial trauma have been treated with conventional implant technology, and that have been affected by infections and other complications. Based on his experience, he contacted a professor in biomaterials at Uppsala University and together they succeeded in developing a bioceramic material that, through its chemical composition, mimics bone. The first implant was inserted into a patient three years ago and the follow-up shows that the attempt has been successful. The healing of skin and scalp has been satisfactory and bone has been able to grow into the implant material. Thomas Engstrand is now engaged in Karolinska Development's portfolio company Oss-Q, that is running the project towards commercialization and none of the major medical technology companies are known to offer an implant material with such promising properties.

"The first patient that was treated with our implant had previously been through treatment with five different types of reconstructive material, but each time the results were not satisfactory. The healing process did not work and the patient was affected by several complicated infections that were hard to treat. Our technology has in this case been functioning excellently during more than three years, both in terms of the cosmetic result and the absence of complications", says Bo Qwarnström, CEO of Oss-Q.

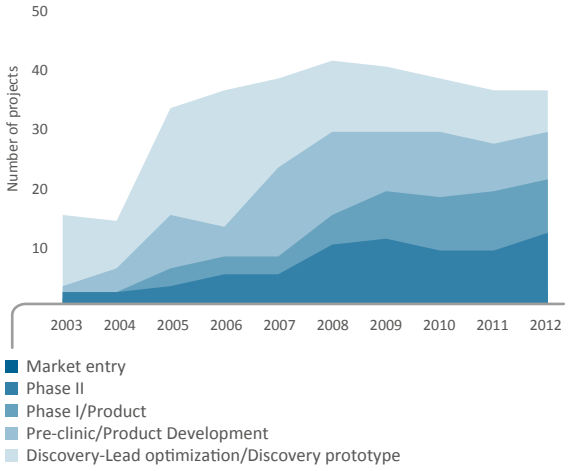
Oss-Q is currently completing the documentation of the technology, but have already received regulatory approval to market the product. Because the target population is small – in the Nordic countries there are only 12 hospitals where patients with cranial fractures are treated – Oss-Q has decided to run the sales operations in-house. This leads to increased control over the sales process, a deeper relationship with treating physicians and patients, and a larger portion of revenue stays within in company. The company is now looking to introduce the product in the Nordic countries and Germany.

For more information on Oss-Q, see page 42

OSS-Q

The Portfolio

Since the inauguration in 2003, the number of projects in the Karolinska Development portfolio has increased from 15 to 36 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 15 clinical projects of which 10 are in Phase II. Consequently many projects are facing important milestones for pharmaceuticals candidates at a stage where they are attractive for pharmaceutical companies aiming to take drugs to the market. The portfolio also consists of nine 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. Two 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 36 projects today, ranging from concept development to clinical Phase II.

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.

Preclinical Phase

Emphasis is on testing through the use of animal studies, to determine if the candidate drug (CD) is sufficiently safe for testing in humans.

Phase I

The first tests on humans are carried out. Normally, a small group of healthy volunteering men (20–100) is selected. The CD is given in increasing doses in order to test its safety and how it is absorbed and broken down in the body.

Phase II

Trials are performed to test the CD's effect on patients and to establish an appropriate dosage level. Study sizes vary greatly depending on the area of disease, from around ten up to several hundred patients.

Phase III

The efficacy of the CD is compared to a placebo and/or existing therapies. Data from these studies form the basis for subsequent applications for market approval of the pharmaceutical. The clinical trials in Phase III are normally multicenter studies on large patient groups, around 300 to 3,000 or more, depending on the target indication.

Market

PROOF-OF-PRINCIPLE

The first indication that the CD can be expected to have the intended effect in the body at a dosage level that will not give rise to unwanted side effects. Typically this is shown using relevant animal models or in Phase I.

PROOF-OF-CONCEPT

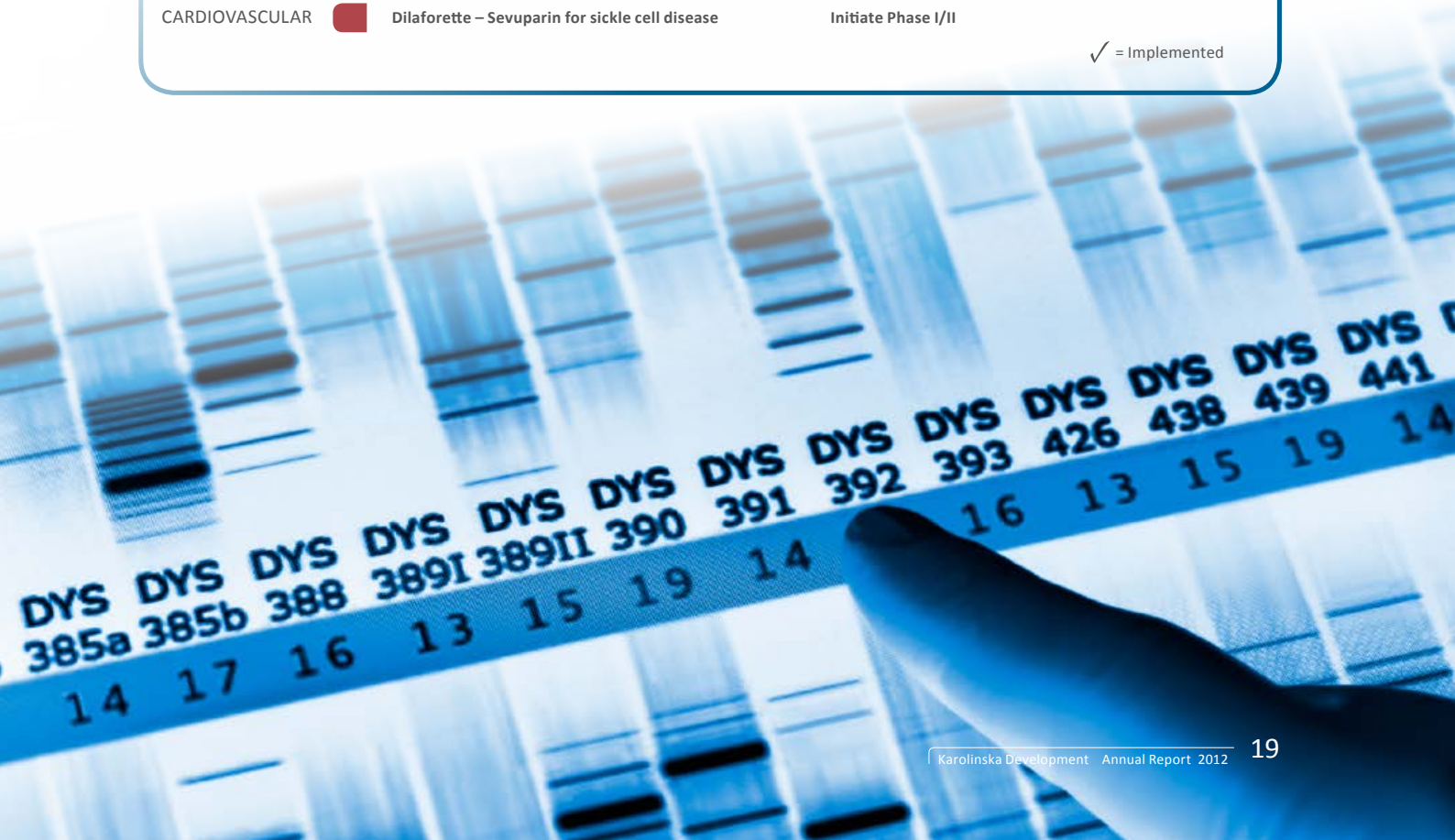
Proof of concept is achieved when the CD has shown effect in patients at the intended dosage level, typically achieved during Phase II.

Portfolio Milestones

During 2012, several portfolio companies passed important milestones. Pharmanest initiated both Phase I and Phase II studies, Akinion started their Phase I/II study in AML and Pergamum initiated studies with both DPK-060 and LL-37. Before the end of the year Pergamum reported clinical trial results from both the DPK-060 study and for PXL01, and Aprea published results from a Phase I/II study of APR-246. During 2013 Axelar presented preliminary data from the Phase II-trial with AXL1717 and several companies are expected to report data; Dilaforette, Pergamum, Pharmanest and Umecrine Mood are all expecting to finalize studies during the year. In addition, Dilaforette is expecting to initiate a clinical program in sickle cell disease aside from the study which was initiated at the beginning of 2013 in malaria, and Aprea expects to start a clinical trial in ovarian cancer.

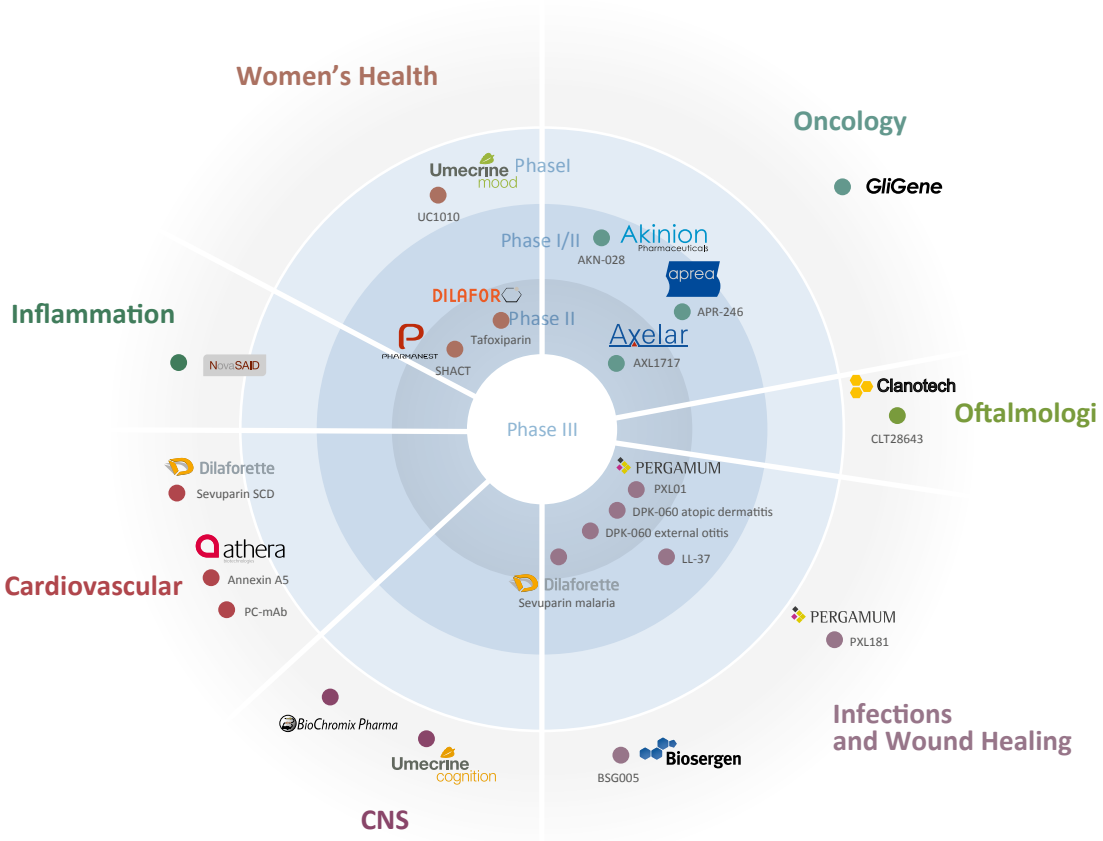
ONCOLOGY	Akinion – AKN-028 for AML	Initiate clinical studies	✓
	Aprea – APR-246	Complete Phase I/II	✓
	Akinion – AKN-028	**Complete Phase I**	
	Aprea – APR-246 for ovarian cancer	**Initiate Phase II**	
	Axelar – AXL1717 for NSCLC	**Complete Phase II**	
INFECTIONS AND WOUND HEALING	Dilaforette – Sevuparin for severe malaria	Initiate Phase II	✓
	Pergamum – DPK-060 for external otitis	Initiate Phase II	✓
	Pergamum – PXL01 for prevention of post-surgical adhesions	Phase II data	✓
	Pergamum – LL-37 for chronic wounds	Initiate Phase I/II	✓
	Pergamum – DPK-060 for external otitis	Complete Phase II	✓
	Dilaforette – Sevuparin for malaria	**Complete Phase I/II**	
	Pergamum – LL-37 for chronic wounds	**Complete Phase I/II**	
WOMEN'S HEALTH	Pharmanest – SHACT for pain relief at IUD insertion	Initiate Phase I	✓
	Pharmanest – SHACT for pain relief at IUD insertion	Initiate Phase II	✓
	Dilafor – Tafoxiparin for protracted labor	**Initiate Phase IIb with partner**	
	Pharmanest – SHACT for pain relief at IUD insertion	**Complete Phase II**	
	Umecrine Mood – Severe PMS and PMDD	**Complete Phase II**	
CARDIOVASCULAR	**Dilaforette – Sevuparin for sickle cell disease**	**Initiate Phase I/II**	

✓ = Implemented



Pharmaceuticals

Several projects are close to the accepted 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). In conjunction with childbirth, one fifth of women experience protracted labor, increasing the risk to mother and child. Karolinska Development's companies Umecrine Mood and Dilafor respectively, are developing pharmaceuticals for these needs.

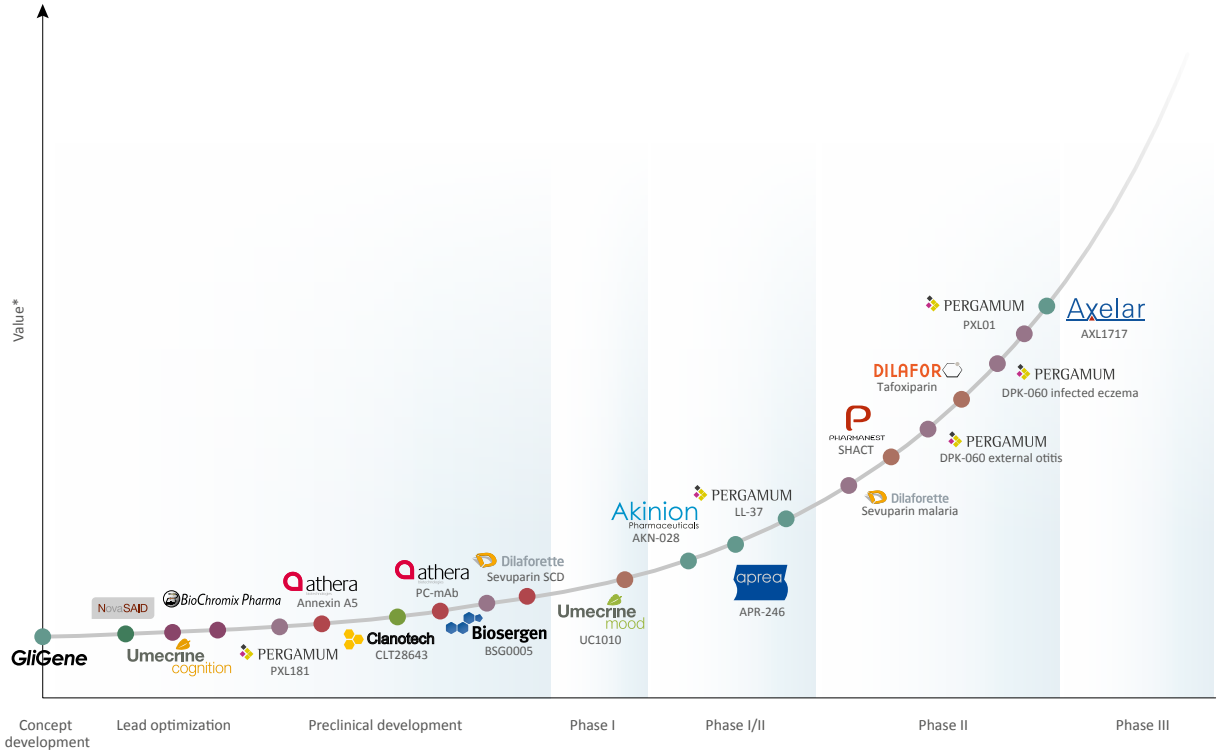
Infections and Wound Healing

Karolinska Development's infectious disease projects involve, among other areas, malaria, which causes one million deaths each year, mostly of children. Products against the most common invasive fungal infections, Aspergillus and Candida, are also under development. Also included is Pergamum with a portfolio of therapeutic peptides targeting skin infections and wound healing.

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 for heart attacks and strokes, both acute and recurrent.

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 Phase II-trials or are about to enter that phase during the coming years.



* The diagram illustrates conceptually how the value changes with the development phases. It cannot be used as a value ranking indication between projects.
As an example, the value of Pergamum's PXL01 were written down after the company reported in July 2012 that it had not met its primary end point in the Phase II-study

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 retinopathy associated with diabetes. Both of these diseases are characterized by pathological ocular neovascularization, which is counteracted by the company's therapeutic concept.

CNS

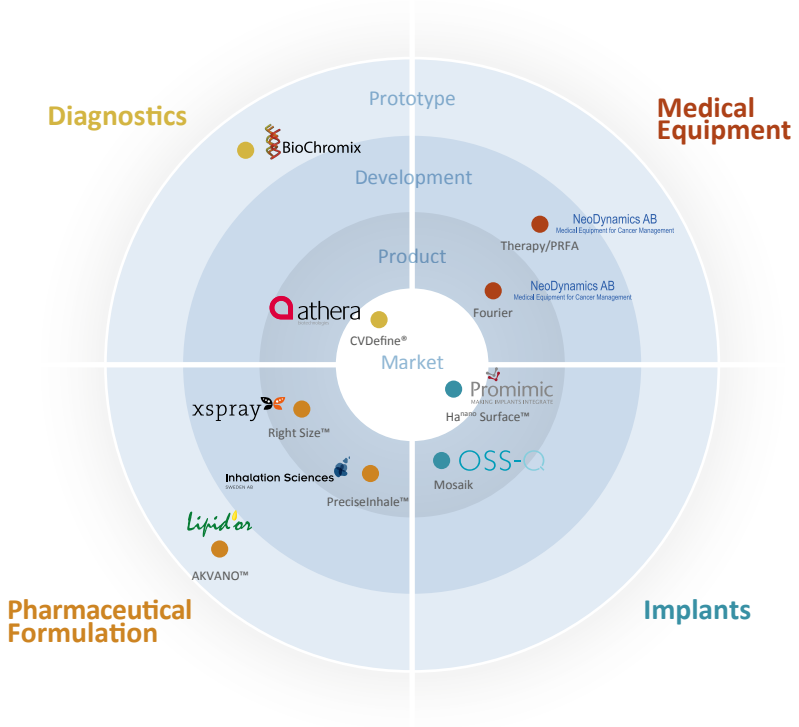
Alzheimer's Disease is among the diseases that place the greatest burden on society in terms of socioeconomic costs. These diseases affect not only the 25 million patients worldwide in the form of degenerating changes in behavior, cognitive ability and general quality of life but also lead to physical and mental stress on caregivers and relatives. Umecrine Cognition and BioChromix have innovative pharmaceutical as well as diagnostics projects in this area.

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.

Technology

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



Karolinska Development's technology portfolio ranges from companies with an early prototype to products on the market

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 10, 2013

Pharmaceuticals

	Ownership*	Page
Oncology		
Axelar AB AXL1717	39%	24
Aprea AB APR-246	60%	25
Akinion Pharmaceuticals AB AKN-028	78%	26
KDev Oncology AB GliGene	35%	27
Infection & wound healing		
Dilaforette AB Sevuparin, malaria	57%	30
Pergamum AB DPK-060, infected eczema	55%	28
Pergamum AB DPK-060, external otitis	55%	28
Pergamum AB PXL01	55%	28
Pergamum AB LL-37	55%	28
Biosergen AS BSG005	56%	31
Pergamum AB PXL181	55%	28
Women's health		
Dilafor AB Tafoxiparin	48%	32
Pharmanest AB SHACT	60%	33
Umecrine Mood AB UC1010	37%	34
Cardiovascular		
Athera Biotechnologies AB Annexin A5	65%	35
Athera Biotechnologies AB PC-mAb	65%	35
Dilaforette AB Sevuparin, SCD	57%	36
Ophthalmology		
Clanotech AB CLT28643	77%	37
CNS		
BioChromix Pharma AB	76%	38
Umecrine Cognition AB	54%	39
Inflammation		
NovaSAID AB	77%	40

Technology

	Owner-ship*	Page
Implants		
Promimic AB Ha^{nano} Surface™	27%	41
Oss-Q AB Mosaik	16%	42
Diagnostics		
Athera Biotechnologies AB Athera CVDefine®	65%	43
BioChromix AB	14%	44
Pharmaceutical Formulation		
Inhalation Sciences Sweden AB PreciseInhale™	66%	45
XSpray Microparticles AB Right Size™	63%	46
Lipidor AB AKVANO™	46%	47
Medical Equipment		
NeoDynamics AB Fourier	18%	48
NeoDynamics AB PRFA	18%	48

Financial/Passive Investments

	Ownership*	Page
BioArctic Neurosciences AB BAN2401	3%	49
NephroGenex, Inc. Pyridorin™	1%	49
Pergamum AB Laurantis Pharma Oy, cis-UCA dermatology	3%	49
Pergamum AB Laurantis Pharma Oy, cis-UCA onkologi	3%	49
Pergamum AB Laurantis Pharma Oy, ad-VEGF-C	3%	49
CytoGuide ApS	9%	49

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.

Lead identification 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. As at April 10, 2013.

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 pharmaceuticals[1]. 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). 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 resis- tance to therapy[2]. IGF-1R 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.

Competitive Advantages

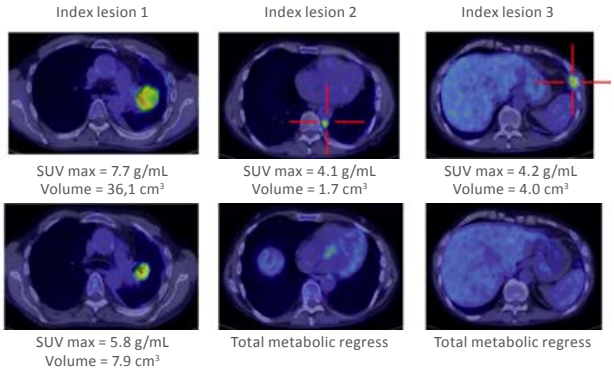
Because IGF-1R is structurally closely related to the insulin receptor, most of the small molecule IGF-1R inhibitors in clinical development also inhibit the insulin receptor with ensuing adverse effects. Axelar's lead candidate AXL1717 is the first small molecule inhibitor of IGF-1R in clinical development 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 non-detectable size.

