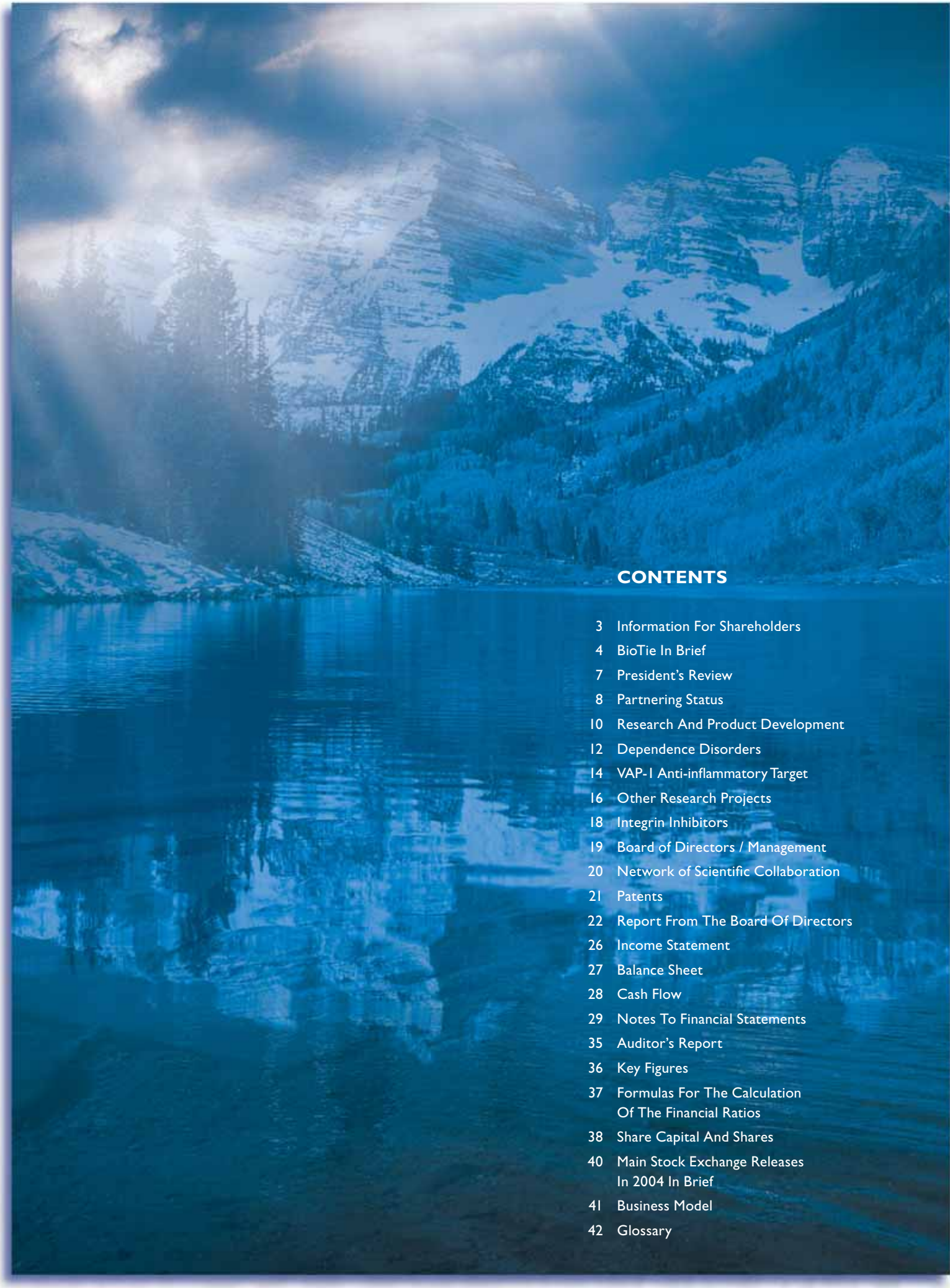
Bio Tie THERAPIES

Annual Report 2004



CONTENTS

Information for Shareholders

ANNUAL GENERAL MEETING

The Annual General meeting of Biotie Therapies Corp. will be held on Wednesday March 30, 2005 commencing at 14.30 (2.30 p.m.), at the Mauno Koivisto Center in Turku (Tykistökatu 6).

