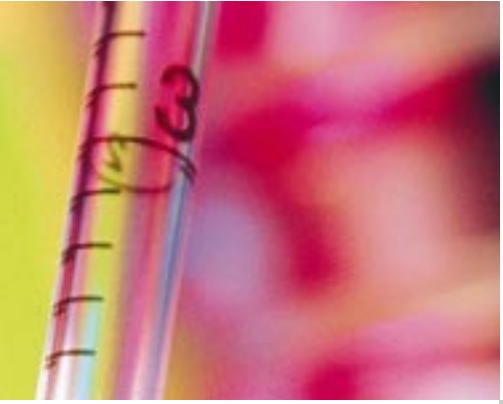

Active Biotech

Annual Report 1998

Research and development enables us to produce vaccines and pharmaceuticals that prevent and cure diseases, are precisely targeted, and have no side effects. Active Biotech is creating value for shareholders by applying cutting-edge biomedical expertise in a global industry.

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Annual General Meeting

The Annual General Meeting will be held on Monday, 10 May 1999, at 5.00 p.m. at the Star Hotel in Lund.

Right to participate at the Annual General Meeting

In order to be able to participate in the Annual General Meeting shareholders

must be recorded in the Securities Register maintained by Värdepapperscentralen VPC AB (Swedish Securities Register Centre) no later than Friday, 30 April,

must inform the company of their intention to participate in the Annual General Meeting no later than Friday, 7 May at 4.00 p.m.

Notification may be made by post to: Active Biotech AB, P.O. Box 724, SE-220 07 Lund, Sweden or
by telephone +46 46 19 20 00, fax +46 46 19 20 50
or e-mail info@activebiotech.com
Upon notification being made, the shareholder's name, address, telephone number, personal identification number/corporate registration number, type and number of shares held, must be stated.

Shares in trust

In order to be able to participate in the Annual General Meeting, shareholders, whose shares are registered with a bank's trust department or an individual securities dealer, must temporarily register their shares in their own name with VPC. Re-registration must have been completed no later than Friday, 30 April.

Announcement

In accordance with the Articles of Association, an announcement shall be placed in the Sydsvenska Dagbladet and Dagens Industri, no later than two weeks prior to the Annual General Meeting.

Financial information

Annual General Meeting	10 May 1999
Interim report, three months	17 May 1999
Interim report, six months	26 August 1999
Interim report, nine months	25 November 1999
Final accounts report for 1999	February 2000
Annual Report for 1999	March 2000

Financial information may be ordered from Active Biotech AB, P.O. Box 724, SE-220 07 Lund, Sweden
or by telephone +46 46 19 20 00, fax +46 46 19 20 50
or e-mail info@activebiotech.com
Our home page: www.activebiotech.com

Active Biotech

THE YEAR IN BRIEF

ACQUISITION OF ACTIVE BIOTECH RESEARCH

In March Active Biotech Research (previously known as the Lund Research Center) was acquired from Pharmacia & Upjohn, who came in as a part owner of Active Biotech with 22 per cent of the capital.

NEW ISSUES PROVIDED APPROX. SEK 500 MILLION

Institutional ownership increased from 4 per cent to approx. 40 per cent.

NEW HEAD OF RESEARCH

Karl Olof Borg took up his post as Vice President, Research & Development, for the Group.

NEW PRESIDENT & CEO

Sven Andréasson, who has wide experience from the biotechnology and pharmaceutical industry, was appointed President & CEO for the Group.

SEK 320 MILLION FOR THE PROPERTY IN LUND

The property in Lund was sold at the end of the year for SEK 320 million. The transaction generated a capital gain of SEK 80 million.

EARNINGS

The Group profit for 1998 after net financial items and minority interests, was SEK –35 million (39), SEK –3.11 per share. Available liquid funds amounted to SEK 644 million. The equity/assets ratio in the Group was 68 per cent.

OTHER BUSINESS DIVIDEND

It is proposed that the non-biotechnology-related activity within Active Biotech be given as a tax-free dividend to the shareholders.

Bo Håkansson, 1998's President & CEO

We have now established the platform for the future. Today Active Biotech is a biomedical company researching into the areas of infectious, inflammatory and autoimmune diseases as well as cancer. One of the last stages in the transformation of Active Biotech into a biomedical company is the establishment of Wilh. Sonesson AB which, it is proposed, will be given as a tax-free dividend to the shareholders at the Annual General Meeting. All shareholders are invited on an exciting journey with this newly created company.

By acquiring Active Biotech Research, previously known as the Lund Research Center, in March last year, from Pharmacia & Upjohn, who came in as part owners of Active Biotech with 22 per cent of the capital, we gained 165 qualified researchers and a highly interesting research portfolio. We have carried out two new issues which generated SEK 500 million. The institutional ownership has increased from 4 per cent to approx. 40 per cent.

Our strength thus consists of high expertise and strong financial resources. The challenge has been to explain the new direction involving investment in research projects which will not generate money for some years. This may have led to difficulties in valuing our share. However, I believe that we have huge potential in pipeline projects.

Our objective is, by means of research and development, to produce new and improved medicines and vaccines within major disease areas. We wish to develop an international biomedical group and create value for shareholders by combining leading edge world class expertise in the biomedical sector with business knowledge and an entrepreneurial spirit.

Acquisition of Active Biotech Research

Our acquisition of Active Biotech Research added several valuable projects to our research portfolio. The aim of research within the unit is to generate innovative concepts for the development of medicines, including the diseases multiple sclerosis (MS), arthritis, asthma and cancer. In order to free capital and concentrate upon our core activity, the property in Lund was sold for SEK 320 million and the transaction brought about a capital gain of SEK 80 million.

New candidate drug against MS

One of our highest priority research projects is the SAIK-project. The aim of the project is to produce a therapy of treatment against autoimmune diseases, of which MS is one of many. In addition the preparation shall be able to be taken orally in order to facilitate medication over a long period. The research has advanced more rapidly than planned and the candidate drug was selected as early as the end of last year. It should be possible, as early as this year, to produce all the research results which are required to be able to apply to the responsible authorities for permission to conduct clinical trials on healthy individuals (Phase I) and subsequently in clinical trials, Phase II.

Industry professionals

In our structuring of Active Biotech we have appointed Karl Olof Borg as Head of Research for the Group. Karl Olof has worked in research management posts with Astra for 15 years and within the Pharmacia & Upjohn Group for 11 years.

In order to gain access to an administrative strength with long and broad experience from the biotechnology and pharmaceutical industries, we have appointed Sven Andréasson as President & CEO of the Active Biotech Group. Sven comes from Pharmacia & Upjohn, most recently as President of their French subsidiary. Sven's extensive experience has been acquired from work both in Sweden as well as internationally. At the same time, I shall remain in the company as Chairman of the Board. The Swedish pharmaceutical industry's doyen, Hugo Thelin, will become Vice Chairman

and contribute with all his experience. In addition we have strengthened the Board with industry professionals from pharmaceuticals and biotechnology. Sven and I have a clear concept of how the tasks are to be divided. Sven will be responsible for the operational work while I concern myself with finances and strategy.

Foundation stones

As early as 1985 we laid the first cornerstone in our concentration upon biotechnology in co-operation with Professor Lars Björck and his colleagues at the Department for Cell and Molecular Biology at the University of Lund. Bacterial surface proteins were to play an important role in the establishment in 1996 of the company Actinova Ltd., which is located in Cambridge, England. Actinova is today a research-intensive subsidiary which conducts a number of research projects related to bacterial proteins and their influence upon the course of different diseases. They are projects which relate to infections caused by streptococcal bacteria, various inflammatory conditions and disturbances to normal blood coagulation.

The second cornerstone was the acquisition of SBL Vaccin in 1997. This gave us an entrée into the vaccines market which is growing almost twice as quickly as the pharmaceuticals market. The aim with SBL Vaccin's activity is to develop and produce vaccines for international launch and to market our own vaccines and agency products in the Nordic and Baltic regions, as well as to distribute vaccines on the Swedish market.

ETEC – vaccine against travel diarrhoea

One high priority project is a vaccine against travel diarrhoea – ETEC. The ETEC-bacterium (Entero Toxin-creating Escherichia coli) is one of the most common causes of diarrhoea which, through dehydration, causes about 700,000 deaths a year worldwide. At present there is no ETEC-vaccine available on the market. Active Biotech's own cholera vaccine – Dukoral – also possesses a 60 per cent preventive effect against ETEC. The experiences from Dukoral have been employed in order to bring about a drinkable vaccine against ETEC as well. Both of the vaccines contain the same rCTB-component, which makes the vaccine drinkable and, in itself, creates protection.

Right now Phase III studies are being conducted in Kenya and Guatemala/Mexico. We expect an international launch in the year 2001 through the pharmaceutical company SmithKline Beecham, which has the exclusive right to market the vaccine worldwide, outside of the Nordic and Baltic regions, which we shall take care of ourselves.

Vaccine against streptococcus

A vaccine against infections caused by Group A-streptococci, for example tonsillitis, is another of our leading projects. This disease affects millions of children and young people every year and imposes a major burden upon health care. There is also a threat from antibiotic resistance which has begun to arise within several types of bacteria. During 1998 Active Biotech and researchers from the Lund University have carried out a detailed analysis of bacterial surface proteins and have identified a series of potential vaccine candidates. Active Biotech has also entered upon a strategic research and development co-operation with the Australian Queensland Institute for Medical Research in Brisbane. This enables access both to a further vaccine candidate as well as to the Institute's specialist knowledge concerning the design of vaccines against group A-streptococci.

No short cuts to success

There are no short cuts to success. However I am convinced that the combination of the entrepreneurial spirit and research at the very highest level will lead us to the goal whereby we shall continue to produce new medicines and vaccine candidates, in addition to existing products. And then to develop them, either by ourselves or together with some co-operation partners.

Moreover we must not forget that we are working in an industry which is exposed to strong competition. If we are successful, then the rewards will be great. It is therefore important to maintain a high tempo. It is essential to be first. The first in the market, wins.

Again I can see an eventful year ahead of me. In order to succeed we must continue along the chosen path with great vigour at the same time as new transactions and new co-operation agreements shall be developed and examined. Before I hand over to Sven and wish him good luck, I will take this opportunity to thank all my colleagues for their good efforts during this last year!

Lund, March 1999

Bo Håkansson

Sven Andréasson, 1999's President & CEO

It is going to be an exciting challenge to lead Active Biotech into the future

Sven Andréasson, new President & CEO of Active Biotech since 1 February 1999

We enjoy a strong financial situation, combined with considerable expertise primarily with regard to vaccines and immunology. Over a short period of time this has created a strong foundation which now forms the basis for further development. It is on this basis that the company is entering a new phase.

It is now a question of concentrating our efforts upon the operational work. The intention is to ensure that established goals and plans are realised with regard to schedules and planned resources. Only when we attain our planned goals are we able to achieve measurable results in our activities and thereby achieve increased stability and confidence. In line with the progress of our research projects we shall find new partners in order to add to existing co-operation agreements. To find the right partners at the right time is going to be significant for our success.

Recipe for success

We are going to follow our established business strategy and strive for growth, both organically as well as through acquisitions. The financing of the activity shall be primarily achieved through equity capital. We shall continue to strive for a clear profile and market position. A lot has happened during the year and it is important that the market analyses and follows our rapid development. Active Biotech's research strategy is to build up and secure expertise of a world class standard within immunology as well as within cell and molecular biology. We shall bridge the gap between academic institutions and the large medical companies. We want to create co-operation and strong alliances with other research and pharmaceutical companies. The greatest possible growth in value in each project is to attempt to drive the development of new products forwards under our own management, up to and including clinical phase II (proof of concept).

Focus on biotech

Active Biotech has grown rapidly and has already undergone a number of reorganisations. The dividend of Wilh. Sonesson is going to involve a refining of the pharmaceuticals and biotechnology activities at the same time as other businesses may be developed on the basis of the specific conditions that apply to them. I

believe that this will be appreciated by the market. As the company gradually develops, organisation, management functions, expertise and management systems will be examined in order to be able to create a company which corresponds to the market's requirements and expectations.

Active business development
Financial strength enables the opportunity for active business development. Both the acquisition of products as well as the strengthening of the organisation for our domestic market in the Nordic and Baltic regions are considered. In line with the restructuring of the industry we shall work to extend the activity with the aim of creating further balance between research/development costs as well as between sales, licence and contract research incomes. This is going to happen within niche sectors, which are related to existing activity and expertise.

Future prospects
Active Biotech is an exciting company with attention focused upon it and with high expectations attached to it – 1999 will be an important year in a new development phase. Our strong equity/asset ratio guarantees endurance in terms of research and affords opportunities for new interesting acquisitions.

Forecast for 1999
Our research and development activities means that costs occur before income. We are going to have some years with planned deficits. I expect the 1999 result to be about SEK -115 million. This forecast is based upon us going through a refining process and leaving the profitable parts of the Group – Helikopterservice, Inter Air and Sonesson – at the same time as we intensify our concentration upon research projects.

Lund, March 1999

Sven Andréasson

Our strong equity/ assets ratio serves as a guarantee of our staying power in terms of research and provides opportunities for new and interesting acquisitions

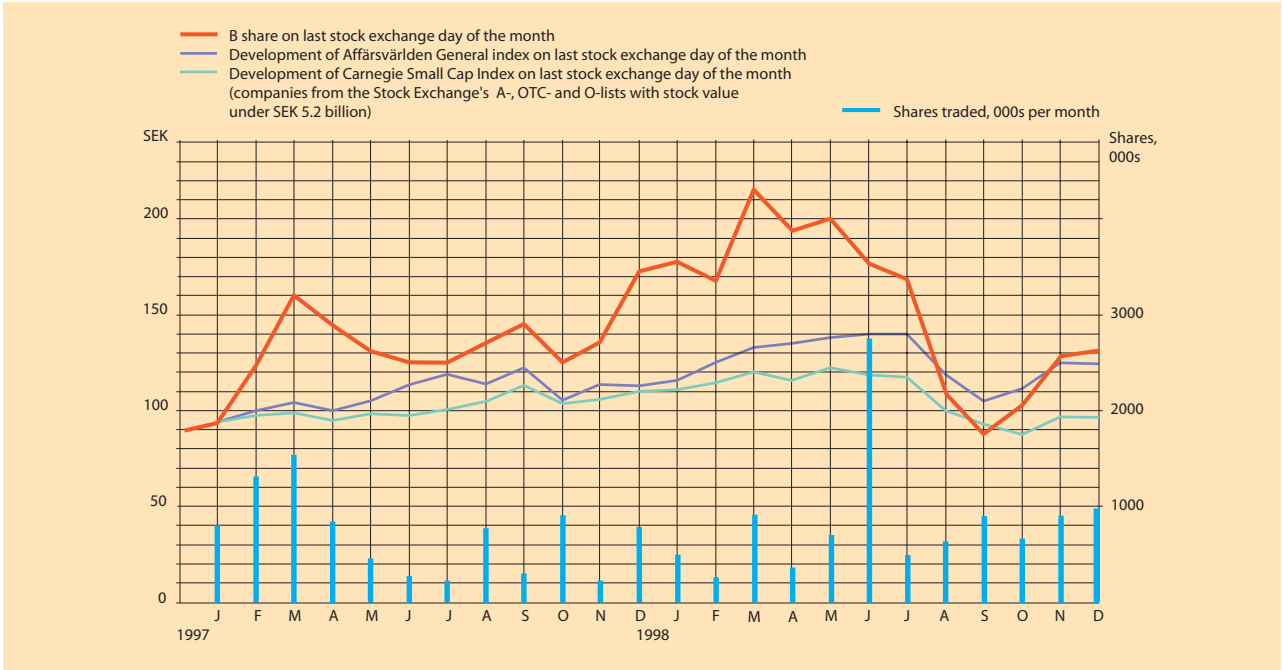
The share

Share capital

The share capital amounts to SEK 281.2 million, divided into 1,972,695 Series A shares, and 9,273,597 Series B shares, all of a nominal value of SEK 25. Each Series A share carries one vote and each Series B share carries 1/10 of one vote. During the year there was carried out an initial share issue to P&U of 2,000,000 B shares, a new issue of 1,891,496 B shares as well as a directed new issue aimed at institutional owners of 1,400,000 B shares. In addition, remaining loans of SEK 36,000,000 have been converted into 388,810 B shares and the re-stamping of 342,965 A shares to B shares was carried out in accordance with the articles of association.

Change in share capital

Occurence		A shares	B shares	Par value SEK	Change in share capital SEK M	Total share capital SEK M
1994	Conversion of debentures		9,142,856	1	9.2	55.3
1995	Consolidation of shares 1:10, par value SEK 10.					
	New issue of 4 Series B shares	–20,840,940	–28,892,930	10	0	55.3
1996	Bonus issue			25	82.9	138.2
1997	Conversion 4,000 SEK thousand		40,000	25	1.0	139.2
1998	Initial share issue		2,000,000	25	50.0	189.2
1998	New issue		1,891,496	25	47.3	236.5
1998	New issue		1,400,000	25	35.0	271.5
1998	Conversion 36,000 SEK thousand		388,810	25	9.7	281.2
1998	Re-stamping of A to B	–342,965	342,965	25	0	281.2



The Active Biotech share

SEK M	1998	1997
Profit after full tax, SEK	– 3.99	5.49
Visible shareholders' equity	121.27	98.24
Bid and ask prices as per Dec. 31:		
A shares	131.50	186.00
B shares	131.00	193.00

Shareholders

Active Biotech's largest shareholders ranked by proportion of equity.
This list is based on information available to the company on 30 December 1998.