In a Phase I/II study, AXL1717 was given as single agent to 49 patients with advanced, progressive, refractory solid tumors with no remaining treatment alternatives available. The data indicated good tolerability and oral bioavailability. The study was performed in a Phase I setting with safety assessments and recommended Phase II dose as the main endpoints. In spite of the trial design, the data also suggested that, particularly in some patients with NSCLC, AXL1717 showed signs of possible clinical benefit. The 15 NSCLC patients with treatment durations of more than two weeks with AXL1717 showed a median time to progression of 31 weeks and a median survival of 60 weeks. In one NSCLC patient, a partial response was confirmed with RECIST criteria.

Based on this data a randomized, open-label Phase II study with AXL1717 versus standard regimen chemotherapy (docetaxel) was initiated in NSCLC patients that has progressed from first line treatment. Preliminary results from this study indicates that AXL1717 has similar efficacy as docetaxel with regards to progression-free survival after 12 weeks, which was the primary endpoint.

The Market

Each year 1.1 million patients are diagnosed with lung cancer in the world and the disease accounts for 950,000 deaths annually[3]. Around 85 % of those patients have NSCLC[4]. 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 of the NSCLC patients[5]. 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 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 substantially larger.



PET images of three tumors on a NSCLC patient that was treated with AXL1717, at first dosing (upper panel) and at follow up at 12 weeks (lower panel). Partial response was confirmed according to RECIST criteria.

Status

- AXL1717 has shown potent anti-tumor effect against a wide range of tumors in various animal models
- A Phase I/II clinical trial has been completed where AXL1717 demonstrated a good safety profile and where signs that suggest clinical benefit in some patients with NSCLC were observed
- Preliminary results from a randomized Phase II clinical trial in NSCLC patients indicates that AXL1717 is efficacious in patients that do not respond to standard treatment
- An investigator-led Phase I/II study in malignant brain tumors has been initiated at Rush University Medical Hospital in Chicago

Planned Milestones

- Completion of the randomized Phase II clinical trial

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 after the ongoing Phase II study.

1) Source: Goffin et al., 2010. J Thorac Oncol. 5(2):260-274
2) Source: Pollak, 2008. Nat Rev Cancer. 8(12):915-928
3) Source: Globocan, 2010
4) Source: Datamonitor, Epidemiology: Non-Small Cell Lung Cancer, 2011
5) Source: Travis et al., 1995. Cancer. 75(12):2979

First-in-class potential | Project: AXL1717 | Ownership: 39 %

Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch

Contact:

Carl Harald Janson, CEO
Phone: +46 8 524 861 88
carlharald.janson@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 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 reintro- duction 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 Oncology[1]. 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 resistant ovarian cancer patients.

Competitive Advantages

APR-246 activates the function of p53 whether it is normal or mutated and thus triggers programmed cell death in tumor cells. This function appears to be a unique characteristic of APR-246. 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 it 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 13 million people are diagnosed with cancer and close to eight million people die worldwide as a result[2]. APR-246 has the potential to be used in many cancers and the market potential only in ovarian cancer is substantial. In 2011, more than 200 000 women were living with ovarian cancer in the seven major markets and 65 000 new patients were diagnosed. The latter is expected to grow to 75 000 during the next ten years with the number of prevalent cases reaching nearly 250 000[3].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 2.3bn[4].

Status

- Phase I/II dose finding study completed
- Data published in Journal of Clinical Onclolgy
- Extension study completed
- Mechanism of action further clarified

Planned Milestones

- Initiate Phase II proof-of-concept study in platinum resistant 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., 2012. J Clin Oncol. 30(29):3633-3639
2) Source: WHO, International Agency for Research on Cancer 2008
3) Source: Datamonitor, Epidemiology: Ovarian Cancer, 2012
4) Source: GlobalData, Ovarian Cancer Therapeutics – Global Drug Forecasts and Treatment Analysis 2020, 2012

First-in-class potential | Project: APR-246 | Ownership: 60 %

Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch

Contact:

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 quick growth of abnormal, leukemic white blood cells. As the leukemic cells outnumbers normal white and red blood cells, an array of anemic and immunologal 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 older [1].

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

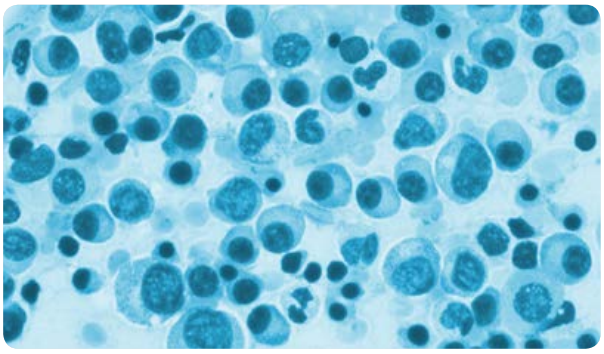
AKN-028 is a small molecule kinase inhibitor candidate drug developed for the treatment of AML. Preclinical results from in vitro and *in vivo* studies with AKN-028 show a unique efficacy against all primary AML tumor samples tested, even chemotherapy-resistant AML tumors. AKN-028 is administered as 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. Furthermore, the superior safety profile of AKN-028 compared to current standard-of-care therapy could offer the more fragile elderly AML patient population a less aggressive treatment option.

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 30,000 [2]. 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 development [3]

Planned Milestones

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

Patent Status

Patent applications covering a number of the company's compounds in major territories have been filed.

Commercialization

The development program will be continued toward achieving clinical proof-of-concept. Akinion will 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., 2012. Blood Cancer J. 3(2):e81

First-in-class potential | Project: AKN-028 | Ownership: 78%

Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch

Contact:

Carl Harald Janson, VD
Phone: +46 8 524 861 88
carlharald.janson@akinion.com
www.akinion.com

KDev Oncology AB

KDev Oncology is Karolinska Development's fully owned company within the oncology area. The ambition with KDev Oncology is to improve focus and efficiency in this important therapeutic area by achieving synergies between projects and by recruiting top competence as well as attracting strategic partners and co-investors. As of today, GliGene is under the direct ownership of KDev Oncology but all of the oncology companies involved in pharmaceutical development in the portfolio share expertise and resource optimization through KDev Oncology.

GliGene AB

GliGene

GliGene was established as a result of research conducted by Professor Rune Toftgård and colleagues at the Karolinska Institutet. It is an early stage development company in oncology that is focusing its discovery activities on the Hedgehog signaling pathway. This pathway is involved in the control of cell differentiation, growth, and proliferation in developmental growth but also plays an important role in cancer growth when it is reactivated in pathogenic circumstances. This reactivation is apparent in many different types of cancers. One example where the Hedgehog pathway is often reactivated is pancreatic cancer, which is one of the deadliest of all cancers.

First-in-class potential

Ownership: 35 %

Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch

Contact:

Carl Harald Janson, CEO
Phone: +46 8 524 861 88
carlharald.janson@gligene.com
www.gligene.com

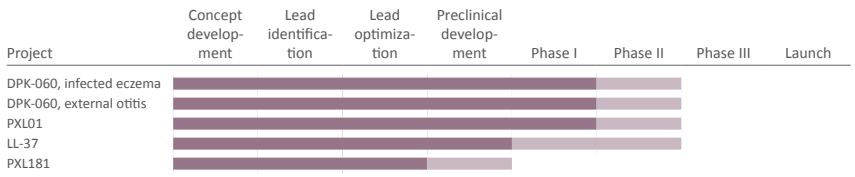
Pergamum AB

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: 55%



Contact:

Jonas Ekblom, CEO
Phone: +46 8 524 891 01
jonas.ekblom@pergamum.com
www.pergamum.com

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 world [1]. 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 world [2], and the company estimates that permanent scars and adhesions occur in at least 20% of these procedures [3].

Finally, there is an estimated incidence of external otitis of approximately 1% in the general population [4], which is equivalent to 10 million cases every year in the developed world.

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. [5]

The fastest growth potential is within the segment where Pergamum operates; in the field of 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

- A Phase I/II study of LL-37 in chronic wounds is ongoing
- Patient enrolment has been completed to a Phase II study of PXL01 for prevention of post-surgical adhesions
- Patient enrolment has been completed to a Phase II study of DPK-060 in external otitis
- Co-development agreement signed with Cadila Pharmaceuticals Ltd. headquartered in Ahmedabad, India, around one of Pergamum's early stage development projects

Planned Milestones

- Report data from the ongoing Phase I/II study of LL-37 in chronic leg ulcers
- Final report from the Phase II study of PXL01 in post-surgical adhesions
- Final report from the Phase II study of DPK-060 in external otitis

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 nine patent families that are approved or pending approval.

Commercialization

Pergamum's strategy is to initiate partnering discussions for development programs once they have achieved clinical proof-of-concept in a Phase II study. The intention is to find a strategic acquirer or to enter one or several collaborative alliances once data is concluded from the ongoing programs, preferably a leading pharmaceutical company in the field of advanced wound care/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., 2008. Lancet. 372:139-144
3) Source: Pergamum's estimate
4) Source: Rosenfeld et al., 2006. Otolaryngol Head Neck Surg. 134:s4-23
5) Source: Espicom, The Global Advanced Wound Care Market to 2015, 2010

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

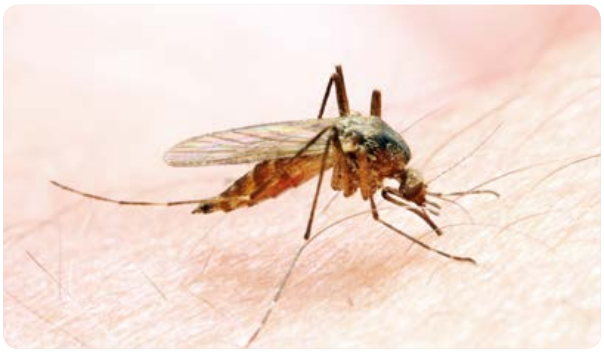
Dilaforette has developed a low anticoagulant heparin derivative, sevuparin, for the treatment of severe malaria and sickle cell disease. Heparin has been successfully tried as an adjunctive treatment in severe malaria, but the use was discontinued due to severe bleeding complications related to its anticoagulant property. Sevuparin is a heparin derivative in which anticoagulant activity has been significantly reduced, which strongly reduces this important risk factor. 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 no effective treatment. 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 malaria[1]. 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 settings[2]. The total numbers of severe malaria cases are estimated to be around 10 million per year[3].



Status

- Safety and toxicological 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 for sevuparin and its medical use in key markets.

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: Dondorp et al., 2010. Lancet. 376(9753):1647-1657
3) Source: Murray et al., 2012. Lancet. 379(9814):413-431

First-in-class potential | Project: Sevuparin, malaria | Ownership: 57%

Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch

Contact:

Pirkko Sulila Tamsen, CEO
Phone: +46 70 302 95 88
pirkko.tamsen@dilaforette.se
www.dilaforette.se

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

Competitive Advantages

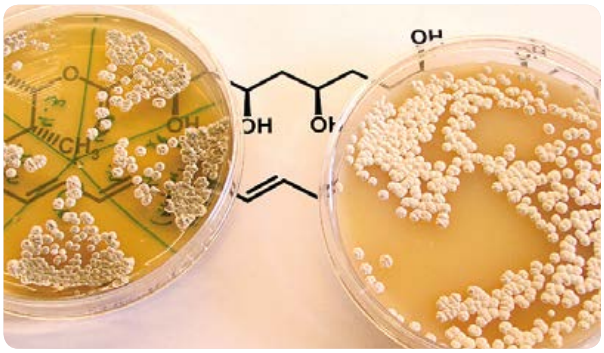
Biosergen's BSG005 is a new innovative drug candidate with a wide antifungal efficacy spectrum. BSG005 has so far shown superior properties compares to conventional treatment in term of efficacy, toxicity and pharmacokinetics.

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 market[1].

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

Project: BSG005 Ownership: 56%

Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch

Contact:

Gunilla Ekström, CEO
Phone: +46 73 354 20 58
gunilla.ekstrom@biosergen.se
www.biosergen.se

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

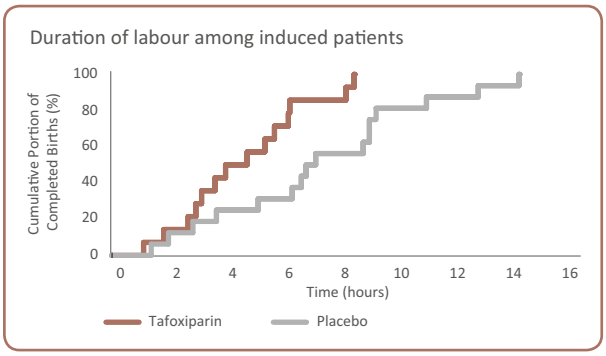
Dilafor's drug candidate, tafoxiparin, is based on a modification of LMWH that essentially eliminates the anti-coagulative effect and thus the heightened risk of bleeding. Tafoxiparin has been tested in a Phase IIa trial with 263 first-time mothers. The study showed that significantly fewer women were in labor for more than twelve hours compared to placebo. It also showed significantly shorter labor time 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 deliveries[1]. 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 labour among women who were induced and received either tafoxiparin or placebo. A notch in the curve represents birth. The difference is statistically significant.

Status

- Phase I clinical showed high tolerability and safety
- Phase IIa trial with tafoxiparin in 263 women completed.
- Significantly fewer first-time mothers in labor for more than twelve hours compared to placebo
- Significantly shorter labor time in labor induction cases and with no cases of protracted labor in the tafoxiparin treated group
- Excellent safety and tolerability

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 is currently seeking a partner for the further development and commercialization of tafoxiparin.

1) Source: National Vital Statistics Reports, 2006

First-in-class potential | Project: Tafoxiparin | Ownership: 48 %

Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch

Contact:

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. It is also well known that the range of effective treatments for 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 in-house. 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 use in local pain relief in connection with the insertion of IUDs. There are few local pain relief products with documented efficacy on the market at present, and the patient therefore has no choice but oral products or no pain relief at all.

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.

The Market

Some 150 million women around the world have an IUD[1]. The medical need for local pain relief when the IUD is inserted has been confirmed by recently conducted market surveys[2]. 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 hysteroscopy, abortions and obstetric pain.

Status

- Phase II clinical trial ongoing

Planned Milestones

- Complete Phase II clinical trial

Patent status

Pharmanest´s patent applications directed to its formulation technology and to the product in development are pending in the national phase.

Commercialization

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

1) Source: United Nations, World Contraceptive Use 2011

2) Source: Marketing studies

Project: SHACT

Ownership: 60 %

Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch

Contact:

Gunilla Lundmark, CEO

Phone: +46 70 974 90 57

gunilla.lundmark@pharmanest.se

www.pharmanest.se

Umecrine Mood AB

The Challenge

Severe premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD) affect over 15 % of all fertile women[1]. 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.

Umecrine Mood's Solution

Umecrine 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

Umecrine 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. Umecrine 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 alone[2]. From a health economics perspective, an effective treatment for these conditions 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 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
- The drug candidate has an excellent safety profile and is currently at the Phase I clinical stage

Planned Milestones

- Complete the current Phase I program
- Carry out a Phase II clinical trial in PMDD patients aimed at demonstrating proof-of-concept

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

Umecrine Mood will continue its development program up to proof- of-concept to demonstrate the effect of treatment of PMDD in clinical Phase II. At the same time, the company will identify potential partners for continued development. 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 Obstreticians 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: 37 %

Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch

Contact:

Karin Ekberg, CEO

Phone: +46 70 458 00 45
karin.ekberg@umecrine.se

www.umecrine.se

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 acute 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 after acute coronary syndrome.

Athera is also developing Annexin A5, a recombinant protein treatment that in animal studies has been shown to prevent inflammation, restenosis and plaque rupture. The protein is being developed to prevent complications after vascular surgery of patients with peripheral arterial disease.

Competitive Advantages

Athera's product candidates target the inflammatory component of acute cardiovascular disease, where current therapies are considered to be inadequate. The company's biomarker, CVDefine® kit, makes it possible to identify high risk patients with CVD that are most likely to benefit from anti-inflammatory 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 deaths[1]. Several of the world's most prescribed drugs are used for the treatment of cardiovascular diseases with USD 100bn sales[2].

Status

- Treatment with PC-mAb was shown to be effective in 3 different animal models of CVD
- 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 studies
- Process development for Annexin A5 has been scaled up to manufacturing scale

Planned Milestones

- Continue preclinical development of PC-mAb, aiming to reach IND-status
- Develop Annexin A5 through preclinical phase aiming to reach IND-status

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 and Annexin A5. New patent applications have been filed for diagnostic and therapeutic innovations.

Commercialization

Athera is currently identifying and securing strategic partners for late stage clinical development and commercialization of its therapeutic products, and is pursuing commercial activities to gain market acceptance and generate increased revenues for CVDefine. The company is also looking for additional business opportunities to reach laboratory markets with high volumes through agreements with diagnostic companies.

1) Source: WHO, The Global Burden of Disease: 2004 Update, 2008
2) Source: Datamonitor, PharmaVitae Explorer

First-in-class potential

Ownership: 65 %

Project	Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch
Annexin A5								
PC-mAb								

Contact:

Carina Schmidt, CEO
Phone: +46 76 193 81 90
c.schmidt@athera.se
www.athera.se

Dilaforette AB, sickle cell disease

The Challenge

Sickle cell disease (SCD) is a genetic disorder caused by mutation in the hemoglobin gene. This may cause, among other things, red blood cells to assume an abnormal 'sickle' form. In SCD adherence of sickled red blood cells to the endothelium of blood vessels lead to restricted blood flow to the organs. This leads to Vaso-Occlusive Crisis (VOC), painful events and a clinical hallmark of the disease. In SCD, pain occurs in more than 50% of days and 90% of hospital admissions are for acute pain[1]. On average VOC causes around 1 hospitalization per patient and year[2] and the average life expectancy of males and females with SCD is only 42 and 48 years, respectively[3]. There is currently no approved therapy for treatment of acute VOC besides pain management.

Dilaforette's Solution

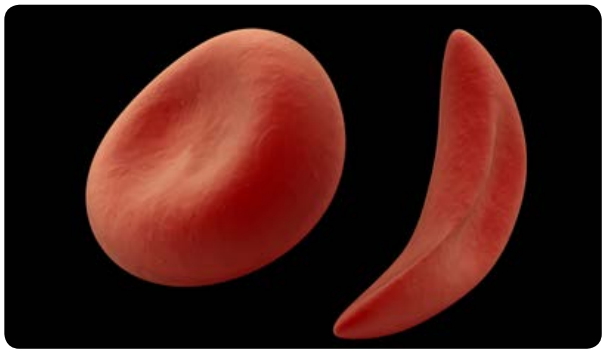
Dilaforette has developed a low anticoagulant heparin derivative, sevuparin, for the treatment of severe malaria and SCD. The candidate drug was developed with its low anticoagulant properties in mind. In this way, many of the adverse events, primarily bleeding, that are associated with heparins can be avoided. In SCD, sevuparin has the potential to treat VOC by restoring normal blood flow by inhibiting adhesion of sickled red blood cells.

Competitive Advantages

Preclinical evaluation has shown that sevuparin has the potential to reduce time to resolution of the crisis, reduce need of analgesics and hospitalization time. Thereby, Dilaforette's treatment has the potential to lower the severe debilitating pain that many SCD patients experience and also serve as a health economic relief with less burden associated with hospitalization.

Market

SCD is most common in Africa where around 300,0000 – 400,000 are born with the disease each year. In Europe and the US SCD is an orphan disease with approximately 80,000 and 30,000 patients, respectively.[4,5] By successfully limiting the number and 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 and toxicological documentation of sevuparin has been successfully completed in a Phase I clinical trial
- Planning is underway for a Phase I/II program in SCD

Planned Milestones

- Initiate clinical proof-of-concept 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., 1991. N Eng J Med. 325:11-16
4) Source: WHO, 2001
5) Source: Hassel, Am J Prev Med 2010

First-in-class potential | Project: Sevuparin, SCD | Ownership: 57%

Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch

Contact:

Pirkko Sulila Tamsen, CEO
Phone: +46 70 302 95 88
pirkko.tamsen@dilaforette.se
www.dilaforette.se

Clanotech AB

The Challenge

Pathological angiogenesis is a process that involves abnormal growth of new blood vessels. Several diseases of the eye involve pathological angiogenesis in the retina, leading to visual impairment and blindness. Ocular neovascular diseases such as age-related macular degeneration (AMD) and diabetic retinopathy are most common in an ageing population. Current treatments are based on inhibitors of the vascular endothelial growth factor (VEGF). However, the treatment needs to be injected in the eye and currently only a limited number of patients are being treated.

Clanotech's Solution

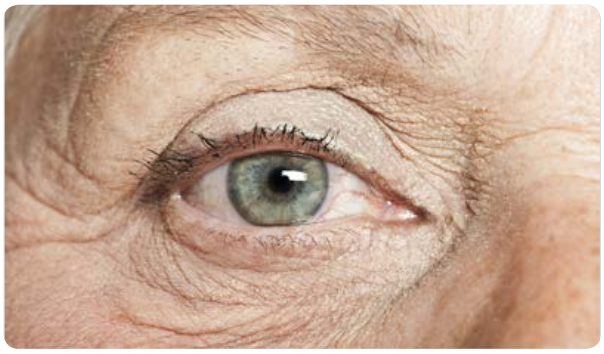
Clanotech's lead candidate is an inhibitor of the $\alpha_5\beta_1$-integrin receptor present on vascular endothelial cells. $\alpha_5\beta_1$-integrin stimulates the unwanted formation of new blood vessels through pathways that are partly complementary and partly interrelated with the VEGF pathway which is the target of today's drug therapy. $\alpha_5\beta_1$-integrin is strongly up-regulated in choroidal neovascularization in microvessels of diabetic patients and in cornea neovascularization indicating that $\alpha_5\beta_1$-integrin antagonists are a new and promising area of research for the treatment of neovascularization in the eye.

Competitive Advantages

Clanotech's $\alpha_5\beta_1$-integrin antagonist offers a new add-on mechanism to anti-VEGF-therapy, providing a sustained antiangiogenic effect. A new $\alpha_5\beta_1$-integrin antagonist therapy has the potential to become a complementary treatment to the current standard care in combination regiments. In addition, the potential use in other eye diseases is also being investigated.

The Market

The total global financial burden of AMD is estimated at USD 350bn each year[1] and there are around 4 million people suffering from the wet form of AMD worldwide[2]. Lucentis, an anti-angiogenic product indicated for this disease, achieved sales close to USD 4bn in 2012[3]. Between 70–90 % of diabetic patients develop diabetic retinopathy, and there are currently no effective pharmaceutical treatments available for these patients.