Shareholders are entitled to participate in the Annual General Meeting if they are registered in the Company's register of shareholders maintained by the Finnish Central Securities Depository Ltd no later than March 18, 2005.

Shareholders wishing to participate in the Annual General Meeting must notify the Company thereof no later than March 24, 2005 at 16.00 (4.00 p.m.) either in writing to Biotie Therapies Corp., Ms Virve Nurmi, Tykistökatu 6, FIN-20520 Turku, Finland, or by telephone at +358 2 274 8911 during office hours 9.00–16.00 from Monday to Friday. The letter of participation must arrive at the Company before the expiry of the above mentioned period for notification. Any letters of authorization must be submitted in connection with the notification of participation.

FINANCIAL PUBLICATIONS

This annual report and the Company's financial reports are published in Finnish and English. The interim reports will be published as follows:

:: January – March,
on Thursday, April 28, 2005
:: January – June,
on Friday, August 12, 2005
:: January – September,
on Thursday, October 27, 2005

To order these publications, please send your request to Biotie Therapies Corp., Ms Virve Nurmi, Tykistökatu 6, FIN-20520 Turku, Finland or call her at +358 2 274 8911. The publications can also be ordered via virve.nurmi@biotie.com

INVESTOR RELATIONS

BioTie's investor relations are the responsibility of
Jari Saarinen, President and CEO
Tel. +358 2 274 8954
jari.saarinen@biotie.com

BioTie In Brief

BIOTIE'S STRATEGY

BioTie is a drug development company focusing on dependence disorders, inflammatory diseases and thrombosis. As the nalmefene program has reached the commercialization phase, the Company will focus on inflammatory diseases and thrombosis in the future.

Candidate drugs are primarily developed until phase II clinical studies (Proof of Concept). Research and product development is carried out in cooperation with academic research groups and with contract research organizations and contract manufacturing organizations.

BIOTIE'S HISTORY

Biotie Therapies is, in its present form, a result of the merger of three Finnish biotechnology companies; Contral Pharma Corporation, Biotie Therapies Corp. and Carbion Inc. in October 2002. The new combined company was named Biotie Therapies Corp.

The research and development operations of Contral Pharma had focused on drug therapy for dependence disorders. Contral Pharma was founded in 1998 for the development and commercialization of nalmefene, an opioid antagonist intended for the treatment of alcoholism and alcohol abuse.

BioTie's research activities were focused on inflammatory diseases, thrombosis and cancer. Professors Markku Jalkanen and Sirpa Jalkanen founded BioTie in June 1992 based on their research work at the University of Turku and the National Public Health Institute. BioTie commenced operations in its first research premises in BioCity, Turku in 1996. In fall 1998, BioTie introduced pilot production facilities that met GMP requirements. In summer 1999, BioTie submitted its first clinical trial application to conduct clinical research with its own drug to the National Agency for Medicines. BioTie's shares were listed on the NM list of the Helsinki Exchanges in June 2000.

Focusing on the development of glycomics-based drugs for the treatment of cancer, viral and bacterial infections, Carbion's research activities were based on academic research at the carbohydrate and protein chemistry laboratories of the Institute of Biotechnology of the University of Helsinki. Contral Pharma owned 50.1 per cent of Carbion.

THE YEAR 2004 IN BRIEF

:: BioTie signed a license agreement in November with Somaxon Pharmaceuticals Inc. on to the nalmefene North American rights. The partnership agreement could be valued at up to USD 13.2 million plus royalties.

