RaySearch Laboratories

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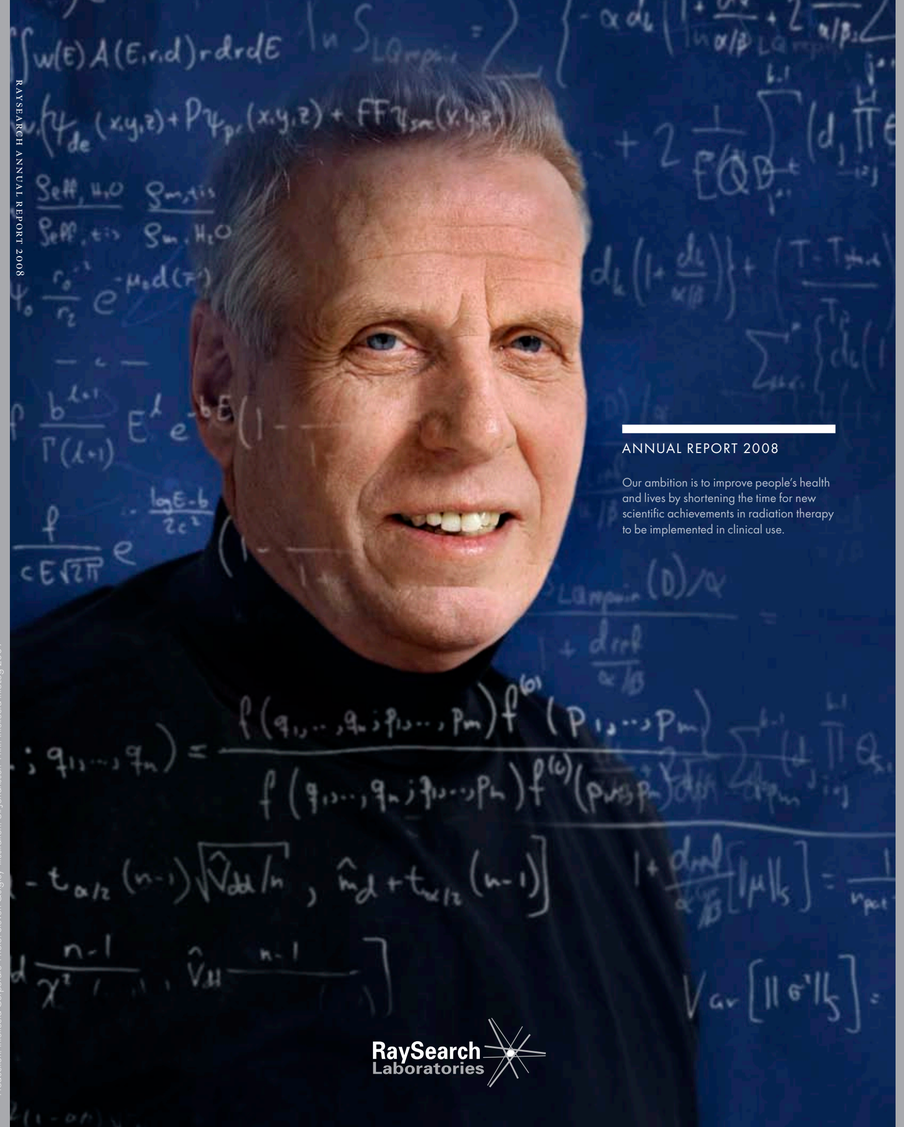
Production: Intellecta Corporate. Photo: Sweden Quigley. Illustration: Ulf Johansson. Print: Intellecta Infolog 2009



ANNUAL REPORT 2008

Our ambition is to improve people's health and lives by shortening the time for new scientific achievements in radiation therapy to be implemented in clinical use.

RaySearch Laboratories

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ANNUAL GENERAL MEETING

The Annual General Meeting of shareholders in RaySearch Laboratories AB (publ) will be held on Tuesday, May 26, 2009, at 6:00 p.m. in Kammarsalen at Berns Conference Center, Berzelii Park, Stockholm. Shareholders wishing to participate in the Meeting must be registered in the company's share register on Tuesday May 19, 2009, and must also notify the company of their intention to participate.

The company's share register is maintained by Euroclear Sweden. Shareholders are registered in the share register either in their own name or through a nominee. Only shareholders registered under their own name are entitled to participate in the meeting. Shareholders who have nominee-registered their shares via the trust department of a bank or an individual nominee must have their shares registered under their own name through Euroclear. Such registration, which may be temporary, is requested from the share nominee. Re-registration must be carried out not later than Tuesday May 19, 2009. The nominee should be informed well in advance of this date.

Registration to participate in the Annual General Meeting may be made in writing to RaySearch Laboratories AB at Sveavägen 25, SE-111 34 Stockholm, Sweden, by fax to Fax no. +46-8-545 061 39, by telephone to Tel. no. +46-8-545 061 30, or by e-mail to: bolagsstamma2009@raysearchlabs.com, not later than 4:00 p.m. on Tuesday May 19, 2009. Registration must include the shareholder's name, civic registration number or corporate identity number, address and telephone number, as well as the registered number of shares held. Authority documents, such as proxies, registration certificates, etc., should be enclosed with the registration.

A printed version of the annual report is sent to all registered shareholders who have not actively declined receipt of the annual report.

RaySearch will publish the following financial reports in 2009:
Interim Report for January–March 2009: May 15, 2009.
Interim Report for January–June 2009: August 27, 2009.
Interim Report for January–September 2009: November 2009.

This is a translation of the Swedish Annual Report.

RAYSEARCH IN BRIEF

RaySearch in brief

RaySearch is a medical technology company that develops software for radiation therapy of cancer. Operations are predicated on the desire to improve human health and life. The company's products are used to enhance efficiency of radiation therapy by optimizing the radiation dose for each individual cancer patient. License agreements with leading partners facilitate the marketing and sales of RaySearch's products on the global market. Read more about the business concept and strategies on page 4 and products on page 20.

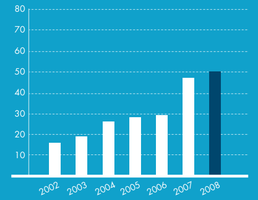
OWNERSHIP STRUCTURE IN RAYSEARCH IN TERMS OF CAPITAL DISTRIBUTED BY OWNER CATEGORIES

- Foreign owners (32.6%)
- Swedish owners/institutions (17.8%)
- Swedish owners/private individuals (49.6%)

GEOGRAPHIC DISTRIBUTION OF RAYSEARCH'S SALES IN 2008, PERCENT

- North America (44%))
- Europe and rest of world (37%)
- Asia (19%)

RAYSEARCH EMPLOYEES 2002-2008



WHO ARE OUR OWNERS?

RaySearch, which was spun off from Karolinska Institutet, was founded by Johan Löf, Erik Hedlund, Carl Filip Bergendal, Anders Brahme, Bengt Lind, Anders Liander and Karolinska Institutet Holding AB. Eight years after its founding, RaySearch has launched eight commercial products and more are on the way. The major shareholders of RaySearch are its founders, followed by the Swedish insurer AFA Försäkring, Swedish Pension funds and several international shareholders. The company has been publicly listed since 2003 and at year-end 2008, the number of shareholders amounted to slightly more than 4,400. Non-Swedish ownership amounts to 33 percent of the share capital. Read more about the ownership structure and the share on page 30.

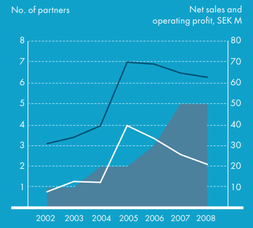
WHERE ARE WE LOCATED?

RaySearch has its office in Stockholm, Sweden. Through its cooperation partners, RaySearch's products are widely disseminated, particularly in hospitals and clinics in the US and Europe. There is also major market potential in other parts of the world, and use of RaySearch's products is increasing on these continents. More than 1,300 clinics in some 30 countries use the company's products.

HOW LARGE ARE WE?

RaySearch has 50 full-time employees, of whom 45 work with research and development. Sales amounted to SEK 62.7 million during 2008, a strong increase since the start in 2000. RaySearch's five partners control more than three quarters of the world market, and the company has now reached more than 1,300 advanced cancer clinics that administer radiation therapy to patients. In treatment planning for IMRT, RaySearch's system is by far the most widely used in the world.

NET SALES, OPERATING PROFIT AND NUMBER OF PARTNERS



- Net sales
- Operating profit
- No. of partners

STRONG FOCUS ON RESEARCH AND DEVELOPMENT

- Sales
- Research and development

HOW ARE WE EVOLVING?

Since its founding in 2000, RaySearch has signed seven license agreements with five commercial partners. These partnerships encompass a total of more than 20 commercial products, of which eight have been launched to date. As a consequence of RaySearch's business model in which partners are responsible for sales and marketing, expansion increases sales and profits more than costs. This focused business model allows RaySearch to maintain favorable margins. Read more about the business model on page 4.

WHERE ARE WE GOING?

New treatment methods, such as rotation therapies and adaptive radiation therapy, are poised for a breakthrough, thereby bolstering demand for RaySearch's products. During recent years, the company has broadened its development work and diversified the product portfolio in such areas as new forms of intensity-modulated radiation therapy, optimization of conventional radiation therapy, quality assurance, image processing and radiation therapy using protons. During 2009, there will be major product launches with all five partners. Read more about our product development on page 24 and research projects on page 26.

A brief look at 2008

FINANCES

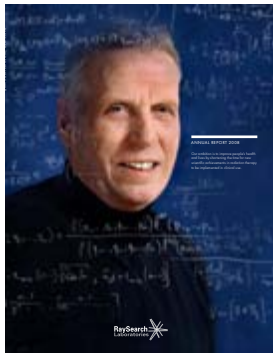
- Net sales declined by 3 percent, compared with the preceding year and amounted to SEK 62.7 M (64.7). The operating margin amounted to 33.6 percent (39.8). Support revenues increased by 21 percent during 2008 to SEK 23.7 M (19.6). Read more on page 37.
- Operating profit amounted to SEK 21.1 M, compared with SEK 25.8 M in 2007.
- Profit after tax amounted to SEK 18.2 M (19.8). Earnings per share amounted to SEK 0.53, compared with SEK 0.58 in 2007.
- Cash flow from operations amounted to SEK 26.0 M (37.9).

PARTNERSHIPS

- RaySearch has seven license agreements with five commercial partners.
- The partnership with Philips was expanded with a product for the new VMAT treatment method.
- The partnership with Nucletron was expanded in January 2009 with two new solutions for treatment planning.
- RaySearch previously signed partnership agreements with Philips in 2000 and 2006, Nucletron in 2004 and 2006, IBA Dosimetry in 2006 and Varian and TomoTherapy in 2007.

PRODUCT DEVELOPMENT

- The first patient was treated with RaySearch's system for proton therapy.
- The first product in the partnership with TomoTherapy received FDA approval in January 2009 and can thus be launched.
- A large number of products are nearing completion and major launches are planned with all five partners during 2009.



Proton therapy is the most advanced form of radiation therapy. RaySearch has been working for several years to develop a system for treatment planning of proton therapy. During 2008, a system was completed for The Svedberg Laboratory in Uppsala, Sweden. The man pictured on the cover was one of the first patients to receive an improved cancer treatment planned with RaySearch's system for proton treatment planning.

Intensive development work creates strong position for RaySearch

The year 2008 was challenging for RaySearch. Through intensive efforts, we worked our way out of a slump in the middle of the year and finished the year on a strong note. We are now better prepared than ever with a new generation of products that will begin to generate sales in 2009.

NEW MARKET TREND RESULTED IN DELAYS BUT ALSO NEW CONTRACTS

The most significant market trend during the year was the focus on VMAT (Volumetric Modulated Arc Therapy), which is a new, advanced form of radiation therapy, promoted intensely by Varian and Elekta since last autumn. To handle that launch, our partner Varian focused all its effort on VMAT, which resulted in postponement of the launch of the products included in the partnership with RaySearch until 2009.

During the first half of the year, Philips could not offer its own solution for this type of treatment, which contributed to weaker sales. It was therefore decided that RaySearch would focus on development of a VMAT solution for Philips and postpone the launch of the first product within adaptive therapy for Philips. In June, we announced a license agreement for the product, which was successfully demonstrated at all major trade shows during the summer. The product is being marketed under the name SmartArc, and launch is planned for the first half of 2009.

STRONG FINISH TO THE YEAR

The trend reversed during the third quarter, and the fourth quarter was RaySearch's best-ever in terms of sales. Nearly all of the decline from the weak second and third quarters was thus offset, and sales for the full-year declined by 3 percent to SEK 62.7 M. Profit after tax in 2008 fell in line with sales to SEK 18.2 M from SEK 19.8 M in the preceding year. It is highly reassuring that RaySearch's position remains very solid without interest-bearing debt and cash and cash equivalents amounting to SEK 70.6 M at year-end.

An important reason for the increase during the fourth quarter was that sales via Nucletron were significantly better than during the preceding year. This is a trend that we hope to be able to strengthen through the expansion of our partnership with Nucletron announced in January 2009 covering two new products. The first is a solution for VMAT, while the other is a solution for model-based segmentation (MBS). The MBS product consists of software that simplifies the segmentation process, when three-dimensional models of the tumor and the surrounding organs are created prior to the actual treatment planning. Since it is useful both for brachytherapy and external radiation therapy, we are also broadening our customer base with this product as we reach clinics focusing on brachytherapy for the first time. Launch of both products is planned for the second half of 2009.

The quality assurance system COMPASS® in our partnership with IBA Dosimetry showed a positive sales trend during the fourth quarter. COMPASS® is a market-leading solution for quality assurance of intensity modulated radiation therapy that was launched at the end of 2007. The COMPASS® concept represents a paradigm shift for clinics so the market penetration has been relatively slow during the year. We hope that the positive trend from the last quarter will strengthen, as we are working on extending COMPASS® with support for VMAT treatments. Our goal is to be able to start supplying upgrades during the second quarter of 2009.

TREATMENT PLANNING SYSTEM FOR PROTON THERAPY IN CLINICAL USE

The proton field, in which we have a cooperation agreement with Nucletron, is another area where we have made rapid progress. In August we concluded a development agreement with The Svedberg Laboratory in Uppsala, Sweden, and during the autumn, we finalized a proton treatment planning system for them. In December the first patient was treated using a plan generated with proton treatments that are administered each year at the proton research unit in Uppsala. The agreement with The Svedberg Laboratory will not generate any revenues by itself, but it is highly significant that our system is now clinically validated, as this makes us an even more credible candidate in current and future procurement tenders.

RAYSTATION OPENS POSSIBILITY OF EXPANDING THE BUSINESS MODEL

During the autumn, we began evaluating the possibility to supplement our business model by selling products directly to clinics. We initiated this work to be able to manage the risk that partners postpone launches beyond our control.

To support this initiative, we worked intensively to develop the first version of RayStation. The result will be a framework for clinically validated commercial products. It will be possible to offer

RayStation directly to clinics as a flexible system where the user can select different treatment planning functionality according to specific user needs. We are now evaluating several specific product alternatives with various clinics while also pursuing close dialog with our partners to ensure that our good relations are not jeopardized. It is important to emphasize that if we begin selling directly to clinics, it will not involve dealing with complete treatment planning systems that compete directly with our partners, but products that in various ways supplement the clinics' existing systems.

RayStation will also function as RaySearch's internal platform for developing and demonstrating prototypes. One example of this is the prototype for multi-criteria optimization that we are developing through a cooperation program initiated in August with the Massachusetts General Hospital.

RECORD NUMBER OF NEW PRODUCTS TO BE LAUNCHED IN 2009

Looking ahead, we are now facing a generation shift. Support revenues from our first product p-RayOptimizer will decline while a wide range of new products will begin to generate revenues. The number of products that will generate sales is expected to nearly double during 2009.

First out will be the first product in our partnership with Tomotherapy that received FDA approval in January and is planned to be launched in the spring. The product, which will be marketed under the name SharePlan™, will enable automatic transfer of treatment plans from Tomotherapy's Hi·Art®accelerator to conventional linear accelerators. This will result in an improved balance in the work load in clinics with different types of accelerators and greater capacity for treating patients. There are already more than 200 Hi·Art®systems installed in clinics that are thus potential users of SharePlan™, so it will be very exciting to follow the sales trend over the rest of the year.

Thereafter will follow the new COMPASS® version, in which support for quality assurance of VMAT has the potential to increase sales. In addition, a number of proton procurement tenders that we have a good chance of winning will be decided during the spring.

Also ahead of us we have the major market launch of the three products with Varian. Here I want to particularly emphasize the product for optimization of conventional 3D-CRT treatments as a new and exciting area for RaySearch. Conventional treatments with conformal radiation therapy still comprise the majority of treatments. This product thus has a substantial volume potential, since demand should be high even in markets where more advanced treatments are not yet commonplace.

Last but not least, we have the launch of the SmartArc VMAT solution with Philips, as well as the two new products with Nucletron. We have never been anywhere near this product launch rate in the past and, thus, we are now about to reap the harvest of several years of very demanding development work.

Undoubtedly, 2009 will be a highly eventful year but it is difficult to predict how large the financial impact will be. Predicting the market response to new products is always a challenge, and the prevailing sluggish economic climate adds to the uncertainty. Historically, the market for radiation therapy products has been relatively insensitive to economic trends, and our sales during the last quarter of 2008 were at record levels despite the financial crisis. However, it is too early to draw a firm conclusion that we will not be affected by the crisis, although 2009 looks fantastic in terms of product launches. We also continue to be actively involved in a number of discussions concerning new products both with new and existing partners. As a result, I am hopeful that 2009 will be a very good year for RaySearch.

Stockholm, April 2009

Johan Löf
President, RaySearch Laboratories AB

Global reach with limited costs

One of RaySearch's strengths is the scalability of its business model. Through licensing and partnerships with leading commercial players, sales to hospitals and clinics can increase without a proportionate cost increase. The business model thus offers leverage combined with low financial risk.

RaySearch's business concept is to provide innovative software that creates more effective radiation therapy for cancer. The business is founded on the ambition to improve people's health and lives by shortening the time required for the deployment of new scientific achievements in radiation therapy in clinical applications. The overall goal is to make RaySearch the leading supplier of advanced software in radiation therapy.

SALES THROUGH COMMERCIAL PARTNERS PROVIDES STRENGTH

To be able to offer innovative methods and advanced software to clinics around the world, RaySearch's business model is based on partnerships with leading medical technology companies and scientific institutions. Working together with leading commercial partners means that innovations and new software developed by RaySearch can be made available to the international market more rapidly.

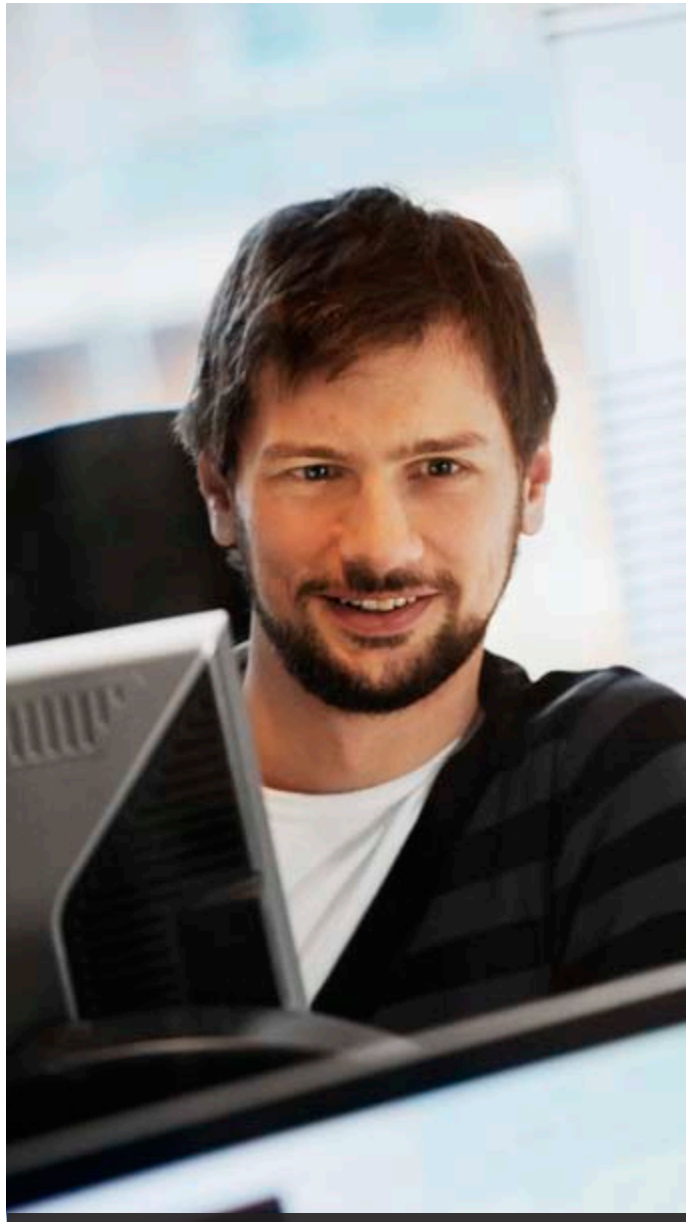
Since the commercial partner is responsible for sales and service to the end customer, RaySearch does not need a global sales organization, but can instead retain its focus on advanced new research and development.

STRATEGY FOCUSED ON RESEARCH AND DEVELOPMENT

To be able to supply clinics around the world with constantly improving technical solutions for more effective treatment of cancer, RaySearch must focus its resources on research and development. Within RaySearch, 45 of the company's 50 employees work with research and development.

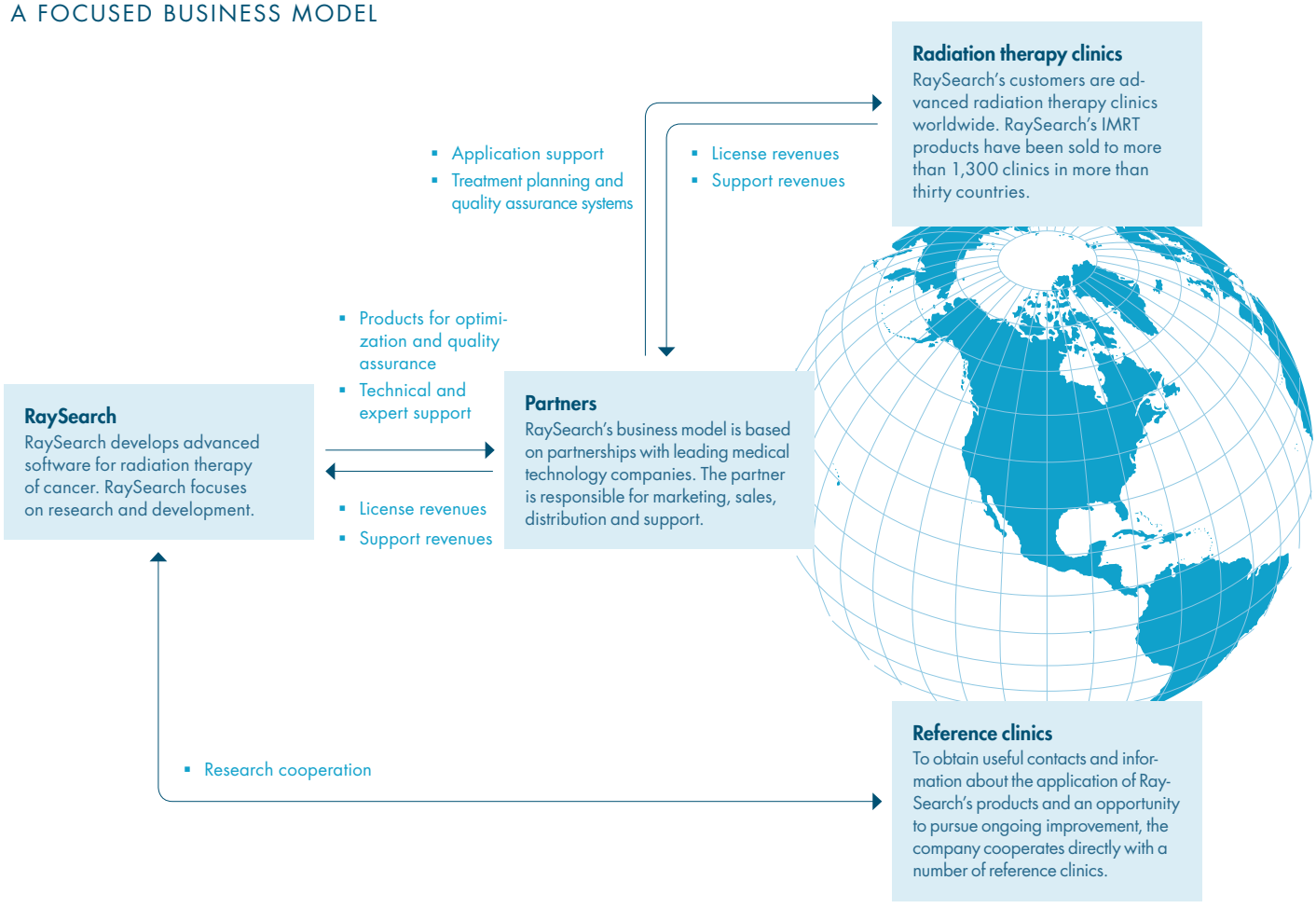
To continue its rapid growth, RaySearch works consistently with three strategic directions. We maximize sales and reach through partners, we expand the product portfolio through continuous product development, and we expand into new market segments.

An important component in this strategy is that all products and solutions that we develop are highly flexible and modular. This is



Work on generating new scientific results and developing new products is conducted by RaySearch's 45 highly trained specialists. Marketing, sales and distribution around the world are handled by partners. This business model allows a high degree of specialization and thus maximum value creation.

A FOCUSED BUSINESS MODEL



Every product sold generates a fixed license fee for RaySearch. After the purchase, the customer may also sign a service agreement that generates support revenues. Reliance on commercial partners makes the business model scalable – that is, the company can increase its sales to clinics without its costs increasing to the same extent.

means that they can be easily and efficiently enhanced and integrated into other companies' systems. All development within the company is structured and leveraged within the ORBIT product platform, which is the starting point for all commercial partnerships. With this basic functionality as a starting point, contracts are signed for those portions of ORBIT that the partner wishes to use as a basis for new initiatives or improvements of existing products. Based on each partner's needs and requirements, new functionality is then developed. â e ORBIT platform's basic functionality thus grows as new partnerships are established.

EXTENSION OF THE BUSINESS MODEL STUDIED

To create a possibility to rapidly introduce products to the market independently of our partners' plans, we began during the year to evaluate the option to sell products directly to clinics as a supplement to our business model. We are working intensively with RayStation, the first version of a framework for clinically validated commercial products. It will be possible to offer RayStation directly to clinics as a flexible system where the user can select different treatment planning functionality according to specific user needs. We are now evaluating several specific product alternatives with various clinics while also pursuing close dialog with our partners to ensure that our good relations are not jeopardized. It is important to emphasize that if we begin selling directly to clinics, it will not involve dealing with complete treatment planning systems that compete directly with our partners, but products that in various ways supplement the clinics' existing systems. Neither is it our intention to build up a large sales force.

MAXIMIZE SALES AND REACH THROUGH PARTNERS

RaySearch's commercial partners are leading, medical technology companies. Through these partnerships, the company's products become available to clinics around the world more rapidly. The commercial partner is responsible for sales and support, meaning that RaySearch can retain its focus on advanced research and development.

RaySearch's goal is to sign license agreements with all leading medical technology companies, which in turn are successful in their sales. By providing innovative high-quality solutions for radiation therapy for cancer, RaySearch aspires that its products will be the first choice of the world's radiation therapy clinics. RaySearch's products should significantly improve the quality of radiation therapy of cancer and contribute to driving development.

Strong brands are of great importance in achieving success in medical technology. By positioning RaySearch as the leading supplier of advanced solutions within radiation therapy, opportunities increase to forge partnerships with additional commercial partners.

EXECUTION

- RaySearch currently has seven license agreements with five commercial partners: Philips, Nucletron, Varian, Tomotherapy and IBA Dosimetry and supports its partners in marketing and sales in many ways.
- RaySearch's five partners control more than three fourths of the global market for treatment planning. RaySearch's system for optimizing IMRT treatments is by far the world's most widely used.

BROADEN THE PRODUCT PORTFOLIO THROUGH CONSTANT DEVELOPMENT

Ever since RaySearch was founded, one of the most important goals has been to broaden the product portfolio. The company is constantly enhancing and launching products and strives to cover all forms of advanced applications for treatment planning. During the first five years of operation, RaySearch focused product development on IMRT but has now expanded into other areas of treatment planning such as rotational therapies (VMAT), proton therapy and conventional radiation therapy (3D-CRT).

It is possible to maintain a fast pace in product development by continuous re-use of program code from the ORBIT software platform in developing new products. Product development takes place in parallel with enhancement of the ORBIT platform, which is the foundation for the applications. Reference clinics that provide feedback and share experience from existing products support the continuous improvement process.

A broad installed base and loyal customers are obtained by ensuring that RaySearch's products meet and exceed the clinics' demands with respect to user-friendliness, robustness and clinically relevant functionality.