Status

- The lead candidate is in preclinical development

Planned Milestones

- Completion of regulatory toxicology studies
- Preparation for clinical studies

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

First-in-class potential | Project: CLT28643 | Ownership: 77%

Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch

Contact:

Patrizia Caldirola, CEO
Phone: +46 70 374 71 79
patrizia.caldirola@clanotech.se
www.clanotech.se

BioChromix Pharma AB

The Challenge

At present, there are no cures for neurodegenerative diseases such as Alzheimer's disease (AD), Huntington's Disease and Amyotrophic Lateral Sclerosis (ALS). Nor are there any pharmaceutical therapies that halt the development of the diseases. The only approved drugs provide only short-term symptomatic relief and are often associated with side effects. Currently, there are no therapies that target the basic pathology of the diseases i.e. the misfolding of naturally occurring proteins that can build up to neurotoxic aggregates which are one of the prime suspects in damaging and killing nerve cells.

BioChromix Pharma's Solution

BioChromix Pharma has discovered a novel class of compounds representing a unique therapeutic approach for the treatment of Alzheimer's disease and other neuro- degenerative diseases. The BioChromix Pharma compounds that are under development have been shown to reduce plaque load and neurotoxic Aß aggregates significantly.

Competitive Advantages

The company's lead compounds cross the blood brain barrier (BBB) and quickly reach effective concentrations in the brain. Their fluorescent properties enable rapid and accurate target engagement evaluation. The compounds are also believed to operate in a larger window than for example antibodies which are only active against a few misfolded proteins. In addition, antibodies and many small molecule drugs do not easily cross the BBB.

The Market

Direct care cost for the 30 million patients suffering from Alzheimer's related dementia worldwide is estimated to be around USD 156bn per annum. Sales of Alzheimer's disease drugs across the seven major markets reached over USD 5bn in 2011. It is forecasted that the market will grow to USD 13bn by 2021, at a compound annual growth rate of 9%.[1]

Status

- Lead compounds are currently being optimized and validated in *in vitro* and *in vivo* models of several neurodegenerative diseases.
- Several mechanism of action has been established demonstrating e.g that the compounds bind to the soluble aggregates of Aß, believed to be the neurotoxic species of Aß
- Preliminary proof-of-principle has been established, with further investigations ongoing

Planned Milestones

- Continue the preclinical studies to investigate the efficacy and drug properties of lead compounds
- Select candidate drug

Patent Status

BioChromix Pharma has built its patent portfolio around its lead compounds, and several patent families are pending.

Commercialization

The development program will be continued in order to demonstrate proof of concept in man, through Phase IIa clinical trials. At or prior to this stage the company will form a strategic partnership or seek to license the project, in order to complete the clinical program and to bring the product to market.

1) Source: Datamonitor, Market and Product Forecasts: Alzheimer's Disease, 2012

First-in-class potential

Ownership: 76%

Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch

Contact:

Lovisa Afzelius, CEO

Phone: +46 70 814 88 84

lovisa.afzelius@biochromix-pharma.com

www.biochromixpharma.com

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 which leads to hyperammonemia. The main symptoms of hyperammonemia arises in the brain where impaired neural signaling and 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 control hyperammonemia. Currently, there are no drugs available that 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 HE[3]. 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 2009[6]. The preliminary 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

- Three lead compounds have been identified and candidate drugs have been pre-nominated for development
- Mechanism of action has been established
- Proof-of-principle has been demonstrated in vitro and in experimental models regarding the GABA-steroid modulating approach to improving cognitive function and consciousness

Planned Milestones

- Exploratory studies to verify the pharmacological properties of the pre-nominated candidate drugs
- Nomination of a candidate drug and begin regulatory toxicology studies 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, 2008. Lancet. 371: 838-851
2) Source: Blachier et. al., 2013. J. Hepatol. 58: 593-608
3) Source: HCUPnet, Healthcare Cost and Utilization project, 2006
4) Source: Yoneyama et. al., 2004. Dig. Dis. Sci., 49: 1174-1180
5) Source: Planas et. al., 2004. J. Hepatol. 40: 823-830
6) Source: Stepanova et al., 2012. Clin. Gastroenterol. Hepatol. 10:1034-1041

First-in-class potential

Ownership: 54%

Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch

Contact:

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, respectively[1]. NovaSAID's compounds have the potential to replace both COX-2 inhibitors and NSAIDs, which currently have combined sales of more than USD 12bn[2]. 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

Planned Milestones

- Enter preclinical development with the first candidate drug

Patent Status

Patent applications for compounds in development are pending.

Commercialization

NovaSAID is seeking a partner for further development and global commercialization of mPGES-1 inhibitor products.

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

First-in-class potential

Ownership: 77 %

Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch

Contact:

Pirkko Sulila Tamsen, CEO
Phone: +46 70 302 95 88
pstamsen@novasaid.se
www.novasaid.se

Promimic AB

The Challenge

TThe 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 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 HA^{nano} 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

HA^{nano} 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 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

Patent for the company's primary innovation is currently pending on all major markets worldwide and patent has 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: 27 %

Concept development	Prototype	Development	Product	Sales
			■	

Contact:

Ulf Brogren, CEO

Phone: +46 31 772 80 22
info@promimic.se

www.promimic.se

Oss-Q AB

The Challenge

The mission of Oss-Q 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 integration with tissues around them and are a lifetime risk for skin penetration and infection [1]. When such complications occur, treatment choices are few, subsequent failure rates increase exponentially and treatment costs soar. A recent study of 1,200 patients demonstrated that hospital costs are more than five times higher in patients with complications after advanced surgery as compared to complication-free surgery [2].

Oss-Q's Solution

The vision of Oss-Q is to become best in class globally, in offering treatment solutions for complex bone defects. The key to realizing the vision is to improve the quality of life of these patients, often in considerable distress, and to reduce the costs for hospitals treating the patient group. In order to realize the vision, Oss-Q develops, manufactures and sells implants based on a proprietary technology platform with bone-like bioceramics at its core.

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 Oss-Q´s lead product, patient specific mosaic-designed implants have resulted in very promising clinical outcomes in this patient group.

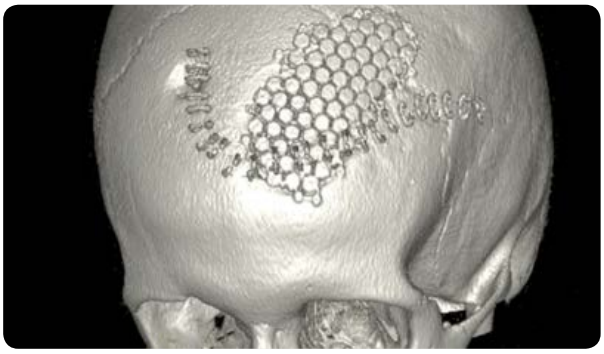
The key competitive advantage of the cranial implant is to reduce the complication rate, leading to:

- Improved quality of life for patients
- Reduced costs for hospitals

Beyond cranioplasty, Oss-Q intend to exploit its technology platform for commercially developing other products for the treatment of complex bone defects, indications that currently lack effective therapies.

The Market

The market for biomaterials products in orthopedics was worth more than EUR 1.25bn in 2012. The market for Oss-Q's lead product in cranioplasty alone is expected to amount to approximately EUR 80m in 2017. Oss-Q 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, which are easy to identify and reach. In addition the price sensitivity is low for products with proven efficacy



Status

- Clinical testing has been ongoing for cranial implant.
- The company has documented that bone grows on the Oss-Q ceramic material.
- Oss-Q has received a registration certificate from the Swedish Medical Product Agency
- Oss-Q now has market access and has sold its first products.

Planned Milestones

- Launch the mosaic-designed cranial implant in Scandinavia and Germany.

Patent Status

Oss-Q has eight PCT patent applications. For its lead product, Oss-Q has patent applications addressing design, material and process aspects of the innovation.

Commercialization

Oss-Q intend to build an international medical device firm based on direct sales on niche markets, starting with skull surgery, and to develop other markets in general orthopedics in collaboration with strategic partners.

1) Source: Marchac & Greensmith, 2008, JPRAS. 61(7):744-752
2) Source: Vonlanthen et. al., 2011. Annals of Surgery. 254(6):907-913

Project: Mosaik

Ownership: 16%

Concept development	Prototype	Development	Product	Sales

Contact:

Bo Qwarnström, VD
Phone: +46 76 899 85 87
bq@oss-q.com
www.oss-q.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 acute coronary syndrome patients at high risk of secondary events. 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

Carry out additional international clinical studies in collaboration with key opinion groups.

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 pursuing commercial activities to gain market acceptance and generate increased revenues for CVDefine. Additional business opportunities are being sought to reach high-volume laboratory markets through agreements with diagnostics companies.

Product: IgM anti-PC (CVDefine® kit) Ownership: 65 %

Concept development	Prototype	Development	Product	Sales

Contact:

Carina Schmidt, CEO
Phone: +46 76 193 81 90
c.schmidt@athera.se
www.athera.se

BioChromix AB

The Challenge

Alzheimer's disease (AD) affects nearly 1 % of the world population. It is a progressive, degenerative, irreversible disease, and the most common form of dementia. The only reliable diagnosis of Alzheimer's disease that we have today is *post mortem* identification of the disease in the brain. There are no cures for AD at present. To achieve an effective treatment of the disease it is necessary to start treatment early, before the first symptom, memory disturbance, occurs. Therefore it is essential to develop a reliable test that can identify those at risk of developing the disease. Today there is no such test. In addition, efficient development of disease modifying drugs for AD requires *in vivo* detection of the major pathological events of the disease, aggregating Tau and Aß, in the brain.

BioChromix's Solution

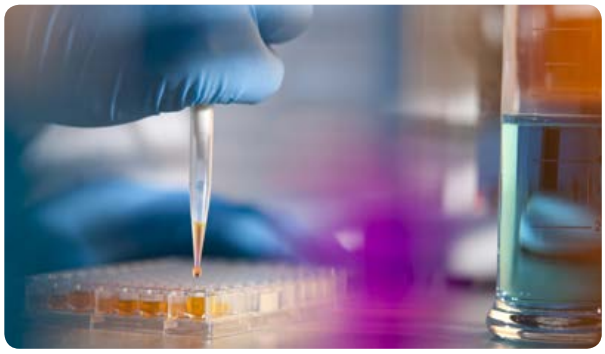
BioChromix has developed a sensitive method that can detect Aß oligomers in biological samples such as cerebrospinal fluid. Thus, it would be possible to diagnose the disease by measuring the amount of oligomers. BioChromix's test would also be very helpful for monitoring the effectiveness of different treatments and the development of new drugs for AD. There is a great commercial need for BioChromix' unique products.

Competitive Advantages

Today there are no efficient methods approved to measure levels of soluble Aß oligomers for the development of next generation drugs for AD. Drugs targeting the Aß directly or modifying the Aß fibrillation, like Beta secretase inhibitors or Aß aggregation inhibitors, are the preferred approach currently being taken by big pharma. BioChromix see great value in being able to offer a unique method to measure Aß oligomers to these pharmaceutical companies.

The Market

Across the seven major pharmaceutical markets the AD drug market is forecast to grow from USD 5bn in 2011 to USD 12bn in 2021. Patient numbers are expected to reach over 100 million by 2050. It is believed that on important catalyst for this growth will come from earlier and improved diagnosis of AD. The AD diagnostics and biomarker segment market alone is expected to exceed USD 1bn in 2011 and USD 2.5bn by 2021.[1]



Status

BioChromix is currently continuing the evaluation of its *in vitro* and *in vivo* methods in collaboration with leading clinical institutions.

Planned Milestones

Advance the development, validation and commercialization of the innovative Aß and Tau detection methods for the diagnosis and research of AD.

Patent Status

The Company's patented methods are based on the novel luminescent conjugated polymer andoligomer (LCP/LCO) molecules. Several of BioChromix' patent applications have been granted in the US, Europe, Japan, Canada and Australia as well as other countries and several other patents are pending.

Commercialization

The company is open to strategic partnership or project licensing discussions while continuing to develop the project.

1) Source: Datamonitor, Market and Product Forecasts: Alzheimer's Disease, 2012

Ownership: 14 %

Concept development | Prototype | Development | Product | Sales

Contact:

Peter Åsberg, CEO
Phone: +46 70 949 17 21
peter.asberg@biochromix.com
www.biochromix.com

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

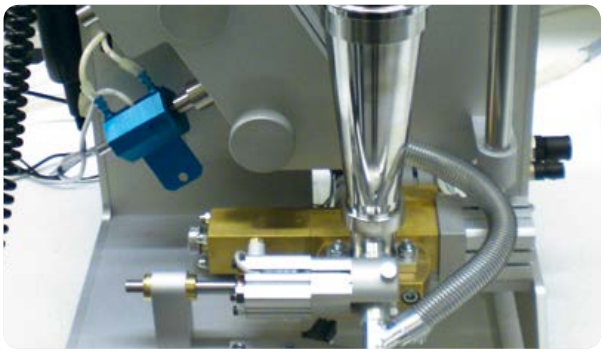
The technology platform requires only minimal pre-processing of a compound before testing. Only small amounts – often less than 100 mg – of an active substance are needed to generate all aerosol exposures necessary in order to complete the critical first screening of a lead compound for its potential 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 (pharmaco-kinetics, 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 cortico-steroids or long acting combination products. The asthma/COPD market is expected to reach sales of almost USD 25bn in 2017[1].

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 first-pass 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

- Develop an *in vitro* system for early screening of inhalation drugs
- Validation of the PreciseInhale system for clinical use.

Patent Status

Five patent applications have been filed in the US, EU, Canada, Russia, China, India and Japan covering the important aspects of the technology.

Commercialization

The company's vision is to make the PreciseInhale platform a gold standard tool for inhalation 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

Ownership: 66 %

Concept development | Prototype | Development | Product | Sales

Contact:

Fredrik Sjövall, CEO

Phone: +46 70 645 08 75
fredrik.sjovall@inhalation.se

www.inhalation.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.

The 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.

XSprays Right Size technology showed approximately 26 times better solubility and approximately 8 times better bioavailability for nilotinib compared to the launched product Tasigna® (nilotinib, Novartis), a poorly soluble protein kinase inhibitor (PKI).The majority of PKIs are poorly soluble and challenging to formulate.

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.

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.

The Market

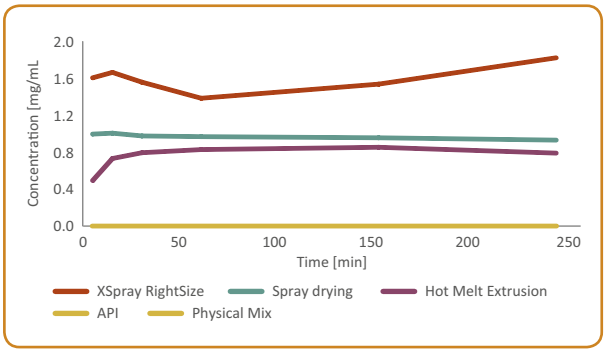
PKIs include a number of commercially successful brands such as Tasigna which had sales of USD 1bn in 2012[1]. PKIs are the second leading class of targeted cancer therapies having sales of USD 9bn in 2011, equivalent to 30% of total oncology sales in the seven major markets[2].

Over the next five years it is estimated that more than USD 267bn of branded pharmaceutical sales are at risk from generic competition[3]. 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.

Status

- First commercial agreement was signed in 2008
- Fully functional service laboratory is in place
- GMP production facility supporting Phase I and II clinical trials is validated and ready for production



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

- A candidate for a proprietary drug has been identified and development work is ongoing
- Animal studies demonstrate significantly improved bioavailability of RightSize formulation
- Stability for 14 months of RightSize formulation demonstrated
- Entered partnership with Cerbios-Pharma SA of Lugano, Switzerland for the joint development of HPAI (High Potency Active Ingredients)

Planned Milestones

- Initiate development of own drug project to clinical Proof-of-Concept

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™ Particle Manufacture Technology — Ownership: 63 %

Concept development	Prototype	Development	Product	Sales

Contact:

Per Andersson, CEO
Phone: +46 8 730 37 00
per.andersson@xspray.com
www.xspray.com

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 Advantage

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
- A partnership with Cerbios-Pharma SA (Switzerland) has been established for supplying calcipotriol, providing stability data and supplying clinical trial material

Planned Milestones

- Initiate Phase I/IIa clinical trial

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: 46%

Concept development	Prototype	Development	Product	Sales

Contact:

Anders Carlsson, CEO
Phone: +46 73 778 06 43
anders.carlsson@lipidor.se
www.lipidor.se

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 – 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.

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

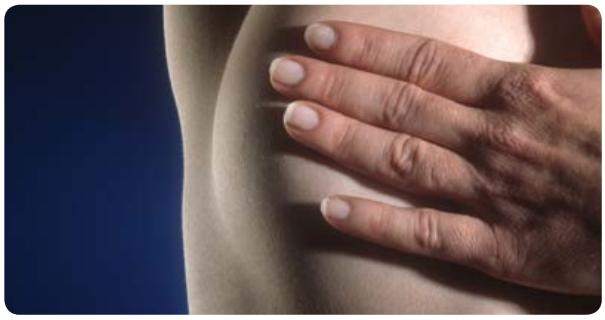
The cancer diagnostic and therapeutic market is expected to experience a steady growth due to demographic changes. The global biopsy market is estimated at USD 1bn. More than 10,000 biopsies per million of population are carried out for suspected cancer in the developed world. The largest indications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

Status

Fourier

- In final product development phase
- Local occurrence of living tumor cells in breast biopsies, and that these can be eliminated with Fourier, has been established and the data published, generating a lot of attention[2]



- 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 Cancer[3].

PRFA

- Results from the first clinical study have been published
- A second clinical study is ongoing (outpatient surgery) and publication is planned
- 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 and obtain CE-marking
- Market launch

PRFA

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

Patent Status

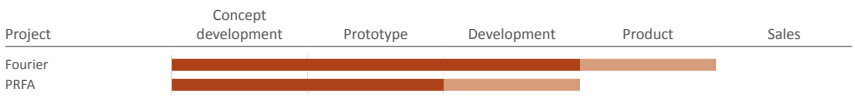
NeoDynamics has 35 patents granted and 4 patents pending for the company's various technologies and medical applications.

Commercialization

The company aims to launch diagnostic procedures in selected European countries during 2014.

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., 2010. Breast. 19(3): 219-225
3) Source: Wiksell et al., 2010. Br J Cancer. 103:1706-1709

Ownership: 18 %



Contact:

Peter Sellei, CEO
Phone: +46 70 624 21 89
peter.sellei@neodynamics.se
www.neodynamics.se

KDev Exploratory AB

KDev Exploratory is a fully owned subsidiary to Karolinska Development. The company enables value building by early drug discovery efforts focused on innovative disease targets, to identify and validate low molecular weight lead compounds. The company provides concept validation, research tools and data, to support future research and development activities within Karolinska Development. Projects are normally carried out as collaboration with cutting-edge academic research groups, providing invaluable knowledge and suitable biological test systems.

The team includes project managers and specialists in drug discovery and development, covering disciplines such as biology, pharmacology, and medicinal chemistry. The team's experience comes from academic research as well as from biotech and pharma industry R&D operations.

Michael Sundström, CEO
Phone: +46 70 248 09 93
michael.sundstrom@KDevExploratory.com
www.kdevexploratory.com

Financial/passive investments

BioArctic Neuroscience AB

BioArctic Neuroscience develops pharmaceuticals, devices and diagnostics aimed at disorders affecting the central nervous system. The company's most advanced program is a monoclonal antibody BAN2401, co-developed with Eisai, for the treatment of Alzheimer's disease. A Phase II study of BAN2401 is currently in progress.

Pär Gellerfors, CEO
Phone: +46 73 382 88 56
par.gellerfors@bioarctic.se
www.bioarctic.se

CytoGuide ApS

CytoGuide is developing therapies for treating inflammatory diseases. A humanized antibody conjugate has been produced and proof-of-concept has been reached in animal models for the technology. The platform technology will be used to develop drugs for the treatment of a range of diseases where macrophages are involved.

Søren Moestrup, CEO
Phone: +45 289 922 82
skm@cytoguide.dk
www.cytoguide.dk

Laurantis Pharma Oy

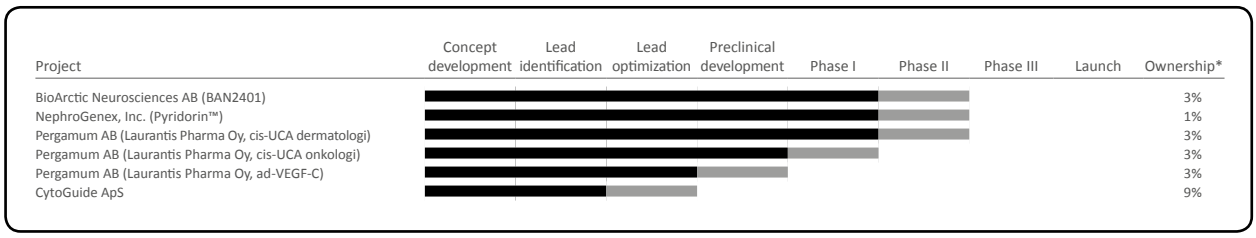
Pergamum AB owns a minority share in Laurantis Pharma that develops novel therapies in dermatology, ophthalmology and oncology. The company is currently conducting a Phase II trial in atopic dermatitis and a Phase I/II trial in non-invasive bladder cancer parallel to its preclinical program aimed at developing a treatment for lymphedema.

Jim Phillips, Acting CEO
Phone: +358 2 4788 378
info@laurantis.com
www.laurantis.com

NephroGenex Inc.

NephroGenex has completed Phase II trials with promising results using the company's lead candidate product Pyridorin™. The targeted pharmacological mechanism involves pathogenic oxidative chemistries that are an important factor in kidney diseases such as diabetic nephropathy and acute renal failure.