:: In March, BioTie signed a research, development and collaboration agreement with Sanofi-Aventis to develop a new oral, heparin-like drug for the prevention and treatment of blood coagulation disorders. The partnership agreement could be valued at up to EUR 5 million. During the reporting period, BioTie reached the first milestone defined in the agreement.

:: In December, BioTie and Roche signed a collaboration and option agreement to develop BioTie's proprietary small molecule vascular adhesion protein-1 (VAP-1 SSAO) program targeting inflammatory diseases. The option agreement could be valued at up to EUR 5 million.

:: The company decided to focus on developing fully human antibody in its VAP-1 antibody program during the third quarter of the year.

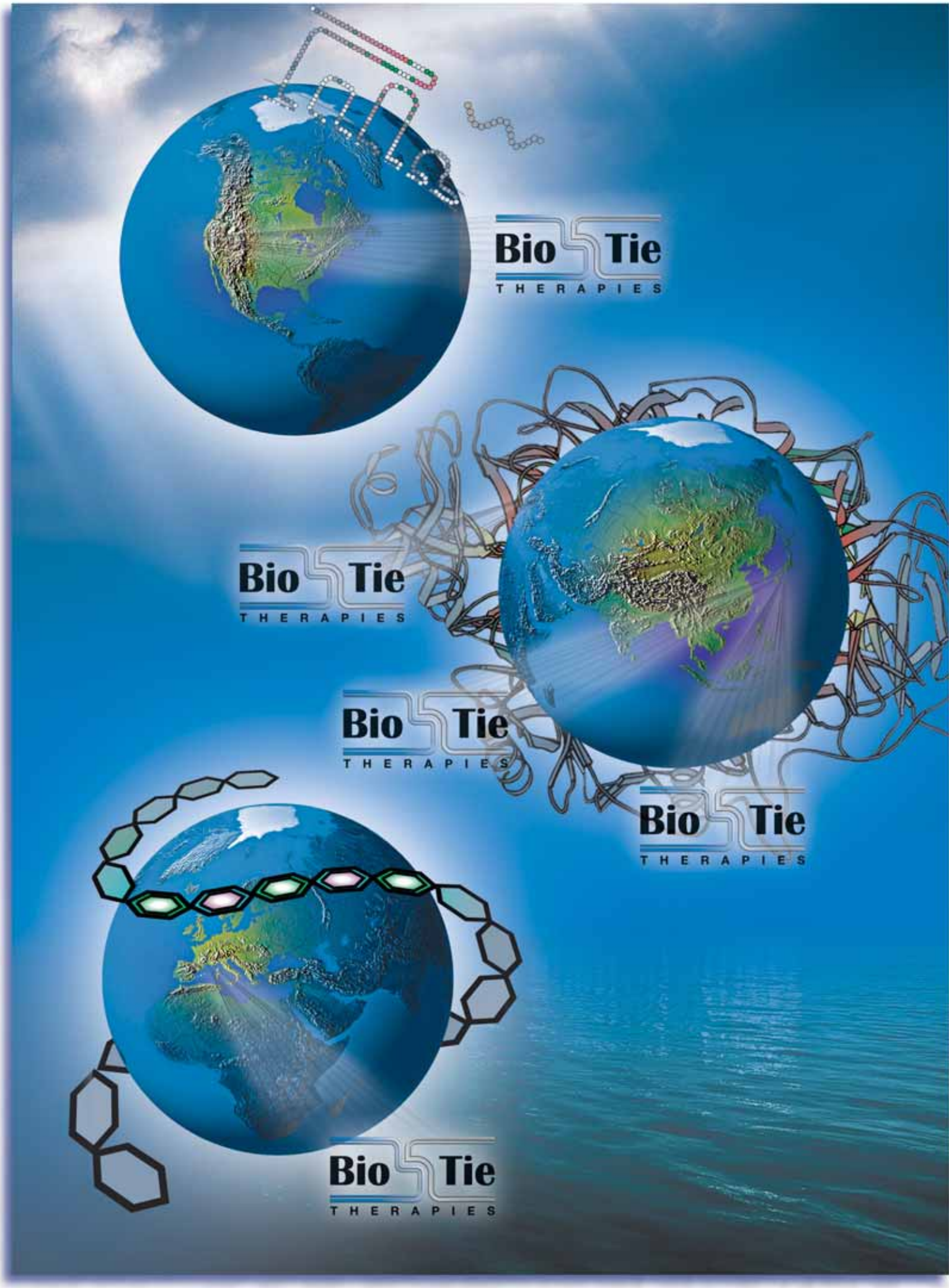
:: The National Technology Agency (Tekes) granted 1.4 million euros additional funding for BioTie's integrin $\alpha 2\beta 1$ inhibitor project and EUR 3.3 million for Biotie Therapies' VAP-1 SSAO small molecule inhibitor program.