EXECUTION

- RaySearch is the world leader in IMRT and currently sells six IMRT products, three via Philips and three via Nucletron. In total, these products have been sold to more than 1,300 clinics in over 30 countries.
- In total, the company is currently developing more than 15 products with five commercial partners.
- During 2008, the partnership with Philips was expanded to include a product for treatment planning of the new, advanced VMAT treatment form.
- In January 2009, the partnership with Nucletron was expanded with new products for VMAT and model-based segmentation.

New strategic options are possible with the development of RayStation as it can be offered directly to clinics.

- Since 2005, RaySearch has been conducting a project to develop a prototype system for treatment planning and optimization of radiation treatment with light ions, such as protons and carbon ions. RaySearch has had a partnership with Nucletron in this field since 2006.

- A new agreement was signed with Varian during 2007 for the development of optimization of conventional three-dimensional conformal radiation therapy (3D-CRT), as well as radiobiological evaluation and radiobiological optimization of treatment plans for radiation therapy with photons/electrons and intensity modulated radiation therapy (IMRT).

EXPAND TO NEW MARKET SEGMENTS THROUGH COMMERCIAL CONTRACTS

RaySearch uses its expertise and technical platform strategically to develop applications in new areas beyond traditional treatment planning. RaySearch sees significant opportunities for expanding its business to applications in additional areas in the treatment chain with products in adaptive radiation therapy, quality assurance of IMRT and image processing in the area of diagnostics.

A prerequisite for retaining the position at the forefront of radiation therapy is close contact and frequent exchange with leading scientific institutions and clinics.

EXECUTION

- ά rough expansion of the partnership with Nucletron in model-based segmentation, RaySearch is strengthened in the image processing segment and also for the first time reaches out to clinics working with brachytherapy.

- RaySearch has conducted research and development within adaptive radiation therapy since 2002, which resulted in a system for adaptive radiation therapy. In 2006, a development and licensing agreement was signed with Philips for joint development and marketing of a product portfolio in adaptive radiation therapy.

- In 2006, a long-term development and licensing agreement was signed with IBA Dosimetry involving four products for quality assurance of IMRT, of which two are now on the market.

- ά rough partnerships with leading research institutions, RaySearch can test applications in new areas. ά is research opens new areas for expansion and shortens the time from scientific publication to clinical application. As an example, RaySearch has a long-term research agreement within adaptive radiation therapy with Princess Margaret Hospital in Toronto, Canada.

Growing global demand for advanced treatment techniques

The number of diagnosed cancer cases is increasing steadily in both the US and Europe. At the same time, increasingly advanced radiation therapy techniques are being developed to combat the disease. The market trend for these methods is driven primarily by two factors: the proven clinical value and insurance systems, which must approve the methods.

About 12.4 million persons around the world were diagnosed with cancer during 2008, and the figure is expected to increase as the global population grows and is also getting older. By 2030, the number of new cancer cases each year is expected to exceed 20 million. Cancer is one of the most common causes of death, and in 2008, 7.6 million people died in cancer, corresponding to a full 13 percent of the 58 million registered deaths in the world. ȧ e number of deaths is also expected to continue to increase and is estimated to amount to 12.9 million in 2030.

Today, 52 percent of cancer cases occur in low- and middle-income countries where options for diagnosis and treatment are fewer. A reflection of this is that these countries account for a larger proportion of deaths at 59 percent. ȧ is imbalance is attributable to an increase in recent decades in the number of cancer cases in richer countries that are treated and cured as a result of greater knowledge of the disease.

Earlier detection of cancer and improved treatment techniques have had the result that the proportion of patients surviving the disease over the long term now stands at 60 percent, which is a significant increase since the early 1970s, when the proportion was about 40 percent. ȧ is trend also means that more resources are devoted to the battle against cancer and that demand for better and more advanced treatment techniques is increasing. Demand will be particularly strong in such countries as China and India, which currently do not have well-established cancer care programs but are expected to show relatively strong economic growth in the future.

Of the three main branches of cancer therapy – surgery, radiation therapy and chemotherapy – radiation therapy has increased most for patient groups undergoing curative care over the past twenty years. Radiation therapy entails exposing the tumor to ionized radiation that damages the cell's DNA. Healthy cells have an ability to repair the DNA damage, an ability that is reduced in cancer cells. A certain radiation dose can thus make the cancer cells die or reproduce at a slower rate without permanently damaging healthy cells. ȧ e advantages of radiation therapy are its clinical benefits and cost-effectiveness. In the industrialized countries, approximately 50 percent of all cancer patients are treated with radiation therapy.

Sales of radiation therapy equipment totaled about USD 2.5 billion during 2008. ȧ is includes both various types of hardware, such as linear accelerators and simulators, and software. With respect to hardware, Varian, Elekta and Siemens are the largest market players. ȧ e importance of radiation therapy is also increasing as new and more exact techniques are developed. RaySearch has a market-driving role in this development.

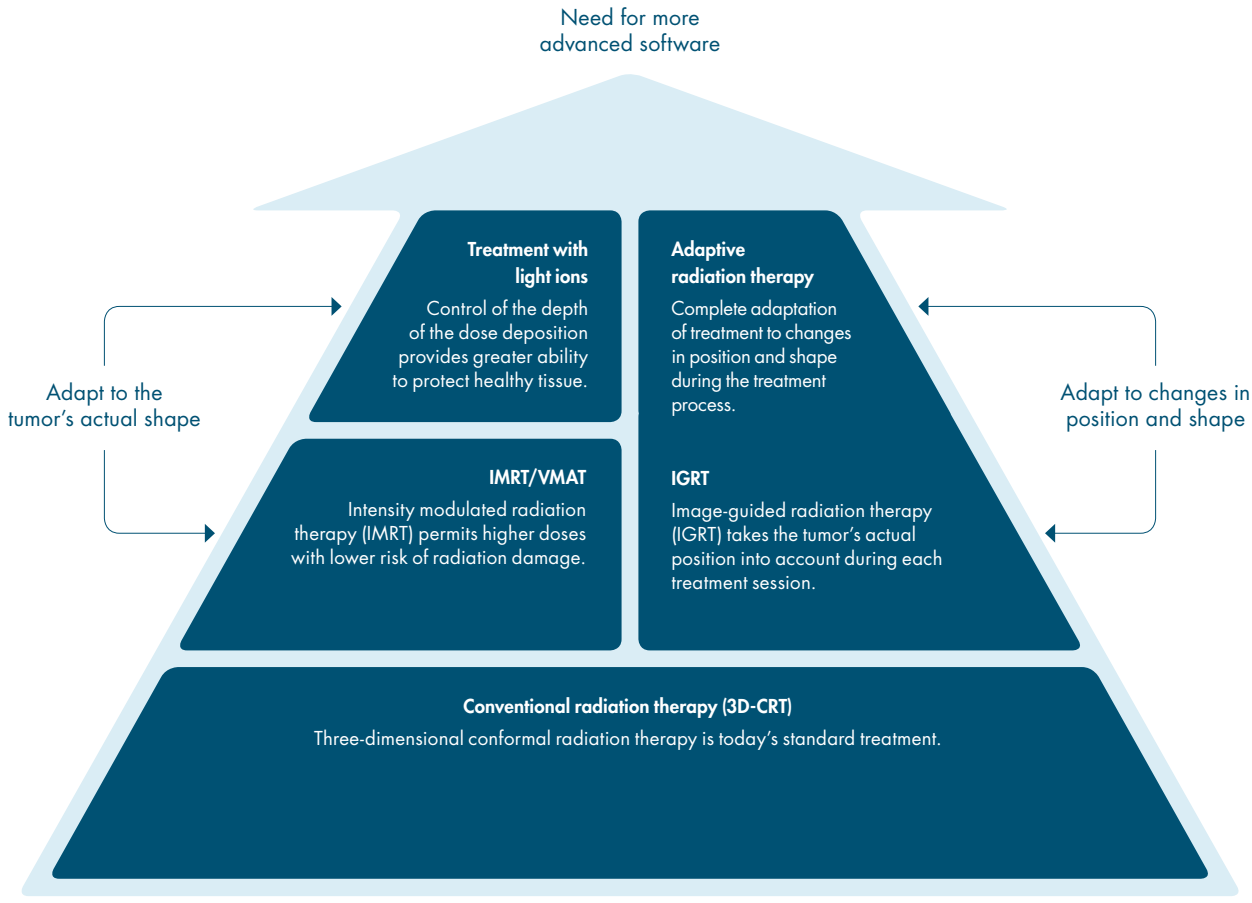
NEW TECHNIQUES DRIVE GROWTH IN TREATMENT PLANNING

A treatment planning system consists of software that is used to plan exactly how a radiation treatment will be executed. ȧ e system can be described as a combination of a CAD tool, a simulator and a database. Planning starts with radiologic images of the patient, primarily generated through computed tomography. Using the radiologic images, the physician defines the extent of the tumor in three dimensions and prescribes the radiation dose with which it will be treated. ȧ e software then enables simulation and visualization of all treatment parameters to determine the best possible treatment, which then results in a control program for the radiation equipment.

MARKET DRIVING FORCES

- Demand for radiation therapy, and thus RaySearch's products, is affected by the trend in the number of diagnosed cancer patients worldwide.
- Development of new treatment techniques increase demand for the type of advanced software products that RaySearch develops.
- How medical insurance systems, particularly in the US, allocate their resources is extremely important for the potential to commercialize RaySearch's products. Approval of a new treatment technique by the insurance system leads to a major impact for that technique.
- Agreements with the right commercial partners are crucial in RaySearch's pursuit of market success and increased market share.

DEVELOPMENT OF NEW TREATMENT METHODS DRIVES THE MARKET



Worldwide, the four companies Philips, Varian, Elekta-CMS and Nucletron together account for the dominant share of sales of treatment planning systems. RaySearch has partnerships with all but Elekta-CMS and thus reaches approximately three quarters of the clinics using advanced treatment planning.

RaySearch's products are sold via partners to both the existing installed bases and as a necessary component in new sales of treatment planning systems. Sales of each product have been relatively constant historically, and growth in RaySearch's sales is created when new products are launched. The market for treatment planning systems was about USD 360 M during 2008 and has increased by about six percent annually over the past five years.

Growth is primarily driven by the development of new treatment techniques. Three-dimensional conformal radiation therapy (3D-CRT) is today's standard treatment in which the tumor is irradiated from several directions and the beam's shape is matched to the tumor's cross section. 3D-CRT is often very effective but has limitations. Firstly, it is impossible to define the high dose region to match a complex tumor shape. Physicians are simply forced to compromise when treating tumors with a complex shape. The compromise is between reducing the dose to protect adjacent healthy tissue or increasing the dose to improve control of the tumor but running the risk damaging surrounding healthy tissue. Another limitation is that a month-long treatment is based on diagnostic images taken when the treatment began. The tumor changes both position and shape inside the body during treatment, and to be sure that the tumor is treated, a larger volume where the tumor is assumed to be located is irradiated. The risk is that healthy tissue is damaged unnecessarily or that the tumor is not controlled because the dose must be restricted to avoid side effects.

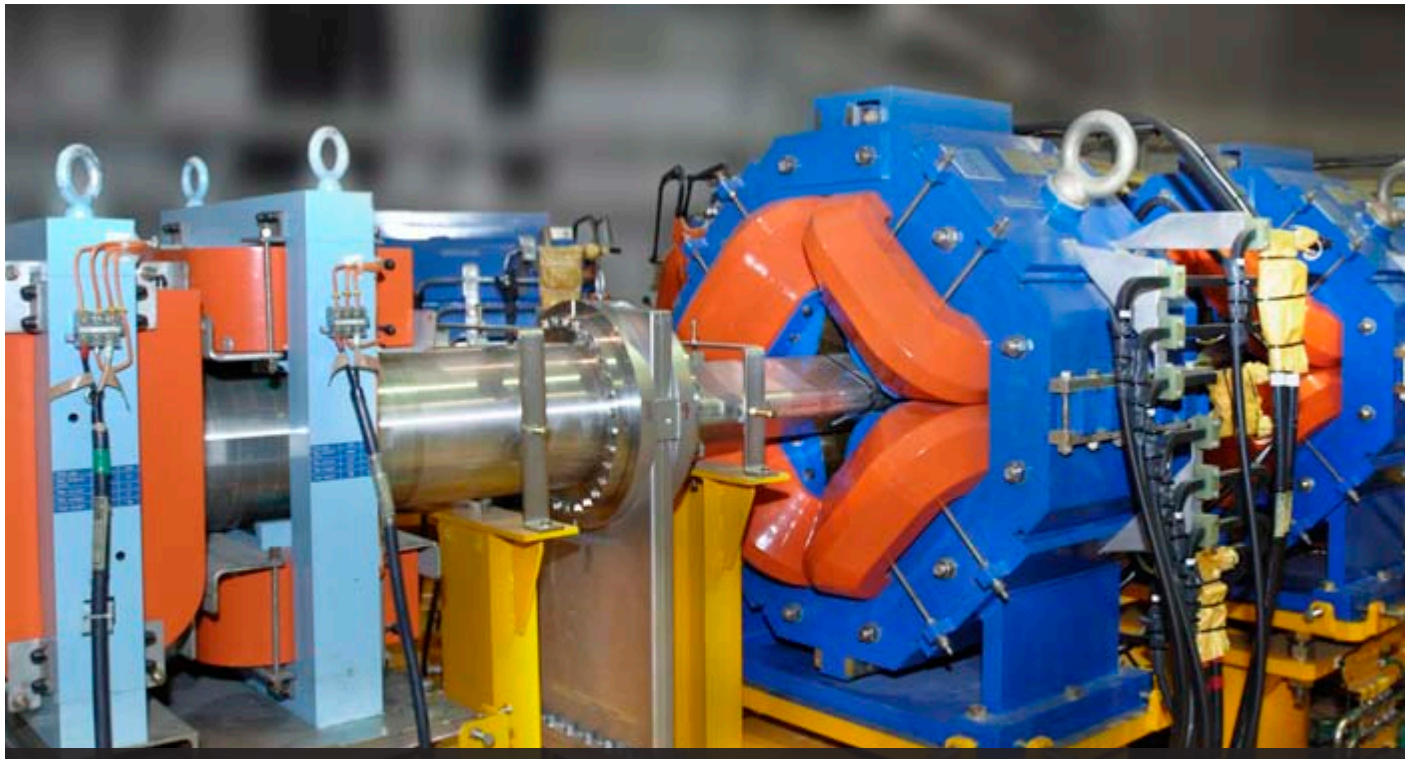
New treatment techniques are emerging that are intended to avoid these compromises and make it possible to increase the dose to the tumor in various ways without risking damage to the patient's healthy tissue. RaySearch develops advanced software that supports these new techniques, thus creating favorable opportunities for continued growth in the area of treatment planning. Even within 3D-CRT, however, there is much more to be done. Treatment planning for 3D-CRT is currently very time-consuming, since it involves a considerable amount of manual labor to identify the right treatment parameters. In partnership with Varian, RaySearch is developing a product that automatically calculates optimal parameters, which both saves considerable time and improves treatment plans.

NEW TECHNOLOGY FOR ENHANCING IMRT GENERATED GREAT INTEREST

Intensity modulated radiation therapy (IMRT) is performed with the same hardware as conventional radiation therapy. With the help of advanced software, each beam is divided into segments with varying intensity and shape. When they interact, a beam is produced in which the intensity varies over the beam's cross section. In this manner, it is possible to increase the dose to tumors with a complex shape without risking damage to surrounding organs. IMRT was established at the early 2000s, and many studies show that IMRT improves treatment results. ȧ e next step in development is a new, advanced form of IMRT called VMAT (Volumetric Modulated Arc ȧ erapy), a technique that is expected to become an important part of the IMRT market.

All of the major suppliers of treatment planning systems offer software for IMRT. RaySearch's first products are solutions that support treatment planning in Philips and Nucletron's treatment planning systems. RaySearch's IMRT products are currently installed in over 1,300 clinics in more than 30 countries and are thus the world's most widely used IMRT products. ȧ e majority of systems are installed in the US, where IMRT has achieved a more rapid breakthrough, in part as a result of advantageous compensation levels from insurance companies. Europe, which has a different compensation system, is behind the US. IMRT is currently well-established in Europe, but the large differences between countries with respect to application of IMRT remain.

During 2008, the hardware suppliers Varian and Elekta launched solutions for VMAT. ȧ is new treatment technique, which uses the same hardware as IMRT, means that the tumor is continuously irradiated while the radiation source rotates around the patient in single or multiple arcs. ȧ is concept enables faster treatment delivery compared to traditional IMRT, where the patient is irradiated only from a few selected angles. At the same time, equivalent or improved treatment quality is achieved, compared with IMRT. ȧ e launch of VMAT generated very great interest, and RaySearch has signed contracts with both Philips and Nucletron for new products to allow planning of VMAT treatments with their respective systems.



Acceleration of particles for proton and carbon-ion treatment requires advanced equipment and considerable space. Irradiation with protons or carbon ions makes it possible to control the radiation by controlling the particles' speed. The picture shows one of the magnets that focuses the ion beam.

LEADING INNOVATOR IN PROTON AND CARBON-ION TREATMENT PLANNING

Radiation with protons or carbon ions instead of photons as in conventional radiation treatment is a very promising form of therapy that is growing. Radiation with protons or carbon ions means that radiation can be further controlled and made more effective by controlling the speed of the particles. ȧ ey can be controlled so that they come to rest with millimeter precision without injuring underlying tissue. Treatment can thus become more exact than IMRT treatments.

Particle acceleration requires advanced equipment and considerable space. Treatment planning and optimization are often purchased separately for each product and partially customized to match its prerequisites. Only a few projects are sold around the world each year.

ȧ e strongest players in this area are the listed companies IBA and Varian. Other players are Hitachi, which won a prestigious order (MD Anderson in Texas) and MHI (Mitsubishi Heavy Industries). Siemens is also developing a complete solution for carbon-ion treatment in a technology partnership with Heidelberg University.

In pure market terms, proton and carbon-ion treatments are significantly different, compared with other existing markets. Total investment for establishing a proton and carbon-ion center is substantial, from about SEK 500 M to more than SEK 1 billion, of which the order value for planning and optimization systems per center can be expected to be between SEK 10 and 40 M. ȧe technical equipment alone currently costs about SEK 350 M. Emerging price pressure on accelerators and additional evidence of clinical benefits will increase the number of centers and thus the demand for treatment planning systems. At present, an estimated 56,000 patients have been treated with proton therapy.

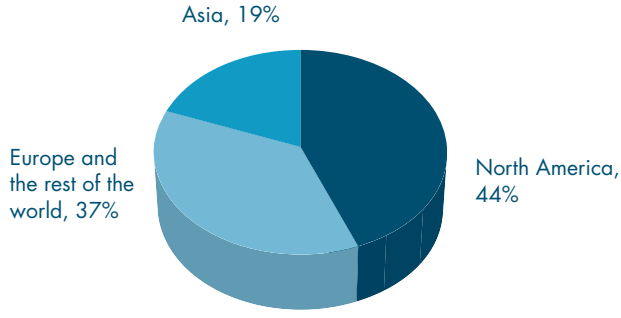
In 2006, RaySearch signed an agreement with Nucletron for the development of a system for treatment planning and optimization for radiation treatment with protons. RaySearch is participating together with Nucletron in a number of tenders. Development work continues in parallel, and during 2008, RaySearch's system was used clinically for the first time at Uppsala University Hospital where it will be used for the approximately 100 proton treatments administered annually at ȧ e Svedberg Laboratory.

Apart from commercial concerns, proton and carbon-ion treatment planning is an area at the absolute forefront of development. RaySearch wants to lead this development and by so doing, strengthen RaySearch's position in general as an innovator.

ADAPTIVE RADIATION THERAPY IS THE NEXT PHASE OF DEVELOPMENT

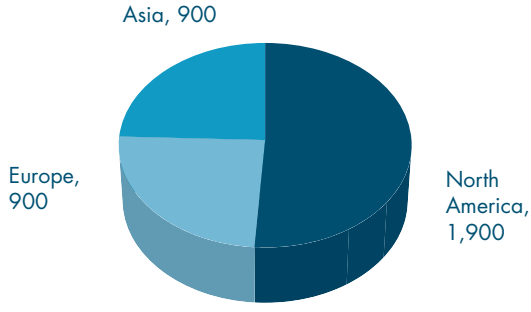
IMRT represented a major breakthrough in radiation therapy, and now adaptive radiation therapy is on the verge of a similar break-

GEOGRAPHIC DISTRIBUTION OF RAYSEARCH'S LICENSE SALES IN 2008, PERCENT



Today, over 1,300 clinics have one or more of RaySearch's products integrated in their systems. In IMRT treatment planning, RaySearch is the market leader.

GEOGRAPHIC DISTRIBUTION OF ADVANCED RADIATION TREATMENT CLINICS, NUMBER[1)]



There are an estimated 6,200 clinics around the world that currently offer radiation treatment for cancer patients. Of these, an estimated 3,700 are advanced in the sense that their treatment planning systems have the capacity to perform complete three-dimensional radiation treatment calculations with high accuracy. It is these advanced clinics that are the target group for RaySearch's modern software solutions.

1) Dirac 2008.

through. One of the main problems in radiation therapy is the geometric uncertainty with respect to both the patient's position in relation to the radiation beam and the changes in position and shape of the tumor and surrounding tissue. The traditional method of dealing with these uncertainties is to define the treatment area with sufficient margin around the tumor to ensure that it receives an adequate dose despite the movements during the six weeks that treatment normally lasts. With adaptive radiation therapy, it is possible to deal with the changes in the patient's anatomy that occur during a treatment in progress and to correct for any errors that may occur during the treatment process.

Many linear accelerators are already being sold with integrated imaging systems that provide images of the patient in conjunction with treatment, which is a prerequisite for being able to track geometrical changes. At present, these systems are only used for adjustment of the treatment table to correct for changes in the tumor's position (image-guided radiation therapy or IGRT). With more advanced software, it is possible to take the next step and use this information to change the entire treatment based on treatment results and changes in both position and shape of the tumor and surrounding organs.

Market growth for products in adaptive radiation therapy will most probably be driven by the same factors as growth within IMRT, in which documented clinical benefits and how the US insurance system allocates its resources are of great importance. It is important to note that adaptive techniques are a complement to IMRT and therefore will not have a negative impact on revenue potential within IMRT.

RaySearch has had a long-term development and licensing agreement with Philips since 2006 for a suite of three products in adaptive radiation therapy. The partnership with IBA Dosimetry in quality assurance of radiation therapy also includes adaptive functionality.

QUALITY ASSURANCE A NATURAL AREA FOR EXPANSION

Quality assurance of radiation therapy is an adjoining area to treatment planning and a market segment into which RaySearch is expanding. RaySearch can benefit greatly from its existing expertise in this area, making quality assurance a natural area for expansion.

Quality assurance involves measuring and minimizing the deviations between the treatment plan and the dose actually administered to the patient. In this manner, assurance is obtained that the deviations are within the specified tolerance levels. Because IMRT is a more complex treatment method than conventional radiation therapy and higher doses are administered, quality assurance is more extensive. At present, this is a very expensive and time-consuming task that can be made significantly more efficient. More than 2,000 clinics currently perform IMRT, and the potential for systems that can make this process more efficient is very substantial.

The leading supplier of advanced dosimetry and quality assurance for clinical and industrial radiation systems is IBA Dosimetry. RaySearch signed a licensing agreement with IBA Dosimetry in February 2006 regarding joint development of a revolutionary new system for quality assurance of intensity modulated radiation therapy called COMPASS®.

COMPASS® received FDA approval and was launched in December 2007. During 2008, sales and installation of the system began in clinics around the world. COMPASS® allows measurement and three-dimensional reconstruction of the radiation dose that was actually administered to the patient on each day of a treatment cycle. This is very valuable, particularly for advanced IMRT/IGRT treatments. In addition to improving accuracy, COMPASS® has the potential to significantly shorten the time required for the quality assurance process, which gives clinics more time for treating patients, while improving safety. We are working continuously to improve COMPASS®, and these improvements will include expanding the system for quality assurance of VMAT.

COMPETITORS

RaySearch's competitors are primarily the internal development departments of its potential commercial partners. These large medical technology companies always have the option of developing software within their own organizations or outsourcing development work. These companies often choose to focus their development in the areas in which they have the greatest expertise and to find a partner for development that is outside the company's primary focus. The more advanced solutions that RaySearch can offer to develop, the greater the probability that these companies will elect to give the assignment to RaySearch.

An evident trend is that commercial partners are increasingly open to development partnerships. The reasons are that the pace of development is increasingly rapid, new treatment areas such as carbon-ion therapy are opening up and the forms for how commercial partnerships in the area of radiation therapy can be formulated have matured. There are thus grounds for concluding that competition from the internal development departments has become less intense for RaySearch.

THE ADAPTIVE RADIATION THERAPY PROCESS

IMRT represented a major advance in radiation therapy, and now adaptive radiation therapy is on the verge of a similar breakthrough. Adaptive radiation therapy comprises the entire treatment process and is thus a broader area in market terms than IMRT, meaning that products that support the process have greater market potential.

In 2007, RaySearch signed a license agreement with Varian, which is the largest supplier of equipment and software for radiation treatment of cancer. The first three products from this partnership are expected to be launched in 2009.

Strong and enhancing partnerships

RaySearch's commercial partners are companies that develop and sell treatment planning systems to hospitals and clinics that treat cancer with radiation therapy. RaySearch's solutions are integrated into each partner's systems, which they then sell and distribute to hospitals and clinics around the world.

With its five different partners, RaySearch reaches a very large portion of all clinics, while creating breadth and balance in the company's business. RaySearch now has partnerships with the leading players in treatment planning, which gives RaySearch the strength to further expand and enhance its core technology and to be able to offer even more functionality to new and existing partners in the future.

PHILIPS – WORLD LEADER WITH A BROAD PORTFOLIO

Philips Medical Systems is one of the world's leading suppliers of medical diagnostic equipment. Its product portfolio includes equipment for several different medical application areas. Within Philips it is the treatment planning business unit Philips Radiation Oncology Systems that collaborates with RaySearch within radiation therapy.

Philips was RaySearch's first commercial partner. The first agreement entered by the parties in 2000 related to the product p-RayOptimizer, which was launched in 2001, with the supplementary products p-RayBiology and p-RayMachine launched in 2004. These products are integrated into Philips' Pinnacle³ treatment planning system. In June 2008, the licensing agreement was expanded with p-RayArc, which is a product for planning VMAT treatments. p-RayArc is expected to be available for clinical use during the first half of 2009.

In October 2006, another long-term licensing and development agreement was signed within adaptive radiation therapy for a suite of new products. Adaptive radiation therapy increases geometric precision by taking into consideration changes in the patient's anatomy during the treatment, which makes it possible to administer higher doses to the tumor while at the same time reducing the risks of side effects.

PHILIPS

Launched products:
p-RayOptimizer
p-RayMachine
p-RayBiology

Coming products:
p-RayArc
p-RayAdaptive/IGRT
p-RayAdaptive/Dose
p-RayAdaptive/ART

NUCLETRON – STRONG OFFERING IN RADIATION THERAPY

Nucletron has its head office in Veenendaal in the Netherlands and offices in 20 other countries around the world. The company is specialized in development, manufacturing, sales, service and support of products for cancer treatment. Its core competence is in the areas of brachytherapy, treatment planning, information processing and simulation.

RaySearch signed a license agreement with Nucletron in IMRT in January 2004. The agreement comprises a suite of products that are integrated into Nucletron's Oncentra MasterPlan products for treatment planning. In 2005, the first product, n-RayOptimizer, was launched, and in 2006, n-RayMachine/DSS and n-RayMachine/Angle were launched. In addition to these products, the partnership includes n-RayBiology/Eval, n-RayBiology/Opt and n-RayBiology/Fraction, which are three products for biological evaluation and optimization of IMRT. In January 2009, the partnership was expanded to include the products n-RayArc for planning of VMAT treatments and n-RayAnatomy/MBS for model-based segmentation. Both of these products are planned to be launched in the second half of 2009.

Nucletron

Launched products:
n-RayOptimizer
n-RayMachine/DSS
n-RayMachine/Angle

Coming products:
n-RayArc
n-RayAnatomy/MBS
n-RayBiology/Eval
n-RayBiology/Opt
n-RayBiology/Fraction
n-RayProton

In November 2006, an additional long-term development and licensing agreement was signed relating to proton radiation treatment of cancer. Treatment with proton radiation has potentially even better characteristics than intensity modulated radiation therapy (IMRT) with photon irradiation. The n-RayProton product is included in Nucletron's Oncentra MasterPlan treatment planning system, and the first patient treatments with the system were performed in 2008.

IBA DOSIMETRY – LEADER IN DOSIMETRY

German-Belgian IBA Dosimetry is a leading market player within advanced dosimetry and quality assurance solutions for clinical and industrial applications of radiation physics. IBA Dosimetry is a subsidiary of the Belgian IBA group and was previously named Scanditronix-Wellhöfer. IBA (Ion Beam Applications) supplies effective and reliable solutions within cancer diagnostics and cancer treatment.

In February 2006, a long-term development and licensing agreement was signed with IBA Dosimetry relating to three products within quality assurance of IMRT. In addition to these three products, a fourth product, i-RayTracker, is planned. Quality assurance of IMRT is a labor-intensive process involving much manual work. Within the framework of this partnership, RaySearch is developing advanced software for automated quality assurance products, which will make a significantly more efficient quality assurance process possible. The agreement constitutes an important expansion of RaySearch's area of business, and the first products from the partnership, i-RayDose and i-RayMonitor, which are sold under the COMPASS® brand, were launched in December 2007.