J Wesley Fox, CEO
Phone: +1 919 678 95 12
info@nephrogenex.com
www.nephrogenex.com



Karolinska Development's share and shareholders in 2012

Ownership structure

On 31 December 2012, Karolinska Development had 2,569 shareholders. International investors owned 32 % of the share capital and 25 % of the votes. On the same date, institutional investors held 90 % of the share capital and 92 % 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

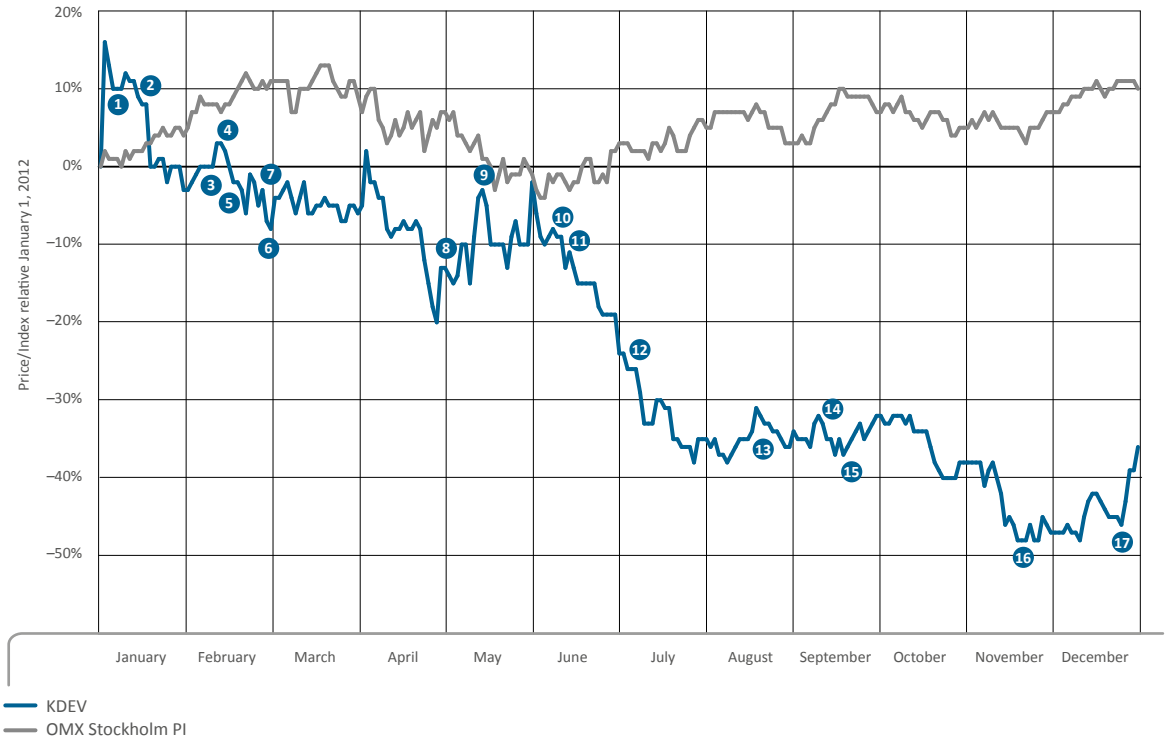
The closing price on the first trading day was SEK 24.0, and at year-end 2012 the share traded at SEK 15.3, a decline of 36 %. No dividend was paid in 2012.

Share capital

At year-end 2012, 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 44.0 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 2012

1 Akinion Pharmaceuticals initiates Phase I/II clinical trial with AKN-028 in AML

2 Pergamum initiates Phase II trial with DPK-060 in outer ear infections

3 Pergamum completes patient recruitment to the Phase II clinical trial for prevention of post-surgical adhesions

4 Karolinska Development announces the formation of KDev Oncology AB

5 KDev Oncology AB invests in the new portfolio company GliGene AB

6 Karolinska Development invests in the new portfolio company Oss-Q AB

7 The 2011 Year-End Report is published

8 Pharmanest initiates Phase I trial with SHACT

9 Interim report January – March is published

10 Pharmanest initiates Phase II study of SHACT for pain relief associated with intrauterine device (IUD) insertion

11 Karolinska Development arranges a share ownership exchange with Industrifonden, Karolinska Development exchanges its holding of shares in Oncopeptides AB for Industrifonden's shares in Aprea AB

12 Pergamum reports top line Phase II-data from the clinical trial for prevention of post-surgical adhesions

13 Interim report January – June is published

14 Pergamum announces that the first patient has been dosed with LL-37, a potential new treatment for hard-to-heal wounds

15 Aprea announces positive data from a clinical Phase I/II study with APR-246 in patients with advanced cancers

16 Interim report January – September is published

17 Karolinska Development Announces a 220m Strategic Deal and Pergamum reports positive Phase II data from clinical trial in outer ear infections

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	2,453,933	8.2	28.2
Coastal Investment Management LLC	0	3,470,541	7.2	5.6
The Foundation of Baltic and East European Studies	0	3,345,537	6.9	5.4
Jarla Investeringar AB	0	1,629,354	3.4	2.6
Länsförsäkringar Group	0	1,451,246	3.0	2.3
Foundation Asset Management AB	0	1,392,035	2.9	2.2
Skagen Funds	0	1,301,200	2.7	2.1
Stefan Persson	0	1,261,278	2.6	2.0
Insamlingsstiftelsen för främjande och utveckling av medicinsk forskning vid Karolinska Institutet	0	1,150,323	2.4	1.9
Swedbank Robur Funds	0	1,122,607	2.3	1.8
Fourth Swedish National Pension Fund	0	835,010	1.7	1.3
Norges Bank Investment Management	0	750,000	1.5	1.2
Holberg Funds	0	710,835	1.5	1.1
SBSB Innovation AB	0	700,000	1.4	1.1
Ruffer Funds	0	450,000	0.9	0.7
Gålö Foundation	0	375,535	0.8	0.6
Nordea Funds	0	366,600	0.8	0.6
OTK Holding A/S	0	325,000	0.7	0.5
KL Ventures AB	0	300,000	0.6	0.5
Sum. listed shareholders	**1,503,098**	**28,069,534**	**60.9**	**69.5**
Sum. other shareholders	**0**	**18,958,785**	**39.1**	**30.5**
Sum. all shareholders	**1,503,098**	**47,028,319**	**100**	**100**

As per December 31, 2012
Source: Euroclear

Board

BOARD OF DIRECTORS

HANS WIGZELL

Chairman and Board member since 2006. **Born** 1938. **MD and Professor of Immunology. Other appointments** Chariman of Rhenman & Partner Asset Management AB. Board member of AviBiopharma Inc., Swedish Orphan Biovitrum AB, Humalabs LLC, Intercell AG and RaySearch Laboratories AB. 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.

RUNE FRANSSON

Board member since 2006. **Born** 1947. **BSc. in Economics. Other appointments** Chairman of Karolinska Institutet Holding AB and the University Accommodation Center AB. Previous assignments include, among others, Board member of KI Health Management. **Holdings in Karolinska Development** 0 shares.

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. **Holdings in Karolinska Development** 0 shares.

RAYMOND HILL

Board member since 2011. **Born** 1945. **PhD. DSc. (Hon), FMedSci Other appointments** Visiting Professor at Bristol, Surrey, Imperial and Strathclyde Universities. He is President Emeritus of the British Pharmacological Society and a Member of Council of the Academy of Medical Sciences. In 2011 he received the Sir James Black Award for Drug Discovery from the BPS in recognition of his part in the introduction of Maxalt and Emend during the time he worked for Merck / MSD. He is a non-Executive Director of the Swiss companies Addex and Covagen and of Orexo in Sweden. **Holdings in Karolinska Development** 0 shares.

CHARLOTTE EDENIUS

Board member since 2012. **Born** 1958. **PhD., Medical Degree. Other appointments** Executive VP Research & 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. **Holdings in Karolinska Development** 0 shares.

KLAUS WILGENBUS

Board member 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. **Holdings in Karolinska Development** 0 shares.

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).

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 Neuro-Search AS, Axelar AB, Aprea AB, Pharmanest AB and Paris-based DBV Technologies. **Holdings in Karolinska Development** 41,375 shares.

ROBIN WRIGHT

Chief Financial Officer Appointed in May 2012 and **Head of Business Development** since 2011. Born 1964. **BA (Oxon), Chartered Accountant.** Robin Wright has spent over 20 years in finance with various companies, investment banking and business development in the pharmaceutical industry. He has served as EVP & Chief Financial Officer at Orexo AB and PanEuropean Food Fund, Head of European Pharma M&A at Citibank Salomon Smith Barney and Head of Corporate Finance at Bioscience Managers. **Other appointments** Chairman of Dilaforette Holding AB and Dilaforette AB and Board member of Dilafor AB and KDev Oncology AB. **Holdings in Karolinska Development** 15,000 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 Board member of ARTs Biologics A/S, KDev Exploratory AB, Axelar AB and Dilaforette AB. **Holdings in Karolinska Development** 20,000 shares.

BENJAMIN NORDIN

Investor Relations Officer 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.

ULF RICHENBERG

General Councel 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** Board member of KCIF Fund Management AB, KD Incentive AB and Avaris AB. **Holdings in Karolinska Development** 3,996 shares personally and through related parties.

RESEARCH AND DEVELOPMENT TEAM

TERJE KALLAND

See "Management" on page 53

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** 3 650 shares.

TOMAS ODERGREN

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, inlcuding Vice President for Project Management for the CNS and pain Innovative Medicines and Global Vice President for Onglyza franchise. **Holdings in Karolinska Development** 1,000 shares.

HANS POSTLIND

Vice President Non Clinical Development Appointed in October 2012. **Born** 1961. **PhD, Pharmacist.** Hans Postlind has close to 20 years of experience from senior positions in the pharmaceutical industry, including as Vice President, Portfolio, Project & Alliance Management at Takeda/Nycomed, Vice President, Preclinical Development at Biovitrum. **Other appointments** Chairman of KDev Exploratory AB and board member of Akinion Pharmaceuticals AB and Clanotech AB. **Holdings in Karolinska Development** 4,350 shares.

ANN-SOFIE STERNÅS

Vice President IPR Appointed in June 2012. **Born** 1961. **European Patent Attorney, MSc 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** 4,600 shares.

MICHAEL SUNDSTRÖM

Vice President Discovery Research Appointed in September 2011. **Born** 1963. **PhD.** Michael Sundström has nearly 20 years 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. **Other appointments** CEO of KDev Exploratory AB. **Holdings in Karolinska Development** 6,000 shares.

BUSINESS DEVELOPMENT TEAM

TORBJÖRN BJERKE
See “Management” on page 53

ROBIN WRIGHT
See “Management” on page 53

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, BioChromix AB, Inhalation Sciences Sweden AB, KCIF Fund Management AB, Limone AB, NeoDynamics AB, Oss-Q AB, Promimic AB, Stockholm BiotechBuilders Association, Umecrine Cognition AB, Umecrine Mood AB and XSpray Microparticles AB. Alternate Board member of Stockholm Uppsala Life Science AB. **Holdings in Karolinska Development** 5,591 shares and 90,591 warrants.

BENJAMIN NORDIN
See “Management” on page 53

FREDRIK KÄLLGREN
Senior Business Analyst Employed since April 2012. **Born** 1982. **MSc in Bioinformatics, MSc in Business and Economics, ACMA.** Fredrik Källgren has more than 5 years experiece in the life science sector as Equity Research Analyst at Kaupthing Bank and various positions at AstraZeneca. **Holdings in Karolinska Development** 0 shares.

DANIEL BOLANOWSKI
Busniess 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 two years since joining as a university graduate. Other appointments Part of the business development teams in Axelar AB and Akinion Pharmaceuticals AB. **Holdings in Karolinska Development** 0 shares.

CONTROLLER AND ADMINISTRATION

MICHAEL OWENS
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. Advisor to Portfolio companies. **Holdings in Karolinska Development** 2,888 shares

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. **Holdings in Karolinska Development** 0 shares.

Financial statements

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 2012.

SIGNIFICANT EVENTS DURING THE FINANCIAL YEAR

Karolinska Development AB

Strategic deal with Rosetta Capital

A strategic deal between Karolinska Development and Rosetta Capital IV LP was announced, whereby Karolinska Development has transferred the holdings in 13 of its portfolio companies to a new private holding company, KDev Investments AB. The deal means that Rosetta acquires a minority share in 13 of Karolinska Development's portfolio companies. Rosetta acquires 7.33% of the common shares in KDev Investments for SEK 110m and preference shares for an additional SEK 110m. The agreed purchase sum values KDev Investments to SEK 1,501m which is twice the Karolinska Development investment in that portfolio and 23% above the reported fair value before the announcement of the deal.

Portfolio companies in the transaction
The transaction comprises 13 companies representing a selection of development projects in various phases and a variety of areas. Seven of the companies develop pharmaceuticals 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 are developing treatments in the area of women's health; Dilaforette Holding AB Group, which is developing sevuparin for use against malaria and sickle cell anemia; and Pergamum AB, which is developing Karolinska Development's wound healing and dermatology portfolio. Three companies are involved in pharmaceutical projects in or prior to the preclinical phase: Biosergen AS (systemic fungal infections), Clanotech AB (ophthalmology) and NovaSAID AB (inflammatory disorders). Another three companies conduct development of technology products: Inhalation Sciences in Sweden AB, NeoDynamics AB and Promimic AB.

Management of KDev Investments AB
Karolinska Development will be the majority owner of KDev Investments AB and management of the joint venture will be governed by a shareholders' agreement between the parties. The parties will cooperatively manage the holdings in KDev Investments. The transaction gives Karolinska Development access to the expertise and experience in the life science area that Rosetta's management team has gained through many years of developing and commercializing companies and products. Board resources will be distributed as needed to the companies to provide expertise and experience in specific medical areas and development phases. The transaction does not change the operations of any of the companies involved. Karolinska Development and Rosetta have both committed to further investments in the portfolio in line with the plans Karolinska Development had for these portfolio companies before the deal was announced.

Terms for the preference shares
Rosetta's preference shares will have priority to future profit distributions and other returns as well as in liquidation, as outlined below. Subsequent allocations will be divided between the common shareholders, with 92.67% to Karolinska Development and 7.33% to Rosetta.

(i) 100% of the total future return up to SEK 220m after Karolinska Development has received the second tranche of SEK 17m;
(ii) 30% of the total future return between SEK 220m and SEK 880m;
(iii) 18.33% of the total future return between SEK 880m and SEK 1,320m; and
(iv) 0% of the total future return over SEK 1,320m.

Consequences for the financial reporting
As a result of the transaction, KDev Investments and its portfolio companies will be classified as a joint venture and, when the deal closes, will be recognized at fair value. Of the 13 companies included in KDev Investments, several are subsidiaries at the end of the reporting period.

Share ownership exchange with Industrifonden
Karolinska Development and Industrifonden signed an agreement to swap the share holdings in Oncopeptides AB and Aprea such that Industrifonden acquired Karolinska Development's shares in Oncopeptides AB in exchange for their shares in Aprea AB.

Additions to the portfolio
KDev Oncology
The fully owned subsidiary KDev Oncology was founded to improve focus and efficiency within the oncology area.

GliGene AB
GliGene became the first company included within KDev Oncology. The company is focused on early pharmaceutical development within the Hedgehog signaling pathway. The biological cascade plays a fundamental role in the control of cells' differentiation, growth and proliferation which is reactivated in cancer development.

Oss-Q AB
Oss-Q develops a unique implant technology based on research at the Karolinska University Hospital and Uppsala University.

Progress in the portfolio

Akinion Pharmaceuticals AB initiated a clinical program with AKN-028
The company announced the start of a Phase I/II trial of AKN-028 in patients with AML. The Study is a two-part, international multicenter study where the first part is a dose escalation study where AKN-028 is given twice daily until the maximum tolerated dose is reached. The other part is a proof-of-concept study in which around 20 patients will be treated. The study will evaluate safety, tolerability, pharmacokinetics and anti-leukemia efficacy of AKN-028.

Important milestones in Pergamum AB
DPK-060 in outer ear infections
During the year, Pergamum initiated a Phase II trial of DPK-060 in patients with outer eat infections. The trial was a double-blind, randomized, placebo controlled, multicenter study. The primary endpoint in the study was to evaluate local tolerability and safety for DPK-060 administered as ear drops for infections caused by bacteria or fungi. The study, which was completed during the year, showed that DPK-060 is safe and well tolerated. In addition, a complete cure in 85% to 94% of the patients (depending on the rating scale used) was shown after ten days treatment with DPK-060 – a significant difference compared to placebo.

Phase I/II trial of LL-37 initiated
The study of LL-37 is a double-blind, multicenter study where patients with chronic leg wounds are randomized to receive either placebo or one of three doses of LL-37. The primary end point in the study is to evaluate safety and tolerability for Pergamum's proprietary formulation of the therapeutic peptide LL-37. The study is expected to include 32 patients.

PXL01 for prevention of post-surgical scars
Top line data from a Phase II study of PXL01 was published during the year. Treatment with PXL01 was well tolerated and did not affect hand or wound healing negatively. The study showed no significant difference between the patients that were treated with PXL01 or placebo according to TAM2 (Total Active Motion, sum of two finger joints), which was

the primary objective of the study. In total, 138 patients that had undergone hand surgery in this randomized, placebo controlled clinical double-blind study that was conducted in Sweden, Denmark and Germany. The study continues to include 6 and 12 months follow-up.

Fast clinical progress in Pharmanest AB
During the year, Pharmanest initiated a Phase I study and subsequently a Phase II study of SHACT, developed for pain relief in association with IUD insertion. The double-blind and randomized Phase II study is expected to enroll 200 patients. SHACT is applied locally in the cervix and uterus with technology developed by Pharmanest. The aim of the study is to achieve immediate pain relief compared to placebo without the help of advanced equipment.

Aprea AB reported positive Phase I/II data
In the finalized Phase I/II trial, escalating doses of Aprea's drug candidate APR-246 was given as monotherapy to 22 patients with advanced hematological or prostate cancer during four consecutive days. Besides reporting that the drug was well tolerated, the study concluded that APR-246 induces biological effects and that there are cases of clinical effect on tumor burden. The results of the study was published in Journal of Clinical Oncology.

SIGNIFICANT EVENTS AFTER THE BALANCE SHEET DATE

Karolinska Development AB

Closing of the SEK 220m strategic deal
Rosetta Capital IV LP acquired the minority stake of Karolinska Development's shares in 13 of the company's 25 portfolio companies on March 7, 2013, in accordance with the deal that was announced on December 21, 2012.

In February, 2013, Karolinska Development transferred its holdings in 13 of the companies in the portfolio to KDev Investments AB. There were then 1,073,300 outstanding shares in KDev Investments. Of these, 1,000,000 were common shares and 73,300 were preference shares. Both types of shares caries equal voting rights. Rosetta had by the finalization of the transaction acquired 73,300 common shares and all of the preference shares in KDev Investments from Karolinska Development.

Karolinska Development received the first payment of EUR 23m at the finalization of the deal, which was approximately SEK 190m in the current exchange rate. The remaining sum up to SEK 220m is due when the total accumulated return from KDev Investments equals the balance.

Innovation agreement with Mayo Clinic

Through the agreement, Karolinska Development gets the opportunity to evaluate and investment in innovations from Mayo Clinic. Investments in commercially attractive innovations can be done by both parties, together or individually. Mayo Clinic is a globally well renowned source of innovation within biosciences and new treatment methods. Mayo is a non-profit organization and the profits that Mayo generates from its investments will be used to support their research and education.

Progress in the portfolio

Axelar announced positive preliminary interim data
The Company announced preliminary interim results from the Phase II trial with AXL1717. The data indicated that AXL1717 is effective in treating patients with non-small cell lung cancer. The company assessed that it had sufficient data to guide further development of the drug and will finalize the study with fewer patients than initially planned.

Dilaforette AB starts Phase II study in severe malaria
Dilaforette and their partner Mahidol Oxford Tropical Medicine Research Unit (MORU) plans to enroll 50 patients in India, where severe malaria is very common. The primary objective of the study in is to evaluate safety, but also a number of efficacy parameters. A separate clinical study in uncomplicated falciparum malaria is ongoing in Thailand since 2011.

Pergamum AB in strategic collaboration with Cadila Pharmaceuticals Ltd.
The two companies will collaborate around preclinical and clinical development of a new therapeutic peptide that has been developed by Pergamum. The development will be conducted in Ahmedabad, India. Cadila will finance the development of the product including clinical Phase II and the global rights to the product will be divided between the two companies. This new infection treatment has a unique mode of action that clearly differentiates from conventional antibiotics.

FINANCIAL DEVELOPMENT FOR THE GROUP IN 2012

Revenue

Consolidated revenue during the year amounted to SEK 9.9m, compared with SEK 10.5m in the previous year.

Results

During the year, the Group's operating loss amounted to SEK –253.8m (–400.7), a change of SEK 146.9m compared with the previous year. The loss was mainly due to the portion of the change in fair value affecting income, which amounted to SEK –86.8m (–243.8) during the year, as well as increased development costs in subsidiaries. The change in fair value was affected when Pergamum announced Phase II data from PXL01 that unfortunately did not meet the primary end point, which has also affected the valuation of the reported total portfolio holding negatively. As indicated in Note 2, the value of companies reported as subsidiaries appreciated by SEK 208.2m (67.8). These changes are not recognized in the consolidated income statement and statement of financial position, since the subsidiaries are consolidated and not measured at fair value.

During the year, a share swap was completed with Industrifonden through which Karolinska Development exchanged its shares in Oncopeptides AB for Industrifonden's shares in Aprea AB. The share swap gave Karolinska Development controlling interest in Aprea AB, which has therefore been consolidated as a subsidiary as of the closing date, 27 August 2012. The transaction has had no effect on the consolidated operating results other than Aprea´s operational costs post closing (Note 24).

The Group's loss before tax for the year amounted to SEK –276.0m (–405.7), of which Parent Company costs SEK–55.8m (–61.8), fair value change SEK–86.8m (–243.8), subsidiary costs SEK –111.2m (–95.1) and financial net SEK –22.2m (–5.0).

Financial position

As of December 31, 2012, assets and liabilities attributable to KDev Investments Group are recognized in accordance with the accounting standard IFRS 5 as available-for-sale holdings (Note 25).

The Group's equity to total assets ratio was 91 (93) percent on 31 December 2012 and equity amounted to SEK 2,024.2m (2,173.9).

Cash, cash equivalents and short-term investments in the Group amounted to SEK 291.2m (620.6), in addition to SEK 59.6m in cash and cash equivalents reclassified as available-for-sale assets.

Total assets amounted to SEK 2,215.0m (2,345.9).

Cash flow

Cash flow for the Group amounted to SEK 13.3m (56.0) in 2012. Cash flow from operating activities amounted to SEK –152.6m (–133.4), while cash flow from investing activities amounted to SEK 164.4m (–430.4). Through financing activities, subsidiaries received SEK 4.1m (56.7) from non-controlling interests in connection with new issues, interest-

bearing liabilities were amortized by SEK -0.4m (0) and shares were repurchased for SEK –2.2m (0). Cash flow from financing activities thus amounted to SEK 1.5m (619.9).

