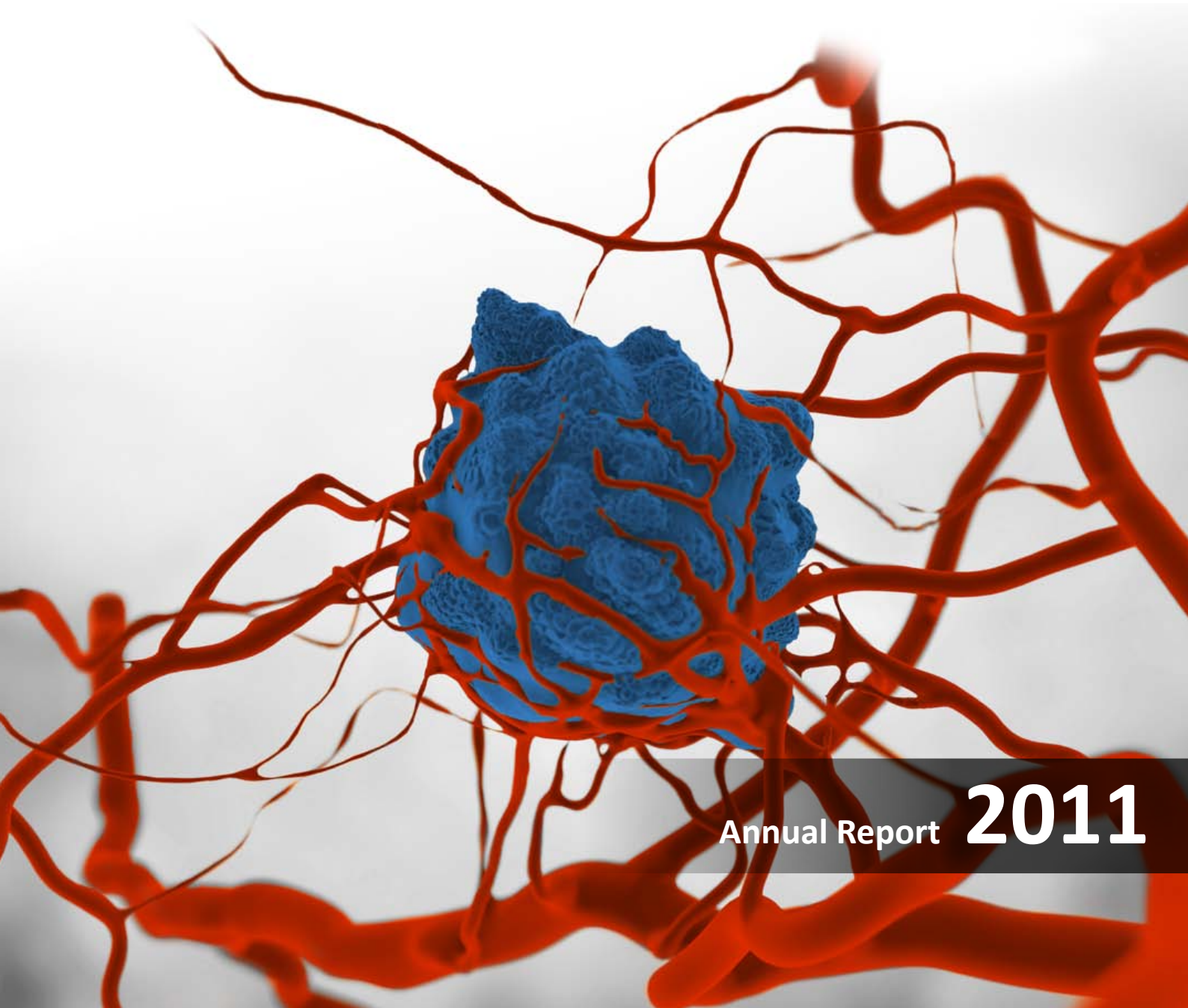
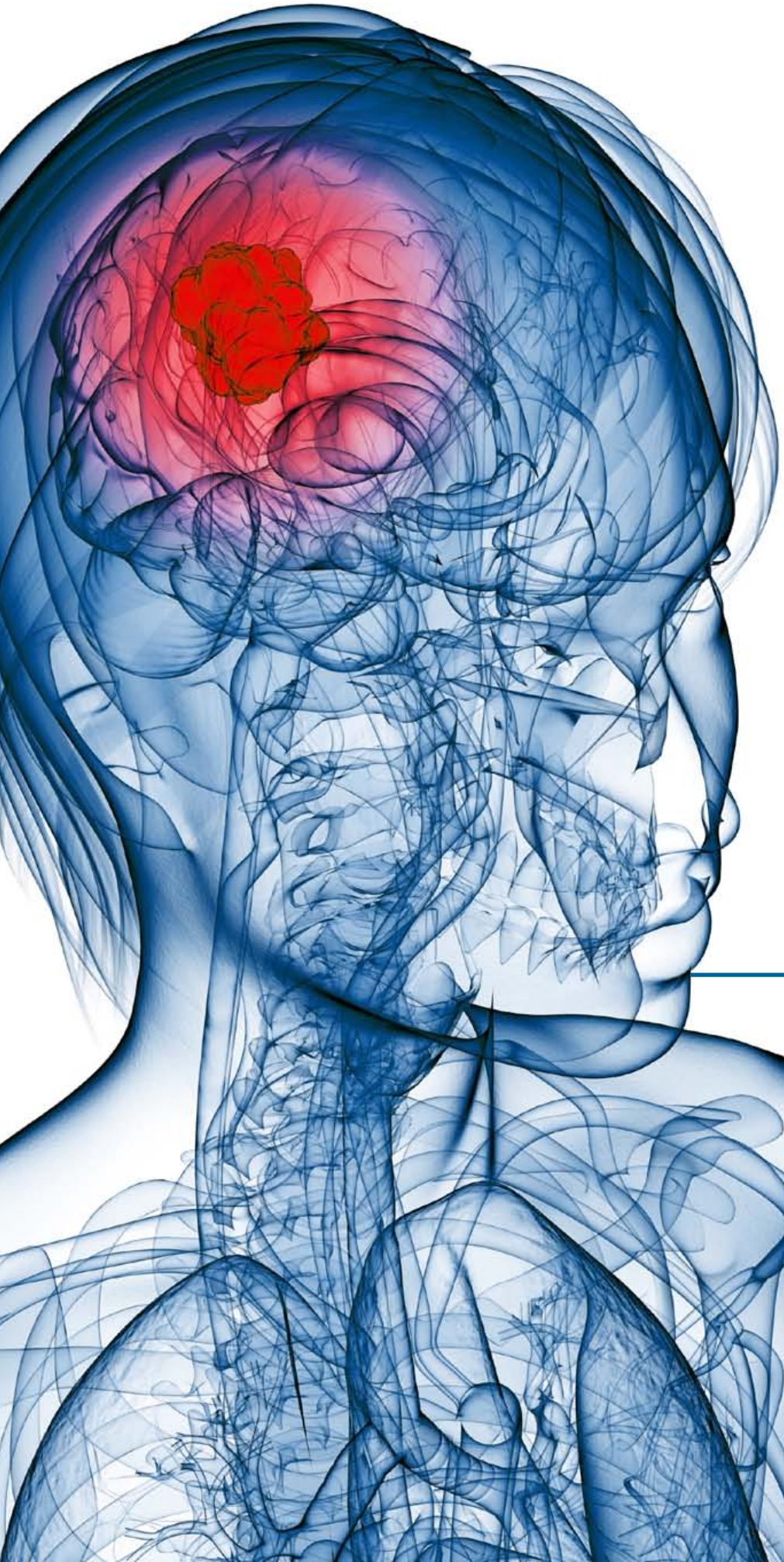
KAROLINSKA
DEVELOPMENT

Profit from Innovation



Annual Report 2011



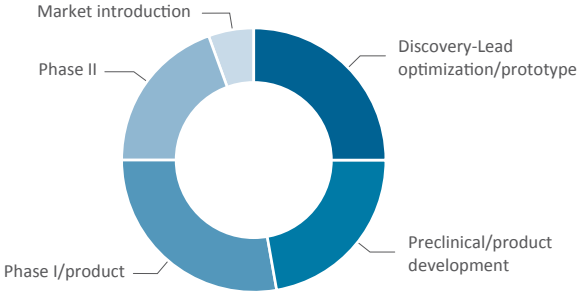
Content

Karolinska Development 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.

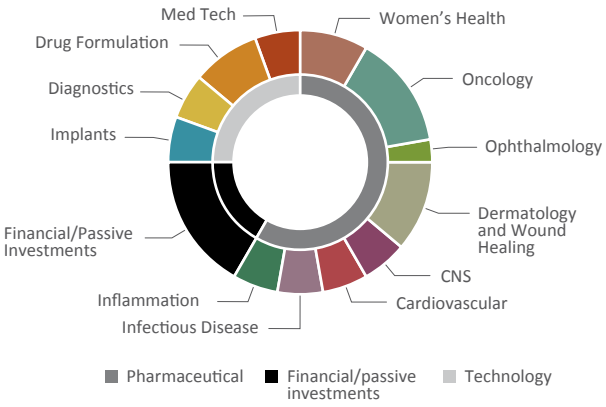
The business model is to **SELECT** the most commercially attractive medical innovations, **DEVELOP** innovations to the stage where the greatest return on investment can be achieved, and **COMMERCIALIZE** the innovations through the sale of companies or out-licensing of products.

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 14 are in clinical development.

Projects by development phase



Projects by area



Significant events during the financial year

Karolinska Development AB

Initial public offering

- Karolinska Development was listed on NASDAQ OMX Stockholm on 15 April 2011 and completed a new share issue, generating SEK 608m before issue costs

New recruitments and changes in the organization

- Torbjörn Bjerke assumed the position as new CEO of Karolinska Development
- Terje Kalland was appointed as CSO of Karolinska Development
- Karolinska Development appointed Benjamin Nordin as IRO
- Michael Sundström was recruited as Vice President Discovery Research for Karolinska Development and CEO of Actar
- The Investment Manager role was eliminated

Portfolio companies

Major progress in clinical projects

- Pergamum extended its Phase II study for prevention of post-surgical adhesions
- Axelar reported positive interim results in a Phase I/II study
- Axelar initiated a Phase II study on lung cancer
- Dilaforette initiated a Phase I/II study with Sevuparin for treatment of severe malaria
- Aprea reported progress in its Phase I/II clinical safety trial with APR-246 in cancer patients
- Holdings in four portfolio companies were written off

Investments that take projects to potential proof-of-concept

- Axelar AB secured financing
- Kurma Biofund co-invested with Karolinska Development in the portfolio company Umecrine Mood AB
- Karolinska Development invested in BioChromix AB
- Karolinska Development AB participated in a new share issue by the portfolio company Pergamum AB – offset receivables of SEK 77.6m against the issue proceeds

Significant events after the balance sheet date

Karolinska Development AB

New CFO with extensive business development experience

- Robin Wright, who is currently head of business development at Karolinska Development, is succeeding Gunnar Casserstedt as Chief Financial Officer in connection with the Annual General Meeting in 2012

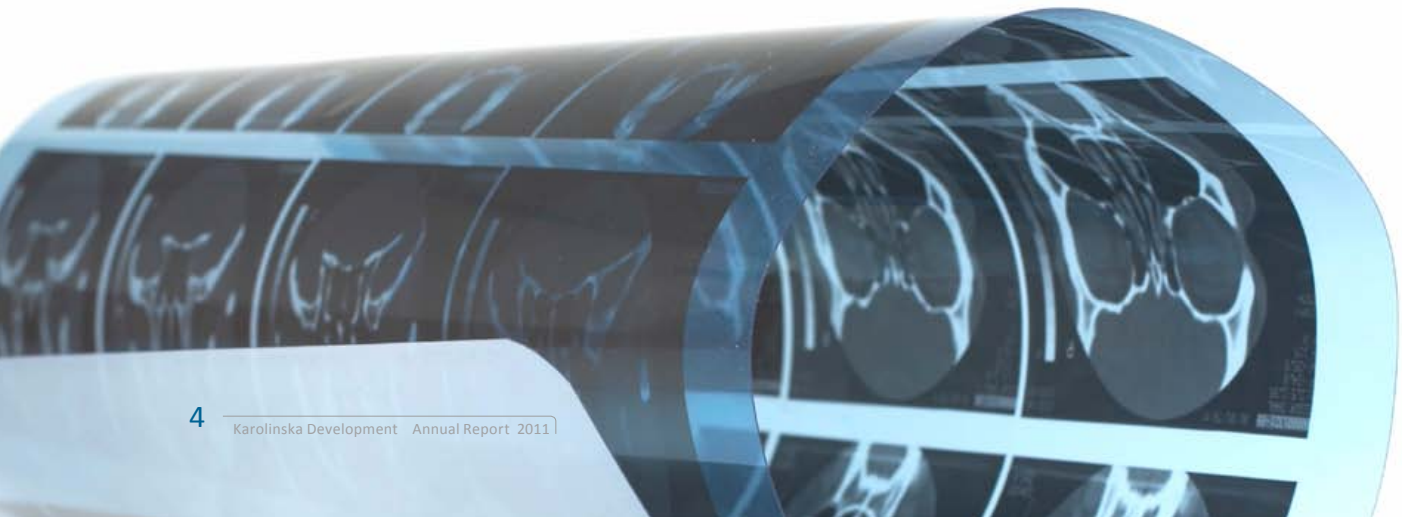
Two new portfolio companies

- Karolinska Development formed KDev Oncology AB with Akinion Pharmaceuticals AB and new company GliGene AB
- Karolinska Development invested in Oss-Q AB

Portfolio companies

Important clinical milestones passed by Akinion Pharmaceuticals and Pergamum

- Akinion Pharmaceuticals initiated a Phase I/II clinical study with AKN-028 in patients with Acute Myeloid Leukemia
- Pergamum recruited the final patient for a Phase II trial of PXL01 for prevention of post-surgical adhesions
- Pergamum initiated a Phase II study with DPK-060 in outer ear infections



Messsage from the CEO

In connection with Karolinska Development's successful initial public offering on NASDAQ OMX Stockholm in April we completed a new share issue that significantly strengthened our financial position. As at the year-end, the Group had liquid assets of SEK 620m. This will enable Karolinska Development to continue to invest in innovations which we believe can meet future medical needs and generate a good return. We recently invested in two totally new companies. One is GliGene, a research company whose goal is to develop targeted cancer therapies based on a discovery by Professor Rune Toftgård at Karolinska Institutet. The other is Oss-Q, which was founded by researchers at Uppsala University and Karolinska University Hospital and is developing pioneering implants for bone healing with a focus on skull surgery.

During the year, Axelar concluded a Phase I/II clinical study with the drug candidate AXL1717 where all the primary end points were met. As planned, before the year-end it also recruited the first patient for a Phase II study that will include a total of 140 lung cancer patients. In addition, Dilaforette initiated a Phase I/II study with Sevuparin for treatment of severe malaria. Several important clinical milestones have been reached after the end of the reporting period. Akinion initiated a Phase I/II clinical study with AKN-028 in patients with Acute Myeloid Leukemia, while Pergamum recruited the final patient in a Phase II trial of PXL01 for prevention of post-surgical adhesions and initiated a Phase II study with DPK-060 in outer ear infections.

In order to reach our investment goals, we must evaluate our portfolio continuously and reset priorities, which also means discontinuing investments in projects that do not meet established targets. In 2011, we had to wind up the three preclinical companies Avaris, IMED and Eribis, and the associated write-downs negatively contributed to the year's result. During 2011, we worked intensely with business development in our companies, and the portfolio is significantly stronger today than it was at the beginning of 2011. Our goal is that this work will bear fruit this year.

Torbjörn Bjerke

Chief Executive Officer

> The portfolio is significantly stronger today than it was at the beginning of 2011

Our strengths

Exclusive access to top-class medical innovations

Karolinska Development has an exclusive deal flow agreement with Karolinska Institutet Innovations AB (KIAB), which gives it a preferential right to invest in the broad range of innovations that KIAB screens from Karolinska Institutet and several leading Nordic universities. Since 2003, KIAB has evaluated more than 1,300 ideas, of which Karolinska Development has invested in 59, or about one in twenty innovations.

Several drug candidates with first-in-class potential

Being close to cutting-edge academic research has enabled Karolinska Development to build a highly innovative portfolio, where more than 20 projects contain substances with first-in-class potential in their respective therapy areas.

Significant clinical progress: 14 projects in clinical phase

The clinical portfolio matured during the year and has grown from 12 projects at the beginning of 2011 to 14 today. Five of the projects are in oncology and focus on meeting large medical needs. The goal is to demonstrate the efficacy of the drug candidates against specific diseases, usually after Phase II trials. In many cases this is the final step before the sale or out-licensing of a project. A total of seven projects are now in clinical Phase II.

Portfolio with great commercial potential

Karolinska Development's investments are aimed at meeting large medical needs and in that way generating a high return on the portfolio. Because it does not have a limited investment horizon, Karolinska Development can capitalize on a large percentage of the future income potential of its projects. Many drug candidates are focused on markets with multi-billion dollar sales potential if the product reaches its targets. This is because they are clearly differentiated and have the potential to increase life expectancy, improve quality of life and sometimes save lives.

Large portfolio of companies reduces binary risks: 27 companies, 36 projects

Karolinska Development's investment strategy is to diversify risks through active ownership of a large portfolio. It manages the risks inherent in pharmaceutical and medical technology development by continuously monitoring each project's progress, and in this way can focus its resources where they do the most good at any given time.

Strong financial position – The Company is financed up to important clinical data

Through its successful initial public offering, Karolinska Development is able to drive the current portfolio until the projects reach commercialization milestones. The aim is also to invest in promising new life science projects, as exemplified by the recent investments in the oncology company GliGene and bone implant company Oss-Q.

Experienced management with strong track record

Karolinska Development's management team has extensive experience from pharmaceutical development, business development and finance from global pharmaceutical companies and investment banks. It utilizes this experience through close collaborations and representation on the boards of its portfolio companies, and by tapping a wide-ranging network of specialists to ensure that each project has access to the right experts and business contacts.

Clear focus on business development throughout the portfolio

Since the majority of the portfolio companies are at a stage where out-licensing or sale is possible, Karolinska Development focuses much of its resources on business development together with the portfolio companies. Karolinska Development also welcomes other serious long-term co-investors, as has been the case with many of its projects.

Lead investor role

In most cases Karolinska Development assumes the role of lead investor, usually with an ownership stake in its portfolio companies of over 40 percent. This lead role is important in that it allows Karolinska Development to be an active owner, which is a cornerstone of its strategy.

Commercialization in three steps

Karolinska Development has selected a total of 59 life science innovations out of more than 1,300 ideas since 2003. The goal is to create value for investors as well as patients and researchers by developing innovations from cutting edge research into products that can be sold or out-licensed with high returns.

Select

Karolinska Development has developed a well-structured selection process to identify the most commercially-attractive medical innovations screened by KIAB. Pharmaceutical development is a high-risk enterprise. In most cases, development projects fail because of side effects or insufficient efficacy. Successful selection of innovations is fundamental to Karolinska Development's business model, which makes the inflow of new projects crucial. One key to success lies in selecting those innovations that can be developed from scientific findings to products and have significant commercial potential. To date, over 1,300 projects have been screened by KIAB.

To be accepted for screening, an innovation must:

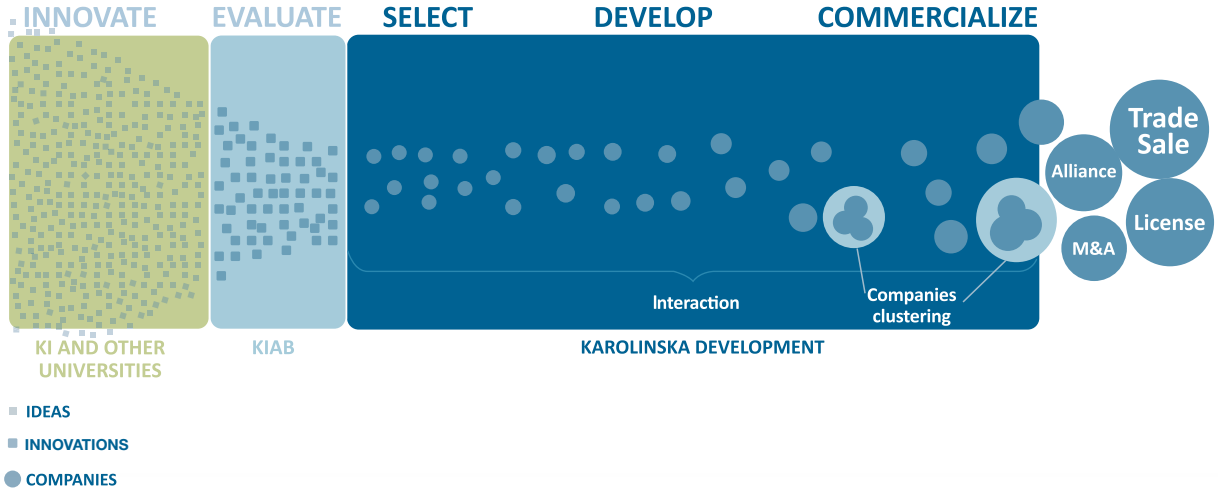
- meet a significant medical need and exhibit major international commercial potential;
- be based on a unique technology originating from prominent research; and
- have secured, or have the potential to secure solid intellectual property rights.

After initial selection, projects go through a validation period, which is financed by Karolinska Development. Once certain milestones have been achieved, Karolinska Development may invest according to a predetermined formula. Karolinska Development's goal is to invest in up to five projects annually.

Develop

The portfolio companies are often founded together with the innovators and are initially operated as virtual companies with few or no employees. During the first six to twelve months, the companies normally have minimal fixed costs and technological development is outsourced.

The innovator, who is often employed at an academic institution, normally participates as a board member and scientific advisor. The CEO of a portfolio company cooperates closely with a representative of Karolinska Development, who in most cases is also a board member of the company. The companies are capitalized to reach their next milestone, usually within a period of six to eighteen months. Development projects are continuously monitored, and those that do not meet their stipulated targets are discontinued. In the first three to four years, a portfolio company's operating expenses are often limited to a few million Swedish kronor per year, which cover the cost of external studies and the salary of the staff. In subsequent years, Karolinska Development and other investors play an important role recruiting key expertise to the companies.



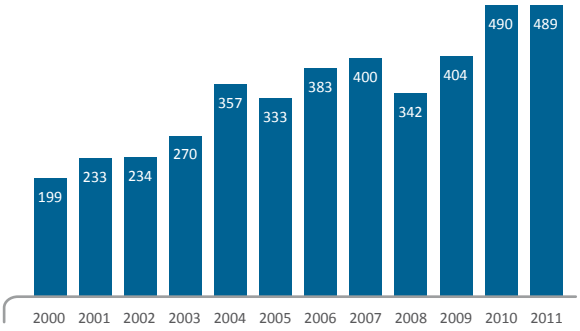
Commercialize

Karolinska Development intends to realize value by exiting portfolio companies or out-licensing products. Such transactions (especially out-licensing) are often structured as one-off payments followed by payments based on predetermined milestones and royalties on future sales.

Although Karolinska Development has a flexible exit strategy, there are two reasons why pharmaceutical products are likely to be exited at Phase II. First, a successful Phase II study indicates that the pharmaceutical has an effect on patients, which is an important value-enhancing factor when negotiating out-licensing or sales. Secondly, finalizing product development and undertaking Phase III clinical trials frequently requires large patient populations. In many cases this requires completely different resources than those available to Karolinska Development but which can be found in established pharmaceutical companies.

Karolinska Development is strongly focused on business development and commercialization. In our opinion, the market for value-creating deals is good with the current portfolio.

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

	2003	2004	2005	2006	2007	2008	2009	2010	2011
Number evaluated by KIAB	57	79	85	112	103	159	88	97	80
Number selected by Karolinska Development	13	22	10	15	12	12	9	4	2
Of which from KI	13	12	5	8	11	7	4	2	1

Focused efforts in oncology

In early 2012, Karolinska Development announced the creation of KDev Oncology, a group focused on the development of new cancer treatments. Cancer is a complex disease that often requires multiple therapies, which in turn necessitates a large number of development projects. KDev Oncology's aim is to bring together expertise, know-how and experience in the field in order to increase the effectiveness of research and development, while also achieving cost synergies. KDev Oncology's portfolio today consists of Akinion Pharmaceuticals AB and GliGene AB, though it has room to add another 4–5 project companies.

In terms of sales, oncology is the fastest growing and among the largest of all therapeutic areas. Sales growth is being driven by targeted therapies, i.e. drugs for specific uses. An important element is the research to identify genes linked to specific types of tumors and thereby develop customized therapies.

"Understanding the genetic basis for tumor development is the key to figuring out how tumors form and to develop new effective therapies. If we can identify the genes that induce and promote tumors and with the help of biomarkers identify patients with those genes in their tumor-DNA, we can carefully select patient groups for clinical trials and improve the effectiveness of our research and development," says Carl Harald Janson, CEO of KDev Oncology AB.

About Akinion Pharmaceuticals AB

Akinion develops so-called kinase inhibitors with the goal of developing a targeted treatment for acute myeloid leukemia (AML). Around 42,000 new cases of AML are diagnosed in the US, the EU and Japan every year, with around 30,000 deaths each year. The five-year survival rate is only 34 percent for people under the age of 65 and 4 percent for those over 65. Current treatments include chemotherapy and bone marrow transplants, but no targeted treatments have yet to be approved.