Launched products:
i-RayDose
i-RayMonitor

Coming products:
i-RayCorrector
i-RayTracker

VARIAN – MARKET LEADER IN CANCER TREATMENT

Varian Medical Systems, with its base in Palo Alto, California, is the world-leading manufacturer of medical equipment and software for radiation treatment of cancer.

In May 2007, a long-term strategic licensing agreement was signed with Varian within which RaySearch will develop advanced software for treatment planning for radiation treatment of cancer for integration into Varian's Eclipse™ treatment planning system. The agreement includes development of a number of components, such as radiobiological evaluation and radiobiological optimization of treatment plans for radiation therapy with photons/electrons, intensity modulated radiation therapy (IMRT) and proton therapy, as well as optimization of conventional conformal radiation therapy (3D-CRT). The three products for radiobiological evaluation, radiobiological optimization and optimization of conventional 3D-CRT-plans, are expected to be available to clinics during the first half of 2009.

Coming products:
v-RayBiology/Eval
v-RayBiology/Opt
v-RayConformal
v-RayProton

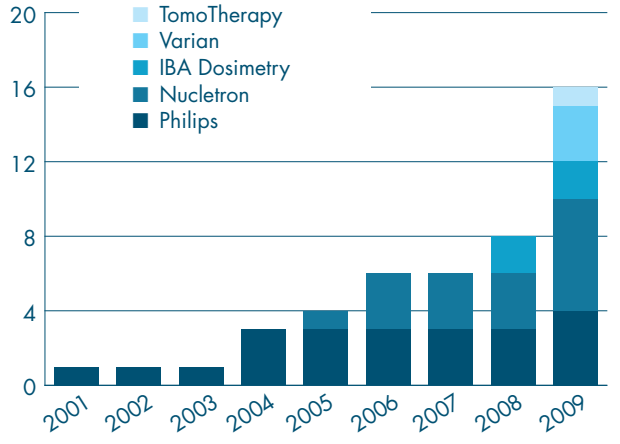
TOMOTHERAPY – STABLE PARTNER WITH GROWTH AMBITIONS

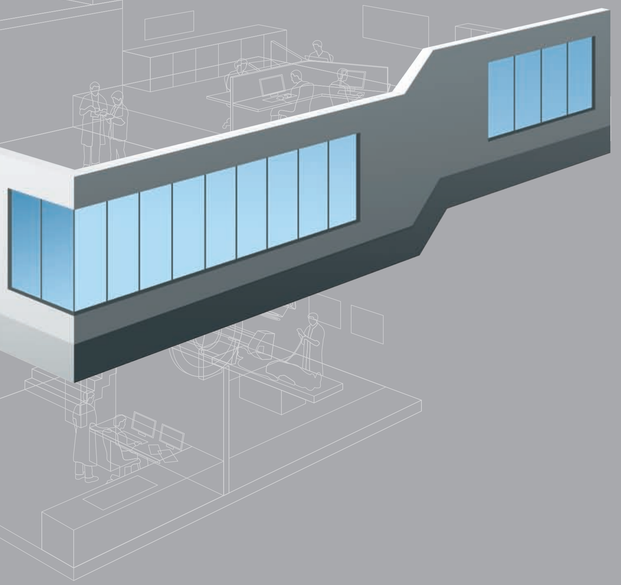
TomoTherapy, based in Madison, Wisconsin, develops, manufactures and sells an advanced radiation therapy system that is marketed under the Hi·Art® brand for treatment of a large number of cancer forms.

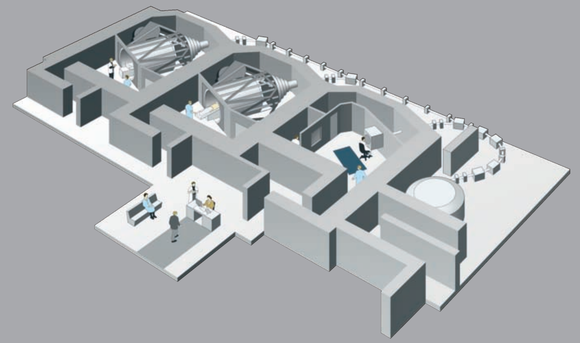
RaySearch signed a license agreement with TomoTherapy in August 2007. The agreement comprises development of a suite of products that facilitate the transfer of treatment plans between a TomoTherapy Hi·Art® system and a conventional linear accelerator (linac). The ability to transfer treatment plans between TomoTherapy Hi·Art® treatment equipment and a conventional linear accelerator results in a better work balance in clinics with different types of accelerators. This means better utilization of the accelerators and greater capacity for treating patients. The first product sold under the name SharePlan™ received FDA approval in January 2009 and launch is planned during the spring.

Coming products:
t-RayAutoplan
t-RayPlan
t-RayAnatomy

NUMBER OF PRODUCTS LAUNCHED OR PLANNED FOR LAUNCH



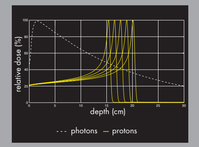




Aiming at a world-leading position within treatment planning for proton- and carbon-ion therapy

Recent decades have seen a vast increase in the effectiveness and efficiency of cancer treatment, but nevertheless there is considerable potential in new technologies and treatment methods. The use of protons and carbon ions to radiate cancer tumors is one such promising approach that has shown excellent results. Since 2006, RaySearch has been working in partnership with Nucletron to develop a system for proton beam therapy planning. During 2008, RaySearch's system was used clinically for the first time at Uppsala University Hospital for the approximately 100 proton radiation treatment administered each year at The Svedberg Laboratory. The company is aiming to secure a world-leading position in this area and is seeking to maximize the efficiency and benefits of this effective treatment method.

Protons and carbon ions are particles that have limited penetration in tissue, meaning that by regulating the energy of the particle beam, it is possible to control the depth of the beam's penetration with great precision, thus enabling the underlying tissue

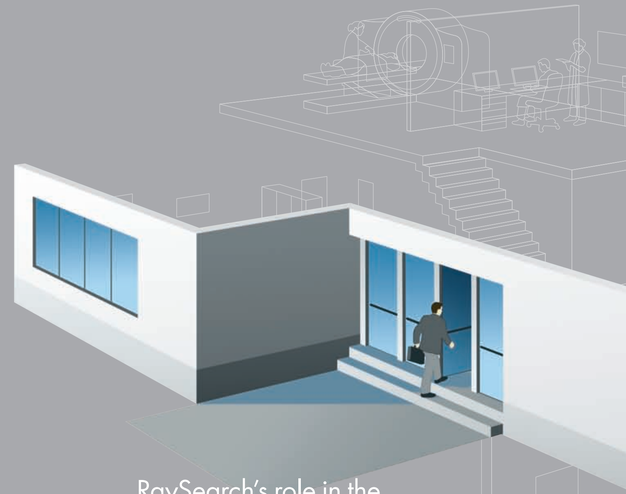


to be completely protected from the radiation. The particle characteristics are also such that they have the greatest effect at the depth at which they come to rest, which also means that the overlying tissue is protected to a greater extent than in other types of radiation therapy. This effect is called the Bragg peak, which is illustrated above. Proton and carbon ion treatment is currently used in cases where precision is absolutely crucial, such as in treatment of brain or eye cancer, as well as in the treatment of children.

Ion acceleration requires advanced equipment and considerable space. A typical unit has an accelerator that supplies three to five treatment rooms with a rotating gantry and one or two rooms with a fixed beam that is often used for treatment of cancer in or around the eyes. Additional treatment rooms are not optimal for an individual accelerator, since in practice this would result in costly waiting time. A clear difference for patients is that a rotating beam gantry for protons and carbon ions is significantly larger than that used in conventional radiation therapy.

The total investment involved in setting up a facility is considerable, ranging from some SEK 500 M to more than SEK 1 billion, of which planning and optimization systems represent from SEK 10 to 40 M. The technical equipment alone currently costs about SEK 350 M. Treatment planning and optimization are often purchased separately for each product and customized for its particular characteristics. Currently, there is no advanced and comprehensive system available, but during 2006, RaySearch signed a contract with Nucletron for the development of a system for treatment planning and optimization of proton beam therapy.

Our challenge is to support radiation therapy clinics so that they can provide better treatment to more patients with ever greater precision.



RaySearch's role in the radiation therapy process

Let us take a look at the workflow in a radiation therapy clinic, which will show you where in the process RaySearch's products are used and in what way they benefit the clinic.

1 Diagnostics

The treatment method for a patient with cancer is determined based on a thorough analysis to establish the nature, origin and extent of the tumor. The analysis may involve checking tissue samples, clinical examination, endoscopy or the use of various imaging methods, such as computed tomography, also known by its initials, CT. A CT examination takes a few minutes and is performed with the patient in the treatment position. Normally a few dots are tattooed onto the patient's skin to help the medical staff to place the patient in the same position in each subsequent treatment.

2 Prescription

Radiation therapy is one of the most common methods used to treat cancer. The treatment is often combined with other treatment methods, such as surgery and chemotherapy. A radiation therapy prescription contains information from the physician about which areas should be treated, what total dose is needed to treat the tumor, how many fractions (treatment sessions) this dose should be divided into and which healthy organs it is particularly important to avoid.

3 Treatment planning and optimization

The patient's volume is imaged in treatment position by means of CT slices through the relevant part of the body. The physician outlines the tumor areas and organs at risk in the imaged volume of the patient using special software tools. Nurses and radiation physicists then use the physician's prescription to create a treatment plan that meets the physician's requirements. A treatment planning system is used for this purpose. The treatment planning system can be described in simple terms as a simulator. Radiation sessions are simulated, then transferred to the treatment machine that will treat the patient. Conventional treatments are usually planned manually by iteratively changing such parameters as beam shapes and beam weights before calculating the resulting dose to the tumor and organs at risk. The preparation of complex plans, such as IMRT plans, requires optimization using advanced software. The user specifies the desired dose to the tumor and risk organs, and the system prepares a plan that fulfills these objectives.

Advanced optimization of IMRT

Advanced optimization of IMRT (intensity modulated radiation therapy) focuses the radiation on the tumor to a greater extent than is possible with conventional three-dimensional conformal radiation therapy (3D-CRT), thereby protecting healthy tissues and enabling higher dosages to be delivered to the tumor.

Products for advanced optimization of IMRT plans give the user considerable freedom in defining different targets and conditions for treatment and assist in achieving the desired dose distribution in the patient. These products make it easy to create an optimal dose plan for each patient.

Launched products:
p-RayOptimizer, p-RayMachine, n-RayOptimizer, n-RayMachine/DSS, n-RayMachine/Angle

Coming products:
t-RayAutoplan, t-RayPlan, p-RayArc, n-RayArc

Radiobiological evaluation and optimization

In radiobiological evaluation and optimization, models are employed to predict how tumors and healthy tissue will react when irradiated. This makes it possible, for example, to evaluate the probability for a given radiation dose that a tumor can be controlled or the risk of damaging healthy tissue. The models can also be used for biological optimization that allows physicians to formulate prescriptions directly in clinical terms, such as the desired probability of controlling the tumor or the risk for radiation-induced complications.

Launched products:
p-RayBiology

Coming products:
v-RayBiology/Eval, v-RayBiology/Opt, n-RayBiology/Eval, n-RayBiology/Opt, n-RayBiology/Fraction

Segmentation and graphical tools

Before treatment can be planned, a three-dimensional model must be created of the tumor and the organs that are in the risk zone. This is performed with the support of a computer by reviewing the CT scans and outlining the contours of the relevant structures slice by slice. The software then combines the slices into a three-dimensional shape. There are a variety of graphical software tools that simplify the process and thus reduce the amount of manual work. These tools also significantly improve quality.

Coming products:
t-RayAnatomy n-RayAnatomy/MBS

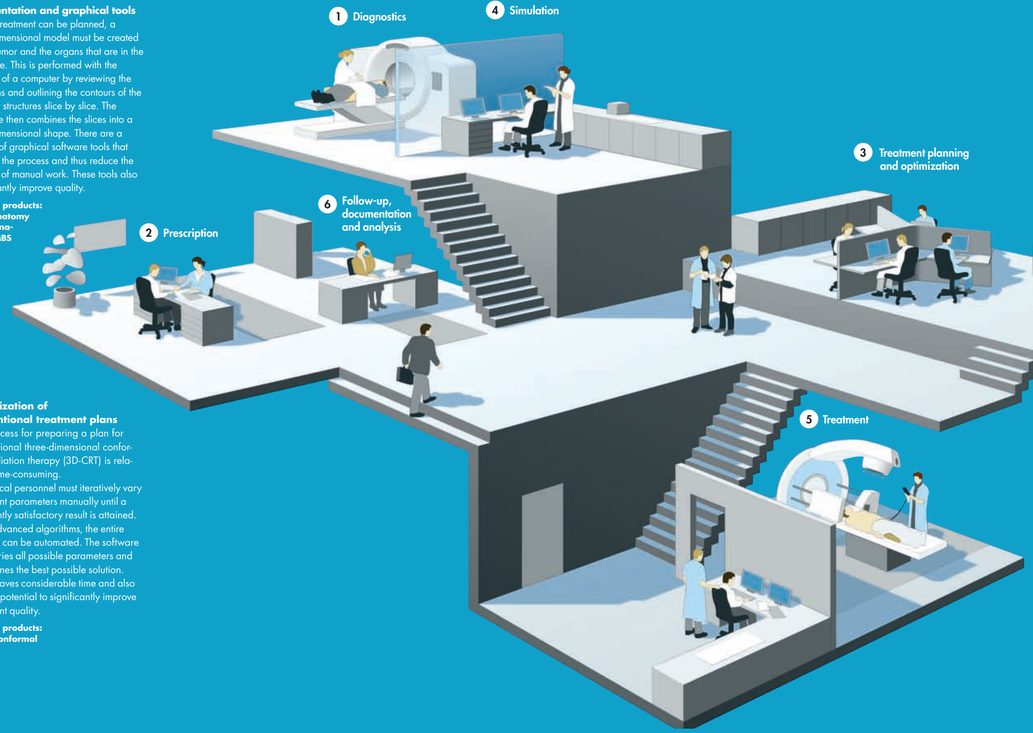
Optimization of conventional treatment plans

The process for preparing a plan for conventional three-dimensional conformal radiation therapy (3D-CRT) is relatively time-consuming.

Medical personnel must iteratively vary treatment parameters manually until a sufficiently satisfactory result is attained. With advanced algorithms, the entire process can be automated. The software then varies all possible parameters and determines the best possible solution.

This saves considerable time and also has the potential to significantly improve treatment quality.

Coming products:
v-RayConformal



5 Treatment

Prior to every IMRT session, a medical physicist performs a quality assurance process to check that the calculated dose corresponds to the real dose that will be delivered by the treatment machine. If the values agree, the plan is approved and the patient can be treated. If they do not agree, a new treatment plan must be produced.

The therapy is divided into fractions. Prior to each fraction (normally one per day, five days per week), the patient is placed on the treatment table. The patient's position must be identical during each treatment session, and this is checked meticulously using laser beams and other aids. What are called portal images are used for this purpose in certain cases.

During the actual irradiation, which takes from ten to twenty minutes, the patient is alone in the room but has voice contact with the medical staff who can see the patient via a monitor.

Adaptive radiation therapy is an emerging treatment method in which repeated measurements of patient geometry are made during the course of the treatment. Information on changes in the tumor's position and shape can then be used to adapt the treatment so that a more patient-specific therapy can be applied.

Quality assurance

In traditional quality assurance of IMRT, the treatment plan is transferred to a simplified model of a patient – a phantom – containing measurement instruments. The phantom is irradiated, and the dose is registered at certain points within the phantom and compared with the corresponding dose in the treatment plan. The process involves considerable manual work that includes assembling and disassembling the equipment and analyzing the results. This cumbersome procedure is normally performed just once prior to the first treatment.

RaySearch is developing products that do not use a phantom, but instead employ detectors mounted on the radiation equipment. This allows three-dimensional measurement and visualization of the radiation dose that will actually be delivered to the patient on each day during the treatment cycle. In addition to improving accuracy and supporting real-time control, these products have the potential to significantly shorten the quality assurance process, thus giving the clinic more time for treating patients, while increasing safety.

Launched products:
i-RayDose, i-RayMonitor

Coming products:
i-RayCorrector, i-RayTracker

Adaptive radiation therapy

Today, radiation therapy is based on the patient's anatomy as it appeared when the CT images were taken and on which the treatment area is defined with sufficient margin surrounding the tumor. In reality, however, both the patient's exterior contours and the position of internal organs change from day to day during treatment. There are already linear accelerators with integrated computed tomography that enable daily imaging of the patient's anatomy. These systems are used for what is called image-guided radiation therapy (IGRT), which is a simpler form of adaptive radiation therapy in which the treatment table is moved so that the tumor is positioned correctly in relation to the beam. The next step is fully adaptive radiation therapy in which the treatment planning system can quantify geometrical changes during treatment with respect to both position and shape and continuously adapt the beam to the new information or correct previous errors.

Coming products:
p-RayAdaptive/IGRT, p-RayAdaptive/Dose and p-RayAdaptive/ART

4 Simulation

When treatment planning and optimization are complete, the treatment plan is checked before being transferred to the treatment device. The check can be carried out using a simulator or, in certain cases, directly in the CT room using the CT machine.

6 Follow-up, documentation and analysis

After treatment has been completed, it is important to follow up the patient's treatment results in a structured manner. Radiation reactions can occur long after the completion of the treatment and may require medical attention. Long-term treatment results over periods of five or ten years are of interest, since it takes a long time to rule out metastasis and give the patient a clean bill of health. Planning and implementation of radiation therapy are meticulously documented so that the clinic can evaluate and thereby improve its own treatment techniques, as well as enable experience to be exchanged with other clinics and partners.

Working together to improve the results of radiation therapy

Users of RaySearch's products are found in clinics that perform radiation treatment of cancer. They are physicians, nurses and medical physicists who all strive to offer their patients the best possible treatment. RaySearch's mission is to help clinical staff over both the short and long term to improve the results and efficiency of radiation therapy.

RaySearch's solutions are found in more than 1,300 clinics in over 30 countries, which all offer their patients advanced radiation treatments. The clinics' physicians, physicists and nurses want to optimize radiation treatment, make the therapy flow more efficiently and limit side-effects. With the help of new, efficiency-enhancing solutions, clinical staff want to treat more patients, while being able to devote more time to each patient.

Patients have a large number of alternatives with respect to forms of treatment and often make a conscious choice. For the clinics, it is a competitive advantage to be able to offer the latest technology for radiation treatment. Examples of the benefits of technical improvements are many. One of the most important is increased precision, which leads to better chances for tumor control while reducing side effects. The patient's confidence depends on providing the latest and most effective treatment method available, which also drives the clinic's development.

In the clinics, several different personnel groups influence decisions regarding the treatment tools to be purchased. Physicians are often the primary decision makers with respect to what treatment is provided and the equipment and techniques the hospital uses. It is the physician who presents the treatment alternatives and treatment plans for the patient and is ultimately responsible for the treatment.

The hospital physicist plays a very important role in the treatment chain by developing the treatment plan and, as part of quality assurance, ensuring that the doses are administered in the manner prescribed by the plan. The hospital physicist therefore often has great influence when a hospital chooses treatment-planning and quality assurance systems.

Nurses within oncology are the persons who perform the radiation treatment and also plan treatment doses when they become routine. Their role is to take care of patients and ensure that the treatment progresses rapidly and effectively according to plan. For these oncology nurses, system reliability and efficiency are extremely important.

Underlying each radiation treatment are exact calculations on which the treatment plan is based. In planning, radiology images of the tumor area, usually with computed tomography, are important for assessment of the extent of the tumor and determination of the radiation dose.

The clinics' technical support departments are another important target group, since their specifications place indirect requirements on RaySearch's products.

Apart from the operative personnel groups, hospital management, which is responsible for income and finances, participates in decisions. This group evaluates the financial and practical implications of investments in new technology. RaySearch's products increase the efficiency of radiation treatment and the entire treatment process, which strengthens the company's commercial partners in their sales of equipment to the clinics.

● Clinics that have purchased RaySearch's products

North America

Development of radiation treatment is led by North America, since the US and Canada are very advanced in implementation of IMRT. These are some examples of radiation therapy centers that use RaySearch products:

■ **Princess Margaret Hospital, Toronto, Canada** · Johns Hopkins Hospital, Baltimore, US · Mayo Clinic of Jacksonville, US · Mayo Clinic of Scottsdale, US · M.D. Anderson Cancer Center, Houston, US · Swedish American Hospital, Rockford, US · The Queen's Medical Center, Honolulu, US · William Beaumont Hospital, Royal Oak, US · UCSF Medical Center – Mt. Zion, San Francisco, US · University of Chicago Hospital, US · University of Wisconsin, Madison, US

Europe

In Europe, the rate of development in radiation therapy centers varies greatly between clinics. A number of clinics have been providing IMRT treatments for some time, while others still need to improve their work methods before this treatment method can be taken into use. Examples of leading radiation therapy centers using RaySearch's products include:

■ **Netherlands Cancer Institute NKI/AVL Hospital, Amsterdam, Netherlands** · Amtssygehuset Herlev, Copenhagen, Denmark · Centre Antoine Lacassagne, Nice, France · St. Luke's Hospital, Dublin, Ireland · Ospedale Civile – San Giovanni, Venice, Italy · Centre Francois Baclesse, Luxembourg · University Medical Centre Nijmegen, Netherlands · Det Norske Radiumhospital, Oslo, Norway · Eresa Hospital, Madrid, Spain · Christie Hospital, Manchester, UK · Clatterbridge Centre for

Oncology, Liverpool, UK · Royal Marsden NHS Trust, London, UK · Uppsala University Hospital, Sweden · Klinikum rechts der Isar, München, Germany · Universitätsklinikum Berlin Charité, Germany

Asia and Middle East

Radiation treatment in Asia and the Middle East is growing fast on the hardware side, which will certainly result in rising demand for advanced software solutions over the coming years. Examples of leading radiation therapy centers using RaySearch's products include:

■ **Matsushita Memorial Hospital, Japan** · Shanghai Hospital, China · Yonsei Cancer Center, South Korea · Intermedic, Beirut, Lebanon · Mount Elisabeth Hospital, Singapore · Kangdong Sacred Heart Hospital, Seoul, South Korea

Further expansion of the product portfolio

RaySearch develops software products that improve the treatment planning systems that are currently used for radiation treatment of cancer. These products are integrated into our partners' systems for treatment planning or quality assurance.

Since RaySearch was founded in 2000, a total of eight products have been launched in partnership with Philips, Nucletron and IBA Dosimetry. In addition to the launched products, RaySearch has signed license agreements for a further 15 products under development with Philips, Nucletron, IBA Dosimetry, Varian and Tomoàerapy. Read more about the planned development of our partnerships and planned product launches on page 15.

RAYOPTIMIZER

RayOptimizer is a product for advanced optimization within IMRT, which allows the user to specify the desired dose distribution to be administered to the patient. àe user has great freedom in defining various targets and constraints for the treatment and can thus optimize the treatment plan for each individual patient. An advantage to RaySearch's optimization engine is that it handles all combinations of linear and non-linear parameters. Another is that it uses advanced mathematical methods for fast convergence in finding a solution. More than 1,300 clinics around the world and over 100,000 patients have received better radiation therapy as a result of this system. Many of the end customers are outstanding radiation clinics, such as Princess Margaret Hospital in Canada and M.D. Anderson Cancer Center in the US. RayOptimizer is sold via two partners Philips (p-RayOptimizer) and Nucletron (n-RayOptimizer).

RAYMACHINE

A critical factor in modern radiation therapy is the trade-off that clinics must make between providing as exact treatment as possible and the time it takes for the accelerator to deliver the treatment. It is also important, particularly for clinics with personnel shortages, to minimize the planning time for each patient.

RayMachine is a product that makes it possible for clinics to significantly reduce the radiation time for each treatment session while maintaining or improving quality in the treatment plan. RayMachine increases the user's ability to define the constraints that will determine the final treatment time and quality as early as during the initial treatment planning phase. àe process also consists of fewer steps, compared with conventional IMRT planning since the equipment settings are optimized directly instead of being calculated as an additional step after opimization is concluded. àis fact and the fact that a clinically acceptable treatment plan is obtained that does not need to be re-planned or adjusted at a later date makes the planning process more user friendly and efficient.

RayMachine is sold via two partners, Philips (p-RayMachine) and Nucletron (n-RayMachine) that are also able to handle hard constraints and a number of smaller functions that facilitate the optimization process (n-RayMachine/DSS). n-RayMachine can also handle gantry angle optimization (n-RayMachine/Angle) and in the future also optimization of collimator angles.

RAYBIOLOGY

In conventional IMRT, it is the physician who on the basis of clinical experience defines the dose with which the tumor will be treated and the highest permissible dose to which healthy tissue may be exposed. RayBiology supports radiobiological evaluation using radiobiological models for how tumors and healthy tissues react to radiation.

After refinement, the product will also include biological optimization, which will allow the physician to formulate the prescription directly in clinical terms (desired probability for tumor control and maximum permissible probability for radiation-induced complications) instead of dosage to different volumes. àe physician balances maximizing the probability of completely eliminating the tumor against minimizing the risk for complications caused by the radiation to find the optimum balance between the dose to the tumor and the surrounding healthy tissue.

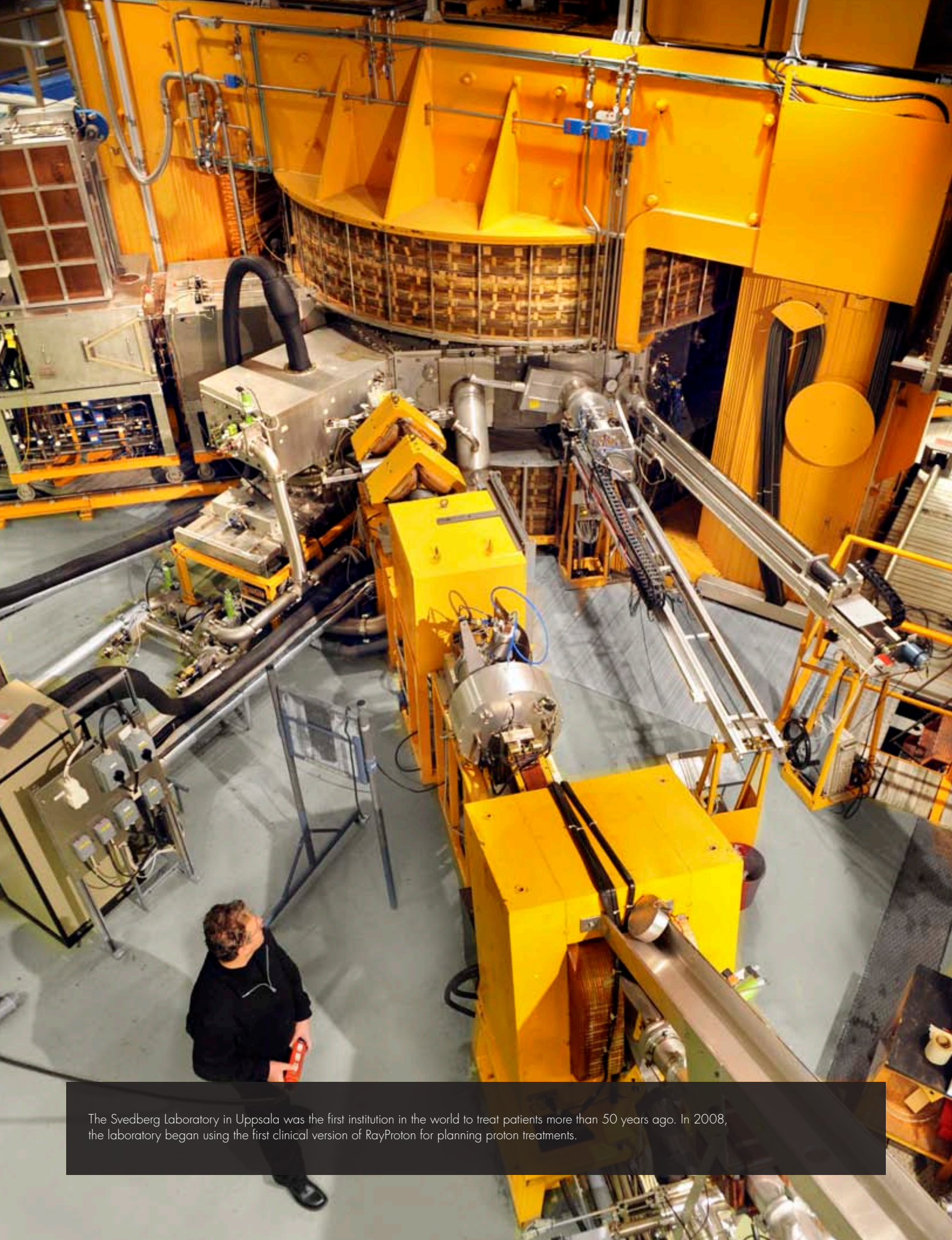
RayBiology is currently sold through one partner, Philips (p-RayBiology), but license agreements have also been signed with Varian and Nucletron.