Investments in portfolio companies

The Group's investments during the year amounted to SEK 231.6m (297.6), of which SEK 153.8m (202.7) affected cash flow.

The largest investments (SEKm) during the year were in Aprea AB at SEK 72.6m through the share swap with Industrifonden (Note 24), Axelar AB at SEK 25.0m, Athera Biotechnologies AB at SEK 22.6m, Dilaforette Holding AB at SEK 17.3m (of which SEK 17.3m in Dilaforette AB) and SEK 15.0m in Akinion Pharmaceuticals AB.

FINANCIAL DEVELOPMENT FOR THE PARENT COMPANY IN 2012

Revenue

The Parent Company's revenue during the year amounted to SEK 4.0m (2.5).

Results

During the year, the Parent Company's operating loss amounted to SEK –132.6 m (–181.6), a change of SEK 49.0 m compared with the previous year. The operating loss for the year includes impairment losses on the holdings in Pergamum AB (SEK –106.5m), KDev Exploratory AB (formerly Actar AB) (SEK –9.2m), Limone AB (SEK –4.3m) and Avaris AB (SEK- 0.1m). The impairment related to Pergamum AB was recognized after the results of the randomized Phase II clinical trial of PXL01 for prevention of post-surgical adhesions proved inconclusive.

During the year, a share swap with Industrifonden was completed through which Karolinska Development exchanged its shares in Oncopeptides AB for Industrifonden's shares in Aprea AB. The transaction has positively affected the operating result by SEK 49.7m (Note 34). Furthermore, the shareholding in the portfolio company ProNoxis AB was divested with a negative effect on the operating result of SEK –6.5m.
The Parent Company's operating loss for the year amounted to SEK –152.7m (–187.7).

Investments in portfolio companies

The Parent Company invested a total of SEK 81.9m (83.7) in subsidiaries during the year. The largest investments (SEKm) were in Axelar AB at SEK 25.0m, Akinion Pharmaceuticals AB at SEK 15.0m, KDev Exploratory AB (formerly Actar AB) at SEK 13.0 m and Clanotech AB at SEK 9.5m.

The Parent Company invested SEK 148.2m (210.0) in associated companies and joint ventures during the year. The largest investments (SEKm) were in Aprea AB at SEK 72.6m through the share swap with Industrifonden (Note 24), Athera Biotechnologies AB at SEK 22.6m and Dilaforette Holding AB at SEK 17.3m (of which SEK 17.3m in Dilaforette AB).

The Parent Company invested SEK 1.5m (3.9) in other long-term securities holdings during the year.

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).

Repurchase of shares

The Annual General Meeting 2012 decided to allow repurchase of own shares amounting to 150 800 class B shares for 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 2012 (Note 6). During the year, 150 600 shares were repurchased, which equals the total number of shares held at year-end. This amounts to 75 300 SEK of the share capital and the consideration paid amounted to SEK 2.2m.

Future development

If Karolinska Development assumes 40–60 percent of the total capital requirement of current portfolio companies, this is expected to correspond to an annual investment during the coming years of about SEK 200m. Investments are made when a project has passed defined milestones if it is considered to be able to generate a sufficient return.

Furthermore, 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 intention 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 provides no forecasts regarding 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

Parent Company and Group
Risks and uncertainties are primarily associated with investments in portfolio companies and the development of projects in these companies as well as financial risks.

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 development of medicial technology at an early phase are, by their very nature, difficult to value, as lead times are very long and the development risks are high. Due to the uncertainty in these assessments, the estimated value of the portfolio may deviate substantially from the future generated value.

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.

For detailed information on risks and uncertainties see page 76.

Five-year summary

	Group				
Amounts in SEKm	**2012**	**2011**	**2010**	**2009**	**2008**
Income statement					
Net sales	10	10	14	30	23
Operating expenses	–177	–167	–133	–74	–64
Result of change in fair value	–87	–244	–226	30	–30
Operating loss	**–254**	**–401**	**–345**	**–14**	**–71**
Financial net	–22	–5	6	11	13
Loss after financial items	**–276**	**–406**	**–339**	**–3**	**–58**
Statement of financial position					
Intangible and tangible non-current assets	15	705	182	4	5
Shares in joint ventures and associated companies	219	980	1,221	1,450	1,240
Other long-term securities holdings	27	25	25	33	40
Loans receivable joint ventures and associated companies	13	4	0	0	0
Other financial assets	9	0	0	0	0
Total non-current assets	**283**	**1,714**	**1,428**	**1,487**	**1,285**
Other current assets	9	12	102	36	68
Short-term investments	174	457	137	121	301
Cash and cash equivalents	117	163	107	394	10
Assets to be transferred to KDev Investments Group	1,632	–	–	–	–
Total current assets	**1,932**	**632**	**346**	**551**	**379**
Total assets	**2,215**	**2,346**	**1,774**	**2,038**	**1,664**
Equity	2,024	2,174	1,717	1,998	1,651
Deferred tax liabilities	0	144	34	0	0
Long-term liabilities	11	2	2	0	0
Current liabilities	15	26	20	40	13
Liabilities attributable to assets to be transferred to KDev Investments Group	165	–	–	–	–
Total equity and liabilities	**2,215**	**2,346**	**1,773**	**2,038**	**1,664**
Cash flow					
Cash flow from operating activities	–152	–133	–98	–34	–18
Cash flow from investing activities	164	–430	–182	2	–438
Cash flow from financing activities	1	620	–7	417	351
Cash flow for the year	**13**	**57**	**–287**	**385**	**–105**
Key ratios					
Capital employed	2,035	2,176	1,719	1,998	1,651
Return on equity	–14%	–19%	–20%	0%	–3%
Return on capital employed	–14%	–19%	–20%	0%	–3%
Equity to total assets ratio	91%	93%	97%	98%	99%
Average number of employees	46	47	37	30	21
Data per share					
Loss after tax, before and after dilution, SEK	–4.39	–8.07	–9.79	–0.10	–2.34
Equity, SEK	41.71	44.79	51.51	61.27	63.05
Net asset value, SEK	44.01	44.70	53.51	62.73	62.48
Share price at year-end, SEK	15.30	24.00	–	–	–
Dividend, SEK	0.0	0.0	0.0	0.0	0.0
Share price/Equity per share	37%	54%	–	–	–
Share price/Net asset value per share	35%	54%	–	–	–
Number of shares at year-end	48,531,417	48,531,417	33,331,417	32,609,993	26,182,816
Weighted average number of shares before and after dilution	48,529,767	43,908,951	33,263,938	27,001,275	24,658,791

Proposed appropriation of profit (SEK)

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

Retained loss	–397,269,459
Share premium reserve	1,778,253,602
Net loss for the year	–152,710,696
Total	**1,228,273,447**

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

To be carried forward	1,228,273,447
Total	**1,228,273,447**

For information regarding the operating results and financial position of the Group and the Parent Company, refer to the following income statement, 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	2012	2011
Revenue	3	9,943	10,479
Other external expenses	4, 5	–108,980	–104,056
Personnel costs	6	–62,818	–59,871
Depreciation and amortization of tangible and intangible non-current assets		–5,163	–3,431
Change in fair value of shares in joint ventures and associated companies	2	–87,694	–236,621
Change in fair value of other long-term securities holdings	2	902	–7,175
Operating loss		**–253,810**	**–400,675**
Interest income		5,827	6,247
Interest expenses		–57	–36
Other financial gains and losses	7	–27,931	–11,196
Financial net		–22,161	–4,985
Loss before tax		**–275,971**	**–405,660**
Deferred taxes	8	45,807	19,987
NET LOSS FOR THE YEAR		**–230,164**	**–385,673**
Attributable to:			
Parent Company's shareholders		–212,852	–354,147
Non-controlling interests		–17,312	–31,526
TOTAL		**–230,164**	**–385,673**

Consolidated statement of comprehensive income

Amounts in SEK 000	Note	2012	2011
Net loss for the year		–230,164	–385,673
Total comprehensive income for the year		**–230,164**	**–385,673**
Attributable to:			
Parent Company's shareholders		–212,852	–354,147
Non-controlling interests		–17,312	–31,526
TOTAL		**–230,164**	**–385,673**

Earnings per share

Amounts in SEK 000	Note	2012	2011
Earnings per share attributable to Parent Company's shareholders, weighted average, before and after dilution		–4.39	–8.07
Number of shares, weighted average	17	48,529,767	43,908,951

Consolidated statement of financial position

Amounts in SEK 000	Note	31 Dec 2012	31 Dec 2011
ASSETS			
Non-current assets			
Intangible non-current assets	9	9,864	702,957
Tangible non-current assets	10	4,985	1,663
Shares in joint ventures and associated companies	11	219,173	980,276
Other long-term securities holdings	12	26,949	24,587
Loans receivable joint ventures and associated companies	13	12,856	3,675
Other financial assets	24	8,907	0
Total non-current assets		**282,734**	**1,713,158**
Current assets			
Accounts receivable	14	513	1,462
Other short-term receivables	15	3,955	8,757
Prepaid expenses and accrued income	16	4,578	1,886
Short-term investments	21	174,160	457,249
Cash and cash equivalents		117,033	163,347
Total current assets		**300,239**	**632,701**
Assets to be transferred to KDev Investments Group	25	1,632,025	–
TOTAL ASSETS		**2,214,998**	**2,345,859**
EQUITY AND LIABILITIES			
Equity			
Share capital	17	24,266	24,266
Share premium		1,768,179	1,768,179
Retained earnings including current period result		–122,547	86,442
Equity attributable to Parent Company's shareholders		**1,669,898**	**1,878,887**
Non-controlling interests		354,294	295,041
Total equity		**2,024,192**	**2,173,928**
Long-term liabilities			
Deferred taxes	8	0	143,585
Interest-bearing liabilities	18	0	2,000
Other financial liabilities	24	10,889	0
Total long-term liabilities		**10,889**	**145,585**
Current liabilities			
Interest-bearing liabilities	18	0	0
Accounts payable		4,215	9,563
Other current liabilities	19	2,775	2,796
Accrued expenses and prepaid income	20	8,166	13,987
Total current liabilities		**15,156**	**26,346**
Liabilities attributable to assets to be transferred to KDev Investments Group	25	164,761	–
Total liabilities		**190,806**	**171,931**
TOTAL EQUITY AND LIABILITIES		**2,214,998**	**2,345,859**

Consolidated statement of changes in equity

		Equity attributable to Parent Company's shareholders					
Amounts in SEK 000	Note	Share capital	Share premium	Retained earnings incl. current year result	Total	Non-controlling interests	Total equity
Opening equity at 1 Jan 2012		**24,266**	**1,768,179**	**86,442**	**1,878,887**	**295,041**	**2,173,928**
Net loss for the year				–212,852	–212,852	–17,312	–230,164
Total comprehensive income for the year		0	0	–212,852	–212,852	–17,312	–230,164
Business combinations					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**
Opening equity at 1 Jan 2011		**16,666**	**1,212,611**	**454,484**	**1,683,761**	**33,414**	**1,717,175**
Net loss for the year				–354,147	–354,147	–31,526	–385,673
Total comprehensive income for the year		0	0	–354,147	–354,147	–31,526	–385,673
Business combinations					0	222,834	222,834
Change in non-controlling interests				–13,895	–13,895	70,319	56,424
New share issue		7,600	600,400		608,000		608,000
Issue costs			–44,949		–44,949		–44,949
Effect of warrants			117		117		117
Closing equity at 31 Dec 2011	**17**	**24,266**	**1,768,179**	**86,442**	**1,878,887**	**295,041**	**2,173,928**

Consolidated statement of cash flows

Amounts in SEK 000	Note	2012	2011
Operating activities			
Operating loss		–253,810	–400,675
Adjustments for depreciation and amortization	9, 10	5,163	3,431
Adjustments for changes in fair value	2	86,792	243,796
Change in value of short-term investments		9,868	6,435
Interest paid		–56	–36
Interest received		3,345	3,302
Cash flow from operating activities before changes in working capital		**–148,698**	**–143,747**
Cash flow from changes in working capital			
Increase (–)/Decrease (+) in operating receivables		–2,516	6,223
Increase (+)/Decrease (–) in operating liabilities		–1,431	4,087
Cash flow from operating activities		**–152,645**	**–133,437**
Investing activities			
Investments in intangible non-current assets		–1,963	–2,546
Investments in tangible non-current assets		–5,233	–288
Acquired cash and cash equivalents in subsidiaries	24	5,363	12,878
Investments in shares in joint ventures and associated companies	40	–70,564	–115,077
Investments in other long-term securities	41	–1,460	–3,915
Change in short-term investments		278,555	–317,040
Sale of shares in joint ventures and associated companies		3,217	24,833
Sale of other long-term securities		0	540
Loans provided to associated companies		–43,467	–29,805
Cash flow from investing activities		**164,448**	**–430,420**
Financing activities			
Non-controlling interests' share of subsidiary issue		4,137	56,711
New share issue		0	608,000
Issue costs		0	–44,949
Warrants		0	117
Amortization of interest-bearing liabilities		–425	0
Share repurchase		–2,243	0
Cash flow from financing activities		**1,469**	**619,879**
Cash flow for the year		**13,272**	**56,022**
Cash and cash equivalents at beginning of the year	21	163,347	107,325
Cash and cash equivalents to be transferred to KDev Investments Group	25	–59,586	–
CASH AND CASH EQUIVALENTS AT YEAR-END	21	117,033	163,347

Supplemental disclosure

Amounts in SEK 000	Note	31 Dec 2012	31 Dec 2011
Cash and cash equivalents at year-end		117 033	163 347
Cash and cash equivalents to be transferred to KDev Investments Group		59,586	–
Short-term investments, market value at closing date		174,160	457,249
CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS AT YEAR-END		**350,779**	**620,596**

Income statement for the Parent Company

Amounts in SEK 000	Note	2012	2011
Net sales	29	3,986	2,467
Revenue		**3,986**	**2,467**
Other external expenses	30, 31	–28,156	–32,173
Personnel costs	32	–31,650	–32,066
Depreciation of tangible non-current assets		–6	–67
Impairment losses on shares in subsidiaries, joint ventures, associated companies and other long-term securities holdings	33	–120,078	–125,962
Result from sale of shares	34	43,269	6,239
Operating loss		**–132,635**	**–181,562**
Interest income and similar income	35	11,989	15,053
Interest expenses and similar expenses	36	–32,065	–21,236
Financial net		**–20,076**	**–6,183**
Taxes	37	0	0
NET LOSS FOR THE YEAR		**–152,711**	**–187,745**

Statement of comprehensive income for the Parent Company

Amounts in SEK 000	Note	2012	2011
Net loss for the year		–152,711	–187,745
Total comprehensive income for the year		**–152,711**	**–187,745**

Statement of financial position for the Parent Company

Amounts in SEK 000	Note	31 Dec 2012	31 Dec 2011
ASSETS			
Non-current assets			
Machinery and equipment	38	9	42
Financial assets			
Shares in subsidiaries	39	440,479	252,545
Shares in joint ventures	40	475,302	590,616
Shares in associated companies	40	30,621	22,277
Other long-term securities holdings	41	15,841	14,381
Loans receivable joint ventures and associated companies	42	12,856	3,675
Other financial assets		2,623	2,080
Total non-current assets		**977,731**	**885,616**
Current assets			
Accounts receivable	44	409	49
Group receivables		260	74
Other receivables	45	2,476	5,766
Prepaid expenses and accrued income	46	2,463	881
Short-term investments		174,160	457,249
Cash and cash equivalents		108,680	68,319
Total current assets		**288,448**	**532,338**
TOTAL ASSETS		**1,266,179**	**1,417,954**
EQUITY AND LIABILITIES			
Equity			
Restricted equity			
Share capital	17	24,266	24,266
Unrestricted equity			
Share premium reserve		1,778,253	1,778,253
Retained earnings		–397,269	–207,281
Net loss for the year		–152,711	–187,745
Total equity		**1,252,539**	**1,407,493**
Long-term liabilities			
Pension obligations		2,623	2,080
Total long-term liabilities		**2,623**	**2,080**
Current liabilities			
Accounts payable		2,510	807
Group liabilities		474	0
Other current liabilities	47	1,512	1,530
Accrued expenses and deferred income	48	6,521	6,044
Total current liabilities		**11,017**	**8,381**
Total liabilities		**13,640**	**10,461**
TOTAL EQUITY AND LIABILITIES		**1,266,179**	**1,417,954**

Pledged assets and contingent liabilities

Amounts in SEK 000	Note	31 Dec 2012	31 Dec 2011
Pledged assets	22	2,623	2,080
Contingent liabilities	22	1,200	900
Total		**3,823**	**2,980**

Statement of changes in equity for the Parent Company

		Restricted equity	Unrestricted equity			
Amounts in SEK 000	Note	Share capital	Share premium reserve	Retained earnings	Net loss for the period	Total equity
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 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**
Opening equity at 1 Jan 2011		**16,666**	**1,222,685**	**–95,932**	**–111,349**	**1,032,070**
Appropriation of loss				–111,349	111,349	0
Net loss for the year					–187,745	–187,745
Total		**16,666**	**1,222,685**	**–207,281**	**–187,745**	**844,325**
New share issue		7,600	600,400			608,000
Issue costs			–44,949			–44,949
Warrants			117			117
Closing equity at 31 Dec 2011	17	**24,266**	**1,778,253**	**–207,281**	**–187,745**	**1,407,493**

Statement of cash flows for the Parent Company

Amounts in SEK 000	Note	2012	2011
Operating activities			
Operating loss		–132,635	–181,562
Adjustments for depreciation and amortization		120,084	126,029
Capital gains/losses on sales of associated companies		–43,269	–6,239
Change in value of short-term investments		9,868	6,435
Interest paid		–4	–6
Interest received		2,146	1,990
Cash flow from operating activities before changes in working capital		**–43,810**	**–53,353**
Cash flow from changes in working capital			
Increase (–)/Decrease (+) in operating receivables		–704	10,679
Increase (+)/Decrease (–) in operating liabilities		2,636	–2,018
Cash flow from operating activities		**–41,878**	**–44,692**
Investing activities			
Investments in subsidiaries	39	–81,799	–83,711
Investments in shares in joint ventures and associated companies	40	–70,564	–115,077
Investments in other long-term securities	41	–1,460	–3,915
Change in short-term investments		278,555	–317,040
Sale of shares in subsidiaries		3,217	810
Sale of shares in joint ventures and associated companies		0	24,833
Sale of other long-term securities		0	540
Loans provided to associated companies		–43,467	–29,805
Cash flow from investing activities		**84,482**	**–523,365**
Financing activities			
New share issue		0	608,000
Issue costs		0	–44,949
Warrants		0	117
Share repurchase		–2,243	0
Cash flow from financing activities		**–2,243**	**563,168**
Cash flow for the year		**40,361**	**–4,889**
Cash and cash equivalents at beginning of the year		68,319	73,208
CASH AND CASH EQUIVALENTS AT YEAR-END		**108,680**	**68,319**

Supplemental disclosure

Amounts in SEK 000	Note	31 Dec 2012	31 Dec 2011
Cash and cash equivalents at year-end		108,680	68,319
Short-term investments, market value at closing date		174,160	457,249
CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS AT YEAR-END		**282,840**	**525,568**

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 36 projects, of which 15 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, the 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 2013. 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 on 14 May 2013.

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, revenues 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
None of the IFRS or the interpretations of the IFRS Interpretations Committee that are mandatory for the first time in the financial year that began on 1 January 2012 have had a significant impact on the Group.

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 2012 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:

IAS 1 Presentation of Financial Statements has introduced changes with respect to other comprehensive income. The most significant change in the revised IAS 1 is the requirement that items recognized in other comprehensive income are presented in two groups based on whether or not they could potentially be reclassified to profit or loss (reclassification adjustments). The changes do not address the question of which items should be included in other comprehensive income.

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 2015 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.

IFRS 10 Consolidated Financial Statements builds on existing policies, since it identifies control as decisive in determining whether a company is included in the consolidated financial statements. The standard provides further guidance to assist in the determination of control when this is difficult to judge. The Group intends to apply IFRS 10 for the financial year beginning 1 January 2014 and has not yet evaluated the full effect on the financial reports.

IFRS 12 Disclosures of Interests in Other Entities comprises disclosure requirements for subsidiaries, joint arrangements, associated companies and unconsolidated structured entities. The Group intends to apply IFRS 12 for the financial year beginning 1 January 2014 and has not yet evaluated the full effect on the financial reports.

IFRS 13 Fair Value Measurement is designed to make fair value measurements more consistent and less complex by providing an exact definition and a single 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 measurement at fair value. The Group intends to apply IFRS 13 to the financial year beginning 1 January 2013. In the Group's judgment, the new standard will not have a significant impact on its income statement and

statement of financial position. Disclosures, on the other hand, will be impacted, since the new standard contains more extensive requirements on fair value disclosures, particularly for fair values in level 3 of the fair value hierarchy.

In November 2012, the IASB published additional amendments to IFRS 10, IFRS 12 and IAS 27 related to investment entities. When a company meets the definition of an investment entity, it does not consolidate its subsidiaries. Instead, the holdings are measured at fair value in accordance with the rules in IFRS 9 Financial Instruments. If the Group meets the definition of an investment entity, the Group will recognize all its holdings in portfolio companies, including subsidiaries, at fair value with changes in value recognized in profit or loss according to IAS 31 p. 1. The Group has not yet analyzed whether the investment entity definition will be met.

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 revenues 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, revenues 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, revenues 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 controlling 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. During 2012, based on changes in the associated shareholder agreements, an additional company was consolidated as a subsidiary. This company was previously accounted for as a holding in joint ventures.

Valuation of portfolio companies
The fundamental valuation methodology is 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 revenues are probability adjusted based on the phase of development.
- A WACC of 11.68% (11.63%) was used regarding biotechnological companies and 7.78% (7.83%) 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 services. 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 2012 and 2011.

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 is 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 to belong 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 flow to the Company and the cost of the asset can be reliably measured.

Equipment is stated 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 begin 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.

Additional expenses
Additional expenses are included only in furniture, 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 where applicable, 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
Expenditure on research activities is recognized as an expense in the period in which it arises. 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 recognized as an expense 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 brands 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 indications exist 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.

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

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 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 86.

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.