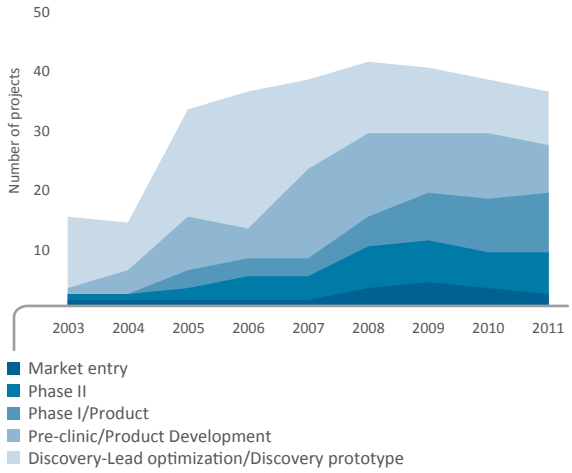
In early 2012, Akinion initiated a clinical Phase I/II trial of AKN-028 for treatment of AML. AKN-028 is a targeted, oral small molecule FLT3 and cKIT kinase inhibitor with a unique differentiating efficacy against leukemic cells that are resistant to current therapies. The Phase I/II trial with AKN-028 is a two-part international multi-center study in patients with AML. The first part is a dose-escalating study where AKN-028 is administered orally twice a day, until the maximum tolerated dose is established. The second part is a proof-of-concept study where approximately 20 patients will be treated. The trial will assess the safety, tolerability, pharmacokinetics and anti-leukemic effect of AKN-028.

About GliGene AB

GliGene is developing inhibitors of the Hedgehog signaling pathway for treatment of solid tumors. Malignant tumors cause nearly 35 % of all deaths in the developed world. Cancer is normally treated with a combination of surgery, chemotherapy, targeted therapies and radiation. The Hedgehog signaling pathway is a biological cascade that plays a fundamental role in the control of cell differentiation, growth and proliferation. It becomes reactivated in cancer, and probably is not needed in normal adult tissue. Inhibition of this pathway may provide a selective way to treat cancer, with pancreatic cancer being GliGene's primary goal.

The Portfolio

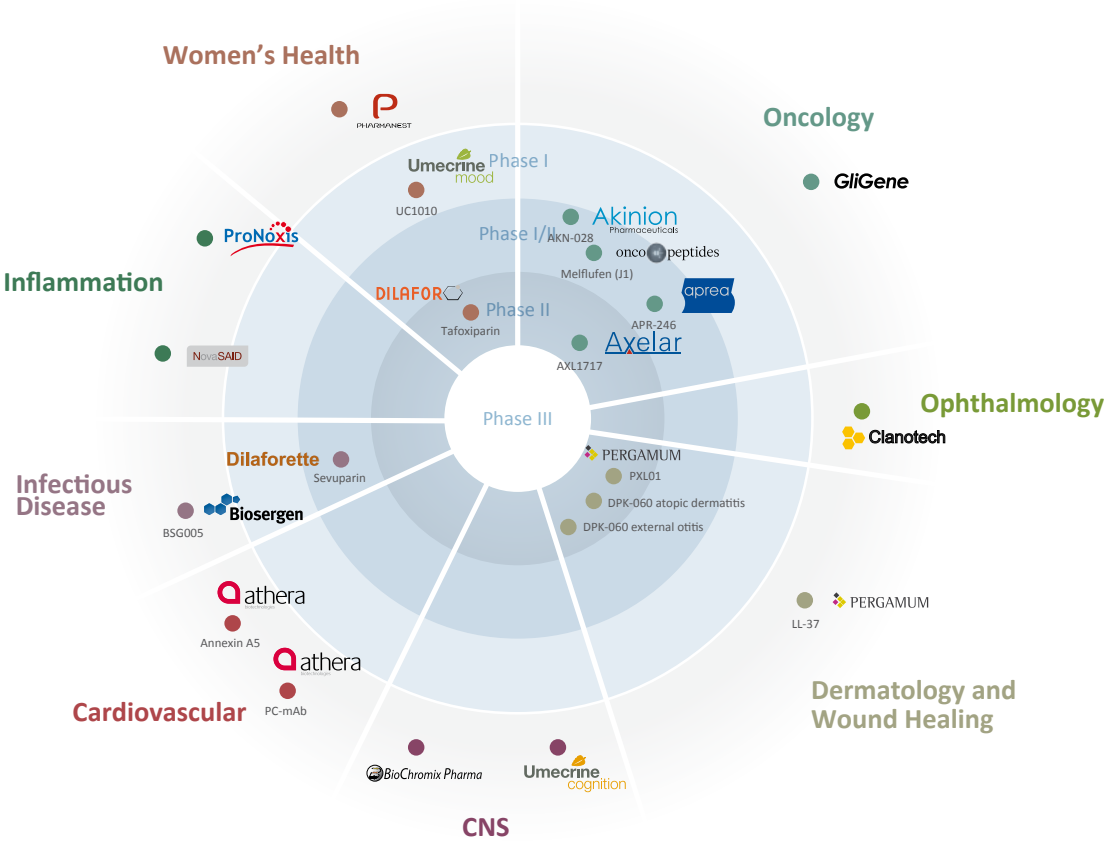
The portfolio matured during the last year. The number of projects that have entered clinical development, i.e. human trials, has grown from 12 to 14. At the same time, the number of early stage projects has decreased, as new investments in 2011 were unusually low and did not compensate for projects that were discontinued. The Company expects the number of new investments to return to a more normal level in 2012, which is around five.



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 lead optimization to clinical Phase II.

Pharmaceuticals

Several projects are close to the accepted clinical proof-of-concept, Phase II data…



Karolinska Development has a broad-based portfolio with excellent 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 are developing pharmaceuticals for these needs.

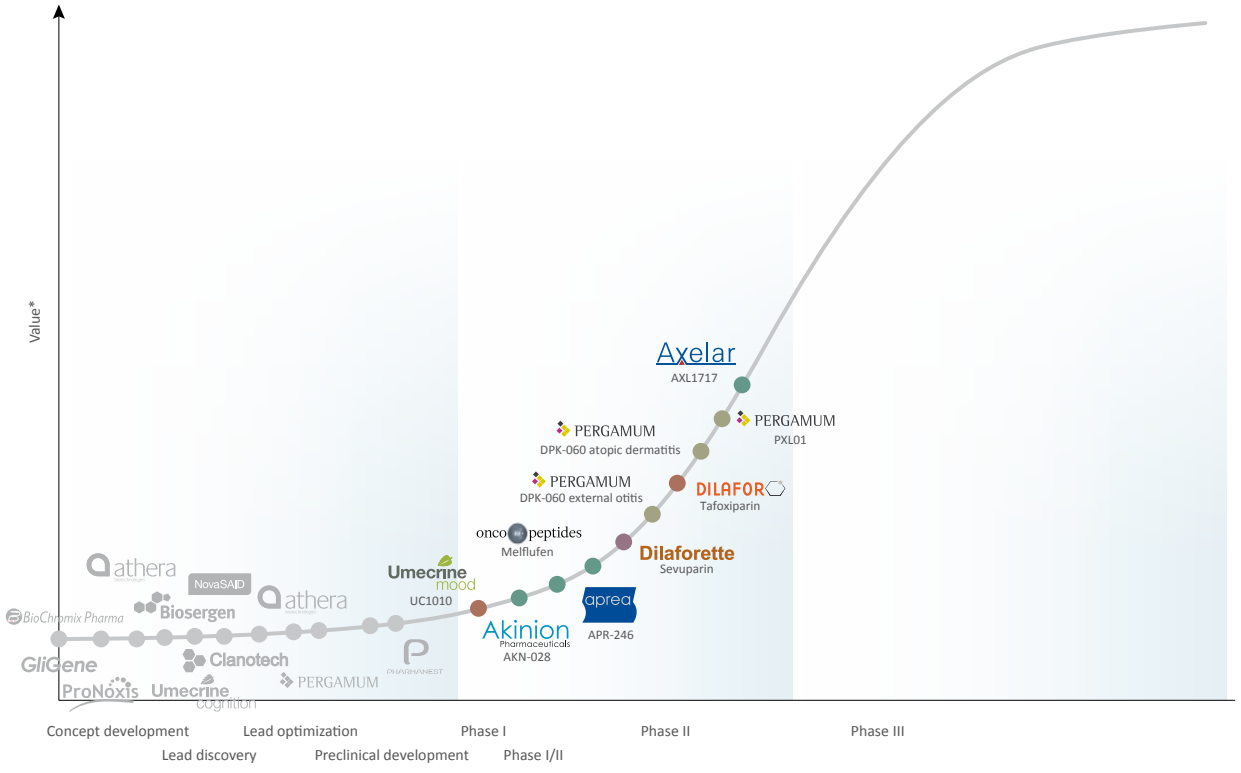
Dermatology and Wound Healing

Karolinska Development's dermatology and wound healing portfolio is gathered within the company Pergamum. Pergamum specializes in therapeutic peptides for novel treatments, e.g. in atopic eczemas, which affect 10–20 percent of children in developed countries.

Infectious Diseases

Karolinska Development's infectious disease projects involve, among other areas, malaria, which causes two million deaths each year, mostly of children. Products against the most common invasive fungal infections, *Aspergillus* and *Candida*, are also under development.

…a point where it is usually possible to sell or out-license the projects at a high value if they have reached established targets.



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

Cardiovascular

Cardiovascular diseases are the most common cause of death among people in the developed world. An important focus to improve treatment of heart disease is included in the Karolinska Development portfolio and involves targeted measures against the kinds of inflammation that are often the basis for heart attacks and strokes, both acute and recurrent.

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. Several of the projects in Karolinska Development's inflammation portfolio have first-in-class potential.

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. Karolinska Development has innovative pharmaceutical as well as diagnostics projects in this area.

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.

Important clinical projects fully financed up to possible exits

Karolinska Development's portfolio companies have delivered on key clinical milestones that the Company anticipated in connection with its IPO. By mid-year 2013, Karolinska Development expects Axelar, Akinion Pharmaceuticals, Umecrine Mood, Oncopeptides, Pergamum, Pharmanest and Dilaforette to deliver clinical data which, if they reach their established targets, will take these companies to the point where they are ready to be sold or licensed out. Furthermore, these studies are fully financed.

ONCOLOGY	Aprea – APR-246	Phase I/II data	✓
	Axelar – AXL1717	Phase I/II data	✓
	Axelar – AXL1717 for NSCLC	Initiate Phase II	✓
	Akinion – AKN-028 for AML	Initiate clinical studies	✓
	Oncopeptides – Melflufen for ovarian cancer	**Complete Phase I/II**	
	Axelar – AXL1717 for NSCLC	**Complete Phase II**	
	Akinion – AKN-028	**Complete Phase I/II**	
DERMATOLOGY	Pergamum – PXL01 for surgical adhesion	Complete enrolment of Phase II	✓
	Pergamum – DPK-060 for external otitis	Initiate Phase II	✓
	Pergamum – DPK-060 for atopic dermatitis	**Preparation for Phase IIb**	
	Pergamum – LL-37 for chronic wounds	**Initiate clinical studies**	
WOMEN'S HEALTH	**Dilafor – Tafoxiparin for protracted labor**	**Initiate Phase IIb with partner**	
	Pharmanest – Pain relief at IUD insertion	**Initiate Phase I and II**	
	Umecrine Mood – Severe PMS and PMDD	**Initiate Phase I/II**	
OTHER	Dilaforette – Sevuparin for malaria	Initiate Phase I/II	✓
	Dilaforette – Sevuparin for malaria	**Complete Phase I/II**	

✓ = Implemented

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 efficiency 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

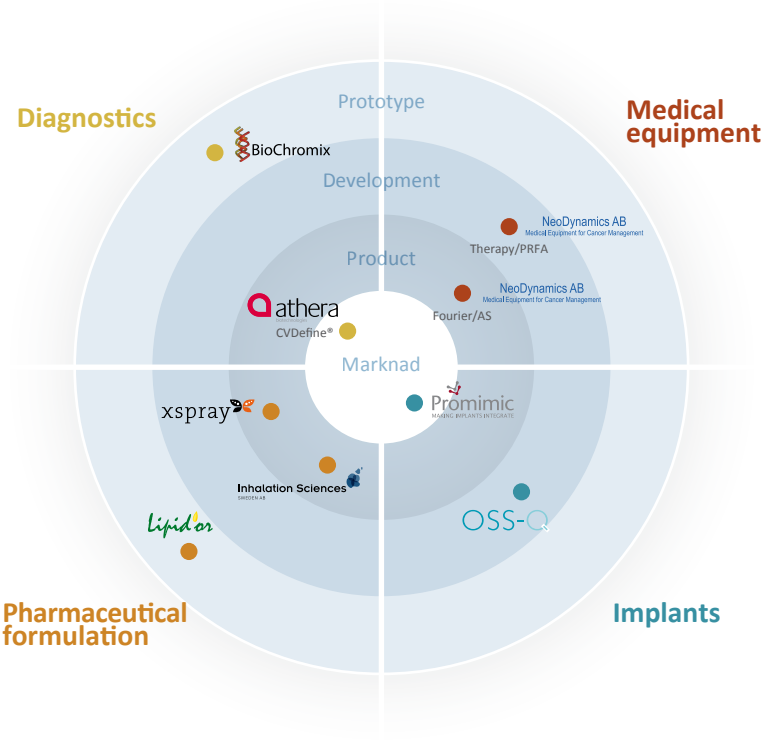
The first indication that the CD can be expected to have the intended effect in the body at a dosage level that will not give rise to unwanted side effects. Typically this is shown using relevant animal models or in Phase I.

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.

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.

Effective pain management in connection with gynecological procedures

Within women's health are a number of areas with large unmet medical needs, including pain management. Women's health is one of several priority areas for Karolinska Development, which currently has three portfolio companies that are developing novel treatments for various indications: Dilafor, Umecrine Mood and Pharmanest.

Pharmanest specializes in developing products for local pain relief in gynecology and obstetrics. The company was founded in 2009 by experts in pain management, gynecology, obstetrics and pharmaceutical formulation, and its operations are an offshoot of research on pain nerves in the cervix and uterus. Based on known substances, Pharmanest will develop, patent and clinically test new products that are applied locally where pain relief is needed.

Pharmanest's vision is to make pain management available to all women with the help of safe and effective products. Today pain management in connection with gynecological procedures such as dilatation and curettage after a miscarriage and childbirth is available only to a very small percentage of the world's women. In addition, there are procedures for which there is no pain relief at all.

"Historically, pain management for women in connection, for example, with IUD insertion has not been a priority," says Gunilla Lundmark, CEO of Pharmanest AB. "But we are clearly seeing a trend shift driven by the younger generation, which won't accept pain, whether it be from gynecological examinations, basic procedures or childbirth. There is also a socioeconomic driver to develop simple methods for pain management as we move more towards outpatient care."

Pharmanest today has a number of product candidates that could potentially provide immediate pain relief when applied locally and devices are being developed in close cooperation with experienced specialists to improve ease of application.

The first candidate product will be clinically tested in a double-blind trial of women who have not given birth, where pain relief is measured when inserting an IUD. The trial will comprise 200 women, 100 of whom receive the active substance and 100 who receive a placebo. Development of new products and methods for additional indications will continue at the same time that this product candidate is evaluated.

IUD's are a well-established contraceptive, but today there is no effective pain relief for IUD insertion. Pharmanest hopes to change that.

Innovative research on Alzheimer's

BioChromix and BioChromix Pharma are two innovative research companies specializing in Alzheimer's Disease (AD), the most common – not to mention incurable and deadly – form of dementia. In 2011, around 25 million people were diagnosed with AD, a number expected to rise to over 100 million by 2050. Direct healthcare costs for today's AD patients are estimated at USD 156 billion per year, a figure that will continue to grow in pace with the swelling patient population. Currently, there is no treatment to delay the onset or stop the disease, where the average life expectancy after diagnosis is about 7 years.

BioChromix AB is developing innovative *in vitro* diagnostic tools for neurotoxic aggregates of Amyloid Beta (Aß) for diagnostics and research on neurodegenerative disorders such as AD. Aß is a peptide that in the aggregate form damages and kills nerve cells and eventually leads to the accumulation of plaque deposits in the brain: one of the primary causes of AD. BioChromix Pharma AB is developing a unique treatment for AD. The substances are based on a unique class of conjugated heterocyclic compounds for treatment for AD and other neurodegenerative disorders. The substances BioChromix Pharma is testing have demonstrated a significant reduction in plaque formation and a reduction in soluble aggregates in an in vivo model of AD.

"Healthy patients with plaque indicate that AD starts considerably earlier than the initial symptoms manifest. This means that diagnosis and treatment before the disease breaks out is critical, and we have shown in models that our substances significantly reduce damaging accumulations of Aß and plaque formation," says Peter Åsberg, CEO of BioChromix.

BioChromix's diagnostic technology is currently being tested on a small group of patients who have received a clinical diagnosis. The pilot study is expected to be completed during the first half of 2012. A larger clinical trial will be then conducted based on the data collected, after which the aim is to register and launch a diagnostic product. BioChromix Pharma's goal is to select a drug candidate during the second half of 2012 which can then be tested on humans in a clinical Phase I trial.

"BioChromix's vision is to be a leader in noninvasive tests for AD and other disorders related to aggregated proteins. A future goal is to develop an in vivo brain scan for AD that can also be used to monitor drug efficacy," says Peter Åsberg.

About BioChromix

BioChromix has developed a sensitive method that can detect oligomerized Aß in biological samples. Formation of these small peptide aggregates is tied to the development of Alzheimer's disease. This should make it possible to diagnose the disease early on by measuring the amount of oligomers in spinal fluid, for example.

About BioChromix Pharma

BioChromix Pharma is developing a drug for the treatment of Alzheimer's disease. The company has discovered a new class of conjugated heterocyclic compounds that could potentially offer a unique method to treat Alzheimer's Disease and other neurodegenerative disorders.

Portfolio Development

The portfolio as at April 18, 2012

Pharmaceuticals

	Ownership*	Page
Oncology		
Axelar AB	45 %	19
Aprea AB	41 %	20
Oncopeptides AB	43 %	21
KDev Oncology AB (Akinion, AKN-028)	88 %	23
KDev Oncology AB (GliGene)	10 %	22
Dermatology and wound healing		
Pergamum AB (DPK-060, atopic dermatitis)	62 %	26
Pergamum AB (DPK-060, external otitis)	62 %	26
Pergamum AB (PXL01)	62 %	27
Pergamum AB (LL-37)	62 %	28
Women's health		
Dilafor AB	55 %	29
Umecrine Mood AB	43 %	30
Pharmanest AB	59 %	31
Infectious diseases		
Dilaforette AB	62 %	32
Biosergen AS	60 %	33
Cardiovascular		
Athera Biotechnologies AB (Annexin A5)	65 %	42
Athera Biotechnologies AB (PC-mAb)	65 %	42
CNS		
BioChromix Pharma AB	69 %	37
Umecrine Cognition AB	54 %	38
Inflammation		
NovaSAID AB	89 %	35
ProNoxis AB	22 %	36
Ophthalmology		
Clanotech AB	87 %	39

Technology

	Ownership*	Page
Implants		
Promimic AB	29 %	40
Oss-Q AB	16 %	41
Diagnostics		
Athera Biotechnologies AB (Athera CVDefine®)	65 %	42
BioChromix AB	9 %	43
Drug Formulation		
Inhalation Sciences Sweden AB	72 %	44
XSpray Microparticles AB	61 %	45
Lipidor AB	40 %	47
Medical Equipment		
NeoDynamics AB (Fourier/AS)	21 %	46
NeoDynamics AB (Therapy/PRFA)	21 %	46

Financial/passive investments

	Ownership*	Page
NephroGenex, Inc.	1 %	47
Pergamum AB (Laurantis Pharma Oy, cis-UCA dermatology)	6 %	25
BioArctic Neurosciences AB	3 %	47
Pergamum AB (Laurantis Pharma Oy, cis-UCA oncology)	6 %	25
Pergamum AB (Laurantis Pharma Oy, ad-VEGF-C)	6 %	25
CytoGuide ApS	9 %	47

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 18, 2012.

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

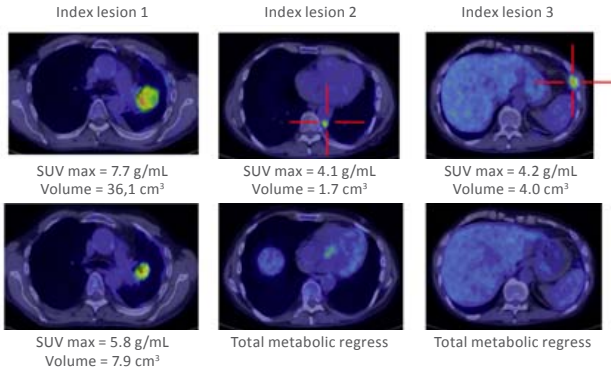
Axelar has discovered a group of compounds that target the Insulin-like Growth Factor 1-receptor (IGF-1R). IGF-1R is overexpressed on cancer cells and its signaling pathway is believed to be of great importance for cancer cell growth, tumor cell survival and resistance to therapy[2]. IGF-1R is therefore an excellent target for cancer drug development and a range of major tumors including NSCLC may be addressed through inhibition of this receptor. Axelar's lead product AXL1717 is a small molecule that has been tested in patients with various solid tumors in a Phase I/II clinical study where all major end points were met. A randomized Phase II study in patients with NSCLC is ongoing.

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. 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 recently completed 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. The Phase I/II data clearly warranted continuing clinical development, and in December 2011 a randomized, open-label Phase II study with AXL1717 versus standard regimen cytotoxic chemotherapy (docetaxel) was initiated in squamous cell and adenocarcinoma NSCLC patients that has progressed from first line treatment. The main objective is to compare progression-free survival after 12 weeks in the two trial arms.

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 sub-market 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 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
- A randomized Phase II clinical trial in NSCLC patients has been initiated. In this trial, patients are treated with AXL1717 or standard regimen cytotoxic chemotherapy (docetaxel) over three months

Planned Milestones

- Completion of the randomized Phase II clinical trial

Patent Status

Patents have been granted in both the US and Europe.

Commercialization

Axelar intends to find one or more partners to continue the clinical development after the ongoing Phase II study.

[1] Source: Goffin, J., et al., First-line systemic chemotherapy in the treatment of advanced non-small cell lung cancer: a systematic review, Journal of thoracic oncology, 2010

[2] Source: Pollak, M., Insulin and insulin-like growth factor signalling in neoplasia. Nat Rev Cancer, 2008

[3] Source: Globocan, 2010

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

[5] Source: Travis, W.D., L.B. Travis, and S.S. Devesa, Lung cancer. Cancer, 1995

First-in-class potential | Project: AXL1717 | Ownership: 45 %

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

Contact:

Johan Harmenberg, CEO

Phone: +46 8 524 865 99
johan.harmenberg@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's Solution

Restoration of p53 function should eliminate tumor cells by apoptosis. Aprea has identified small molecules that reactivate p53. The company's first candidate drug, APR-246, has been shown to induce cell death in many cancer cell lines with varying p53 status. Promising therapeutic effects on tumors taken directly from patients and on human tumors transplanted to mice have also been demonstrated.

A first Phase I/II safety study in cancer patients has been completed. The study demonstrated good tolerability at intended therapeutic doses of APR-246. A continuation of the study was recently started with the aim to evaluate safety and pharmacokinetics further and to establish the optimum dose as well as duration of exposure.

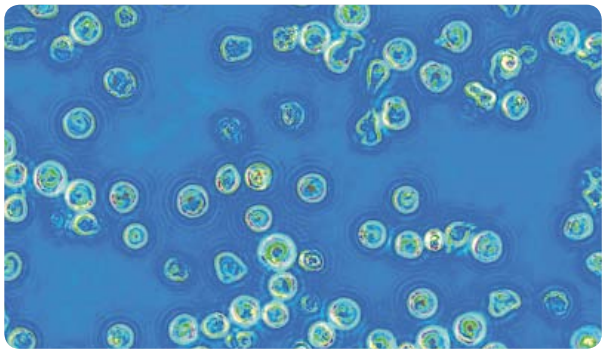
Aprea has also developed analogs of APR-246 that can be given by the oral route.

Competitive Advantages

APR-246 activates the function of p53 whether it is apparently 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 has shown potential to be effective on many tumor types on its own, and to be used to overcome resistance to conventional chemotherapies.

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 6.5 million people are diagnosed with cancer and over four million people die worldwide as a result[1].



Status

- Phase I/II dose finding study completed
- Extension study of Phase I/II ongoing
- Mechanism of action further clarified
- Gained orphan drug status for the indication AML in the EU
- Key patents for APR-246 and back-up analogs approved in the US and EU

Planned Milestones

- Evaluation of additional indications, combination therapies and dosage regimens
- Planning of Phase II proof of concept study
- Further development and evaluation of back-up compounds

Patent Status

Aprea has a number of patent families at various stages of approval to protect its commercial rights (some have been granted and others are expected to be granted), as well as regulatory protection through the orphan drug designation in the EU.