RAYAUTOPLAN

RayAutoplan is a treatment planning product that uses highly sophisticated algorithms to automatically generate a selection of deliverable high-quality IMRT plans based on an existing dose distribution. àis helps clinics to automatically transfer treatments between different types of treatment equipment.

àis makes it possible to balance capacity utilization. Today,

RaySearch currently has three products integrated in Philips' Pinnacle³ treatment planning system. During 2009, a new product will be launched under the SmartArc brands that will be used for treatment planning of the new, advanced treatment form VMAT.



The Svedberg Laboratory in Uppsala was the first institution in the world to treat patients more than 50 years ago. In 2008, the laboratory began using the first clinical version of RayProton for planning proton treatments.

users must often create a number of different plans manually for the various treatment alternatives available.

Automatic generation of treatment plans is a revolutionary concept that is exceptionally user-friendly and has great potential to reduce the amount of time required for daily, routine tasks. In the future, the product will also be able to transfer plans between different treatment modalities, such as brachytherapy, proton therapy and conventional IMRT.

RayAutoplan is currently available in a version for Tomoάerapy (t-RayAutoplan), which markets the product for transfer of plans from Tomoάerapy's Hi·Art®system to conventional linear accelerators.

RAYDOSE

άe two most important components in a treatment planning system are optimization of the treatment plan and dose calculation. In the beginning, RaySearch was focused on optimizing treatment, but with the development of RayDose, RaySearch also provides products for calculating doses with clinical accuracy. Calculating doses is a complicated process that is based on both the accelerator's characteristics and the patient's different tissue types. RayDose calculates the clinical dose based not only on the patient's anatomy, but also matches the calculations to each individual accelerator to obtain the greatest possible accuracy. In addition to calculating the dose, RayDose visualizes its distribution in the patient's three-dimensional geometry. Advanced visualization tools are necessary for obtaining an overview of the information and taking the correct clinical decision.

RayDose is currently sold through a partner, IBA Dosimetry (i-RayDose), but RayDose is also integrated in t-RayAutoplan from the cooperation with Tomoάerapy.

RAYMONITOR

To ensure that treatment is delivered correctly, a large number of control measurements are performed by the clinic. άis is a time-consuming and therefore costly task. RayMonitor makes it possible to perform control measurements simply using various detectors from which measurements are obtained in real time. When treatments are quality assured using today's methods, it is difficult to assess how a measured deviation affects treatment quality for the patient in question. RayMonitor puts the results in a more relevant context, which makes it easier to draw conclusions about the treatment based on the patient's specific prerequisites. άe expected measurement results for correct treatment are calculated by RayMonitor, and deviations can be corrected in real time. Treatment can be halted if negative consequences arise. RayMonitor thus constitutes a unique monitoring and safety system.

At present, RayMonitor is sold through one partner, IBA Dosimetry (i-RayMonitor).

RAYPROTON

Although treatment planning for radiation treatment of cancer with protons has many similarities to photon treatment planning, there are several important differences worth noting. άe interaction of protons with tissue is significantly different from photons, which places additional requirements on dose calculations. Furthermore, the proton beam's intensity is modulated in a completely different manner. Lateral and vertical modulation is obtained either using individually adjusted range modulators and compensation filters or by using a narrow beam with variable energy that is swept over the tumor area. Over the past two years, RaySearch has developed the manual and automated software tools that are required for planning both these treatment modes. RayProton is by far the most modern product for proton therapy planning on the market. Because it is based on RaySearch's very advanced general methods for optimization, it can also be adapted to optimize a large number of different parameters that are currently adjusted manually. It also incorporates the most recent findings for dose calculation, which enable very rapid and precise calculations. άe first clinical version was taken into operation in 2008 and is now used for planning the proton treatments administered by άe Svedberg Laboratory at Uppsala University Hospital.

άis version, named n-RayProton, is integrated in Nucletron's Oncentra Masterplan treatment planning system, and the two companies are participating jointly in several major tenders for new proton centers.

Development of many, new and unique products

When RaySearch signs a licensing agreement with a partner, development work begins. The goal is to create a commercially successful product in the shortest possible time by applying research results and adapting the existing platform. The research department is currently working with over 15 products. Several initiatives are new for the year and will become unique products on the market.

PLATFORM ENABLES QUALITY AND SPEED IN DEVELOPMENT

Based on the ORBIT platform's functionality, the development department's task is to develop a commercial product matching the partners' and the users' high quality requirements. Development is based on research results and proven methods and includes both creation of new products and the improvement and maintenance of existing products.

The development of the ORBIT platform is the development department's core assignment, and all new functionality is developed as far as possible within the ORBIT platform. This enables a well-proven and fully tested code base to be reused for many products. Having already completed the basic functionality also strengthens RaySearch in negotiations with new partners and in starting new projects.

INCREASED BREADTH IN THE DEVELOPMENT PORTFOLIO

In pace with RaySearch establishing new partnerships and expanding existing ones, the focus of product development is also broadened. IMRT, which has been at the core of the development work thus far, is now one of many areas in which development work is intensive. Enhancement of IMRT, optimization of conventional radiation therapy (3D-CRT), proton treatment planning and quality assurance are areas in which development work is most intensive.

Development within IMRT takes place primarily through constant improvement of basic functionality and development of related technologies that further increase the efficiency of IMRT. Work is conducted within the framework of enhancement of the products that we have launched with Philips and Nucletron.

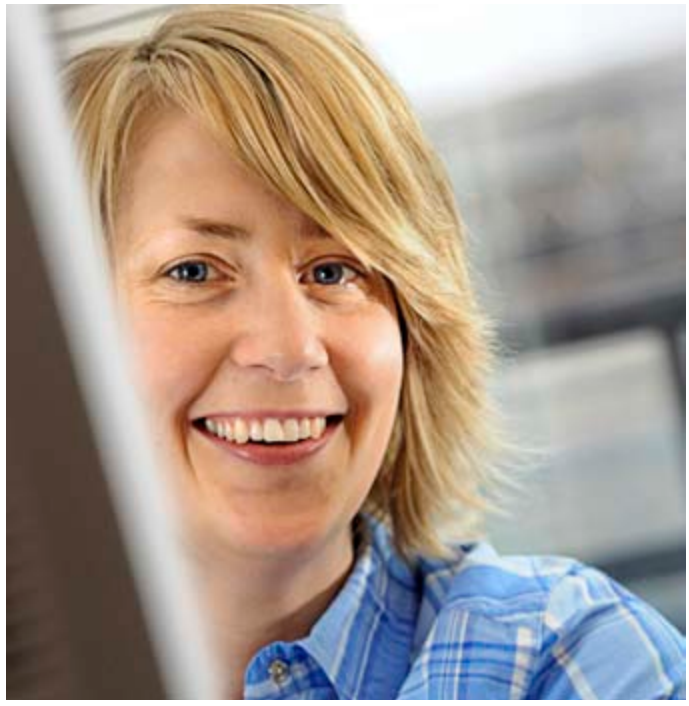
During the year, the development department also worked hard on a new solution for treatment planning for VMAT (Volumetric Modulated Arc therapy), a new, advanced form of IMRT that we are developing for both Philips and Nucletron. VMAT means that the tumor is continuously irradiated while the radiation source rotates around the patient in single or multiple arcs. The concept allows treatment to be administered more rapidly than with traditional IMRT in which the radiation is applied from a small number of fixed gantry angles. Optimizing this type of treatment in a favorable manner requires advanced algorithms that can take into consideration differences in the characteristics of various treatment machines. This is an area in which RaySearch is the leader, and the company is now completing a very flexible and competitive solution that will be available for clinics in 2009.

Within IMRT, RaySearch also worked with automatic generation of IMRT plans within the framework of its partnership with Tomotherapy. This solution is valuable for clinics that have different types of treatment machines and need to balance capacity utilization across different machines. RaySearch's revolutionary solution is exceptionally user-friendly and has great potential to reduce the time required for daily routine tasks. The product was completed in the beginning of 2009 and sales by Tomotherapy begin this spring.

As a result of the long-term strategic license agreement with Varian, the development of advanced software for IMRT that utilizes radiobiological models has been accelerated. The first of these components is expected to be available to clinics during 2009 as part of Varian's Eclipse™ treatment planning system. The products will make it possible to optimize a treatment plan by using biological models as probabilities related to tumor control and the risk of damaging healthy tissue in various parts of the body. This differs from the conventional method, which is not matched to the individual patient's pathology and anatomy to the same extent.

Optimization of conventional three-dimensional conformal radiation therapy (3D-CRT) is an exciting new area for RaySearch that has been added through the partnership with Varian. Conventional treatment with conformal radiation therapy still accounts for a large majority of treatments. Although treatment techniques are simpler, automating and simplifying treatment planning is a challenge. A product is now nearing completion that will sharply reduce the relatively large amount of manual labor still required. This product will also be introduced on the market this year.

Another area in which RaySearch made considerable progress was in the area of proton therapy where the company has a partner-



ship agreement with Nucletron. Proton treatment planning has many similarities with photon planning, at the same time as there are important differences with respect to dose calculation and intensity modulation methods. In August, RaySearch entered into a development agreement with the Svedberg Laboratory in Uppsala, and in December, the first patient was treated with a plan developed using our system.

The first two products for quality assurance for IMRT developed in partnership with IBA Dosimetry were launched globally in the end of 2007 under the COMPASS® brand. The system enables measurement and three-dimensional reconstruction of the radiation dose actually administered to the patient each day during the course of treatment. During 2008, we worked with enhancements of the products that we have developed within quality assurance and plan to launch new functionality during 2009. The most important addition will be that the system will be able to perform quality assurance of the new, advanced VMAT treatments in a unique manner.

EFFECTIVE WORK METHODS INCREASE PRODUCTIVITY

Product development is RaySearch's most critical business process, and there is an established development process that is carefully followed by company management. Product development comprises the dominant portion of the company's operations and was significantly expanded during recent years. During the autumn, RaySearch reorganized the development department to adapt its structure to the substantial increase in the number of employees within development in recent years.

Most development projects extend over one to three years with subsequent enhancement of functionality. As in the research department, the product development department has a well-defined role and its own management, although the two departments share much work.

Group dynamics including a mix of specialties in combination with joint platform development and a structured development methodology are the most important factors for successful product development.

Development work is primarily determined by licensing agreements that specify product goals and functionality requirements. Because RaySearch often performs several similar project steps simultaneously, we work in specialized development teams that develop functionality that can be included in several products. This minimizes duplication of work and means that what we develop consists mostly of permanent solutions that can be added to the technical platform.

In addition to project-related development, there is also long-term method and product development that is intended to prepare for future development projects. The objective is to shorten the time from a research discovery and licensing agreement to the launch of a commercially viable and clinically useful product.

FOCUS AREAS FOR RAYSEARCH'S PRODUCT DEVELOPMENT

Enhancement of IMRT Enhancement of basic technology and development of related technology that further increases the efficiency of IMRT, such as radiobiological optimization, VMAT or automatic plan generation.

Improvement of conventional radiation therapy Development of treatment planning functionality for conventional treatment to reduce the relatively great amount of manual work that is still required while improving treatment quality.

Proton treatment planning Development of basic technology for treatment planning and optimization that takes advantage of the new treatment opportunities offered by these particle types.

Quality assurance Products are being developed for improving and increasing efficiency in the process that clinics follow for ensuring the accuracy of radiation therapy.

Active research results in successful product development

RaySearch has an independent department that pursues its own research while working in close cooperation with various partners. Research results that lend themselves to commercialization form the basis of future product development. The publication of reports in journals and presentations at international conferences help project the image of RaySearch as a business partner at the cutting edge of research.

RESEARCH PROVIDES STABLE BASE FOR OPERATIONS

One of the key factors in RaySearch's success is that the company invests a large portion of its resources in long-term preparations for future product development through a department with research as its primary assignment. RaySearch invests approximately one sixth of its sales in research and slightly more than 60 percent of its sales in research and development. ȧe level of competence in the research department is high, with 65 percent of personnel either holding doctor's degrees or pursuing doctoral studies.

RaySearch's research department is separated from the development department in the organization. ȧ e department's independent status strengthens the creative environment needed for more long-term study of new methods and techniques in radiation therapy. Results are gradually transferred to the development department in the form of research data, new product concepts and proposals for improvement of existing products.

Another very important task for the research department is to present results at international conferences and in scientific journals. ȧ is work is essential for RaySearch from a marketing perspective, since it contributes both to attracting new partners and preparing the market for new treatment methods. During 2008, RaySearch participated in about ten scientific presentations within such areas as adaptive radiation therapy, radiobiological optimization and proton therapy. Several presentations took place during the leading international conferences PTCOG, AAPM, ESTRO and ASTRO.

MOVING QUICKLY FROM RESEARCH TO DEVELOPMENT

RaySearch's research operations are conducted through internal studies and in close collaboration with reference clinics, universities and colleges. Research projects often involve concept studies of algorithms or development of prototype software for developing new treatment techniques. An important task for the department is monitoring scientific developments and thus minimizing the time from scientific publication to finished clinical product.

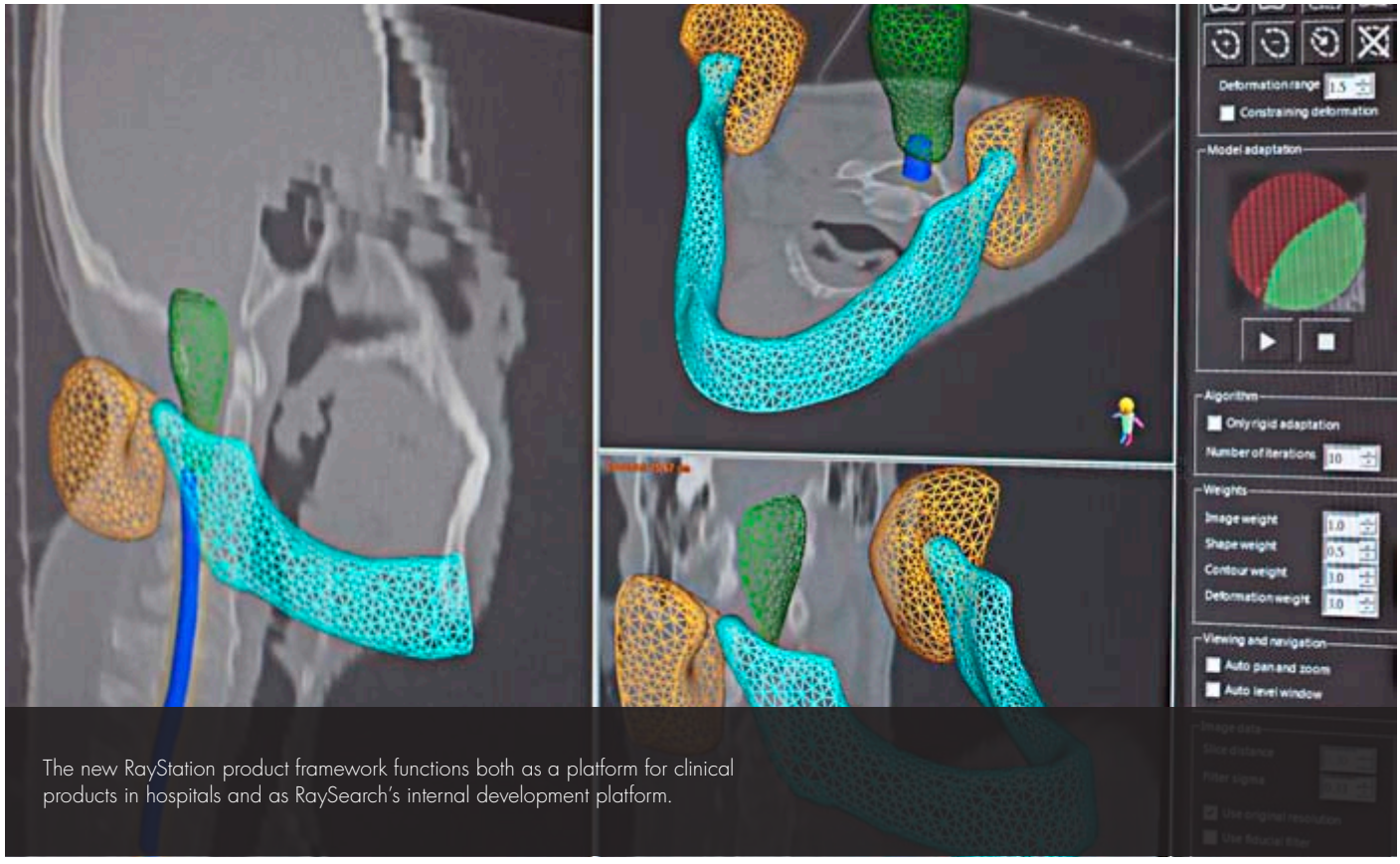
RaySearch's research is long-term with a result perspective of two to five years and is conducted in areas that company management has identified as attractive from a commercial and technical standpoint. When a commercial partner shows interest in RaySearch, research results are often used as a basis for negotiations and for the coming product development phase. Personnel from the research department then continue with product development work. In this manner, the process of developing finished products from research results becomes more efficient.

THREE RESEARCH AREAS PARTICULARLY IMPORTANT

RaySearch's research focuses primarily on three areas: IMRT, adaptive radiation therapy and radiobiological models.

IMRT is by now a relatively mature treatment technique. However, it is possible to develop solutions and enhancements of existing software according to new and more advanced principles. One example is multi-criteria optimization, an area in which RaySearch initiated a new partnership with Massachusetts General Hospital in Boston during the year. Multi-criteria optimization is a tool that helps the physician balance contradictory treatment goals in a structured manner, such as providing a sufficiently high radiation dose to achieve tumor control while needing to keep the dosage to surrounding healthy tissue low enough to minimize the risk of side effects. During 2008, RaySearch's first industrial graduate student defended his doctor's thesis in the area of radiation therapy optimization.

ȧ e research department devotes a large portion of its resources to adaptive radiation therapy. Adaptive radiation therapy refers to techniques in which the position and shape of tumors and internal organs are measured repeatedly during the course of treatment. ȧ ese measurements are then used to adapt the treatment according to anatomical changes. In cooperation with Princess Margaret Hospital, RaySearch has shown that it is possible to maintain control of tumors in the head and neck while reducing damage to adjacent healthy



The new RayStation product framework functions both as a platform for clinical products in hospitals and as RaySearch's internal development platform.

organs. Work to improve tools for adaptive radiation therapy during the year focused primarily on image processing methods. This work resulted in a solution for model-based segmentation (MBS) that simplifies the segmentation process in which a three-dimensional model of the tumor and surrounding tissue is created before the treatment itself is planned. This is a time-consuming step, since it is traditionally performed by manually tracing the contours of relevant structures. With the new software, three-dimensional organ models are automatically matched to each patient's individual image data, thus facilitating the processes and making it significantly more efficient. MBS is an excellent example of how research can quickly result in revenues. RaySearch signed a new license agreement for this product with Nucletron in January 2009.

The research department works continuously to prepare for increased use of radiobiological models and to improve existing functionality. This work was the basis for two of the products that will be launched by Varian later in 2009. Radiobiological models are mathematical models for how various organs and tumors respond to radiation. These models can be used to evaluate and optimize treatment plans. As an example, it is possible using biological models to adjust the radiation dose for unplanned interruptions in the treatment. During 2008, work on radiobiological models was focused on tools for estimating various biological parameters based on radiation modalities for a population and tools for comparing different radiation modalities, such as external radiation therapy and brachytherapy with each other in a biologically correct manner.

NEW PRODUCT PLATFORM LIVES UP TO FUTURE REQUIREMENTS

Another important project during 2008 was the creation of RaySearch's new product platform RayStation, which will be used to develop and demonstrate prototypes. The platform is also being developed as a framework for clinically validated commercial products that will allow users to select various advanced modules for clinical application. Over time, this will create opportunities for RaySearch to sell its own products directly to the clinics. The research department therefore devoted great effort to specifying and developing a framework that takes into consideration all the new requirements that may be placed on treatment planning systems in the future.

RAYSEARCH HAS RESEARCH PARTNERSHIPS WITH LEADING HOSPITALS AND UNIVERSITIES

Massachusetts General Hospital, Boston, US
Princess Margaret Hospital, Toronto, Canada
Karolinska Institutet, Stockholm, Sweden
Royal Institute of Technology, Stockholm, Sweden
University Medical Centre, Nijmegen, Netherlands
Clatterbridge Centre for Oncology Research, Liverpool, UK

Opportunities for breaking new ground

RaySearch is a knowledge-based company in which individuals with deep expertise are able to break new ground. The company attracts employees primarily by offering stimulating and challenging work assignments. Successful recruitment and competence development are prerequisites for achieving business success.

Employees at RaySearch have very extensive and specialized expertise, which is essential for the company's development. Each individual employee's expertise can also be seen as an important asset. About one fourth of all employees at RaySearch have doctorates, while the average age is just 34 years.

The creative environment, in which employees are able to develop advanced solutions based on leading-edge research is one of the most important reasons why RaySearch is able to attract leading expertise.

CREATIVE TEAMWORK AND A SOUND WORKING ENVIRONMENT

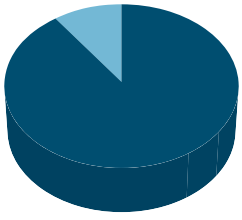
Most operational work consisting of product development work is organized in special teams that are responsible for well-defined subprojects. Work is led by a project manager who reports to the management group. During the autumn, the development department was reorganized to adapt its structure to the substantial increase in the number of employees in development in recent years. The result was more effective work without duplicated assignments and in which functions are developed for several products or partners simultaneously. Team spirit, group dynamics and responsibility characterize the company's work methods.

To retain and develop employees, the best possible working environment is created with stimulating work duties, reasonable working hours, health and fitness benefits and opportunities to participate in business planning as important elements. Employee talks with charting of progress towards individual goals take place continuously to promote employee development. Personnel turnover and absence due to illness are very low. During 2008, absence due to illness at RaySearch was 1.0 (1.3) percent.

SYSTEMATIC COMPETENCE DEVELOPMENT

Competence development takes place primarily through exchanges between employees and within the framework of our partnerships with institutions and clinics, such as Karolinska Institutet, the Royal Institute of Technology and Princess Margaret Hospital. The trend toward increased research partnership in practice means greater opportunities for development. Participation in conferences is another activity that is educational, and several employees often attend the major international conferences. Experience from these events is systematically reported to all employees. The research department also arranges seminars to provide information to other employees about developments in strategically important areas. For less specialized work assignments, such as project management, competence-enhancing activities are arranged when the need arises.

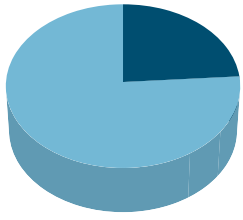
EMPLOYEE DISTRIBUTION



- Research and development (90%)
- Marketing, finance and administration (10%)

Of 50 employees, 45 work in research and development.

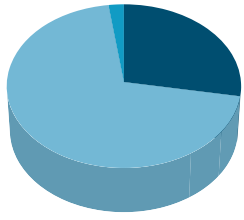
GENDER DISTRIBUTION



- Women (24%)
- Men (76%)

At year-end 2008, RaySearch had a total of 50 employees, of whom 38 men and 12 women.

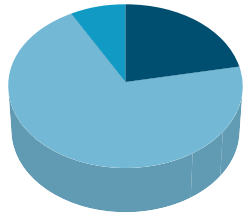
LEVEL OF EDUCATION



- Ph.D (28%)
- University (70%)
- Other (2%)

RaySearch employees are generally very highly educated – 98% have primary university degrees.

AGE DISTRIBUTION



- 21–30 yrs (11)
- 31–40 yrs (35)
- Over 40 yrs (4)

The average age in 2008 was 34 years.

RaySearch gives its employees an opportunity to develop advanced solutions for radiation treatment of cancer based on leading-edge research. This is the primary factor contributing to our attractiveness as an employer.

Shares and ownership

SHARE CAPITAL

The share capital in RaySearch Laboratories amounts to SEK 17,141,386.50. A 3:1 share split, was approved by the 2008 Annual General Meeting. After the share split, the number of shares totals 34,282,773, distributed among 12,638,724 Class A shares and 21,644,049 Class B shares. The quotient value changed from SEK 1.50 to SEK 0.50. All shares carry equal rights to the company's assets and earning's. Each Class A share carries ten votes and each Class B share carries one vote at the Annual General Meeting. All shareholders entitled to vote at the Annual General Meeting may vote for the full number of shares owned or represented by them, with no restrictions on voting rights. The term "Founders" in this section refers to Johan Löf, Erik Hedlund, Anders Brahme, Carl Filip Bergendal, Bengt Lind, Anders Liander and Karolinska Institutet Holding AB.

CHANGES IN SHARE CAPITAL OF RAYSEARCH

Year	Transaction	Quotient value (SEK)	Change in number of shares	Increase in share capital	Number of Class A shares	Number of Class B shares	Total number of shares	Total share capital (SEK)
2005	Opening balance	1.50			4,237,604	6,275,457	10,513,061	15,769,591.50
	Non-cash issue (B)		914,530	1,371,795	4,237,604	7,189,987	11,427,591	17,141,386.50
	Reclassification 2005				–24,596	24,596		
2005	Closing balance	1.50			4,213,008	7,214,583	11,427,591	17,141,386.50
	Reclassification 2006				–100	100		
2006	Closing balance	1.50			4,212,908	7,214,683	11,427,591	17,141,386.50
2007	Closing balance	1.50			4,212,908	7,214,683	11,427,591	17,141,386.50
	3:1 share split, 2008		22,855,182		8,425,816	14,429,366		
2008	Closing balance	0.50			12,638,724	21,644,049	34,282,773	17,141,386.50

LARGEST SHAREHOLDERS

The table below shows the ownership structure according to the largest shareholders in RaySearch as of December 31, 2008.

SHAREHOLDERS	Class A shares	Class B shares	Total shares	Capital, %	Votes, %
Johan Löf	6,243,084	843,393	7,086,477	20.7	42.7
AFA Försäkring	0	2,037,933	2,037,933	5.9	1.4
Wasatch funds	0	2,023,618	2,023,618	5.9	1.4
Erik Hedlund	1,567,089	228,699	1,795,788	5.2	10.7
Anders Brahme	1,390,161	200,400	1,590,561	4.6	9.5
Goldman Sachs	0	1,447,516	1,447,516	4.2	1.0
Northern Trust	0	1,340,220	1,340,220	3.9	0.9
Anders Liander	1,061,577	185,157	1,246,734	3.6	7.3
Carl Filip Bergendal	1,061,577	154,920	1,216,497	3.6	7.3
Bengt Lind	1,061,577	79,920	1,141,497	3.3	7.2
JP Morgan Chase Bank	0	950,912	950,912	2.8	0.6
DWPBank	0	841,567	841,567	2.5	0.6
Mellon	0	831,210	831,210	2.4	0.6
Swedish Third Pension fund	0	744,000	744,000	2.2	0.5
Dekabank	0	615,660	615,660	1.8	0.4
Dresdner Bank Luxembourg	0	469,500	469,500	1.4	0.3
RayIncentive	0	449,628	449,628	1.3	0.3
Swedish Fourth Pension fund	0	380,550	380,550	1.1	0.3
Home Capitals	0	272,700	272,700	0.8	0.2
Karolinska Institutet Holding	252,756	0	252,756	0.7	1.7
Others	903	7,546,546	7,547,449	22.0	5.1
Total	**12,638,724**	**21,644,049**	**34,282,773**	**100**	**100**

The following table shows RaySearch's shareholders distributed by ownership categories on December 31, 2008.

Category	Capital, %	Votes, %
Foreign shareholders	32.6	7.6
Swedish shareholders	67.4	92.4
of which: institutions	17.8	5.6
individuals	49.6	86.8

The following table shows shareholders in RaySearch distributed by size as of December 31, 2008.

Distribution	Number of shareholders	Number of shares	Holdings, %
1–500	2,893	406,465	1.19
501–1,000	587	471,415	1.38
1,001–2,000	398	625,488	1.82
2,001–5,000	331	1,092,723	3.19
5,001–10,000	116	818,777	2.39
10,001–20,000	69	957,171	2.79
20,001–50,000	33	1,010,209	2.95
50,001–100,000	11	802,684	2.34
100,001–500,000	22	5,515,951	16.09
500,001–1,000,000	3	2,536,479	7.40
1,000,001–5,000,000	9	12,958,934	37.80
5,000,001–10,000,000	1	7,086,477	20.67
Total	**4,473**	**34,282,773**	**100.00**

There has been a shift in ownership from non-Swedish to Swedish shareholders. Foreign owners' shareholdings in RaySearch have decreased from 37.8 percent at December 31, 2007 to 32.6 percent at December 31, 2008. The number of shareholders increased in 2008. As of December 31, 2008, there were 4,473 (3,634) shareholders.

STATEMENT FROM SOME OF THE PRINCIPAL SHAREHOLDERS

Principal shareholders Johan Löf, Erik Hedlund and Anders Brahme intend to continue as significant long-term shareholders of RaySearch.