Holders	A shares	B shares	Number, %	Votes, %
Pharmacia & Upjohn	0	2,500,000	22.2	8.6
Bo Håkansson and companies	1,250,419	309,562	13.9	44.2
D. Carnegie AB	0	379,386	3.4	1.3
Sand Ronni family & companies	0	260,000	2.3	0.9
Skandia	0	197,000	1.8	0.7
Svenska Handelsbanken S.A Luxemburg	2,100	188,862	1.7	0.7
Rbs Trust Bank Ltd, Great Britain	0	170,250	1.5	0.6
Odin Fondene, Oslo	0	152,100	1.4	0.5
Others	720,176	5,116,437	51.8	42.5
Total	**1,972,695**	**9,273,597**	**100.0**	**100.0**

Total number of shares: 11,246,292
Total number of votes: 2,900,055
Votes per share: Series A shares 1 vote, Series B shares 1/10 vote
Maximum dilution: Convertibles 500,000 B shares
Number of shareholders: 9,677
Institutional ownership: 40 per cent of the equity
and 18 per cent of the votes

Ownership structure

Shareholding range	Number of owners	As a percentage of shareholders	Number of shares	As a percentage of shareholders' equity	Average per shareholder
1-1,000	8,788	91	1,914,458	17	218
1,001-10,000	809	8	2,008,882	18	2,483
10,001-100,000	69	1	1,930,059	17	27,972
100,001-	11	-	5,392,893	48	490,263
Total	**9,677**	**100**	**11,246,292**	**100**	**1,162**

This is how the immune defence system works

All humans have a defence system which protects them daily from different microorganisms; bacteria, virus and parasites. These are to be found in their millions everywhere – in the air and in the water. If the protection does not work as it should, then this can lead to the occurrence of such pathogenic conditions as infection and autoimmune diseases.

The human body is able to defend itself against infection in many different ways. The skin and mucus membranes constitute the first barrier for the majority of microorganisms. If this barrier is penetrated, by means of a sore on the skin, for example, then an inflammatory reaction is triggered, in which the immune defence system plays the key role.

The immune defence system consists of two parts: a basic defence and a part which is developed gradually as the person becomes exposed to the influence of foreign bodies and organisms. This latter part is built up over the years and may be said to have a memory function, which recalls how it worked the last time that the body was under threat.

When the body is infected by a contagion for the first time, the immune system actually finds out what the intruder looks like and how it is to be combated. The foreign body activates the body's defence cells, which come to maturity and begin to create antibodies. Moreover the information about the intruder is stored in the memory cells so that the immune defence system is able to react immediately next time, and render the intruder powerless.

This learning mechanism is employed with vaccination. The vac-

cination means that the body is provided with a contagion, an antigen, which teaches the immune defence system to recognise and deal with a contagion, which it has not yet encountered.

The immune defence system most often works on behalf of the body. Its cells are, in fact, trained to recognise the body's own tissue. But occasionally it starts to fight against its own body and the person is affected by the diseases which are termed autoimmune. The body becomes its own enemy. The reasons for this are not known, but it is likely that autoimmunity is due to a combination of genetic conditions and, for example, to virus infection.

Antibiotic resistance a growing threat

We are used to treating infections with antibiotics, but a growing problem in the world is that bacteria are developing resistance to antibiotics. In Sweden the antibiotic resistance is so far limited to pneumococci, which give rise to ear infections in children as well as sinusitis and pneumonia in adults and the elderly. The resistance also encompasses enterococci, which cause infections in urinary tracts and heart valves. Recently Sweden, too, has been subjected to the problem of resistant staphylococci.

Society can gradually end up in a situation where antibiotics can no longer be employed against certain infections

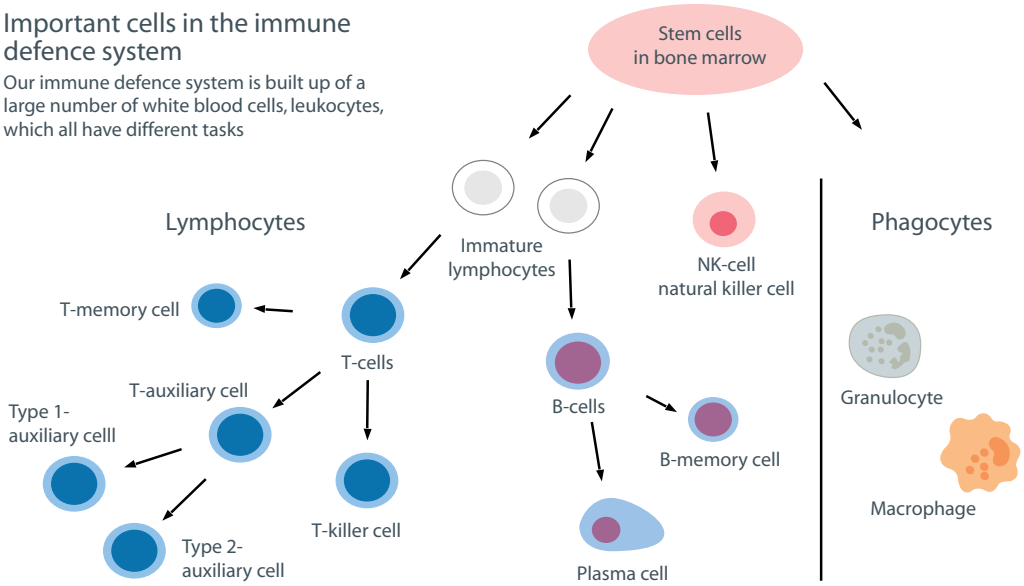
In spite of the fact that many bacterial strains are now resistant, it is usually possible to deal with a bad infection if one specific antibiotic preparation does not help, quite simply by selecting another one. There are about a hundred preparations to choose between and, moreover, they can be combined. The risk of a patient dying because of a lack of correct treatment has, however, increased dramatically in recent years.

Society may thus gradually find itself in a situation, in which antibiotics are no longer able to be employed against certain infections. The need for extended vaccination programmes and new vaccines will therefore increase.

The vaccinations of the future are going to provide better protection against a large number of infectious diseases. Vaccines are also being developed with the aim of being employed in treatment, the so-called therapeutic vaccines, against cancer, allergies and autoimmune diseases.

Important cells in the immune defence system

Our immune defence system is built up of a large number of white blood cells, leukocytes, which all have different tasks



Source: MFR 1998, illustrator Annika Röhl

Immunobiology is our tool and our method of attack

The basis for our activity may be summarised by the concept of immunobiology. Active Biotech conducts research and development within medical areas where the immune system is of central interest to the activity. This relates both to our internal activity as well as the external activity which we conduct in co-operation with research groups at different universities.

The last quarter of a century has involved increased opportunities for entirely new problem formulations within the biological sciences. The progress made within biochemistry – also known as the molecular biological revolution – has fundamentally altered the method of attack and the methodology that is now applied in medical research.

Immunobiology includes and exploits all these advances. They have also, for easily explained reasons, become primarily associated with questions and problems precisely related to the immune system.

The areas of activity

Active Biotech's activity is based upon immunobiology and is divided into three areas of disease: *infection* including vaccines, *autoimmunity/ inflammation* and *cancer*. Our research has also generated a number of *technology platforms* which can be utilised in the company's own projects, but also function alone in business sectors.

Active Biotech's business concept

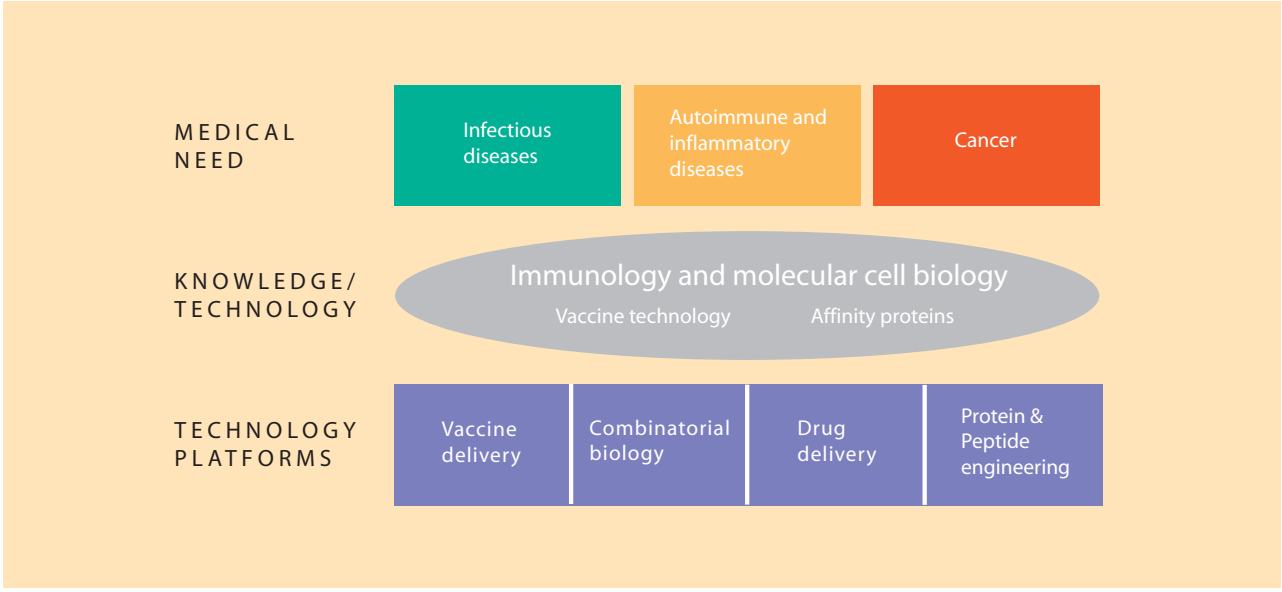
Active Biotech is a specialised biopharmaceutical company founded on a knowledge of the immune system.

Active Biotech's objective

The company will develop and manufacture innovative and novel drugs and vaccines, which prevent and cure diseases in areas of significant unmet medical needs.

Active Biotech's business strategy

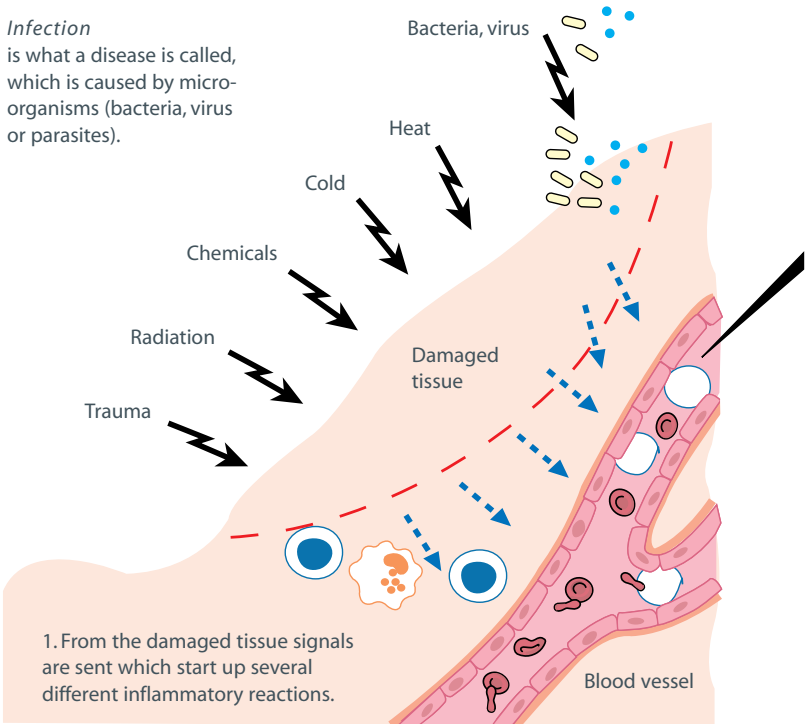
- to grow, both organically and through acquisitions
- to maintain a strong financial position
- to be a transparent company for the benefit of investors and partners
- to strive for a clear profile and market position
- to communicate in a uniform, clear and open manner.

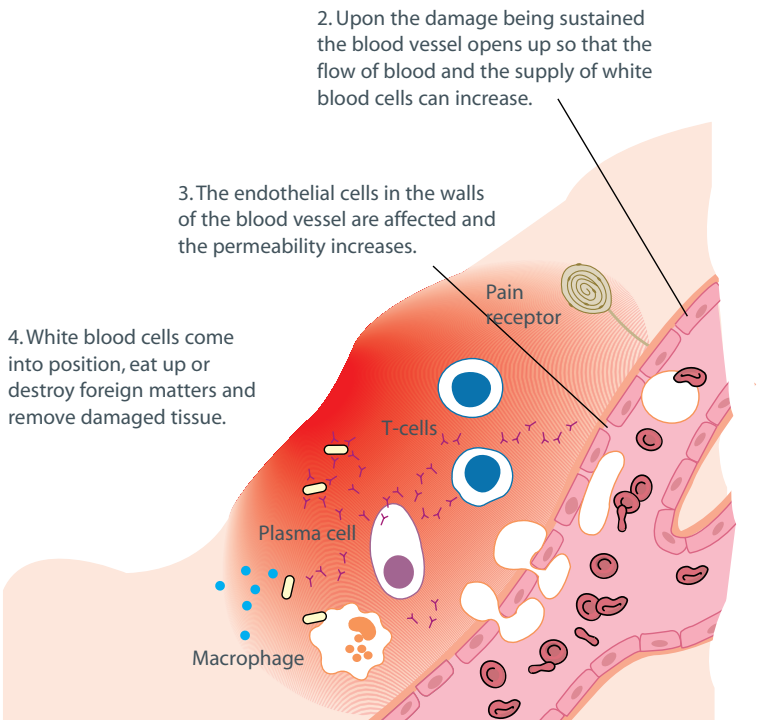


Active Biotech's research strategy

- to build up and secure expertise within immunology as well as cell and molecular biology
- to bridge the gap between academic institutions and the pharmaceutical industry
- to create co-operation and strong alliances with other research and pharmaceutical companies
- to build value by developing projects up to Phase II, "proof of concept" and marketing world-wide with external partners.

Infection
is what a disease is called, which is caused by micro-organisms (bacteria, virus or parasites).





Source: MFR 1998, illustrator Annika Röhl

The inflammation process

Inflammation is the body's reaction, which is aimed at trying to repair damage, irrespective of whether it is caused by infection, extreme heat or cold, chemical matters, radiation or a mechanical injury (a sore).

Inflammation means to set alight in Latin.

The signs of inflammation are: swelling, reddening, raised temperature, pain and reduced function.

The intellectual capital

Active Biotech is, to a high degree, funded on our intellectual capital. Of decisive importance for successful development of new candidate drugs and commercial exploitation of these, is the employees' expertise and creativity as well as the company possessing structures and processes which facilitate and support their work. This tends to be described as a company's human and structure capital respectively, and can be covered by the concept of intellectual capital.

Human capital
By human capital is understood the combination of knowledge, skilfulness and innovative ability on the part of each individual employee. Evaluations and business culture are also parts of the human capital.

Employees
Active Biotech has highly competent and professional employees. The level of education is high and there is significant experience of the industry. The average number of permanently employed staff in the biotechnological activities during 1998 was 317, of which 190 were women, and the personnel turnover was 5.7 per cent. Also part of the staff are PhD students employed on a project basis who, in 1998, totalled twelve persons.

Further education
In order to provide employees with opportunities to develop and keep their expertise updated, Active Biotech invested significant amounts in 1998 in external further education.

Options programme

In order to increase commitment and to give employees the opportunity to a share in the increased value of the Active Biotech shares, all the employees were offered the chance last spring to take part in a shares option programme. The take up was very high and over 70 per cent of the employees chose to subscribe for options.

Structure capital

The structure capital includes the organisation structure, hardware and software respectively, patents, relations etc.; in other words, what is left at the company when the employees have gone home.

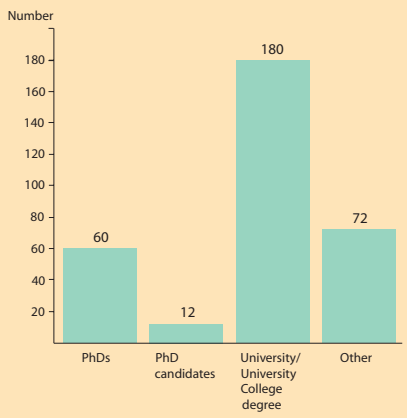
Co-operation with academic institutions

Active Biotech's strategy is, for example, to form a link between the academic world and the large medical companies. This involves ongoing contacts and co-operation with research groups at different universities. This occurs in order to find new projects, but also in the form of co-operation where external research teams carry out work for Active Biotech's account. This can be exemplified by the co-operation which Active Biotech has had with Professor Lars Björck and the Department for Cell and Molecular Biology at the University of Lund ever since 1985. This affords Active Biotech the right to employ the results which Lars Björck's research team has produced in its product development, with regard to different mechanisms of infection.

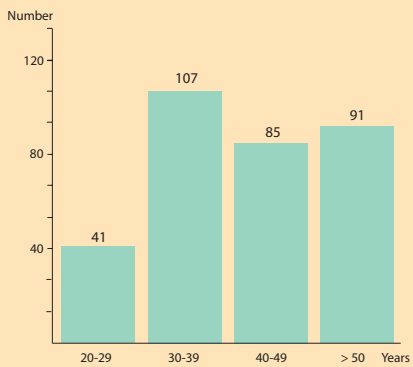
Over 150 external researchers work on projects for Active Biotech's account

A listing of ongoing co-operation with university groups shows that over 150 external researchers are working on projects for Active Biotech's account.