Commercialization

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

[1] Source: WHO, International Agency for Research on Cancer, Globocan 2008 http://globocan.iarc.fr

First-in-class potential | Project: APR-246 | Ownership: 41 %

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

Contakt:

Ulf Björklund, CEO
Phone: +46 70 667 04 40
ulf.bjorklund@aprea.com
www.aprea.com

Oncopeptides AB

The Challenge

In spite of the progress made in treating recurrent and often therapy resistant cancer with new targeted drugs, treatment of most types of cancers remains a challenge. In most cases, treatment is performed by combining standard chemotherapy regimens with newly developed targeted agents if available. In order to improve on these regimens there is a need for new chemotherapeutic agents and treatment combinations that are more efficacious, or more specific, than current drugs in this class.

Oncopeptides Solution

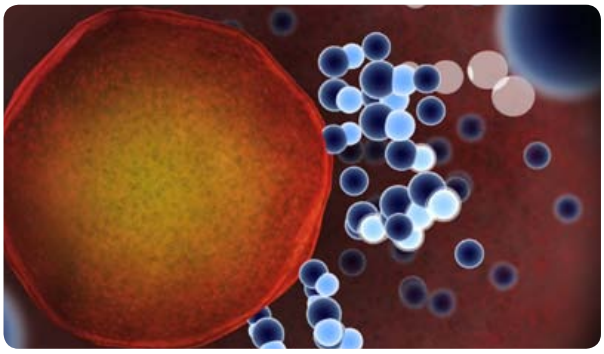
Oncopeptides develops targeted prodrugs of chemotherapeutic agents already approved for cancer treatment. Designed to be activated by enzymes that are over-expressed in tumor cells, they provide for accumulation of anticancer drugs more selectively in cancer cells compared to normal cells. In addition to direct effects on tumor cells, the company's drug candidate, melflufen, has also shown a strong inhibitory effect on the growth of blood vessels.

Competitive Advantages

Melflufen (melphalan flufenamide) has a considerable better uptake into tumor cells compared to melphalan and following hydrolysis by an enzyme that is overexpressed in many malignant tumors, melphalan flufenamide has the advantage of preferentially trapping the cytotoxic agent, at high concentrations in the tumor tissue. As a pro-drug to melphalan, melphalan flufenamide is considerably more active than melphalan.

The Market

The market for basic chemotherapeutic drugs is significant, as both Treanda (bendamustine) and Abraxane (albumin-bound paclitaxel) have recently shown, with global sales figures of around USD 500m each in 2011[1]. Oncopeptides is initially focusing on hematologic cancers, which also represent significant markets. The first indication the company is focusing on is multiple myeloma. This is a disease where there is a great medical need and represents a significant market. Two big-selling drugs for multiple myeloma are Velcade (bortezomib) and Revlimid (lenalidomid), which are expected to attain sales of USD 2.2bn and 3.6bn respectively in 2012[1].



Status

- Several potential therapeutic areas have been identified in which tumors have shown a high sensitivity to melflufen
- Synergistic effects with specific chemotherapeutic drugs have been verified in preclinical *in vitro* and *in vivo* studies
- The Phase I/II study to establish dose and side-effects profile has been completed
- A clinical development plan has been prepared for the indication of multiple myeloma

Planned Milestones

- Further strengthen the preclinical program
- Start a proof-of-concept study in multiple myeloma
- Obtain orphan drug status for faster route to market

Patent Status

Patent protection covering the drug candidate has been granted in the USA, Europe and Canada and is pending in Japan. The drug formulations have also been protected through patent applications.

Commercialization

The owners of Oncopeptides intend to license the project or sell the company during or after the Phase II studies.

[1] Source: Datamonitor PharmaVitae Explorer, 2012

Project: Melflufen (J1) Ownership: 43 %

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

Contakt:

Jakob Lindberg, CEO

Phone: +46 70 569 54 71
jakob.lindberg@oncopeptides.se

www.oncopeptides.se

KDev Oncology AB

KDev ONCOLOGY

KDev Oncology AB	Project	Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch	Ownership
Akinion Pharmaceuticals AB	AKN-028									88 %
GliGene AB										10 %

KDev Oncology is the name of 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, the portfolio consists of Akinion Pharmaceuticals and GliGene, with the ambition to include an additional four to five new oncology projects over the coming years.

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: 10 %

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

Akinion Pharmaceuticals AB

The Challenge

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[1].

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[2].

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

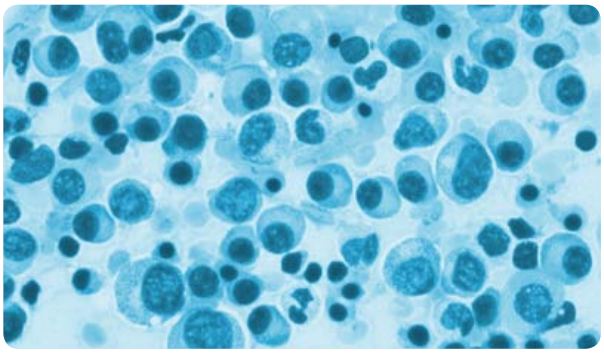
AKN-028 is a small molecule kinase inhibitor candidate drug developed for the treatment of AML. Preclinical results from *in vitro* and *in vivo* studies with AKN-028 show a unique efficacy against all primary AML tumor samples tested, even chemotherapy-resistant AML tumors. AKN-028 is administered as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

The number of patients with AML is four times higher than the number of patients with chronic myelogenous leukemia (CML). The market for imatinib (Glivec/Gleevec), a kinase inhibitor and first line treatment for CML, was reported to be USD 4.3bn in 2010[3]. Even though AML is a heterogenous disease, the market for a successful oral AML treatment is expected to be at least the same size as for Glivec.



Status

- A Phase I/II clinical study is ongoing

Planned Milestones

- Data from the ongoing Phase I/II study

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 towards 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: National Comprehensive Cancer Network, 2009
[2] Source: Surveillance, Epidemiology and End Results (SEER) Program from 1996 to 2002
[3] Source: Datamonitor, PharmaVitae Explorer

First-in-class potential | Project: AKN-028 | Ownership: 88 %

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

Contakt:

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

Pergamum

PERGAMUM

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 current development pipeline includes three therapeutic peptides that are aimed at five different initial indications. Two programs are targeting skin infections in atopic dermatitis and external otitis (outer ear infection). Two other programs are aimed at prevention of post-surgical adhesions following flexor tendon repair surgery and broader orthopedic surgery procedures as an extension indication. Yet another program is based on a new therapeutic approach to promote healing of chronic wounds such as venous leg ulcers.

Pergamum estimates its products to have a combined peak sales potential of more than EUR 1bn. In the completed Phase IIa for DPK-060 in skin infections (atopic dermatitis), the primary endpoint was successfully met. A Phase II study for DPK-060 in external otitis started in January 2012, and a Phase II study with PXL-01 for the prevention of post-surgical adhesions following flexor tendon repair surgery is also ongoing.

Pergamum AB	Project	Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch	Ownership
Skin infections (atopic dermatitis)	DPK-060									62 %
Derm. infections (external otitis)	DPK-060									62 %
Flexor tendon adhesion	PXL01									62 %
Orthopedic adhesions	PXL01									62 %
Venous leg ulcers*	LL-37									62 %

* Phase I will support further clinical work for venous leg ulcers and diabetic foot ulcers.

Technology Platform

The common theme of therapeutic peptides for local application enables Pergamum to make use of synergies. The development programs benefit from international expertise at corporate level, cost efficiency by sharing resources, and a cross-functional knowledge base.

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 modulation of inflammation and other immune functions, fibrinolysis and wound healing. All of the peptides exhibit potent antimicrobial activity, offering beneficial effects in both infection diseases and wound healing.

These anti-infective agents are unique in that they seem to avoid antimicrobial resistance. This is due to their particular mechanism of targeting microorganisms – binding to microbial membranes in an unspecific way using the intrinsic properties of the membranes.

The peptides in development have a broad spectrum of bactericidal (gram(+) and gram(-)) and fungicidal activity. Their targeting mechanism clearly distinguishes them from classical antibiotics, which are associated with increasing resistance development limiting their use in medical care.

The peptides are intended for local application, and thus the risk for systemic adverse events is low.

Partnering

Pergamum's strategy is to initiate partnering discussions for development programs once they have achieved clinical proof-of-concept in a Phase II study. Targeted partners are mid- to large pharmaceutical companies. Pergamum also evaluates other strategic partnering opportunities as they occur, and welcomes interest from potential partners in any ongoing project.

Investments

Laurantis Pharma Oy

Pergamum holds a minority position in Laurantis Pharma Oy. The development program, together with its underlying technology platform within Pergamum's area of focus, is based on a newly characterized entity capable of modulating intracellular pH-levels. The products in development target substantial therapeutic markets.

Contact:

Jonas Ekblom, CEO

Phone: +46 8 524 89 101
jonas.ekblom@pergamum.com

www.pergamum.com

DPK-060

The Challenge

Atopic dermatitis (AD, eczema) is a common disease in all of the developed pharmaceutical markets, afflicting 10–20 % of children and 1–3 % of adults. The disease is characterized by severe itching, skin lesions and dry skin. Some patients with severe AD are affected with recurrent conditions. Current treatments for moderate to severe AD are limited to conventional antibiotics. Because of safety issues and cost of treatment, these agents may only be used during shorts periods time or with regular treatment breaks.

Acute external otitis (EO) is a painful infection in the ear canal, usually lasting a short period of time. The incidence for acute EO in out-patient clinics in Europe and North America is around 1 %.

In both of these conditions, the weakened skin barrier makes patients susceptible to bacterial colonization. There is a major need for new categories of safe and effective antimicrobial treatments that by-pass the induction of antibiotics resistance.

Pergamum's Solution

DPK-060 is a new antimicrobial peptide that has the capacity to reduce the bacterial and fungal load in lesions of the skin, and to restore biologically the often-reduced expression of endogenous antimicrobial peptides and proteins in infected skin lesions of patients with AD and EO. It is structurally derived from the endogenous human protein kininogen, and optimized through modification of the amino acid sequence. DPK-060 interacts with microorganisms by attacking their membranes and causing the microorganisms to die rapidly. Development of classical bacterial resistance to antimicrobial host defense peptides is unlikely to occur. Consequently, it seems plausible that these peptides, which are components of the body's innate immune system, can be used in long-term therapy. DPK-060 is formulated as an ointment for easy application on the skin (for AD) and as individually packaged doses of eardrops for easy application into the ear (for EO).

Competitive Advantages

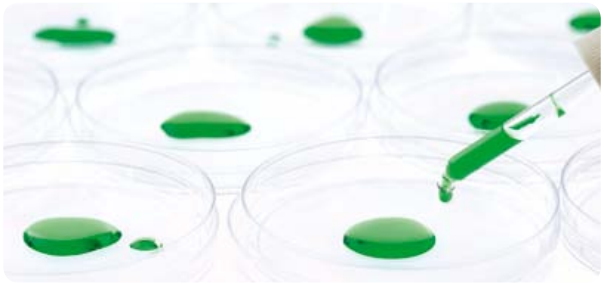
Current treatment options for atopic dermatitis patients include steroids, immunomodulators and traditional antibiotics but they are associated with side effects and possible resistance development, neither of which have been seen so far in clinical studies with DPK-060. Furthermore, DPK-060 has a broad action spectrum and is both bactericidal (including *S. aureus* and multidrug-resistant *S. aureus* strains) and antifungal (including *Candida* and *Malassezia*).

The Market

The prevalence of atopic dermatitis has increased three to four-fold over the past 30 years, and more than 40 million people are suffering from atopic dermatitis in the major markets (US, the five largest EU markets (EU5), and Japan). External otitis is also a common condition, as it is estimated that at least 10 % of the population in US and EU will develop at least one episode of EO during their lifetime.

The dermatology market is characterized by:

- Estimated annual sales of over EUR 12bn in total across all sectors in the US, EU5, and Japan
- Many of the current treatment options are either generic or private label versions of very similar products
- Sales of products used in atopic dermatitis therapy worldwide are estimated at over EUR 1.5bn in 2013



Potential peak sales of DPK-060 for atopic dermatitis and external otitis is estimated to exceed EUR 400m annually in the major markets combined. The number of patients with relevant stage of disease for treatment with DPK-060 in the US, EU5, and Japan is estimated at about 10–15 million[2].

DPK-060 has the potential to be used for other dermatological conditions where microorganisms are a major problem, including impetigo, skin ulcers, acne, and fungal skin infections.

Status

- A Phase I/II study of DPK-060 in AD demonstrated that the peptide reduced bacterial colonization and itching in patients with AD in short-term treatment. The treatment was well-tolerated and no side effects or absorption of DPK-060 were reported. Pergamum is currently completing of the development of a formulation for a Phase IIb study.
- A Phase II clinical study on short term treatment in EO is ongoing
- A pivotal long-term GLP-toxicology study has recently been completed indicating an excellent safety profile
- Formulation optimization is ongoing for a medical product that is suitable for long-term treatment in atopic dermatitis

Planned Milestones

- Complete enrollment of the ongoing Phase II study of DPK-060 in EO
- Initiate a Phase IIb trial for long term treatment in severe AD, including dose finding

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 five patent families pending approval.

Commercialization

The intention is to carry out the later stages of drug development in cooperation with a strategic partner, preferably a leading pharmaceutical company in the field of infection treatment/dermatology.

[1] Source: Datamonitor, Stakeholder Opinion: Atopic Dermatitis, 2007

[2] Source: Pergamum estimates

First-in-class potential

Ownership: 62 %

Project	Concept development	Lead identification	Lead optimization	Preclinical development	Phase I	Phase II	Phase III	Launch
DPK-060, atopic dermatitis								
DPK-060, external otitis								

Contact:

Jonas Ekblom, CEO

Phone: +46 8 524 891 01

jonas.ekblom@pergamum.com

www.pergamum.com

PXL-01

The Challenge

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. Depending on the location where the adhesions occur, they can cause symptoms such as chronic pain, reduced mobility and function, intestinal obstruction and infertility.

Pergamum's Solution

PXL-01 is an antimicrobial peptide derived from the human milk protein lactoferrin. It has been demonstrated in animal studies that local administration of PXL-01 significantly reduces the formation of adhesions during the healing phase of surgical wounds. The anti-adhesive effect of PXL-01 is linked to its ability to reduce the inflammatory response and its fibrinolytic capacity.

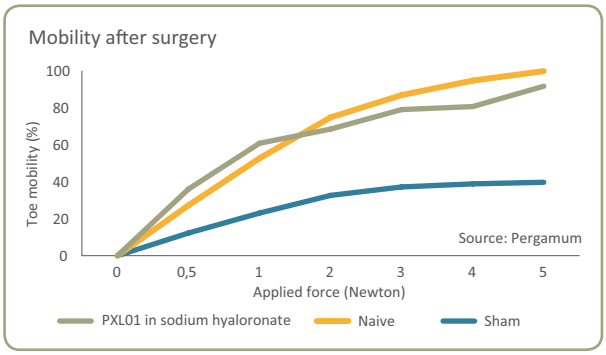
Competitive Advantages

There is no pharmacological treatment registered for adhesion prevention. All treatments currently in use act by physically separating damaged tissue surfaces and they are registered as medical device products. PXL-01 could potentially be the first pharmacological treatment for adhesion prevention.

PXL-01 has been shown to have antimicrobial effects, with the potential to reduce the risk of infection. The compound is formulated as a lubricating gel that provides controlled release of the peptide, combining the pharmacological effects of PXL-01 to prevent adhesion with the physical barrier effect of the barrier gel compound (sodium hyaluronate). The product is administered in the area of the flexor tendon during surgery.

The Market

The market for the prevention of post-surgical adhesions can be divided into segments by surgical specialty: Orthopedic, abdominal/pelvic, cardiac, sinus surgery, and surgery of the peripheral nervous system. In the EU and the US alone, about eight million procedures in these fields could benefit from adhesion-prevention products. The company estimates the total relevant market size to be in excess of EUR 1.6 bn[1]. However, all current products are registered as medical devices. The orthopedic surgery segment offers a particularly attractive market as a result of large numbers of patients and high occurrence of complications due to adhesions and homogeneous product requirements.



Data from animal studies (rabbit). Toe joint moblility measured after administration of PXL01 in connection with surgery showed statistically significant improvement, reaching levels of naive mobility, when compared to untreated tendon lacerations.

Status

- The effect of PXL-01 in sodium hyaluronate on adhesions associated with flexor tendon repair procedures was studied in a rabbit model (see diagram above). PXL-01 treatment resulted in completely normal joint mobility after surgery. Animals undergoing surgery without protection with PXL-01 developed significantly reduced joint mobility as a result of adhesions.
- A Phase I study showed that the drug candidate PXL-01 is safe and well-tolerated
- 138 patients have been included in a Phase II study for proof-of-concept of PXL-01 for prevention of post-surgical adhesions after flexor tendon repair surgery. The patients are being followed for a 12 week period

Planned Milestones

- Complete report of Phase II study in flexor tendon surgery
- Initiate a Phase II study of PXL-01 in orthopedic surgery

Patent Status

The lead compound has been granted patents in both the US and Europe. A method patent covering reduced scar formation with the company's drug candidate has also been granted in the US. Additional substance and formulation patents have also been filed.

Commercialization

Pergamum's goal is to build up an attractive portfolio of adhesion-prevention and wound-healing products. The company plans to develop products to clinical proof-of-concept stage, after which opportunities for strategic partnerships will be evaluated. Preferred partners should have access to marketing and sales resources in the field of adhesion prevention specifically, or wound healing in general.

[1] Source: Pergamum estimates

First-in-class potential | Project: PXL-01 | Ownership: 62 %

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

Contact:

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

LL-37

The Challenge

Venous leg ulcers are hard-to-heal wounds. An important factor in the development of venous leg ulcers is increased blood pressure in the tissues caused by impaired function of the veins. The result is leg swelling and skin damage, which eventually can lead to the formation of ulcers. The main current treatment of leg ulcers is compression bandaging, which results in healing in about 50 % of patients within 5 months[1]. In some cases, the ulcers fail to heal for years.

Pergamum's Solution

LL-37 is a multifunctional antimicrobial peptide, structurally derived from the C-terminal portion of human cathelicidin antimicrobial protein 18 (hCAP18). LL-37 is rapidly produced in damaged skin and is an important component in normal wound healing. The peptide has beneficial effects on various parts of the healing process, by affecting the formation of new skin cells and blood vessels. Reduced quantities of LL-37 are produced in venous leg ulcer tissue. Therefore, the addition of synthetic LL-37 has the potential to promote healing of these ulcers. Preclinical studies in diabetic mice have shown that local treatment with LL-37 resulted in significantly improved wound healing.

Competitive Advantages

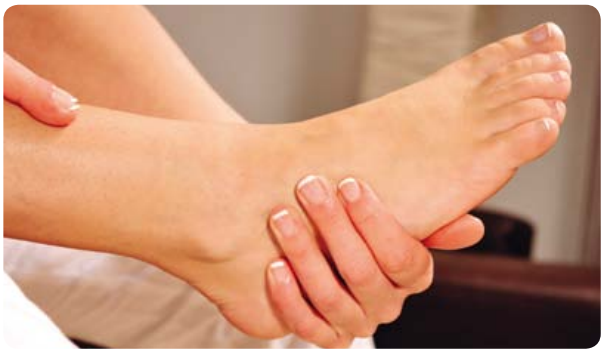
LL-37 has unique wound healing and antibacterial effects not offered by any available treatments. LL-37 is formulated as a viscous solution. This formulation offers the following advantages that are essential in clinical practice:

- Controlled dose
- Simple and rapid application
- Compatible with standard dressings
- Low production costs

The Market

Between 13 and 18 million patients have hard-to-heal ulcers in the developed world[2]. Approximately two out of 1,000 individuals have chronic leg ulcers below the knee[3] with disease duration of at least six weeks[4]. Venous leg ulcers constitute the largest segment among these, approximately 40–60 %[3]. Additional segments include arterial, diabetic, and multifactorial ulcers, each of which represents 10–20 % of the total incidence. Total sales of advanced wound healing products exceed EUR 5bn and are growing by approximately 10 % annually[3].

Despite limited clinical efficacy, medical device products dominate the market for advanced wound treatment. Only one globally launched pharmaceutical product (Regranex®) is on the market, with global annual sales exceeding EUR 100m. However, this product has a "black-box-warning" since 2008 after an increase in cancer mortality was observed. Regranex® is only approved for treatment of diabetic foot ulcers. Pergamum estimates the peak sales potential of LL-37 for chronic leg ulcers to exceed EUR 500m annually on the combined major markets (US, EU5, and Japan).



Status

- Proof-of-principle has been achieved in vivo
- No safety problems noted in studies carried out to date including a pivotal GLP toxicology study

Planned Milestones

- Finalization of optimal formulation and manufacture of investigational medical product
- Start of Phase I/ II study to achieve safety and early efficacy data

Patent status

The company has two patent families which include the lead product. The first of these two has been approved in the US, Japan, China and South Africa, and is shortly expected to gain approval in Europe. The second patent is pending approval.

Commercialization

Pergamum intends to develop the lead product to at least clinical proof-of-concept. After this, a strategic partnership will be established with one or more companies that have a strong presence on the wound healing market.

[5] Source: Bjellerup. Determining venous incompetence: a report from a specialised leg ulcer clinic. Journal of Wound Care 15 (10): 429-436, 2006

[3] Source: Med Market Diligence, Worldwide Wound Management, 2009

[1] Source: Espicom, The Global Advanced Wound Care Market to 2015, 2010

[2] Source: Forsgren, Fransson and Velzén. Leg Ulcer point prevalence can be decreased by broad-scale intervention, Acta Dermato-Venerologica, 88(3): 252-256, 2008

First-in-class potential | Project: LL-37 | Ownership: 62 %

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

Contact:

Jonas Ekblom, CEO

Phone: +46 8 524 891 01
jonas.ekblom@pergamum.com

www.pergamum.com

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

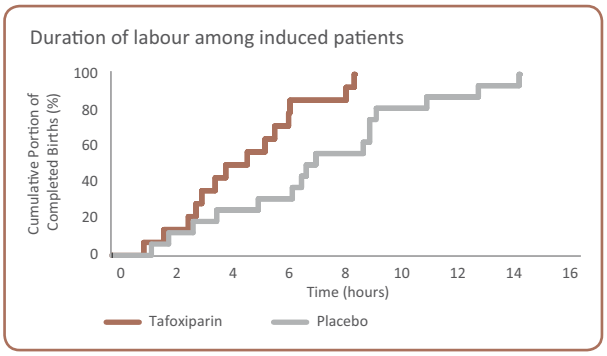
Dilafor's drug candidate, tafoxiparin, is based on a modification of LMWH that essentially eliminates the anti-coagulative effect and thus the heightened risk of bleeding. Tafoxiparin has been tested in a Phase IIa trial with 263 first-time mothers. The study showed that significantly fewer women were 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 holds patents covering treatment of protracted labor with tafoxiparin and other compounds in the US, Europe, Japan, and other key markets

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: 55 %

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

Contakt:

Lena Degling Wikingsson, CEO
Phone: +46 70 790 02 07
lena.wikingsson@dilafor.com
www.dilafor.com

Umecrine Mood AB

The Challenge

Severe pre-menstrual syndrome (PMS) and pre-menstrual 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 steroid 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 and severe PMS.

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 Women's Health/CNS segment.

Status

- A drug candidate and two back-up compounds have been identified
- 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

- Optimize the medicinal product and complete the Phase I clinical trial
- Carry out a Phase II clinical trial in PMDD patients aimed at demonstrating proof-of-concept

Patent Status

Patents covering the drug candidate have been granted for use in PMS and PMDD in the major markets. Patents have also been granted, or are pending approval, for the company's other compounds.

Commercialization

Umecrine Mood will continue its development program up to proof-of-concept to demonstrate the effect of treatment of PMDD in a clinical Phase II study. At the same time, the company will identify potential partners for continued development. The company will seek a strategic partnership for continued Phase 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: 43 %

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

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 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. The medical need for local pain relief when the IUD is inserted has been confirmed by recently conducted market surveys[1]. 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

- Safety/toxicology study completed
- GMP manufacturing for clinical trial has been initiated

Planned Milestones

- Initiate Phase I/II clinical trial

Patent status

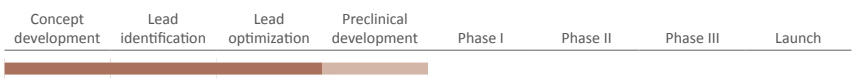
Pharmanest has filed for three patents, now pending as published International (PCT) applications. The applications are directed to three different new formulations of local anesthetics. Further, Pharmanest has filed for a design patent on its developed applicator.

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: Marketing studies

Ownership: 59 %



Contakt:

Gunilla Lundmark, CEO

Phone: +46 70 974 90 57
gunilla.lundmark@pharmanest.se

www.pharmanest.se

Dilaforette AB

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 created new a low anticoagulant heparin derivative , sevuparin, for the treatment of severe malaria patients. 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. Heparin is known from *in vitro* studies, however, to reverse the processes that lead to blockage of the blood flow. In Dilaforette's heparin analogues the anticoagulant activity of heparin has been significantly reduced, which strongly reduces this important risk factor. Dilaforette is developing the first potential 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. Due to its low anticoagulant activity, Dilaforette's drug candidate can be administered with a more than tenfold reduction in the risk of prolonged bleeding compared to heparin.

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. 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. The total numbers of severe malaria cases are estimated to be around 10 million per year [1,2,3].

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 severe malaria patients is being prepared to start later in 2012

Planned Milestones

- Complete the PhI/II study in uncomplicated falciparum malaria
- Initiate the Phase II study in severe malaria patients

Patent Status

Dilaforette has submitted patent applications covering its lead program.