SHAREHOLDER AGREEMENTS

To the knowledge of the Board of Directors of RaySearch, there are no shareholder agreements for Class B shares. However, there is a shareholder agreement among the Founders for their Class A shares. This agreement stipulates the obligation to offer shares to existing shareholders prior to sales of shares to an outsider and the right for Founders in certain cases to acquire the shares of another Founder, for example if the latter should declare bankruptcy. Bengt Lind, Anders Liander and Karolinska Institutet Holding AB are however completely free to transfer their shares to an outsider without any restrictions. The percentage of total voting rights in RaySearch formally covered by this agreement is about 69.3 percent (about 29.9 percent of capital). The shareholder agreement does not contain any provisions about exercising voting rights. When a Founder no longer holds Class A shares, the Founder is no longer a party to the agreement.

The shareholder agreement also includes an undertaking from the Founders in relation to Philips to the effect that, in the event of a public bid for RaySearch from another party, the Founders shall offer their Class A shares to Philips if Founders with a majority of Class A shares believe that the bid is reasonable and will be accepted.

As a result of RaySearch's licensing agreement with Nucletron, Johan Löf, Erik Hedlund, Anders Brahme and Carl Filip Bergendal have also undertaken, in relation to Nucletron, to retain through their Class A shares voting control over RaySearch. This undertaking in relation to Nucletron shall remain in effect until January 2012 at the latest. Unlike their relationship to Philips, Johan Löf, Erik Hedlund, Anders Brahme and Carl Filip Bergendal do not have any obligation to offer their shares in RaySearch to Nucletron before selling them to a third party.

As a result of RaySearch's licensing agreement with IBA Dosimetry, Johan Löf, Erik Hedlund, Anders Brahme and Carl Filip Bergendal have also undertaken, in relation to IBA Dosimetry, to retain, through their Class A shares voting control over RaySearch. This undertaking in relation to IBA Dosimetry shall remain in effect until June 2012 at the latest. Unlike their relationship to Philips, Johan Löf, Erik Hedlund, Anders Brahme and Carl Filip Bergendal do not have any obligation to offer their shares in RaySearch to IBA Dosimetry before selling to a third party.

RaySearch's agreement with Tomotherapy gives each party the right to cancel the agreement if a competitor gains significant influence over the other party through the acquisition of shares.

LISTING ON THE OMX NORDIC EXCHANGE LIST

RaySearch is listed on the OMX Nordic Exchange in Stockholm in the Small Cap segment.

SHARE TRADING AND SHARE PRICE TREND

Adjusted for the 3:1 split, in 2008, a total of 7,956,062 (10,778,256) shares in RaySearch were traded at a value of SEK 193.1 M (721.9). This corresponds to an average price of SEK 24.27 (66.98). The highest price paid during 2008 was SEK 64.16, on January 7. The lowest price during the same period was recorded on October 28 at SEK 10.00. On the last trading day of the year, December 30, the price per share was SEK 11.50 (63.33). During 2008, the share price decreased 82 percent (up 27) for RaySearch's shares, while OMXS showed a

decline of 42 percent (down six) for 2008. Between July 1, 2003 and December 31, 2008, the share price rose 113 percent. RaySearch's market value totaled SEK 394 M (2,171) at the end of December. In these calculations, Class A shares, which are not listed on the stock exchange, were assigned the same value as the listed Class B shares.

LIQUIDITY GUARANTEE

To increase the liquidity of its share, RaySearch signed an agreement with Remium Securities for a liquidity guarantee up to December 31, 2008. As of January 1, 2009, Erik Penser Bankaktiebolag has instead been engaged to quote buy and sell prices on the Stockholm Exchange for RaySearch's Class B shares daily. ä e liquidity is intended to ensure that the difference between the buy and sell prices for RaySearch shares does not exceed 2 percent.

OPTION PROGRAM

RaySearch has issued option programs to facilitate its ability to attract, motivate, and retain personnel. See Note 6.

DIVIDEND POLICY

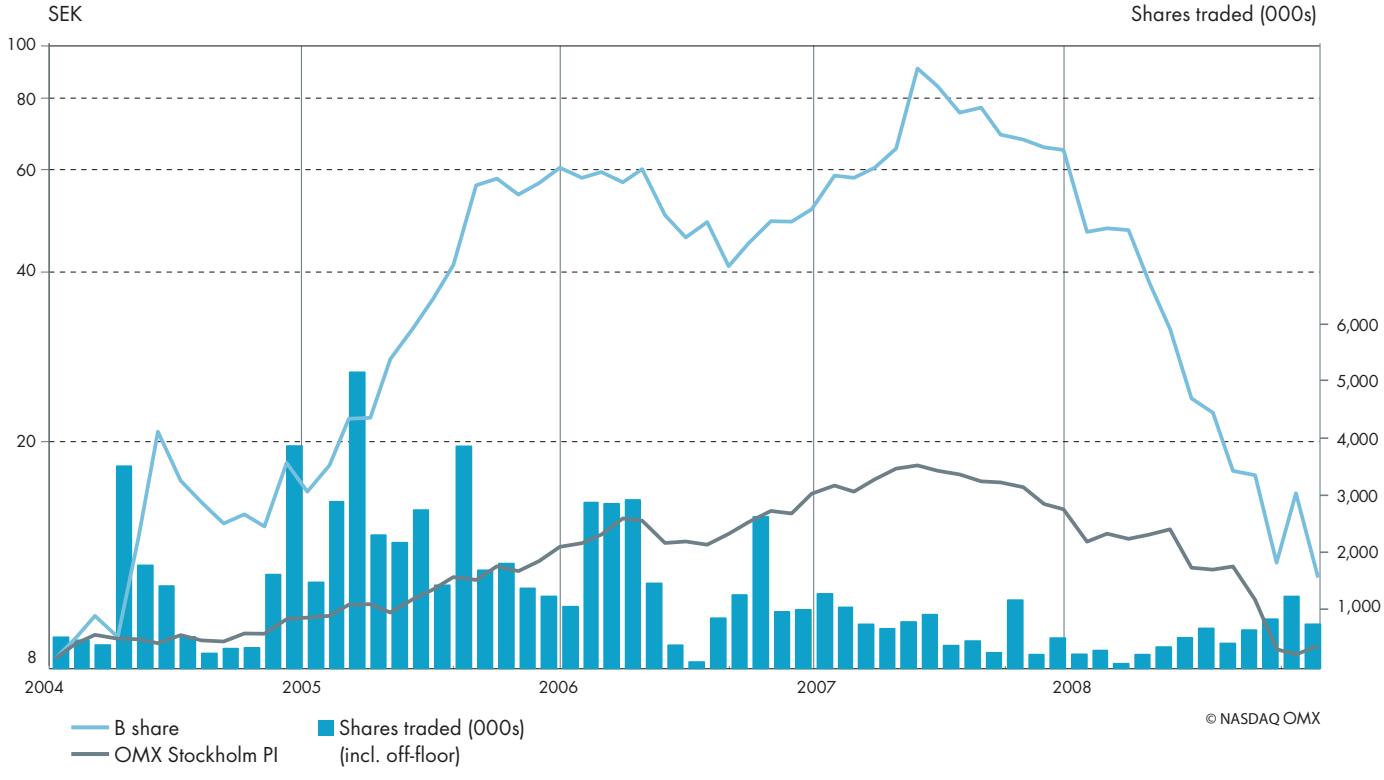
ä e Board of Directors' intention is to pay as dividends approximately 20 percent of the Group's profit after tax on condition that a healthy capital structure is retained.

SHARE PRICE TREND

ä e diagram shows the share price for RaySearch from January 2004 to December 2008, as well as the number of shares traded per month.

Key ratios [1]	Dec. 31, 2008	Dec. 31, 2007	Dec. 31, 2006	Dec. 31, 2005
Number of shares before full dilution [4]	34,282,773	34,282,773	34,282,773	34,282,773
Equity per share, SEK [4]	4.39	4.02	3.44	2.39
Earnings per share, SEK [4]	0.53	0.58	1.06 [2]	0.85
Earnings per share after full dilution, SEK [4]	0.53	0.57	1.05 [2]	0.85
Share price, SEK [4]	11.50	63.30	50.00	59.00
P/E-ratio before dilution	22	110	47	69
P/E-ratio after dilution	22	110	47	69
Dividend, SEK [4]	– [3]	0.17	–	–
Price/Adjusted equity per share, multiple [4]	2.6	5.3	4.8	8.2

1) Definitions of key ratios, page 34.
2) SEK 0.73 and SEK 0.72, excl. capitalization of loss carry-forwards for tax purposes as of December 31, 2006.
3) Proposed dividend.
4) Corrected for 3:1 share split



Corporate Governance Report

GENERAL

Since July 1, 2008, all companies listed on the OMX Nordic Exchange in Stockholm are obliged to apply the Swedish Code of Corporate Governance ("the Code"). ȧ e purpose of the Code is to improve the governance of Swedish companies, especially to ensure that companies are operated in accordance with the interests of their owners. Good corporate governance, in turn, increases confidence in the companies on the capital market and among the general public. ȧ e term "applying the Code" involves a company taking an active position as to how the company will relate to the various regulations in the Code. To the extent that companies choose to depart from the rules of the Code, this shall be reported in accordance with the principle of "comply or explain."

ȧi s corporate governance report has not been subject to external audit.

APPLICATION OF THE CODE

In summary, the Board's approach primarily means that no nominating committee, audit committee or remuneration committee was appointed, nor should any report be drawn up regarding RaySearch's internal controls. In addition to the regulations that, in whole or in part, are not applied due to the fact that they relate to the above-mentioned situation, there are only a few other regulations that the Board has decided RaySearch should not apply.

ȧ e reason that no nominating committee will be appointed is that the ownership structure at RaySearch is such that a nominating committee would lack real function and only incur costs. ȧ e reason that no audit or remuneration committees have been formed is that the size of the Board and the company does not warrant the expenses related to such committees. Even the fact that no report over internal controls shall be established is due to the fact that the Board feels the costs of such a report are not motivated for a company the size of RaySearch. Neither does the Company comply with the Code's provision that deputy Board members should not be appointed. ȧi s is because the reason for not having deputy members, primarily that they frequently lack information, does not apply to RaySearch since the deputy member is the Board secretary and always attends the meetings and receives the same material as the ordinary Board members.

ȧ e Board continuously considers whether its decisions regarding deviations from the Code need to be changed.

ENSURING THE QUALITY OF FINANCIAL REPORTING, ETC.

ȧ e Board is responsible for ensuring that there are effective systems for internal controls and risk management. ȧ e Board has delegated to the President the task of working on these issues. Responsibility and authority is defined in policies, including the financial policy and authorization manual. ȧ e company's auditor attends at least one Board meeting annually.

WORK OF THE BOARD DURING 2008

ȧ e Board held 11 meetings during the year. Erik Hedlund, Johan Löf and Carl Filip Bergendal participated on all occasions and Hans Wigzell participated on nine occasions. Deputy ȧ omas Pousette participated in all meetings. Considering the size of the Board, it has not been considered necessary to implement any special division of labor within the Board. Nor have any committees been established.

FURTHER INFORMATION

For further information regarding the Board and President, the reader is referred to pages 64–65, and Notes 4 and 6 in the Annual Report. For further information on the auditors, refer to page 67 and Note 5 in the Annual Report. A more detailed corporate governance report is available on RaySearch's home page www.raysearchlabs.com.

Stockholm, April 3, 2009

Board of Directors

Key Ratios and Financial Overview

The summary shows how the core business developed between 2000 and 2008. The years 2004-2008 were prepared in accordance with IFRS.

Figures in the income statement, balance sheet and cash-flow statement for the full-year 2002 and 2003 refer to the previously prepared pro forma accounting, since this comparison provides a more accurate picture of how operations have progressed.

Additional information regarding the pro forma accounting can be found in the Annual Report for 2003.

Group	2008	2007	2006	2005	2004	2003 [1]	2002 [1]	2001 [2]	2000 [2]
Net sales, SEK M	62.7	64.7	69.0	69.9	39.5	34.0	31.0	21.1	–
Growth in sales, %	–3.0	–6.2	–1.3	77.0	16.0	9.7	46.9	–	–
Operating profit/loss, SEK M	21.1	25.8	33.5	39.6	12.5	12.9	8.0	11.1	–1.3
Operating margin, %	33.6	39.8	48.6	56.7	31.6	37.8	25.9	52.8	–
Profit margin, %	38.5	43.3	50.5	57.3	32.0	38.5	26.8	53.1	–
Net profit/loss, SEK M	18.2	19.8	36.2	29.1	11.2	8.7	3.9	6.4	–1.3
Earnings per share, SEK [5]	0.53	0.58	1.06 [3]	0.85	0.36	0.28	0.12	0.20	–0.04
Cash flow per share [5]	0.76	1.10	0.88	1.21	0.41	0.38	0.53	0.23	–0.10
Dividend per share, SEK [5]	– [4]	0.17	–	–	–	–	0.06	0.06	–
Capital employed, SEK M	150.0	137.9	118.1	81.9	39.4	28.3	23.6	14.1	5.0
Interest-bearing liabilities, SEK M	–	–	–	–	–	–	–	–	0.2
Total assets, SEK M	188.1	173.2	146.3	107.2	54.8	42.5	31.8	18.1	5.5
Equity per share, SEK [5]	4.39	4.03	3.44	2.39	1.25	0.90	0.75	0.36	0.15
Equity/assets ratio, %	80.0	79.6	80.7	76.4	72.0	66.5	74.5	73.2	86.5
Share of risk-bearing capital, %	93.9	92.8	92.9	89.3	88.6	81.9	84.2	77.4	86.5
Return on capital employed, %	16.7	22.2	34.9	66.1	37.5	50.7	44.2	117.7	–
Return on total capital, %	13.4	17.8	27.5	49.5	26.1	35.5	33.5	94.1	–
Return on equity, %	12.6	15.5	36.2	48.0	33.1	33.7	21.3	71.5	–
Share price at year-end, SEK [5]	11.50	63.33	50.00	59.00	16.20	8.33	–	–	–
Average number of employees	48	37	28	27	23	19	16	8	2

1) Pro forma in accordance with Swedish Financial Accounting Standards Council Recommendations, see Annual Report for 2003.
2) Pertains to RaySearch Medical AB in 2000 and 2001 in accordance with the general directives of the Swedish Accounting Standards Board.
3) SEK 0.73, excl. capitalization of tax loss carry-forwards in 2006.
4) Proposed 2008 dividend.
5) Corrected for 3:1 share split

DEFINITIONS OF KEY DATA

Capital employed Total assets less non-interest-bearing liabilities including deferred tax liability.

Cash flow per share Cash flow from current operations divided by average number of shares during the year.

Dividend per share, SEK Dividend divided by number of shares at year-end.

Earnings per share Net earnings divided by average number of shares during year.

Equity/assets ratio Equity as a percentage of total assets.

Equity per share Equity divided by number of shares at end of year.

Operating margin Operating profit, expressed as a percentage of net sales.

P/E-ratio Share price divided by earnings per share, before and after dilution.

Share price/Adjusted equity per share Share price divided by adjusted equity per share at year-end.

Profit margin Income after financial items expressed as a percentage of net sales.

Return on capital employed Operating profit plus financial income expressed as a percentage of average capital employed.

Return on equity Net income after taxes expressed as a percentage of average shareholders' equity.

Return on total capital Operating profit plus financial income expressed as a percentage of total assets.

Share of risk-bearing capital Equity plus deferred tax liabilities expressed as a percentage of total assets.

There are no minority interests with the Group for accounting purposes.

CONSOLIDATED INCOME STATEMENTS

Amounts in SEK 000s	2008	2007	2006	2005	2004
Net sales	62,690	64,705	68,976	69,855	39,479
Cost of goods sold	–661	–863	–849	–1,121	–1,238
Gross profit	**62,029**	**63,842**	**68,127**	**68,734**	**38,241**
Research and development costs	–29,183	–24,225	–17,379	–16,069	–13,147
Other operating expenses	–11,788	–13,836	–17,208	–13,058	–12,634
Operating profit	**21,058**	**25,781**	**33,540**	**39,607**	**12,460**
Result from financial items	3,048	2,260	1,320	408	158
Profit/loss before tax	**24,106**	**28,041**	**34,860**	**40,015**	**12,618**
Tax	–5,883	–8,262	1,359	–10,873	–1,403
Profit for the year	**18,223**	**19,779**	**36,219**	**29,142**	**11,215**
Earnings per share before full dilution	0.53	0.58	1.06	0.85	0.36
Earnings per share after full dilution	0.53	0.57	1.05	0.85	0.33

CONSOLIDATED BALANCE SHEETS

Amounts in SEK 000s	Dec. 31, 2008	Dec. 31, 2007	Dec. 31, 2006	Dec. 31, 2005	Dec. 31, 2004
ASSETS					
Intangible fixed assets	81,705	62,738	45,397	34,876	25,707
Other fixed assets	12,495	13,586	12,232	1,351	3,950
Total fixed assets	**94,200**	**76,324**	**57,629**	**36,227**	**29,657**
Total current assets	**93,891**	**96,909**	**88,645**	**70,954**	**25,138**
TOTAL ASSETS	**188,091**	**173,233**	**146,274**	**107,181**	**54,795**
SHAREHOLDERS' EQUITY AND LIABILITIES					
Shareholders' equity attributable to the Parent Company's shareholders	150,435	137,851	118,072	81,854	39,475
Liabilities	37,656	35,382	28,202	25,327	15,320
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES	**188,091**	**173,233**	**146,274**	**107,181**	**54,795**

CONSOLIDATED CASH-FLOW STATEMENTS

Amounts in SEK 000s	2008	2007	2006	2005	2004
Cash flow from operating activities	26,045	37,862	30,093	41,393	12,872
Cash flow from investing activities	–29,540	–25,559	–16,872	–14,640	–11,843
Cash flow from financing activities	–4,996	–	–	13,279	–
Cash flow for the year	**–8,491**	**12,303**	**13,221**	**40,032**	**1,029**

Board of Directors' Report 2008

The Board of Directors and President of RaySearch Laboratories AB (publ), corporate registration number 556322-6157, submit herewith the annual report and consolidated accounts for the 2008 fiscal year.

OPERATIONS

RaySearch Laboratories is a medical technology company that develops advanced software solutions for improved radiation therapy of cancer. RaySearch's products are sold through license agreements with leading partners such as Philips, Varian, Nucletron, IBA Dosimetry and Tomotherapy. Eight products have been released to date, and RaySearch's software is used at more than 1,300 clinics in over 30 countries. In addition, existing license agreements cover more than 15 other products that are scheduled to be launched in the coming years. RaySearch was founded in 2000 as a spin-off from Karolinska Institutet in Stockholm and the company is listed in the Small Cap segment on the OMX Nordic Exchange Stockholm.

Development focuses on translating market demands, customer preferences and research results into products in cooperation with the company's partners. This involves creation of new products as well as enhancements and maintenance of existing products. Development in 2008 was focused on treatment planning of rotational therapy and conventional radiation therapy, radiation therapy with protons, automatic generation of treatment plans, biological treatment evaluation and quality assurance of radiation treatments.

The research is more future-oriented and forms the basis of the next generation of products. Research primarily focuses on the following areas: adaptive radiation therapy, multi-criteria optimization and radiobiological models and tools. Research operations are conducted in close cooperation with such organizations as Karolinska Institutet in Solna, Stockholm, the Royal Institute of Technology in Stockholm, Princess Margaret Hospital in Canada, Massachusetts General Hospital in the U.S., University Medical Centre Nijmegen in the Netherlands and Clatterbridge Centre for Oncology in the United Kingdom.

HIGHLIGHTS OF THE YEAR

COMPASS® began generating revenue and the agreement with IBA Dosimetry was expanded

COMPASS® is a market-leading dosimetry solution for quality assurance of intensity modulated radiation therapy and has been developed in cooperation with IBA Dosimetry. In December 2007, COMPASS® was launched globally by IBA Dosimetry and in the first quarter of 2008, the first orders were received. At the same time, RaySearch also received its first revenue from COMPASS® when the first commercial system was installed. The cooperation was also formally expanded with a new product, i-RayTracker, which will further strengthen the COMPASS® system's unique online surveillance capabilities. Already today, COMPASS® enables the users to measure what dose is actually delivered to the patient each day during the treatment process. Using images captured during the course of treatment, i-RayTracker will in addition allow the users to accurately compute the accumulated dose taking into consideration anatomical changes such as organ motion or tumor shrinkage. This will in turn offer a potential for even more effective treatments with decreasing risk of side effects. This advanced functionality is not available in any commercial system on the market today.

RaySearch and Philips signed an agreement covering new product for VMAT

In June, RaySearch Laboratories AB and Philips signed an extension of the existing IMRT agreement covering a new treatment planning product for VMAT treatments. Volumetric Modulated Arc therapy (VMAT) is a new, advanced form of Intensity Modulated Radiation therapy (IMRT) where the treatment machine rotates around the patient while the treatment beam is turned on. This concept enables faster treatment delivery compared with traditional IMRT where the patient is irradiated from a few selected angles. At the same time treatment quality remains similar or can be improved compared with IMRT which is currently considered the best treatment quality. The product will be an integrated module in Philips' treatment planning system Pinnacle^3 and is marketed under the name SmartArc. A prototype is already integrated in Pinnacle^3 and has been demonstrated at the large trade fairs AAMD and AAPM. The finished product is expected to be available for clinical use in the first half of 2009.

RaySearch commenced research cooperation with Massachusetts General Hospital

In August, RaySearch signed a cooperation agreement with Massachusetts General Hospital (MGH) in Boston, Massachusetts covering research and development within the field of multi-criteria optimization for radiation therapy. In all radiation treatments the clinician has to balance conflicting objectives such as obtaining a sufficiently high target dose to achieve tumor control, while ensuring that the dose to the surrounding healthy tissues is sufficiently low to minimize the risk for side effects. Multi-criteria optimization provides a tool for dealing with these tradeoffs in a stringent fashion. The goal of the cooperation is to develop a software prod-

uct that enables clinicians to explore and evaluate a representative set of treatment alternatives in a highly intuitive and efficient way. ȧ is has the potential to speed up the time-consuming treatment planning optimization process where currently the different parameters of a treatment plan are changed through trial and error until a satisfactory plan is found.

First patient treated using RaySearch's proton therapy system
In August 2008, RaySearch Laboratories AB concluded a cooperation agreement with Uppsala University Hospital covering the development of a new system for proton radiation treatment to be performed at ȧ e Svedberg Laboratory. December marked a key milestone when the first patient was treated clinically using a plan derived from the new system supplied by RaySearch. ȧ e system has been integrated into the Oncentra MasterPlan treatment system from RaySearch's business partner, Nucletron. Uppsala University Hospital treats more than 100 cancer patients annually using proton radiation therapy at ȧ e Svedberg Laboratory and the system will be used for all proton treatment in the future.

SALES AND EARNINGS

For 2008 as a whole, net sales declined by 3 percent from the preceding year, totaling SEK 62.7 M (64.7). ȧ e number of licenses sold amounted to 634 (731) and license revenues during 2008 totaled SEK 39.0 M (45.1). Sales mainly comprise license revenues from p-RayOptimizer and p-RayMachine and support revenues. ȧi s drop in sales is primarily attributable to lower sales volumes through Philips. Support revenues rose 21 percent in 2008 and amounted to SEK 23.7 M (19.6). Support revenues are based on accumulated license sales and have thus grown continually. During 2009, however, support revenues for RaySearch's first product – p-RayOptimizer – will begin to decline as the product has been on the market since 2001, and is now regarded as mature according to contracts.

Operating profit in 2008 amounted to SEK 21.1 M (25.8), corresponding to an operating margin of 33.6 (39.8) percent.

Profit after tax for 2008 totaled SEK 18.2 M (19.8), corresponding to earnings per share of SEK 0.53 (0.58).

OPERATING EXPENSES AND CAPITALIZATION OF DEVELOPMENT COSTS

Operating expenses excluding currency effects increased by SEK 4.7 M, compared with the preceding year, and amounted to SEK 42.8 M. ȧ is increase was due to increased research efforts, primarily within radiation therapy with protons, adaptive radiation therapy, multicriteria optimization and the research collaboration with Princess Margaret Hospital. Costs of larger office premises and increased amortization of capitalized costs also contributed to the increase. Other operating revenues and other operating expenses pertain to exchange rate gains and losses, and the net of these amounted to SEK 1.8 M (0.1) during 2008.

As of December 31, 2008, 45 (40) employees were engaged in research and development. Research and development costs include payroll costs, consulting fees, computer equipment and premises. Before capitalization and amortization, research and development costs totaled SEK 48.1 M (41.1) and are expected to continue to represent a significant portion of costs in the future.

During 2008, development costs were capitalized in the amount of SEK 29.6 M (23.4). Amortization of capitalized development costs in 2008 amounted to SEK 10.7 M (6.6). Research and development costs after capitalization and amortization of development costs amounted to SEK 29.2 M (24.2). See Note 16.

LIQUIDITY AND FINANCIAL POSITION

As of December 31, 2008, cash and cash equivalents totaled SEK 70.6 M, compared with SEK 79.1 M at December 31, 2007. As of December 31, 2008, current receivables totaled SEK 23.2 M compared with SEK 17.8 M at December 31, 2007. RaySearch has no interest-bearing liabilities.

CASH FLOW

Cash flow in 2008 was a negative SEK 8.5 M (pos.: 12.3). Cash flow from operating activities amounted to SEK 26.0 M (37.9). ȧ e decline is primarily due to the fact that working capital decreased in 2007, which had a positive effect of SEK 9.8 M while working capital increased in 2008, which had a negative effect of SEK 10.5 M. ȧ e increase in working capital in 2008 is primarily attributable to increased accounts receivables. ȧ e cash flow was also negatively affected by RaySearch paying a dividend to shareholders in an amount of SEK 5.6 M (0.0).

CURRENCY EXPOSURE

ȧ e company is dependent on trends in USD and EUR exchange rates against the SEK, since invoicing to Philips is in USD and invoicing to Nucletron and IBA Dosimetry is in EUR. During 2008, revenues in USD were reported at an average exchange rate of SEK 6.69, compared with SEK 6.70 during 2007. In 2008, revenues in EUR were reported at an average exchange rate of SEK 9.86, compared with SEK 9.27 during 2007. A sensitivity analysis of currency exposure indicates that the impact on operating profit in 2008 of a change in the average USD exchange rate of +/– 10 percent is +/– SEK 4.4 M and that the corresponding effect of a change in the EUR exchange rate of +/– 10 percent is +/– SEK 1.8 M.

The company pursues the currency policy set by the Board of Directors. See sensitivity analysis in Note 27.

INVESTMENTS

Fixed assets comprise primarily capitalized development costs. Investments in intangible fixed assets in 2008 totaled SEK 30.2 M (24.3) and in tangible fixed assets SEK 0.5 M (2.1). Refer to Notes 16, 17 and 18.

EMPLOYEES

At December 31, 2008, the number of employees at RaySearch totaled 50 (47). The average number of employees during the period January–December 2008 totaled 48 (37). The workforce has a high academic background, with 28 percent holding PhDs and 70 percent with degrees from universities/technology institutes. RaySearch has an equal opportunity plan.

For RaySearch to more easily be able to attract, motivate and retain its staff, in June 2008, a new option program was issued, directed at the employees including senior executives who had not participated in previous incentive programs. In total, 103,128 call options were issued for the same number of shares. The options can be utilized to acquire shares during the period December 31, 2011 to December 31, 2012 at the strike price of SEK 46.50. The options were acquired by the employees at a market price calculated according to the Black and Scholes model. Since the options are issued for existing shares held by the subsidiary RayIncentive, no dilution effect will arise on the shareholders' holdings.

BONUS AND PROFIT-SHARING FOUNDATION

In 2008, the bonus was removed for all employees except the President and replaced by a profit-sharing foundation. The profit-sharing foundation covers all employees including senior executives except the President. A provision to the profit-sharing foundation is issued in a given year if the operating profit the preceding year reached a level in excess of an operating margin of 20 percent. In such a case, the amount reserved is 10 percent of the part of the operating profit above the limit. The provision has a maximum outcome of 30 percent of the dividend paid. If a dividend is not paid or if the operating margin does not reach 20 percent no provision is made.

THE WORK OF THE BOARD

RaySearch's Board of Directors, which consists of four directors and a deputy, was elected by the shareholders at the Annual General Meeting on May 22, 2008. The company's President is a member of the Board. The Board held 11 meetings in 2008.

The Board conducts its work according to special rules of procedure and instructions regulating the distribution of work between the Board and the President. At each regular meeting, the Board reviews specific reports and decision points. The Board considers issues involving strategy, structure and organization, as well as research and development. The Board also addresses cooperation agreements, interim reports, annual financial statements, as well as audit and budget-related issues. In addition to the President, who is the reporting party during Board meetings, other company employees also participate as required.

The Board approved the President's remuneration and benefits package for the 2008 financial year. The President, in consultation with the Chairman of the Board, approved remuneration to other senior executives. The Board of Directors does not have remuneration or nomination committees.

The company's auditor attends at least one Board meeting annually. RaySearch applies the Swedish Code of Corporate Governance.

PARENT COMPANY

The Group's Parent Company is RaySearch Laboratories AB (publ). The financials of the Parent Company correspond in all significant respects to the financials of the Group, meaning that the comments for the Group also apply to a high degree for the Parent Company. Capitalization of development costs are accounted for in the Group, but not in the Parent Company. Earnings before tax amounted to SEK 17.3 M (9.6). The increase in earnings is attributable to an anticipated dividend from the subsidiary RayIncentive of SEK 12.0 M. As of December 31, 2008, the Parent Company had cash and cash equivalents amounting to SEK 54.5 M (64.2).