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

	Profit/loss from change in fair value of portfolio companies	
Amounts in SEK 000	**2012**	**2011**
Subsidiaries		
Change in fair value	208,201	67,819
Joint ventures and associated companies		
Change in fair value	18,847	–118,789
Impairment losses[1]	–106,541	–117,832
Other long-term securities holdings		
Change in fair value	902	–4,675
Impairment losses[1]	0	–2,500
Change in fair value of total portfolio holdings	**121,409**	**–175,977**
Group eliminations		
Less change in fair value of subsidiaries	–208,201	–67,819
Net result from changes in fair value	**–86,792**	**–243,796**
Consolidated revenue and other expenses	–189,179	–161,864
Consolidated profit/loss before tax	**–275,971**	**–405,660**

[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 121.4m (–176.0) during the year, which includes a positive change in the fair value of subsidiaries of SEK 208.2m (67.8). 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 –86.8m (–243.8).

Assets per segment

	Fair value of portfolio companies	
Amounts in SEK 000	**31 Dec 2012**	**31 Dec 2011**
Fair value of total portfolio holdings		
Subsidiaries	1,010,663	542,001
Joint ventures and associated companies	789,578	980,276
Other long-term securities holdings	26,949	24,587
Total fair value of total portfolio holdings	**1,827,190**	**1,546,864**
Less fair value of subsidiaries	–1,010,663	–542,001
Less fair value of joint ventures and associated companies to be transferred to KDev Investments Group	–570,405	–
Group	**246,122**	**1,004,863**

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 2011	209,108	1,220,791	24,761	1,454,660
Investments (Notes 11, 12, 39)	83,711	209,955	3,915	297,581
Reclassifications	182,173	–185,799	3,626	0
Sale of shares	–810	–28,050	–540	–29,400
Changes in fair value and impairment losses	67,819	–236,621	–7,175	–175,977
Closing balance at 31 Dec 2011	**542,001**	**980,276**	**24,587**	**1,546,864**
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[1]	0	–72,681
Changes in fair value and impairment losses	208,201	–87,694	902	121,409
Closing balance at 31 Dec 2012	**1,010,663**	**789,578**	**26,949**	**1,827,190**

[1] Of which SEK 72,636 thousand relates to Oncopeptides AB (Note 24)

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

Amounts in SEK 000	**31 Dec 2012**	**31 Dec 2011**
Aggregate fair value of total portfolio holdings	1,827,190	1,546,864
Less fair value of subsidiaries	–1,010,663	–542,001
Other consolidated assets	1,398,471	1,340,996
Consolidated total assets	**2,214,998**	**2,345,859**

Note 3 Revenue distribution

Services rendered comprise of invoiced services to 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	**2012**	**2011**
Services rendered	3,156	3,213
Subsidies received	5,082	5,338
Other revenues	1,705	1,928
Total revenues	**9,943**	**10,479**

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 63,515 thousand (63,717). No portion has been capitalized other than application fees for patents, which in 2012 amounted to SEK 1,943 thousand (2,546).

Fees and remuneration to the Group's auditors

Amounts in SEK 000	2012	2011
Deloitte		
Audit services	901	580
Audit related services	323	334
Tax consulting	579	514
Other services	137	64
Other auditors		
Audit services	55	15
Audit related services	5	2
Tax consulting	0	0
Other services	0	3
Total	**2,000**	**1,512**

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 rent of equipment have been expensed in an amount equivalent to SEK 4,773 thousand (3,982). Future leasing fess are to be paid according to the table below.

Amounts in SEK 000	2012	2011
Within one year	3,851	3,867
Between one year and five years	312	860
Total	**4,163**	**4,727**

Note 6 Employees and personnel costs

Average number of employees

Full-time equivalent	2012	Of whom men	2011	Of whom men
Parent Company	16	75%	16	81%
Subsidiaries	30	27%	31	39%
Total	**46**	**43%**	**47**	**53%**

Remuneration expenses for employees

Amounts in SEK 000	2012	2011
Salaries and remuneration	39,561	38,790
Social security expenses	13,742	13,128
Pension expenses	7,611	7,066
Total	**60,914**	**58,984**

Salaries, other remuneration and social security expenses

	2012		2011	
Amounts in SEK 000	Salaries and remuneration	Social security expenses	Salaries and remuneration	Social security expenses
Parent Company	23,811	6,812	24,692	7,065
(of which pension expenses)	4,502	1,092	4,188	1,016
Subsidiaries	23,361	6,930	21,164	6,063
(of which pension expenses)	3,109	754	2,878	698

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 Annual General Meeting. In accordance with the resolution of the 2012 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, appropriate and characterized by moderation. 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 (this does not apply, however, to the extent that the paid remuneration does not impact the Company other than with regard to social security contributions); 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 six-month term of notice. Karolinska Development has implemented two programs with variable salaries, one three-year program for the period 2008–2010 which is a combined share warrant and profit-sharing plan. And one long-term Performance Share Program, PSP 2012.

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

2012					
Amounts in SEK 000	Basic salary/ Board fee	Variable remuneration	Other benefits and remuneration	Pension costs	Total remuneration
Torbjörn Bjerke, CEO	3,530		391	756	4,677
Gunnar Casserstedt, former Deputy CEO	1,057			212	1,269
Terje Kalland, Deputy CEO	2,043		3	653	2,699
Hans Wigzell, Chairman	350		6		350
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)	8,375		62	2,197	10,634
Total	**16,385**	**0**	**462**	**3,818**	**20,665**

2011 Amounts in SEK 000	Basic salary/ Board fee	Variable remune-ration	Other benefits and remuneration	Pension costs	Total remune-ration
Torbjörn Bjerke, CEO	3,323		252	579	4,154
Conny Bogentoft, former CEO	1,067		4	444	1,515
Gunnar Casserstedt, Deputy CEO	1,324		60	420	1,804
Hans Wigzell, Chairman	448		210		658
Per-Olof Edin, Board member	316				316
Rune Fransson, Board member	55				55
Ulrika Slåne, Board member	316				316
Peter Sjöstrand, Board member	243				243
Michael Rosenlew, Board member	231				231
Raymond Hill, Board member	121				121
Other senior executives (8 persons)	8,878[1]	188	193	2,510	11,769
Total	**16,322**	**188**	**719**	**3,953**	**21,182**

[1] The amount includes severance of SEK 792 thousand.

Severance

CEO Torbjörn Bjerke has a gross salary of SEK 3,530 thousand per year. His contractual pension amounts to 21 percent of gross salary, which is comprised of a premium-based provision.

Torbjörn Bjerke is entitled to severance equivalent to his salary for twelve months if he is terminated by the Company (unless the termination is a result of a breach of his terms of employment), if a change in ownership occurs and Torbjörn Bjerke, after the change, no longer remains CEO or in the case of a significant breach of contract by the Company.

No severance is payable to any other employee upon termination.

Variable remuneration

Karolinska Development has two programs with variable salaries. The first is a combined warrant and profit-sharing program for the CEO, CFO and other senior executives, consisting of three program stages which were adopted by the AGM's in 2008, 2009 and 2010 (of which the 2008 warrant program expired during the year without any subscriptions by participants). In 2012, the AGM resolved to introduce a new Performance Share Program, PSP 2012, for management. There is also a profit-sharing program for other personnel.

Warrant program

Through its subsidiary, KD Incentive AB, Karolinska Development has issued share warrants in three separate programs. These warrants have been sold 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 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 2009	60,825	2009	1 Oct 2013–31 Dec 2013	4.93	120
Supplemental warrant I 2009[1]	11,625	2010	1 Oct 2013–31 Dec 2013	7.02	93
Supplemental warrant II 2009[1]	24,421	2011	1 Oct 2013–31 Dec 2013	1.06	56
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
Totalt	**185,772**				

[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.

	2012		2011	
Amounts in SEK 000	Number of warrants	Weighted redemption price	Number of warrants	Weighted redemption price
At beginning of the year	442,790	93.01	325,733	106.86
Allocation during the year	0	0	117,057	54.44
Repurchased warrants program 2009	–11,250	0	–	–
Repurchased warrants program II 2009	–5,130	0	–	–
Repurchased warrants program 2010	–15,000	0	–	–
Repurchased warrants program I 2010	–6,840	0	–	–
Expired warrant program 2008	–218,798	–81.88	–	–
Closing balance	**185,772**	**104.00**	**442,790**	**93.01**

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 program 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 Annual General Meeting 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 whose employment has not been terminated at the time of the issue of the sub-plan, participate in the sub-plan. Participation in each sub-plan occurs proportionately to participation in the portion of the warrant program issued in conjunction therewith, in accordance with the above, whereby 50 percent participation in such a portion of the warrant program will lead 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 implies that Karolinska Development has the opportunity to share profits from the co-investment structure to a greater extent than follows from 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 sub-plans for 2010, 2011 and 2012 in relation to the size of the plans. The right to profit-sharing attributable to the cooperation with the European Investment Fund therefore applies beyond the profit-sharing based on the excess returns that have been described above. Because of the limited returns so far, this approach has not resulted in any accounting effects.

Profit-sharing plan for other personnel
The plan was introduced in 2008 and includes permanent employees other than the CEO, CFO and investment managers. A general condition for profit-sharing to be paid out for a particular year is that the profit for that year amounts to at least SEK 10m. Those included in the program share a percentage of the profit (distributed between them based on salary) in excess of SEK 10m. The rate is 0.57 percent at SEK 10m and thereafter gradually declines to 0.22 percent at SEK 1,700m. Amounts of no more than the equivalent of an annual salary can be paid out for one year. Profit refers to operating income, according to the revised income statement. Payment is made retroactively.

Performance Share Program 2012 (PSP 2012)
On 23 May 2012, the Annual General Meeting decided on a Performance Share Program for management 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 comparable companies.

The company will cover the social security contributions related to the program by acquiring and transferring not more than 150,600 of its own shares. The Performance Share Program has not had any impact on the company's results and financial position as of 31 December 2012.

The Board's proposal to the 2013 Annual General Meeting for decision on guidelines for remuneration to senior executives
Karolinska Development shall maintain compensation levels and terms required to attract and keep an executive management with the competence and experience needed to achieve the object of the company's operation. The total compensation to an executive management employee shall be competitive, reasonable and appropriate. Fixed salary shall be based on responsibility and experience of the individual. Variable compensation shall (i) be construed in order to support Karolinska Development´s long-term value creation; (ii), have governing elements that are clear, measurable and that can be influenced; (iii) regarding variable salary, have a pre-determined maximum outcome; (iv) not be included in calculation of pension. The notice period in case of termination by the company shall not exceed 6 months. Severance pay shall be paid only to CEO.

Note 7 Other financial gains and losses

Amounts in SEK 000	2012	2011
Change in value of short-term investments	7,334	10,036
Foreign currency exchange rate gains and losses	–1,307	–2
Revaluation of financial liability related to Aprea (Note 24)	–1,982	0
Impairment of receivables from joint ventures and associated companies	–31,976[1]	–21,230
Total	**–27,931**	**–11,196**

[1] Relates to impairment of loans receivable from Pergamum.

Note 8 Taxes

Reconciliation of effective tax rate

Amounts in SEK 000	%	2012	%	2011
Profit/loss before tax		–275,971		–405,660
Income tax expense calculated at applicable rate in the Parent Company	26.3%	72,580	26.3%	106,689
Tax effect of				
Non-deductible expenses		–8,860		–5,831
Tax-exempt revenue		1		1,641
Items recognized directly against equity		0		11,822
Changes in fair value, non-taxable		–22,826		–59,383
Capitalization of deferred tax losses carried forward in subsidiaries		–13,778		–19,987
Increase in tax losses carried forward without corresponding capitalization of deferred taxes		–27,117		–34,951
Recognized current tax	**0.0%**	**0**	**0.0%**	**0**
Change in deferred tax		45,807[1]		19,987
Recognized deferred tax	**16.6%**	**45,807**	**4.9%**	**19,987**
Total recognized tax	**16.6%**	**45,807**	**4.9%**	**19,987**

[1] Of which effect of tax rate change 32,030

Tax rate change
In November 2012 the Swedish parliament decided to reduce the corporate tax rate from 26,3% to 22%. The reduced tax rate is applicable to fiscal years beginning on January 1, 2013 or later. Deferred taxes on temporary differences and tax losses carried forward at December 31, 2012 are calculated with the tax rate of 22%.

Recognized in the statement of financial position
Temporary differences arise in cases where the assets' or liabilities' carrying amounts and fiscal values differ.

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

Deferred tax in the statement of financial position

Amounts in SEK 000	31 Dec 2012	31 Dec 2011
Intangible non-current assets[1]	–217,810	–182,343
Tax losses carried forward[2]	66,532	38,758
Less liabilities attributable to assets to be transferred to KDev Investments Group	151,278	–
Deferred tax assets/tax liabilities, net	**0**	**–143,585**

[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 2011	45,770	–11,575
Acquired subsidiaries	136,573	–7,196
Recognized through profit or loss	0	–19,987
Closing balance 2011	**182,343**	**–38,758**
At beginning of 2012	182,343	–38,758
Acquired subsidiaries (Note 24)	77,807	–24,307
Recognized through profit or loss	–42,340	–3,467
Of which effect of tax rate change	*(–42,340)*	*(10,310)*
Less liabilities attributable to assets to be transferred to KDev Investments Group	–217,810	66,532
Closing balance 2012	**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 64,142 thousand (64,284) at year-end 2012, of which SEK 33,863 thousand (30,632) 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 2012	31 Dec 2011
Accumulated acquisition cost		
At beginning of the year	715,977	196,688
Acquisitions of subsidiaries (Note 24)	306,811	519,289
Less assets to be transferred to KDev Investments Group	–1,015,926	0
Closing balance	**6,862**	**715,977**
Accumulated amortization and impairments		
At beginning of the year	–22,656	–22,656
Less assets to be transferred to KDev Investments Group	22,656	0
Closing balance	**0**	**–22,656**
Carrying amount	**6,862**	**693,321**

The carrying amount above is comprised of the acquisition cost of subsidiaries; see acquisitions for the year in Note 24.

Patents, licenses and similar rights

Amounts in SEK 000	31 Dec 2012	31 Dec 2011
Accumulated acquisition cost		
At beginning of the year	14,280	8,141
Acquisition of subsidiaries (Note 24)	374	3,657
Acquisitions during the year	1,963	2,546
Reclassifications	0	–64
Sales and disposals	–2,706	0
Less assets to be transferred to KDev Investments Group	–9,207	0
Closing balance	**4,704**	**14,280**
Accumulated amortization and impairments		
At beginning of the year	–4,644	–2,395
Acquisition of subsidiaries (Note 24)	–50	0
Amortization for the year	–3,650	–2,249
Sales and disposals	2,941	0
Less assets to be transferred to KDev Investments Group	3,701	0
Closing balance	**–1,702**	**–4,644**
Carrying amount	**3,002**	**9,636**

Note 10 Tangible non-current assets

Amounts in SEK 000	31 Dec 2012	31 Dec 2011
Accumulated acquisition cost		
At beginning of the year	6,960	6,608
Acquisition of subsidiaries (Note 24)	458	0
Acquisitions during the year	5,233	288
Disposals	–581	0
Reclassifications	922	64
Less assets to be transferred to KDev Investments Group	–2,342	0
Closing balance	**10,650**	**6,960**
Accumulated amortization and impairments		
At beginning of the year	–5,297	–4,115
Depreciation for the year	–1,513	–1,182
Acquisition of subsidiaries (Note 24)	–428	0
Sales and disposals	–407	0
Less assets to be transferred to KDev Investments Group	1,980	0
Closing balance	**–5,665**	**–5,297**
Carrying amount	**4,985**	**1,663**

Finance leases
The Group did not enter into any finance leases in 2012, 2011 or any prior period.

Note 11 Shares in joint ventures and associated companies

Amounts in SEK 000	2012	2011
Accumulated acquisition cost		
At beginning of the year	980,276	1,220,791
Acquisitions during the year (Note 40)	148,189	209,955
Reclassifications	–178,512	–185,799
Sales of associated companies	–72,681	–28,050
Change in fair value in profit/loss for the year	–87,694	–236,621
Less assets to be transferred to KDev Investments Group	–570,405	0
Closing balance	**219,173**	**980,276**

Companies that have been reclassified to subsidiaries have previously been recognized as joint ventures and associated companies and measured at fair value with changes in value through profit or loss. As a result of amended shareholder agreements, Karolinska Development has controlling interest in the companies, which is why they are classified as subsidiaries and are consolidated in the Group. This implies that the full income statement and statement of financial position, as well as cash flows for these companies, are consolidated and that the change in the value of the holdings is no longer recognized through consolidated profit or loss. Reporting of the purchase price does not imply that any cash consideration has been paid. For a further description, see Note 24.

Note 12 Other long-term securities holdings

Amounts in SEK 000	2012	2011
Accumulated acquisition cost		
At beginning of the year	24,587	24,761
Acquisitions during the year (Note 41)	1,460	3,915
Sale of other long-term securities holdings	0	–540
Reclassifications	0	3,626
Change in fair value in profit/loss for the year	902	–7,175
Total fair value	**26,949**	**24,587**

Note 13 Loans receivable joint ventures and associated companies

Amounts in SEK 000	31 Dec 2012	31 Dec 2011
Loans receivable joint ventures and associated companies		
At the beginning of the year	3,675	83,870
Loans provided	45,942	29,805
Conversions	–4,240	–88,770
Repayments	–2,475	0
Impairment losses	–30,000	–21,230
Exchange rate differences	–46	0
Total loans receivable joint ventures and associated companies	**12,856**	**3,675**

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 2012	31 Dec 2011
Receivables not past due	614	1,462
Overdue receivables without provision		
1–30 days	201	0
31–90 days	0	0
91–180 days	0	0
>180 days	0	0
Less assets to be transferred to KDev Investments Group	–302	–
Total	**513**	**1 462**

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 2012	31 Dec 2011
Tax receivable	1,614	1,371
VAT receivable	2,851	2,874
Other	1,530	4,512
Less assets to be transferred to KDev Investments Group	–2,040	–
Total other current receivables	**3,955**	**8,757**

Note 16 Prepaid expenses and accrued income

Amounts in SEK 000	31 Dec 2012	31 Dec 2011
Prepaid rental expenses	923	677
Accrued interest income	715	93
Insurance premiums	592	46
Accrued income	1,689	0
Other	1,214	1,070
Less assets to be transferred to KDev Investments Group	–555	–
Total	**4,578**	**1,886**

Note 17 Equity

Changes in share capital

Year	Transaction	No. of shares	Share capital	No. of A shares	No. 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**
April 2011	Share issue	15,200,000	7,600,000		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**

Net asset value per share

	Group	
Amounts in SEK 000	**31 Dec 2012**	**31 Dec 2011**
Net assets		
Cash and cash equivalents	117,033	163,347
Short-term investments	174,160	457,249
Loans receivable joint ventures and associated companies	12,856	3,675
Financial liabilities	–1,982	–2,000
Total net assets	**302,067**	**622,271**
Estimated fair value of portfolio companies including subsidiaries	1,827,190	1,546,864
Total net asset value	**2,129,257**	**2,169,135**
Number of shares	**48,380,817**[1]	**48,531,417**
Net asset value per share	**44.01**	**44.70**

1) The number of shares has been reduced by 150.600 repurchased shares.

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. These shares represent SEK 75,300 of the share capital, and the consideration paid totals SEK 2,243,879. The shares were repurchased to cover the social security costs in the incentive program PSP 2012 resolved by the Annual General Meeting in 2012.

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 during the year without any subscriptions by participants. As of 31 December 2012, 96,871 and 88,901 warrants have been acquired through the two remaining programs. This will dilute the current shares if the market price of the shares exceeds the subscription price of the associated shares that the warrants are entitled to. 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 2012 or 2011.

Earnings per share basic and diluted

Amounts in SEK 000	**2012**	**2011**
Loss for the year attributable to the Parent Company's shareholders	–212,852	–354,147
Weighted average number of shares	48,529,767	43,908,951
Loss per share, SEK	**–4.39**	**–8.07**

Note 18 Interest-bearing liabilities

Amounts in SEK 000	**31 Dec 2012**	**31 Dec 2011**
Long-term liabilities		
Loans from Almi Företagspartner and Innovationsbron	1,375	2,000
Less liabilities attributable to assets to be transferred to KDev Investments Group	–1,375	–
Total	**0**	**2,000**

Amounts in SEK 000	**31 Dec 2012**	**31 Dec 2011**
Current liabilities		
Loans from Almi Företagspartner and Innovationsbron	200	0
Less liabilities attributable to assets to be transferred to KDev Investments Group	–200	–
Total	**0**	**0**

Interest-bearing liabilities relate to loans raised by the subsidiary Inhalation Sciences 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 2012**	**31 Dec 2011**
VAT liabilities	195	0
Other taxes and fees	2,767	2,747
Other	2,374	49
Less liabilities attributable to assets to be transferred to KDev Investments Group	–2,561	–
Total	**2,775**	**2,796**

Note 20 Accrued expenses and deferred income

Amounts in SEK 000	**31 Dec 2012**	**31 Dec 2011**
Salaries and remuneration to personnel	3,462	4,077
Accrued remuneration to Board of Directors	2,363	1,389
Accrued auditor and consultant fees	3,236	993
Payroll tax and accrued pension costs	2,952	2,363
Accrued employer's contributions	436	334
Deferred subsidies	0	2,612
Other	1,187	2,219
Less liabilities attributable to assets to be transferred to KDev Investments Group	–5,470	–
Total	**8,166**	**13,987**

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: Financial assets designated at FVTPL	Financial assets at fair value through profit or loss: Held for trading	Loan and receivables	Other financial liabilities	Total carrying amount	Fair value
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**
Other financial liabilities				10,889	10,889	10,889
Accounts payable				4,215	4,215	4,215
Total				**15,104**	**15,104**	**15,104**
2011						
Shares and participations	1,004,863				1,004,863	1,004,863
Accounts receivable			1,462		1,462	1,462
Current loans receivable			3,675		3,675	3,675
Short-term investments		457,249			457,249	457,249
Cash and cash equivalents			163,347		163,347	163,347
Total	**1,004,863**	**457,249**	**168,484**	**0**	**1,630,596**	**1,630,596**
Owed to credit institutions				2,000	2,000	2,000
Accounts payable				9,563	9,563	9,563
Total				**11,563**	**11,563**	**11,563**

Short-term investments
The 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 if the duration exceeds three months at the date of acquisition.