Commercialization

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

[1] Source: World Malaria Report 2011, WHO
[2] Source: CJL Murray et al, Lancet 2012 Vol 379, Feb 4,
[3] Source: Dondorp et al. Lancet 2010;376:1647-1657

First-in-class potential | Project: Sevuparin | Ownership: 62 %

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. Several systemic fungal diseases are potentially life-threatening, and 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. These new analogues 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 novel nystatin analogues have similar properties to amphotericin, a commonly-used treatment for systemic fungal infections, in that they are effective in a broad antifungal spectrum, but are less prone to cause pathogenic fungi to develop resistance to the drug compared with other antimycotics.

The Market

In 2011, the global market for systemic antifungals was estimated to be USD 4.5bn with annual growth of approximately 5 %. Amphotericin 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 BSG 005 as a clinical candidate
- Start phase I clinical trials

Patent Status

Biosergen's global patent applications cover the modification of the nystatin genetic cluster in Streptomyces bacteria, as well as lead compounds (e.g. BSG005), including semi-synthetically modified compounds.

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: 60 %

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

Contact:

Nils Spidsøe, CEO

Phone: +47 7 359 26 06
nils.spidsoe@sintef.no

www.biosergen.no

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] Kource: Datamonitor, PharmaVitae Explorer

First-in-class potential

Ownership: 65 %

Project	Concept develop-ment	Lead identifica-tion	Lead optimiza-tion	Preclinical develop-ment	Phase I	Phase II	Phase III	Launch
Annexin A5								
PC-mAb								

Contakt:

Carina Schmidt, CEO

Phone: +46 76 193 81 90

c.schmidt@athera.se

www.athera.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 USD 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

Several compound patent applications and mPGES-1 crystal structure application filed.

Commercialization

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

[1] Source: Autoimmune market Outlook to 2012, Melissa Zebrowksi, Business Insights Ltd, 2007

[2] Source: The pain market Outlook to 2011, Melissa Zebrowksi, Business Insights Ltd, 2006

First-in-class potential

Ownership: 89 %

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

ProNoxis AB

The Challenge

Autoimmune diseases represent a diverse set of syndromes and manifestations. The common feature of these diseases is tissue damage due to loss of tolerance.

Rheumatoid arthritis is an example of an autoimmune disease that affects 0.5–1 % of the population. It is characterized by painful, swollen and stiff joints and gradual joint destruction. Current treatments consist of NSAIDs for pain and inflammation, and disease-modifying anti-rheumatic drugs such as TNFα-inhibitors and other biologics. However, a substantial number of patients still fail to respond adequately to current therapies.

ProNoxis' Solution

ProNoxis is developing a new therapeutic concept for rheumatoid arthritis and other autoimmune diseases based on the discovery of a gene encoding a subunit of NADPH oxidase. NADPH oxidase has been shown to affect autoimmune disease in several rat models where, surprisingly, relief was achieved when production of free oxygen radicals increased.

Studies conducted by ProNoxis show that the effect is related to recruitment of auto reactive T cells, an early key event in autoimmune disease. The project is currently in an early stage of development. However, initial validation studies in vivo show that the treatment may potentially reduce inflammatory activity and prevent relapses in ongoing disease.

Competitive Advantages

ProNoxis' products will act through a new mechanism and could potentially be used in patients that do not respond to current therapies or in combination with current treatments. The therapeutic concept has the potential to be applied within several diseases, primarily rheumatoid arthritis and multiple sclerosis, but possibly also inflammatory bowel disease and psoriasis.

The company has access to state-of-the-art *in vitro* models and relevant animal models, as well as to cutting-edge research groups in the autoimmune field.

The Market

In 2010, the sales of rheumatoid arthritis drugs reached USD 12bn in the seven major pharmaceutical markets, dominated by the three TNFα-inhibitors Humira, Enbrel and Remicade. The introduction of reformulations of other classes of drugs such as subcutaneous Orencia and Actemra, as well as an intravenous formulation of the TNFα-inhibitor Simponi, is expected to fuel growth. In addition, Datamonitor expects new product launches such as novel oral JAK inhibitors to drive market growth to USD 18bn by 2020[1]. The primary part of this market, and especially those patients who do not receive adequate amelioration from existing therapies, will be the target market for ProNoxis.

Status

- Several compounds with promising properties have been identified and synthesized
- Lead compounds have been characterized for further investigation of metabolic stability, oral availability and cellular toxicity
- Efficacy has been shown in animal models for the lead compounds

Planned Milestones

- Select a candidate drug for preclinical development
- Continue the preclinical development of the candidate drug to early clinical phase

Patent Status

The patent portfolio includes patent applications covering the novel compounds with composition of matter and new medical use patents.

Commercialization

ProNoxis plans to develop compounds through to proof-of-principle in early clinical studies. The company will seek to find a strategic partner or to license the project either at, or prior to, this stage.

[1] Source: Datamonitor, PharmaVitae Explore

First-in-class potential

Ownership: 22 %

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

Contact:

Karin Bryder, CEO

Phone: +46 70 755 69 00
karin.bryder@pronoxis.com

www.pronoxis.com

BioChromix Pharma AB

The Challenge

There are no cures for Alzheimer's disease (AD) at present. Nor are there any pharmaceutical therapies that modify the development of the disease. Approved drugs, such as cholinesterase inhibitors and the NMDA receptor antagonist memantine, only provide short-term symptomatic relief. Currently, there are no therapies that target the basic pathology of the disease, i.e. the formation of neurotoxic amyloid ß-peptide (Aß) aggregates and neurofibrillary tangles, which are the prime suspects in damaging and killing nerve cells. More than 25 million people suffer from AD today. The disease also affects the lives of other people in the patient's family leading to a growing public health challenge with increased costs for individuals and society.

BioChromix Pharma's Solution

BioChromix Pharma has discovered a novel class of conjugated heterocyclic 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, as demonstrated in an *in vivo* model of Alzheimer's disease.

The class of compounds produced by BioChromix Pharma shows good potential to cross the blood-brain barrier (BBB) and thereby reach sufficiently high concentrations in the brain to achieve desirable effect. The company is continuing to develop, optimize and validate lead compounds both *in vitro* and *in vivo*.

Competitive Advantages

The company's lead compounds cross the BBB and quickly reach effective concentrations in the brain. They are also believed to operate in a large window of the Aß cascade. In comparison, antibodies and many other compounds are normally only active in a narrow window. In addition, antibodies and many small molecule drugs do not easily cross the BBB. The company's lead compounds offer potential selectivity and affinity improvements over currently available therapies by several orders of magnitude.

The Market

Direct care cost for the 25 million patients suffering from Alzheimer's related dementia worldwide is estimated to be around USD 156bn per annum. Across the seven major pharmaceutical markets, the AD market is forecast to grow from USD 5bn in 2010 to USD 12bn in 2019[1].

Status

- Lead compounds are currently being optimized and validated in *in vitro* and *in vivo* models
- The mechanism of action has been established demonstrating 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, complete "Investigational Medicinal Product Dossier" and initiate Phase I clinical trial

Patent Status

BioChromix Pharma is actively securing its IP position. Worldwide patents are pending for all of the company's lead compounds and their derivatives.

Commercialization

The development program will be continued in order to demonstrate proof of concept in man, through Phase IIa clinical trials, for the treatment of AD and potentially other neurological diseases. 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, Pipeline and Commercial Insight: Alzheimer's Disease 2010

First-in-class potential

Ownership: 69 %

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

Contact:

Peter Åsberg, CEO

Phone: +46 70 949 17 21

peter.asberg@biochromix-pharma.com

www.biochromixpharma.com

Umecrine Cognition AB

The Challenge

Alzheimer's disease (AD) is a progressive, degenerative, irreversible disease, and is the most common form of dementia. Initially, disease progression includes deterioration of cognitive functions, which patients experience as very stressful.

Elevated endogenous stress hormones affect the brain via the inhibitory GABA system. The consequence is a decrease in cognitive function with subsequently reduced clearance of the Alzheimer-associated amyloid ß-peptide (Aß). As a result of this, there can be accumulation and oligomerisation of Aß and thus progression of AD.

Umecrine Cognition's Solution

Umecrine Cognition is developing pharmaceuticals to treat the gradual progression of AD caused by endogenous CNS-active steroids (GABA-steroids). The expected effects of treatment include a slowdown in disease progression and improved memory and learning for patients. Umecrine Cognition currently has three lead compounds undergoing preclinical evaluation.

Competitive Advantages

A therapy based on this mode of action will have the potential to delay disease progression and improve the memory performance of patients with early AD. Currently, there are no drugs available that influence the progression of AD. Umecrine Cognition's innovation represents a unique and novel treatment principle and no similar substances exist that block the noxious effects of endogenous and exogenous CNS-steroids.

The Market

The prevalence of AD is estimated to be approximately 5 % of the population over 65 years of age. Across the seven major pharmaceutical markets, the AD market is forecast to grow from USD 5bn in 2010 to USD 12bn in 2019[1]. It is also estimated that early to moderate forms of AD will make up 60–70 % of this market.

Umecrine Cognition is aiming at the early AD segment, which is becoming a significant and increasing problem due to an aging population. In the absence of disease-modifying treatments, delay of progression of AD represents a huge potential market for a new effective therapy.

Status

- Three lead compounds have been identified
- Mechanism of action has been established
- Proof-of-principle has been demonstrated *in vitro* and in animal models regarding the GABA-steroid modulating approach to improving cognitive function

Planned Milestones

- Continue preclinical studies to verify the pharmacological properties of the lead compounds
- Select a candidate drug and begin development of a suitable formulation

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 to sell, or license out its compounds to a pharmaceutical company capable of providing appropriate marketing strength in this very large and widespread market.

[1] Source: Datamonitor, Pipeline and Commercial Insight: Alzheimer's Disease 2010

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

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 is only partially effective.

Clanotech's Solution

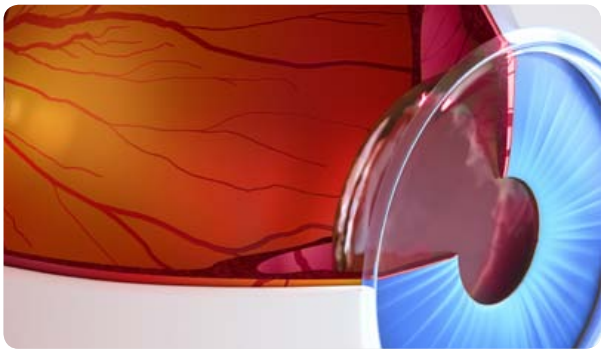
Clanotech's lead candidate is an inhibitor of the $\alpha_5\beta_1$-integrin receptor present on vascular endothelial cells. $\alpha_5\beta_1$-integrin stimulates the unwanted formation of new blood vessels through pathways that are partly complementary and partly interrelated with the VEGF pathway which 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 mechanism to treat resistant or relapse patients to anti-VEGF-therapy, providing a sustained anti-angiogenic effect. A new $\alpha_5\beta_1$-integrin antagonist therapy has the potential to become an alternative therapy to standard care anti-VEGF treatment, but it may also become a complementary treatment to the current standard care in combination regimens.

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 3.5 billion in 2011[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 currently being optimized for for clinical development

Planned Milestones

- Selection of candidate drug
- Identification of Formulation for clinical Phase I
- Preparation for animal toxicology

Patent Status

Patent applications covering Clanotech's proprietary compounds are pending worldwide.

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.

First-in-class potential

Ownership: 87 %

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

Contact:

Patrizia Caldirola, CEO

Phone: +46 70 37 47 179
patrizia.caldirola@clanotech.se

www.clanotech.se

Promimic AB

The Challenge

The implant industry is driven by a 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. By coating these materials with the Promimic HA^{nano} Surface™, an implant is created with mechanical properties and chemistry almost identical to bone

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. Compared to competing micrometer thick alternatives HA^{nano} Surface is nanometer thin, which preserve the micro-structure of the implant and reduce the risk of cracks in the coating. Furthermore, the nano thin coating improves the hydrophilicity of the implant material 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 times by half.

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
- First patient study is being finalized
- Collaboration discussions are ongoing with several leading implant companies

Planned Milestones

- Initiate a second study in patients
- Launch of an implant with HA^{nano} Surface
- Expand the product portfolio with a synthetic bone formula

Patent Status

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

Commercialization

Through collaborations and licensing, Promimic aims to become the implant industry's preferred supplier of synthetic bone interfaces between implant and human tissue.

The HA^{nano} Surface has successfully been sold on the biosensor market since 2007.

Product: HA^{nano} Surface

Ownership: 29 %

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 has developed from challenges encountered every day in clinical practice in the use of implants to treat bone defects, particularly 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

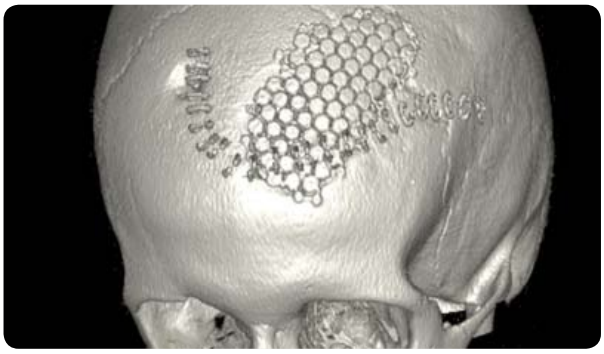
Oss-Q develops, manufactures and will sell implants based on a bioceramic material that resembles bone in its chemical make-up. The bioceramic is osteoconductive, meaning that the material promotes adjacent bone growth. Its design allows free circulation of blood around the implant and supports soft tissue healing. Overall, these healing properties – better bone growth and soft tissue integration, reduces the risk for future complications, which are painful for the patient and costly for the hospital.

Competitive Advantages

Oss-Q has developed a proprietary moulding technology in ceramics, unique in the industry. This provides the company with a means of making implants with superior healing features, in a range of new, unique shapes and configurations. Oss-Q´s lead product is aimed at cranioplasty, the surgical repair of skull defects. A high percentage of advanced cranioplasties fail and lead to difficult and expensive clinical complications. The use of Oss-Q´s implant in early testing has resulted in very promising clinical outcomes. The company has strong clinical know-how in the area.

The Market

The market for biomaterials products in orthopedics was worth more than EUR 1.25bn in 2011. The market for the lead product of Oss-Q in cranioplasty alone amounts to approximately EUR 50m. The market is attractive as it is concentrated, as these procedures are carried out in a limited number of hospitals, and as the price sensitivity is low for high performing products. Oss-Q has several projects in its product portfolio, significantly expanding the company´s commercial potential.



Status

- Very promising results from 2 year follow-up on first pilot patients.
- Development of manufacturing process ongoing in collaboration with manufacturing partner

Planned Milestones

- Finalize manufacturing process
- Assemble regulatory documentation
- Complete quality system
- Finalize and start implementation of market launch plan

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. Oss-Q has received a favourable PCT International search report and written opinion on its key patent application. All IP is owned by Oss-Q.

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 D, Greensmith A. Long-term experience with methylmethacrylatecranioplasty in craniofacialsurgery. Journal of plastic, reconstructive&aestheticsurgery :JPRAS. 2008; 61(7): 744-52; discussion 53.

[2] Source: The Impact of Complications on Costs of Major Surgical Procedures: A Cost Analysis of 1200 Patients; Von Lanthen et al; Annals of Surgery 05/2011.

Ownership: 16 %

Concept development	Prototype	Development	Product	Sales

Contakt:

Bo Qwarnström, CEO
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

Contakt:

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.

BioChromix's Solution

BioChromix has developed a sensitive method that can detect Aß oligomers in biological samples such as cerebrospinal fluid. The formation of these small peptide aggregates, Aß oligomers, is associated with AD. Thus, it would be possible to diagnose the disease by measuring the amount of oligomers in cerebrospinal fluid, for example. To do this you need a sensitive and reliable method, which is currently not available. 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. Development is focused on R&D assays, *in vitro* diagnostics and *in vivo* imaging of AD.

The Company's patented methods are based on the novel luminescent conjugated polymer (LCP) molecules.

Competitive Advantages

By combining the LCP technology with traditional standard high-sensitivity laboratory equipment BioChromix aims to provide unique methods and products that enable analysis of the pathological events leading to AD with extremely high accuracy. 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

As the only reliable diagnosis of AD is post mortem identification of the disease in the brain AD often goes unrecognized or is misdiagnosed in its early stages. Direct-care cost for the circa 25 million patients worldwide suffering from Alzheimer's related dementia today is estimated to be around USD 156bn per annum, a number that is growing every year. Across the seven major pharmaceutical markets the AD drug market is forecast to grow from USD 5bn in 2010 to USD 12bn in 2019[1]. Patient numbers are expected to reach over 100 million by 2050.

Status

BioChromix is currently evaluating its technology in collaboration with a leading clinical institution.

Planned Milestones

Advance the development, validation and commercialization of the innovative Aß detection tools for the diagnosis and research of AD

Patent Status

Several of BioChromix' patent applications have been granted in the US, Europe, Japan, Canad 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's Pipeline and Commercial Insight Alzheimer's Disease 2010.

Ownership: 9 %

Concept development	Prototype	Development	Product	Sales

Contakt:

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 research platform which may provide pharmacokinetic and dynamic data at an early stage, i.e. for very early selection of drug candidates. The company's goal is to introduce a new patented technology for development of inhalation drugs. The key is to be able to generate data that effectively allows either a go or no-go decision to be reached at an early stage in the development process.

Competitive Advantages

The technology platform requires only minimal pre-processing of a compound before testing. Only small amounts – often less than 100 mg – of a substance/new chemical entity 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 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 PK & ADME performance in the clinic, is substantially reduced.

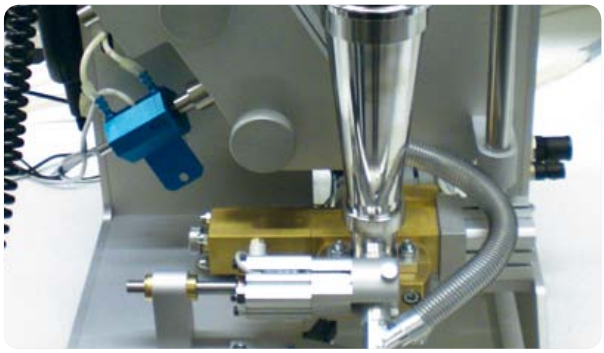
Inhalers can be selected early in the development phase of new inhalation therapies for achieving optimal pharmacological features.

The company is also developing its own pipeline of inhalation drugs.

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 corticosteroid/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
- Significantly expand current collaborations with pharmaceutical and biotech companies for screening drug candidates in the IPL and *in vivo* in rats
- Carry out indicative kinetic studies in human volunteers

Patent Status

Four 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 strategy is to seek collaborations with leading global pharmaceutical companies for further development and validation of the entire technology platform. This will form a solid foundation for further commercial activities such as out-licensing or a possible M&A transaction. The company also welcomes opportunities to work in collaboration with biotech and pharmaceutical companies for the co-development of new inhalation drugs intended for out-licensing.

[1] Source: Datamonitor, Forecast Insight: Asthma/COPD, 8/2008

Ownership: 72 %

Concept development | Prototype | Development | Product | Sales

Contact:

Staffan Söderström, CEO
Phone: +46 8 508 845 80
staffan.soderstrom@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 ~ 50 % better solubility of itraconazole, a poorly soluble drug, compared with formulations obtained with more conventional techniques, such as hot melt extrusion and spray drying.

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.

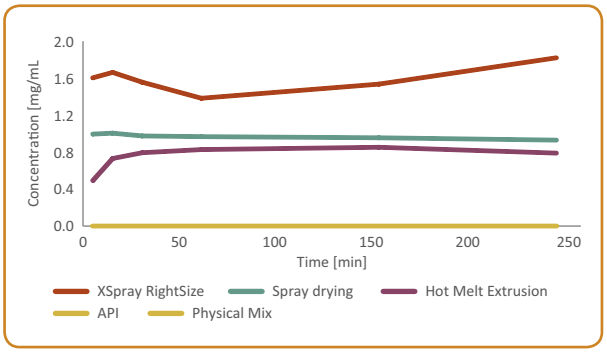
Competitive Advantages

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.

When compared with more traditional technologies, dissolution improvement has been shown for a variety of compounds.

The Market

Over the next five years it is estimated that more than USD 267bn of branded pharmaceutical sales are at risk from generic competition[1]. The pharmaceutical industry is experiencing difficulties in developing new pharmaceuticals at the same rate as the expiration rate of patents on many important pharmaceuticals. This is increasing the demand on effective life cycle management of successful products and access to external projects, resulting in more licensing deals and acquisitions



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

Status

- 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
- A candidate for a proprietary drug has been identified and development work is ongoing.

Planned Milestones

- Initiate 1–2 additional strategic partners or customer projects
- 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 to generic pharmaceutical companies.

[1] Source: PharmExec. Managing product lifecycle, 2011

Project: RightSize™ Particle Manufacture Technology

Ownership: 61 %

Concept development	Prototype	Development	Product	Sales

Contact:

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

NeoDynamics AB

The Challenge

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

NeoDynamic's Solution

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

Fourier/AS – The company's projection-free inertia-stabilized versatile core needle biopsy device, is equipped with Anti-Seeding functionality that prevents tumor cells from spreading during the biopsy procedure. 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

Unique, combined diagnostic and therapy methods.

Fourier/AS: The company's Fourier/AS 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/AS

- Local occurrence of living tumor cells in breast biopsies, and that these can be eliminated with Fourier/AS, has been established and the data published, generating a lot of attention[2]
- New proprietary equipment has been developed for Core Needle Biopsy
- Core Needle Biopsy is going through market-acceptance testing

PRFA

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

Planned Milestones

Fourier/AS

- Launch Fine Needle Biopsy after reaching a manufacturing and distribution agreement with a major supplier
- Start clinical studies of prostate, abdominal and thoracic tumors
- Adapt equipment as necessary for different types of biopsies
- Secure serial manufacturing and registration
- Develop radiofrequency ablation devices for the treatment of breast lesions
- Achieve clinical validation of developed prototypes

PRFA

- Expand the clinical study to include patients with benign changes needing investigation
- Complete the ongoing study
- Put new generation of treatment equipment into clinical use
- Secure serial manufacturing and registration

Patent Status

NeoDynamics has 24 patents granted and 15 patents pending for the company's various technologies and medical applications

Commercialization

The company aims to launch both diagnostic and treatment procedures in selected European countries.

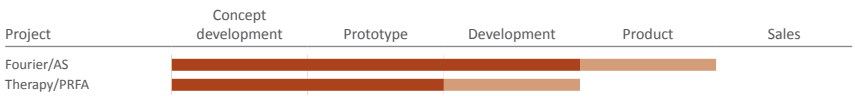
A clinical study on the anti-seeding technology was published in the British Journal of Cancer (2010)[3].

[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: Feasibility study on the treatment of small breast carcinoma using percutaneous US-guided preferential radiofrequency ablation (PRFA). Breast. 2010 Jun;19(3):219-25. Epub 2010 Feb 18

[3] http://www.nature.com/bjc/journal/v103/n11/pdf/6605964a.pdf

Ownership: 21 %



Contact:

Peter Sellei, CEO

Phone: +46 70 624 21 89
peter.sellei@neodynamics.se

www.neodynamics.se

Actar

Actar 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. Thus, Actar 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 Actar 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.

New and other investments

Oss-Q AB

Read more on page 41.

KDev Oncology AB

KDev Oncology is the name of 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, the portfolio consists of Akinion Pharmaceuticals and GliGene, with the ambition to include an additional four to five new oncology projects over the coming years.

GliGene AB

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.

Lipidor AB

Lipidor is a technology company that develops topical lipid layer-forming carrier system as novel drug delivery methods for new and existing pharmaceuticals. The spray-on technology enables the volatile carrier compound to vaporize and leave the active compound available in a thin lipid layer for uptake.