OFFICES OUTSIDE SWEDEN

RaySearch has no branch offices outside Sweden.

HOLDINGS OF OWN SHARES (TREASURY STOCK)

The holdings of treasury stock at December 31, 2008 and at December 31, 2007 (adjusted for the 3:1 split) amounted to 449,628 shares held by RayIncentive AB. The quotient value of these shares is SEK 0.50. These shares correspond to 1.3 percent of the share capital. The payment made for these shares totals SEK 276,000. No own shares were acquired or transferred during the fiscal year.

SHARES AND OWNERSHIP

A 3:1 share split, was approved by the 2008 Annual General Meeting. After the share split, the number of shares totals 34,282,773, distributed among 12,638,724 Class A shares and 21,644,049 Class B shares. The quotient value changed from SEK 1.50 to SEK 0.50. All shares carry equal rights to the company's assets and earnings. Each Class A share carries ten votes and each Class B share carries one vote at the Annual General Meeting. All shareholders entitled to vote at the Annual General Meeting may vote for the full number of shares owned or represented by them, with no restrictions on voting rights. At year-end 2008, the largest shareholders in RaySearch were Johan Löf, who owns 20.7 percent of the capital and 42.7 percent of the votes, AFA Försäkring which own 5.9 percent of the capital and 1.4 percent of the votes, Wasatch funds which own 5.9 percent of the capital and 1.4 percent of the votes and Erik Hedlund who owns 5.2 percent of the capital and 10.7 percent of the votes.

To the knowledge of the Board of Directors of RaySearch, there are no shareholder agreements for Class B shares. However, there is a shareholder agreement among Johan Löf, Erik Hedlund, Anders Brahme, Carl Filip Bergendal, Bengt Lind, Anders Liander and Karolinska Institutet Holding AB (the Founders) concerning their Class A shares. ȧi s agreement stipulates the obligation to offer shares to existing shareholders prior to sales of shares to an outsider and the right for Founders in certain cases to acquire the shares of another Founder. ȧ e percentage of total voting rights in RaySearch formally covered by this agreement is about 69.3 percent (about 29.9 percent of capital). ȧ e shareholder agreement also includes an undertaking from the Founders in relation to Philips to the effect that, in the event of a public bid for RaySearch from another party, the Founders shall offer their Class A shares to Philips if Founders with a majority of Class A shares believe that the bid is reasonable and will be accepted.

As a result of RaySearch's licensing agreement with Nucletron, Johan Löf, Erik Hedlund, Anders Brahme and Carl Filip Bergendal have also undertaken, in relation to Nucletron, to retain, through their Class A shares voting control over RaySearch. ȧi s undertaking in relation to Nucletron shall remain in effect until January 2012 at the latest.

As a result of RaySearch's licensing agreement with IBA Dosimetry, Johan Löf, Erik Hedlund, Anders Brahme and Carl Filip Bergendal have also undertaken, in relation to IBA Dosimetry, to retain, through their Class A shares voting control over RaySearch. ȧi s undertaking in relation to IBA Dosimetry shall remain in effect until June 2012 at the latest.

RaySearch's agreement with Tomoȧ erapy gives each party the right to cancel the agreement if a competitor gains significant influence over the other party through the acquisition of shares.

ȧ ere are no special rules in the Articles of Association regarding appointment and removal of Board members or about changes to the Articles of Association. ȧ e General Meeting of shareholders has not authorized the Board to decide on the company issuing new shares or acquiring own shares. Nor is there any agreement between the company and Board members or employees, that in the event of a public offer to acquire shares in the company, prescribes any payments if these persons resign, are given notice without reasonable grounds or if their employment ceases. Refer also to shares and ownership on page 30.

GUIDELINES FOR REMUNERATION TO SENIOR EXECUTIVES

ȧ e starting point for the Board is that remuneration and other conditions of employment for company management shall be on market terms. ȧ e principles for remuneration and other employment conditions applied during 2008 are described below.

Salary and other remuneration

ȧ e President has a fixed basic salary and a variable remuneration. ȧ e variable remuneration amounts to 2.0 percent of the Groups' profit before taxes, however, not more than six months of salary. ȧ e President refrained from his right to a bonus for 2008, which is why no bonus was issued. In addition, the President has a company car.

ȧ e President's salary is reviewed annually. ȧi s is carried out through negotiations between the President and the Chairman of the Board, after which the Chairman presents a proposal to the other Board members. ȧ e President is not present when the Board decides on this matter.

In 2008, the other senior executives comprised the CFO, Director of Research, Director of Development, Product Manager and Director of Marketing. ȧ ese persons have a fixed basic salary. In 2008, the senior executives' variable remuneration was replaced by a profit-sharing foundation, which covers all employees except the President. ȧ e terms for provisions to the profit-sharing foundation are described above under Bonus and profit-sharing foundation. ȧ e other senior executives' salaries are reviewed annually. ȧi s is carried out in negotiations between the President and each employee.

Incentive program

ȧ ere is no incentive program aimed at the company's management.

Pension

All pension undertakings are defined-contribution plans. Retirement age for the President and the other senior executives is 65 and the pension premium is equivalent to the Swedish ITP plan.

Termination of employment

If the President chooses to terminate his employment, his term of notice is six months; if the employer terminates the employment, the term of notice is 12 months. In both cases, the President receives pay during the term of notice. ȧ e company and the other senior executives have a mutual term of notice of three months during which the other senior executives receive salary.

Severance pay

Neither the President nor other senior executives are entitled to any severance pay, in the formal sense, if their employment ceases. However, as stated above, the President and the other senior executives have a right to salary during the notice period.

Proposal for guidelines in 2009

ȧ e Board proposes that the above guidelines shall remain valid for the period following the 2009 Annual General Meeting. ȧ e Board proposes that it should be able to deviate from the guidelines if specific reasons arise.

SIGNIFICANT EVENTS AFTER THE CLOSE OF THE FINANCIAL YEAR

In January, RaySearch and Nucletron extended their collaboration in the form of two new solutions for treatment planning

In January, a development and licensing agreement was signed

covering Nucletron's Oncentra® MasterPlan treatment planning system, which entails that RaySearch will continue to develop software modules for Model Base Segmentation (MBS) and treatment planning of rotation treatments (Volumetric Modulated Arc ả erapy – VMAT). VMAT is a relatively new advanced form of IMRT (Intensity Modulated Radiation ả erapy), in which the target organ is continually radiated at the same time as the radiation source is rotated once or twice around the patient. ả e concept means that treatment can be delivered faster than traditional IMRT, during which the patient is radiated only from a small number of approach angles. MBS simplifies the segmentation process in which a three-dimensional model of the tumor and surrounding organs are created before the actual treatment commences. ả is is a time-consuming stage, since it is traditionally conducted by manually drawing the contours of the relevant structures. ả e new software uses three-dimensional organ models that are automatically adapted to each patient's image data. ả e product will be available for the treatment planning of external radiotherapy and brachytherapy, and offers major potential to boost the efficiency of the segmentation process and also ensure that segmentation is conducted in a consistent manner from case to case.

FDA approval for ả rst product from collaboration with TomoTherapy – marketing under way

In August 2007, a cooperation program commenced with Tomoả erapy, and in January 2009, the first product to emerge from the program gained 510(k) clearance from the US Food and Drug Administration (FDA) and can thereby be launched on the market, which is planned during spring. ả e product, which is marketed under the name SharePlan™, permits the transmission of treatment plans from Tomoả erapy's Hi·Art® system to conventional linear accelerators. By using highly sophisticated algorithms, the product automatically generates a selection of deliverable IMRT plans based on the current Hi·Art® plan. ả is time-saving concept is a key tool in optimizing patient benefits and treatment capacity in clinics that have installed a Hi·Art® system in a mixed environment that includes conventional linear accelerators. ả e potential to automatically generate treatment planning for IMRT is unique by nature and is not available in any other system on the market.

RISKS AND UNCERTAINTY FACTORS

Financial risk management

ả e Board has formulated the Group's financial risk management policy, which serves as a framework of guidelines and regulations in the form of risk mandates and limits for financial activities. RaySearch is primarily influenced by exchange-rate risk. All of the Group's net sales have to-date been in USD or EUR. In accordance with the established financial policy, no currency hedging is employed.

Operational risks

As a result of its operations, the Group is exposed to various operational risks, including the following: dependency on key persons, competition and strategic partnerships. RaySearch currently has partnerships with Philips, Varian, Nucletron, IBA Dosimetry and Tomoả erapy. RaySearch also has several research partnerships. If RaySearch were to lose one or more of these partners, this could have a major impact on the company's sales, profit and financial position. RaySearch is engaged in continuous discussions with a number of medical technology companies in respect of new collaborations. Refer to the Accounting Principles, Note 1 on page 46, for more information on risks and risk management.

FUTURE PROSPECTS

ả e agreements with Varian and Tomoả erapy mean that RaySearch has five partners. All collaboration is continuing and gaining depth. In 2009, important launches are planned with all partners and the number of revenue-generating products is consequently expected to increase sharply. In parallel, the more long-term research work is continuing with a focus on more products being able to be released in the next few years. ả is often takes place in different cooperative arrangements with leading institutions such as Princess Margaret Hospital and Massachusetts General Hospital. RaySearch is also working on developing its own platform under the name RayStation, which will make it possible for the company to sell products directly to clinics. Overall, these factors point to favorable prospects for RaySearch in continuing to build one of the world's leading companies in treatment planning for radiation therapy.

PROPOSAL FOR THE ALLOCATION OF THE COMPANY'S PROFIT OR LOSS

ả e Group's earnings and financial position are presented in the following income statements, balance sheets, and cash flow statements with accompanying notes to the financial statements.

ả e Board of Directors and the President propose that the available earnings of SEK 15,984,000 be handled as follows:

SEK 000s	
Retained earnings	951
Profit for the year	15,033
To be carried forward	15,984

Income Statements

GROUP

Amounts in SEK 000s	Note	2008	2007
Net sales	2, 3	62,690	64,705
Cost of goods sold		–661	–863
Gross profit	27	**62,029**	**63,842**
Other operating income	8	2,012	453
Selling expenses		–2,563	–1,366
Administrative expenses	10	–11,031	–12,525
Research and development costs	10	–29,183	–24,225
Other operating expenses	9	–206	–398
Operating profit	4, 5, 6, 7, 11	**21,058**	**25,781**
Financial income		3,097	2,570
Financial expenses		–49	–310
Net financial income	12	**3,048**	**2,260**
Profit before tax		**24,106**	**28,041**
Tax	14	–5,883	–8,262
Profit for the year[1)]		**18,223**	**19,779**
Earnings per share before dilution (SEK)	15	0.53	0.58
Earnings per share after dilution (SEK)	15	0.53	0.57

1) 100 percent attributable to the Parent Company's shareholders.

PARENT COMPANY

Amounts in SEK 000s	Note	2008	2007
Net sales	2, 3	62,690	64,705
Cost of goods sold		–661	–863
Gross profit	27	**62,029**	**63,842**
Other operating income	8	2,012	453
Selling expenses		–2,563	–1,366
Administrative expenses	10	–12,461	–14,255
Research and development costs	10	–46,635	–39,317
Other operating expenses	9	–206	–398
Operating profit	4, 5, 6, 7, 11	**2,176**	**8,959**
Interest income and similar items		14,454	2,091
Interest expenses and similar items		–37	–310
Profit after financial items	12	**16,593**	**10,740**
Appropriations	13	743	–1,101
Profit before tax		**17,336**	**9,639**
Tax	14	–2,303	–2,974
Profit for the year		**15,033**	**6,665**

Balance sheets

GROUP

Amounts in SEK 000s	Note	Dec. 31, 2008	Dec. 31, 2007
ASSETS			
Fixed assets			
Intangible fixed assets			
Capitalized development expenses	16	80,484	61,574
Software	17	1,221	1,164
		81,705	62,738
Tangible fixed assets			
Equipment, tools, fixtures and fittings	18	1,926	2,333
		1,926	2,333
Financial fixed assets			
Deferred tax receivable	23	10,569	11,253
		10,569	11,253
Total fixed assets		**94,200**	**76,324**
Current assets			
Current receivables			
Accounts receivable	20, 27	19,732	11,143
Tax receivable		–	2,643
Other receivables		1	1,107
Prepaid expenses and accrued income	21	3,514	2,881
Cash and cash equivalents	22	70,644	79,135
Total current assets	28	**93,891**	**96,909**
TOTAL ASSETS		**188,091**	**173,233**
SHAREHOLDERS' EQUITY AND LIABILITIES			
Equity			
Share capital		17,141	17,141
Other contributed capital		1,975	1,975
Retained earnings including net profit for the year		131,319	118,735
Shareholders' equity attributable to the Parent Company's shareholders		**150,435**	**137,851**
Total equity		**150,435**	**137,851**
Long-term liabilities			
Deferred tax liabilities	23	26,240	22,850
Other long-term liabilities	25	1,610	967
Total long-term liabilities		**27,850**	**23,817**
Current liabilities			
Accounts payable		4,283	4,577
Tax liabilities		725	119
Other liabilities		855	1,464
Accrued expenses and deferred income	26	3,943	5,405
Total current liabilities	28	**9,806**	**11,565**
TOTAL LIABILITIES		**37,656**	**35,382**
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		**188,091**	**173,233**
Pledged assets	29		
Chattel mortgages		5,000	5,000
Contingent liabilities		**None**	**None**

Balance sheets

PARENT COMPANY

Amounts in SEK 000s	Note	Dec. 31, 2008	Dec. 31, 2007
ASSETS			
Fixed assets			
Intangible fixed assets			
Software	17	1,221	1,164
		1,221	1,164
Tangible fixed assets			
Equipment, tools, fixtures and fittings	18	1,926	2,333
		1,926	2,333
Financial fixed assets			
Participations in Group companies	19	2,160	2,160
Deferred tax receivable	23	10,569	11,253
		12,729	13,413
Total fixed assets		**15,876**	**16,910**
Current assets			
Current receivables			
Accounts receivable	20, 27	19,732	11,143
Receivables from Group companies		12,000	–
Tax receivable		–	2,643
Other receivables		1	1,107
Prepaid expenses and accrued income	21	3,505	2,881
Cash and cash equivalents	22	54,534	64,217
Total current assets	28	**89,772**	**81,991**
TOTAL ASSETS		**105,648**	**98,901**
SHAREHOLDERS' EQUITY AND LIABILITIES			
Equity			
Restricted equity			
Share capital (12,638,724 A shares, 21,644,049 B shares)		17,141	17,141
Statutory reserve		43,630	43,630
		60,771	60,771
Non-restricted equity			
Retained earnings		951	–
Profit for the year		15,033	6,665
		15,984	6,665
Total equity		**76,755**	**67,436**
Untaxed reserves	24	**19,290**	**20,033**
Current liabilities			
Accounts payable		4,283	4,577
Current tax liabilities		535	–
Other liabilities		855	1,464
Accrued expenses and deferred income	26	3,930	5,391
Total current liabilities	28	**9,603**	**11,432**
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		**105,648**	**98,901**
Pledged assets	29		
Chattel mortgages		5,000	5,000
Contingent liabilities		**None**	**None**

Summary of changes in equity

GROUP

Amounts in SEK 000s	Share capital	Other contributed capital	Retained earnings including net profit for the year	Total
Opening equity January 1, 2007	17,141	1,975	98,956	118,072
Profit for the year			19,779	19,779
Closing equity Dec. 31, 2007	17,141	1,975	118,735	137,851
Profit for the year			18,223	18,223
Dividend paid			–5,639	–5,639
Closing equity Dec. 31, 2008	17,141	1,975	131,319	150,435

PARENT COMPANY

Amounts in SEK 000s	Share capital	Statutory reserve	Retained earnings	Total
Opening equity January 1, 2007	17,141	217,116	–173,486	60,771
Reduction of statutory reserve		–173,486	173,486	0
Profit for the year			6,665	6,665
Closing equity Dec. 31, 2007	17,141	43,630	6,665	67,436
Profit for the year			15,033	15,033
Dividend paid			–5,714	–5,714
Closing equity Dec. 31, 2008	17,141	43,630	15,984	76,755

RayIncentive's holding of shares in RaySearch Laboratories amounted to 449,628 shares at December 31, 2008. RayIncentive has issued options on all shares, mainly to people employed at RaySearch. The consolidated carrying amount of these 449,628 shares in RaySearch Laboratories is SEK 0.

Capital management

RaySearch has the following dividend policy. The Board of Directors' intention is to pay as dividends approximately 20 percent of the Group's profit after tax on condition that a healthy capital structure is retained. RaySearch has no external loans. The Board has proposed that no dividend be paid for 2008. Many employees own shares and/or options in RaySearch. The Board has no mandate from the General Meeting to repurchase shares. The Group has not repurchased shares. During the year, there was no change in the Group's capital management. Shareholders' equity is defined as share capital, statutory reserve and unrestricted shareholders' equity. The Group is not subject to any external capital requirements.

Cash-flow statements

GROUP

Amounts in SEK 000s	2008	2007
Operating activities		
Profit before tax	24,106	28,041
Adjustments for items not included in cash flow, etc.[1)]	10,981	6,864
Taxes paid	1,439	–6,841
Cash flow from operating activities before changes in working capital	**36,526**	**28,064**
Cash flow from changes in working capital		
Increase (–)/Decrease (+) in operating receivables	–8,116	6,681
Increase (+)/Decrease (–) in operating liabilities	–2,365	3,117
Cash flow from operating activities	**26,045**	**37,862**
Investing activities		
Capitalized development expenditure	–29,043	–23,399
Acquisition of tangible fixed assets	–497	–2,160
Cash flow from investing activities	**–29,540**	**–25,559**
Financing activities		
Option premiums received	643	–
Dividend paid	–5,639	–
Cash flow from financing activities	**–4,996**	**–**
Cash flow for the year	**–8,491**	**12,303**
Cash and cash equivalents at the beginning of the year	**79,135**	**66,832**
Cash and cash equivalents at year-end	**70,644**	**79,135**

1) These amounts include amortization of capitalized development expenses.

PARENT COMPANY

Amounts in SEK 000s	2008	2007
Operating activities		
Profit after financial items	16,593	10,740
Adjustments for items not included in cash flow, etc.	–10,513	1,179
Taxes paid	1,558	–6,819
Cash flow from operating activities before changes in working capital	**7,638**	**5,100**
Cash flow from changes in working capital		
Increase (–)/Decrease (+) in operating receivables	–8,107	6,682
Increase (+)/Decrease (–) in operating liabilities	–2,364	3,112
Cash flow from operating activities	**–2,833**	**14,894**
Investing activities		
Investments in software	–640	–837
Acquisition of tangible fixed assets	–497	–2,160
Cash flow from investing activities	**–1,137**	**–2,997**
Financing activities		
Dividend paid	–5,713	–
Cash flow from financing activities	**–5,713**	**–**
Cash flow for the year	**–9,683**	**11,897**
Cash and cash equivalents at the beginning of the year	**64,217**	**52,320**
Cash and cash equivalents at year-end	**54,534**	**64,217**

Notes

NOTE 1 GENERAL ACCOUNTING PRINCIPLES

COMPLIANCE WITH STANDARDS AND LAWS

The consolidated accounts have been prepared in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) and interpretation rulings issued by the International Financial Reporting Interpretations Committee (IFRIC) that have been approved by the EU Commission for application within the EU. Additionally, the Swedish Financial Reporting Board recommendation RFR 1:1 Supplementary Rules for Consolidated Financial Statements has been applied.

The Parent Company implements the same accounting principles as the Group except in those instances specified below under the section "Parent Company's accounting principles." The differences that exist between the Parent Company's and the Group's principles result from limitations in the ability to implement IFRS at the Parent Company due to the Swedish Annual Accounts Act and, in certain instances, for tax reasons.

ASSUMPTIONS WHEN PREPARING THE PARENT COMPANY'S AND THE GROUP'S FINANCIAL REPORTS

The Parent Company's functional currency is the Swedish krona (SEK), which is also deemed the reporting currency for the Parent Company and Group. This means that financial reports are presented in SEK. All amounts, unless otherwise specified, are rounded off to the nearest thousand. Assets and liabilities are reported at their historical acquisition value, except for certain financial assets and liabilities that are valued at fair value. Financial assets and liabilities valued at fair value consist of assets classified as financial assets valued at fair value in the income statement.

Preparing financial reports in accordance with IFRS requires that company management make assessments and estimates as well as assumptions that impact the application of the accounting principles and the reported amounts of assets, liabilities, revenues and expenses. Estimates and assumptions are based on historical experience and a number of other factors that, under existing circumstances, appear reasonable. The result of these estimates and assumptions is then used to estimate the reported values of assets and liabilities that would otherwise not clearly appear from other sources. Actual results can vary from these estimates and assumptions.

Estimates and assumptions are regularly reviewed. Changes to estimates are reported in the period the change is made if the change affects only that period and in the current period and future periods if the change affects both current period and future periods.

Estimates made by company management in implementing IFRS, which have a significant impact on the financial reports and estimates made that could involve significant adjustments to subsequent years' financial reports, are described in greater detail on page 50.

The accounting principles specified below for the Group have been applied consistently during all periods presented in the Group's financial reports, unless otherwise stated. The Group's accounting principles have been applied consistently in regards to reporting and consolidation of the Parent Company and the subsidiaries.

REVISED ACCOUNTING PRINCIPLES

The following new and changed standards and interpretations were applied in preparing the 2008 financial reports: Three interpretive statements have been issued by IFRIC. IFRIC 11 IFRS 2 – Group and Treasury Share Transactions, IFRIC 12 – Service Concession Arrangements, IFRIC 14 IAS 19 – The Limit on a Defined-Benefit Asset Minimum. In autumn 2008, IASB has made changes to IAS 39 and IFRS 7, which were also approved for application by the EU, which allows some financial assets under specific conditions to be reclassified as of July 1, 2008. The new interpretive statements IFRIC 11, 12 and 14 and the amendments to IAS 39 and IFRS 7 do not affect RaySearch Laboratories' income statements, balance sheets, cash flow and shareholders' equity.

NEW IFRS AND INTERPRETATIONS NOT YET APPLIED

A number of new standards or changes in standards and interpretations become effective as of the 2009 fiscal year and have not been applied in preparing these financial reports. New standards or amendments that are applicable as of fiscal years after 2009 are not planned to be applied in advance. Where expected effects on the financial reports from the application of the following new or amended standards and interpretations are not described below, RaySearch Laboratories has not yet made an assessment of their effects.

IFRS 8 Operating Segments outlines what an operating segment is and what information should be provided about them in the financial reports. The standard requires that the segment information be presented based on the management perspective, which means that it is presented in the same manner as it is used in internal reporting. This standard, which has not been adopted by the EU, shall be applied to fiscal years beginning on January 1, 2009 or later. In RaySearch Laboratories' judgment (see the Segment reporting chapter), the operation only comprises one operating segment, which is why IFRS 8 will not affect the company's income statements, balance sheets, cash flow or equity.

IAS 1 Presentation of Financial Statements means that the presentation of the financial statements will change in a few respects and that new, non-compulsory names for the statements are proposed. RaySearch Laboratories' future presentation of financial statements will be affected accordingly upon introduction. This change does not affect the amounts reported. The amended IAS 1 shall be applied to fiscal years beginning on January 1, 2009 or later.

The amendment to IFRS 1 First-time Adoption of IFRS and IAS 27, Cost of an Investment in a subsidiary, jointly controlled entity or associate, concerns dividends received from subsidiaries, associated companies and joint ventures. This amendment shall be applied as of July 1, 2009.

In addition to IFRS 8, IAS 1 and IAS 27, there are amendments to IFRS 2 Share-based Payment, IFRS 3 Business Combinations, IAS 23 Borrowing Costs, IAS 32 Financial Instruments, IAS 39 and IFRS 7 Financial Instruments, IFRIC 13 Customer Loyalty Programmes, IFRIC 15 Agreements for the Construction of Real Estate, IFRIC 16 Hedges of a Net Investment in a Foreign Operation, and IFRIC 17 Distribution of Non-cash Assets to Owners. The aforementioned amendments and IFRICs are not assessed to have any effect on RaySearch Laboratories' income statements, balance sheets, cash flow or equity.

SEGMENT REPORTING

A segment is an identifiable part of a Group, for accounting purposes, that either offers products or services (business segment), or goods or services within a certain economic area (geographic area), which is exposed to risks and opportunities that differ from other segments. Segment information is submitted in accordance with IAS 14 for the Group only. The Group's internal reporting system is based on follow-up of returns from the Group's products and therefore business segments are its primary segment-reporting format. The company's revenue areas – licenses and support – are heavily interdependent and share the same customer base. They are exposed to similar risks and opportunities, which means that separate business segments cannot be identified for accounting purposes. The company therefore believes that the activity consists of one business segment.

CLASSIFICATION, ETC.

Fixed assets and long-term liabilities in the Parent Company and Group essentially only consist of amounts that are expected to be recovered or paid more than twelve months after the balance sheet date. Current assets and current liabilities in the Parent Company and Group essentially only consist of amounts that the company expects to recover or receive payment for within twelve months of the balance sheet date.

CONSOLIDATION PRINCIPLES

Subsidiaries

Subsidiaries are companies that are under a controlling influence from RaySearch Laboratories. Controlling influence means, directly or indirectly, a right to formulate a company's financial and operational strategies for the purpose of achieving economic benefits. When determining whether controlling influence exists, securities other than shares that can immediately be used to obtain shares shall also be considered.

The Group includes Parent Company RaySearch Laboratories AB (publ), corporate registration number 556322-6157, which owns 90.8 percent of the capital and 49.7 percent of the voting rights in RayIncentive AB, whose only function is to own the shares set aside to cover the outstanding and future employee options program.

Consolidation of special-purpose entities

Special-purpose entities (SPE) are included in the consolidated accounts when the economic consequences of business connections between a Group company and an SPE indicate that the Group company exerts a controlling influence over an SPE. When determining whether an SPE exerts a controlling influence, consideration is given to whether operations in the SPE are conducted in a predetermined manner. RaySearch Laboratories owns 90.8 percent of the capital and 49.7 percent of the votes in RayIncentive. RaySearch Laboratories has control over the company and no minority stakes are reported. Any potential dividend from RayIncentive shall, in its entirety, go to RaySearch Laboratories. These circumstances mean that RayIncentive is considered to be an SPE.

RayIncentive's sole function is to own shares in RaySearch Laboratories on which options have been issued or will be issued. RayIncentive is accounted for in accordance with the purchase method. This method means that the acquisition of a subsidiary is viewed as a transaction through which the Group indirectly acquires the subsidiary's assets and assumes its liabilities and contingencies. The consolidated acquisition value is determined through an acquisition analysis in conjunction with the acquisition of the operation. In the analysis, the acquisition value is determined for the shares or operations, as well as the actual value of the acquired identifiable assets and assumed liabilities and contingencies. The difference between the acquisition value for subsidiary shares and the actual value of acquired assets, assumed liabilities and contingencies constitutes consolidated goodwill, or negative goodwill.

Elimination of transactions between Group companies in consolidation

Receivables and liabilities, and revenues or costs and unrealized gains and losses arising from intra-Group transactions are eliminated in their entirety in the consolidated accounts.

FOREIGN CURRENCY

Transactions in foreign currency

Transactions in foreign currency are translated to the functional currency at the exchange rate prevailing on the transaction day. Monetary assets and liabilities in foreign currency are recalculated to the functional currency at the exchange rate on the closing day. Exchange rate differences arising in translation are reported in the income statement. Non-monetary assets and liabilities that are reported at historic acquisition value are translated at the exchange rate on the transaction date. Non-monetary assets and liabilities accounted for at their actual value are translated to the functional currency at the exchange rate prevailing on the valuation date of their fair value. Exchange rate differences are reported in the same manner as other value changes related to the asset or liability.

REVENUE

Licenses and support sales

Revenue is recognized in the income statement when it is likely that future economic benefits will accrue to the company and that these benefits can be reliably calculated. Revenues are reported at the fair value of what was received or will be received with deduction for discounts granted.

The Group reports its license revenue when software is licensed to the customer and the rights to use the software are transferred to the customer. Revenue from support sales is reported monthly, based on invoicing.

OPERATING EXPENSES AND FINANCIAL INCOME AND EXPENSES

Payments relating to operating leases

Payments relating to operating leases are accounted for in the income statement straight-line over the leasing period. Benefits received in conjunction with signing a contract are reported as a part of the total leasing cost in the income statement.

Government contributions

The company has received a grant from the EU through Karolinska Institutet for a research project and from the Swedish Research Council regarding two industrial doctorates. The contributions are reported net against research and development costs. The contributions received do not total to any significant amount.

Financial income and expenses

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

Interest income on receivables and interest expenses on liabilities are calculated by applying the effective interest method. Effective interest is the interest that makes the present value of all future deposits and payments during the fixed interest term the same as the carrying amount of the receivable or liability. The Group and the Parent Company do not capitalize the interest in asset acquisition values.

FINANCIAL INSTRUMENTS

Financial instruments are valued and accounted for in the Group in accordance with the regulations in IAS 39.

Financial instruments accounted for in the balance sheet include, on the assets side, cash and cash equivalents, accounts receivable and loan receivables. Among liabilities and shareholders' equity are accounts payable, issued debt and equity instruments as well as loan liabilities.