The personnel's education levels



Age structure



At present co-operation is being conducted with research groups at the following institutions and universities:

Lund University
University of Gothenburg
The Karolinska Institute, Stockholm
Swedish University of Agriculture, Uppsala
Huddinge Hospital
Royal Institute of Technology, Stockholm
The Biomedical Centre, Uppsala
Uppsala University
Institute of Infection Protection, Solna
University of Odense
University of Helsinki
University of Tampere
Kings College, London
Guys Hospital, London
University of Southampton
University of Cambridge
University of Sussex
University of Manchester
University of Oxford
Klinikum der Johann Wolfgang Goethe University, Frankfurt am Main
Centre National de la Recherche Scientifique Villejuif, Paris
University of Leuven
Sidney Kimmel Cancer Center, San Diego
University of Pittsburgh
University of Maryland
San Diego State University
University of Illinois at Chicago
McMaster University, Canada
Institut de Recherches Cliniques de Montreal
Queensland Institute for Medical Research, Brisbane

INTELLECTUAL PROPERTY

Handling of patents

Of decisive importance if Active Biotech is to be able to commercialise the research results produced within the Group, is for the business to be able to protect this know-how on important markets. In order to secure efficient handling of patents the company co-operates with patent agents, which are renowned in the sector, both in Sweden and internationally. In total the Active Biotech Group has nine patents which have been granted and 21 patent applications, which have been submitted. When a patent is granted in some of the countries where applications are submitted, the same application may be pursued in all important countries in accordance with the existing international agreements. This means that the technology which is described in the patent gains an international pro-

tection and that one and the same "basic patent" is converted into a national patent in a large number of countries. How many and in which countries, will depend upon the commercial importance of the respective patent. It is of primary importance to have patent protection in Western Europe, North America and Japan for the medical technologies which are to be developed and commercialised.

	Granted	Submitted
Product/substance	7	15
Process/methodology	2	4
Application/indication	-	2

What is a patent and how is it registered?

Patents shall encourage innovation. A patent application shall contain a detailed description of the area to which the innovation applies and it shall, in the form of clauses, specify what the inventor is seeking protection for, the so-called patent claims. A majority of countries have patent legislation, which means that whosoever makes an invention or innovation may seek and obtain protection of it for 20 years. As a rule a patent application is submitted in the country where the invention is made or where the owner of the invention is to be found. In our case, this means Sweden and England.

Generally speaking there are three types of patent:

A *product patent* gives the holder the exclusive right to manufacture and market the substance in question; it can relate to a protein, a medical substance, an antibody, etc.

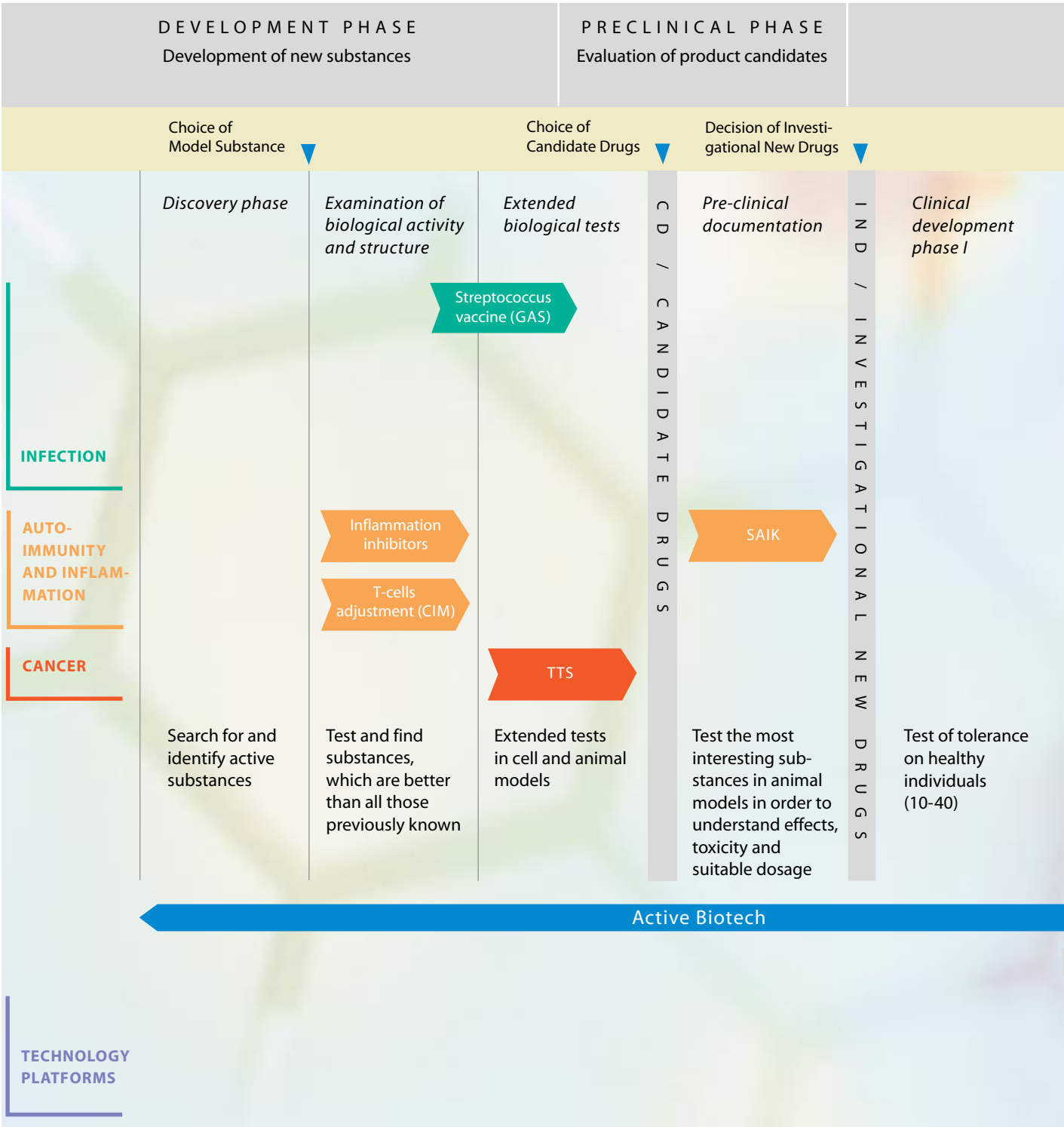
By *process patent* is understood a protection for the product which is manufactured in accordance with the described process.

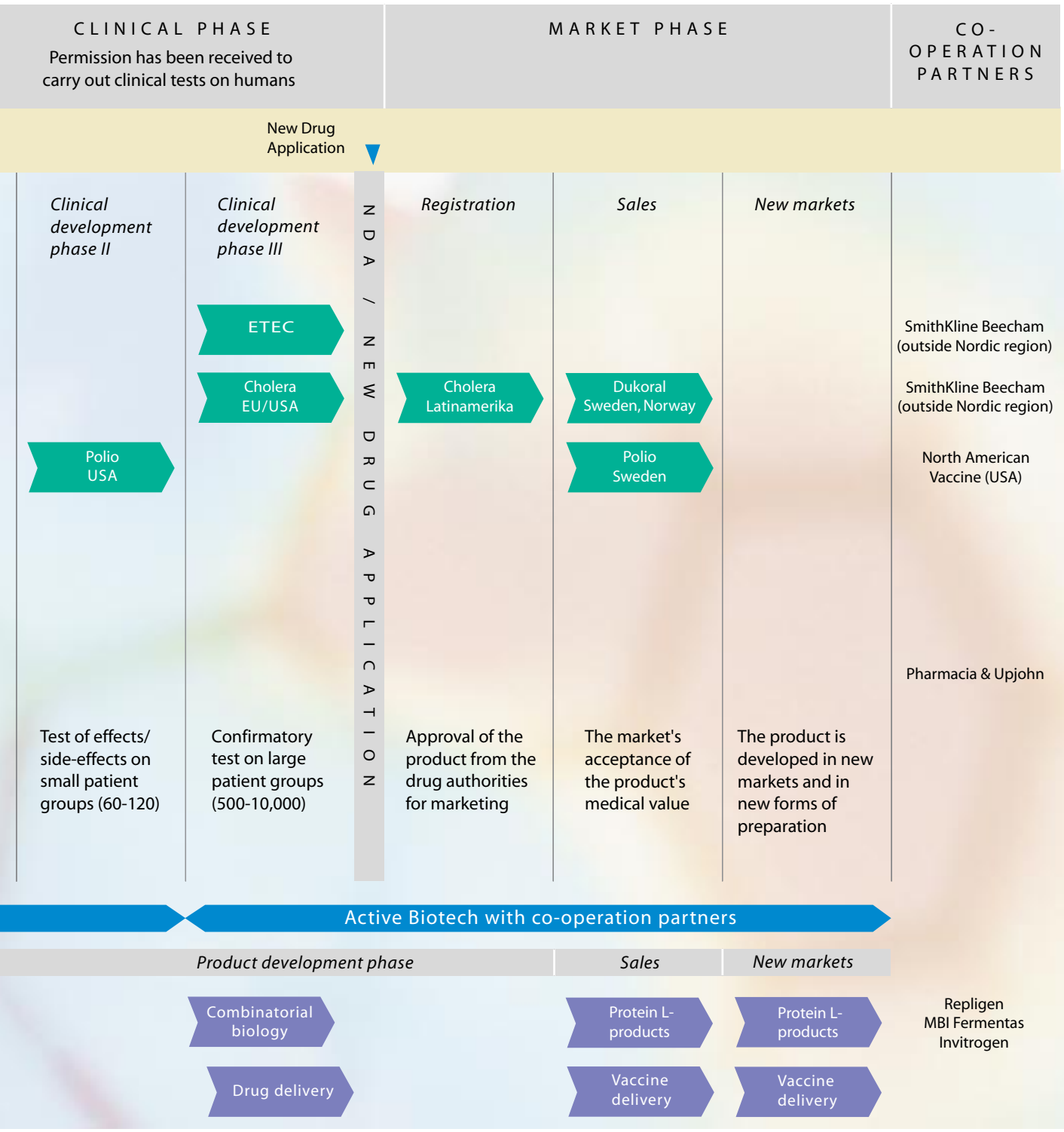
A *patent relating to indication or application* may be granted when a substance or a product gains a new, not previously anticipated, area of application.

Trademarks

Trademarks are also part of the intellectual capital which may be of very considerable value for a business. Active Biotech is working actively in registering and protecting trademarks in order to be best able to commercialise its products.

Active Biotech's project portfolio




CLINICAL PHASE
Permission has been received to carry out clinical tests on humans
MARKET PHASE
CO-OPERATION PARTNERS
New Drug Application
Clinical development phase II
Clinical development phase III
NDA / NEW DRUG APPLICATION
Registration
Sales
New markets
ETEC
Cholera EU/USA
Polio USA
Cholera Latinamerika
Dukoral Sweden, Norway
Polio Sweden
SmithKline Beecham (outside Nordic region)
SmithKline Beecham (outside Nordic region)
North American Vaccine (USA)
Pharmacia & Upjohn
Test of effects/ side-effects on small patient groups (60-120)
Confirmatory test on large patient groups (500-10,000)
Approval of the product from the drug authorities for marketing
The market's acceptance of the product's medical value
The product is developed in new markets and in new forms of preparation
Active Biotech with co-operation partners
Product development phase
Sales
New markets
Combinatorial biology
Drug delivery
Protein L-products
Vaccine delivery
Protein L-products
Vaccine delivery
Repligen
MBI Fermentas
Invitrogen

Vaccines prevent

The purpose behind all vaccination is to start a reaction in the body's immune system and thereby prevent a future disease or limit its effects. The same fundamental principles which lie behind vaccination against infections may, in the future, be employed for the treatment of other diseases, for example cancer and autoimmune diseases.

The diseases which cause the greatest number of deaths in the world are infectious diseases: diarrhoea, malaria, aids, tuberculosis and respiratory infections. The interest in research and development with the objective of improving the treatment of infections is therefore very considerable. The interest in vaccines as preventive treatment is strongly influ-enced by the ever increasing problem of the develop-ment of bacteria which are resistant to antibiotic therapy.

Active Biotech's programme in the vaccine sector extends from the research project for new vaccines against streptococci and staphylo-cocci, to a drinkable vaccine against ETEC-diarrhoea; currently at a clini-cal stage of development. The devel-opment of vaccines against intestinal infections has a high priority in a global perspective.

Technological breakthrough gives rise to new types of vaccines

A drinkable vaccine pre-supposes a technology which makes it possible for the body to build up a long-term immunological protection after the intestinal mucous membrane has been exposed to the vaccine. Active Biotech has access to this via the so-called rCTB-technology.

Vaccines can be a part of the solution to the growing problem of the resistance of bacteria to antibiotics

The research project we are conducting for a vaccine against streptococcal infections belongs to a new generation of products. It does not include the bacteria or virus which the human being is to be made immune against, but merely the substance or substances from the microorganism which are necessary in order for the immune system to be able to build up a defence against the intruder. This may, for example, be a protein or a peptide which is isolated from the streptococcus bacterium.

Another type of new vaccines at the research stage, are based upon exploiting parts of the genetic material, DNA. A few years ago a somewhat surprising discovery was made that DNA-sequences, which were administered by means of injection, could introduce an immune defence. This observation initiated extensive research around the exploitation of DNA as a basis for vaccines. Apart from new biological properties compared with traditional vaccines, this should mean a major simplification of the production processes.

The different new principles for vaccination have only been possible thanks to the technologies which have been developed within molecular biology.

Combination vaccines

Another trend is to unite several active vaccine components in one and the same product. This is particularly true today in respect of children's vaccines where it is possible to apply five vaccines in one injection: diphtheria, tetanus, whooping cough, polio and certain types of meningitis.

The types of preparation are also going to be changed. Thus far the majority of vaccines have been injected, but even today oral, i.e. drinkable, vaccines are being marketed. Tomorrow's vaccines are also going to be supplied in a different manner, as a nasal spray for example.

The vaccine market

The global vaccine market was evaluated in 1997 at USD four billion. Up to the year 2001 it is expected to grow to USD seven billion. This means a growth of 15 per cent a year, compared with 8 per cent for the whole of the pharmaceutical industry.

SmithKline Beecham and Pasteur-Merieux are the largest international players. In addition there are a large number of small businesses in different countries, which is a consequence of vaccines being previously regarded as a national area of activity.

Vaccines are useful to society

Vaccines do not only afford the individual effective protection against the majority of infectious diseases. They contribute positively to the health economics of society. According to WHO, society saves USD 7-20 in health care costs for every dollar which is employed on vaccinations with a preventive objective. Thanks to a worldwide vaccination programme, smallpox has been eradicated and the same is about to happen with measles and polio.

Vaccines can also be a part of the solution to the growing problem of the resistance of bacteria to antibiotics. A vaccine against tonsillitis, for example, would radically reduce the need for the antibiotic treatment which is commonplace in today's health care.

Drinkable vaccine against cholera

Each year an estimated 5.5 million people in the world are smitten by cholera, with approx. 120 000 deaths as a result. Active Biotech's drinkable vaccine against cholera has been registered in Sweden and Norway under the name of Dukoral. It has undergone large-scale field trials in, for example, Bangladesh in the mid 80's. In Sweden and Norway Dukoral is also registered as a prophylaxis against ETEC, the so-called tourist diarrhoea. Dukoral, too, is based upon the discovery of rCTB, which is here employed as a carrier of killed cholera bacteria.

Potential market

In spite of the relatively small risk of being infected by cholera, many travellers wish to have the security of cholera protection. The potential market for the cholera vaccine is therefore deemed to be appreciable. Sales of Dukoral in Sweden and Norway exceeded SEK 13 million in 1998, an increase of 73 per cent.

Dukoral is the only existing cholera vaccine which has undergone field trials. Our vaccine has shown a high protective effect. A similar oral vaccine against cholera has been developed by the vaccines company Berna in Switzerland.

International launching

During 1999 submission of applications for registration of the cholera vaccine in the USA and EU is planned with a launch one year later. This will occur via the pharmaceutical company SmithKline Beecham, which has the exclusive right to market the vaccine in the

USA, EU and Australia. Active Biotech will thereby receive royalties and cover of its production costs. The royalty is high, compared with what is normal for the industry, since the company financed both the development and the clinical trials by itself.

Polio vaccine

The polio vaccine, which has been sold in Sweden since 1957, is a so-called killed virus vaccine, which thereby enjoys certain advantages compared with the polio vaccine, which is currently employed internationally. It is now going to be launched internationally in co-operation with North American Vaccine, NAV. The polio vaccine shall take the form of a component in a combination vaccine for children and shall be launched internationally, together with NAV.

The newly restructured polio plant in Solna has a good production capacity and an efficient production process.

Dukoral is the only existing cholera vaccine which has undergone field trials

ETEC-vaccine against tourist diarrhoea

The ETEC-bacteria (Entero Toxin-forming Escherichia coli) is one of the most common causes of diarrhoea, which by means of dehydration causes some 700,000 deaths every year in the world. For people who travel to countries where the ETEC-bacteria is common, there is a discernible risk of being infected. This applies to Latin America, Asia and Africa, but also to the Mediterranean area, Eastern Europe and Russia.

The infections give rise to watery diarrhoea for two to four days, in certain cases up to two weeks. The disease passes over by itself, but is unpleasant and highly limiting in terms of movement.

The number of travellers from the EU, USA, Japan and Australia to high risk areas for ETEC is about 50 millions and increases by five per cent per year. Some 120 million people travel to areas with medium or low risk.

The market potential is estimated at USD 300-650 million per year after launching. This makes the vaccine against ETEC financially the most important asset for Active Biotech over the next few years.

First on the international market

The only protection available today is Active Biotech's own Dukoral. It has an approximately 60 per cent preventive effect against ETEC, a consequence of the immunological similarities which exist between rCTB and toxins in ETEC.

Dukoral is based upon an observation discovered by Professor Jan Holmgren of Gothenburg. He has mapped the cholera toxin and pro-

duced a part, its B-unit, rCTB. This is itself completely toxin-free and has the function of binding other substances to the intestinal mucous membranes. The experiences from Dukoral have been applied in order to produce a drinkable vaccine against ETEC as well. It contains rCTB and inactivated types of ETEC. Upon the first immunisation two doses are required, at a week's interval.

