

- Licensing agreement on the development of a novel treatment for Helicobacter pylori, based on an A⁺ SCIENCE INVEST basic development at Göteborg University, has been signed with Carbion OY
- The future development of novel medications in the area of dyspepsia and inflammatory bowel syndrome has been transferred to an associated company, Pharmacore AB, which is seeking finance
- The projects regarding single cell manipulations and measurements will be transferred to Cellectricon AB, a company partly owned by A⁺ SCIENCE INVEST, that will be specifically dedicated to this very competitive area
- Stem cell activities will be transferred to the newly formed Cell Therapeutics (Scandinavia), another area of great future importance
- In vitro and animal studies in cancer and diabetes projects have been initiated
- > Clinical studies in sciatica, obstructive sleep apnoea and diabetes projects are ongoing
- Investments in projects for the period amounted to 11.2 MSEK (8.4 MSEK)
- The annual shareholders meeting agreed that the Board may increase the number of shares by an issue of 15.000.000, which corresponds to 39% of the total number of shares.

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Interim Report



The Company

Since A⁺ SCIENCE INVEST AB (PUBL.) (A⁺) was formed in October 1997, a multitude of projects and product ideas, mainly from the medical and the natural sciences departments of Göteborg University, have been evaluated, acquired and developed further by the Company. Consequently, many of these ideas have been considerably refined and documented by A⁺, successfully creating an increase in value through development.

As a result of this process of selection and development, approximately 30 projects held and developed by A⁺ are patented, and these constitute the immaterial rights of the Company. During the first half of 2001, more than 20 projects in the portfolio are being developed further. The projects focus on the life science area, particularly those related to healthcare.

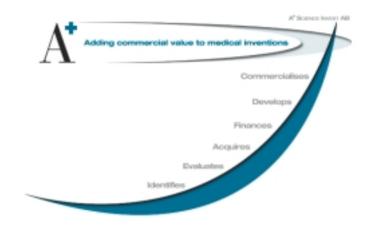
During this spring, A⁺ has concentrated its efforts on reaching the point of exit in several projects. Some of these are subject to negotiations aimed at forming spin-off companies or licenses. Five new projects have been added to the portfolio, and discussions on further acquisitions are ongoing.

Business Concept

A⁺ identifies, evaluates, acquires, finances, develops and commercialises patentable and marketable inventions. By strengthening all steps involved in project management, A⁺ will further develop the intellectual property and 'knowhow' of inventions, mostly in collaboration with the inventor and the research group. A⁺ will also protect and increase the value of the property by adding other competencies and financing if required.

Within A⁺, there is now a focus on delivering the milestones/exits relevant to the needs of the pharmaceutical and other industries, along with a strengthened business concept. The potential exit represents the point when a project has reached the previously agreed milestone.

A⁺ believes that it offers considerable proven benefits to both the market and the scientists who rely on the



Company to commercialise their inventions. In particular, A⁺ can now provide the collaboration and competencies necessary to achieve the documentation that makes commercialisation feasible by the industry. A⁺ has invested and will continue to invest in order to create the resources to make this happen.

Important Activities During the Period

In February an agreement was signed between A⁺ and Carbion OY on the development of a novel pharmaceutical approach for the treatment of *Helicobacter pylori*, based on research conducted at Göteborg University and intellectual property owned by A⁺. The agreement does not include work on a potential vaccine for *H. pylori*, which will remain a focus for development within A⁺.

In collaboration with researchers at the GastroResearch Unit, Sahlgrenska University Hospital, Göteborg, and Biomedical Centre in Uppsala, A⁺ has developed leads to a novel approach for the treatment of dyspepsia and inflammatory bowel syndrome. Pharmacore AB, an associated company of A⁺, was formed to develop these compounds further, and has already filed substance patents based on initial lead compounds already identified, and is in final discussions on funding the development of promising new agents.

Cellectricon AB is a technological company committed to functional cell-based high throughput screening assays, and genetic and metabolic engineering of single cells. This company was formed late last year with A⁺ as one of the owners. Activities to form and build the company platform were initiated during spring 2001. The first steps to transfer the A⁺ projects and 'know-how' to Cellectricon were taken during 2001.

The importance and great potential of the principles behind competitive cell research and development of therapies based on cell technologies mean that further research by Cellectricon is essential. The researchers have already developed and patented functional cell-based assays and biochips. Research is also focusing on a potential *in vivo* gene drug and drug-delivery device. Currently, the methods are all set up and the business plan is being finalised. Discussions with financial partners are ongoing.

Stem cell projects within A⁺ and the intellectual property gained from these projects are planned to be transferred to and developed further by Cell Therapeutics (Scandinavia) AB. In return for this transference, A⁺ will be one of the minority owners of Cell Therapeutics. The company, which is currently under formation, will be a major source of defined human stem cells for advanced research and a world leader in development and distribution of stem cell-based therapies.

The core competencies of Cell Therapeutics encompass all steps in the R&D chain, from the isolation of stem cells from unused *in vitro* fertilisation material or the patient, to clinical applications. The first major step will be to establish quality defined stem cell lines from human blastocysts. Cell Therapeutics will dedicate additional research and product development to therapies of several common diseases and conditions, e.g. diabetes, cartilage replacement, myocardial infarction and neurodegenerative diseases, such as Alzheimer's and Parkinson's disease.