Financial instruments are reported initially at the acquisition value corresponding to the instrument's fair value with addition of transaction costs for all financial instruments except when they are part of the category known as financial assets reported at fair value in the income statement, which are reported at fair value excluding transaction costs. Subsequent reporting is based on how they are classified as below.

A financial asset or financial liability is recognized in the balance sheet when the company is bound by the instrument's terms. Accounts receivable are recognized in the balance sheet when the invoice is sent. Liabilities are recognized when the counterparty has performed and there is a contractual obligation to pay, even though 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 rights of the contract are realized, expire or the company loses control over them. The same applies for components of a financial asset. A financial liability is derecognized from the balance sheet when the obligation in the contract is fulfilled or in some other manner is extinguished. The same applies for components of a financial liability.

The fair value of listed financial assets corresponds to the listed bid price on the closing date. At each reporting date, the company tests to determine if there is any objective indication that a financial asset or a group of financial assets need to be impaired.

IAS 39 classifies financial instruments in categories. The classification depends on the intention behind the acquisition of the financial instrument. Company management determines the classification at the original time of acquisition. The following categories are held by the company:

Loan receivables and accounts receivable

"Loan receivables and accounts receivable" are financial assets that are not derivatives with fixed payments or payments that can be determined and which are not listed on an active market. The receivables arise when the company provides money, goods and services directly to the debtor without the intention of trading in receivable rights. The category also includes acquired receivables.

Financial assets value at fair value in the income statement
This category includes the financial assets that are current investments equivalent to cash and cash equivalents.

Other financial liabilities
Comprises financial liabilities not held for trading. The Group's accounts payable are included in this category.

Cash and cash equivalents
Cash and cash equivalents comprise cash funds and balances at banks and comparable institutions that are immediately available as well as short-term liquid investments with a duration from the date of acquisition of less than three months, which are only subject to a negligible risk of value fluctuations. Changes in value are reported in net financial items. Bank balances are reported in the category loan receivables and accounts receivable. Current investments are reported in the category financial assets valued at fair value in the income statement.

Long-term receivables and other receivables
Long-term receivables and other receivables arise when the company provides money without the intention of trading in receivable rights. If the expected holding duration is longer than one year, they are long-term receivables, and if it is shorter they are other receivables. These receivables are in the category loan receivables and accounts receivable.

Accounts receivable
Accounts receivable are in the category loan receivables and accounts receivable. Accounts receivable are reported at the amount expected to be received less doubtful receivables that are assessed individually. The expected duration of accounts receivables is short, which is why the value is reported at a nominal amount without discounting. Impairment of accounts receivable is reported in operating expenses.

Liabilities
Liabilities are classified as other financial liabilities, meaning that they are initially reported at the amount received less transaction costs. After the date of acquisition, the loan is valued at amortized cost in accordance with the effective interest method. Long-term liabilities have an expected duration of more than one year, while current liabilities have a duration of a maximum of one year. Option premiums received are recognized as liabilities until the options are exercised.

Accounts payable
Accounts payable are classified in the category other financial liabilities. Accounts payable have a short expected duration and are valued without discounting at the nominal amount.

TANGIBLE FIXED ASSETS
Assets owned
Tangible fixed assets are reported as assets in the balance sheet if it is probable that the future economic benefits will accrue to the company and that the acquisition value can be calculated in a reliable manner.

Tangible fixed assets are reported in the consolidated accounts at acquisition value after deduction for accumulated depreciation and any impairments. The acquisition value includes the purchase price and costs directly attributable to the asset to deliver it in place and in condition to be used as the acquisition intends. The accounting principles for impairment are presented below.

Tangible fixed assets comprising components with varying useful lives are treated as separate components of tangible fixed assets. The reported value of a tangible fixed asset is derecognized from the balance sheet upon disposal or divestment or when no future economic benefit is expected from use or disposal/divestment of the asset. The gain or loss arising from the disposal or divestment of an asset is the difference between the selling price and the asset's carrying amount less direct selling costs. Gains and losses are reported as other operating income/expenses.

Leased assets
IAS 17 applies to leased assets. Leasing is classified in the consolidated accounts as a finance or operating lease. A finance lease is a lease that essentially transfers all the risks and rewards associated with ownership of an asset to the lessee. If this is not the case, it is an operating lease.

An operating lease means that the leasing fee is expensed over the term based on use, which can differ from what is paid de facto as leasing fee during the year.

In accordance with these rules, all leases in the Group are reported as operating leases.

Depreciation
Depreciation is based on the original acquisition value less any residual value. Depreciation is straight-line over the estimated useful life of the asset. Estimated useful lives:
– computers 3–5 years
– equipment, tools, fixtures and fittings 5 years

The residual value and useful life are assessed annually.

INTANGIBLE FIXED ASSETS
Research and development
Expenditure for research activities that relate to obtaining new scientific or technical knowledge is recognized as an expense as incurred.

Expenditures for development activities, whereby the research results or other knowledge is applied to achieve new or improved products or processes, are reported as an intangible asset in the balance sheet, provided the product or process is technically and commercially feasible and the company has sufficient resources to complete development, and is subsequently able to use or sell the intangible asset. The carrying amount mainly includes direct and indirect expenses, such as personnel costs and cost of premises. Other expenses for development are charged to income as incurred. In the balance sheet, capitalized development expenditure is recognized at acquisition value less accumulated amortization and any impairment losses. Deferred taxes have been taken into account.

Other intangible assets
Other intangible assets acquired by the company are reported at acquisition value less accumulated amortization and any impairment losses.

Expenditure for internally generated goodwill and brands is reported in the income statement when the cost is incurred.

Amortization
Amortization is charged to the income statement on a straight-line basis over the estimated useful lives of intangible assets. Capitalized development expenditures on which amortization has not commenced, are tested for impairment annually or as soon as there is an indication that the asset may be impaired. Intangible assets are amortized as of the date the asset is available for use. The following amortization periods are used:
– Capitalized development costs 5 years
– Software 3–5 years

Impairment
The carrying amount of the Group's assets is tested on each closing date to determine whether there is any indication that impairment would be necessary. If any such indication is found, the recoverable amount of the asset is calculated as the higher of the value in use and the net selling price. An impairment loss is recognized if the recoverable amount is less than the carrying amount. The recoverable amount is determined by discounting the estimated future cash flow from the cash-generating units.

SHARE CAPITAL
Treasury stock
Holdings of own shares (treasury stock) and other shareholders' equity instruments are reported as a reduction of shareholders' equity. Acquisition of such instruments is reported as a deduction from shareholders' equity. Proceeds from the divestment of shareholders' equity instruments are reported as an

increase in shareholders' equity. Any transaction costs are charged directly against shareholders' equity.

Dividends
Dividends are recognized as a liability after approval of the dividend by the Annual General Meeting.

EMPLOYEE BENEFITS
Defined-contribution plans
Plans in which the company's commitment is limited to the fees the company has undertaken to pay are classified as defined-contribution plans. In such cases, the size of the employee's pension depends on the fees the company pays into the plan or to an insurance company and the capital return the fees generate. Accordingly, it is the employee who carries the actuarial risks (that the remuneration will be lower than expected) and the investment risk (that the invested assets will be adequate to provide the expected remuneration). The company's commitments to the plans are recognized as an expense in the income statement as incurred. The Group only has defined-contribution pensions. The Group's obligation for each period is the amount that the Group shall contribute for the specific period.

Provisions for terminations
A provision is reported in conjunction with the termination of employees only when the company is committed to terminating the employment before the normal date.

Share-based payments
The company's options program is such that on each occasion employees have paid a market price for the options. The market price was determined in accordance with the Black & Scholes model.

TAXES
Income tax comprises current and deferred tax. Income tax is recognized in the income statement except when it relates to items recognized directly in equity, in which case it is recognized in equity.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantially enacted at the balance sheet date, and any adjustment to tax payable in respect of previous years.

Deferred tax is calculated using the balance sheet liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The temporary differences relating to investments in subsidiaries and associated companies are not taken into account when they will probably not be reversed in the foreseeable future. The amount of deferred tax provided is based on the expected manner of realization or settlement of the carrying amounts of assets and liabilities. Deferred tax is computed using tax rates enacted or substantially enacted at the balance sheet date.

A deferred tax asset relating to deductible temporary differences and loss carry-forwards is recognized only to the extent that it is probable that future taxable profits will be available, against which the asset can be utilized. The value of deferred tax assets is reduced when it is no longer probable that the related tax benefit will be realized.

Any additional income taxes that arise from the distribution of dividends are recognized at the same time as the liability to pay the related dividend arises in the distributing company.

CONTINGENT LIABILITIES
A contingent liability is reported when there is a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events or when there is a present obligation that can not be reported as a liability or provision because it is not probable that an outflow of resources will be required.

PARENT COMPANY'S ACCOUNTING PRINCIPLES
The Parent Company has prepared its annual report in accordance with the Annual Accounts Act (1995:1554) and the standard, RFR 2:1 Reporting by a legal entity, issued by the Swedish Financial Reporting Board. Under RFR 2:1, the Parent Company in its annual report for the legal entity shall apply all the IFRS and interpretations approved by the EU to the extent possible within the framework of the Annual Accounts Act, also considering the relation between financial reporting and taxation. The recommendation states which exceptions from and additions to IFRS should be made. The differences between the accounting principles applied in the consolidated financial statements and those applied by the Parent Company are presented below. The accounting principles presented below for the Parent Company have been applied consistently in all periods presented in the Parent Company financial statements.

Dividends
Dividend revenues are recognized when the right to receive the payment is deemed certain.

Research and development
All expenditures for research and development are recognized in the Parent Company's income statement. Similar reporting is permitted in accordance with RFR 2:1, point 68. In the consolidated accounting, these expenditures for development are recognized as assets in accordance with IAS 38.

Taxes
Untaxed reserves in the Parent Company are reported including deferred tax liabilities. In the consolidated accounting, untaxed reserves are divided into deferred tax liabilities and shareholders' equity.

Group contributions and shareholders' contributions in legal entity accounts
The company reports Group contributions and shareholders' contributions in accordance with the pronouncement of the Swedish Financial Reporting Board. Shareholders' contributions are reported directly in the recipient's equity whereas the contributor capitalizes the contribution with shares and participations, to the extent that the recognition of an impairment loss is not required. Group contributions are reported in accordance with their financial substance. This means that Group contributions paid to minimize the Group's overall income tax burden are reported directly in retained earnings net of the related tax effect.

Group contributions that are equivalent to a dividend are reported as dividends. This means that Group contributions received and their actual tax effect are reported in the income statement. Group contributions paid and the actual tax effect are reported directly in retained earnings.

Group contributions that are equivalent to shareholder contributions are reported against retained earnings at the recipient, taking into account the current tax effect. The contributor reports Group contributions and its current tax effect as investments in participations in Group companies, when recognition of an impairment loss is not required.

RISKS AND RISK MANAGEMENT
Financial risk management
The Group is exposed to various types of financial risks through its operations. The term "financial risks" refers to fluctuations in the company's earnings and cash flow as a result of changes in exchange rates, interest rates, refinancing, and credit risks. The Board has formulated the Group's financial risk management policy, which serves as a framework of guidelines and regulations in the form of risk mandates and limits for financial activities.

Foreign-exchange risk
Foreign-exchange risk refers to the risk of fluctuations in the value of a financial instrument because of changes in exchange rates. Foreign-exchange risk is related to changes in expected and contracted cash flow (transaction exposure), receivables and liabilities in foreign currency (translation exposure), and financial exposure in the form of currency risk in cash flow and investments. To date, the Group has mainly had payments in USD and EUR, which means a foreign exchange risk. No hedging has been done.

Interest-rate risk
Interest-rate risk refers to the effect on earnings that a change in interest rates would cause. Since RaySearch does not have any interest-bearing loans, the interest risk is limited to short-term investments with short fixed interest periods.

Financing risk
Financing risk refers to the risk that the company would need to borrow funds in a strained credit market. The Group's operations are financed with equity and are currently not exposed to any financing risk.

Credit risk
The Group's credit risk consists of credit risk for receivables from Philips, Nucletron and IBA Dosimetry, which to date are the company's three commercial partners with which products have been launched. No loan losses have occurred to date, and the Group considers that its credit risk will continue to be very low. See Note 27 for a description of the significance of financial risks.

Operational risks
As a result of its operations, the Group is exposed to various operational risks, including the following:

Dependence on key personnel
RaySearch's future progress is partly dependent on the continuation in the organization of a number of key personnel with specific skills. The loss of one or more of these key people could result in an adverse impact on the Group's operations. Part of the personnel has participated in incentive programs and currently holds shares or options in RaySearch.

Competition
RaySearch's competitors are primarily the in-house development departments at potential commercial partners, such as Siemens. These large medical technology companies have always elected to develop software within their own organization or outsource development work. The more advanced the solutions achieved by RaySearch, the greater the probability that major companies will refrain from proprietary development and instead outsource the task to RaySearch.

Strategic cooperation
RaySearch currently has partnerships with Philips, Varian, Nucletron, IBA Dosimetry and TomoTherapy. RaySearch also has several research partnerships. If RaySearch were to lose one or more of these partners, this could have a major impact on the company's sales, profit and financial position. RaySearch is engaged in continuous discussions with a number of medical technology companies in respect of new collaborations.

Alternative treatment methods
Of the three primary forms of cancer treatment – surgery, radiation therapy and chemotherapy – radiation therapy is the form that has grown most for curative groups over the past twenty years. RaySearch believes that radiation therapy will continue to be a key treatment form in the future.

US insurance system
Any decision by the US insurance system not to compensate clinics for treatment in adaptive radiation therapy would adversely affect RaySearch.

Official approval
Medical technology products require official approval. RaySearch would be adversely affected if any product scheduled to be sold by its business partners failed to receive official approval.

Product development
RaySearch develops highly advanced products, in which RaySearch assumes risk in the development effort through to launch, which could result in higher costs than estimated. This is offset through continuous project follow-up and quality assurance.

Fair value
Fair value and carrying amount are synonymous in the Group.

Critical estimates and assessments
Executive management has discussed developments, selection and information regarding the Group's critical accounting principles and estimates, as well as the applications of these principles and estimates.

Critical assessments in the application of the Group's accounting principles
Certain critical estimates for accounting purposes made in the application of the Group's accounting principles are described below.

Significant sources of uncertainty in estimates
Capitalized development expenses
In calculating the cash-generating units' value for the assessment of any impairment requirements for capitalized development expenses, certain assumptions regarding future circumstances and parameter estimates have been made, as presented in Note 16.

Exposure to foreign currencies
Movements in exchange rates may have a relatively large impact on the company in general. Note 27 provides a detailed analysis of the exposure to foreign currencies and the risks associated with changes in exchange rates.

Income recognition
The allocation of license sales and support sales over the various periods is crucial for income recognition and for ensuring that allocation is done in a uniform manner over time.

Information regarding the Parent Company
RaySearch Laboratories AB (publ) is a Swedish-registered limited liability company with its registered office in Stockholm. The Parent Company's shares are listed on the OMX Nordic Exchange in the Small Cap segment. The address of the head office is Sveavägen 25, SE-111 34 Stockholm.

NOTE 2 SEGMENT REPORTING

Operating segments
The Group's operations comprise a single operating segment. Operating segments represent the Group's primary basis for subdivision.

Geographic areas
Geographic areas represent the Group's secondary basis of subdivision. The information presented regarding the segment's revenue pertains to the geographic areas grouped on the basis of the location of the end customers.

	North America		Asia		Europe and the rest of the world	
Percent	2008	2007	2008	2007	2008	2007
Sales	44	56	19	14	37	30
Assets	–	–	–	–	100	100
Investments	–	–	–	–	100	100

NOTE 3 INCOME DISTRIBUTION

	Group		Parent Company	
	2008	2007	2008	2007
Revenue from licenses sold	39,032	45,126	39,032	45,126
Revenue from support services	23,658	19,579	23,658	19,579
	62,690	64,705	62,690	64,705

NOTE 4 EMPLOYEES AND STAFF COSTS

The Group company RayIncentive had no employees or personnel costs.

Costs for remunerations

Parent Company and Group	2008	2007
Salaries and remunerations, etc.	26,582	20,621
Pension costs, defined contribution	4,946	3,905
Social security expenses	8,418	6,931
	39,946	31,457

Average number of employees

The Parent Company had an average of 48 (37) employees, with 36 (26) men and 12 (11) women.

Gender distribution in management

Percent	Dec. 31, 2008 Percentage of women	Dec. 31, 2007 Percentage of women
Parent Company		
Board of Directors	–	–
Other senior executives	–	–
Group total		
Board of Directors	–	–
Other senior executives	–	–

Salaries and other remuneration distributed between senior executives and other employees as well as social security expenses in the Parent Company and Group.

	2008		2007	
	Senior executives and Board (9)	Other employees	Senior executives and Board (9)	Other employees
Salaries and other remuneration	6,510	20,072	7,222	13,399
(of which, bonus)	*(11)*	*(–)*	*(859)*	*(397)*
Social security expenses	3,758	9,606	3,812	7,024
(of which, pension costs)	*(1,568)*	*(3,378)*	*(1,388)*	*(2,517)*
Parent Company, total	10,268	29,678	11,034	20,423

Salaries and remunerations pertain solely to personnel in Sweden.

Remuneration of board members and senior executives in the Parent Company and Group

2008	Basic salary, Board fees	Variable remuneration	Other benefits	Pension costs	Total
Board Chairman Erik Hedlund	330	–	–	–	330
Board member Carl Filip Bergendal	110	–	–	–	110
Board member Hans Wigzell	110	–	–	–	110
Board deputy Thomas Pousette[1)]	–	–	–	–	–
President Johan Löf	2,169	11	245	383	2,808
Other senior executives (5)	3,781	–	1	1,184	4,966
Total	6,500	11	246	1,567	8,324

2007	Basic salary, Board fees	Variable remuneration	Other benefits	Pension costs	Total
Board Chairman Erik Hedlund	323	–	–	–	323
Board member Carl Filip Bergendal	108	–	–	–	108
Board member Hans Wigzell	108	–	–	–	108
Board deputy Thomas Pousette[1)]	–	–	–	–	–
President Johan Löf	2,449	570	250	369	3,638
Other senior executives (5)[2)]	3,377	289	5	1,019	4,690
Total	6,365	859	255	1,388	8,867

No financial instruments or other remuneration was distributed.

1) Advokatfirman Lindhs DLA Nordic KB, in which Board deputy Thomas Pousette is a partner, received SEK 1,520,000 (1,027,000) in legal fees.
2) Four persons at beginning of 2007, one newly employed in August 2007.

Variable remuneration
Variable remuneration paid to the President is based on the Group's earnings and amounts to 2 percent of earnings before tax, though it may not exceed six months' pay. The President was entitled to SEK 482,000 in bonus for 2008, but renounced his right to a bonus for 2008, which is why no bonus was paid. In 2008, the bonus was removed for all employees except the President and replaced by a profit-sharing foundation. The profit-sharing foundation covers all employees including senior executives except the President. A provision to the profit-sharing foundation is issued in a given year if the operating profit the preceding year reached a level in excess of an operating margin of 20 percent. In such a case, the amount reserved is 10 percent of the part of the operating profit above the limit.

The provision has a maximum outcome of 30 percent of the dividend paid. If a dividend is not paid or if the operating margin does not reach 20 percent, no provision is made. Since the Board proposes that no dividend be paid for 2008, no provision is expected to be made for the year.

Pensions
All pension undertakings are defined-contribution plans. Retirement age for the President is 65 and the pension premium is equivalent to the Swedish ITP plan. The pension undertaking for other senior executives shall be equivalent to the Swedish ITP plan. The pension age is 65 for all other senior executives.

Severance pay
If the President chooses to terminate his employment, his term of notice is six months; if the employer terminates the employment, the term of notice is 12 months. In either case, the President is not entitled to any special severance pay, but in both cases, the President receives salary during the term of notice. The company and other senior executives have a mutual term of notice of three months during which salary is paid. Members of the Board of Directors do not receive any severance pay.

Decision process
The decision process regarding remuneration and benefits is described in greater detail in the Board of Directors' report.
See Note 6 for share-related remuneration.

Illness absenteeism Parent Company

Percent	2008	2007
Illness absenteeism as a percentage of ordinary work time	1.0	1.3
Percentage of illness absenteeism pertaining to long-term illness absenteeism of 60 days or longer	–	–
Illness absenteeism as percentage of each group's ordinary work time:		
Illness absenteeism by gender:		
Men	0.9	0.8
Women	1.4	2.6
Illness absenteeism by age category:		
29 and younger	1.2	1.3
30-49	1.0	1.3
50 or older	–[1)]	–[1)]

1) There are no employees in the category of 50 years and over.

NOTE 5 AUDITORS' FEES AND COMPENSATION FOR EXPENSES

	2008	2007	2006
Group			
KPMG			
Auditing assignments	540	599	610
Other assignments, consulting	53	50	165
Parent Company			
KPMG			
Auditing assignments	529	584	593
Other assignments, consulting	53	50	165

Auditing assignments refer to the examination of the annual report and accounting as well as the administration by the Board and President, as well as other duties incumbent on the company's auditors or other matters arising from observations during such examination or implementation of such other duties. Everything else is other assignments.

NOTE 6 EMPLOYEE REMUNERATION

Share-based payments
RaySearch offers option programs to facilitate its ability to attract, motivate, and retain personnel. The subsidiary RayIncentive AB owns shares in RaySearch Laboratories to cover options issued and future options programs. RayIncentive's shareholding in RaySearch Laboratories at December 31, 2008 was 449,628, all of which pertain to RayIncentive's Class B shares in RaySearch Laboratories' existing options programs. Employees of RaySearch and a RaySearch Board member own these options. The company's President has no options in RaySearch. When these persons acquired options in RaySearch, it was done at a market price calculated according to the Black and Scholes model.

In June 2008, 103,128 options were issued in the 2008:1 options program. This options program was directed at the employees who had previously not been covered by an options program.

Options Program, RaySearch Laboratories

	Exercise period	Shares included	Exercise price (SEK)
2004:1	Dec. 31, 2008–Dec. 31, 2009	346,500	27.13
2008:1	Dec. 31, 2011–Dec. 31, 2012	103,128	46.50
		449,628	

No options were exercised in 2008.

NOTE 7 OPERATING EXPENSES DISTRIBUTED BY TYPE OF COSTS

	Group		Parent Company	
	2008	2007	2008	2007
Cost of goods sold	–661	–863	–661	–863
Personnel expenses	–17,984	–14,534	–42,354	–31,513
Depreciation	–10,965	–6,862	–1,470	–1,178
Exchange-rate losses	–180	–398	–180	–398
Other operating expenses	–13,854	–16,720	–17,861	–22,247
	–43,644	–39,377	–62,526	–56,199

NOTE 8 OTHER OPERATING INCOME

	Group		Parent Company	
	2008	2007	2008	2007
Exchange-rate gains on operating receivables/liabilities	1,912	453	1,912	453
Other operating income	100	–	100	–
	2,012	453	2,012	453

NOTE 9 OTHER OPERATING EXPENSES

	Group		Parent Company	
	2008	2007	2008	2007
Exchange rate losses on operating receivables/liabilities	–188	–398	–188	–398
Other operating expenses	–18	–	–18	–
	–206	–398	–206	–398

NOTE 10 DEPRECIATION AND AMORTIZATION OF TANGIBLE AND INTANGIBLE FIXED ASSETS

	Group		Parent Company	
	2008	2007	2008	2007
Intangible fixed assets				
Amortization according to plan and function				
Administrative expenses	–116	–106	–116	–106
Research and development	–10,702	–6,576	–467	–267
	–10,818	–6,682	–583	–373
Tangible fixed assets				
Depreciation according to plan and function				
Administrative expenses	–141	–173	–345	–334
Research and development	–4	–9	–541	–471
	–145	–182	–886	–805
Total amortization and depreciation	–10,963	–6,864	–1,469	–1,178

NOTE 11 OPERATING LEASES

	Group		Parent Company	
	2008	2007	2008	2007
Leasing agreements in which the company is the lessee				
Rent of premises	5,393	4,542	5,393	4,542
Other leasing	813	571	813	571
Total lease costs	6,206	5,113	6,206	5,113
Contractual future lease fees for leases that expire:				
Within one year	7,568	5,686	7,568	5,686
Later than one but within five years	14,178	7,679	14,178	7,679
Later than five years	–	–	–	–
	21,746	13,365	21,746	13,365

None of the leasing fees are variable.

NOTE 12 INTEREST INCOME AND INTEREST EXPENSES ON FINANCIAL INSTRUMENTS

	Group		Parent Company	
	2008	2007	2008	2007
Interest income on assets valued at fair value in income statement	2,061	1,994	1,542	1,568
Interest income on accounts receivable and loan receivables	712	459	600	406
	2,773	2,453	2,142	1,974
Interest expenses on other financial liabilities	–18	–22	–18	–22
	–18	–22	–18	–22
Net	2,755	2,431	2,124	1,952

The Parent Company item, Interest income and similar items, includes anticipated dividends from the subsidiary RayIncentive amounting to SEK 12,000,000.

NOTE 13 APPROPRIATIONS

	2008	2007
Tax allocation reserve, year's allocation	–1,919	–3,288
Tax allocation reserve, year's reversals	2,491	2,411
Accumulated depreciation for tax purposes	171	–224
	743	–1,101

NOTE 14 TAX ON PROFIT FOR THE YEAR

Group	2008	2007
Current tax expense		
Tax expense for the period	–1,802	–3,091
Adjustment of tax attributable to prior years	–8	–137
	–1,810	–3,228
Deferred tax expense/income		
Deferred tax for temporary differences		
capitalized development costs	–5,295	–4,726
changes in appropriations	208	–308
deferred tax resulting from changes in the tax rate	1,014	–
	–4,073	–5,034
Total tax expense/income reported for Group	**–5,883**	**–8,262**

Reconciliation of effective tax	2008		2007	
Group	Percent	Amount	Percent	Amount
Profit before tax		24,106		28,041
Swedish tax rate	28.0	–6,750	28.0	–7,852
Non-taxable income	–0.2	55	–0.1	37
Other non-deductible costs	0.4	–89	0.6	–175
Standard interest on tax allocation reserve	0.7	–168	0.5	–135
Tax pertaining to prior years	0.0	–8	0.5	–137
Other items	–0.3	63	0.0	–
Deferred tax resulting from changes in the tax rate	–4.2	1,014	0.0	–
Reported effective tax	24.4	–5,883	29.5	–8,262

Parent Company	2008	2007
Current tax expense		
Tax expense for the period	–1,612	–2,972
Adjustment of tax attributable to prior years	–8	–2
	–1,620	–2,974
Deferred tax liability		
Deferred tax resulting from changes in the tax rate	–683	–
	–683	–
Total tax expense reported for Parent Company	**–2,303**	**–2,974**

Reconciliation of effective tax	2008		2007	
Parent Company	Percent	Amount	Percent	Amount
Profit before tax		17,336		9,639
Swedish tax rate	28.0	–4,854	28.0	–2,699
Non-taxable income	–19.8	3,436	–0.4	37
Other non-deductible costs	0.5	–89	1.9	–175
Standard interest on tax allocation reserve	1.0	–168	1.4	–135
Tax pertaining to prior years	0.0	–8	0.0	–2
Other items	–0.4	63	0.0	–
Deferred tax resulting from changes in the tax rate	3.9	–683	0.0	–
Reported effective tax	13.3	–2,303	30.9	–2,974

For further information on deferred tax, refer to Note 23.

NOTE 15 DIVIDEND PER SHARE, EARNINGS PER SHARE AND NUMBER OF SHARES

	2008	2007
Dividend per share [1] [2]	None	0.17 SEK
Number of shares used in calculating earnings per share		
Weighted average number of shares before dilution [2]	34,282,773	34,282,773
Effect of options outstanding [2]	–	206,112
Weighted average number of shares after dilution [2]	34,282,773	34,488,885
Earnings per share after dilution [2]	0.53	0.57
Profit for the year attributable to Parent Company shareholders (before or after dilution)	18,223	19,779

1) Proposed for 2008.
2) Corrected for 3:1 share split.

NOTE 16 CAPITALIZED DEVELOPMENT EXPENSES

	Group	
	Dec. 31, 2008	Dec. 31, 2007
Capitalized development expenses		
Accumulated acquisition value		
Opening balance	82,652	59,204
Internally developed assets	29,609	23,448
Closing balance	112,261	82,652
Accumulated depreciation/amortization according to plan		
Opening balance	–21,078	–14,507
Depreciation/amortization according to plan for the year	–10,699	–6,571
Closing balance	–31,777	–21,078
Closing carrying amount	80,484	61,574

Assessment of the balance items are based on the cash-generating unit's value in use. The future estimated cash flows have been calculated at present value at a rate of 23 (18) percent before tax, which has been calculated as the company's weighted average cost of capital (WACC). The value in use of all products exceeds the carrying amount. The risk-free interest rate was calculated at 3 (4) percent. Even with a significant change in variables, there would still be no impairment requirement.