:: The net loss in the financial year 2004 stood at EUR –7.1 million (in 2003 EUR –12.4 million). Cash flow before financing items was EUR –6.1 million (EUR –12.1 million in 2003).

:: The company's liquid assets amounted to EUR 7.0 million (in 2003, EUR 10.4 million) as at December 31, 2004. The company has liquid assets to finance its operations to approximately the middle of 2005 without any revenue.

KEY FIGURES

1 000 €	1.1.–31.12.2004 12 months	1.1.–31.12.2003 12 months	1.1.–31.12.2002 12 months
Revenues	4 457	2 243	153
Research and development expenses	9 244	11 888	21 541
Operating profit (loss)	-7 083	-12 433	-26 133
Cash flow before financing activities	-6 109	-12 057	-25 712
Cash and cash equivalents	7 033	10 422	8 691
Personnel at the end of the period	46	55	112


Bio Tie
THERAPIES
Bio Tie
THERAPIES
Bio Tie
THERAPIES
Bio Tie
THERAPIES
Bio Tie
THERAPIES

President's Review

Looking at BioTie's development last year, I am happy to notice that 2004 can perhaps be considered the most significant year for the company so far. As far as business development is concerned, the company took several long steps forward as projects proceeded from drug research to commercialization. In accordance with its strategy, BioTie managed to enter into collaboration and commercialization agreements with first class partners.

In March BioTie entered into a drug development, research and collaboration agreement with Aventis. BioTie and Aventis agreed on a collaboration for the development of an orally administered drug for the prevention and treatment of blood coagulation disorders. The value of the option agreement may be as high as EUR 5 million. During the financial year, we reached the first research milestone as defined in the agreement.

In November, we signed a licensing agreement with Somaxon Pharmaceuticals for the North American rights to nalmefene intended for the treatment of impulse control disorders. The agreement could be valued at USD 13.2 million for the first indication, pathological gambling. In addition, the companies have agreed on royalties.

Towards the end of 2004, we made a collaboration and option agreement with Roche for the development of a VAP-1 SSAO small molecule inhibitor. This agreement could be valued at EUR 5 million.

After the drug research program for nalmefene reached the commercialization phase, the company decided to focus more and more of its drug development resources on the treatment of inflammatory diseases and thrombosis. Most of the future research and development of nalmefene will be done by the partners.

As for drug development projects, BioTie and Aventis continued their efforts to optimize a new chemical entity into a recombinant oral heparin product. Similarly, the company made a decision in the third quarter to focus the VAP-1 antibody program on the development of a fully human antibody for clinical research, and the antibody entered drug development in December. Commencing in 2003, the collaboration with the Japanese company Seikagaku in the VAP-1 antibody program continued as planned. Similarly, the preclinical program for the development of VAP-1 SSAO small molecule inhibitors continued as planned. BioTie also continued the screening and preclinical studies of new $\alpha 2\beta 1$ integrin inhibitors in collaboration with the University of Turku, Åbo Akademi University and the University of Jyväskylä.