Development

Projects in the A⁺ portfolio contain three distinctive areas based on immaterial rights – patents and documented 'know-how' in indication patents, therapeutic patents and biotechnical projects. The following is a summary of the ongoing activities in some of the projects.

Back Pain

Back pain involves pain in the neck, usually associated with whiplash, lower back pain and sciatica. In the US, back pain is the leading cause of disability in individuals aged 45 years and below. A high incidence of back pain is also observed in Europe. During the last two years, A⁺ has supported further basic research related to cytokine mechanisms in this field. The Company has also initiated a study with a tumour necrosis factor (TNF) inhibitor in patients with sciatic disease. The intellectual property in this project included a TNF inhibitor-based principle for treatment of sciatic pain. The further basic research has markedly expanded the insights into these mechanisms, and A⁺ has recently filed additional patents which comprise not only related principles for diagnosis and treatment, but also new adjunctive and interesting therapy areas.

OSA

Obstructive sleep apnoea (OSA) is a disorder of sleep and breathing, caused by partial or total collapse of the upper airways. OSA, and associated forms of disordered breathing during sleep, are highly prevalent in the general population.

Clinical studies have shown that acetylcholineesterase inhibitors (ACEI) have a beneficial effect in OSA, and they have rapidly received attention from both the general public and medical profession. Moreover, clinical studies investigating several types of ACEI have been initiated by A⁺. The Company is also exploring different routes of administration of these compounds.

Diabetes

The incidence of diabetes is growing rapidly worldwide. Moreover, the prevalence of type II diabetes and insulin resistance in the developed world is escalating, and there is a great medical need for new, less complex (type I diabetes) and more efficient (type II diabetes) antidiabetic agents. There is also a significant need for simple, improved and safe diagnostic methods, particularly those for the early detection of insulin resistance.

Diabetes is a multitarget disease and so far, eight or nine different possible targets for medical intervention have been identified. There is therefore a lot of potential for discovering new and more specific antidiabetic drugs, and this therapeutic area has attracted a great deal of interest from the pharmaceutical industry.

A⁺ has developed intellectual property in both the diagnostic and therapeutic areas that could mean earlier detection in a pre-diabetic stage of type I diabetes and medical treatments for types I and II diabetes. Proof of concept studies using different animal models of diabetes have been initiated. Clinical epidemiological data exploring the value of patents relating to diagnostic products are under current evaluation.

Biosensors

Each pharmaceutical company spends millions of USD annually on developing high throughput screening (HTS) assays and screening large compound libraries, which triggers a constant quest for new screening concepts. There is also a high demand for new detection techniques in relation to protein-related clinical and other diagnostics.

The biosensor project covers a novel biochemical concept involving a synthetic modular protein that acts as a scaffold. The invention allows ligands and fluorescence probes to be incorporated into the synthetic protein. The result is the production of cost-effective artificial receptors that bind bioactive proteins. The biosensor concept can be applied in HTS, and also to detect and determine protein concentrations from, e.g. clinical samples. Conclusive data for these applications are available.

The aim is to miniaturise the analysis by putting the artificial receptors onto microchips. Information from a market study indicates that this concept has a promising commercial potential.

Financial Situation

The current operating cash flow for the period amounted to -3.6 MSEK (-3.3). The operating cash flow for investment activities amounted to -11.5 MSEK (-8.1).

During the period, a convertible loan has been issued, at a total amount of 30 MSEK, whereof 21 MSEK have been paid by the end of the period. An additional 9 MSEK were paid in early July. The loan was subscribed to by the current owners as a part of the ongoing financing activities. The aim is to convert the loan into shares before December 31, 2001.

By the end of the period, cash and bank amounted to 14.0 MSEK (27.2).

Investments

The company has a portfolio of 20 projects being actively processed. 11.2 MSEK (8.4) have been invested in these projects during the period. In addition 0.2 MSEK (0.1) were invested in fixed assets and 0.1 MSEK (0.0) in associated companies.

Organisation

The total number of employees at the end of the period was 10 (7).

Shareholders Annual General Meeting

On 20 April 2001, the Shareholders Annual General Meeting (AGM) decided to authorise the Board of Directors to undertake a new stock issue of a maximum of 15.000.000 shares, with or without preferential right for the present shareholders. The purpose of the planned stock issue is to finance the Company's further and continuous concentration on new and existing projects.

The AGM also decided to authorise the Board of Directors to undertake the issue of a new stock option program at a maximum of 5.000.000 options, to be distributed among scientists and employees of the company. All Board members were re-elected at the AGM, i.e. Per Carendi, Staffan Edén, Lars Ingelmark, Staffan Josephson, Kalevi Kurkijärvi, Lars Nordström and Lennart Philipson. At a subsequent statutory Board Meeting, Per Carendi was re-elected as Chairman of the Board, and Boo Edgar as Managing Director.