NOTE 17 SOFTWARE

	Group		Parent Company	
	Dec. 31, 2008	Dec. 31, 2007	Dec. 31, 2008	Dec. 31, 2007
Software				
Accumulated acquisition value				
Opening balance	2,818	1,981	2,818	1,981
New acquisitions	641	837	641	837
Closing balance	3,459	2,818	3,459	2,818
Accumulated depreciation according to plan				
Opening balance	–1,654	–1,281	–1,654	–1,281
Depreciation according to plan for the year [1]	–584	–373	–584	–373
Closing balance	–2,238	–1,654	–2,238	–1,654
Closing carrying amount	1,221	1,164	1,221	1,164

1) Of the Group's depreciation, SEK 464,000 (262,000) was capitalized.

NOTE 18 TANGIBLE FIXED ASSETS

	Group		Parent Company	
Equipment, tools, fixtures and fitting	Dec. 31, 2008	Dec. 31, 2007	Dec. 31, 2008	Dec. 31, 2007
Accumulated acquisition value				
Opening balance	7,733	5,679	7,733	5,679
New acquisitions	512	2,160	512	2,160
Divestments and disposal	–781	–106	–781	–106
Closing balance	7,464	7,733	7,464	7,733
Accumulated depreciation according to plan				
Opening balance	–5,400	–4,700	–5,400	–4,700
Divestments and disposal	754	105	754	105
Depreciation according to plan for the year [1]	–892	–805	–892	–805
Closing balance	–5,538	–5,400	–5,538	–5,400
Closing carrying amount	1,926	2,333	1,926	2,333

1) Of the Group's depreciation for the year, SEK 741,000 (624,000) was capitalized.

NOTE 19 PARTICIPATIONS IN GROUP COMPANIES

Parent Company	Dec. 31, 2008	Dec. 31, 2007
Accumulated acquisition value		
Opening and closing balance	2,160	2,160

Specification of Parent Company's and Group's holdings of participations in Group companies

Subsidiary/Corp. reg. no. /Reg. office	*Number/participations percent* [1]	*Adjusted equity/ Profit for the year* [2]	*Carrying amount*
RayIncentive AB, 556635-8247, Stockholm	9,080/90.8	13,240/443	2,160
			2,160

1) Ownership share of capital, voting rights total 49.7%.

2) Adjusted equity refers to the share of the company's equity, incl. the equity share of untaxed reserves. Profit for the year refers to the ownership share of the company's earnings after tax, incl. the capital share in the change for the year in untaxed reserves.

NOTE 20 ACCOUNTS RECEIVABLE

No bad debt losses and no impairments related to accounts receivable were reported during the year.

The company's credit risk consists of credit risk for receivables from Philips, Nucletron and IBA Dosimetry, which to date are the company's three commercial partners with which products have been launched. The company estimates that the credit risk will remain very low and the credit quality is high.

Age analysis	
Not past due	16,251
Past due 0-30 days	2,905
Past due more than 30 days	576
Total	19,732

The past due receivables were paid after the closing date.

NOTE 21 PREPAID EXPENSES AND ACCRUED INCOME

	Group		Parent Company	
	Dec. 31, 2008	Dec. 31, 2007	Dec. 31, 2008	Dec. 31, 2007
Prepaid rent	1,712	1,255	1,712	1,255
Prepaid insurance	484	504	484	504
Accrued interest income	22	90	13	90
Other items	1,296	1,032	1,296	1,032
	3,514	2,881	3,505	2,881

NOTE 22 CASH AND CASH EQUIVALENTS

	Group		Parent Company	
	Dec. 31, 2008	Dec. 31, 2007	Dec. 31, 2008	Dec. 31, 2007
The following components are included in cash:				
Cash and bank balances	50,664	31,461	34,554	30,446
Current investments equivalent to cash	19,980	47,674	19,980	33,771
	70,644	79,135	54,534	64,217

The above items have been classified as cash and cash equivalents on the basis that:
– They represent insignificant risk for changes in value.
– They are easily converted into cash.
– They have a lifetime of a maximum 3 months from the acquisition date.

NOTE 23 DEFERRED TAX RECEIVABLES AND TAX LIABILITIES

Group	Dec. 31, 2008	Dec. 31, 2007
Deferred tax liabilities for:		
Intangible assets		
Opening balance	17,241	12,515
Change during the year	3,926	4,726
Closing balance	21,167	17,241
Untaxed reserves		
Opening balance	5,609	5,301
Change during the year	–536	308
Closing balance	5,073	5,609
Carrying amount	26,240	22,850
Group and Parent Company		
Deferred tax receivables in respect of loss carry-forwards		
Opening balance	11,253	11,253
Change during the year	–684	–
Closing balance	10,569	11,253

Valuation is based on the nominal tax rate. The change during the year is due to a tax rate change from 28 percent to 26.3 percent.

NOTE 24 UNTAXED RESERVES

Parent Company	Dec. 31, 2008	Dec. 31, 2007
Accumulated depreciation in excess of plan:		
Opening balance, January 1	224	–
Reversals/depreciation in excess of plan for the year	–171	224
Closing balance, December 31	53	224
Untaxed reserves		
Allocated at taxation in 2003	–	2,491
Allocated at taxation in 2004	747	747
Allocated at taxation in 2005	1,443	1,443
Allocated at taxation in 2006	5,673	5,673
Allocated at taxation in 2007	6,167	6,167
Allocated at taxation in 2008	3,288	3,288
Allocated at taxation in 2009	1,919	–
	19,290	20,033

NOTE 25 OTHER LONG-TERM LIABILITIES

Group	Dec. 31, 2008	Dec. 31, 2007
Opening balance	967	967
Change during the year	643	–
Closing balance	1,610	967

The amount pertains to the premiums for the options in RayIncentive and recognized as a liability. No liabilities fall due for payment later than five years from the balance sheet date.

NOTE 26 ACCRUED EXPENSES AND PREPAID INCOME

	Group		**Parent Company**	
	Dec. 31, 2008	Dec. 31, 2007	Dec. 31, 2008	Dec. 31, 2007
Social security contributions and vacation costs	2,307	2,114	2,307	2,114
Personnel-related costs	43	1,259	43	1,259
Auditing expenses	313	308	300	295
Legal expenses	49	–	49	–
Annual report	909	1,265	909	1,265
Prepaid income	146	146	146	146
Other items	176	313	176	312
	3,943	5,405	3,930	5,391

NOTE 27 INTEREST AND EXCHANGE-RATE RISKS

Effective rate of interest and due payment structure
RaySearch's cash and cash equivalents are liquid funds in bank accounts with an effective rate of interest of 4.20 percent as well as interest-bearing securities with a term shorter than three months with an effective rate of interest of 4.00 percent. Under the company's financial policy, investments are made in K1-rated interest-bearing securities.

Transaction exposure
Translated to SEK, the Group's transaction exposure is distributed among the following currencies:

	2008		2007	
Currency	SEK	Percent	SEK	Percent
EUR	17,559	28	15,038	24
USD	44,470	72	48,804	76
	62,029		63,842	

The Group's income statement includes exchange-rate gains and losses in a net amount of SEK 1,723 (54) in operating profit and SEK 0 (0) in net financial items. Translation exposure was not hedged.

Translation exposure
Net foreign assets translated to SEK in the Group are distributed among the following currencies:

	2008		2007	
Currency	SEK	Percent	SEK	Percent
EUR	7,222	37	2,944	26
USD	12,510	63	8,199	74
	19,732		11,143	

Sensitivity analysis
The company is dependent on trends in the USD and EUR exchange rates against the SEK, since invoicing to Philips is in USD and invoicing to Nucletron and IBA Dosimetry is in EUR. During 2008, revenues from Philips were reported at an average USD exchange rate of SEK 6.69, compared with SEK 6.70 during 2007. The revenues from Nucletron and IBA Dosimetry were reported at an average EUR exchange rate of SEK 9.86, compared with SEK 9.27 during 2007. A sensitivity analysis of currency exposure indicates that the impact on operating profit in 2008 of a change in the average USD exchange rate of +/–10 percent is +/– SEK 4.4 M. The sensitivity analysis shows that the effect of a change in the average EUR exchange rate of +/– 10 percent annually results in SEK +/– 1.8 M.

At December 31, 2008, a change in interest rates of 1 percent would increase Group profit before tax by approximately SEK 0.7 M (0.8).

NOTE 28 VALUATION OF FINANCIAL ASSETS AND LIABILITIES AT FAIR VALUE

Fair value and carrying amount reported in the balance sheet below:	Financial assets valued at fair value in the income statement	Accounts and loan receivables	Other financial liabilities	Carrying amount	Fair value
Group, Dec. 31, 2008					
Accounts receivable		19,732		19,732	19,732
Cash and cash equivalents	19,980	50,664		70,644	70,644
Total	19,980	70,396		90,376	90,376
Accounts payable			4,283	4,283	4,283
Total			4,283	4,283	4,283
Group, Dec. 31, 2007					
Accounts receivable		11,143		11,143	11,143
Cash and cash equivalents	47,674	31,461		79,135	79,135
Total	47,674	42,604		90,278	90,278
Accounts payable			4,577	4,577	4,577
Total			4,577	4,577	4,577
Parent Company, Dec. 31, 2008					
Accounts receivable		19,732		19,732	19,732
Cash and cash equivalents	19,980	34,554		54,534	54,534
Total	19,980	54,286		74,266	74,266
Accounts payable			4,283	4,283	4,283
Total			4,283	4,283	4,283
Parent Company, Dec. 31, 2007					
Accounts receivable		11,143		11,143	11,143
Cash and cash equivalents	33,771	30,446		64,217	64,217
Total	33,771	41,589		75,360	75,360
Accounts payable			4,577	4,577	4,577
Total			4,577	4,577	4,577

NOTE 29 PLEDGED ASSETS AND CONTINGENT LIABILITIES

	Dec. 31, 2008	Dec. 31, 2007
Pledged assets		
Chattel mortgages	5,000	5,000
Total	5,000	5,000
The company has a credit limit on its overdraft facilities of SEK 5,000,000, which was not utilized in 2008 and 2007.		
Contingent liabilities	None	None

NOTE 30 TRANSACTIONS WITH CLOSELY RELATED PARTIES

For a description of transactions with senior executives, refer to Note 4.
Otherwise, there were no transactions with closely related parties.
No sales or purchases were undertaken among Group companies.

The consolidated accounting and annual report were prepared in accordance with the international accounting standards referred to in the European Parliament and Council regulation (EC) no. 1606/2002 dated July 19, 2002 on the application of international accounting standards and generally accepted accounting practices and provides a fair view of the Group's and Parent Company's position and earnings. The Board of Directors' and President's report for the Group and Parent Company provides an accurate view of the Group's and Parent Company's operations, financial position and earnings, and describes the significant risks and uncertainty factors that the Parent Company and the companies in the Group face.

The annual report and the consolidated accounts, as stated above, were approved for publication by the Board of Directors on April 3, 2009. The consolidated income statement and balance sheet and the Parent Company income statement and balance sheet will be submitted for adoption at the Annual General Meeting on May 26, 2009.

Erik Hedlund
Chairman of the Board

Johan Löf
President/CEO and Board member

Carl Filip Bergendal
Board member

Hans Wigzell
Board member

My auditor's report was submitted on April 3, 2009

Anders Linér
Authorized Public Accountant

Audit Report

TO THE ANNUAL MEETING OF THE SHAREHOLDERS OF RAYSEARCH LABORATORIES AB (PUBL) CORPORATE REGISTRATION NUMBER 556322-6157

I have audited the annual accounts, the consolidated accounts, the accounting records and the administration of the Board of Directors and the President of RaySearch Laboratories AB for the year 2008. ȧ e company's annual report is included in the printed version of this document on pages 36–62. ȧ e Board of Directors and the President are responsible for these accounts and the administration of the company as well as for the application of the Annual Accounts Act when preparing the annual accounts and the application of International Financial Reporting Standards (IFRS) as adopted by the EU and the Annual Accounts Act when preparing the consolidated accounts. My responsibility is to express an opinion on the annual accounts, the consolidated accounts and the administration based on my audit.

I conducted my audit in accordance with generally accepted auditing standards in Sweden. ȧ ose standards require that I plan and perform the audit to obtain high but not absolute assurance that the annual accounts and the consolidated accounts are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the accounts. An audit also includes assessing the accounting principles used and their application by the Board of Directors and the President and significant estimates made by the Board of Directors and the President when preparing the annual accounts and the consolidated accounts as well as evaluating the overall presentation of information in the annual accounts and the consolidated accounts. As a basis for my opinion concerning discharge from liability, I examined significant decisions, actions taken and circumstances of the company in order to be able to determine the liability, if any, to the company of any Board member or the President. I also examined whether any Board member or the President has, in any other way, acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association. I believe that my audit provides a reasonable basis for my opinion set out below.

ȧ e annual accounts have been prepared in accordance with the Annual Accounts Act and give a true and fair view of the company's financial position and results of operations in accordance with generally accepted accounting principles in Sweden. ȧ e consolidated accounts have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and the Annual Accounts Act and give a true and fair view of the Group's financial position and results of operations. ȧ e statutory Board of Directors' and President's report is consistent with the other parts of the annual accounts and the consolidated accounts.

I recommend to the Annual Meeting of shareholders that the income statements and balance sheets of the Parent Company and the Group be adopted, that the profit of the Parent Company be dealt with in accordance with the proposal in the Board of Directors' and President's report and that the members of the Board of Directors and the President be discharged from liability for the financial year.

Stockholm, April 3, 2009

Anders Linér
Authorized Public Accountant

Board of Directors

ERIK HEDLUND
Chairman and member of the Board of Directors of RaySearch Laboratories since 2000. President and member of the Board of C-RAD AB, as well as chairman of the three subsidiaries C-RAD Positioning AB, C-Imaging AB and C-RAD Innovation AB.
Other directorships: Chairman of the Boards of Scandiflash AB, Scandiflash Holding AB, hhDesign AB and RayIncentive AB, and member of the Board of Ramsta Robotics AB.
Born: 1948.
Educational background: M.Sc. in Electrical Engineering from the Royal Institute of Technology (KTH) and MBA from Stockholm University.
Professional experience: Erik Hedlund has held a number of senior positions in major international groups, including Siemens and Saab, as well as in small and mid-sized companies during his career. He has concentrated on high-tech with the focus on medical technology. Since 1994, his main focus has been on radiation therapy and radiation physics. He is an independent Board member in relation to RaySearch Laboratories but not in relation to major shareholders in the company.
Shareholding: 1,567,089 Class A and 228,699 Class B shares.

JOHAN LÖF
President and CEO. Member of the Board of Directors at RaySearch since 2000.
Other directorships: RayIncentive AB.
Born: 1969.
Educational background: Johan Löf holds a M.Sc. in Engineering Physics from the Royal Institute of Technology and a Ph.D. from the Department of Medical Radiation Physics at the Department of Oncology-Pathology, Karolinska Institutet. As a doctoral student he worked with mathematical models for optimization of radiation therapy and also developed the prototype for ORBIT.
Professional experience: President and CEO of RaySearch since 2000. He is not an independent Board member in relation to RaySearch Laboratories or in relation to major shareholders in the company.
Shareholding: 6,243,084 Class A and 843,393 Class B shares.

CARL FILIP BERGENDAL
Member of the Board of Directors at RaySearch since 2000.
Other directorships: RayIncentive AB.
Born: 1945.
Educational background: M.Sc. in Engineering Physics from the Royal Institute of Technology and MBA from the Stockholm School of Economics.
Professional experience: Carl Filip Bergendal has held a number of senior positions in subsidiaries of the Modo Group (1972–1980) and in the medical technology company Stille-Werner (1980–1987), with the two final years as President and CEO. He has worked since 1988 certified in Lots® and, providing support for managers in large and mid-size companies undergoing restructuring processes. Partner of the Lots Company since 2003. Independent Board member in relation to RaySearch Laboratories and in relation to major shareholders in the company.
Shareholding: 1,061,577 Class A and 154,920 Class B shares.

HANS WIGZELL
Member of the Board of Directors of RaySearch since 2004. Professor at Karolinska Institutet in Solna.
Other directorships: Chairman of Karolinska Development I AB and Board member of Biovitrum AB, Intercell AG, Probi AB and Neodynamics AB.
Other assignments: Member of the Royal Swedish Academy of Science and the Academy of Engineering Science.
Born: 1938.
Educational background: Doctor of Medicine.
Professional experience: Dean of Karolinska Institutet in Solna, 1995-2003. Independent Board member in relation to RaySearch Laboratories and in relation to major shareholders in the company.
Shareholding: 0. **Options:** Options for 30,000 Class B shares in RaySearch Laboratories.

THOMAS POUSETTE
Deputy member, Board of Directors for RaySearch since 2004 and secretary of the Board of Directors since 2000. Attorney and partner at Advokatfirma Lindhs DLA Nordic KB.
Other directorships: Board member of Spectrogon AB, Lauzon International Network AB and Advokatfirma Lindhs DLA Nordic KB.
Born: 1964.
Educational background: LLM; (Stockholm University), LLM; (King's College London).
Professional experience: County Administrative Court, Jämtland County, Administrative Court of Appeal in Sundsvall, DLA Nordic from 1994. He is not an independent Board member in relation to RaySearch Laboratories but is independent in relation to major shareholders in the company.
Shareholding: 12,000 Class B shares.

Senior management

From left: Anders Liander, Anders Martin-Löf, Johan Löf, Henrik Rehbinder and Anders Murman.

JOHAN LÖF, PRESIDENT AND CEO
Member of the Board of Directors at RaySearch since 2000. **Other directorships:** RayIncentive AB. **Born:** 1969. **Educational background:** Johan Löf holds a M.Sc. in Engineering Physics from the Royal Institute of Technology and a Ph.D. from the Department of Medical Radiation Physics at the Department of Oncology-Pathology, Karolinska Institutet. As a doctoral student he worked with mathematical models for optimization of radiation therapy and also developed the prototype for ORBIT. **Professional experience:** President and CEO of RaySearch since 2000. **Shareholding:** 6,243,084 Class A and 843,393 Class B shares.

ANDERS MARTIN-LÖF, CHIEF FINANCIAL OFFICER
Born: 1971. **Educational background:** M.Sc. in Engineering Physics from the Royal Institute of Technology and ENSIMAG in Grenoble, France. B.Sc. in Business Administration and Economics from the Stockhom University. **Professional experience:** Before joining RaySearch, Anders Martin-Löf served as Director of Investor Relations and held various business development positions for the biotech company Biovitrum. Prior to that he was a management consultant with the Boston Consulting Group, Cell Network and co-founder and CEO of ScienceCap, a consulting firm focused on small companies in the biotech and medtech sectors. He has also attended the Swedish Army Language School and worked at the Swedish Consulate General in St. Petersburg, Russia. Joined RaySearch in 2007. **Shareholding:** 0. **Options:** Options for 15,000 Class B shares in RaySearch Laboratories.

ANDERS MURMAN, DIRECTOR OF DEVELOPMENT
Born: 1967. **Educational background:** Anders Murman has a M.Sc. in Engineering Physics from the School of Engineering at Uppsala University, with a focus on systems development and radiation science. **Professional experience:** Anders Murman has worked in radiation therapy throughout his professional career. He worked for twelve years at Helax, MDS Nordion, and Nucletron in a number of positions, including research, development, service, support, sales, marketing, and business development in both Uppsala and California. Most recently, before joining RaySearch, he worked as senior designer for Nucletron's product suite Oncentra MasterPlan. He has been employed at RaySearch since 2004. **Shareholding:** 900 Class B shares. **Options:** Options for 60,000 Class B shares in RaySearch Laboratories.

HENRIK REHBINDER, DIRECTOR OF RESEARCH
Born: 1972. **Educational background:** Henrik Rehbinder has a M.Sc. in Engineering Physics. In 2001, he received his Ph.D. in Optimization and Systems Theory from the Royal Institute of Technology, Stockholm. His Ph.D. studies focused mainly on mathematical methods for autonomous robot systems and biomechanical models of the human body. **Professional experience:** He has been employed at RaySearch since 2002. **Shareholding:** 32,400 Class B shares.

ANDERS LIANDER, CHIEF TECHNOLOGY OFFICER
Born: 1971. **Educational background:** Anders Liander has a M.Sc. in Electrical Engineering from the Royal Institute of Technology, Stockholm, with a focus on medical technology. **Professional experience:** He began at the Division of Medical Radiation Physics at the Department of Oncology-Pathology, Karolinska Institutet, in 1996 and was employed for two years as a doctoral student with the main task of developing ORBIT together with Johan Löf. After that he worked in product development at Elekta. He was employed by RaySearch when the company was founded in 2000. **Shareholding:** 1,061,577 Class A and 185,157 Class B shares.

Auditors

AUDITOR
Anders Linér
Auditor at RaySearch Laboratories since 2003. Authorized Public Accountant, KPMG AB. *Born:* 1952

DEPUTY
Lena Krause
Deputy auditor at RaySearch Laboratories since 2003. Authorized Public Accountant, KPMG AB. *Born*: 1961

Scientific Advisory Board

ANDERS BRAHME
Professor and Head of the Department of Medical Radiation Physics at Karolinska Institutet in Stockholm. Professor Brahme received his doctorate in 1975 from Stockholm University. Since then he has been active in the development of new methods for dosimetrics, design of beam delivery and quality assurance. He also initiated the development of intensity modulated radiation therapy (IMRT) with scanned beams and multi-leaf collimators. During the past two decades, his activities have focused on optimization of radiation therapy with radiobiology models and light ion therapy.

ANDERS FORSGREN
Professor at the Department of Optimization Science and Systems Theory, Royal Institute of Technology (KTH), Stockholm. Professor Forsgren received his doctorate in optimization science and system theory from KTH in 1990 and has a M.Sc. in operations analysis from Stanford University. He has worked at KTH since 1990, where he was appointed professor in 2003. His research focus is non-linear optimization.

DAVID JAFFRAY
Head of the Department of Radiation Physics at Princess Margaret Hospital, Toronto, Canada and Associate Professor at the Institutions for Radiation Oncology and Medical Biophysics at Toronto University. Dr. Jaffray received his doctorate for his work in megavolt radiology from the Institution for Medicinal Biophysics at the University of Western Ontario 1994. He is certified in the area of medical physics (ABMP, Radiation Oncology) with more than ten years' experience. His main area of interest is the development of IGRT equipment and strategies to improve the therapeutic ratio in radiation therapy of cancer. Dr. Jaffray's major contribution has been the understanding of the foundations underlying megavolt imaging and development of cone-beam CT for IGRT.

RADHE MOHAN
Professor and Chairman of the Department of Radiation Physics at M. D. Anderson Cancer Center, Houston, Texas, USA. Professor Mohan received his doctorate in theoretical nuclear physics from Duke University in 1969, after which he held a post-doctoral research post at Rutgers University. He has worked 25 years at Memorial Sloan-Kettering Cancer Center, where he was Assistant Chairman of the Institution for Medicinal Physics. Subsequently, he was professor and head of the Radiation Physics Institution at Virginia Commonwealth University for five years. His research expertise spans a wide spectrum of radiation physics for oncology. In recent years, his activities have focused on intensity modulated radiation therapy, applications of the Monte-Carlo methods in radiation therapy, imaging systems and IGRT and modeling, assessment and applications of dose response relationships.

Glossary

Accelerator Also sometimes referred to as linear accelerator or linac. The accelerator is used to create and shape the radiation beams used in radiation therapy. Usually there are one to ten accelerators per cancer clinic. Major manufacturers are Elekta, Siemens, and Varian.

Adaptive Radiation Therapy (ART) Radiation therapy in which information extracted from image studies (CT, MRI or PET scans) acquired during the course of treatment is used to correct the treatment. This method reduces the effects of uncertainties and erroneous information during planning and improves treatment outcome. Refer also to IGRT.

Algorithms A method for solving a problem in a number of steps, for example, a calculation procedure is called an algorithm.

Algorithm development The process of formulating algorithms. Algorithm development focuses on the method itself and not on programming, though programming accounts for a substantial share of algorithm development.

ART Refer to Adaptive Radiation Therapy.

Biological optimization Refer to Radiobiological optimization.

Brachytherapy Local radiation treatment using radioactive isotopes, usually radium, iridium or cobalt, placed directly on or in the patient.

Carbon ions By accelerating carbon atoms to speeds approaching half the speed of light. The carbon atom is ionized and can be used for radiation therapy that has a unique biological effect, in addition to the favorable properties that the type of radiation shares with protons.

Collimator angles The collimator used to limit the flow profile's broadening can be rotated around its own axis.

Computer tomography (CT scan) The usual diagnostic method for cancer today. A method that uses X-rays to produce a 3D image of the internal density of the body.

Cone-beam CT Technology for computer tomography (CT) images by means of a cone-formed X-ray beam, permitting images to be acquired promptly, and is used when CT is integrated with the treatment machine.

Conventional three-dimensional conformal radiation therapy (3D-CRT) The treatment method used today when IMRT is not used. Involves shaping the beams to conform to the contour of a tumor using an MLC, while the intensity of the beam remains constant.

CT (Computer tomography) Refer to computer tomography.

Curative radiation therapy Therapy in which clinicians decide to treat patients in an effort to cure the cancer, in other words, completely eradicate the tumor. The opposite is palliative treatment. See below.

Detector technology Technology used to measure radiation magnitudes. Technical examples include ion chambers, diodes or electrometers.

Direct optimization of machine parameters The basis of RayMachine. Direct optimization of machine parameters means that, during optimization, you use a detailed model of the accelerator with its physical and technical limitations.

Dose calculation algorithms Algorithms for calculating the radiation dose that the patient receives, given a specific machine setting.

Dose response relationships How tissue reacts to radiation.

Dosimetry An area of science dealing with the measurement of absorbed doses in materials from ionizing radiation.

Fluence optimization A method used for calculating IMRT plans in which one permits the photon fluence to vary randomly across each beam's cross-section. The photon fluences are then recomputed to machine settings in a stage that adversely impacts on treatment quality. A better method is "Direct optimization of machine parameters."

Gantry angle optimization Optimization method in which, in addition to computing the optimal collimator setting or fluence profiles, also simultaneously calculates optimal beam angle.

IGRT – Image-Guided Radiation Therapy. Radiation therapy in which information extracted from images of patients in the treatment position is used for basic geometric corrections such as the patient positioning. Typical imaging modalities are portal imaging and CT scanners integrated with the treatment machine (see Cone-beam CT). By means of this procedure, positioning errors can be reduced and a better treatment gained. Refer also to Adaptive radiation therapy.

IMRT Intensity Modulated Radiation Therapy is a technique in which the intensity of the beam is varied spatially using a multi-leaf collimator. Traditional radiation therapy uses only homogeneous intensity.

Light ions An ion is an atom with a negative or a positive charge due to an excess or deficit of electrons. Ions with a lower atomic number, such as helium (2), beryllium (4) and carbon (6) are referred to as being light.

Magnetic Resonance (MR) An increasingly common diagnostic technique that can be used on the entire body, using the magnetic resonance of the body's molecules. MR provides very good contrast imagery of the bodies' soft tissues and it is therefore possible to make a better assessment of the tumor's position and spread than with CT.

MLC Multileaf collimator The multileaf collimator is a device that shapes the radiation beam and is installed in the treatment head of a linear accelerator. Used to shape the beams to conform to the tumor instead of using only a rectangular field and essentially always in conjunction with the supply of IMRT.

Modularity A property of software, which means that parts of the software can be reused in other contexts and products than the purpose for which they were initially developed.

MR Refer to Magnetic Resonance.

Multileaf collimator Refer to MLC

Oncentra MasterPlan The new name of Nucletron's treatment planning system. The previous name was OTP.

Optimization algorithms for radiation therapy Algorithms for calculating the radiation therapy that gives the best quality of treatment. Quality of treatment is defined by the doctor in terms of various requirements.

ORBIT Optimization of Radiation therapy Beams by Iterative Techniques. The core of RaySearch's software, which works as a framework and a toolbox for the software products that RaySearch develops.

Organ contour calculation The process of automatically identifying the contour (closed curve) that defines the area in an image that corresponds to a certain organ.

OTP Oncentra Treatment Planning. The previous name of Nucletron's Oncentra MasterPlan treatment planning system.

Palliative radiation therapy Therapy in which clinicians cannot cure the disease, but only alleviate it or slow its progress. The opposite is referred to as curative therapy. See above.

Plug-in module Software that can be plugged into a larger software system and provide enhanced functionality.

Positron emission tomography (PET) A more recent diagnostic technique, in which tumor markers are labeled with radioactive isotopes that are injected in the blood. Markers move in the circulatory system to the intended position and radioactivity shows where a tumor is positioned.

Protons A type of particle with a substantially larger static mass than electrons and which, accelerated to half the speed of light, has superior radiation therapy properties than traditional photon or electron radiation.

Quality assurance Extensive checks are conducted in hospitals of all systems included in the radiation process. Certain checks are conducted daily, others before the treatment of each patient commences. These processes are referred to as quality assurance and are aimed at ensuring that the patients receive exactly the planned dose.

Radiation dose algorithms See Dose calculation algorithms.

Radiobiological optimization Optimization of radiation therapy in which mathematical models of how tissue reacts to radiation are used in order to help the user to assess quality of treatment.

Software modules A software package to solve a specific host system's needs for functionality.

Treatment planning Using a computer to find one or more recommendations for radiation therapy of the tumor. Usually includes work with CT images, tumor and organs at risk delineation, application of radiation type and beam angle, optimization (manual or automatic) of dose results, as well as evaluation and approval of best recommendation (plan).

Tumor response. How the tumor reacts to radiation treatment.