As the final stage of its rationalization program BioTie decided to locate all operations in Turku and closed the Viikki unit. The rationalization program commenced on the merger of BioTie, Contral Pharma and Carbion at the end of the year 2002. The turnover of the new BioTie formed by the merger amounted to EUR 0.2 million and the loss to EUR 26.1 million in 2002.

At present, BioTie is in a significantly better position, for the revenues in 2004 amounted to EUR 4.5 million, doubled compared with the previous year. Similarly, the loss for the financial year further decreased and amounted to EUR 7.1 million, having been EUR 12.4 million in the previous year.

Nevertheless, BioTie's financing situation continued to be challenging. The company has studied, and is still studying, alternatives to secure it's future financing. In 2004, the role of Tekes was emphasized as a significant financier. Tekes granted EUR 1.4 million additional funding for the $\alpha 2\beta 1$ integrin inhibitor project and EUR 3.3 million for the VAP-1 SSAO small molecule inhibitor project.

The year 2004 was significant for BioTie. During the year we proceeded to the commercialization phase of our products. I wish to thank our shareholders for their confidence and our partners for the smooth collaboration. My special thanks go to the staff. We have had two difficult years. However, the past year showed that our work has not been in vain. We have created a good basis for the continued development and commercialization of our products.

Jari Saarinen

Partnering Status

THE TERRITORIAL LICENSING AGREEMENT WITH SEIKAGAKU CORPORATION ON THE VAP-1 ANTIBODY PROGRAM

In April 2003, BioTie entered into a territorial licensing agreement on its VAP-1 antibody program with the Japanese Seikagaku Corporation. The value of the agreement, including a signing fee and milestone payments, amounts to USD 16.7 million and covers three indications: rheumatoid arthritis, psoriasis and ulcerative colitis. Seikagaku has the exclusive right to the VAP-1 monoclonal antibody in Japan, Taiwan, Singapore, New Zealand and Australia. The same agreement also includes an option for BioTie's VAP-1 SSAO small molecule inhibitors, additionally valued at USD 16.7 million, once the option is exercised. So far, Seikagaku has paid BioTie as signing fee USD 2.5 million.

Seikagaku Corporation is a Japanese company operating in the healthcare business and is a pioneer in the field of glycoscience and therapeutics for joint diseases such as arthritis. During the financial year ending March 2004, the company's turnover amounted to USD 189 million, and the number of employees was 450. The company's head office is located in Tokyo.

www.seikagaku.com

THE GLOBAL RESEARCH, DEVELOPMENT AND COLLABORATION AGREEMENT WITH SANOFI-AVENTIS

In March 2004, BioTie signed a research, development and collaboration agreement with Aventis (now Sanofi-Aventis) to develop a new oral recombinant heparin drug for the prevention and treatment of blood coagulation disorders. BioTie granted Sanofi-Aventis the global exclusive right to negotiate an exclusive licensing agreement. Sanofi-Aventis agreed to pay BioTie a EUR 5 million signing fee and milestone payments for this exclusive option during twelve months. The signing fee was paid when the agreement entered into force, and milestone payments are payable in accordance with jointly agreed development milestones. A signing fee of EUR 1 million and the first milestone of EUR 1 million were paid in 2004.

The Sanofi-Aventis Group is the world's 3rd largest pharmaceutical company, ranking number 1 in Europe. Backed by a world-class R&D organization, Sanofi-Aventis is developing leading positions in seven major therapeutic areas: cardiovascular diseases, thrombosis, oncology, diabetes, central nervous system, internal medicine, as well as research and development of vaccines.
www.sanofi-aventis.com

THE TERRITORIAL LICENSING AGREEMENT WITH SOMAXON ON NORTH AMERICAN RIGHTS TO NALMEFENE

In July 2004, BioTie signed an option agreement with Somaxon Pharmaceuticals for granting an exclusive license covering North American rights to nalmefene. In November 2004 Somaxon's option agreement was converted into a license agreement. The agreement on the first indication (pathological gambling) could be valued at up to USD 13.2 million. The companies have also agreed on future royalties. BioTie granted Somaxon an exclusive license covering North America for the clinical development, manufacture and marketing of nalmefene for the treatment of impulse control disorders, alcoholism, alcohol abuse and nicotine dependence. In July, a USD 0.2 million option fee was paid and a signing fee of USD 3 million was paid in November.