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 I 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 Project: CD163

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

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 performance in 2011

Ownership structure

On 31 December 2012, Karolinska Development had 2,868 shareholders. International investors owned 31 % of the share capital and 24 % 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

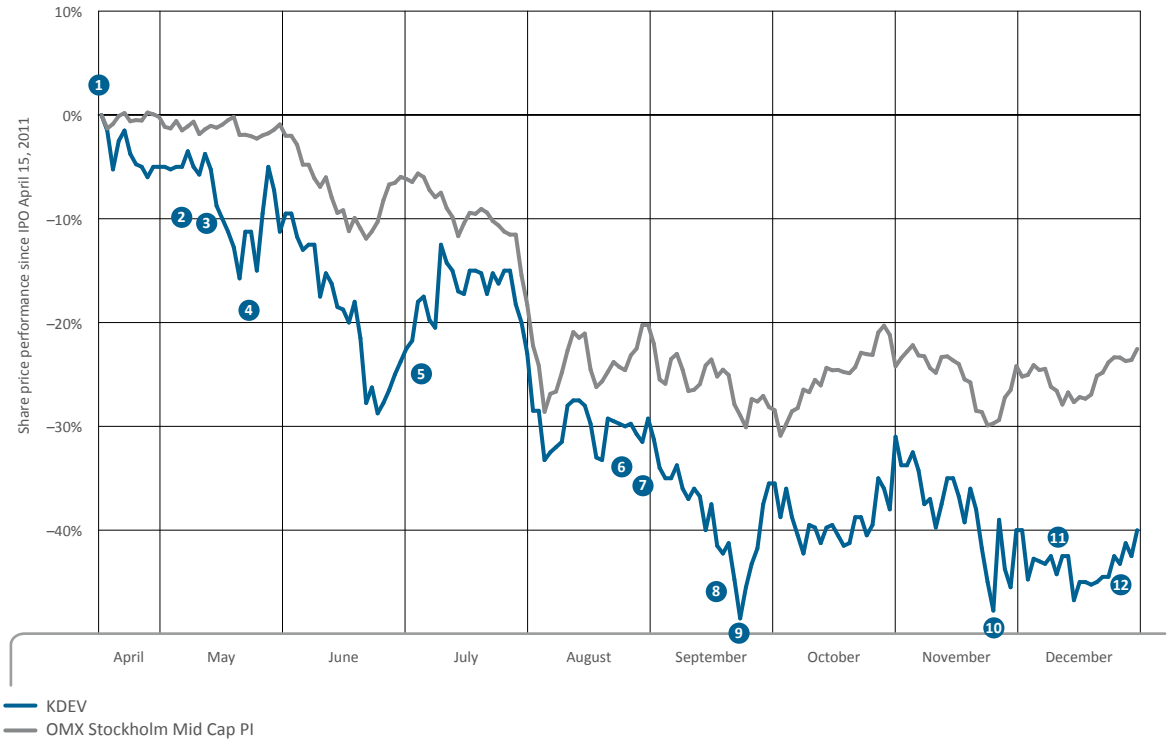
Karolinska Development was publicly listed on 15 April 2011. The closing price on the first trading day was SEK 40, and at year-end 2011 the share traded at SEK 24, a decline of 40 %. No dividend was paid in 2011.

Share capital

At year-end 2011, 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 44.70 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 Mid Cap Index. The ISIN code is SE0002190926.



Significant events

1 **April 15, 2011** Karolinska Development AB was listed on NASDAQ OMX Stockholm and issued new shares, generating proceeds of SEK 608.0m before issue costs

2 **May 11, 2011** Axelar secured funding for its upcoming Phase II program in lung cancer

3 **May 12, 2011** Karolinska Development AB participated in a new share issue by the portfolio company Pergamum AB, offsetting receivables of SEK 77.6m against the issue proceeds

4 **May 26, 2011** The interim report for January-March was published

5 **July 7, 2011** Axelar completed clinical Phase I/II safety study

6 **Aug 25, 2011** The interim report for January-June was published. Holdings in the portfolio companies IMED AB and Eribis Pharmaceuticals AB were divested

7 **Sept 1, 2011** Michael Sundström was appointed Vice President Discovery Research of Karolinska Development and CEO of Actar

8 **Sept 23, 2011** Dilaforette initiated Phase I/II study with Sevuparin for treatment of malaria

9 **Sept 26, 2011** Axelar reported good safety profile for AXL1717 in clinical Phase I/II trial in cancer patients

10 **Nov 25, 2011** The interim report for January-September was published. The holdings in the portfolio company Avaris AB was divested

11 **Dec 12, 2011** Aprea announced continuation of the clinical Phase I/II trial of APR246 in leukemia patients

12 **Dec 28, 2011** Axelar initiated Phase II trial of AXL1717 for treatment of non-small cell lung cancer

Shareholders

	A shares	B shares	Capital %	Votes %
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
Östersjöstiftelsen	0	3,345,537	6.9	5.4
Swedbank Robur Funds	0	1,920,074	4.0	3.1
Jarla Investeringar AB	0	1,629,354	3.4	2.6
Foundation Asset Management AB	0	1,392,035	2.9	2.2
Skagen Funds	0	1,297,700	2.7	2.1
Stefan Persson	0	1,261,278	2.6	2
Insamlingsstiftelsen för främjande och utveckling av medicinsk forskning vid Karolinska Institutet	0	1,150,323	2.4	1.9
Holberg Funds	0	783,400	1.6	1.3
Norwegian State	0	750,000	1.5	1.2
SBSB Innovation AB	0	677,000	1.4	1.1
Ruffer Funds	0	450,000	0.9	0.7
Gålöstiftelsen	0	375,535	0.8	0.6
Nordea Funds	0	366,600	0.8	0.6
Fourth Swedish National Pension Fund	0	343,959	0.7	0.6
KL Ventures AB	0	300,000	0.6	0.5
Lingfield AB	0	281,989	0.6	0.5
Kåre Gilstring	0	275,000	0.6	0.4
Sum	**1,503,098**	**27,202,758**	**59.1**	**68.1**
Sum, other shareholders	**0**	**19,825,561**	**40.9**	**31.9**
Sum, all shareholders	**1,503,098**	**47,028,319**	**100**	**100**

Board

HANS WIGZELL | RUNE FRANSSON | ULRICA SLÅNE | MICHAEL ROSENLEW

HANS WIGZELL

Chairman and **Board** member since 2006. **Born** 1938. **MD** and **Professor of Immunology. Other appointments** Hans Wigzell is Chairman of Rhenman & Partners Asset Management AB and a Board member of AVI Biopharma Inc, Swedish Orphan Biovitrum AB (publ), Humalabs LLC , Intercell AG and RaySearch Laboratories AB (publ). He is a member of the Royal Swedish Academy of Sciences and the Royal Swedish Academy of Engineering Sciences **Holding in Karolinska Development** 8,491 series B shares.

RUNE FRANSSON

Board member since 2006. Born 1947. BSc in Economics. Other appointments Chairman of Karolinska Institutet Holding AB and University Accommodation Center AB. Previous assignments include Board member of KI Management. Holding in Karolinska Development No holding.

ULRICA SLÅNE

Board member since 2007. **Born** 1965. **MSc in Business and Economics and CFA**. Other appointments Ulrica Slåne is Portfolio Manager Life Science at Third Swedish Public Pension Fund (AP3). She is a Board member of Diagenic ASA, Oslo. **Holding in Karolinska Development** No holding.

MICHAEL ROSENLEW

Board member since 2010. **Born** 1959. **MSc in Corporate Finance and Accounting. Other appointments** Michael Rosenlew is Chairman of Mikaros AB and TimeSystem Finland Oy and a Board member of Mikaros Invest AB, YIT Oyj, Alfa AB, Mikaros Fastigheter AB, Oy Desinfinator Ltd, Time System Holding AG and Oy Hold 1 Ltd. **Holding in Karolinska Development** No holding.

PETER SJÖSTRAND PER-OLOF EDIN RAYMOND HILL

PETER SJÖSTRAND

Board member since 2008. **Born** 1946. **MD and MSc in Business and Economics**. **Other appointments** Chairman of Stiftelsen Oscar Hirschs Minne, Byggnads AB S:t Erik and Life Science Imaging. Board member of Active Biotech AB and Calmark AB. Member of Vatera Holding Advisory Board and Senior Industrial Advisor EQT. Previous assignments include, among others, AGA, Aleris, Astra (alternate), Astra-Merck, Gambro, Meda, Medivir, Mediject, Pharma Vision, Symbicom, Trygg Hansa and Tularik. **Holding in Karolinska Development** No holding.

PER-OLOF EDIN

Board member since 2007. **Born** 1940. **Professor. Other appointments** Vice Chairman of the Seventh AP Fund. Previous assignments include Chairman of Södertörn University College and the Baltic Sea Foundation. **Holding in Karolinska Development** No holding.

RAYMOND HILL

Board member since 2011. **Born** 1945. **PhD, DSc (Hon), Fellow of the United Kingdom Academy of Medical Sciences. 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.
Holding in Karolinska Development No holding.

Management and personnel

TORBJÖRN BJERKE | ROBIN WRIGHT | GUNNAR CASSERSTEDT | TERJE KALLAND

TORBJÖRN BJERKE

CEO since 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 NeuroSearch AS, Axelar AB, Aprea AB, Pharmanest AB and Paris-based DBV Technologies. **Holding in Karolinska Development** 11,375 shares.

ROBIN WRIGHT

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. Robin takes over as CFO in May 2012. **Other appointments** Chairman of Dilaforette Holdings AB and Dilaforette AB and Board member of Dilafor AB and KDev Oncology AB. **Holding in Karolinska Development** 0 shares and 0 warrants.

GUNNAR CASSTESTEDT

CFO since 2006 and **Deputy CEO** since 2007. **Born** 1950. **MSc in Business Economics. Background** Gunnar Casserstedt has nearly 40 years experience in senior positions in the pharmaceutical and biotechnology industries, including as Vice President R&D Finance at Pharmacia Inc. and CFO of Sopherion Therapeutics Inc. **Other appointments** Chairman of KCIF Fund Management AB and KD Incentive AB and Board member of Dilaforette Holding AB and KDev Holding Oncology AB. **Holding in Karolinska Development** 11,949 shares and 31,220 warrants.

TERJE KALLAND

CSO since 2011. **Born** 1951. **MD, PhD. Background** 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, Actar AB and Dilaforette AB. **Holding in Karolinska Development** No holding.

PERSONNEL

CEO: Torbjörn Bjerke

Finance and Business Development (4 employees):
CFO and Deputy CEO: Gunnar Casserstedt (Robin Wright will take over as CFO at the 2012 Annual General Meeting)

Responsible for financing and financial reporting at Karolinska Development. Services are also provided to some extent to portfolio companies.

Research and Development (2 employees):
CSO: Terje Kalland

Responsible for Karolinska Development's project portfolio, including identification of new projects as well as planning, oversight and quality assurance.

IR and Business Analysis (3 employees):
IRO: Benjamin Nordin

Responsible for investor relations as well as internal and external communication. Responsible for analysis and valuation of the portfolio companies for financial reporting and in connection with exits. Services are also provided to some extent to portfolio companies.

Legal Affairs, Administration and HR (3 employees):
General Counsel: Ulf Richenberg

Responsible for legal issues and administration at Karolinska Development. Services are also provided to some extent to portfolio companies.

BENJAMIN NORDIN | ULF RICHENBERG | MICHAEL SUNDSTRÖM | OTTO SKOLLING

BENJAMIN NORDIN

IRO since 2011 and **Head of Business Analysis** since 2008. **Born** 1974. **MSc in Molecular Biology. Background** 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 **Holding in Karolinska Development** 200 shares.

ULF RICHENBERG

General Counsel since 2008. **Born** 1955. **Master of Laws. Background** 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, Avaris AB and NovaSAID AB. **Holding in Karolinska Development** 2,024 shares personally and through related parties.

MICHAEL SUNDSTRÖM

VP Discovery Research since 2011. **PhD Born** 1963. **Background** 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 has been Managing Director since 2007. **Other appointments** CEO of Actar AB. **Holding in Karolinska Development** 2,000 shares.

OTTO SKOLLING

Vice President Business Development since 2012 and employed since 2007. **Born** 1961. **MSc in Chemical Engineering.** Background 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, BioChromix Pharma AB, Inhalation Sciences Sweden AB, KCIF Fund Management AB, Limone AB, NeoDynamics AB, Promimic AB, Stockholm Biotech-Builders Association, Umecrine Mood AB and XSpray Microparticles AB. Alternate Board member of Stockholm Uppsala Life Science AB. **Holding in Karolinska Development** 5,591 shares and 90,591 warrants.

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 2011.

SIGNIFICANT EVENTS DURING FINANCIAL YEAR

Karolinska Development AB

Initial public offering

Karolinska Development AB was listed on NASDAQ OMX Stockholm on 15 April 2011 and issued shares – generated proceeds of SEK 608.0m before issue costs

Karolinska Development AB was listed on NASDAQ OMX Stockholm on 15 April 2011. In connection with the listing, a total of 15,200,000 series B shares in Karolinska Development were issued, generating SEK 608.0m before costs. After costs, the issue generated SEK 563.1m for Karolinska Development. After registration on 21 April 2011, there were a total of 48,531,417 shares in Karolinska Development, divided into 1,503,098 series A shares and 47,028,319 series B shares and 62,059,299 votes in the company.

New recruitments and changes in the organization

Torbjörn Bjerke appointed the new CEO of Karolinska Development

Torbjörn Bjerke was formerly the President and CEO of Orexo AB, a position he held from 2007. Previous positions included 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. Torbjörn Bjerke serves on the board of directors of NeuroSearch AS and Paris-based DBV Technologies. Torbjörn Bjerke succeeded Conny Bogentoft, who played a central role in Karolinska Development's creation and led the company since its founding in 2003.

Terje Kalland appointed CSO of Karolinska Development

Terje Kalland is an MD specializing in immunology. He has twenty years of international experience in leading pharma and biotech organizations in discovery, preclinical and clinical development. Dr Kalland has overseen more than 40 drug candidates from discovery research to development, half of which were protein-based products. He comes to Karolinska Development most recently from Novo Nordisk, where he was Senior Vice President, Biopharmaceuticals Research since 2005.

Karolinska Development appointed Benjamin Nordin as Investor Relations Director

Benjamin was given responsibility for communication and investor relations, but also retained responsibility for business analysis. As a part of this change, he also became part of Karolinska Development's management team. Prior to joining Karolinska Development, Benjamin was head of the healthcare analyst team at Kaupthing Bank.

Michael Sundström appointed Vice President Discovery Research of Karolinska Development and CEO of Actar

Michael Sundström, PhD, has been appointed Vice President Discovery Research of Karolinska Development as well as CEO of the subsidiary Actar AB. Michael was most recently the Managing Director of the Novo Nordisk Foundation Center for Protein Research, a leading academic center for protein and proteome research. He has nearly 20 years of international experience from leading pharmaceutical and biotechnology organizations, including as Director, Structural Chemistry, and Chairman of the Oncology Research Review Committee at Pharmacia as well as Chief Scientist of the Structural Genomics Consortium at Oxfords University.

Investment Management role eliminated

The previous organization with Investment Managers was eliminated and replaced by new positions with specialist functions in research and development, business development and investor relations.

Portfolio companies

Major progress in clinical projects

Pergamum extended its Phase II trial for prevention of post-surgical adhesions

Pergamum AB, Karolinska Development's dermatology and wound healing company, received approval from the German Regulatory Authority and the Independent Ethics Committee to begin a Phase II clinical trial in Germany The trial will monitor efficacy and safety of PXL01 for the prevention of post-surgical adhesions.

Axelar reported positive interim and final results from Phase I/II study

In April, Axelar reported positive interim data from the first part of a Phase I/II study. The company achieved its goals to identify a recommended Phase ll dose and show that AXL1717 is safe and tolerable. At the European Multidisciplinary Cancer Congress (ESMO) in Stockholm in September it was also announced that all major objectives were met in the clinical study, and signs that suggest clinical benefit were observed in some patients with non-small cell lung cancer.

Axelar initiated Phase II study in lung cancer

In December it was announced that the first patient has been dosed in a randomized Phase II study on non-small cell lung cancer (NSCLC) patients of its drug candidate AXL1717. A total of 140 patients with squamous cell carcinoma or adenocarcinoma of the lung will be included in the study, which will investigate the clinical efficacy of continuous dosing of AXL1717. NSCLC is the most common form of lung cancer, with 420,000 new patients diagnosed in the industrial countries every year. Treatment with standard cytotoxic chemotherapy is unsatisfactory and provides only short-term control of the disease.

Dilaforette initiated Phase I/II study with Sevuparin for treatment of severe malaria

Dilaforette AB announced that the first patient has received a dose of Sevuparin in a Phase I/II study. This is the first time Sevuparin is being tested in malaria patients. Primarily a safety study, it is being conducted on uncomplicated falciparum malaria patients before moving on to severe malaria patients in the next step. The study, comprising 98 patients, is being conducted in Thailand together with the Mahidol Oxford Research Unit (MORU) in Bangkok. MORU is a collaboration between Mahidol University and the University of Oxford sponsored by the Wellcome Trust of Great Britain.

Aprea reported progress in the clinical Phase I/II safety study with APR-246 in cancer patients

Aprea conducted a Phase I/II dose-escalating safety study with APR-246 in patients with refractory hematological malignancies or prostate cancer. The results show that the compound is safe at predicted therapeutic plasma levels. In December it was announced that the first patient has been dosed in a continuation of the clinical Phase I/II study of APR246. The primary aim of the study is to evaluate safety and pharmacokinetics, but also to make an early assessment of effectiveness. The study is being carried out at five clinics in Sweden under the supervision of Dr. Sören Lehmann and comprises 10 patients with Acute Myeloid Leukemia (AML) and Chronic Lymphocytic Leukemia (CLL), refractory to standard treatment. The study is expected to be completed during the first half of 2012.

Holdings in four portfolio companies divested

The portfolio companies IMED AB, Eribis Pharmaceuticals AB, Avaris AB and HBV Theranostica AB did not achieve their established targets and further investments were discontinued. These four holdings were written off completely.

Investments that in several cases take projects to possible proof-of-concept

Axelar secured financing

Axelar secured SEK 123m (EUR 13.7m), which allows the company to complete its planned Phase II program for non-small cell lung cancer patients.

Kurma Biofund co-invested with Karolinska Development in the portfolio company Umecrine Mood AB

Kurma Biofund completed a co-investment with Karolinska Development in Umecrine Mood, securing the financing for the continued clinical development through clinical Phase II of its drug candidate to treat severe premenstrual symptoms. Umecrine Mood develops novel products to treat the mental and physical symptoms associated with Premenstrual Dysphoric Disorder (PMDD) and severe Premenstrual Syndrome (PMS).

Karolinska Development invested in BioChromix AB

BioChromix AB, a Swedish in vitro diagnostic company focusing on Alzheimer's disease, has received financing through a new share issue directed to Karolinska Development. The new share issue will enable BioChromix to advance the development, validation and commercialization of its innovative amyloid-beta (Aß) detection tools for the diagnosis and research of neurodegenerative diseases, such as Alzheimer's disease.

Karolinska Development AB participated in a new share issue by the portfolio company Pergamum AB – offset receivables of SEK 77.6m against the issue proceeds

Pergamum AB, Karolinska Development's portfolio company in wound and skin infections, completed an offset share issue valued at a total of SEK 119.6m, of which SEK 77.6m came from Karolinska Development.

SIGNIFICANT EVENTS AFTER THE BALANCE SHEET DATE

Karolinska Development AB

New Chief Financial Officer with extensive business development experience

Robin Wright replaces Gunnar Casserstedt as CFO

Gunnar Casserstedt, 62, has announced his desire to step down from operational duties in 2012. Robin Wright, who has managed business development activities for several months as a consultant, will take over as Chief Financial Officer in connection with the company's Annual General Meeting and assume responsibility for both the finance department and business development.

Two new portfolio companies

Karolinska Development formed KDev Oncology AB with Akinion Pharmaceuticals AB and GliGene AB

Karolinska Development formed the wholly owned subsidiary KDev Oncology with the aim of improving focus and efficiency in this important therapeutic area. The formation of KDev Oncology enables Karolinska Development and its co-investors to accumulate projects within a specific therapeutic area to obtain synergies and critical mass. The goal of KDev Oncology, which started with Akinion Pharmaceuticals and then invested in GliGene, is to invest in another four to five new oncology companies. GliGene is focused on the discovery of new antagonists to the Hedgehog pathway to develop targeted cancer therapies. The investment is divided into two tranches, the first of which was paid during the fourth quarter 2011. The second investment will be made in 2012 if the company reaches established targets.

Karolinska Development invested in OSS-Q AB

Karolinska Development invested in the new medical technology company OSS-Q, which is a novel implant technology and related biocermic innovations was founded by researchers at Karolinska University Hospital and Uppsala University. The company's vision is to convert the technology into differentiating products for bone repair and to build a niche company in orthopedics, with its own sales starting with skull surgery. The market for biomaterials products in orthopedics was worth more than EUR 1.25b in 2011. The SEK 9m share issue was finalized in February 2012. Karolinska Development's investment was made in the fourth quarter of 2011. Aside from Karolinska Development, Almi Invest and Uppsala Universitets Utveckling AB also participated.

Portfolio companies

Important clinical milestones passed by Akinion and Pergamum

Akinion Pharmaceuticals initiated Phase I/II clinical study with AKN-028

Akinion Pharmaceuticals announced that the first patient has been dosed with AKN-028 in a Phase I/II clinical trial in acute myeloid leukemia (AML). The Phase I/II trial with AKN-028 is a two-part international multi-center study. AKN-028 is a targeted oral small molecule FLT3 and cKIT kinase inhibitor with a unique differentiating efficacy against leukemic cells resistant to current therapies and is administered in tablet form.

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

Pergamum announced that the last patient has been dosed in a randomized Phase II trial of PXL01 for prevention of post-surgical adhesions. In total, 138 patients undergoing hand surgery have been included in Pergamum's placebo controlled, multi-center trial in Sweden, Denmark and Germany. Many patients undergoing hand surgery suffer from debilitating scar formation, which reduces the range of motion and complicates daily activities.

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

Pergamum announced that the first patient has been dosed in a randomized Phase II study of DPK-060 for the treatment of patients with external otitis (swimmers ear). Every year more than 10 million people worldwide seek treatment for infections in the outer ear. There is a significant medical need to avoid the rapidly increasing global prevalence of antibiotics resistance, which limits the therapeutic value of conventional products. Pergamum's Phase II study is a double-blind, randomized, placebo-controlled, multi-center trial in patients with acute external otitis. The trial is expected to enroll approximately 70 patients.

FINANCIAL DEVELOPMENT FOR THE GROUP IN 2011

Revenue

Consolidated revenue for the full-year 2011 amounted to SEK 10.5m, compared with SEK 13.9m in the same period in 2010, which was primarily due to a decrease in services sold to portfolio companies.

Results

The Group's operating loss for the full-year amounted to SEK –400.7m (–345.3), a change of SEK –55.4m compared with the previous year. The increased loss was mainly due to the portion of the change in fair value affecting income, which amounted to SEK –243.8m (–225.8) in 2011. As indicated in Note 2, the value of companies recognized as subsidiaries rose by SEK 67.8m (–7.0) for the full-year. The change in the fair value of subsidiaries is not recognized in the consolidated income statement and balance sheet, since the subsidiaries are consolidated and therefore are not measured at fair value. The recognized change in fair value was mainly due to discontinued projects in the portfolio companies Avaris AB, IMED AB, Eribis AB, HBV Theranostica AB, Omnio Healer AB and BioResonator AB, which affected the result by SEK –120.3m (–37.1). Other changes in the fair value of portfolio companies which are not subsidiaries amounted to SEK –123.5m (–188.7). The Group's revenue and other expenses amounted to SEK –161.9m (–113.5). The result was adversely affected by increased operating expenses in subsidiaries, the consolidation of the former associated company Axelar AB as a subsidiary as of the second quarter, and listing costs in the Parent Company.

The Group's loss before tax amounted to SEK –405.7m (–339.3).

Financial position

The Group's equity to total assets ratio was 93 percent (97) on 31 December 2011 and equity amounted to SEK 2,173.9m (1,717.2). The decrease in the equity to total assets ratio was largely due to the increase in total assets.

Cash, cash equivalents and short-term investments amounted to SEK 620.6m on 31 December 2011, an increase of SEK 376.7m since the beginning of the year. The increase was due to the new share issue in April, which provided the Group with proceeds of SEK 563.1m after deducting issue costs.

Total assets amounted to SEK 2,345.9m (1,773.6) on 31 December 2011.

Cash flow

Cash flow for the Group amounted to SEK 56.0m in 2011. Through financing activities, SEK 608m was received in a new share issue in April in connection with an initial public offering. Subsidiaries received SEK 56.7m from non-controlling interests in connection with new issues. The Group received SEK 0.1m from warrants. After deducting issue costs of SEK –44.9m, cash flow from financing activities amounted to SEK 619.9m. Cash flow from investing activities amounted to SEK –430.4m and from operating activities to SEK –133.4m.

Investments in portfolio companies

The Group's investments for the full-year 2011 amounted to SEK 213.9m (144.6), of which investments in portfolio companies affecting cash flow amounted to SEK 119.0m (Notes 37–38).

FINANCIAL DEVELOPMENT FOR THE PARENT COMPANY

Revenue

Parent Company revenue decreased for the full-year to SEK 2.5m (11.0). The decrease was primarily due to lower sales of services to KCIF Fund Management AB, which in turn sells services to KCIF Co–Investment Fund KB.

Results

The Parent Company's operating loss for the full-year amounted to SEK –181.6m (–117.4), a change of SEK –64.2m compared with 2010. The increased loss was mainly due to write-downs of portfolio companies, listing costs and increased personnel costs. During the year, the following portfolio companies were written down: Avaris AB by SEK–53.7m, IMED AB by SEK –45.3m, Eribis AB by SEK –13.5m, Actar AB by SEK –3.2m, Limone AB by SEK –2.7m, BioResonator AB by SEK –2.5m and HBV Theranostica AB by SEK –2.4m. The share of the loss recognized by KCIF Co-Investment Fund KB resulted in a charge of SEK 2.7m during the period. Total impairment losses and shares of profits and losses amounted to SEK –126.0m during the year.

The loss after taxes for the year was SEK –187.7m (–111.3).

Investments in portfolio companies

The Parent Company invested a total of SEK 83.7m (48.4) in subsidiaries for the full-year. The largest investments (SEKm) were in Akinion Pharmaceuticals AB at SEK 30.0m, Axelar AB at SEK 20.0m, and NovaSAID AB at SEK 12.0m (Note 36).

The Parent Company invested SEK 210.0m (135.3) in associated companies and joint ventures. The largest investments were in Pergamum AB at SEK 108.1M, where loans of SEK 77.6m have been converted, Aprea AB at SEK 12.5m, BioChromix Pharma AB at SEK 10.0 and Dilafor AB at SEK 9.0m (Note 37).