At present there is no competing ETEC-vaccine on the market. Active Biotech can thereby be first on the international market with such a product within this interesting area.

Two trials in Phase III

During 1998 clinical trials were initiated in Phase III on American students undergoing language tuition in Guatemala. The previously initiated studies in Kenya continued. It is obligatory to carry out clinical trials under conditions, which are realistic for travellers, so-called field trials. This imposes greater demands upon the management of the study, its quality and logistics. In spite of the political unrest in Kenya and Hurricane Mitch in Guatemala it has still been possible, however, to keep the trials going. In order to increase the number of students included, a new hospital centre has been started up in Mexico, as a supplement to the Guatemala study.

Co-operation with SmithKline Beecham

During the whole year considerable resources have been provided in order to develop the production process for the commercial vaccine product. Active Biotech is striving to complete the documentation which, through our partner SmithKline Beecham, is to be submitted to the responsible authorities during the year 2000. The FDA (Food and Drug Administration) requires a well conducted study prior to registration.

SmithKline Beecham has the exclusive rights to market the vaccine globally, apart from in the Nordic and Baltic regions. Active Biotech shall thereby receive both royalties and cover for its production costs. The royalty is high, since the company has financed all the development itself. The ETEC-vaccine is expected to be launched internationally in the year 2001.

Acquisition of Vitec

As part of the strong concentration upon the ETEC- and cholera vaccines, Active Biotech has, through its subsidiary SBL Vaccin, acquired all the shares in Vitec. This was previously wholly owned by Jan Holmgren and Vitec has the patent rights to rCTB. Vitec also earns royalties on income from the sale of Dukoral as well as royalty on future income from the sale of the ETEC-vaccine.

The purchase sum consisted of two parts:

- SEK 25.6 million in cash on the day of taking possession
- a supplementary purchase sum of 60,000 B shares in Active Biotech to be paid out upon successful registration of the ETEC-vaccines in the EU and USA respectively.

By means of the acquisition, Active Biotech also receives Vitec's royalty payments which means that the financial outcome will increase markedly upon a positive launch of the ETEC and cholera vaccines.

Group A streptococcus vaccines

One of Active Biotech's leading candidate drugs is a vaccine against infections caused by group A-streptococci, such as tonsillitis for example. This disease affects many millions of children and young people every year and imposes a heavy burden upon health care. Even if tonsillitis, in general, responds well to antibiotic treatment, the disease may still inflict chronic injury to the heart and kidneys.

The development of a safe and efficient vaccine against these infections is complicated, for two reasons:

- the bacteria's surface varies in structure. This makes it difficult for the immune defence system to efficiently combat the hundreds of pathogenic variants – "serotypes" which are to be found of the bacteria.
- group A-streptococci employ many different strategies in order to deal with the host's natural defences. Certain bacterial surface proteins have a structure which is similar to the tissue in the heart, kidneys and joint tissue. It thereby serves as a disguise for the bacteria in the face of the immune defence. An infection may also result in the immune defence attacking and damaging these organs.

In spite of the difficulties, the aim now, following a long-term co-operation with the University of Lund, is to find a new way for the development of a vaccine against this hitherto unfulfilled medical need.

Three new patents

During 1998 Active Biotech and researchers from the University of Lund have carried out a detailed analysis of bacterial surface proteins and have identified a series of potential vaccine candidates. One result of this work is that three new patent applications have been submitted.

Pre-clinical studies have already shown that the majority of these vaccine candidates are able to generate specific antibodies in animals, capable of recognising a great variety of serotypes of group A-streptococci. These studies are to be concluded during the first quarter of 1999 and the most promising candidates shall then be selected for an extended pre-clinical development programme, which is going to be completed by the end of 1999.

Active Biotech has also concluded a strategic research and development co-operation with the Australian Queensland Institute for Medical Research in Brisbane. This gives access both to a further vaccine candidate and to the Institute's special knowledge regarding the design of vaccines against group A-streptococci.

Focus upon safety

Vaccine safety is a subject the importance of which cannot be overstated. In order to greatly reduce the risks of unwanted allergic reactions, Active Biotech will test its vaccine candidates in comprehensive laboratory trials. This work is to be supplemented by studies which are to be carried out by the group in Australia. This possesses special experience in analysing unwanted immune reactions to vaccines against group A-streptococci.

Hopefully, these joint efforts will greatly reduce the time, which is needed for pre-clinical development and make it possible to initiate clinical tests (Phase I) in the year 2000.

Other streptococci vaccines

The same strategy as was employed with the development of the vaccine components for group A-streptococci, shall be applied to the development of vaccines against diseases which are caused by other streptococci.

Active Biotech has initiated a project for the development of a more efficient vaccine against pneumonia, caused by the bacterium Streptococcus pneumoniae. The bacterium is still an important cause of pneumonia and death in older people

Three new patent applications have been submitted

and the very young, and does not respond effectively to today's vaccines. Another vaccine project is aimed at the group B-streptococci, an organism which causes serious infections in new-born babies. These bacteria are to be found in the mother and are transferred to the child during the final stage of pregnancy or upon delivery and can cause serious, often fatal, infections.

In both cases the potential vaccine candidates have been identified. Pre-clinical studies of these will be completed during the first half of 1999. Active Biotech intends to strengthen both the research programme, through the licensing of further vaccine candidates and complementary technologies.

Cure against caries attack

Tooth decay is caused by acid, which is produced by the bacterium Streptococcus mutans. Active Biotech has acquired the exclusive rights to a new candidate drug; p1025, which has been produced by the United Medical and Dental School (UMDS) at Kings College in London. It is a protein fragment, a peptide, which prevents the bacteria from attaching to the surface of the tooth. In a small pilot study involving volunteer test subjects, this candidate peptide fulfilled its task for up to 120 days. Active Biotech is carrying out further volunteer studies in co-operation with UMDS. The intention is to commence clinical trials during the year 2000.

Through its subsidiary, SBL Vaccin AB, Active Biotech is the only Swedish company which has specialised in vaccines. SBL Vaccin has undergone major processes of change during the last few years, which have accelerated since Active Biotech's purchase in 1997 from the Swedish state. After having only concentrated upon the Swedish market, the company is now aiming at the international market.

The company's activity can be divided up into two principal sectors:

- development and manufacture of vaccines for international launch
- marketing of own vaccines and agency products in the Nordic and Baltic regions as well as distributing vaccines in the Swedish market.

Before Active Biotech's accession, a comprehensive investment programme had begun. Since 1995 there has been SEK 300 million invested in the form of R&D as well as production investments and process development. The production plants are now adapted to the requirements which are imposed by the industry for the manufacture of the vaccines in accordance with GMP, Good Manufacturing Practice.

Strong trademark

The trademark, SBL, is strong in the Swedish market with a wide range of child, travel and adult vaccines. The company has a significant share of the vaccines market in Sweden. For child vaccines SBL is able to offer all the vaccines, which are given in Sweden, in accordance with the recommendations of the Swedish National Board of Health and Welfare, and here, SBL is the market leader.

SBL markets its own produced child vaccines against diphtheria, tetanus (lockjaw) and polio, as well as the travel vaccine, Dukoral, against cholera with indication against ETEC-diarrhoea as well. By means of co-operation agreements with other producers, child and influenza vaccines are also marketed to international suppliers.

Investing in product specialists

One objective is to strengthen the marketing organisation through investing in product specialists, which are available for advising

doctors and other healthcare personnel. Where advising the general public directly is concerned, SBL Vaccin participates in the home page Travel Fever (Resfeber) on the Internet. At the address www.resfeber.com fast and simple information is provided about which vaccinations are to be recommended for travels to more than 200 different countries.

On the Norwegian market a learning centre within the vaccination area is being created for doctors and hospital nurses throughout the whole of Norway, in co-operation with SmithKline Beecham. Since August last year SBL Vaccin's newly appointed Product Manager has been marketing our products Dukoral, Duplex (diphtheria/tetanus) and Infanrix (child vaccine), which have now been approved and registered in Norway.

Sales mix

SBL Vaccin Distribution is the most established vaccine distributor in Sweden. In order to be able to offer the customers a complete range of all the registered vaccines on the Swedish market, the agency products and our own manufactured products are supplemented by other manufac-

turers' vaccines. Of SBL's distribution 80 per cent occurs direct to the end customers, i.e. hospitals, private doctors, care centres, vaccination clinics, school and industrial health care, etc. The county councils' and municipalities' buying is of ever increasing importance. SBL asserts itself well in the new competitive situation, thanks to a complete range, high service, competent customer service, cost-efficient distribution and stock controls as well as rapid and secure supplies.

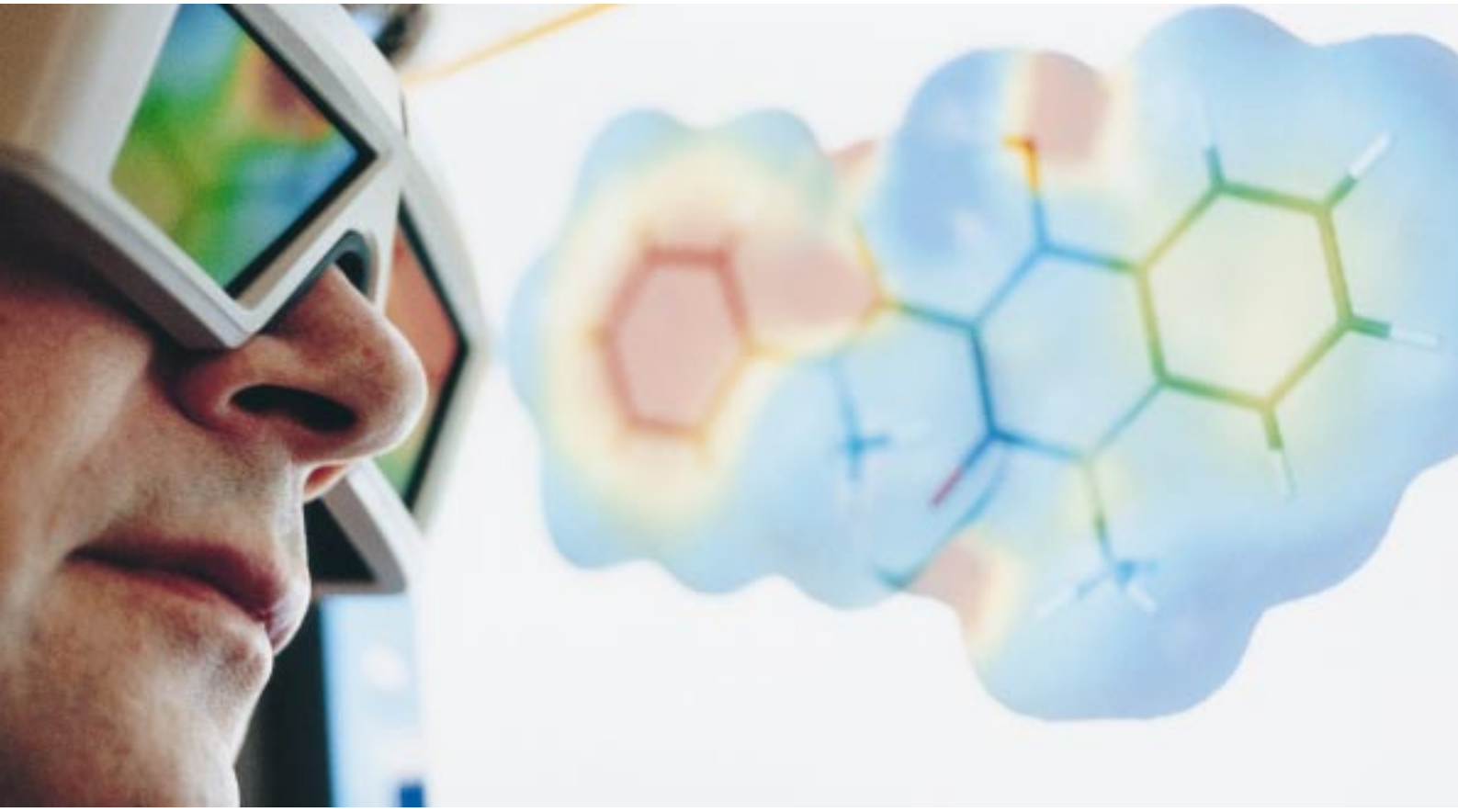
Two new production plants

During the year Active Biotech has invested in two new production plants. The largest investment, totaling SEK 30 million, encompasses a reconstruction of the polio plant as well as documentation and validation for the manufacture of polio vaccines for the international market as well. SBL has manufactured and sold polio vaccines on the Swedish market for a long time and now has an agreement with North American Vaccine (NAV) whereby SBL's polio vaccine shall form part of a combination vaccine for children.

The manufacture of rCTB was moved to Matfors outside Sundsvall during 1998. The reason was to get all the production of vaccine components under one roof. In Matfors SBL has adapted a pharmaceutical production plant to meet the GMP requirements.

The factory in Matfors has concluded test production during 1998 and, since October, has been going ahead with production which will, initially, provide about five million doses a year. The production capacity can, by means of limited additional resources, be increased appreciably.

When the body becomes its own enemy



In the USA alone it is estimated that 20 million people suffer from autoimmune diseases

Autoimmune diseases occur when the immune defence system turns against the body's own tissues. It is a large and heterogeneous group of diseases, which encompasses all the body's organs.

Usually the immune system operates on behalf of the body. Its cells are taught to recognise the body's own tissues. But occasionally it starts to fight against its own body and we are then affected by the diseases, which are termed auto-immune. Autoimmunity probably derives from a combination of in-herited conditions and, for example, virus attacks.

Inflammation is otherwise a process whereby the body repairs damage and destroys unwanted micro-organisms.

A hundred diseases

The area of inflammatory diseases has widened perceptibly during the last decade. Within the group there are to be found a hundred diseases or conditions, such as arthritis, multiple sclerosis (MS), goitre, young people's diabetes and psoriasis.

In the USA alone it is estimated that 20 million people suffer from autoimmune diseases. For only a minority, if any, is there to be found

a satisfactory pharmacological treatment alternative at present. The most common is symptom alleviating treatment and cortisone preparations. Beta-interferones have, in recent times, shown themselves to be effective in the treatment of MS.

Every year over 20,000 new cases of MS are diagnosed in the world. The market for medicines against the disease is estimated at approximately USD 400 million and is expected to increase. The importance of research into autoimmunity and inflammatory diseases has gradually grown.

Success for SAIK-MS

Active Biotech's research into a medicine against MS has advanced better than planned. The preparations which have been studied are so-called SAIK substances, or immunomodulators, which influence the immune defence system by activating or suppressing parts of it.

The research activities in the SAIK project have increased significantly during 1998. Appreciable resources have been supplied to the project with the aim of achieving its objective as quickly as possible. Experimental models, which reflect the safety requirements that apply to the associations, have been established, and a number of studies have been completed in order to clarify the connection between chemical structure and biological effects. One substance – SAIK-MS – satisfies the requirements which the researchers have imposed, and has therefore been selected as a candidate drug. Four new patent applications have been submitted during the year.

"Active Biotech's research into a medicine against MS has progressed better than planned"

Clinical studies in the year 2000

The candidate drug SAIK-MS will now be examined more closely with the aim of evaluating it in clinical trials on patients with MS. It should be possible to obtain all the research results which are required, during the first half of the year 2000, in order to be able to apply to the responsible authorities for permission to initiate trials involving healthy people (Phase I) and then patients (Phase II).

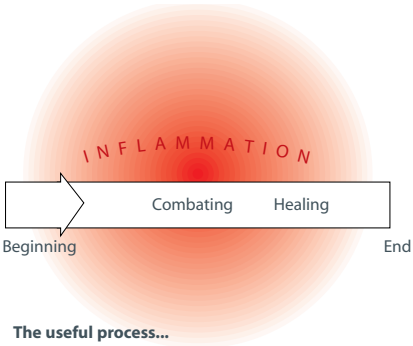
At present further research is being conducted in order to discover what positive effects SAIK-substances can have in several other disease models for psoriasis, juvenile diabetes and arthritis. The world market for psoriasis is estimated to be about USD two billion.

New treatment of asthma and rheumatism

Active Biotech's research surrounding inflammation inhibitors is expected to provide a more selective and efficient treatment of the endemic diseases, asthma and arthritis.

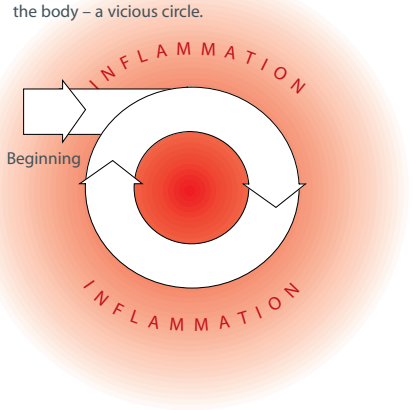
Asthma is a chronic inflammatory disease in the respiratory system, which occurs in about five per cent of the population in the developed countries, i.e. in 35 million individuals. The market for medicines against asthma is estimated at approximately USD seven billion and is expected to grow more rapidly than other pharmaceuticals markets.

The total market for medicines against arthritis is calculated at approx. USD two billion. Today only 60 per cent of the patients are treated with medicine, which indicates a large medical requirement for new and effective preparations.



The useful process...
Inflammation is a vitally useful process which is needed in order to repair damage and to neutralise unwanted micro-organisms. It ceases when the tissue is healed and the "danger" is over.

...and the harmful
If the inflammation is able to continue even after the primary damage has been repaired, it can change into a mechanism which is injurious to the body – a vicious circle.