Somaxon Pharmaceuticals is a specialty pharmaceutical company focusing on developing and commercializing products for the treatment of neuro-psychiatric diseases and disorders. The company's leading clinical program is to evaluate SO-101, low-dose doxepin for the treatment of insomnia. Somaxon is headquartered in San Diego, California.
www.somaxon.com

THE COLLABORATION AND OPTION AGREEMENT WITH ROCHE

In December, Roche and BioTie signed a collaboration and option agreement to develop BioTie's proprietary small molecule vascular adhesion protein-1 (VAP-1) SSAO inhibitor program.

Under the terms of the agreement, Roche will provide its expertise to BioTie's development of VAP-1 small molecule inhibitor candidates. At defined stages, Roche will have an exclusive option right to license the selected VAP-1 inhibitor candidate worldwide, excluding Japan, Taiwan, Singapore, New Zealand, and Australia. By extending its option right to phase IIb, Roche could pay BioTie EUR 5 million and BioTie will retain all rights to any compounds developed until a license is granted.

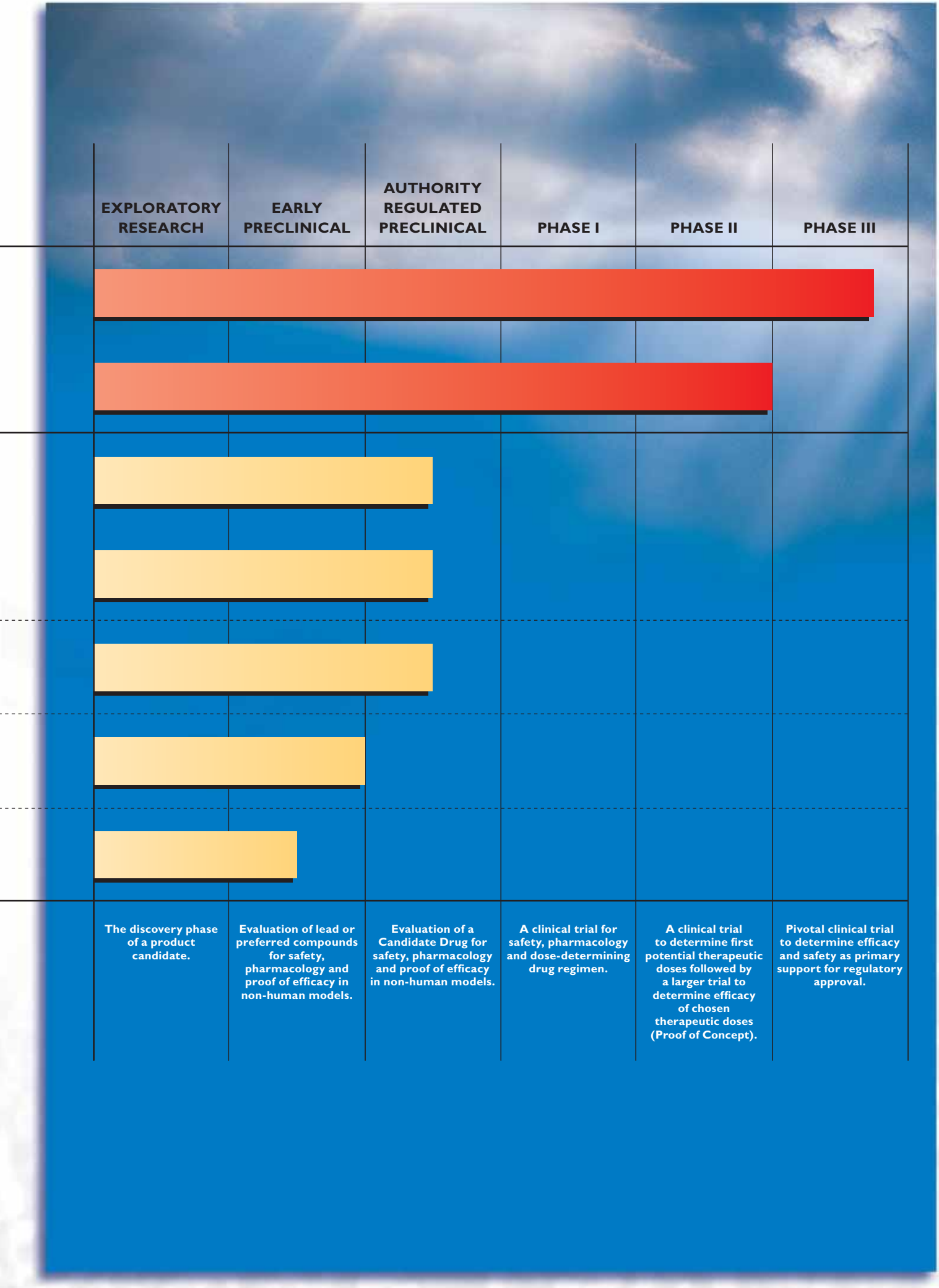
Headquartered in Basel, Switzerland, Roche is one of the world's leading research-intensive healthcare groups. Its core businesses are pharmaceuticals and diagnostics. The company is a world leader in diagnostics, the leading supplier of medicines for cancer and transplantation and a market leader in virology. In 2003, the Pharmaceuticals Division generated 19.8 billion Swiss francs in prescription drug sales, while the Diagnostics Division posted sales of 7.4 billion Swiss francs. Roche employs roughly 65,000 people in 150 countries.
www.roche.com