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 measured 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
Short-term investments	174,160	0	0	174,160
Cash and cash equivalents	117,033	0	0	117,033
Total	**291,193**	**0**	**255,029**	**546,222**
Financial liabilities				
Other financial liabilities	0	0	10,889	10,889
Total	**0**	**0**	**10,889**	**10,889**

Group's assets and liabilities measured at fair value as of 31 December 2011

Amounts in SEK 000	Level 1	Level 2	Level 3	Total
Financial assets				
Shares and participations	0	0	1,004,863	1,004,863
Short-term investments	457,249	0	0	457,249
Cash and cash equivalents	163,347	0	0	163,347
Total	**620,596**	**0**	**0**	**1,625,459**
Financial liabilities	**0**	**0**	**0**	**0**
Total	**0**	**0**	**0**	**0**

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
Sales	–72,681	0	–	–72,681
Assets to be transferred to KDev Investments Group	–570,405	0	–	–570,405
Reclassifications to subsidiaries	–178,512	0	–	–178,512
Transfers to level 2	0	0	–	0
Transfers to level 1	0	0	–	0
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				
Result from changes in fair value	–87,694	902	0	–86,792
Total	**–87,694**	**902**	**0**	**–86,792**

Changes in financial assets on level 3 in 2011

Amounts in SEK 000	Shares in joint ventures/ associated companies	Other long-term securities holdings	Total
At beginning of the year	1,220,791	24,761	1,245,552
Total recognized gains and losses	–236,621	–7,175	–243,796
Acquisitions	209,955	3,915	213,870
Sales	–28,050	–540	–28,590
Reclassifications	–3,626	3,626	0
Reclassifications to subsidiaries	–182,173	0	–182,173
Transfers to level 2	0	0	0
Transfers to level 1	0	0	0
Carrying amount at year-end	**980,276**	**24,587**	**1,004,863**
Gains and losses in profit/loss for the year for assets included in the closing balance			
Result from changes in fair value	–236,621	–7,175	–243,796
Total	**–236,621**	**–7,175**	**–243,796**

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

Shares in associated companies and other long-term holdings (unlisted holdings)
The valuation of unlisted holdings is based on "International Private Equity and Venture Capital Valuation Guidelines." For a further description, see Note 1 Accounting policies, "Valuation of portfolio companies."

Other financial assets and liabilities
The valuations of other financial assets and liabilities are based on the same principle as the valuation of shares in associated companies and other long-term holdings.

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.

Accounts receivable and payable
For accounts receivable and payable with a remaining life of less than six months, the carrying amount is considered to reflect fair value.

Sensitivity analysis regarding fair value of portfolio companies
Weighted Average Cost of Capital (WACC)
Net cash flow from each project the portfolio companies are involved in is discounted with two different discount rates: one reflects the risk in small companies ("Biotechnology WACC") and the second is a lower discount rate from the time the project is licensed to global pharmaceutical companies ("Pharma WACC"). The components of the discount rates are:

– Risk-free interest, represented by the Swedish Riksbank's 10-year government bond.

– Market risk premium, defined as the difference between the expected annuity quota and risk-free interest on the NASDAQ OMX stock exchange.

– Premium supplement for private/small cap companies is a supplement to the market risk premium representing the risk supplement for project companies with illiquid shares. This premium is collected from companies with a market value under SEK 100m on the NASDAQ OMX stock exchange. The premium supplement for private/small cap companies constitutes the difference between Biotechnology WACC and Pharma WACC.

– The risk premium supplement from the discount rate is based on external market information and is regularly updated. Per 31 December 2012, Biotechnology WACC was 11.68% (11.63%) and Pharma WACC was 7.78% (7.83%).

To estimate the effect of changes to the discount rate on the valuation of the portfolio, WACC has been adjusted by –1% and +1%.

Sensitivity analysis WACC	WACC adjustment –1%		Biotechnology WACC: 11.68% Pharma WACC: 7.78%	WACC adjustment +1%	
Amounts in SEKm	Fair value	Change	Fair value	Fair value	Change
Fair value difference for shares in portfolio companies	1,843.9	16.8	1,827.2	1,812.5	–14.6

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 2012	31 Dec 2011
Accounts receivable	513	1,462
Other current receivables	3,955	8,757
Short-term investments	174,160	457,249
Cash and cash equivalents	117,033	163,347
Maximum exposure to credit risk	**295,661**	**630,815**

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. Interest risk is limited to short-term fluctuations in interest rates as the Group only holds temporary surplus liquidity on interest bearing accounts and money market funds with short duration.

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 18 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
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**
2011					
Interest-bearing liabilities	0	0	2,000	0	2,000
Accounts payable and other liabilities	9,563	0	0	0	9,563
Other current liabilities	2,796	0	0	0	2,796
Total	**12,359**	**0**	**2,000**	**0**	**14,359**

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 2012	31 Dec 2011
Pledged assets		
Endowment insurance	2,623	2,080
Total pledged assets	**2,623**	**2,080**
Investment commitments		
Uminova	1,000	400
Biocelex	200	500
Total contingent liabilities	**1,200**	**900**
Total	**3,823**	**2,980**

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, 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, the Group therefore reports no assets or liabilities, with the exception of special payroll contribution, related to these endowment insurance policies. The Parent Company recognizes an asset and corresponding liability.

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 regarding investments in projects evaluated by KIAB. The term of 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 before then. 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 accumulated earnings before financial items and tax from 1 January 2008, which includes a so-called threshold amount of SEK 652m. No success fee will be paid before the accumulated earnings amount to at least SEK 652m, after which only surplus amounts will form the basis of calculation. The condition for the basis of calculation is that the accumulated result is cash positive. At year-end 2011, the accumulated loss was SEK –1,130m.

The basis of calculation for the success fee is adopted after the Annual General Meeting in 2013. Since the calculation for 2012 leads to a negative accumulated result, no success fee will be charged for 2012.

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 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 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 2012 amounted to SEK 0.

FMAB 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 FMAB. Karolinska Development, KIAB and the investment managers have entered into to a shareholder agreement regarding FMAB. 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.

	2012		2011	
Amounts in SEK 000	Sale of services	Purchase of services	Sale of services	Purchase of services
Associate relationship				
Owner: Karolinska Institutet Holding Group	230	8,002	104	6,630
(of which rental cost)		(1,144)		(2,749)
KCIF Co-Investment Fund KB	0	0	0	0
Other joint ventures and associated companies	821	0	2,699	498
Total	**1,051**	**8,002**	**2,803**	**7,128**

	31 Dec 2012		31 Dec 2011	
Amounts in SEK 000	Liability to associates	Receivable from associates	Liability to associates	Receivable from associates
Associate relationship				
Karolinska Institutet Holding Group	813	106	452	511
Joint ventures and associated companies	0	13,548	60	3,905
Total	**813**	**13,654**	**512**	**4,416**

Note 24 Business combinations

Karolinska Development has completed the share swap with Industrifonden through which Karolinska Development has received shares in Aprea AB in exchange for Karolinska Development's holding in Oncopeptides AB. The share swap has given Karolinska Development controlling interest in Aprea AB. Aprea AB was previously reported as a joint venture and measured at fair value with changes in fair value through profit or loss. Because of this controlling interest, Aprea AB is classified as a subsidiary and consolidated in the Group as of 27 August 2012. This means that the full income statement, statement of financial position and cash flow are now consolidated and that the holding is no longer recognized at fair value. The net assets are recognized in the consolidated financial statements, including non-controlling interests.

Acquisition of subsidiaries

Subsidiary	Operations	Acquisition date	Share of acquired equity that carries voting rights, %	Acquisition cost
Aprea AB	Biotechnological research and development	27 August 2012	69.43%	178,140
Total consolidated value				**178,140**

Consolidated value	
Amounts in SEK 000	
Book value of previous holding in Aprea AB	46,199
Share swap with Industrifonden	72,636
Change in fair value[1]	59,305
Total consolidated value	**178,140**

[1] The change in fair value was previously recognized through profit or loss.

Share swap with Industrifonden
Through the share swap, Karolinska Development received Industrifonden's holding in Aprea AB, representing 28.31% of the total number of shares outstanding, in exchange for Karolinska Development's holding of shares in Oncopeptides AB. No cash consideration was paid.

Financial receivable and liability contingent consideration
The transaction also contains a provision whereby Karolinska Development AB can receive a 5% share of any future revenue Industrifonden receives from Oncopeptides up to SEK 80m, while Industrifonden can receive a 5% share of any future revenue Karolinska Development receives from Aprea AB up to SEK 80m as contingent consideration. In the statement of financial position, they have been recognized at an estimated market value of SEK 8,907 thousand on the acquisition date. During the fourth quarter, the financial liability was revalued at SEK 10,889 thousand.

Acquisition-related costs
Acquisition-related costs amounted to SEK 400 thousand and are recognized as other external expenses in the Group's total comprehensive income.

Other disclosures
Aprea has issued 21,160 warrants to its employees. These warrants have not been taken into consideration on the acquisition date, since they are not expected to have a significant effect on the acquisition cost.

Acquired assets and assumed liabilities on the acquisition date

Amounts in SEK 000	Aprea AB Fair value
Patents	324
Development projects in progress	306,811
Equipment	31
Financial non-current assets	1
Deferred tax assets from fiscal deficit	24,307
Accounts receivable	23
Other current receivables	592
Prepaid expenses and accrued income	97
Cash and cash equivalents	5,363
Deferred tax liabilities on development projects in progress	–77,807
Accounts payable	–1,066
Other current liabilities	–228
Accrued expenses and deferred income	–1,873
Net identifiable assets and liabilities	**256,575**
Less non-controlling interests	–78,435
Acquisition cost	**178,140**

Revenue and loss before tax since the acquisition date included in the consolidated statement of comprehensive income

Amounts in SEK 000	Revenue	Loss before tax
Aprea AB	326	–5,896

Revenue and loss before tax if the acquisition date had been at the beginning of the financial year

Amounts in SEK 000	Revenue	Loss before tax
Aprea AB	577	–16,350

Note 25 Assets and liabilities to be transferred to KDev Investments Group

On 21 December2012, Karolinska Development signed an agreement with Rosetta Capital IV LP on the sale of a minority share in Karolinska Development's holdings in 13 of its portfolio companies. The transaction was finalized in the first quarter 2013. Karolinska Development has transfered 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 shareholders agreement on the management of KDev Investments AB, whereby Karolinska Development have relinquish 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 to Karolinska Development and will be recognized at fair value in the consolidated statement of financial position. The assets and liabilities attributable to KDev Investments Group have therefore been recognized separately in the group statement of financial position, in accordance with accounting standard IFRS 5.

In accordance with Accounting standard RFR 2, Accounting for legal entities, the parent company has not recognized the asset and liabilities separately in the parent statement of financial position. Book value of the 13 portfolio companies transferred to KDev Investments AB during the first quarter amounted to 704 063 KSEK. KDev Investments AB is a joint venture of Karolinska Development and is recognized at cost in the parent company´s statement of financial position.

Assets to be transferred to KDev Investments Group

Amounts in SEK 000	Group 31 Dec 2012
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 to be transferred to KDev Investments Group

Amounts in SEK 000	Group 31 Dec 2012
Deferred taxes	151,278
Interest-bearing liabilities	1,575
Accounts payable	3,878
Other short-term liabilities	8,030
Total	**164,761**

Note 26 Significant events after the closing date

See Directors' report, page 58.

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 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	2012	2011
Revenues from services from Group companies	2,695	1,433
Invoiced costs	1,291	1,034
Total revenue	**3,986**	**2,467**

Note 30 Other external expenses

Auditor and consultant fees

Amounts in SEK 000	2012	2011
Deloitte		
Audit services	680	450
Audit related services	323	334
Tax consulting	579	514
Other services	96	64
Total	**1,678**	**1,362**

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 1,482 thousand (1,489). Future leasing fees are to be paid according to the table below.

Amounts in SEK 000	2012	2011
Within one year	1,148	1,350
Between one and five years	0	0
Total	**1,148**	**1,350**

Note 32 Employees and personnel costs

Average number of employees

Full-time equivalent	2012	Of whom men	2011	Of whom men
Parent Company	16	75%	16	81%
Total	**16**	**75%**	**16**	**81%**

Employee benefits

Amounts in SEK 000	2012	2011
Salaries and remuneration	19,309	20,504
Social security costs	6,812	7,065
Pension costs	4,697	4,188
Total	**30,818**	**31,757**

Salaries and other remuneration distributed between Board members and other employees

	2012		2011	
Amounts in SEK 000	Board and CEO	Other employees	Board and CEO	Other employees
Salaries and remuneration	8,410	10,899	7,970	12,534
Pension costs	1,621	3,076	1,443	2,745
Total	**10,031**	**13,975**	**9,413**	**15,279**

Note 33 Impairment

Amounts in SEK 000	2012	2011
Impairment of shares in subsidiaries	–13,537	–5,871
Impairment of shares in joint ventures and associated companies	–106,541	–117,590
Impairment of other long-term securities holdings	0	–2,501
Total	**–120,078**	**–125,962**

Note 34 Result on sale of portfolio companies

Amounts in SEK 000	2012	2011
Capital gain/loss		
Oncopeptides AB	49,722	0
ProNoxis AB	–6,500	0
Independent Pharmaceutica AB	47	3,022
IMED AB	0	3,217
Gain/loss on sale of portfolio companies	**43,269**	**6,239**

The capital gain on Oncopeptides AB has arisen as a result of the share swap with Industrifonden. The disclosure of the transaction is based on the fair value of the shares received in Aprea. No cash consideration was paid.

Note 35 Interest income and similar income

Amounts in SEK 000	2012	2011
Interest income	4,655	5,017
Change in value of short-term investments	7,334	10,036
Total	**11,989**	**15,053**

Note 36 Interest expenses and similar expenses

Amounts in SEK 000	2012	2011
Interest expenses	–4	–6
Exchange rate losses	–85	0
Impairment of receivables from joint ventures and associated companies	–31,976[1]	–21,230
Total	**–32,065**	**–21,236**

[1] Relates to impairment of loans receivable from Pergamum.

Note 37 Taxes

Amounts in SEK 000	%	2012	%	2011
Profit/loss before tax		–152,711		–187,745
Income tax expense calculated at applicable rate in the Parent Company	26.3%	40,163	26.3%	49,377
Tax effect of				
Non-deductible expenses		–40,174		–39,038
Tax-exempt income		11,476		1,641
Items recognized directly against equity		0		11,822
Increase in tax losses carried forward without corresponding capitalization of deferred tax		–11,465		–23,802
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 2012 amounted to SEK 64,142 thousand (64,284), of which SEK 33,863 thousand (30,632) refers to deficits that are restricted by Group contributions and mergers.

Note 38 Tangible non-current assets

Amounts in SEK 000	31 Dec 2012	31 Dec 2011
Accumulated acquisition cost		
At beginning of the year	422	422
Acquisitions during the year	0	0
Sales and disposals	–397	0
Closing balance	**25**	**422**
Accumulated amortization and impairments		
At beginning of the year	–380	–313
Depreciation for the year	–6	–67
Sales and disposals	370	0
Closing balance	**–16**	**–380**
Carrying amount	**9**	**42**

Note 39 Shares in subsidiaries

Amounts in SEK 000	2012	2011
Accumulated book value		
At beginning of the year	252,545	147,173
Acquisitions during the year	81,949	83,711
Reclassifications from joint ventures and associated companies	119,522	28,342
Sales	0	–810
Impairment	–13,537	–5,871
Closing balance, book value	**440,479**	**252,545**

Specification of holdings in subsidiaries

Name	Total holding[1]		Book value in Parent Company	
Amounts in SEK 000	**31 Dec 2012**	**31 Dec 2011**	**31 Dec 2012**	**31 Dec 2011**
Akinion Pharmaceuticals AB[3]	90.32%	88.09%	63,070	48,070
Aprea AB[2,3]	69.43%	–	119,235	–
Aprea Personal AB[3]	69.43%	–	–	–
Avaris AB[4]	94.87%	–	369	–
Axelar AB[3]	45.29%	40.03%	73,343	48,343
ClanoTech AB[3]	88.85%	86.94%	46,692	37,194
HBV Theranostica AB	100.00%	–	50	–
Inhalation Sciences Sweden AB[3]	74.72%	72.11%	28,238	24,238
KCIF Fund Management AB	37.50%	37.50%	143	43
KD Incentive AB	100.00%	100.00%	200	200
KDev Exploratory AB (formerly Actar AB)	100.00%	100.00%	7,500	3,679
KDev Investments AB (formerly Daffodil AB)	100.00%	–	50	–
KDev Oncology AB	100.00%	100.00%	4,000	1,000
Gligene AB	34.65%	10.13%	–	–
Limone AB	100.00%	100.00%	8	296
NovaSAID AB[3]	88.91%	88.91%	74,407	74,407
Pharmanest AB	60.24%	52.47%	23,174	15,075
Total book value			**440,479**	**252,545**

[1] Including indirect ownership interest through portfolio companies. Ownership interest corresponds to formal voting rights according to the participating interest. In addition, in some cases a shareholder agreement has been entered into which gives Karolinska Development controlling interest.

[2] Karolinska Development has obtained controlling interest in Aprea as of 27 August 2012; see Note 24.

[3] These companies have been transferred to KDev Investments Group during the first quarter 2013.

[4] Reclassified during the fourth quarter 2012.

Investments in subsidiaries

Amounts in SEK 000	2012	2011
Akinion Pharmaceuticals AB	15,000	30,000
Axelar AB	25,000	20,000
ClanoTech AB	9,500	2,499
HBV Theranostica AB	200	–
Inhalation Sciences Sweden AB	4,000	7,000
KCIF Fund Management AB	100	0
KD Incentive AB	0	100
KDev Exploratory AB (formerly Actar AB)	13,000	2
KDev Investments AB (formerly Daffodil AB)	50	–
KDev Oncology AB	3,000	1,000
Limone AB	4,000	3,000
NovaSAID AB	0	12,000
Pharmanest AB	8,099	8,110
Total investments in subsidiaries	**81,949**	**83,711**

Non-cash investments in subsidiaries

Amounts in SEK 000	2012	2011
Other non-cash investments		
HBV Theranostica AB	150	0
Total non-cash investments	**150**	**0**

Investment commitments

Agreements on additional financing for portfolio companies relate entirely to Axelar AB, where an investment commitment of SEK 26.6m (25.0) has been entered into.

Axelar

Axelar AB acquired the rights to its project's patent applications from another legal entity during 2005. If Axelar sells its project to another third party in the future, the legal entity has the right to receive repayment for its development costs up to a maximum of SEK 26m (26m).

Note 40 Shares in joint ventures and associated companies

Amounts in SEK 000	2012	2011
Accumulated book value		
At beginning of the year	612,893	573,990
Acquisitions during the year	148,189	209,955
Reclassifications to and from other long-term securities holdings	0	–3,300
Reclassifications to subsidiaries	–119,522	–28,342
Sales	–29,096	–21,820
Impairment	–106,541	–117,590
Closing balance at book value	**505,923**	**612,893**

Specification of holdings in joint ventures

	Total holding[1]		Book value in Parent Company	
Amounts in SEK 000	**31 Dec 2012**	**31 Dec 2011**	**31 Dec 2012**	**31 Dec 2011**
Aprea AB[2]	–	41.12%	–	46,199
Athera Biotechnologies AB	65.02%	62.19%	97,438	74,797
Avaris AB[3]	–	68.40%	0	0
BioChromix Pharma AB	76.47%	68.77%	27,850	19,350
Bioneris AB (in liquidation)	26.31%	26.31%	0	0
Biosergen AS	60.26%	60.26%	21,370	21,370
Dilafor AB[2]	55.86%	54.76%	93,376	88,831
Dilaforette Holding AB[2]	66.34%	57.96%	24,438	7,188
Dilaforette AB[2]	66.34%	57.96%	–	–
HBV Theranostica AB (dormant)	–	72.52%	0	0
Lipidor AB	46.13%	39.98%	12,998	9,000
NeoDynamics AB[2]	20.72%	25.74%	11,097	11,097
Oncopeptides AB (divested)	–	43.36%	–	22,914
Pergamum AB[2]	61.93%	61.93%	104,400	210,850
DermaGen AB[2]	61.93%	61.93%	–	–
Laurantis Pharma OY[2]	3.44%	6.07%	–	–
Lipopeptide AB[2]	61.93%	61.93%	–	–
PharmaSurgics in Sweden AB (divested)	–	61.93%	–	–
XImmune AB[2]	5.16%	5.36%	–	–
ProNoxis AB (divested)	–	19.83%	–	5,500
Umecrine Cognition AB	54.17%	54.17%	14,700	14,700
Umecrine Mood AB[2]	42.54%	42.87%	31,007	25,112
XSpray Microparticles AB	61.81%	60.80%	36,628	33,708
Total book value			**475,302**	**590,616**

[1] Including indirect ownership interest through portfolio companies. Ownership interest corresponds to formal voting rights according to the participating interest. In addition, in some cases a shareholder agreement has been entered into which gives Karolinska Development controlling interest.

[2] These companies have been transferred to KDev Investments Group during the first quarter 2013.

[3] Reclassified during the fourth quarter 2012.

Specification of holdings in associated companies

	Total holding[1]		Book value in Parent Company	
Amounts in SEK 000	**31 Dec 2012**	**31 Dec 2011**	**31 Dec 2012**	**31 Dec 2011**
KCIF Co-Investment Fund KB	26.00%	26.00%	13,871	10,527
OSS-Q AB	15.63%	15.69%	3,650	3,650
Promimic AB	30.12%	24.50%	13,100	8,100
Total book value			**30,621**	**22,277**

[1] Including indirect ownership interest through portfolio companies. Ownership interest corresponds to formal voting rights according to the participating interest. In addition, in some cases a shareholder agreement has been entered into which gives Karolinska Development controlling interest.