Source: MFR 1998, illustrator Annika Röhl

Immunotherapy against cancer

Active Biotech is striving to find means and methods which exploit the immune defence in the fight against cancer

The current forms of treatment for cancer are usually not satisfactory from a medical perspective. In order to create an efficient treatment with fewer side-effects, Active Biotech is striving to find means and methods which exploit the immune defence in the fight against cancer.

Active Biotech has an established research co-operation with Pharmacia & Upjohn regarding selective activation of the immune system. This has resulted in a unique concept called TTS (Tumour Targeting Superantigen). It aims at finding a therapeutic principle which, on the one hand, is able to identify tumour cells and, on the other hand, activates the body's immune defence so that it attacks and destroys them.

Active Biotech carries out the pre-clinical research in order to find candidate drugs for clinical testing. This is then carried out by Pharmacia & Upjohn. The present research programme will extend over the next two years.

Powerful defence system

The immune system is a very powerful defence system with the ability to combat bacteria and viruses when we are affected by an infection. The mechanism which seeks to reject a transplanted organ is an example of how effective the immune system is at destroying tissue, which it does not recognise as being the body's own.

Our research within immunotherapy against cancer is based upon rendering the tumour immunogenic, i.e. to get the immune defence to identify the tumour as foreign tissue and to attack it. The cancer cell derives from a normal cell and therefore has many similarities with it. However, the cancer cell's surface has certain structures which are significantly more usual in tumours than in normal tissue. These may be employed to bind the proteins which, in turn, can activate the immune system locally by the tumour.

The concept is based upon the employment of a super-antigen – a powerful activator of the immune defence – which is directed to the tumour area with monoclonal antibodies, i.e. target-seekers, aimed at the tumour cells. The fundamental concept is for such treatment to work more selectively than the current cytotoxins.

New research gives more candidate drugs

During 1998 research has been concentrated upon studies into the connection between the protein's structure and its effect in model studies where different principles for activating the immune defence by means of so-called T-lymphocytes are employed. The aim of the studies is to find the next candidate drug. The project is running according to plan, with the aim of producing a new product candidate for clinical trials in the year 2000.

Contract research involves research income of SEK 175 million, apportioned as follows: 50 million in 1998, 75 million in 1999 and 50 million in the year 2000. In addition Active Biotech will receive a small royalty on the sales of a future commercial product from the project.

Co-operation with BioPhausia

Active Biotech and BioPhausia concluded an agreement in November 1998, regarding research co-operation concerning a cancer preparation. The co-operation relates to the effect on tumours of the hyaluronidase enzyme. The hypothesis is that hyaluronidase combined with other treatment provides a more pronounced effect.

The project has significant potential. The work is in a pre-clinical phase and has been conducted within BioPhausia. Together with American researchers Active Biotech's oncology group in Lund is developing the project further. The aim of the co-operation is to be able to test the hypothesis within a year, and thereby determine the value of the project.

Knowledge converted into new technology

The work which previously took years to complete, if it was at all possible, can today be carried out in the course of a few weeks

Active Biotech's broad involvement in immunobiology, primarily represented by our biomedical projects, is influenced by the development in the biochemical sector. The researchers have, over the years, themselves acquired knowledge which has been transformed into what is now called technology platforms. For example Active Biotech has an extensive and wide knowledge of rCTB and is thus able to transfer the technology to other product areas. Similarly, by means of its long tradition within the antibody-binding proteins (or affinity proteins) sector, the company has access to process methodology expertise within its own organisation.

Peptide library

The latest addition to this area is called CDT (Covalent Display Technology) and comprises a so-called peptide library. It is a technology which makes it possible to evaluate biological effects of millions of substances in a relatively short time. CDT is a new method of creating genetic "libraries". In common with an ordinary library for books, a molecule library is an ordered system which enables simple and rapid searching for interesting objects, in this instance, molecules. The work which previously took years to carry out, if it was at all possible, can today be carried out in the course of a few weeks. Active Biotech is developing the technology for use in the discovery and design of anti-infectious materials and for the production of new affinity proteins.

The technology can, however, also be employed within many other biotechnological and medical sectors. Active Biotech will therefore exploit the commercial potential of these applications by means of agreements on research co-operation and through the licensing of the technology.

Technology flow from Lund University

For more than twelve years Active Biotech has co-operated with research teams at the Lund University under the leadership of Professors Lars Björck and Ulf Sjöbring. They have investigated the structure and function of certain bacterial surface proteins and how these potent biological molecules integrate with the host's immune defence system. It has created a unique knowledge base and thereby, a powerful platform for Active Biotech's development of preparations against both infections and other diseases. The results from the research have also been employed in technologies and products which are used by other researchers within biochemistry and biomedicine around the world. The further development and handling of the technologies is controlled from Actinova Ltd. and they currently comprise three principal areas:

- New affinity proteins (antibody binding proteins) for increased selectivity upon the identification of small biomolecules,
- SNTP (Streptococcal NucleusTargeting Protein) for intracellular distribution and "target-seeking" with the help of transport proteins,
- CDT (Covalent Display Technology) for the evaluation and selection of potential vaccines and medicines, in accordance with the description above.

This knowledge base has also generated projects and ideas with regard to the group A-streptococci vaccine and immunotherapy, which is discussed elsewhere. The first product on to the market from the co-operation with Lund University is Protein L™, which is now being employed within research, diagnostics and biotechnological manufacture (purification).

Other operations

It is proposed that the non biotechnology related activity within Active Biotech be given as a tax-free dividend to the shareholders

INCREASED TRAVEL DURING 1998

Movera

The Malmö-based Transport AB Movera has had three activities: helicopter and business aircraft as well as tanker shipping. The shipping business was sold during the year. The sale means that Active Biotech's liabilities have been reduced by SEK 476 million and that the equity/assets ratio increased from 34 per cent to 49 per cent. The sale involved a sales loss of SEK 13 million in the Group.

Helikopterservice Euro Air AB

Helikopterservice sold the last of its old helicopters during the year. The fleet now consists of three new helicopters which operate the services Malmö-Copenhagen Airport and Helsingborg-Copenhagen Airport. The number of passengers increased by 10 per cent during the year to a total of 83 493 persons.

Sales in 1998 amounted to SEK 83 million (73) and the profit after net financial items was SEK 15 million (25), of which profit from the helicopter sale was SEK 4 million (12). The shareholders' equity amounted to SEK 62 million.

Inter Air AB

Inter Air is based at Sturup and flies business passengers on a charter basis. Inter Air put a new Cessna Citation VII aircraft into operation at the beginning of the year. It has a long range and gives shorter flying time, factors that have been well received by the market. At the end of the year one of the old aircraft was sold at a profit of SEK 8 million.

Sales in 1998 amounted to SEK 32 million (22) and the profit after net financial items was SEK 5 million (0). The shareholders' equity amounted to SEK 16 million.

STRONG YEAR WITH TRIPLED PROFIT

Sonesson Inredningar

The year 1998 was the second best of the 90's for Sonesson. The order inflow was even greater than during the record year 1995.

In spite of a weak start to the year, sales increased to SEK 141 million (124) and the profit after net financial items was tripled at SEK 9 million (3).

The strong result was due to major sales successes in all the markets, both in Sweden and abroad.

An interior decoration business

The successes may be partly explained by the launch of two new products carried out in 1997. Concentration upon laminates and wooden doors is not the least important factor in strengthening the image of Sonesson as an interior decoration business.

The acquisition the Alnäs furniture factory, which was carried out at the end of 1998, with possession being taken from 1 January 1999, has also contributed to this image. Alnäs sells for approx. SEK 25 million and is one of Sweden's leading manufacturers of wooden storage units for educational and public environments. The acquisition widens the Sonesson range, particularly in the school sector.

Major investments

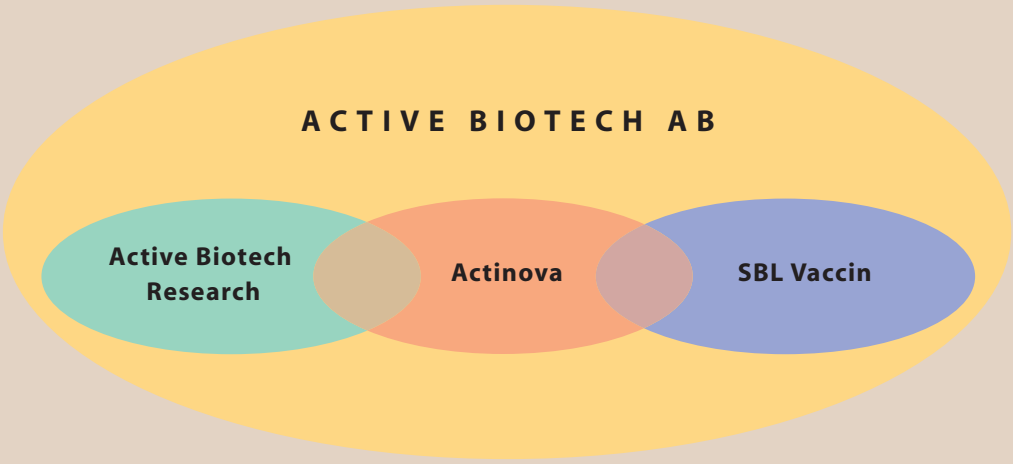
Sonesson Inredningar is investing SEK 10 million in 1998/1999 in a new production line for the factory in Malmö. This is to start up in the spring of 1999. A decision has also been taken to change to a modern and Year 2000-proof computer system, which is being carried out in 1999.

REORGANISATION

Wilh. Sonesson AB

As a last stage in the reorganisation of Active Biotech, other operations have been brought together under the dormant Wilh. Sonesson AB company. The shares acquired during the year in the O-list exchange-quoted Lifco AB, SEK 53.4 million, were transferred on the balance sheet date to Wilh. Sonesson AB. The Board proposes that all the shares in Wilh. Sonesson AB will be distributed as a dividend to the shareholders of Active Biotech AB. The proposal is, however, contingent upon the distribution being able to be made with the support of "lex ASEA" thereby achieving exemption from tax for the shareholders.

Organisation chart



distributed to the shareholders

THE WILH. SONESSON GROUP

PRESIDENT & CEO
Fredrik Herslow

Sonesson Inredningar AB	**Helikopterservice Euro Air AB**	**Inter Air AB**
CEO Jan Wictorsson	CEO Sten Gunnarsson	CEO Anders Lundström

Pro forma profit and loss accounts
Biotechnology and other operations 1998

Amounts in SEK millions	**Biotechnology**	**Other operations**	**Group in total**
Net sales	259.4	255.4	514.8
Cost of goods sold	– 203.4	– 173.8	– 377.2
GROSS PROFIT	**56.0**	**81.6**	**137.6**
	21.57%	*31.96%*	*26.72%*
Selling expenses	– 18.6	– 46.4	– 65.0
Administrative expenses	– 53.7	– 16.3	– 70.0
Research and development costs	– 133.1	– 1.4	– 134.5
Items affecting comparability	79.7	6.7	86.4
Other operating income and costs	8.0	1.9	9.9
OPERATING PROFIT / LOSS	**– 61.7**	**26.1**	**– 35.6**
	– 23.79%	*10.23%*	*– 6.92%*
Net financial items	22.0	– 8.3	13.7
Loss upon sales of subsidiaries		– 13.1	– 13.1
OPERATING PROFIT / LOSS AFTER FINANCIAL ITEMS	**– 39.7**	**4.7**	**– 35.0**
Minority interest	-	– 0.1	– 0.1
Final accounts allocations	0.4	– 0.4	0.0
PROFIT / LOSS BEFORE TAX	**– 39.3**	**4.2**	**– 35.1**
Tax	– 0.5	2.0	1.5
PROFIT / LOSS FOR THE YEAR	**– 39.8**	**6.2**	**– 33.6**
Depreciation included above	*– 28.6*	*– 29.1*	*– 57.7*

Pro forma balance sheet
Active Biotech excl. other operations 31 December 1998

Amounts in SEK millions	
Intangible fixed assets	263.8
Tangible fixed assets	287.4
Financial fixed assets	41.3
Total fixed assets	**592.5**
Inventories	57.7
Current liabilities	376.4
Cash and bank balances	558.0
Total current assets	**992.1**
TOTAL ASSETS	**1584.6**
Shareholders' equity	1140.3
Minority interest	0.0
Allocations	26.9
Long-term liabilities*	183.0
Current liabilities**	234.4
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	**1584.6**

* Interest bearing long-term liabilities 981231 amounts to SEK 50.0 million.
Interest bearing pension liabilities are in addition to this at SEK 17.8 million.

** Interest bearing current liabilities 981231 amounts to SEK 24.8 million.

	Excl. other operations	Incl. other operations
Equity/assets ratio of the Group	72.0%	67.9%
Equity/assets ratio of the parent company	76.1%	84.5%

Quality and environment

Quality and environmental thinking on the part of the employees constitutes important elements in Active Biotech's activity. Within the Group the activity shall be conducted in such a way that the employees and the surrounding environment are protected, as well as raw materials and energy being employed in an efficient manner.

Active and self monitoring
Each unit within Active Biotech is responsible for its own quality and environmental system. The quality and environmental work is based upon active self monitoring carried out by the individual employee in order to protect both the employees and the surrounding environment. Support in the form of work instructions, check lists and models which more than meet the authorities' requirements and regulations, are in place.

Acts regulate the activity
Active Biotech is, like all biotechnology companies, subject to special legislation with regard to pharmaceuticals. This legislation controls, for example, the manufacture, sales, importation and other handling of pharmaceuticals.

During the various phases of development of a pharmaceutical, European and US regulations are those which are primarily followed. Good Laboratory Practice = GLP represents guidelines for laboratory work, especially safety tests. Good Manufacturing Practice = GMP represents guidelines for manufacture and Good Clinical Practice = GCP for clinical testing work.

The drug authorities in Europe, USA and Japan have, since 1990, through ICH (International Conference on Harmonisation), been working on the production of joint guidelines for the development and approval of pharmaceuticals, covering chemical-pharmaceutical as well as pre-clinical and clinical documentation, from both qualitative and quantitative perspectives.

In Active Biotech's activity there is included work on chemical substances and microorganisms. Major efforts have been made to adapt the premises to the regulation, with very high standards and security with regard to the working environment as well.

The company's ambition is to reduce the amount of waste right at the source, to recover materials and manage waste in a safe manner. All waste is sorted and put out for recycling or incineration, all in accordance with current regulations.

Within the whole Group there is an active sorting at source of paper, cardboard and glass. Active Biotech will continue to support the various units' environmental work in the future.

The new millennium

What happens at the millenium change to the year 2000? How will it affect us? What can we do to reduce or completely avoid the problem?

As is seen from the general debate the change to the new millennium can involve risks for the IT systems, which handle time and dates.

Active Biotech's various units have invested a lot of work in the preparations in the form of analyses, planning and measures prior to the year 2000.

Plans and measures

As part of the validation of the new production plants, Year 2000 validation has been included since 1998. This applies both to the new rCTB plant in Matfors and the polio plant in Solna. The group is taking special care to look over all the technical systems before the year 2000.

It is not only traditional computer systems, which can encounter problems with the new millennium, but also technical systems which contain program logic. A large amount of electronic equipment contains circuits or micro-processors, which are fitted with programs exactly like computers, ranging from property service systems to advanced rules and process control systems on the production floor.

In Lund the Year 2000 work commenced in 1997, during the time that the unit was part of Pharmacia & Upjohn. The first phase consisted of listing the computer systems, databases and technical systems and identifying those with a high influence upon the business activity and/or a major risk of Year 2000 problems. Seven specific systems were identified in Lund. They have been checked, rectified or replaced. During 1999 there are Year 2000 measures planned for workplace computers, electronic mail and laboratory equipment.

We have put a great deal of work into preparations for the year 2000

Financial information

General

The Group's concentration upon biotechnology continued during 1998, primarily through the acquisition of Active Biotech Research, previously known as the Lund Research Center, from Pharmacia & Upjohn. One consequence of the reorganisation is that the Group's costs are expected to exceed income over the next few years. The objective for the financing of the group is to be primarily managed via the shareholders' equity, which is why two new issues were carried out during the year, involving a total of SEK 494.9 million net. In addition the property in Lund was sold for SEK 320.4 million in December, with payment effected in February 1999.

Liquidity

Available liquid funds, including unutilised lines of credit, amounted to SEK 644.2 million compared with SEK 374.4 million at the previous year end. Credit facilities approved amounted to SEK 77.0 million of which SEK 52.2 million remained unused. Cash and bank balances, including short-term investments, amounted to SEK 612.4 million on the balance sheet. Of this amount, SEK 423.6 million was invested in interest bearing securities and shares.

Financing

The Group's consolidated shareholders' equity amounted to SEK 1363.8 million (546.8).

During the spring an initial share issue of 2.0 million B shares was made to Pharmacia & Upjohn as payment for Lund Research Center AB. In addition two further new share issues were carried out, one with priority for shareholders and one directed at institutional investors. Altogether the new issues generated SEK 494.9 million net for the group and the number of B shares increased by 3,291,496.

During the year the remaining part of the convertible loan of SEK 36.0 million was converted to 388,810 B shares.

The Group's net cash holding, i.e. short-term investments minus interest bearing liabilities, amounted to SEK 372.0 million (-398.6). The interest bearing liabilities amounted to SEK 240.4 million (737.3) of which SEK 147.8 million referred to the "non-biotechnology related" parts of the Group.

Net financial items

The net financial items amounted to SEK 0.6 million. Interest income amounted to SEK 30.9 million (59.7) and interest costs to SEK 17.3 million (54.6). Net financial items included a loss on the sale of Rederi AB Heron of SEK 13.1 million.

Currency exposure

The Active Biotech Group has a relatively limited exposure to fluctuations in currency exchange rates. The exposure which exists, derives primarily from the companies within Movera and Sonesson, since these have certain income and costs in foreign currencies. There is also some exposure through the investments which have been made in Actinova in Great Britain.