Research and Product Development

	TARGET	PRODUCT	POTENTIAL INDICATIONS
CLINICAL	Opioid receptor	Nalmefene	:: Alcoholism and alcohol abuse.
CLINICAL	Opioid receptor	Nalmefene	:: Pathological gambling.
PRECLINICAL	VAP-1	Monoclonal VAP-1 antibody	:: Treatment of moderate to severe inflammatory diseases.* :: Treatment of severe life-threatening inflammatory conditions.**
PRECLINICAL	VAP-1 SSAO	Small molecule VAP-1 SSAO enzyme inhibitor	:: Treatment of mild and moderate inflammatory diseases.*
PRECLINICAL	TNF-α pathway	TNF-α pathway small molecule inhibitor	:: Inflammatory diseases responding to TNF-α pathway inhibitor
PRECLINICAL	Coagulation factors	Recombinant bioheparin	:: Prevention and treatment of thrombosis in patients with deep vein thrombosis, pulmonary thrombosis, myocardial infarction or unstable angina pectoris. Treatment of hemodialysis patients.
PRECLINICAL	α2β1-integrin	Small molecule α2β1-integrin inhibitor	:: Treatment of myocardial and cerebral infarction and prevention of vascular thrombosis. :: Treatment of malignant tumors such as melanoma, ovarian cancer, gastric cancer and prostate cancer

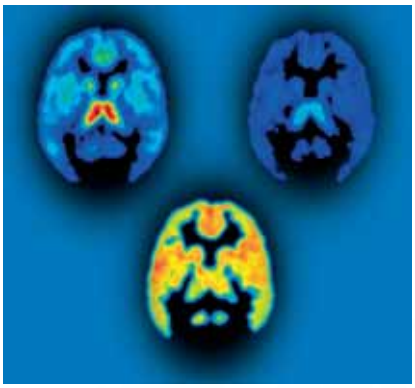
* Rheumatoid arthritis, asthma, hepatitis and inflammatory bowel diseases (Crohn's disease, ulcerative colitis), psoriasis and other inflammatory skin diseases. In particular, conditions not responsive to TNF-α therapy.