Investments in joint ventures and associated companies

Amounts in SEK 000	2012	2011
Aprea AB	72,636	12,470
Athera Biotechnologies AB	22,641	8,760
Avaris AB	444	1,800
BioChromix Pharma AB	8,500	10,000
Biosergen AS	0	6,256
Dilafor AB	4,545	9,000
Dilaforette Holding AB	17,250	7,188
Eribis Pharmaceuticals AB	0	2,490
HBV Theranostica AB	0	200
KCIF Co-Investment Fund KB	3,360	5,834
Lipidor AB	3,998	4,997
NeoDynamics AB	0	3,546
Oncopeptides AB	0	4,378
OSS-Q AB	0	3,650
Pergamum AB	0	108,065
Promimic AB	5,000	0
ProNoxis AB	1,000	2,500
Umecrine Cognition AB	0	7,700
Umecrine Mood AB	5,895	5,286
XSpray Microparticles AB	2,920	5,835
Total investments in joint ventures and associated companies	**148,189**	**209,955**

Non-cash investments in joint ventures and associated companies

Amounts in SEK 000	2012	2011
Conversions of previously provided loans		
Aprea AB	0	5,900
Biosergen AS	0	2,425
Dilafor AB	4,545	0
Dilaforette Holding AB	0	4,000
NeoDynamics AB	0	546
Oncopeptides AB	0	4,378
Pergamum AB	0	77,629
Other non-cash investments		
Aprea AB	72,636	0
Avaris AB	444	0
Total non-cash investments	**77,625**	**94,878**

Note 41 Other long-term securities holdings

Amounts in SEK 000	2012	2011
Accumulated book value		
At beginning of the year	14,381	10,207
Acquisitions during the year	1,460	3,915
Reclassifications from joint ventures and associated companies	0	3,300
Sales	0	–540
Impairment	0	–2,501
Closing balance at book value	**15,841**	**14,381**

Specification of holdings in other long-term securities

Name	Total holding[1]		Book value in Parent Company	
Amounts in SEK 000	**31 Dec 2012**	**31 Dec 2011**	**31 Dec 2012**	**31 Dec 2011**
BioArctic NeuroScience AB	3.17%	3.17%	600	600
BioChromix AB	13.94%	9.34%	3,834	2,374
BioResonator AB (in liquidation)	7.62%	7.62%	0	0
CytoGuide ApS	9.06%	9.06%	3,300	3,300
NephroGenex Inc.	0.58%	0.58%	709	709
Umecrine AB	10.41%	10.41%	7,398	7,398
Total book value			**15,841**	**14,381**

[1] Including indirect ownership interest through portfolio companies. Ownership interest corresponds to formal voting rights according to the participating interest. In addition, in some cases a shareholder agreement has been entered into which gives Karolinska Development controlling interest.

Investments in other long-term securities

Name	2012	2011
BioChromix AB	1,460	2,915
Umecrine AB	0	1,000
Total investments in other long-term securities	**1,460**	**3,915**

Note 42 Loans receivable joint ventures and associated companies

Amounts in SEK 000	31 Dec 2012	31 Dec 2011
Loans receivable joint ventures and associated companies		
At the beginning of the year	3,675	83,870
Loans provided	45,942	29,805
Conversions	–4,240	–88,770
Repayments	–2,475	0
Impairment losses	–30,000	–21,230
Exchange rate differences	–46	0
Total loans receivable joint ventures and associated companies	**12,856**	**3,675**

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	29,010	17,780	–17,856
Aprea AB	Stockholm	556631-2285	440,480	7,645	–16,838
Aprea Personal AB	Stockholm	556771-4034	1,000	100	–1
Athera Biotechnologies AB	Solna	556620-6859	837,735	10,519	–38,522
Avaris AB	Huddinge	556614-2112	443,580	390	–9
Axelar AB	Stockholm	556623-6708	123,143	34,115	–41,901
BioChromix AB	Solna	556656-4786	775,260	9,335	–2,287
BioChromix Pharma AB	Solna	556777-0143	265,833	6,335	–9,162
Biosergen AS	Trondheim	NO 687622075	2,728,968	–5,450	–7,450
ClanoTech AB	Solna	556706-6658	47,879	5,241	–6,486
Dilafor AB	Stockholm	556642-1045	207,589	2,881	–15,398
Dilaforette Holding AB	Stockholm	556851-9523	430,999	30,163	–88
HBV Theranostica AB	Stockholm	556664-7268	218,334	29	–110
Inhalation Sciences Sweden AB	Solna	556665-6038	304,340	–371	–5,472
KCIF Fund Management AB	Solna	556777-9219	37,500	68	–100
KCIF Co-Investment Fund KB	Solna	969744-8810	26	53,338	–63
KD Incentive AB	Solna	556745-7675	100,000	53	–54
KDev Exploratory AB	Solna	556593-9856	273,817	7,672	–9,104
KDev Investments AB	Solna	556880-1608	50,000	28	–22
KDev Oncology AB	Solna	556683-9345	313,345	66,754	–343
Limone AB	Stockholm	556759-9211	170,000	8	–4,288
Lipidor AB	Stockholm	556779-7500	685	2,084	–5,202
NeoDynamics AB	Stockholm	556656-3341	8,495	35,480	–810
NovaSAID AB	Solna	556669-2181	530,505	1,442	–1,664
OSS-Q AB	Uppsala	556841-7546	11,060	3,543	–5,395
Pergamum AB	Solna	556759-9203	9,075,449	66,559	–153,649
Pharmanest AB	Solna	556785-1158	210,639	6,835	–13,248
Promimic AB	Gothenburg	556657-7754	93,875	12,073	–1,455
Umecrine Cognition AB	Umeå	556698-3655	1,156,283	2,731	–5,219
Umecrine Mood AB	Umeå	556698-0750	1,492,256	10,674	–14,225
XSpray Microparticles AB	Solna	556649-3671	534,462	–1,625	–11,946

Note 44 Accounts receivable

Amounts in SEK 000	31 Dec 2012	31 Dec 2011
Trade receivables not past due	207	49
Overdue receivables not considered bad debts		
1–30 days	201	0
31–90 days	1	0
91–180 days	0	0
>180 days	0	0
Total	**409**	**49**

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 2012	31 Dec 2011
Tax receivables	1,401	1,058
VAT receivables	1,057	802
Other	18	3,906
Total other current receivables	**2,476**	**5,766**

Note 46 Prepaid expenses and accrued income

Amounts in SEK 000	31 Dec 2012	31 Dec 2011
Prepaid rental expenses	400	337
Accrued interest income	679	35
Insurance premiums	453	7
Other	931	502
Total	**2,463**	**881**

Note 47 Other current liabilities

Amounts in SEK 000	31 Dec 2012	31 Dec 2011
Other taxes and fees	1,490	1,530
Other	22	0
Total	**1,512**	**1,530**

Note 48 Accrued expenses and deferred income

Amounts in SEK 000	31 Dec 2012	31 Dec 2011
Salaries and remuneration to personnel	958	1,784
Remuneration to Board of Directors	1,089	591
Auditor and consulting fees	871	350
Payroll tax and accrued pension costs	3,011	2,363
Social security contributions	300	237
Other	292	719
Total	**6,521**	**6,044**

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.

	2012		2011	
Amounts in SEK 000	Sale of services	Purchase of services	Sale of services	Purchase of services
Associate relationship				
Owner: Karolinska Institutet Holding Group	230	6,754	91	4,867
(of which rental cost)		(1,144)		(1,331)
Subsidiaries	2,696	1	1,111	2,968
Joint ventures and associated companies	821	0	1,356	0
Total	**3,747**	**6,755**	**2,558**	**7,835**

	31 Dec 2012		31 Dec 2011	
Amounts in SEK 000	Liability to associates	Receivable from associates	Liability to associates	Receivable from associates
Associate relationship				
Owner: Karolinska Institutet Holding Group	813	106	161	353
Subsidiaries	0	474	0	73
Joint ventures and associated companies	0	13,548	0	3,734
Total	**813**	**14,129**	**161**	**4,160**

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 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 2013. 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 2013.

Solna, 10 April 2013

Hans Wigzell Chairman	Per-Olof Edin Board member	Rune Fransson Board member
Klaus Wilgenbus Board member	Charlotte Edenius Board member	Vlad Artamonov Board member
Raymond Hill Board member	Torbjörn Bjerke CEO	

Our Auditor's Report was presented on 10 April 2013

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 2012-01-01–2012-12-31. The annual accounts and consolidated accounts of the company are included in the printed version of this document on pages 57–95.

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 2012 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 2012 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 2012-01-01–2012-12-31.

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
VOur 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 loss dealt with 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 2013

Deloitte AB

Thomas Strömberg
Authorized Public Accountant

Corporate governance report for 2012

INTRODUCTION

This corporate governance report is prepared in accordance with the Swedish Code of Corporate Governance, section 10, and the Annual Accounts Act, Chapter 6, §§ 6–9.

CORPORATE GOVERNANCE AT KAROLINSKA DEVELOPMENT

Application of the Code of Corporate Governance

Karolinska Development applies the Swedish Code of Corporate Governance (the Code). The Company does not deviate from any parts of the Code.

Information on the Company's website

The Company has a special section on its website for corporate governance issues, www.karolinskadevelopment.com under the Corporate Governance section.

Principles of corporate governance

The shareholders meetings and their major right of decision complies with statutory requirements and other regulations. This also applies to the shareholders' rights and how these rights are exercised.

Composition of the Board and functions, etc.

According to the Articles of Association, the Board is to be comprised of three to nine members. Deputies shall not be appointed. Since the AGM 2012, the Board is comprised of seven directors with no deputies.

Regulations regarding the appointment and dismissal of Board members and amendments to the Articles of Association

The Articles of Association contain no special regulations regarding the appointment and dismissal of Board members. The Company also has no special regulations regarding amendments to the Articles of Association.

Authorization of the Board to issue new shares or acquire its own shares

The Annual General Meeting on 23 May 2012 authorized the Board, for the period up to the next annual shareholders' meeting to adopt decisions, whether on one or several occasions without pre-emption rights for the shareholders, with or without payment in form of contribution in kind, to issue new shares of series B shares up to a maximum of ten percent of the share capital, for use as consideration in commercial transactions. The authorization has not been exercised.
The Annual general Meeting authorized the Board to decide on acquisition of up to 150,800 own shares to cover charges in the form secure social fees related to the PSP 2012 incentive program. The board of directors decided on September 28, 2012 to use the mandate. The repurchase of 150,600 shares was executed December 27, 2012 at a price of 14.85 per share.

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, namely that of Karolinska Institutet Holding AB, the only holder of series A shares, with 8,15 percent of the shares (28,17 percent of the votes).

Nomination Committee

The five largest shareholders in terms of votes, according to Euroclear Sweden AB's records as of 1 September 2012, have each appointed a representative to the Nomination Committee. The Nomination Committee consists of the following individuals: Gillis Cullin (Nomination Committee Chairman), appointed by Östersjöstiftelsen; Rune Fransson, appointed by Karolinska Institutet Holding AB; Peter Lundkvist, appointed by Tredje AP-fonden; Claes Kinell, appointed by Jarla Investeringar; and Todd Plutsky, appointed by Coastal Investment Management.

If a member of the Nomination Committee leaves the committee during the mandate period or in any other way is unable to fulfill their duties, the shareholder who appointed the member may appoint a new member. If a significant ownership change takes place before the Nomination Committee has completed its work, the Nomination Committee may, if it so decides and as it sees fit, change the composition of the Nomination Committee. No compensation is paid to the members of the Nomination Committee. With regard to the composition of the Nomination Committee and the Nomination Committee's execution of its task, the Code is followed.

Board of Directors

Composition of the Board
The Company's Board is comprised of seven members, none of whom are employed by the Company.

The Board of Directors consists of the following individuals: Hans Wigzell (Chairman), elected for the first time in 2006; Per-Olof Edin (Vice Chairman), elected for the first time in 2007; Rune Fransson, elected for the first time in 2007; Klaus Wilgenbus, elected for the first time in 2012; Charlotte Edenius, elected for the first time in 2012; Vlad Artamonov, elected for the first time in 2012; and Raymond Hill, elected for the first time in 2011.

Information on remuneration to Board members as resolved by the Annual General Meeting can be found in the annual report under the note "Employees and costs for employees".

Elected members of the Board
Hans Wigzell (born 1938), Chairman of the Board. MD and professor of immunology. Chairman of Rhenman & Partner Asset Management AB. Board member of Swedish Orphan Biovitrum AB, Intercell AG, Avi-Biopharma Inc., Humalabs LLC and Raysearch Labarotories AB. Previous assignments include: Chairman of Karolinska Institutet's Nobel Committee, Rector of Karolinska Institutet and General Director of the Swedish Institute for Communicable Disease Control. Holding in Karolinska Development: 8,491 shares.

Per-Olof Edin (born 1940), Board member and Deputy Chairman. Professor. Board member of Axelar AB. Previous assignments include: Deputy Chairman of the Seventh AP Fund, Chairman of Södertörn University College and of the Baltic Sea Foundation. Holding in Karolinska Development: 0 shares.

Rune Fransson (born 1947), Board member. B.Sc. in Economics. Other assignments: Chairman of Karolinska Institutet Holding AB and University Accommodation Center AB. Previous assignments include: Board member of KI Health Management AB. Holding in Karolinska Development: 0 shares.

Klaus Wilgenbus (born 1962), Board member. MD. 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. Holding in Karolinska Development: 0 shares.

Charlotte Edenius (born 1958), Board member. PhD. Medical Degree. Executive VP Research & Development at Medivir AB, Director of the Board of Qlucore 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. Holding in Karolinska Development: 0 shares.

Vlad Artamonov (born 1978), MBA, B.Sc. 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).

Raymond Hill (born 1945), PhD. DSc. President Emeritus of the British Pharmacological Society and a Member of Council of the Academy of Medical Sciences. Visiting Professor at, Bristol, Surrey, Imperial and Strathclyde Universities. President and Chairman of the Council of Trustees of the British Pharmacological Society. Non-Executive Director of the Swiss companies Addex and Covagen and of Orexo in Sweden. Holding in Karolinska Development: 0 shares.

Independence requirements
The table below indicates which elected Board members 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, company/ management	Independent, major shareholders
Hans Wigzell	Chairman	2006	yes	yes
Per-Olof Edin	member	2007	yes	yes
Rune Fransson	member	2007	yes	no
Klaus Wilgenbus	member	2012	yes	yes
Charlotte Edenius	member	2012	yes	yes
Vlad Artamonov	member	2012	yes	yes
Raymond Hill	member	2011	yes	yes

The Company fulfills the Code's requirement that a majority of the elected Board members are independent in relation to the Company and its management, and that a minimum of two of these are independent in relation to major shareholders.

The Board's work etc.
According to the Rules of procedure, the Board normally meets six times per year. During the year, the Board held one inaugural meeting, eight scheduled meetings and four extraordinary meetings. The extraordinary meetings were summoned mainly to resolve issues related to the incentive program and the deal with Rosetta Capital. Board members were present as follows: Hans Wigzell 13 meetings, Per-Olof Edin 13 meetings, Rune Fransson 13 meetings, Raymond Hill 13 meetings, Klaus Wilgenbus 9 meetings, Charlotte Edenius 9 meetings and Vlad Artamonov 9 meetings. The three directors last mentioned were all elected at the AGM 2012 and have been present at all meetings since the election.

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. They 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 delegation of work within the Board, save for the work by the Audit Committee and the Remuneration Committee.

Audit Committee
Karolinska Development´s Audit Committee consists of three members: Hans Wigzell (chairman), Per-Olof Edin and Klaus Wilgenbus, each being independent of the company, its executive management and controlling owners.
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.

Remuneration Committee
Karolinska Development´s Remuneration Committee consists of three members: Hans Wigzell (chairman), Rune Fransson and Vlad Artamonov, each being independent of the company and its executive management.
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.

CEO
Torbjørn Bjerke (born 1962) has been the Company's CEO since 13 January 2011. MD. More than 20 years experience in the pharmaceutical industry. Other assignments: Board member of NeuroSearch AS and DBV Technologies. Previous assignments include: President and CEO of Orexo AB, President and CEO of Orexo Biolipox AB, Head of Pharmacology at AstraZeneca and Executive Vice President of R&D at ALK-Abello. Holding in Karolinska Development: 41,375 shares.

Terje Kalland is the Company's Deputy CEO.

The main components of the Company's system for internal control in relation to financial reporting

General
Internal control is designed to provide reasonable assurance of the reliability of external financial reporting and whether the financial statements are produced in accordance with the law, generally accepted accounting policies and rules for listed companies.

Internal control and risk management at Karolinska Development
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 internal control. Karolinska Development has a flat organizational structure with a clear division of responsibilities and rights. It has an established system 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. The documentation is centrally accessible to all employees through the Company's internal IT network. The Company has employed personnel responsible for control and legal functions, who jointly work towards a well-functioning control environment as one of their specifically stated goals. These governing documents form the base 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 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 and 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 policies 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 liability relates to the Company on a specified date and, (vii) that an item is classified and described in accordance with law, generally accepted accounting policies and listing rules.

Control Activities. Financial reporting consists of control activities aimed at preventing, detecting and correcting errors and discrepancies. These consist of a specified distribution of work, documented and clearly described rules on how business transactions are approved as well as their traceability, the application of accounting and measurement 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' various projects. Scientific results and business opportunities are both monitored. This is done continuously at the Management Meetings held regularly.

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.

Information and Communication. The internal financial reporting complies with stipulated report plans. The Company's rules of procedure and the instruction on reporting to the Board include detailed descriptions when and what should be reported to and handled by the Board. The Company's CFO, with the support of controllers, is responsible for financial reporting to the Board, which includes information on the Company's results and financial position. Report 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 are reviewed once a year and adjusted as necessary. In conjunction with this, a general assessment of compliance is made. Moreover, continuous control of compliance is performed on a more detailed level. The Audit Committee meets ahead of the board meetings that manages interim reports. The auditors are present at the audit committee meetings and meet annually with directors without anyone from management present.

Specific assessment of the need for internal audit
Karolinska Development has no internal audit. The Board does not believe that there is a need for internal audit at present. The reason is 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 2013

Board of Directors of Karolinska Development

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 2012 included in the printed version of this document on pages 97–99. 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, 10 April 2013

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 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.

Adjuvant treatment An add-on treatment in order to prevent disease relapse by increasing the overall efficacy of a treatment.

Amino acids Amino acids are the chemical building blocks that can be combined in chains, or sequences, to form proteins and peptides.

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.

Analogue Within the field of pharmacology, analogues are two or more compounds that are structurally different but have the same or similar function.

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.

Antifungal Antibiotic-like substances used to treat fungal infection.

Antimicrobial A substance that has the ability to kill microorganisms (bacteria, fungus or parasites).

Antithrombotic Prevents blood clots (thrombosis).

Apoptosis Programmed cell death.

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.

Atopic dermatitis Chronic skin disease that is characterized by eczema and intense itching, inflammation and dryness.

Autoimmune reaction When the immune system start attacking the body's own cells.

BID From Latin 'bis in die', two times daily.

Bioavailability A measurement of what portion of an administered pharmaceutical that reaches circulation and the intended target tissue.

Biomarker Substance that indicates specific biological processes, for example diseases, and can therefore be used as a tool for diagnosis.

Biopsy Removal of tissue for sampling by genetic analysis and microscopy in order to determine a diagnosis.

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').

Blood-brain barrier A protective layer of cells that separates the general blood flow from the blood flow of the brain.

CE-certified Product certification within the EU and EEA that confirms that a product meets criteria for safety and function for example.

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.

Chemotherapy See cytotoxics.

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.

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.

Corpus luteum Structure that remains in the ovaries after the egg cell has detached at ovulation. The corpus luteum excretes estrogen and progesterone.

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.

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.

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.

Dysphoria Sadness, malaise, irritability.

Endogenous Derived from Greek 'proceeding from within'. Substances that originates from within the own body.

Epidural anesthesia Pain relief that is injected into the spinal canal.

EU5 Denotes the five largest pharmaceutical markets in the EU: United Kingdom, France, Germany, Spain and Italy.

Ex vivo From Latin, literally 'outside of the living'. Refers to studies done in laboratory settings, conducted on tissue separated from the organism.

Extracellular mechanism Signaling, reactions and bonding that takes place outside of and in between cells.

FDA Food and Drug Administration. US authority that among other things is responsible for regulating pharmaceutical and medicinal technology products.

Fibrinolytic Compound that contributes in the process of degrading fibrin, a substance that is formed when blood coagulates.

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.

GABA system Receptors and target molecules in the brain that regulate mood and irritability.

Glioblastoma Glioblastoma multiforme. The most common type of brain cancers and one of the most aggressive.

Glutamate receptor A receptor attached to nerve cells that are important for the function of memory, learning and communication.

GMP Good Manufacturing Practice. A quality assurance system and regulations that govern the manufacturing of pharmaceuticals, diagnostic tools and technology products.

Heparin A natural anticoagulant substance that prevents the formation of blood clots as well as the extension of existing blood clots.

Hepatocellular carcinoma The most common type of cancer of the liver.

IgM antibodies Antibodies that belong to the immune response that arises early at an infection.

Immunological marker A biomarker that indicates processes of the immune system.

Immunomodulators Compounds that either inhibits or stimulates the immune system.

In vivo From Latin, literally 'inside of the living'. Refers to studies conducted on living organisms.

Interferon-α An immunomodulator that stimulates the immune system in the presence of pathogens.

Intracellular Inside cells.

Intracerebral Inside the brain (cerebrum).

Intraocular Inside the eye.

Intravenous injection An injection directly into a vein using a needle.

Invasive (surgery or procedure) Involving a surgical opening into the body.

Kinase A group of enzymes responsible for cell signaling, for example from receptors at the cell membrane to proteins inside the cell.

Macrophages A type of white blood cell that is a part of the non-specific immune response.

Malignant disease A severe and progressively worsening disease (usually cancer).

Malignant melanoma A severe form of skin cancer.

Melphalan A cytotoxic that sometimes is used in treatment of multiple myeloma and ovarian cancer.

Mesothelioma A type of cancer that affects the cell lining around the lungs. Most of the patients are affected by contact with asbestos.

Monoclonal antibodies Type of antibodies that are derived from identical parental cells and therefore have the same specificity.

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.

NADPH oxidase An enzyme that is activated on a certain type of white blood cells mainly as a part of the immune response.

Neurodegenerative diseases Collective name for diseases where neuron cells are degraded in the brain, for example Parkinson disease and Alzheimer's disease.

Obstetrics Medical branch that includes pregnancy and childbirth.

Osteoarthritis Disease that involves degradation of the cartilage in joints causing disfigurements, stiffness and pain when the affected joints are subjected to movement.

Over-expressed gene or protein An abnormal activation of a gene causing mass production of the protein product.

Palliative treatment Treatments that aim to reduce disease symptoms. The goal is to reduce pain and increase quality of life.

Parenteral administration From Greek para (beside) and enteron (intestine). Refers to administration via injection.

Pathogen Infectious agent that causes disease.

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.

Peptides Short amino acid chains. Peptides have the same build-up as proteins but are smaller.

Pharmacokinetics The study that includes absorption, distribution and metabolism of a pharmaceutical.

Phosporylcholine (PC) A molecule that is present on the surface of red blood cells.

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.

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.
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.
Programmed cell death	A suicide mechanism a cell may go through if it is somehow damaged.
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.
Protein kininogen	A group of polypeptides that among other things is active in vasodilation (widening of blood vessels).
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.
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.
Sodium hyaluronate	A substance that works as a lubricant between adjacent tissues in the body and is for example present in joints.
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 additative 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.
Uveal melanoma	Cancer that affects pigment cells in the eye.
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 2013	10 May 2013
Interim Report January – June 2013	22 August 2013
Interim Report January – September 2013	21 November 2013
Year-end Report January – December 2013	February 2014
Annual Report 2013	April 2014