Equity/assets ratio/return on shareholders´ equity and capital employed

The equity/assets ratio in the Group amounted to 67.9 per cent (33.9) and in the Parent Company to 84.5 per cent (60.2). The return on shareholders´ equity was -3.5 per cent (5.5) and on capital employed -1.2 per cent (7.9).

Dividend policy

In the next few years it is expected that the Group will report negative results and cash flows. Apart from the year's proposed dividend by the "non-biotechnology related" companies, the Board will not propose any dividend payment as long as the operations show negative cash flow. The Board's long-term objective is that there should be a reasonable relationship between long-term profit trends and the Company's consolidation requirements.

Investments

Net investments in the Group amounted to SEK -200.7 million. The acquisition of Active Biotech Research entailed investment in the Parent Company of SEK 350.8 million of which SEK 340.0 million was financed by means of our own shares. Other investments and sales throughout the Group have occurred in subsidiaries. Large investments have been made in SBL Vaccin which, for example, invested in new plants for the production of polio vaccine and rCTB. Transport AB Movera sold the subsidiary Rederi AB Heron during the year, which is the main reason for the negative net investments. During the year both acquisitions and sales of helicopters and aircraft have taken place in the Transport AB Movera Group.

Financial review
The following is a brief review of trends during the past five years.

STATEMENT OF CHANGE IN FINANCIAL POSITION SEK million	**1998**	1997	1996	1995	1994
Funds provided internally	**24.2**	83.3	430.0	61.6	– 8.4
Change in net working capital (excl. liquid funds)	**– 326.2**	124.3	50.0	– 15.6	87.1
Funds provided by the year's operations	**– 302.1**	207.6	480.0	46.0	78.7
Long-term financing	**397.3**	215.8	485.6	– 60.0	172.2
Investments	**200.7**	– 566.8	– 500.3	24.7	– 217.4
Dividend	**– 22.3**	– 55.3	-	-	-
Change in liquid funds	**273.7**	– 198.7	465.3	10.7	33.5
Return on shareholders' equity (%)	**– 3.5**	5.5	103.8	29.3	– 27.3
Return on capital employed (%)	**– 1.2**	7.9	60.9	22.1	– 0.5
Equity/assets ratio, Group (%)	**67.9**	33.9	47.5	41.8	32.0
Equity/assets ratio, Parent Company (%)	**84.5**	60.2	91.1	58.0	66.2
Net indebtedness	**– 372.0**	398.6	– 2.0	89.9	139.1
Net debt/equity ratio (multiple)	**neg**	0.7	0.0	0.5	1.1
Interest coverage ratio (multiple)	**neg**	1.8	10.0	6.9	neg

Definitions

Return on shareholders' equity
Profit for the year as a percentage of average shareholders' equity.

Return on capital employed
Operating profit/loss after net financial items, plus financial expense as a percentage of average capital employed. Capital employed has been calculated as total assets less non-interest-bearing liabilities.

Equity/assets ratio
Shareholders' equity, plus minority interest as a percentage of total assets.

Proportion of risk-bearing capital
Shareholders' equity, plus minority interest, and deferred tax liabilities as a percentage of the balance sheet total.

Interest coverage ratio
Operating profit/loss after financial items, plus financial expense, divided by financial expense.

Net debt/equity ratio
Net interest-bearing liabilities (interest-bearing liabilities less short-term investments) divided by shareholders' equity, including minority interest.

Earnings per share after full tax
Reported consolidated net profit/loss for the year, divided by average number of shares.

Shareholders' equity per share
Reported consolidated shareholders' equity, divided by number of shares at year-end.

Five-year summary

SEK, million	**1998**	1997	1996	1995	1994
Income statements					
Net sales	**514.7**	456.7	292.6	319.9	272.2
Operating profit/loss	**– 35.6**	37.0	26.3	62.8	– 8.4
Net financial items	**0.6**	5.1	369.5	0.4	– 18.9
Operating profit/loss after financial items	**– 34.9**	42.1	395.8	63.2	– 27.3
Minority interest	**– 0.1**	– 3.3	– 4.0	-	– 0.1
Profit/loss before tax	**– 35.0**	38.8	391.8	63.2	– 27.4
Taxes	**1.5**	– 8.4	– 4.7	– 17.7	– 4.1
Profit/loss for the year	**– 33.6**	30.4	387.1	45.5	– 31.5
Balance sheets					
Fixed assets	**915.5**	1173.0	659.1	201.7	243.3
Current assets	**1098.6**	510.4	620.2	227.0	169.1
Total assets	**2014.2**	1683.4	1279.3	428.7	412.4
Shareholders' equity	**1363.8**	546.8	566.5	179.4	130.8
Minority interest	**3.8**	23.6	40.8	-	1.1
Non-interest-bearing liabilities	**406.2**	375.7	136.6	87.4	69.3
Interest-bearing liabilities	**240.4**	737.3	535.4	161.9	211.2
Total liabilities and shareholders' equity	**2014.2**	1683.4	1279.3	428.7	412.4
Net indebtedness	**– 372.0**	398.6	– 2.0	89.9	139.1
Statement of changes in financial position					
Funds provided internally	**24.2**	83.3	430.0	61.6	– 8.4
Change in net working capital (excluding liquid funds)	**– 326.2**	124.3	50.0	– 15.6	87.1
Funds provided by the year's operations	**302.1**	207.6	480.0	46.0	78.7
External financing	**397.3**	215.8	485.6	– 60.0	172.2
Investments	**200.7**	– 566.8	– 500.3	24.7	– 217.4
Dividend	**– 22.3**	– 55.3	-	-	-
Change in liquid funds	**273.7**	– 198.7	465.3	10.7	33.5
Key ratios					
Return on shareholders' equity (%)	**– 3.5**	5.5	103.8	29.3	– 27.3
Return on capital employed (%)	**– 1.2**	7.9	59.2	21.6	– 0.8
Equity/assets ratio, Group (%)	**67.9**	33.9	47.5	41.8	32.0
Equity/assets ratio, Parent Company (%)	**84.5**	60.2	91.1	58.0	66.2
Share of risk-bearing capital (%)	**68.5**	36.4	49.0	45.2	33.6
Interest coverage ratio (multiple)	**neg**	1.8	10.0	6.9	neg
Net debt/equity ratio (multiple)	**neg**	0.7	0.0	0.5	1.1
Average number of employees	**508**	328	273	455	302
Share data					
Number of shares (thousand)					
before exercising convertibles	**11,246**	5,566	5,526	5,526	55,260
after exercising convertibles	**11,246**	5,926	5,926	5,926	55,260
Profit/loss after full tax (SEK)					
before exercising convertibles	**– 3.99**	5.49	70.05	8.23	– 0.57
after exercising convertibles	**– 3.99**	5.48	65.59	7.98	– 0.57
Adjusted shareholders' equity (SEK)					
before exercising convertibles	**121.27**	98.24	102.52	32.47	2.37
after exercising convertibles	**121.27**	97.81	102.35	37.02	2.37
Market price at year-end (SEK)					
Series A share	**131.50**	186.00	94.00	51.00	4.00
Series B share	**131.00**	193.00	96.00	52.50	3.94
Dividend (SEK)	**1 share in Wilh. Sonesson AB***	4.00	10.00	-	-

* proposed dividend

Active Biotech AB (publ), Corporate Identity No. 556223-9227
The concentration upon biotechnology continued during 1998, primarily through the acquisition of Active Biotech Research from Pharmacia & Upjohn. In order to strengthen the company's financial position, two new share issues were carried out during the year, totalling SEK 495 million net. Moreover the property in Lund was sold off in December for the price of SEK 320 million with payment on the day of taking possession being 1 February 1999.

The Group
On 17 April 100 per cent of the shares in Active Biotech Research were acquired from Pharmacia & Upjohn. Active Biotech Research conducts research into autoimmune and inflammatory diseases as well as cancer. Through the acquisition Active Biotech gained access to several interesting research projects, a research activity with 165 employees, as well as a research plant covering 25,000 sq. m.

During the year the reorganisation of Active Biotech commenced through the sale of Rederi AB Heron. In addition the other non-biotechnology related activity has been brought together in one company, Active Capital AB (name currently being altered to Wilh. Sonesson AB), which at the general meeting shall be proposed to be given as a dividend to the shareholders and then quoted on the Stockholm Stock Exchange's O-list.

Active Biotech acquired the minority share in Transport AB Movera and thereby became the 100 per cent owner of the company.

SBL Vaccin acquired the research company Vitec AB which, among other things, owns patents regarding vaccine delivery technology. By means of the acquisition SBL Vaccin also receives Vitec's royalty payment in respect of the ETEC- and cholera vaccines, which means that the financial outcome from these vaccines will increase significantly upon being launched.

New issues and convertible loans
During the spring an initial share issue was made of 2.0 million B shares to Pharmacia & Upjohn as payment for Active Biotech Research. Moreover, two new share issues were carried out, one with priority for shareholders and one directed at institutional investors. Together the new share issues generated SEK 495 million net for the Group. In connection with the new share issues the remaining part of the convertible loan of SEK 36 million was converted into shares.

Properties
The property which was included in the acquisition of Active Biotech Research was sold during the year for SEK 320 million at a capital gain of SEK 80 million.

Research and development
The Group conducts a large number of research projects within autoimmune, inflammatory and cancer diseases. The projects are at all stages, from the early research phase to projects at the late clinical phase with product launch expected in the next few years. In the ETEC project clinical phase III studies in Kenya as well as Guatemala/Mexico are being conducted, and the market launch of a vaccine is expected in the year 2001. The process of registering the cholera and polio vaccines internationally, is proceeding according to plan.

Promising research results have been achieved for projects at the early research phase, for example, within the SAIK-project against MS where a candidate drug was selected at the end of 1998. In order to strengthen the research function, a new Vice President of Research & Development, Karl Olof Borg, who has extensive experience from the pharmaceutical industry, was appointed during the year.

Significant events after the end of the year
On 1 February 1999 the new President & CEO, Sven Andréasson, took up his appointment.

Sales and earnings
The group's sales amounted to SEK 515 million (457). Included in the sales is Active Biotech Research with SEK 56 million calculated from April 1998. The operating result was SEK -36 million (37) and the pre-tax result was SEK -35 million (39). Included in the result are profits from the sale of the property in Lund at SEK 80 million.

Financial position
Available liquid funds including unutilised lines of credit amounted at year end to SEK 644 million (374). Credit facilities approved amounted to SEK 77 million (178) with an unused part of SEK 52 million (145). Cash and bank balances, including

short-term investments on the balance sheet, amounted to SEK 612 million (339). Of the liquidity, short-term investments accounted for SEK 424 million. The Group's equity/assets ratio amounted to 68 per cent (34).

Personnel

The average number of employees within the Group totalled 508 (328) of which 214 were women (72). The breakdown of the workplaces and information about salaries paid, is shown in notes 18 and 19.

Investments

Net investments in the Group amounted to SEK -200.7 million. The acquisition of Active Biotech Research entailed an investment in the Parent Company of SEK 350.8 million of which SEK 340.0 million was financed by own shares. Other Group investments and sales have taken place in subsidiaries. Large investments have been made in SBL Vaccin which, for example, has invested in a new plant for production of polio vaccine and rCTB. Transport AB Movera sold the subsidiary Rederi AB Heron during the year, which is the main reason for the negative net investments in the Group. During the year both acquisitions and sales of helicopters and aircraft have taken place in the Transport AB Movera Group.

Parent Company

The result after financial items amounted to SEK -77 million (38). Available liquidity, including short-term investments, was SEK 475 million (239) and the equity/assets ratio was 85 per cent (60). Net investments in shares in the Parent Company amounted to SEK 310 million of which SEK 351 million pertained to the acquisition of Active Biotech Research. Details regarding the number of employees and salaries are shown in notes 18 and 19. During the year a shareholder contribution was made to Active Biotech Research of SEK 40 million and to Actinova Ltd. of SEK 25 million.

The Board of Directors' and the President's proposal on the appropriation of the year's result is presented on page 60.

Report on the Board's work in 1998

As a result of the change of Active Biotech into a biotechnology undertaking, the composition of the Board of Directors was altered during 1998. In connection with the Annual General Meeting, four new board members were elected on to the Board of Directors, while one board member chose to leave the Board of Directors. Hugo Thelin was appointed as the new Chairman of the Board.

During the year nine board meetings have been held, of which four were per capsulum meetings. The President has kept both the Chairman of the Board as well as other board members informed about the development of the Company, on an ongoing basis. Important matters which have been dealt with by the Board of Directors, include:

- Acquisition of Active Biotech Research from Pharmacia & Upjohn
- New issues
- Reorganisation, proposal for giving the non-biotechnology related activities as dividend
- Recruitment of new President & CEO.

Profit and loss accounts

		THE GROUP		THE PARENT COMPANY	
Amounts in SEK thousand		**1998**	1997	**1998**	1997
Net sales		514,705	456,679	4,363	3,377
Cost of goods sold	Note 1	– 377,154	– 335,083	-	-
GROSS PROFIT		**137,551**	121,596	**4,363**	3,377
Selling expenses	Note 1	– 65,013	– 50,794	-	-
Administrative expenses	Note 1	– 69,934	– 39,773	– 62,411	– 12,515
Research and development costs	Note 1	– 134,467	– 15,943	-	-
Items affecting comparability	Note 1	86,426	12,285	-	-
Other operating income and costs	Note 1	9,873	9,631	26	-
OPERATING PROFIT / LOSS	Note 18	**– 35,564**	37,002	**– 58,022**	– 9,138
Result from financial investments					
Result from shares in subsidiaries	Note 2	– 13,057	-	– 40,000	-
Interest income and similar income items	Note 3	30,941	59,702	25,215	53,889
Interest expense and similar expense items	Note 4	– 17,265	– 54,621	– 4,646	– 6,457
OPERATING PROFIT / LOSS AFTER FINANCIAL ITEMS		**– 34,945**	42,083	**– 77,453**	38,294
Minority interest		– 101	– 3,344	-	-
PROFIT / LOSS BEFORE APPROPRIATIONS AND TAX		**– 35,046**	38,739	**– 77,453**	38,294
Appropriations	Note 5	-	-	524	– 30,000
PROFIT / LOSS BEFORE TAX		**– 35,046**	38,739	**– 76,929**	8,294
Tax on profit for the year	Note 6	1,488	– 8,317	– 1,126	-
NET PROFIT / LOSS FOR THE YEAR		**– 33,558**	30,422	**– 78,055**	8,294

Balance sheets

		THE GROUP		THE PARENT COMPANY	
Amounts in SEK thousand		**1998**	1997	**1998**	1997
ASSETS					
Research and development		219,412	189,243	-	-
Patent		33,113	4,537	-	-
Goodwill		26,159	29,569	-	-
Other		400	400	-	-
Total intangible fixed assets	Note 7	**279,084**	223,749	**-**	-
Buildings and land		145,472	144,510	-	-
Machinery and other technical facilities		332,164	678,121	-	-
Equipment, tools and other technical fixtures and fittings		26,206	20,442	1,078	840
Ongoing new plants		37,893	105,902	-	-
Total tangible fixed assets	Note 8	**541,735**	948,975	**1,078**	840
Shares in subsidiaries	Note 9	-	-	869,590	559,274
Other long-term securities holding		93,430	-	40,000	-
Other long-term receivables		1,279	250	-	-
Total financial fixed assets		**94,709**	250	**909,590**	559,274
Total fixed assets		**915,528**	1,172,974	**910,668**	560,114
Total inventories	Note 10	**75,169**	70,274	**-**	-
Accounts receivable – trade		59,560	75,714	4	53
Receivables at subsidiaries		-	-	138,170	37,422
Tax receivables		-	-	159	159
Other receivables	Note 11	351,458	25,709	7,872	3,886
Total short-term receivables		**411,018**	101,423	**146,205**	41,520
Other short-term investments	Note 12	423,630	169,000	411,797	131,024
Cash and bank balances	Note 13	188,811	169,737	83,611	114,376
Total short-term investments		**612,441**	338,737	**495,408**	245,400
Total current assets		**1,098,628**	510,434	**641,613**	286,920
TOTAL ASSETS		**2,014,156**	1,683,408	**1,552,281**	847,034

		THE GROUP		THE PARENT COMPANY	
Amounts in SEK thousand		**1998**	1997	**1998**	1997
SHAREHOLDERS' EQUITY AND LIABILITIES					
Restricted shareholders' equity					
Share capital		281,157	139,150	281,157	139,150
Share premium fund		732,910	-	759,979	-
Restricted reserves		39,918	52,421	30,674	30,674
		1,053,985	191,571	**1,071,810**	169,824
Unrestricted shareholders' equity					
Unrestricted reserves		343,330	324,826	317,973	331,942
Profit for the year		– 33,559	30,422	– 78,056	8,294
		309,771	355,248	**239,917**	340,236
Total shareholders' equity	Notes 14, 15	**1,363,756**	546,819	**1,311,727**	510,060
Minority interests		**3,767**	23,561	**-**	-
Untaxes reserves		**-**	-	**52**	184
Provision for pensions		36,463	33,661	-	-
Provision for taxes	Note 6	22,025	42,487	-	-
Structural reserve		-	32,658	-	-
Total allocations		**58,488**	108,806	**52**	184
Interest-bearing long-term liabilities		159,322	528,929	-	-
Convertible loan		-	32,834	-	36,000
Other long-term liabilities		136,970	138,854	120,000	135,000
Total long-term liabilities		**296,292**	700,617	**120,000**	171,000
Accounts payable – trade		89,863	61,817	11,154	1,520
Debts to subsidiaries		-	-	56,689	126,745
Tax liabilities		1,083	46	-	-
Interest-bearing current liabilities		44,998	141,867	-	-
Other current liabilities	Note 16	155,909	99,875	52,659	37,525
Total current liabilities		**291,853**	303,605	**120,502**	165,790
TOTAL SHAREHOLDER'S EQUITY AND LIABILITIES		**2,014,156**	1,683,408	**1,552,281**	847,034
Assets pledged and contingent liabilities	Note 17				

Statement of changes in financial position

	THE GROUP		THE PARENT COMPANY	
Amounts in SEK thousand	**1998**	1997	**1998**	1997
Profit before appropriations and tax	– 35,047	38,739	– 77,454	38,294
Depreciation	57,729	52,926	415	461
Tax	1,488	– 8,317	– 1,126	-
Appropriations	-	-	524	– 30,000
FUNDS PROVIDED INTERNALLY	**24,170**	83,348	**– 77,641**	8,755
Change in inventories	– 4,895	– 49,478	-	-
Change in current receivables	– 309,595	– 39,418	– 104,685	– 4,967
Change in current liabilities	–11,751	213,203	– 45,289	150,295
CHANGE IN NET WORKING CAPITAL	**– 326,241**	124,307	**– 149,974**	145,328
FUNDS PROVIDED BY THE YEAR'S OPERATIONS	**– 302,071**	207,655	**– 227,615**	154,083
Net investments in intangible assets	– 60,238	– 206,489	-	-
Net investments in tangible assets	354,414	– 366,877	– 653	– 56
Net investments in financial assets	– 93,430	6,589	– 40,000	-
Net investments in shares in subsidiaries	-	-	– 310,316	– 471,435
INVESTMENTS	**200,746**	– 566,777	**– 350,969**	– 471,491
	– 101,325	– 359,122	**– 578,584**	– 317,408
Changes to appropriations	– 50,318	23,231	-	-
Dividends to shareholders	– 22,264	– 55,260	– 22,264	– 55,260
Conversions to shares	36,000	4,000	36,000	4,000
Options programme	4,057	-	4,636	-
New issues	834,860	-	861,352	-
Change in long-term liabilities	– 404,325	204,557	– 51,000	131,000
Change in long-term receivables	– 1,030	-	-	-
Change in untaxed reserves	-	-	– 132	-
Translation differences in shareholders' equity	– 2,157	1,157	-	-
Change in minority interests	– 19,794	– 17,244	-	-
LONG-TERM FINANCING	**375,029**	160,441	**828,592**	79,740
CHANGE IN LIQUID FUNDS	**273,704**	– 198,681	**250,008**	– 237,668

Accounting principles

The accounting principles applied comply with the Swedish Annual Accounts Act.