Accounting and Valuation Principles

The accounts are prepared in accordance with the Swedish Annual Accounts Act (ÅRL). The recommendations of the Swedish Financial Accounting Standards Council will be implemented no later than on their effective dates. The same principles and methods of calculation/estimation were used in this interim report for the half year of 2001, as for the financial statements for year 2000.

Acquired patents, patent applications and inventions are posted as non-tangible assets. Consequently, accrued expenses relating to projects are capitalized as nontangible assets. Capitalized values are tested continuously and at year-end. If required, write-downs are carried out. Linear depreciation over five years is applied. Depreciation commences when the projects are completed and ready for introduction, thus achieving conformity between income and cost.

Income Statement (KSEK)	2001-01-01 - 2001-06-30	2000-01-01 - 2000-06-30	2000-01-01 - 2000-12-31
Net Sales Gross Operating Income	834 834	0 0	38 38
Marketing Costs	-1 763	-1 271	-2 636
Administration Costs	-2 533	-2 046	-4 260
R & D Costs	-4 560	-2 741	-8 027
Other Operating Income	0	0	16
	-8 856	-6 058	-14 907
Net Operating Income Income from Financial Investment:	-8 022	-6 058	-14 869
Interest Income	130	193	805
Interest Expenses	16	-7	-168
Loss for the Period	-7 908	-5 872	-14 232
Balance Sheet (KSEK)	2001-06-30	2000-06-30	2000-12-31
ASSETS			
Fixed Assets			
Fixed Non-tangible Assets	47.000		40.00F
Capitalised Development Expenditure	47 299 47 299	<u> </u>	40 205
Fixed Tangible Assets	47 299	30 409	40 200
Equipment	742	833	771
	742	833	771
Fixed Financial Assets			
Shares in Associated Company	131	0	50
	131	0	50
Total Fixed Assets	48 172	37 302	41 026
Current Assets			
Current Receivables			
Accounts receivables, Sales	0	0	4
Other receivables	7 615	917	2 180
Prepaid costs	887	264	487
Short-term Investment	8 502	1 181	2071
Other short-term investments	0	5 000	14 037
	0	5 000	14 037
Coop and Pank	14.000		
Cash and Bank	14 032	22 229	2 157
Total Current Assets	22 534	28 410	18 865
	70 706	65 712	59 891
EQUITY AND LIABILITIES Equity			
<i>Restricted Equity</i> Common Stock (38.057.500 shares)	38 058	38 000	38 058
Stock Premium Reserve	51 194	50 899	51 194
	89 252	88 899	89 252
Accumulated Deficit	00 202		00 202
Loss brought forward	-34 598	-20 366	-20 366
Loss for the Period	-7 908	-5 872	-14 232
	-42 506	-26 238	-34 598
Total Equity	46 746	62 661	54 654
Liabilities			
Current Liabilities			
Accounts Payable, Purchases	1 859	1 233	2 874
Other Liabilities	234	123	185
Accruals and Deferred Income	867 21 000	1 695	2 178
Convertible Loan Total Current Liabilities	21 000 23 960	0 3 051	0 5 237
Total Liabilities	23 960	3 051	5 237
Total Equity and Liabilities	70 706	65 712	59 891
Contingent Liabilities	300	0	0
-			-



Statement of Cash Flow (KSEK)

	2001-01-01 - 2001-06-30	2000-01-01 - 2000-06-30	2000-01-01 - 2000-12-31
Operating Activities			
Operating Income	-8 022	-6 058	-14 869
Adjustment for Non-cash flow items:			
Depreciation	170	180	375
Write Down of Projects	4 087	2 395	7 309
	-3 765	-3 483	-7 185
Interest Income	130	193	805
Interest Expenses	-16	-7	-168
Operating Cash flow Before Working			
Capital Adjustments:	-3 651	-3 297	-6 548
Working Capital Adjustments			
Adjustments, Current Receivables	-5 713	-39	-1 566
Adjustments, Current Payables	-2 277	-5 093	-2 906
Operating Cash flow	-11 641	-8 429	-11 020
Investment Activities			
Investment, Non-tangible Assets	-11 181	-8 412	-17 064
Acquisition, Fixed Tangible Assets	-222	-69	-200
Sales, Fixed Tangible Assets	0	363	363
Change, Fixed Financial Assets	-81	0	-50
Cash flow Capitalisation	-11 484	-8 118	-16 951
Financing Activities			
New Stock Issue	0	16 597	16 949
Convertible Loan	21 000	0	0
Financing Cash flow	21 000	16 597	16 949
	0.405	50	44.000
Change in Cash Cash and Bank at the Beginning	-2 125	50	-11 022
of the Period	16 157	27 179	27 179
Cash and Bank at End of the Period	14 032	27 229	16 157

Göteborg, August 17, 2001

Boo Edgar Managing Director

Auditor's Report

I have carried out a general review of this interim report, in accordance with the recommendation issued by the Swedish Institute of Authorised Public Accountants (FAR).

A general review is considerably limited in comparison with an audit.

Based on my review nothing came to my attention that indicates that the report does not comply with the requirements given in the Swedish Annual Accounts Act.

Göteborg, August 17, 2001

Dan Brännström Authorised Public Accountant

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