The Parent Company invested SEK 3.9m (9.3) in other long-term securities holdings (Note 38).

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. The guidelines are adopted by the Annual General Meeting (Note 6).

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 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 medical 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 developments.

Four-year summary[1]

	Group			
Amounts in SEKm	**2011**	**2010**	**2009**	**2008**
Income statement				
Net sales	10	14	30	23
Operating expenses	–167	–133	–74	–64
Result of change in fair value	–244	–226	30	–30
Operating loss	**–401**	**–345**	**–14**	**–71**
Financial net	–5	6	11	13
Loss after financial items	**–406**	**–339**	**–3**	**–58**
Balance sheet				
Intangible and tangible non-current assets	705	182	4	5
Shares in joint ventures and associated companies	980	1,221	1,451	1,240
Other long-term securities holdings	25	25	33	40
Total non-current assets	**1,710**	**1,428**	**1,488**	**1,285**
	,			
Other current assets	16	102	35	68
Short-term investments	457	137	121	301
Cash and cash equivalents	163	107	395	10
Total current assets	**636**	**346**	**551**	**379**
Total assets	**2,346**	**1,774**	**2,039**	**1,664**
Equity	2,174	1,717	1,999	1,651
Deferred tax liabilities	144	34	0	0
Long-term liabilities	2	2	0	0
Current liabilities	26	21	40	13
Total equity and liabilities	**2,346**	**1,774**	**2,039**	**1,664**
Cash flow				
Cash flow from operating activities	–134	–98	–34	–18
Cash flow from investing activities	–430	–182	2	–437
Cash flow from financing activities	620	–7	416	351
Cash flow for the year	**56**	**–287**	**384**	**–104**
Key ratios				
Capital employed	2,176	1,719	1,998	1,651
Return on equity	–19%	–20%	0%	–3%
Return on capital employed	–19%	–20%	0%	–3%
Equity to total assets ratio	93%	97%	98%	99%
Average number of employees	47	37	30	21
Data per share				
Loss after tax, SEK	–8.07	–9.79	–0.10	–2.34
Equity, SEK	44.79	51.52	61.28	63.05
Net asset value, SEK (see Note 16)	44.70	53.51	62.73	62.48
Share price at year-end, SEK	24.00	–	–	–
Dividend, SEK	0.0	0.0	0.0	0.0
Share price/Equity per share	54%	–	–	–
Share price/Net asset value per share	54%	–	–	–
Number of shares at year-end	48,531,417	33,331,417	32,609,993	26,182,816
Weighted average number of shares before and after dilution	43,908,951	33,263,938	27,001,275	24,658,791

[1] Karolinska Development in its current form was founded in 2008 through a merger of the previously separately owned companies Karolinska Development I and II. For this reason, the financial history is presented from 2008.

Proposed appropriation of profit (SEK)

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

Retained loss	–207,281,301
Share premium reserve	1,778,253,602
Net loss for the year	–187,744,278
Total	**1,383,228,023**

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

To be carried forward	1,383,228,023
Total	**1,383,228,023**

For information regarding the operating results and financial position of the Group and the Parent Company, refer to the following income statements, balance sheets, 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	2011	2010
Revenue	3	10,479	13,895
Other external expenses	4, 5	–104,056	–62,559
Personnel costs	6	–59,871	–43,393
Depreciation, amortization and impairment losses on tangible and intangible non-current assets		–3,431	–27,418
Change in fair value of shares in joint ventures and associated companies	2	–236,621	–224,104
Change in fair value of other long-term securities holdings	2	–7,175	–1,685
Operating loss		–400,675	–345,264
Interest income		6,247	3,966
Interest expenses		–36	–22
Other financial gains and losses	7	–11,196	2,039
Financial net		–4,985	5,983
Loss before tax		–405,660	–339,281
Deferred taxes	8	19,987	4,697
NET LOSS FOR THE YEAR		–385,673	–334,584
Attributable to:			
Parent Company's shareholders		–354,147	–325,615
Non-controlling interests		–31,526	–8,969
TOTAL		–385,673	–334,584

Consolidated statement of comprehensive income

Amounts in SEK 000	Note	2011	2010
Net loss for the year		–385,673	–334,584
Total comprehensive income for the year		**–385,673**	**–334,584**
Attributable to:			
Parent Company's shareholders		–354,147	–325,615
Non-controlling interests		–31,526	–8,969
TOTAL		**–385,673**	**–334,584**

Earnings per share

Amounts in SEK 000	Not	2011	2010
Earnings per share attributable to Parent Company's shareholders, weighted average, before and after dilution		–8.07	–9.79
Number of shares, weighted average	16	43,908,951	33,263,938

Consolidated statement of financial position

Amounts in SEK 000	Note	31 Dec 2011	31 Dec 2010
ASSETS			
Non-current assets			
Intangible non-current assets	9	702,957	179,778
Tangible non-current assets	10	1,663	2,493
Shares in joint ventures and associated companies	11	980,276	1,220,791
Other long-term securities holdings	12	24,587	24,761
Total non-current assets		**1,709,483**	**1,427,823**
Current assets			
Accounts receivable	13	1,462	680
Other short-term receivables	14	12,432	93,054
Prepaid expenses and accrued income	15	1,886	8,138
Short-term investments	20	457,249	136,607
Cash and cash equivalents		163,347	107,325
Total current assets		**636,376**	**345,804**
TOTAL ASSETS		**2,345,859**	**1,773,627**
EQUITY AND LIABILITIES			
Equity			
Share capital	16	24,266	16,666
Share premium		1,768,179	1,212,611
Retained earnings including current period result		86,442	454,484
Equity attributable to Parent Company's shareholders		**1,878,887**	**1,683,761**
Non-controlling interests		295,041	33,414
Total equity		**2,173,928**	**1,717,175**
Liabilities			
Long-term liabilities			
Deferred taxes	8	143,585	34,195
Interest-bearing liabilities	17	2,000	2,000
Total long-term liabilities		**145,585**	**36,195**
Current liabilities			
Accounts payable		9,563	3,117
Other current liabilities	18	2,796	5,044
Accrued expenses and prepaid income	19	13,987	12,096
Total current liabilities		**26,346**	**20,257**
Total liabilities		**171,931**	**56,452**
TOTAL EQUITY AND LIABILITIES		**2,345,859**	**1,773,627**

Consolidated statement of changes in equity

Amounts in SEK 000	Note	Equity attributable to Parent Company's shareholders: Share capital	Share premium	Retained earnings incl. current year result	Total	Non-controlling interests	Total equity
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
Warrants			117		117		117
Closing equity at 31 Dec 2011	**16**	**24,266**	**1,768,179**	**86,442**	**1,878,887**	**295,041**	**2,173,928**
Opening equity at 1 Jan 2010		**16,576**	**1,201,673**	**780,099**	**1,998,348**	**0**	**1,998,348**
Net loss for the year				–325,615	–325,615	–8,969	–334,584
Total comprehensive income for the year		0	0	–325,615	–325,615	–8,969	–334,584
Business combinations					0	42,383	42,383
New share issue		90	10,956		11,046		11,046
Issue costs			–631		–631		–631
Warrants			613		613		613
Closing equity at 31 Dec 2010	**16**	**16,666**	**1,212,611**	**454,484**	**1,683,761**	**33,414**	**1,717,175**

Consolidated statement of cash flows

Amounts in SEK 000	Note	2011	2010
Operating activities			
Operating loss		–400,675	–345,264
Adjustments for depreciation, amortization and impairment losses	9, 10	3,431	27,418
Adjustments for changes in fair value	2	243,796	225,789
Change in value of short-term investments		6,435	0
Interest paid		–36	–22
Interest received		3,302	29
Cash flow from operating activities before changes in working capital		**–143,747**	**–92,050**
Cash flow from changes in working capital			
Increase (–)/Decrease (+) in operating receivables		6,223	1,745
Increase (+)/Decrease (–) in operating liabilities		4,087	–7,632
Cash flow from operating activities		**–133,437**	**–97,937**
Investing activities			
Investments in intangible non-current assets		–2,546	–2,697
Investments in tangible non-current assets		–288	–497
Acquired cash and cash equivalents in subsidiaries	23	12,878	25,213
Investments in shares in joint ventures and associated companies	37	–115,077	–135,327
Investments in other long-term securities	38	–3,915	–9,293
Short-term investments		–317,040	–11,296
Sale of shares in joint ventures/associated companies		24,833	17,881
Sale of other long-term securities		540	0
Loans provided to associated companies		–29,805	–65,870
Cash flow from investing activities		**–430,420**	**–181,886**
Financing activities			
Non-controlling interests' share of subsidiary issue		56,711	0
New share issue		608,000	19,960
Issue costs		–44,949	–27,496
Warrants		117	613
Cash flow from financing activities		**619,879**	**–6,923**
Cash flow for the year		**56,022**	**–286,746**
Cash and cash equivalents at beginning of period	20	107,325	394,071
CASH AND CASH EQUIVALENTS YEAR-END[1]	20	163,347	107,325

[1] In addition to cash and cash equivalents, the Group has at its disposal short-term investments amounting to SEK 457,249 thousand (136,607).

Income statement for the Parent Company

Amounts in SEK 000	Note	2011	2010
Net sales	27	2,467	11,007
Revenue		**2,467**	**11,007**
Other external expenses	28, 29	–32,174	–31,048
Personnel costs	30	–32,066	–25,685
Depreciation of tangible non-current assets		–67	–88
Impairment losses on shares in subsidiaries, joint ventures, associated companies and other long-term securities holdings	31	–125,961	–63,680
Result from sale of shares		6,239	–29,439
Dividends from subsidiaries		0	21,552
Operating loss		**–181,562**	**–117,381**
Interest income and similar income	32	15,053	7,821
Interest expenses and similar expenses	33	–21,236	–1,789
Financial net		**–6,183**	**6,032**
Taxes	34	0	0
NET LOSS FOR THE YEAR		**–187,745**	**–111,349**

Statement of comprehensive income for the Parent Company

Amounts in SEK 000	Note	2011	2010
Net loss for the year		–187,745	–111,349
Total comprehensive income for the year		**–187,745**	**–111,349**

Balance sheet for the Parent Company

Amounts in SEK 000	Note	31 Dec 2011	31 Dec 2010
ASSETS			
Non-current assets			
Tangible non-current assets			
Machinery and equipment	35	42	109
Financial assets			
Shares in subsidiaries	36	252,545	147,173
Shares in joint ventures	37	590,616	534,872
Shares in associated companies	37	22,277	39,118
Other long-term securities holdings	38	14,381	10,207
Other financial assets		2,080	1,515
Total non-current assets		**881,941**	**732,994**
Current assets			
Accounts receivable	40	49	129
Group receivables		74	2,072
Other receivables	41	9,441	91,431
Prepaid expenses and accrued income	42	881	7,617
Short-term investments		457,249	136,607
Cash and cash equivalents		68,319	73,208
Total current assets		**536,013**	**311,064**
TOTAL ASSETS		**1,417,954**	**1,044,058**
EQUITY AND LIABILITIES			
Equity			
Restricted equity			
Share capital	16	24,266	16,666
Unrestricted equity			
Share premium reserve		1,778,253	1,222,685
Retained earnings		–207,281	–95,932
Net loss for the year		–187,745	–111,349
Total equity		**1,407,493**	**1,032,070**
Liabilities			
Long-term liabilities			
Pension obligations		2,080	1,515
Total long-term liabilities		**2,080**	**1,515**
Current liabilities			
Accounts payable		807	991
Group liabilities		0	660
Other current liabilities	43	1,530	3,535
Accrued expenses and deferred income	44	6,044	5,287
Total current liabilities		**8,381**	**10,473**
Total liabilities		**10,461**	**11,988**
TOTAL EQUITY AND LIABILITIES		**1,417,954**	**1,044,058**

Pledged assets and contingent liabilities

Amounts in SEK 000	Note	31 Dec 2011	31 Dec 2010
Pledged assets	21	2,080	4,563
Contingent liabilities	21	26,900	2,100
Total		**28,980**	**6,663**

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 profit/loss for the period	Total equity
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	16	**24,266**	**1,778,253**	**–207,281**	**–187,745**	**1,407,493**
Opening equity at 1 Jan 2010		**16,576**	**1,211,658**	**–5,665**	**–90,267**	**1,132,302**
Appropriation of loss				–90,267	90,267	0
Net loss for the year					–111,349	–111,349
Total		**16,576**	**1,211,658**	**–95,932**	**–111,349**	**1,020,953**
New share issue		90	11,045			11,135
Issue costs			–631			–631
Warrants			613			613
Closing equity at 31 Dec 2010	16	**16,666**	**1,222,685**	**–95,932**	**–111,349**	**1,032,070**

Statement of cash flows for the Parent Company

Amounts in SEK 000	Note	2011	2010
Operating activities			
Operating loss		–181,562	–117,381
Adjustments for depreciation, amortization and impairment losses		126,029	63,379
Capital gains on sales of joint ventures and other long-term securities holdings		–6,239	29,439
Change in value of short-term investments		6,435	0
Adjustment for other non-cash items		0	–21,552
Interest paid		–6	–4
Interest received		1,990	5
Cash flow from operating activities before changes in working capital		**–53,353**	**–46,114**
Cash flow from changes in working capital			
Increase (–)/Decrease (+) in operating receivables		10,679	–3,632
Increase (+)/Decrease (–) in operating liabilities		–2,018	–1,750
Cash flow from operating activities		**–44,692**	**–51,496**
Investing activities			
Investments in tangible non-current assets		0	–18
Investments in subsidiaries	36	–83,711	–48,446
Investments in shares in joint ventures and associated companies	37	–115,077	–135,327
Investments in other long-term securities	38	–3,915	–9,293
Short-term investments		–317,040	–11,296
Sale of shares in subsidiaries		810	0
Sale of shares in joint ventures/associated companies		24,833	17,881
Sale of other long-term securities		540	0
Loans provided to associated companies		–29,805	–65,870
Cash flow from investing activities		**–523,365**	**–252,369**
Financing activities			
New share issue		608,000	19,960
Issue costs		–44,949	–27,496
Warrants		117	613
Cash flow from financing activities		**563,168**	**–6,923**
Cash flow for the year		**–4,889**	**–310,788**
Cash and cash equivalents at beginning of period		73,208	383,996
CASH AND CASH EQUIVALENTS YEAR-END[1]		**68,319**	**73,208**

[1] In addition to cash and cash equivalents, the Company has at its disposal short-term investments amounting to SEK 457,249 thousand (136,607).

Notes to the financial reports

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 14 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 the statements UFR 3-8 from the Swedish Financial Reporting Board have been applied.

The annual accounts and consolidated accounts were approved by the Board on 18 April 2012. The consolidated income statement and balance sheet and the Parent Company's income statement and balance sheet are subject to approval at the Annual General Meeting on 23 May 2012.

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 recommendations 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 and other securities holdings classified as financial assets at fair value through profit or loss as well as 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 recognized 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 the prevailing conditions. The results of these estimates and assumptions are then used to assess the carrying values 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 revision 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 revised 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 2011 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
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 standard has not yet been adopted by the EU.

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 to the financial year beginning 1 January 2013 and has not yet evaluated the full effect on the financial reports. The standard has not yet been adopted by the EU.

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 to the financial year beginning 1 January 2013 and has not yet evaluated the full effect on the financial reports. The standard has not yet been adopted by the EU.

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 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 has not yet evaluated the full effect of IFRS 13 on the financial reports. The Group intends to apply the new standard to the financial year beginning 1 January 2013. The standard has not yet been adopted by the EU.

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.
Non-current assets and long-term liabilities of the Group comprise amounts that are expected to be recovered or settled after more than twelve months from the

balance sheet date. Current assets and current liabilities of the Group essentially comprise amounts expected to be recovered or settled within twelve months from the balance sheet 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 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 influence (subsidiaries). Controlling influence implies a right to establish strategies for 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 influence or significant influence (see below).

SUBSIDIARIES

Subsidiaries are companies in which the Parent Company, Karolinska Development AB (publ), has controlling influence. Controlling influence 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 influence 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 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 change occurs.

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 a controlling influence 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 it is required that the parties who share controlling influence must give their consent with regard to financial and operational decisions related to the business.

The acquisition cost of shares in joint ventures consists of the fair values 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 income and net assets of a jointly owned company which belong to the 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 balance sheet 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 recognized 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 influence, 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 2011, 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 associated companies.

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 analysis based on information from databases, public material, interviews with scientists and doctors, etc. The portfolio valuation is a so-called "sum-of-the-parts" (SOTP) of risk-adjusted net present value (rNPV) from the DCF valuations 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 WAC"). 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 11.63% (11.68%) was used regarding biotechnological companies and 7.83% (7.88%) 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 balance sheet date.

General valuation principles
Market analysis
- Estimates are carried out regarding total population, target population, prevalence and treatable patients in the U.S., the EU and the Japanese market. These markets represent approximately 85% of global pharmaceutical sales in 2009 (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 of 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 reaching the market.

The 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 the 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 at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated into the functional currency at the exchange rate prevailing at the balance sheet 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 at the date of the transaction. Non-monetary assets and liabilities carried at fair value are retranslated into the functional currency at the rate prevailing at 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 law and analytical operations.

Revenues for services rendered are recorded for the period in which the service is performed.

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 interest being lower than the market 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 value 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 Black & Scholes option model. This will lead to a dilution for the 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 2011 and 2010.

The weighted average number of outstanding shares to determine basic earnings per share 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 balance sheet include, on the asset side, shares and participations, loans, accounts receivable, short-term investments, cash and cash equivalents. The liability side consists of borrowings 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 balance sheet when the Company becomes a party according to the instrument's contractual terms. Accounts receivable are recognized in the balance sheet 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 balance sheet 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 balance sheet 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 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 receivables
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. Karolinska Development has no financial liabilities in 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 balance sheet 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 accumulated 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. Gains or losses arising on the disposal of an asset is the difference between the sale price and the asset's carrying value, net of direct selling costs. Profits and losses are recognized as other operating income/expense.

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

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

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

Assets held for sale
Non-current assets (or disposal groups) are classified as held for sale if their carrying amount is recovered principally through sale 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.

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 and 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.

The following useful lives are used in the calculation of depreciation;

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 on the balance sheet only when it increases the future economic benefits for 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 flow 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 recoverable amount can be objectively related 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 value after reversal does not exceed the carrying value the asset would have had if no impairment had been made, taking into account the depreciation that would have been made.

Impairment losses on goodwill are not reversed.

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

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

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

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

Provisions
A provision is recognized in the balance sheet 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, by applying the tax rates enacted or substantively enacted by the balance sheet date. This includes adjustments of 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 that it is probable that the amounts can be offset against future taxable profits.

Deferred tax assets for deductible temporary differences and tax loss carried forwards 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 balance sheet 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 from 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 are primarily risks linked to the Group's investment activities and indirectly by the operational risk of 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 KIHAB as a holding company for such investments and Karolinska Institutet Innovations AB (KIAB), a wholly owned subsidiary of KIHAB, 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 84.

Karolinska Development is indirectly dependent on KIAB's ability to attract researchers with new projects and the competency of staff to be able 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. Excess liquidity in the Group is invested in money market funds or interest-bearing instruments; see also Note 20.

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 within 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 profit/loss from change in fair value in the portfolio companies for segments and consolidated profit before tax

	Net profit/loss from changes in fair value of portfolio companies	
Amounts in SEK 000	**2011**	**2010**
Subsidiaries		
Change in fair value	67,819	–6,998
Joint ventures and associated companies		
Change in fair value	–118,789	–187,001
Impairment losses	–117,832	–37,103
Other long-term securities holdings		
Change in fair value	–4,675	–1,685
Impairment losses	–2,500	0
Change in the fair value of total portfolio holdings	**–175,977**	**–232,787**
Group eliminations		
Less change in fair value of subsidiaries	–67,819	6,998
Net loss from changes in fair value	**–243,796**	**–225,789**
Consolidated revenue and other expenses	–161,864	–113,492
Consolidated profit/loss before tax	**–405,660**	**–339,281**

The aggregate loss from changes in the fair value of the portfolio companies amounted to SEK –176.0m (–232.8) after accounting for a positive change in the fair value of subsidiaries of SEK 67.8m (–7.0). The change in the fair value of subsidiaries is not recognized through profit or loss or the balance sheet, since the subsidiaries are consolidated and therefore are not measured at fair value. The Group's net loss from changes in the fair value of joint ventures, associated companies and other long-term securities holdings amounted to SEK –243.8m (–225.8).

Assets per segment

	Fair value of portfolio companies	
Amounts in SEK 000	**2011-12-31**	**2010-12-31**
Fair value of total portfolio holdings		
Subsidiaries	542,001	209,108
Joint ventures and associated companies	980,276	1,220,791
Other long-term securities holdings	24,587	24,761
Total fair value of total portfolio holdings	**1,546,864**	**1,454,660**
Less fair value of subsidiaries	–542,001	–209,108
Group	**1,004,863**	**1,245,552**

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 2010	28,396	1,450,427	33,439	1,512,262
Acquisitions during the year (Notes 11,12,36)	48,446	135,327	9,293	193,066
Reclassifications	139,264	–122,978	–16,286	0
Sale of shares	–	–17,881	–	–17,881
Change in fair value and impairment losses	–6,998	–224,104	–1,685	–232,787
Closing balance at 31 Dec 2010	**209,108**	**1,220,791**	**24,761**	**1,454,660**
Accumulated fair value				
Opening balance at 1 Jan 2011	209,108	1,220,791	24,761	1,454,660
Acquisitions during the year (Notes 11,12,36)	83,711	209,955	3,915	297,581
Reclassifications	182,173[1]	–185,799	3,626	0
Sale of shares	–810[2]	–28,050[3]	–540[4]	–29,400
Change 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**

[1] Refers to the reclassification of Axelar AB from an associated company to a subsidiary (Note 23)

[2] Refers to the sale of shares in Pharmanest AB KCIF to Co-Investment Fund KB

[3] Of which sales proceeds of SEK 3,217 thousand (IMED) have been received after the closing date, because of which the amount affecting cash flow is SEK 24,833 thousand, which consists of sales to KCIF Co-Investment Fund KB of SEK 21,811 thousand as well as distribution proceeds of SEK 3,022 thousand

[4] Refers to the sale of shares to KCIF Co-Investment Fund KB

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

Amounts in SEK 000	**31 Dec 2011**	**31 Dec 2010**
Aggregate fair value of total portfolio holding	1,546,864	1,454,660
Less fair value of consolidated subsidiaries	–542,001	–209,108
Other consolidated assets	1,340,996	528,075
Consolidated total assets	**2,345,859**	**1,773,627**

Note 3 Revenue distribution

The Group's revenue is mainly comprised of invoiced services rendered by the portfolio companies in Sweden. These services consist of management, communication, finance and administration, also including legal and analytical operations.

Revenue per significant revenue source

Amounts in SEK 000	**2011**	**2010**
Services rendered	3,213	9,393
Subsidies received	5,338	2,612
Other revenues	1,928	1,890
Total revenues	**10,479**	**13,895**

Note 4 Other external expenses

Development expenses
The Karolinska Development Group engages, through the portfolio companies, in research and development operations at an early stage. Research and development expenses in the Group amounted to SEK 63,717 thousand (26,733). No portion has been capitalized other than application fees for patents, which in 2011 amounted to SEK 2,546 thousand (2,697).

Fees and remuneration to the Group's auditors

Amounts in SEK 000	2011	2010
Deloitte		
Audit services	580	590
Audit related services	334	1,339
Tax consulting	514	492
Other services	64	116
Ernst & Young		
Audit services	15	–
Audit related services	2	–
Tax consulting	0	–
Other services	3	–
Total	**1,512**	**2,537**

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. The table below describes future leasing payments as per the closing date of each year.

Amounts in SEK 000	2011	2010
Within one year	3,867	1,124
Between one year and five years	860	80
Total	**4,727**	**1,204**

Note 6 Employees and personnel costs

Average number of employees

Full-time equivalent	2011	Of whom men	2010	Of whom men
Parent Company	16	81%	15	80%
Subsidiaries	31	39%	22	36%
Total/average	**47**	**53%**	**37**	**54%**

Remuneration expenses for employees

Amounts in SEK 000	2011	2010
Salaries and remuneration	38,790	28,267
Social security costs	13,128	8,702
Pension costs	7,066	6,424
Total	**58,984**	**43,393**

Salaries, other remunerations and social security expenses

	2011		2010	
Amounts in SEK 000	Salaries and remuneration	Social security expenses	Salaries and remuneration	Social security expenses
Parent Company	24,692	7,065	19,748	5,490
(of which pension costs)	4,188	1,016	3,269	1,047
Subsidiaries	21,164	6,063	14,943	3,212
(of which pension costs)	2,878	698	3,155	765

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 Annual General Meeting 2011, the main features of the remuneration guidelines adopted for senior executives are as follows. Karolinska Development will maintain remuneration levels and terms required to recruit and retain senior executives with the competence and experience needed for the Company to achieve its operational goals. Total remuneration to senior executives must be competitive, reasonable and appropriate. Remuneration may consist of fixed salary, variable salary in the form of incentives/profit shares, provisions for pensions and other remuneration. 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 nine-month term of notice. Karolinska Development has implemented two programs with variable salaries, one a combined share warrant and profit-sharing plan for the CEO, CFO and other senior executives of Karolinska Development which has been approved by the Annual General Meeting, and the other a profit-sharing program for all other permanent employees.