Consolidated accounting

The consolidated accounting includes the Parent Company and those companies in which the Parent Company directly or indirectly holds more than 50 per cent of the voting rights or, exercises decisive influence as a result of agreements.

The Group companies' untaxed reserves are divided into a shareholders' equity item, which is included in restricted reserves, and a deferred tax liability which is reported as a provision under the "Tax provision" heading. Deferred tax liability has been calculated in accordance with the tax rates in the respective country.

Minority share of the subsidiaries' shareholders' equity is reported as a separate item between shareholders' equity and provisions. This item also includes minority participations in the shareholders' equity proportion of untaxed reserves.

Companies which have been divested during the year are not included in the accounts. Companies which were acquired during the year are included in the consolidated accounting from the time of acquisition.

The Group balance sheet has been drawn up in accordance with the purchase method. This means that the equity capital which, at the time of the acquisition, existed in the subsidiary, is eliminated fully. Consequently only earnings which occur after the acquisition are included in the Group's shareholders' equity. The shareholders' equity in the acquired subsidiary is determined on the basis of a market evaluation of assets and liabilities at the time of the acquisition (acquisition analysis). These market values, together with direct costs attributable to the acquisition, constitute the Group's acquisition cost. The difference between the acquisition value of the subsidiary's shares and the calculated value of equity capital upon the acquisition analysis, is accounted as Group goodwill or, alternatively, negative goodwill.

Goodwill and surplus values attributed to specific assets are depreciated according to plan in the consolidated income statement.

Inventories

The inventories are assessed at the lower of the acquisition value and the actual value in accordance with the so-called first-in-first-out (FIFO) principle, whereby the necessary provisions for obsolescence are made with an appropriate amount.

Evaluation of receivables and liabilities

Receivables are reported at the amounts whereby they are expected to be received. Liabilities are reported at their nominal values.

Translation of foreign subsidiaries

Translation of the foreign subsidiaries' balance sheets has been made at year-end exchange rates. The profit and loss accounts have been translated at average exchange rates for the year. Translation differences, which arise, are assigned directly to the group's shareholders' equity.

Receivables and liabilities in foreign currencies

Receivables and liabilities in foreign currencies have been valued at year-end exchange rates. This principle is applied with the exception of long-term liabilities in USD for the financing of aircraft, which are regarded as being effectively secured in terms of currency, whereby valuation is made according to the historical acquisition exchange rate.

Research and development

The Group capitalises development costs which meet the capitalisation requirements in accordance with BFN R1 and IAS 9. The capitalisation relates to development costs which have a specific application in mind and which are clearly limited to the ETEC and cholera projects. Costs which relate to basic research are charged against the profit for the year in which they occur.

Valuation of shares in subsidiaries

Shareholder contributions have been made during the year to Active Biotech Research AB at SEK 40 million, and the amount has been entered as a cost in the Parent Company. Shareholder contributions have, in addition, been made to Actinova Ltd. at SEK 25 million which increased the value of the shares by a corresponding amount. The entered value is not regarded as exceeding an assessed actual value of these shares.

Fixed assets and depreciation

Fixed assets are valued at the acquisition cost less accumulated depreciation according to plan. Calculation of depreciation according to plan is

based upon the estimated life and the actual acquisition cost. According to plan, depreciation is made in line with the following percentage rates:

Machinery	10-20 %
Computer equipment	20-30 %
Buildings	2-14 %
Land improvements	3-14 %
Aircraft*	3-10 %
Helicopters**	10.9 %
Goodwill	10 %
R&D-costs***	7 %

* Aircraft acquired in the year 1990 and later, are depreciated at 3 percent annually. Engines are depreciated at SEK 900-1000 per flying hour depending on type of aircraft.

** The depreciation time for helicopters is 4 years for 1/3 of the acquisition value and 25 years for 2/3 of the acquisition value.

*** Amortisation of R&D costs commences when the product becomes available for sale or use. Amortisation is effected according to plan and the amortisation periods are assessed individually according to the respective product's economic life. The amortisation period does not, however, exceed the patent period for the product.

Notes to the income statements and balance sheets

Note 1 Depreciation according to plan

	The group					
SEK thousand		**1998**			1997	
	Intangible assets	Tangible assets	Total assets	Intangible assets	Tangible assets	Total assets
Distribution by function						
Production	2,123	27,485	**29,608**	1,138	40,622	41,760
Sales	5	898	**903**	5	676	681
Administration	2,440	221	**2,661**	3,581	1,032	4,613
Research and development	335	18,332	**18,668**	311	108	419
Other operating income and costs	-	5,890	**5,890**	-	5,453	5,453
Total depreciation	4,903	52,826	**57,729**	5,035	47,891	52,926
Type of assets						
Patent	1,326	-	**1,326**	316	-	316
Goodwill	3,577	-	**3,577**	4,719	-	4,719
Machinery and equipment	-	29,743	**29,743**	-	11,423	11,423
Aircraft	-	3,398	**3,398**	-	1,969	1,969
Helicopters	-	13,525	**13,525**	-	10,588	10,588
Vessels	-	-	**-**	-	22,114	22,114
Buildings	-	6,160	**6,160**	-	1,797	1,797
	4,903	52,826	**57,729**	5,035	47,891	52,926

The parent company

The parent company's depreciations for 1998 amounted to SEK 415,000 (461,000) and related to machinery and inventories within function administration.

Included in the parent company's administration costs are costs in connection with new issues amounting to SEK 26.5 million, which are replaced at the Group level where the issues are accounted net. The Group's restructuring as well as sales of property, have involved further significant additional costs in the parent company during the year.

Items affecting comparability

Sales of property SEK 80 million, aircraft and helicopters SEK 12 million as well as depreciation of claim SEK 6 million.

Note 2 Result from shares in subsidiaries

	The group		The parent company	
SEK thousand	**1998**	1997	**1998**	1997
Shareholders' contribution	**-**	-	**– 40,000**	-
Capital gain at sale	**– 13,057**	-	**-**	-
	– 13,057	-	**– 40,000**	-

Note 3 Interest income and similar income items

	The group		The parent company	
SEK thousand	**1998**	1997	**1998**	1997
Dividend	**835**	2,525	**835**	2,525
Interest	**17,558**	13,890	**13,465**	9,475
Capital gain at sale	**12,548**	43,287	**10,915**	41,889
	30,941	59,702	**25,215**	53,889

No interest income has been received from subsidiaries.

Note 4 Interest expense and similar expense items

	The group		The parent company	
SEK thousand	**1998**	1997	**1998**	1997
Interest	**– 17,265**	– 54,621	**– 1,260**	– 3,488
Interest expense to Group companies	**-**	-	**– 3,386**	– 2,969
	– 17,265	– 54,621	**– 4,646**	– 6,457

Note 5 Appropriations

	The parent company	
SEK thousand	**1998**	1997
Group contributions received	**441**	-
Group contributions provided	**– 49**	– 30,000
Reversal of excess depreciation	**132**	-
	524	– 30,000

Note 6 Taxes

	The group		The parent company	
SEK thousand	**1998**	1997	**1998**	1997
Income tax	**– 3,385**	– 558	**– 1,126**	-
Deferred tax on profit for the year	**4,873**	– 7,759	**-**	-
	1,488	– 8,317	**- 1,126**	-

Deferred tax liability of SEK 13 M is included under the "Provision for taxes" heading in the consolidated balance sheet.

Note 7 Intangible assets

	The group									
	1998					1997				
SEK thousand	Research & develop-ment	Patents, licenses & trade-marks	Good-will	Other	Total	Reserach & develop-ment	Patents, licenses & trade-marks	Good-will	Other	Total
Acquisition values, 1 Jan.	189,243	4,850	36,778	400	**231,271**	1,167	52	23,285	400	24,904
Acquisitions	36,808	29,773	167	-	**66,748**	188,076	4,798	13,493	-	206,367
Accumulated acquisition values, 31 Dec.	**226,051**	**34,623**	**36,945**	**400**	**298,019**	189,243	4,850	36,778	400	231,271
Depreciation, 1 Jan.	-	313	7,209	-	**7,522**	-	-	2,490	-	2,490
Sales/scrappings	6,639	-	-	-	**6,639**	-	2	-	-	2
The year's depreciation according to plan	-	1,326	3,577	-	**4,903**	-	316	4,719	-	5,035
Exchange rate difference	-	– 130	-	-	**– 130**	-	– 5	-	-	– 5
Accumulated depreciation according to plan, 31 Dec.	**6,639**	**1,509**	**10,786**	**0**	**18,934**	0	313	7,209	-	7,522
Planned residual value, 31 Dec.	**219,412**	**33,113**	**26,159**	**400**	**279,084**	189,243	4,537	29,569	400	223,749

The parent company

The parent company has no intangible assets.

Note 8 Tangible assets

The group

SEK thousand	1998 Buildings & land	Machinery & other technical facilities	Inventory, tools & installations	Ongoing new plants	1998 Total	1997 Buildings & land	Machinery & other technical facilities	Inventory, tools & installations	Ongoing new plants	1997 Total
Initial acquisition values	169,715	838,470	46,182	105,902	**1,160,269**	60,042	659,449	18,951	27,877	766,319
Acquisitions	2,486	194,042	18,666	25,564	**240,758**	101,597	179,356	48,092	94,676	423,721
Sales/scrappings	– 15	– 592,321	–3,655	– 80,056	**– 676,047**	-	– 12,142	– 17,240	– 389	– 29,771
Reclassifications	4,652	8,865	-	– 13,517	**0**	8,076	11,807	– 3,621	– 16,262	0
Accumulated acquisition values, 31 Dec.	**176,838**	**449,056**	**61,193**	**37,893**	**724,980**	169,715	838,470	46,182	105,902	1,160,269
Depreciation, 1 Jan.	25,206	160,349	25,740	-	**211,295**	12,116	118,596	11,039	-	141,751
Acquired depreciation	-	-	481	-	**481**	11,293	4,698	10,724	-	26,715
Sales/scrappings	-	– 81,023	– 481	-	**– 81,504**	-	– 1,628	– 3,434	-	– 5,062
The year's depreciation according to plan	6,160	37,566	9,100	-	**52,826**	1,797	38,683	7,411	-	47,891
Exchange rate differences	-	-	147	-	**147**	-	-	-	-	-
Accumulated depreciation according to plan, 31 Dec.	**31,368**	**116,892**	**34,987**	**0**	**18,245**	25,206	160,349	25,740	0	211,294
Planned residual value, 31 Dec.	**145,472**	**332,164**	**26,206**	**37,893**	**541,735**	144,509	678,121	20,442	105,902	948,974

The tax assessment value of properties in the Swedish sector of the Group amounts to SEK 35,923,000, of which SEK 7,072,000 is land.

The parent company

SEK thousand	1998 Equipment, tools fixtures and fittings	1998 Total	1997 Equipment, tools fixtures and fittings	1997 Total
Acquisition values, 1 Jan.	3,350	**3,350**	3,294	3,294
Acquisitions	846	**846**	56	56
Sales/scrappings	– 1,251	**– 1,251**	-	-
Accumulated acquisition values, 31 Dec.	**2,945**	**2,945**	3,350	3,350
Depreciation, 1 Jan.	2,510	**2,510**	2,049	2,049
Sales/scrappings	– 1,058	**– 1,058**	-	-
The year's depreciation according to plan	415	**415**	461	461
Accumulated depreciation according to plan, 31 Dec.	**1,867**	**1,867**	2,510	2,510
Planned residual value, 31 Dec.	**1,078**	**1,078**	840	840

Note 9 Shares in subsidiaries

31 Dec. 1998 (SEK thousand)	Corp. No.	Head office	Number	Holding	Par value	Book value
Lund Research Center AB	556168-8515	Lund	200	100%	100	350,782
Active Biotech Research AB	556541-8323	Lund	1,000	100%	100	100
SBL Vaccin AB	556459-7416	Stockholm	625,000	100%	62,500	446,633
Vitec AB	556217-8623	Stockholm	1000	100%	100	-
Actinova Ltd		Cambridge	1,000,000	100%	100,000 GBP	45,125
Actigen Ltd		Cambridge	1,000	100%	1,000GBP	-
Actinova AB	556532-8860	Lund	1,000	100%	100	-
Movera Holding AB	556157-8385	Malmö	500	100%	100	26,950
Transport AB Movera	556256-9441	Malmö	45,667,000	100%	45,667	-
Active Capital AB	556241-5322	Malmö	1,000	100%	100	-
(under change of name to Wilh. Sonesson AB)						
Helikopterservice Euro Air AB	556216-7600	Helsingborg	63,133	95.5%	6,313	-
Fastighets AB Helikoptern	556449-0414	Helsingborg	10,200	68.2%	1,020	-
Inter Air AB	556211-0196	Malmö	101,000	100%	10,100	-
Sonesson Inredningar AB	556008-7305	Malmö	3,600	100%	360	-
Mårdaklev Industri AB	556143-4241	Svenljunga	1,000	100%	100	-
Sonesson Indretning ApS		Denmark	200	100%	200 DKK	-
Sonesson Deutschland GmbH		Germany	1	100%	50,000 DEM	-
						869,590

Researchers and key persons in Actinova have received warrants to acquire 12 per cent of Actinova's ownership.

Note 10 Goods in stock

	The group	
SEK thousand	**1998**	1997
Raw materials stocks	**15,989**	16,469
Products under preparation	**35,405**	33,627
Finished goods stocks	**23,775**	20,178
	75,169	70,274

Note 11 Other receivables

	The group		The parent company	
SEK thousand	**1998**	1997	**1998**	1997
Interest	**2,390**	88	**2,374**	-
Accrued supplier invoicing	**9,905**	2,787	**365**	582
Accrued shipping company support	**-**	3,756	**-**	-
Other items	**3,868**	4,255	**394**	334
Total prepaid expense and accrued income	**16,163**	10,886	**3,133**	916
Other current receivables	**335,295** *	14,823	**4,739**	2,970
	351,458	25,709	**7,872**	3,886

* of which receivable for sale of property 320,380.

Note 12 Other short-term investments

	The group		The parent company	
SEK thousand	**1998**	1997	**1998**	1997
Shares and participations	**423,630**	169,000	**411,797**	131,024
Market value of shares and interests	**430,045**	169,585	**418,212**	131,024

Note 13 Available liquid funds

	The group		The parent company	
SEK thousand	**1998**	1997	**1998**	1997
Cash and bank balances (including short-term investments)	**612,441**	338,737	**495,408**	245,400
Of which, blocked bank funds	**– 20,398**	– 63,207	**– 20,398**	– 63,207
Shares pledged	**-**	– 46,658	**-**	– 43,148
Credit lines approved	**77,041**	178,690	**-**	100,000
Utilised credit lines	**– 24,839**	– 33,206	**-**	0
Available liquid funds	**644,245**	374,356	**475,010**	239,045

Note 14 Shareholders' equity

SEK thousand	Share capital	Restricted reserves	Unrestricted share-holders' equity	Total
THE GROUP				
Opening balance, 1 Jan. 1997	**138,150**	**21,014**	**40,7336**	**566,500**
Appropriation of profit for 1996:				
Dividend	-	-	– 55,260	– 55,260
Allocation to restricted reserves	-	17,500	– 17,500	-
Increase in share capital due to new issue	1,000	3,000	-	4,000
Translation differences	-	-	1,157	1,157
Shifts between restricted and unrestricted shareholders' equity	-	10,907	– 10,907	-
Profit for the year	-	-	30,422	30,422
Opening balance, 1 Jan. 1998	**139,150**	**52,421**	**355,248**	**546,819**
Appropriation of profit for 1997:				
Dividend	-	-	– 22,264	– 22,264
Options programme for employees	-	4,057	-	4,057
Increase in share capital due to new issue	132,287	702,573	-	834,860
Conversion of convertible loan	9,720	26,280	-	36,000
Translation differences	-	-	– 2,157	– 2,157
Shifts between restricted and unrestricted shareholders' equity	-	– 12,502	12,502	0
Profit for the year	-	-	– 33,559	– 33,559
Closing balance, 31 Dec. 1998	**281,157**	**772,829**	**309,770**	**1,363,756**
PARENT COMPANY				
Opening balance, 1 Jan. 1997	**138,150**	**10,174**	**404,702**	**553,026**
Appropriation of profit for 1996:				
Dividend	-	-	– 55,260	– 55,260
Allocation to restricted reserves	-	17,500	– 17,500	-
Increase in share capital due to new issue	1,000	3,000	-	4,000
Shifts between restricted and unrestricted shareholders' equity	-	-	-	0
Profit for the year	-	-	8,294	8,294
Opening balance, 1 Jan. 1998	**139,150**	**30,674**	**340,236**	**510,060**
Appropriation of profit for 1997:				
Dividend	-	-	– 22,264	– 22,264
Increase in share capital due to new issue	132,287	729,064	-	861,351
Conversion of convertible loan	9,720	26,280	-	36,000
Options programme for employees	-	4,635	-	4,635
Profit for the year	-	-	– 78,056	– 78,056
Closing balance, 31 Dec. 1998	**281,157**	**790,653**	**239,917**	**1,311,727**

Note 15 Share capital

	A shares	B shares	Total shares	Share capital
Opening balance, 1 Jan. 1998	2,315,660	3,250,326	5,565,986	139,149,650
Initial share issue	-	2,000,000	2,000,000	50,000,000
New issue	-	1,891,496	1,891,496	47,287,400
Directed new issue	-	1,400,000	1,400,000	35,000,000
Conversion of convertible loan	-	388,810	388,810	9,720,250
Re-stamping from A to B shares	– 342,965	342,965	0	0
Closing balance, 31 Dec. 1998	**1,972,695**	**9,273,597**	**11,246,292**	**281,157,300**

A-shares carry an entitlement to 1 vote and B shares to 1/10 vote.
The Annual General Meeting resolved on 16-04-98 to issue a maximum of 500,000 share options for sale to present and future employees in the Active Biotech Group. At the balance sheet date 280,800 options have been subscribed and the Group has received SEK 4,057,000. Each share option carries an entitlement to subscribe for one B share during the period 25-11-2001 to 25-02-2003 at a cost of SEK 332.

Note 16 Other short-term liabilities

	The group		The parent company	
SEK thousand	**1998**	1997	**1998**	1997
Accrued personal costs	**22,624**	13,495	**1,148**	1,689
Interest	**270**	2,597	**-**	-
Prepaid rental income	**1,781**	4,668	**-**	-
Accrued cost of goods	**7,579**	7,979	**-**	-
Accrued research costs	**11,471**	1,623	**-**	-
Other items	**28,593**	20,490	**1,534**	3,781
Total accrued expense and prepaid income	**72,317**	50,852	**2,682**	5,470
Other current liabilities	**83,591**	49,023	**49,977**	32,055
	155,909	99,875	**52,659**	37,525

Note 17 Assets pledged and contingent liabilities

	The group		The parent company	
SEK thousand	**1998**	1997	**1998**	1997
Assets pledged				
For liabilities to credit institutions	**467,785**	1,521,233	**-**	555,346
FPG/PRI pensions	**25,000**	18,000	**-**	-
Other	**20,398**	4,849	**20,398**	4,849
	513,183	1,544,082	**20,398**	560,195
Contingent liabilities				
Guarantees	**-**	-	**10,625**	10,267
Warranties	**915**	21,104	**193**	12,147
	915	21,104	**10,818**	22,414
Of which, to Group companies	**-**	-	**10,625**	10,267
Total assets pledged and contingent liabilities	**514,098**	1,565,186	**31,216**	582,609
Assets pledged for liabilities to credit institutions				
Real estate mortgages	**53,415**	53,415	**-**	-
Chattel mortgages	**37,743**	44,600	**-**	-
Ship mortgages	**-**	614,391	**-**	-
Aircrafts	**74,277**	14,560	**-**	-
Helicopters	**97,445**	131,949	**-**	-
Net value of assets in subsidiaries	**204,905**	552,453	**-**	453,274
Other shares	**-**	46,658	**-**	43,148
Blocked bank funds	**-**	63,207	**-**	58,924
	467,785	1,521,233	**0**	555,346
FPG/PRI pensions, chattel mortgages	**25,000**	18,000	**-**	-
Blocked bank funds	**20,398**	4,849	**20,398**	4,849
	45,398	22,849	**20,398**	4,849

Note 18 Wages, salaries and other remuneration

SEK thousand	1998 Board and Managing Director	1998 Of which, profit-related wages and salaries	1998 Other employees	1997 Board and Managing Director	1997 Of which, profit-related wages and salaries	1997 Other employees
Parent Company						
Sweden	**2,050**	**-**	**3,783**	1,724	-	3,334
Parent Company total	**2,050**	**-**	**3,783**	1,724	-	3,334
Subsidiaries in Sweden	**3,547**	**-**	**109,476**	4,774	-	70,206
Subsidiaries outside Sweden						
UK	**-**	**-**	**5,597**	1,229	-	383
Germany	**905**	**-**	**2,078**	-	-	1,440
Denmark	**-**	**-**	**2,100**	-	-	480
Norway	**-**	**-**	**-**	-	-	480
Total in subsidiaries	**4,452**	**-**	**119,251**	6,003	-	72,989
Group total	**6,502**	**-**	**123,034**	7,727	-	76,323

SEK thousand	The group 1998	The group 1997	The parent company 1998	The parent company 1997
Board of Directors and Managing Director	**6,502**	7,727	**2,050**	1,724
Other employees	**123,034**	76,323	**3,783**	3,334
Total wages, salaries and remuneration	**129,536**	84,050	**5,833**	5,058
Social security costs	**59,089**	39,521	**5,853**	3,938
of which pension costs	**17,612**	10,470	**3,851**	2,105
(of which to MD)	**(1,563)**	-	**(1,563)**	-
Total payroll costs	**188,625**	123,571	**11,686**	8,996

Senior management's conditions of employment
In accordance with the Annual General Meeting's resolution, a fee of SEK 800,000, SEK 100,000 per member, was paid in 1998 to the members of the board who are not employed within Active Biotech.

A payment of SEK 1,249,809 was paid in 1998 to the Managing Director, Bo Håkansson. Active Biotech has issued a pension undertaking, which provides Bo Håkansson with a life-long pension amounting to 70 per cent of the annual salary cost in the year 2002. Upon termination of the appointment on the part of the company, the MD possesses the right to compensation corresponding to 24 months' salary.

Severance pay to other senior executives shall not be made. With regard to the pension benefits for other senior executives, ITP conditions shall additionally apply for a person who possesses pension rights from the age of 55 years with what corresponds to 70 per cent of the salary.

Note19 Personnel

	1998		1997	
	Number of employees	Of whom women	Number of employees	Of whom women
PARENT COMPANY				
Lund	**7**	**3**	7	3
Parent Company total	**7**	**3**	7	3
SUBSIDIARIES				
Sweden				
Malmö	**106**	**13**	106	13
Solna	**124**	**81**	62	41
Matfors	**4**	**3**	-	-
Helsingborg	**39**	**5**	27	4
Karlshamn	**-**	**-**	70	1
Svenljunga	**28**	**3**	31	4
Lund	**169**	**97**	2	-
Göteborg	**2**	**-**	2	-
Jönköping	**2**	**-**	2	-
Sundsvall	**2**	**1**	2	1
Stockholm	**2**	**1**	2	1
Eskilstuna	**1**	**-**	1	-
Total Sweden, including the Parent Company	**486**	**207**	314	68
UK	**11**	**5**	3	1
Germany	**5**	**-**	6	1
Denmark	**4**	**2**	3	2
Norway	**2**	**-**	2	-
Total outside Sweden	**22**	**7**	14	4
GROUP TOTAL	**508**	**214**	328	72

Proposed appropriation of profits

According to the Group balance sheet the Group's non-restricted shareholders' equity amounts to SEK 309,771,000. The Board of Directors and the Managing Director propose that all the shares in the subsidiary Wilh. Sonesson AB, at a maximum book volume of SEK 201,533,000, shall be distributed among the shareholders.

The Board of Directors and the Managing Director propose that the retained profit in the Parent Company is placed at the disposal of the Annual General Meeting, namely:

Retained profit SEK	317,973,084
Net profit for the year, SEK	– 78,056,581
Total SEK	239,916,503
be appropriated as follows:	
Dividend, all the shares in the subsidiary Wilh. Sonesson AB, maximum SEK	201,533,123
Balance to be carried forward, minimum SEK	38,383,380

Lund, 8 March 1999

The Board of Directors of Active Biotech AB (publ)

Hugo Thelin Chairman	Lena Apler	Svend Holst-Nielsen
Leslie Hudson	Bo Håkansson	Lars Jonung
Hans Lindell	Mats Pettersson	Staffan Svenby

Sven Andréasson
Managing Director
(From and including 01-02-99)

Auditors' report

To the general meeting of the shareholders of
Active Biotech AB (publ),
Registered Number 556223-9227

We have audited the Parent Company and the consolidated financial statements, the accounts and the administration of the Board of Directors and the Managing Director of Active Biotech AB for the year 1998. These accounts and the administration of the Company are the responsibility of the Board of Directors and the Managing Director. Our responsibility is to express an opinion on the financial statements and the administration based on our audit.

We conducted our audit in accordance with Generally Accepted Auditing Standards in Sweden. Those Standards require that we plan and perform the audit to obtain reasonable assurance that the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and their application by the Board of Directors and the Managing Director, as well as evaluating the overall presentation of information in the financial statements. We examined significant decisions, actions taken and circumstances of the Company in order to be able to determine the possible liability to the Company of any Board Member or the Managing Director or whether they have in some other way acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association. We believe that our audit provides a reasonable basis for our opinion set out below.

In our opinion, the Parent Company and the consolidated financial statements have been prepared in accordance with the Annual Accounts Act, and, consequently we recommend

that the income statements and the balance sheets of the Parent Company and the Group be adopted, and

that the profit of the Parent Company be dealt with in accordance with the proposal in the Director's Report.

In our opinion, the Board Members and the Managing Director have not committed any act or been guilty of any omission, which could give rise to any liability to the Company. We therefore recommend

that the Members of the Board of Directors and the Managing Director be discharged from liability for the financial year.

Malmö, 8 March 1999

MATS B C OHLSSON
Authorized Public Accountant
Deloitte & Touche AB

REIDAR PETERS
Authorized Public Accountant
Arthur Andersen AB

Board of Directors, President & CEO and Auditors

Board of directors

HUGO THELIN, Chairman
Born 1929, Board Member since 1998
Board appointments:
Alfa Nativ AB, BioNative AB, Unimedic AB, SBL Vaccin AB, Swedfund International AB, Karolinska Institutet Holding AB, Karolinska Innovations AB, Nova Medical AB, Sino Swed Pharmaceutical Corp., Wuxi P.R. China, Aerocrine AB, Ilsanta U AB
Shareholding: 5,000 Series A shares

LENA APLER
Born 1951, Board Member since 1997
President, Collector Securities AB
Board appointments:
Skogssällskapet, Nordiska Finanssystem AB, CS Collector AB, IF Friskis & Svettis
Shareholding: 3,250 Series B shares

SVEND HOLST-NIELSEN
Born 1940, Board Member since 1998
Group CEO Unilever AB
Board appointments:
Lindab AB, GB Glace AB, Sydsvenska Industri- och Handelskammaren (Chamber of Industry and Commerce for Southern Sweden), Sveriges Livsmedelsindustriförbund (The Swedish Food Manufacturing Industry Association), Industriförbundet (The Federation of Swedish Industries), Scandic Hotels AB, Ballingslöv Holding AB, Samhall-Gripen AB
Shareholding: 3,125 Series B shares

LESLIE HUDSON
Born 1946, Board Member since 1998
Dr., Pharmacia & Upjohn
SVP Worldwide Group Research

SVEN ANDRÉASSON
Born 1952
President & CEO Active Biotech AB
Shareholding: 25,000 Series B shares, 100,000 share options

BO HÅKANSSON
Born 1946, Board Member since 1993
Previously Board Member during 1983-1992
Board appointments:
Althin Medical AB, Sydsvenska Industri- och Handelskammaren (Chamber of Industry and Commerce for Southern Sweden), Sandberg & Co and others
Shareholding: 1,250,419 Series A shares and 309,562 Series B shares, 81,500 share options

LARS JONUNG
Born 1944, Board Member since 1996
Professor Handelshögskolan (Stockholm School of Economics and Business Administration)
Board appointments:
IM Innovationsmarknaden AB
Shareholding: 2,000 Series A shares and 1,750 Series B shares

HANS LINDELL
Born 1944, Board Member since 1993
Attorney with Advokatfirman Jeppsson och Linse
Board appointments:
Svenska Aller AB, S & H Förlag AB, Douglas Krook AB, Joka Plast-Emballage AB
Shareholding: 9,000 Series A shares

MATS PETTERSSON
Born 1945, Board Member since 1998
Senior Vice President Pharmacia & Upjohn
Board appointments:
Amersham Pharmacia Biotech UK

STAFFAN SVENBY
Born 1944, member since 1997
Director MEAB
Board appointments:
Expo Nova AB, SBL Vaccin AB, Helikopterservice AB, Multimedia Production AB, Motor Events AB and others
Shareholding: 2,000 series A shares and 6,750 series B shares

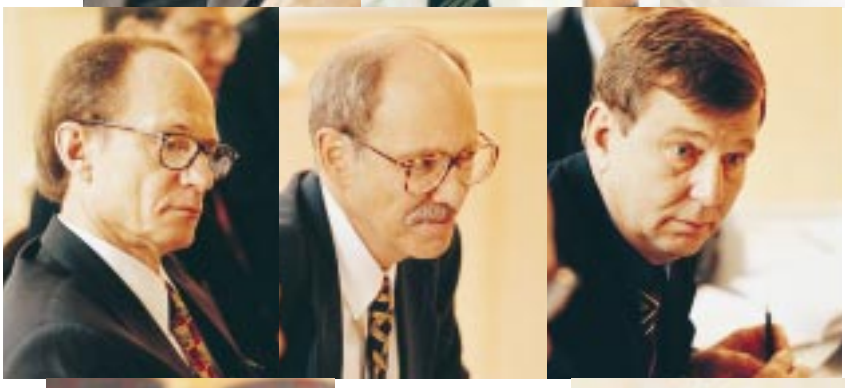
Auditors

MATS B C OHLSSON
Born 1947. Authorised Public Accountant
Deloitte & Touche AB
Appointed auditor in 1983

REIDAR PETERS
Born 1939. Authorised Public Accountant
Arthur Andersen AB
Appointed auditor in 1994

Hugo Thelin
Leslie Hudson
Hans Lindell

Lena Apler
Bo Håkansson
Mats Pettersson



Svend Holst-Nielsen
Lars Jonung
Staffan Svenby

Sven Andréasson

Mats B C Ohlsson
Reidar Peters

Senior executives

SVEN ANDRÉASSON
Born 1952. President & CEO
Employed since 1999
Shareholding: 25,000 series B shares,
100,000 share options

MATS BLOM
Born 1965. Business Controller
Employed since 1998
Shareholding: 2,500 series B shares,
10,000 share options

KARL OLOF BORG
Born 1941. Vice President Research
and Development
Employed since 1998
Shareholding: 625 series B shares,
10,600 share options

SVEN DANIELSSON
Born 1938. CEO SBL Vaccin AB
Employed since 1993
Shareholding: 10,000 series A shares,
21,250 series B shares,
10,000 share options

PIA JANSÄTER
Born 1955. Internal and
external information
Employed since 1999

LENNART MOLVIN
Born 1947. Business Development
and Investor Relations
Employed since 1987
Shareholding: 10,000 series A shares,
2,500 series B shares,
10,000 share options

STEVEN POWELL
Born 1961. CEO Actinova Ltd.
Employed since 1997

MALIN SUNDBÄCK
Born 1971. Accounts and finance
Employed since 1997
Shareholding: 500 share options

Sven Andréasson

Lennart Molvin

Karl Olof Borg

Sven Danielsson

Steven Powell

Malin Sundbäck

Mats Blom

Pia Jansäter

Scientific Council

JAN ANDERSSON

Assistant Professor,
Department of
Infectious Diseases,
Huddinge Hospital

ERIK HELGSTRAND

Head of Research
SBL Vaccin AB.
(First half of 1998)

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Professor, Department of
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Immunology, Gothenburg
University

PER MÅNSSON

New Projects
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Professor, Head of the
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Infectious Disease Control
and the Microbiology and
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(MTC).

KARL OLOF BORG

Vice President Research &
Development
Active Biotech Group

HANS WIGZELL

Professor, Chairman of the
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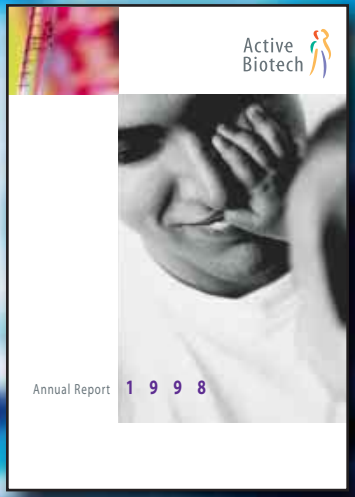

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HUGIN
Investor Relations Made Easy

1998