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

2011 Amounts in SEK 000	Basic salary/ Board fee	Variable remuneration	Other benefits and remuneration	Pension costs	Total remuneration
Torbjörn Bjerke, CEO	3,323		252	460	4,035
Conny Bogentoft, former CEO	1,067		4		1,071
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
Ulrica 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**	**3,390**	**20,619**

[1] The amount includes severance of SEK 792 thousand

2010 Amounts in SEK 000	Basic salary/ Board fee	Variable remu-nera-tion	Other benefits and remu-neration	Pension costs	Total remu-neration
Conny Bogentoft, former CEO	1,656		6	687	2,349
Gunnar Casserstedt, Deputy CEO	1,313		60	430	1,803
Hans Wigzell, Chairman	313				313
Per-Olof Edin, Board member	228				228
Rune Fransson, Board member	25				25
Inger Savén, Board member	283				283
Ulrica Slåne, Board member	228				228
Peter Sjöstrand, Board member	198				198
Other senior executives (5 persons)	4,952	0	12	1,409	6,373
Total	**9,196**	**0**	**78**	**2,526**	**11,800**

Severance
Torbjörn Bjerke took over as CEO of Karolinska Development on 13 January 2011. His gross salary amounts to SEK 3,384 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 types of program 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 Annual General Meetings for 2008, 2009 and 2010. There is 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 Black & Scholes option model, and are not associated with any vesting conditions.

Optionsprogram	Number	Allocation date[2]	Redemption period	Issue price per warrant	Redemp-tion price per share
Warrant program 2008	121,750	2008	1Oct 2012–31 Dec 2012	7.40	91.1
Supplemental warrant I 2008[1]	13,246	2009	1Oct 2012–31 Dec 2012	3.24	120.0
Supplemental warrant II 2008[1]	28,149	2010	1Oct 2012–31 Dec 2012	4.63	93.0
Supplemental warrant III 2008[1]	55,653	2011	1Oct 2012–31 Dec 2012	0.87	47.0
Warrant program 2009	72,075	2009	1Oct 2013–31 Dec 2013	4.93	120.0
Supplemental warrant I 2009[1]	11,625	2010	1Oct 2013–31 Dec 2013	7.02	93.0
Supplemental warrant II 2009[1]	29,551	2011	1Oct 2013–31 Dec 2013	1.06	56.0
Warrant program 2010	78,888	2010	1Oct 2014–31 Dec 2014	5.07	124.0
Supplemental warrant I 2010[1]	31,853	2011	1Oct 2014–31 Dec 2014	1.17	66.0
Total	**442,790**				

[1] Participants in the programs have been invited to subscribe for additional warrants due to an increase in the number of shares in Karolinska Development, referred to as "supplemental warrants" to compensate for dilution. The warrants carry similar terms as the other warrants in issue.

[2] The warrants have been allocated at the Annual General Meeting of each year

	2011		2010	
Amounts in SEK 000	No. of warrants	Weighted redemption price	No. of warrants	Weighted redemption price
At beginning of the year	325,733	106.86	207,071	103.01
Allocation during the year	117,057	54.44	118,662	113.61
Closing balance	**442,790**	**93.01**	**325,733**	**106.86**

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.

Note 7 Other financial gains and losses

Amounts in SEK 000	2011	2010
Change in value of short-term investments	10,036	3,904
Foreign currency exchange rate gains and losses	–2	–870
Impairment of receivables from joint ventures and associated companies	–21,230	0
Impairment of convertible debentures	0	–995
Total	**–11,196**	**2,039**

Note 8 Taxes

Reconciliation of effective tax rate

Amounts in SEK 000	%	2011	%	2010
Profit/loss before tax		–405,660		–339,281
Income tax expense calculated at applicable rate in the Parent Company	26.3%	106,689	26.3%	89,231
Tax effect of				
Non-deductible expenses		–1,096		–14
Tax-exempt revenue		1,641		0
Items recognized directly against equity		11,822		
Changes in fair value, non-taxable		–64,118		–59,383
Capitalization of deferred tax loss carryforwards in subsidiaries		–19,987		0
Increase in tax loss carryforwards without corresponding capitalization of deferred taxes		–34,951		–29,834
Recognized current tax	**0.0%**	**0**	**0.0%**	**0**
Change in deferred tax		19,987		4,697
Recognized deferred tax	**4.9%**	**19,987**	**1.4%**	**4,697**
Total recognized tax	**4.9%**	**19,987**	**1.4%**	**4,697**

Recognized in the balance sheet
Temporary differences exist in the event the assets' or liabilities' carrying amounts and fiscal values differ.

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

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Intangible non-current assets[1]	–182,343	–45,770
Tax loss carryforwards[2]	38,758	11,575
Deferred tax assets/tax liabilities, net	**–143,585**	**–34,195**

[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 loss carryforwards
At beginning of the year 2010	0	0
Acquired subsidiaries	51,727	–12,835
Recognized through profit or loss	–5,957	1,260
Closing balance 2010	**45,770**	**–11,575**
At beginning of the year 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**

Unrecognized deferred tax assets and liabilities
Deductible temporary differences and tax loss carryforwards for which deferred tax assets have not been recognized through profit or loss and the balance sheets 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 loss carryforwards to offset against future taxable profits, despite that there is no time limit on these tax loss carryforwards. Unrecognized deferred tax assets amounted to SEK 64,284 thousand (40,482) at year-end 2011, of which SEK 30,632 thousand (30,632) relates to deficits that are restricted from Group contributions and mergers.

Note 9 Intangible non-current assets

Ongoing development projects

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Accumulated acquisition cost		
At beginning of the year	196,688	0
Acquisitions of subsidiaries (Note 23)	519,289	196,688
Closing balance	**715,977**	**196,688**
Accumulated impairments		
At beginning of the year	–22,656	0
Impairments for the year	0	–22,656
Closing balance	**–22,656**	**–22,656**
Carrying amount	**693,321**	**174,032**

The carrying amount above is comprised of the acquisition cost of subsidiaries; see acquisitions for the year in Note 23. Karolinska Development and its portfolio companies regularly assess projects, their potential and the progress of development activities. In 2010 a decision was made that impacted the carrying value of certain of acquired development projects. As a consequence, the recoverable amount related to these projects could not be supported and an impairment loss was recognized.

Patents, licenses and similar rights

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Accumulated acquisition cost		
At beginning of the year	8,141	28
Acquisition of subsidiaries (Note 23)	3,657	5,416
Capitalized expenses during the year	2,546	2,697
Reclassifications	–64	0
Closing balance	**14,280**	**8,141**
Accumulated amortization and impairments		
At beginning of the year	–2,395	0
Amortization for the year	–2,249	–2,395
Closing balance	**–4,644**	**–2,395**
Carrying amount	**9,636**	**5,746**

Note 10 Tangible non-current assets

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Accumulated acquisition cost		
At beginning of the year	6,608	5,519
Business combinations	0	627
Acquisitions during the year	288	497
Disposals	0	–35
Reclassifications	64	0
Closing balance	**6,960**	**6,608**
Accumulated depreciation and impairments		
At beginning of the year	–4,115	–2,945
Depreciation for the year	–1,182	–1,181
Disposals	0	11
Closing balance	**–5,297**	**–4,115**
Carrying amount	**1,663**	**2,493**

Finance leases

The Group did not enter into any finance leases in 2011, 2010 or any prior period.

Note 11 Shares in joint ventures and associated companies

Amounts in SEK 000	2011	2010
Accumulated acquisition cost		
At beginning of the year	1,220,791	1,450,427
Acquisitions during the year (Note 37)	209,955	135,327
Reclassification to subsidiaries (Note 23)	–182,173	–139,264
Reclassification from other long-term securities holdings	3,000	16,286
Reclassification to other long-term securities holdings	–6,626	0
Sales of associated companies	–28,050	–17,881
Change in fair value in profit/loss for the year	–236,621	–224,104
Closing balance	**980,276**	**1,220,791**

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 a 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 balance sheet, 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 23.

The companies that have been reclassified from other long-term securities holdings were done because Karolinska Development, on the reporting date, had obtained controlling influence or joint control. The Company that was reclassified to other long-term securities holdings was done because of reduced influence through dilution.

Note 12 Other long-term securities holdings

Amounts in SEK 000	2011	2010
Accumulated acquisition cost		
At beginning of the year	24,761	33,439
Acquisitions during the year (Note 38)	3,915	9,293
Sale of other long-term securities holdings	–540	0
Reclassification to joint ventures and associated companies	–3,000	–16,286
Reclassification from joint ventures and associated companies	6,626	0
Change in fair value in profit/loss for the year	–7,175	–1,685
Total fair value	**24,587**	**24,761**

Note 13 Accounts receivable

Maturity structure

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Receivables not past due	1,462	517
Overdue receivables without provision		
1–30 days	0	162
31–90 days	0	1
91–180 days	0	0
>180 days	0	0
Total	**1,462**	**680**

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

Note 14 Other current receivables

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Financial receivables		
Receivables from joint ventures and associated companies	3,675	83,870
Short-term portion of restricted bank accounts	0	5,879
Total financial receivables	**3,675**	**89,749**
Other current receivables		
Tax receivable	1,371	276
VAT receivable	2,874	2,850
Other	4,512	179
Total other current receivables	**8,757**	**3,305**
Total	**12,432**	**93,054**

Karolinska Development normally invests in portfolio companies, but in certain cases other financing solutions can be arranged temporarily. Accordingly, Karolinska Development granted short-term loans to Oncopeptides AB and Dilafor AB in 2011. The loans are interest bearing and mature or are converted to shares within 12 months. Of the loan receivables in 2010, SEK 3,500 thousand has been written down related to Avaris AB and the remainder has been converted to shares.

Note 15 Prepaid expenses and accrued income

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Prepaid rental expenses	677	527
Accrued interest income	93	3,937
Insurance premiums	46	138
Prepaid issue expenses	0	2,985
Other	1,070	551
Total	**1,886**	**8,138**

Note 16 Equity

Changes in share capital

Year	Transaction	No. of shares	Increase in share capital	Share capital	No. of A shares	No. of B shares	Subscription price	Par value
Total per 2010-01-01		**32,609,993,**		**16,304,997**	**1,503,098**	**31,106,895**		**0.5**
January 2010	Share issue	541,824	270,912	16,575,909	0	541,824	62	0.5
April 2010	Share issue	179,600	89,800	16,665,709	0	179,600	62	0.5
Total per 31 Dec 2010		**33,331,417**		**16,665,709**	**1,503,098**	**31,828,319**		**0.5**
April 2011	Share issue	15,200,000	7,600,000	24,265,709		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**

Net asset value per share

	Group	
Amounts in SEK 000	**31 Dec 2011**	**31 Dec 2010**
Net assets		
Cash and cash equivalents	163,347	107,325
Short-term investments	457,249	136,607
Financial receivables	3,675	89,749
Financial liabilities	–2,000	–4,831
Total net assets	**622,271**	**328,850**
Estimated fair value of portfolio companies including subsidiaries	1,546,864	1,454,660
Total net asset value	**2,169,135**	**1,783,510**
Number of shares	**48,531,417**	**33,331,417**
Net asset value per share	**44.70**	**53.51**

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.

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). As of 31 December 2011, 218,798 warrants, 113,251 warrants and 110,741 warrants have been acquired through the three 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 2011 or 2010.

Earnings per share basic and diluted

Amounts in SEK 000	2011	2010
Loss for the year attributable to the Parent Company's shareholders	–354,147	–325,615
Weighted average number of shares	43,908,951	33,263,938
Loss per share, SEK	**–8.07**	**–9.79**

Note 17 Interest-bearing liabilities

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Long-term liabilities		
Loans payable to Almi Företagspartner and Innovationsbron	2,000	2,000
Total	**2,000**	**2,000**

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

Note 18 Other current liabilities

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
VAT liabilities	0	557
Other taxes and fees	2,747	1,011
Other	49	3,476
Total	**2,796**	**5,044**

Note 19 Accrued expenses and deferred income

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Accrued holiday pay, etc.	4,077	2,560
Accrued remuneration to Board of Directors	1,389	894
Accrued auditor and consultant fees	993	1,087
Accrued employer's contributions	334	2,244
Deferred subsidies	2,612	3,153
Other	4,582	2,158
Total	**13,987**	**12,096**

Note 20 Financial assets and liabilities

Financial assets and liabilities by category

	Financial assets at fair value through profit or loss					
Amounts in SEK 000	Financial assets designated at FVTPL	Held for trading	Loan and receivables	Other financial liabilities	Total carrying amount	Fair value
2011						
Shares and participations	1,004,863				1,004,863	1,004,863
Accounts receivable			1,462		1,462	1,462
Current loan receivables			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	**1,625,459**	**0**	**5,137**	**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**
2010						
Shares and participations	1,245,552				1,245,552	1,245,552
Accounts receivable			680		680	680
Current loan receivables			83,870		83,870	83,870
Short-term investments	136,607				136,607	136,607
Cash and cash equivalents	107,325				107,325	107,325
Total	**1,489,484**	**0**	**84,550**	**0**	**1,574,034**	**1,574,034**
Owed to credit institutions				2,000	2,000	2,000
Accounts payable				3,117	3,117	3,117
Total				**5,117**	**5,117**	**5,117**

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 with a maturity exceeding three months.

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

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

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

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

Group's assets and liabilities 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**

Group's assets and liabilities measured at fair value as of 31 December 2010

Amounts in SEK 000	Level 1	Level 2	Level 3	Total
Financial assets				
Shares and participations	0	0	1,245,552	1,245,552
Short-term investments	136,607	0	0	136,607
Cash and cash equivalents	107,325	0	0	107,325
Total	**243,932**	**0**	**1,245,552**	**1,489,484**
Financial liabilities	**0**	**0**	**0**	**0**
Total	**0**	**0**	**0**	**0**

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 of shares in joint ventures and associated companies	–236,621	–	–236,621
Result from changes in fair value of other long-term securities holdings	–	–7,175	–7,175
Total	**–236,621**	**–7,175**	**–243,796**

Changes in financial assets on level 3 in 2010

Amounts in SEK 000	Shares in joint ventures/ associated companies	Other long-term securities holdings	Total
At beginning of the year	1,450,427	33,439	1,483,866
Total recognized gains and losses	–224,104	–1,685	–225,789
Acquisitions	135,327	9,283	144,610
Sales	–17,881	0	–17,881
Reclassifications	16,286	–16,286	0
Reclassifications to subsidiaries	–139,264	0	–139,264
Transfers to level 2	0	0	0
Transfers to level 1	0	0	0
Carrying amount at year-end	**1,220,791**	**0**	**1,245,542**
Gains and losses in profit/loss for the year for assets included in the closing balance			
Result from changes in fair value of shares in joint ventures and associated companies	–224,014	–	–224,014
Result from changes in fair value of other long-term securities holdings	–	–1,685	–1,685
Total	**–224,014**	**–1,685**	**–225,699**

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."

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 2011, Biotechnology WACC was 11.63% (11.68%) and Pharma WACC was 7.83% (7.88%).

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: 11.63% Pharma WACC: 7.83%	WACC adjustment +1%	
Amounts in SEKm	Fair value	Change	Fair value	Fair value	Change
Fair value difference for shares in portfolio companies	1,761.3	214.4	1,546.9	1,361.9	–185.0

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 overall objective of the finance function is to provide cost-effective financing and to minimize adverse effects on its earnings by 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 balance sheet 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 and 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 2011	31 Dec 2010
Accounts receivable	1,462	680
Other current receivables	12,432	93,054
Short-term investments	457,249	136,607
Cash and cash equivalents	163,347	107,325
Maximal exposure to credit risk	**634,490**	**337,666**

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

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

Liquidity risk
Liquidity risk is the risk that the Group cannot meet its short-term payment obligations. The Group's guidelines state that the liquidity reserve must remain at such a level that it meets the Group's ongoing liquidity requirements and requirements for investments in portfolio companies for the following six-month period. The Company's liquid funds on the balance sheet 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, while at the same time placing conditions on co-investors. The Group's investment guidelines require surplus liquidity to be managed by an outside administrator. The portfolio is required to maintain an average duration of not longer than 1.5 years and to be invested in fixed-income funds or interest-bearing instruments.

Amounts in SEK 000	Within 3 months	3–12 months	1–5 years	Over 5 years	Total
2011					
Interest-bearing long-term 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**
2010					
Interest-bearing long-term liabilities	0	0	2,000	0	2,000
Accounts payable and other liabilities	3,117	0	0	0	3,117
Other current liabilities	5,044	0	0	0	5,044
Total	**8,161**	**0**	**2,000**	**0**	**10,161**

Management of capital risks
The 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.

Note 21 Pledged assets and contingent liabilities

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Pledged assets		
Restricted cash	0	3,048
Endowment insurance	2,080	1,515
Total pledged assets	**2,080**	**4,563**
Investment commitments		
Uminova	400	600
Biocelex	500	1,500
Other contingent liabilities		
Axelar	26,000	–
Total contingent liabilities	**26,900**	**2,100**
Total	**28,980**	**6,663**

Restricted cash
In connection with the divestment of Cogmed, Karolinska Development received consideration for the entire holding, a portion of which was not released until certain conditions were met. This occurred in 2011 and the restricted account was closed.

Endowment insurance
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 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.

Investment commitments
During the year, Karolinska Development entered into an investment commitment related to Axelar AB amounting to SEK 50.0m. No additional investment commitments exist.

Other contingent liabilities
Axelar
In the event of a transfer of Axelar's project, the Company is committed to issue a maximum of SEK 26m to the project's previous owners as contingent consideration.

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 amounts 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 2010, the accumulated loss was SEK –944m.

The basis of calculation for the success fee is adopted after the Annual General Meeting in 2012. Since the calculation for 2011 leads to a negative accumulated result, no success fee will be charged for 2011.

Note 22 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 2011 amounted to SEK 0.

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

Compensation and profit distribution
KFMAB 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, KFMAB 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 KFMAB and therefore considers FMAB to be a subsidiary. The indirect ownership in the portfolio companies through KCIF holding has been included in Karolinska Development's share of the portfolio companies.

Amounts in SEK 000	31 Dec 2011 Liability to associate	31 Dec 2011 Receivable from associate	31 Dec 2010 Liability to associate	31 Dec 2010 Receivable from associate
Associate relationship				
Karolinska Institutet Holding Group	452	511	119	2
Joint ventures and associated companies	60	3,905	0	83,881
Total	**512**	**4,416**	**119**	**83,883**

Amounts in SEK 000	2011 Sale of services	2011 Purchase of services	2010 Sale of services	2010 Purchase of services
Associate relationship				
Owner: Karolinska Institutet Holding Group	104	6,630	146	5,246
(Of which rental cost)		(2,749)		(1,176)
KCIF Co-Investment Fund KB	0	0	7,038	0
Other joint ventures and associated companies	2,699	498	3,072	15
Total	**2,803**	**7,128**	**10,256**	**5,261**

For a description of remunerations to senior executives see note 6.

Note 23 Business combinations

Axelar AB was previously recognized as an associated company and measured at fair value with changes in fair value recognized through profit or loss. As a result of an amended shareholder agreement, Karolinska Development has controlling interest in the company as of the second quarter 2011, due to which it is classified as a subsidiary and consolidated in the Group. This means that the full income statement, statement of financial position and cash flows for this company are now consolidated and that the holding is no longer recognized at fair value. The net assets are recognized in consolidated financial statements, including non-controlling interests. Recognition of the acquisition price does not imply that any cash consideration has been paid.

Acquisitions of subsidiaries

Subsidiary	Operations	Acquisition date	Share of acquired equity that carries voting rights, %	Acquisition cost
Axelar AB	Biotechnological research and development	1 April 2011	44.98%	182,173
Total acquisition cost				**182,173**

Acquisition cost

Amounts in SEK 000	Invested amount	Change in fair value	Total
Axelar AB	28,342	153,831[1]	182,173
Total acquisition cost			**182,173**

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

Acquired assets and assumed liabilities on the acquisition date

Amounts in SEK 000	Axelar AB Fair value	Axelar AB Carrying amount
Patents, licenses and similar rights	3,657	3,657
Development projects in progress	519,289	0
Deferred tax assets from fiscal deficit	7,196	0
Other current receivables	465	465
Prepaid expenses and accrued income	95	95
Cash and cash equivalents	12,878	12,878
Deferred tax liabilities on development projects in progress	–136,573	0
Accounts payable	–746	–746
Other current liabilities	–80	–80
Accrued expenses and deferred income	–1,174	–1,174
Net identifiable assets and liabilities	**405,007**	**15,095**
Less non-controlling interests	–222,834	
Acquisition cost	**182,173**	

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
Axelar AB	0	–35 371

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
Axelar AB	0	–41 707

Note 24 Significant events after the balance sheet date

See Directors' report, pages 56.

Note 25 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 3-8 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 the 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 balance sheet 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 balance sheet as a financial asset. The pension obligation is recognized as a provision for an equal amount.

Note 26 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. The consolidated financial statements for the year 2011 consist of the Parent Company and its subsidiaries, collectively referred to as the Group.

Note 27 Revenue distribution

Amounts in SEK 000	2011	2010
Revenues from services from Group companies	1,433	8,490
Invoiced costs	1,034	2,517
Total revenue	**2,467**	**11,007**

Note 28 Other external expenses

Auditor and consultant fees

Amounts in SEK 000	2011	2010
Deloitte		
Audit services	450	500
Audit related services	334	1,339
Tax consulting	514	492
Other services	64	116
Total	**1,362**	**2,447**

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 29 Operating leases

During the year, lease payments for premises have been expensed in an amount equivalent to SEK 1,489 thousand (1,182). Future leasing fees are to be paid according to the table below.

Amounts in SEK 000	2011	2010
Within one year	1,350	886
Between one and five years	0	0
Total	**1,350**	**886**

Note 30 Employees and employee benefit expenses

Average number of employees

Full-time equivalent	2011	Of whom men	2010	Of whom men
Parent Company	16	81%	15	80%
Total	**16**	**81%**	**15**	**80%**

Employee benefits

Amounts in SEK 000	2011	2010
Salaries and remuneration	20,504	16,479
Social security costs	7,065	5,490
Pension costs	4,188	3,269
Total	**31,757**	**25,238**

Salaries and other remuneration distributed between Board members and other employees

	2011		2010	
Amounts in SEK 000	Board and CEO	Other employees	Board and CEO	Other employees
Salaries and remuneration	7,970	12,534	2,937	13,542
Pension costs	880	3,308	687	2,582
Total	**8,850**	**15,842**	**3,624**	**16,124**

Note 31 Impairment

Amounts in SEK 000	2011	2010
Impairment of shares in subsidiaries	–5,871	–35,116
Impairment of shares in joint ventures and associated companies	–117,590	–25,682
Impairment of other long-term securities holdings	–2,501	–2,882
Total	**–125,962**	**–63,680**

Note 32 Interest income and similar income

Amounts in SEK 000	2011	2010
Interest income	5,017	3,917
Change in value of short-term investments	10,036	3,904
Total	**15,053**	**7,821**

Note 33 Interest expenses and similar expenses

Amounts in SEK 000	2011	2010
Interest expenses	–6	–8
Exchange rate losses	0	–786
Impairment of receivables from joint ventures and associated companies	–21,230	0
Impairment of convertible debentures	0	–995
Total	**–21,236**	**–1,789**

Note 34 Taxes

Amounts in SEK 000	%	2011	%	2010
Profit/loss before tax		–187,745		–111,349
Income tax expense calculated at applicable rate in the Parent Company	26,3%	49,377	26.3%	29,285
Tax effect of				
Non-deductible expenses		–39,038		–23,779
Tax-exempt income		1,641		5,668
Items recognized directly against equity		11,822		
Increase in tax loss carryforwards without corresponding capitalization of deferred tax		–23,802		–11,174
Recognized tax	**0,0%**	**0**	**0.0%**	**0**

Unrecognized deferred tax assets

Deductible temporary differences and tax loss carryforwards for which deferred tax assets have not been recognized through profit or loss or the balance sheet 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 loss carryforwards. Unrecognized deferred tax assets for Karolinska Development as of 31 December 2011 amounted to SEK 64,284 thousand (40,482), of which SEK 30,632 thousand (30,632) refers to deficits that are restricted from Group contributions and mergers.

Note 35 Tangible non-current assets

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Accumulated acquisition cost		
At beginning of the year	422	404
Acquisitions during the year	0	25
Sales and disposals	0	–7
Closing balance	**422**	**422**
Accumulated depreciation and impairments		
At beginning of the year	–313	–225
Depreciation for the year	–67	–88
Sales and disposals	0	0
Closing balance	**–380**	**–313**
Carrying amount	**42**	**109**

Note 36 Shares in subsidiaries

Amounts in SEK 000	2011	2010
Accumulated book value		
At beginning of the year	147,173	28,496
Acquisitions during the year	83,711	48,446
Reclassifications from joint ventures and associated companies	28,342	105,347
Sales	–810	0
Impairment	–5,871	–35,116
Closing balance, book value	**252,545**	**147,173**

Specification of the Parent Company's direct holdings in subsidiaries

Name	Ownership interest in Parent Company[1]		Book value in Parent Company	
Belopp i KSEK	**31 Dec 2011**	**31 Dec 2010**	**31 Dec 2011**	**31 Dec 2010**
Actar AB	100.00%	99.96%	3,679	6,844
Akinion Pharmaceuticals AB	88.09%	78.64%	48,070	18,070
Axelar AB[2]	40.03%	–	48,343	–
ClanoTech AB	86.94%	86.32%	37,194	34,695
Inhalation Sciences Sweden AB	72.11%	66.62%	24,238	17,238
KCIF Fund Management AB	37.50%	37.50%	43	43
KD Incentive AB	100.00%	100.00%	200	100
KDev Oncology AB, formerly SoftCure Pharmaceuticals AB	100.00%	100.00%	1,000	0
Limone AB	100.00%	100.00%	296	0
NovaSAID AB	88.91%	87.73%	74,407	62,407
Pharmanest AB*	52.47%	48.56%	15,075	7,776
Total book value			**252,545**	**147,173**

[1] 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 influence

[2] Axelar AB has been reclassified from an associated company to a subsidiary as of 1 April 2011 as a result of a new shareholder agreement which gives Karolinska Development controlling influence in the company (see also Note 23). The new share issue during the second quarter 2011 caused a dilution. A decision has been made on an additional share issue, after which Karolinska Development will hold approximately 49.7 percent of the total number of shares outstanding

*The Karolinska Development Group also has an indirect ownership interest through KCIF Co-Investment Fund KB; see table in Note 37 Associated companies' shareholdings

Subsidiaries' holdings of shares

KDev Oncology AB	Ownership interest in KDev Oncology Group[1]		Indirect ownership in Karolinska Development AB	
Amounts in SEK 000	**31 Dec 2011**	**31 Dec 2010**	**31 Dec 2011**	**31 Dec 2010**
Karolinska Development's indirect ownership interest amounts to 100%				
GliGene AB*	9.20%	–	9.20%	–

[1] Ownership interest corresponds to share of votes

*The Karolinska Development Group also has an indirect ownership interest through KCIF Co-Investment Fund KB; see table in Note 37 Associated companies' shareholdings

Investments in subsidiaries

Amounts in SEK 000	2011	2010
Actar AB	2	0
Akinion Pharmaceuticals AB	30,000	10,000
Axelar AB	20,000	0
ClanoTech AB	2,499	16,000
Inhalation Sciences Sweden AB	7,000	6,058
KD Incentive AB	100	0
KDev Oncology AB, formerly SoftCure Pharmaceuticals AB	1,000	0
Limone AB	3,000	15,000
NovaSAID AB	12,000	388
Pharmanest AB	8,110	1,000
Total investments in subsidiaries	**83,711**	**48,446**

Note 37 Shares in joint ventures and associated companies

Amounts in SEK 000	2011	2010
Accumulated book value		
At beginning of the year	573,990	600,207
Acquisitions during the year	209,955	135,327
Reclassifications to other long-term securities holdings	–3,300	16,405
Reclassifications to subsidiaries	–28,342	–105,347
Sales	–21,820[1]	–46,920
Impairment	–117,590	–25,682
Closing balance, book value	**612,893**	**573,990**

[1] Cash flow affecting sales amounted to SEK 24,833 thousand, which includes distribution proceeds related to OncoReg AB and Independent Pharmaceutica AB

Specification of Parent Company's direct holdings in joint ventures

	Ownership interest in the Parent Company[1]		Book value in the Parent Company	
Amounts in SEK 000	31 Dec 2011	31 Dec 2010	31 Dec 2011	31 Dec 2010
Aprea AB*	40.19%	43.18%	46,199	36,485
Athera Biotechnologies AB*	59.39%	69.07%	74,797	78,097
Avaris AB	68.40%	67.75%	0	51,850
BioChromix Pharma AB	65.55%	50.34%	19,350	9,350
Bioneris AB (in liquidation)	26.31%	26.31%	0	0
Biosergen AS	60.26%	50.97%	21,370	15,114
Calabar International AB (divested)	–	63.17%	–	0
Dilafor AB	54.76%	53.60%	88,831	79,830
Dilaforette Holding AB	57.96%	–	7,188	–
Eribis Pharmaceuticals AB (divested)	–	39.02%	–	10,970
HBV Theranostica AB (dormant)	72.52%	70.73%	0	2,190
IMED AB (divested)	–	57.38%	–	45,307
Lipidor AB	39.98%	30.01%	9,000	4,003
NeoDynamics AB	25.74%	22.58%	11,097	7,551
NT-NeuroTheraputics AB (liquidated)	–	51.85%	–	0
Oncopeptides AB	43.36%	42.32%	22,914	18,536
OncoReg AB (liquidated)	–	88.91%	–	0
Pergamum AB	61.93%	59.75%	210,850	102,786
Promimic AB[2]	–	24.50%	–	8,101
ProNoxis AB	19.83%	14.16%	5,500	3,000
Umecrine Cognition AB	48.94%	40.00%	14,700	7,000
Umecrine Mood AB*	37.63%	43.00%	25,112	22,530
XSpray Microparticles AB*	58.49%	64.85%	33,708	32,172
Total book value			**590,616**	**534,872**

[1] 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 influence

[2] Promimic AB has been reclassified to associated companies after Karolinska Development changed its influence over this company through amendments to the shareholder agreement

*The Karolinska Development Group also has an indirect ownership interest through KCIF Co-Investment Fund KB; see table below, Associated companies' shareholdings

Joint ventures' shareholdings

Pergamum AB	Ownership interest in Pergamum Group[1]		Indirect ownership in Karolinska Development AB	
Amounts in SEK 000	31 Dec 2011	31 Dec 2010	31 Dec 2011	31 Dec 2010
Karolinska Development's indirect ownership interest amounts to 61.93%				
Laurantis Pharma OY	9.80%	9.80%	6.07%	5.86%
DermaGen AB	100.00%	100.00%	61.93%	59.75%
Lipopeptide AB	100.00%	100.00%	61.93%	59.75%
PharmaSurgics in Sweden AB	100.00%	100.00%	61.93%	59.75%

Dilaforette Holding AB	Ownership interest in Dilaforette Holding Group[1]		Indirect ownership in Karolinska Development AB	
Amounts in SEK 000	31 Dec 2011	31 Dec 2010	31 Dec 2011	31 Dec 2010
Karolinska Development's indirect ownership interest amounts to 57.96%				
Dilaforette AB	100.00%	–	57.96%	–

[1] Ownership interest corresponds to share of votes

Specification of the Parent Company's direct holdings in associated companies

Name	Ownership interest in the Parent Company[1]		Book value in the Parent Company	
Amounts in SEK 000	31 Dec 2011	31 Dec 2010	31 Dec 2011	31 Dec 2010
Axelar AB[2]	–	44.98%	–	28,342
CytoGuide ApS[3]	–	11.00%	–	3,300
KCIF Co-Investment Fund KB	26.00%	26.00%	10,527	7,476
Oss-Q AB*	14.31%	–	3,650	–
Promimic AB[4]	24.50%	–	8,100	–
Total book value			**22,277**	**39,118**

[1] 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 influence

[2] Axelar AB has been reclassified from an associated company to a subsidiary as of 1 April 2011 as a result of a new shareholder agreement which gives Karolinska Development controlling influence in the company (see also Note 23)

[3] CytoGuide ApS has been reclassified to other long-term securities holdings as a result of dilution

[4] Promimic AB has been reclassified from joint venture after Karolinska Development changed its influence over this company through amendments to the shareholder agreement

*The Karolinska Development Group also has an indirect ownership interest through KCIF Co-Investment Fund KB; see table below, Associated companies' shareholdings

Associated companies' shareholdings

KCIF Co-Investment Fund KB	Ownership interest in KCIF Co-Investment Fund KB[1]		Indirect ownership in Karolinska Development AB	
Amounts in SEK 000	**31 Dec 2011**	**31 Dec 2010**	**31 Dec 2011**	**31 Dec 2010**
Karolinska Development's indirect ownership interest amounts to 26%				
Pharmanest AB	15.62%	12.88%	4.06%	3.35%
Aprea AB	3.58%	–	0.93%	–
Athera Biotechnologies AB	10.76%	–	2.80%	–
BioChromix AB	3.15%	–	0.82%	–
GliGene AB	3.58%	–	0.93%	–
Oss-Q AB	5.29%	–	1.38%	–
Umecrine Mood AB	2.62%	–	0.68%	–
XSpray Microparticles AB	8.89%	–	2.31%	–

[1] Ownership interest corresponds to share of votes

Investments in joint ventures and associated companies

Amounts in SEK 000	**2011**	**2010**
Aprea AB*	12,470	0
Athera Biotechnologies AB*	8,760	44,667
Avaris AB	1,800	10,000
Axelar AB[1]	0	7,876
BioChromix Pharma AB	10,000	3,000
Biosergen AS	6,256	1,526
Dilafor AB	9,000	16,903
Dilaforette Holding AB	7,188	0
Eribis Pharmaceuticals AB	2,490	2,730
HBV Theranostica AB	200	400
IMED AB	0	14,500
KCIF Co-Investment Fund KB	5,834	4,921
Lipidor AB	4,997	2,803
NeoDynamics AB	3,546	0
Oncopeptides AB	4,378	0
Oss-Q AB[1]*	3,650	0
Pergamum AB	108,065	0
Pharmanest AB[1]*	0	7,745
Promimic AB	0	2,600
ProNoxis AB	2,500	0
Umecrine Cognition AB	7,700	0
Umecrine Mood AB*	5,286	4,730
XSpray Microparticles AB*	5,835	10,927
Total investments in joint ventures and associated companies	**209,955**	**135,327**

[1] Has been reclassified to subsidiaries

* The Karolinska Development Group also has an indirect ownership interest through KCIF Co-Investment Fund KB; see table below, Associated companies' shareholdings

Non-cash investments in joint ventures and associated companies

Amounts in SEK 000	**2011**	**2010**
Conversions of previously issued loans		
Aprea AB	5,900	0
Biosergen AS	2,425	0
Dilaforette Holding AB	4,000	0
NeoDynamics AB	546	0
Oncopeptides AB	4,378	0
Pergamum AB	77,629	0
Total non-cash investments	**94,878**	**0**

Note 38 Other long-term securities holdings

Amounts in SEK 000	**2011**	**2010**
Accumulated book value		
At beginning of the year	10,207	20,201
Acquisitions during the year	3,915	9,293
Reclassifications from joint ventures and associated companies	3,300	–16,405
Sales	–540	0
Impairment	–2,501	–2,882
Closing balance, book value	**14,381**	**10,207**

Specification of the Parent Company's direct holdings in other long-term securities

Name	Ownership interest in the Parent Company[1]		Book value in the Parent Company	
Amounts in SEK 000	**31 Dec 2011**	**31 Dec 2010**	**31 Dec 2011**	**31 Dec 2010**
BioArctic NeuroScience AB	3.17%	3.17%	600	600
BioChromix AB*	8.52%	–	2,374	–
BioResonator AB (in liquidation)	7.62%	7.62%	0	2,500
CytoGuide ApS[2]	9.06%	–	3,300	–
Independent Pharmaceutica AB (liquidated)	–	5.98%	–	0
InDex Pharmaceuticals AB (divested)	–	0.003%	–	0
NephroGenex Inc.	0.58%	0.58%	709	709
Umecrine AB	10.41%	10.01%	7,398	6,398
Total book value			**14,381**	**10,207**

[1] 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 influence

[2] CytoGuide ApS has been reclassified from associated companies as a result of dilution

* The Karolinska Development Group also has an indirect ownership interest through KCIF Co-Investment Fund KB; see table below, Associated companies' shareholdings

Shares in other long-term securities holdings

BioChromix AB	Ownership interest in BioChromix Group[1]		Indirect ownership in Karolinska Development AB	
Amounts in SEK 000	**31 Dec 2011**	**31 Dec 2010**	**31 Dec 2011**	**31 Dec 2010**
Karolinska Development's indirect ownership amounts to 8.52%				
BioChromix Pharma AB	34.45%	49.66%	2.94%	–

Umecrine AB	Ownership interest in Umecrine Group[1]		Indirect ownership in Karolinska Development AB	
Amounts in SEK 000	**31 Dec 2011**	**31 Dec 2010**	**31 Dec 2011**	**31 Dec 2010**
Karolinska Development's indirect ownership amounts to 10.41%				
Umecrine Cognition AB	50.26%	60.00%	5.23%	6.01%
Umecrine Mood AB	43.79%	53.60%	4.56%	5.37%

[1] Ownership interest corresponds to share of votes

Investments in other long-term securities

Name	2011	2010
BioChromix AB*	2,915	0
BioResonator AB	0	1,000
CytoGuide ApS	0	1,685
KCIF Co-Investment Fund KB[1]	0	2,555
NeoDynamics AB[2]	0	2,553
ProNoxis AB[3]	0	1,500
Umecrine AB	1,000	0
Total investments in other long-term securities	**3,915**	**9,293**

[1] KCIF Co-Investment Fund KB was reclassified to associated companies in 2010
[2] NeoDynamics AB was reclassified to joint ventures in 2010
[3] ProNoxis AB was reclassified to joint ventures in 2010
* The Karolinska Development Group also has an indirect ownership interest through KCIF Co-Investment Fund KB; see table below, Associated companies' shareholdings

Note 39 Parent Company's holdings in subsidiaries, joint ventures and associated companies

Company	Registered office	Corporate Identity Number	No. of shares	Equity, SEK 000	Profit/loss, SEK 000
Actar AB	Solna	556593-9856	273,817	3,679	–5,364
Akinion Pharmaceuticals AB	Solna	556777-0978	23,010	20,636	–13,749
Aprea AB	Stockholm	556631-2285	258,429	24,484	–14,544
Athera Biotechnologies AB	Solna	556620-6859	660,550	25,589	–41,312
Avaris AB[1]	Huddinge	556614-2112	319,839	–7,023	–10,550
Axelar AB	Stockholm	556623-6708	99,127	51,062	–35,371
BioChromix AB	Solna	556656-4786	483,260	9,611	–1,954
BioChromix Pharma AB	Solna	556777-0143	190,278	6,997	–5,860
Bioneris AB[2]	Stockholm	556625-7902	41,493	–1,597	–278
Biosergen AS	Trondheim	NO 687622075	2,828,968	1,242	–5,025
ClanoTech AB	Solna	556706-6658	40,003	2,228	–7,645
Dilafor AB	Stockholm	556642-1045	198,499	13,716	–26,606
Dilaforette Holding AB	Stockholm	556851-9523	258,499	9,881	–176
HBV Theranostica AB	Stockholm	556664-7268	158,334	972	–443
Inhalation Sciences Sweden AB	Solna	556665-6038	266,245	1,101	–5,226
KCIF Fund Management AB	Solna	556777-9219	37,500	68	–91
KCIF Co-Investment Fund KB	Solna	969744-8810	26	40,476	56
KD Incentive AB	Solna	556745-7675	100,000	107	–33
KDev Oncology AB	Solna	556683-9345	313,345	1,027	–44
Limone AB	Stockholm	556759-9211	170,000	296	–2,754
Lipidor AB	Stockholm	556779-7500	533	3,522	–3,733
NeoDynamics AB	Stockholm	556656-3341	8,495	16,289	–2,283
NovaSAID AB	Solna	556669-2181	530,505	3,106	–12,601
Oncopeptides AB	Solna	556596-6438	1,578	10,406	–9,584
Oss-Q AB	Uppsala	556841-7546	11,060	5,160	–389
Pergamum AB	Solna	556759-9203	9,075,449	284,441	–43,632
Pharmanest AB	Solna	556785-1158	156,649	8,025	–10,963
Promimic AB	Gothenburg	556657-7754	61,791	7,963	–3,849
ProNoxis AB	Gothenburg	556773-2341	44,407	3,033	–1,827
Umecrine Cognition AB	Umeå	556698-3655	1,156,283	9,721	–2,486
Umecrine Mood AB	Umeå	556698-0750	1,295,764	14,045	–17,571
XSpray Microparticles AB	Solna	556649-3671	500,110	6,192	–10,372

[1] Avaris AB is being dissolved
[2] Bioneris AB is in liquidation

Note 40 Accounts receivable

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Trade receivables not past due	49	129
Overdue receivables not considered bad debts		
1–30 days	0	0
31–90 days	0	0
91–180 days	0	0
>180 days	0	0
Total	**49**	**129**

Note 41 Other current receivables

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Financial receivables		
Receivables from joint ventures and associated companies	3,675	83,870
Current portion of restricted bank accounts	0	5,879
Total financial receivables	**3,675**	**89,749**
Other current receivables		
Tax receivables	1,058	145
VAT receivables	802	1,537
Other	3,906	0
Total other current receivables	**5,766**	**1,682**
Total	**9,441**	**91,431**

Note 42 Prepaid expenses and accrued income

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Prepaid rental expenses	337	294
Accrued interest income	35	3,939
Insurance premiums	7	21
Prepaid issue expenses	0	2,985
Other	502	378
Total	**881**	**7,617**

Note 43 Other current liabilities

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Other taxes and fees	1,530	631
Other	0	2,904
Total	**1,530**	**3,535**

Note 44 Accrued expenses and deferred income

Amounts in SEK 000	31 Dec 2011	31 Dec 2010
Salaries and remuneration to personnel	1,784	1,443
Remuneration to Board of Directors	591	422
Auditor and consulting fees	350	775
Payroll tax and accrued pension costs	2,363	1,303
Social security contributions	237	409
Other	719	935
Total	**6,044**	**5,287**

Note 45 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 Institutet 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 KIAB. 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.

	31 Dec 2011		31 Dec 2010	
Amounts in SEK 000	Liability to associate	Receivable from associate	Liability to associate	Receivable from associate
Associate relationship				
Owner: Karolinska Institutet Holding Group	161	353	119	2
Subsidiaries	0	73	660	2,077
Joint ventures and associated companies	0	3,734	0	83,881
Total	**161**	**4,160**	**779**	**85,960**

	2011		2010	
Amounts in SEK 000	Sale of services	Purchase of services	Sale of services	Purchase of services
Associate relationship				
Owner: Karolinska Institutet Holding Group	91	4,867	146	5,246
(Of which rental cost)		(1,331)		(1,176)
Subsidiaries	1,111	2,968	7,590	5,178
Joint ventures and associated companies	1,356	0	3,072	15
Total	**2,558**	**7,835**	**10,808**	**10,439**

Signing of the annual financial statements

The Board of Directors and CEO hereby certify that the annual financial statements have been prepared according to the Annual Accounts Act and RFR 2 and that they provide a true and fair view of the Company's financial position and results and that the administration report provides a true and fair overview of the development of the Company's operations, position and results, and that it describes significant risks and factors of uncertainty factors facing the Company. The Board of Directors and CEO hereby certify that the consolidated accounts have been prepared according to International Financial Reporting Standards (IFRS), as adopted by the EU, and that they provide a true view of the Group's position and results and that the administration report provides a true overview of the development of the Group's operations, position and results and that it describes significant risks and factors of uncertainty which the companies belonging to the Group face.

The annual financial statements and consolidated statements have been approved for presentation by the Board on 18 April 2012. The Group's income statement and balance sheet and the Parent Company's income statement and balance sheet will be presented for adoption by the Annual General Meeting of shareholders on 23 May 2012.

Solna, 18 April 2012

Hans Wigzell Chairman	Per-Olof Edin Board member	Rune Fransson Board member
Michael Rosenlew Board member	Peter Sjöstrand Board member	Ulrica Slåne Board member
Raymond Hill Board member	Torbjörn Bjerke CEO	

Our Auditor's Report was presented on 18 April 2012

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 2011-01-01 – 2011-12-31. The annual accounts and consolidated accounts of the company are included in the printed version of this document on pages 55–92.

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 and 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 judgment, 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 opinion.

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 2011 and of its financial performance and its cash flows for the year then ended in accordance with the Annual Accounts Act, and 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 2011 and of their financial performance and cash flows 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 examined 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 2011-01-01 – 2011-12-31.

Responsibilities of the Board of Directors and the Managing Director
The Board of Directors is responsible for the proposal for appropriations of the company's profit or loss, and the Board of Directors and the Managing Director are responsible for administration under the Companies Act.

Auditor's responsibility
Our responsibility is to express an opinion with reasonable assurance on the proposed appropriations of the company's profit or loss and on the administration based 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 opinion.

Opinions
We recommend to the annual meeting of shareholders that the profit be 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, 18 April 2012
Deloitte AB

Thomas Strömberg
Authorized Public Accountant

Corporate governance report for 2011

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. The Compensation Committee's duties, as well as those of the Audit Committee, are performed by the Board of Directors in its entirety.

Information on the Company's website

On its website, the Company has a special section for corporate governance issues, where, among other things, the most recent years' corporate governance reports are provided. See www.karolinskadevelopment.com under the section Corporate Governance.

Principles of corporate governance

The functioning of 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.

The Board's composition and functions do not deviate from legal requirements. According to the Articles of Association, the Board is to be comprised of three to nine members. No deputies are appointed. Until 24 August 2011, the Company had an Investment Advisory Board, which provided advice to the Board and CEO.

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 determine if the Company should issue new shares or acquire its own shares

The Annual General Meeting on 25 May 2011 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, 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 meeting has not authorized the Board to acquire any of the Company's own shares.

Limitations on voting rights

The Company's shares were listed for trading on NASDAQ OMX on 15 April 2011, prior to which there was a limit in the Articles of Association whereby a shareholder could not vote for more than 35 percent of all of the votes in the Company.

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 28.17 percent of the votes (8.15 percent of the shares).

Nomination Committee

The five largest shareholders in terms of votes, according to Euroclear Sweden AB's records as of 1 September 2011, 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; Gustaf Vahlne, appointed by Tredje AP-fonden; Kerstin Stenberg, appointed by Swedbank Robur Fonder; 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 ownership change significantly 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. No deputies have been appointed.

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; Ulrica Slåne, elected for the first time in 2007; Peter Sjöstrand, elected for the first time in 2008; Michael Rosenlev, elected for the first time in 2010; 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 Note 6 of the annual report.

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, AviBiopharma Inc., Humalabs LLC and Raysearch 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 Vice Chairman. Professor. Vice Chairman of Sjunde AP-fonden. Previous assignments include: Chairman of Södertörns högskola and of Östersjöstiftelsen. 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 Management. Holding in Karolinska Development: 0 shares.

Ulrica Slåne (born 1965), Board member. MBA and certified financial analyst. Studies in physiology and pharmacology at Karolinska Institutet. Other assignments: Board member of Diagenic ASA and portfolio manager of Tredje AP-fonden. Ulrica has more than 20 years of experience as an analyst and manager in the life science sector. Holding in Karolinska Development: 0 shares.

Peter Sjöstrand (born 1946), Board member. MD and MBA. Other assignments: Chairman of the Board of Life Science Imaging, Incentive AB, Stiftelsen Oscar Hirschs Minne och Byggnads AB S:t Erik. Board member of, among others, Active Biotech AB, Ringens Varv AB and Skolan för Teknik och Hälsa. Previous assignments include: Board member of AGA, Meda, Medivir, Mediject, Pharma Vision, Trygg Hansa, Tularik and Astra (deputy). Holding in Karolinska Development: 0 shares.

Michael Rosenlew (born 1959), M.Sc. in Economics within Corporate Finance and accounting. Other assignments: Chairman of the Board of Moventas Oy, Board member of YIT Oy, Suomen Lähikauppa Oy, Time-System Holding AG, Desinfinator Oy and Arbetsmiljöforum AB. Previous assignments include: Managing Partner of IK Investment Partners, financial and operations executive positions with a number of Finnish companies including the Amer Group. Holding in Karolinska Development: 0 shares.

Raymond Hill (born 1945), PhD. DSc. (Hon), Fellow of the United Kingdom Academy of Medical Sciences. Other assignments: 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, and 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
Michael Rosenlew	member	2010	yes	yes
Ulrica Slåne	member	2007	yes	no
Peter Sjöstrand	member	2008	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 Company's rules of procedure, the Board normally meets six times per year. During the year, the Board held one inaugural meeting, six scheduled meetings and seven extraordinary meetings. The extraordinary meetings were summoned mainly to resolve issues in conjunction with planning for capital funding and the public listing. Board members were present as follows: Hans Wigzell 13 meetings, Per-Olof Edin 14 meetings, Rune Fransson 14 meetings, Ulrica Slåne 14 meetings, Peter Sjöstrand 13 meetings, Michael Rosenlew 13 meetings and Raymond Hill, who was elected during the year, 7 meetings.
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.

No decisions have been made on the specific delegation of work within the Board. Nor have any specific committees been organized. Instead, the duties of these committees have been executed by the Board in its entirety.

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 Biolipox AB, Head of Pharmacology at AstraZeneca and Executive Vice President of R&D at ALK-Abello. Holding in Karolinska Development: 11,375 shares.

Gunnar Casserstedt is the Company's Executive Vice President.

The main components of the Company's system for internal control and risk management 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 of supporting and governing documents. 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. Regular monitoring and verification is performed. 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.

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. This includes: (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 val-

ued 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. With regard to points (i)-(vii) above, special emphasis and focus are placed on the portfolio.

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 biweekly as well as several times a year at special meetings to address these issues.

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 around 15 employees, all located in 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 annually 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. This is a part of the daily management. The Company's external auditors annually issue a report on their review of internal controls to senior management and the auditor personally reports his or her observations and assessment of internal controls to the Board.

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, 18 April 2012

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 2011 included in the printed version of this document on pages 94–96. 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, 18 April 2012
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.

Publication dates for financial information

Interim Report January – March 2012	15 May 2012
Interim Report January – June 2012	23 August 2012
Interim Report January – September 2012	22 November 2012
Year-end Report January- December 2012	February 2013
Annual Report 2012	April 2013