** Ischemic reperfusion injury caused by myocardial or cerebral infarction, organ transplant rejection and ARDS (adult respiratory distress syndrome).


EXPLORATORY RESEARCH
EARLY PRECLINICAL
AUTHORITY REGULATED PRECLINICAL
PHASE I
PHASE II
PHASE III
The discovery phase of a product candidate.
Evaluation of lead or preferred compounds for safety, pharmacology and proof of efficacy in non-human models.
Evaluation of a Candidate Drug for safety, pharmacology and proof of efficacy in non-human models.
A clinical trial for safety, pharmacology and dose-determining drug regimen.
A clinical trial to determine first potential therapeutic doses followed by a larger trial to determine efficacy of chosen therapeutic doses (Proof of Concept).
Pivotal clinical trial to determine efficacy and safety as primary support for regulatory approval.

Dependence Disorders

There is a significant unmet medical need for the treatment of pathological gambling. Nalmefene has shown good efficacy in this indication.



Upper left panel displays a PET image of the tracer substance carfentanil binding to brain μ opioid receptors

Upper right panel displays a PET image from the same individuals after the administration of nalmefene. No tracer is visible because nalmefene displaces it from the receptors

Lower panel displays the corresponding μ receptor occupancies by nalmefene

Red and yellow colors indicate high levels of binding / occupancy, blue indicates low binding / occupancy

NEUROBIOLOGICAL DISTURBANCES IN THE BACKGROUND

Dependence disorders are complex behavioral syndromes, but they have distinct neurobiological underpinnings that can be targeted with pharmacological interventions. A neural pathway in the brain, called the mesocorticolimbic "reward" pathway, is one of the most important mediators of alcohol and drug reinforcement, and disturbances in the function of this pathway are thought to have a central role in the development of substance dependence. The activity of this pathway is modulated in multiple ways, of which opioidergic mechanisms are among the most important.

The consumption of alcohol induces beta-endorphin release in the brain. Beta-endorphin is an endogenous compound that activates opioid receptors. Endorphins are responsible for many of the pleasurable effects of alcohol; they also activate opioid receptors in the mesocorticolimbic system, which leads to reward (reward can be thought of as a pleasurable feeling providing positive reinforcement, such that the behavior is likely to be repeated). Over an extended period of time, the process of reinforcement may lead to the development of dependence, which is characterized by loss of voluntary control over alcohol intake and alcohol craving. An opioid antagonist, such as BioTie's nalmefene, prevents beta-endorphin from binding to and activating opioid receptors.

Recent research results have suggested that reinforcement may also be an important feature in the pathophysiology of impulse control disorders such as pathological gambling, and that the neurobiological basis of impulse control disorders may have substantial similarity to that of addictions. In essence, they may be forms of "behavioral addiction", in which the behavior gradually becomes compulsive and the patient develops a strong craving for gambling.

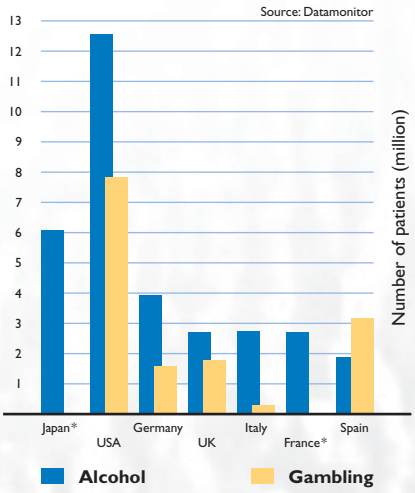
LICENSING AGREEMENT SIGNED WITH SOMAXON OF THE NORTH AMERICAN RIGHTS

In November 2004, Biotie signed a partnership agreement with Somaxon Pharmaceuticals. Somaxon was granted an exclusive license in North America to clinically develop, manufacture and market nalmefene for the treatment of impulse control disorders, alcoholism and alcohol abuse and nicotine dependence. Somaxon intends to initially develop nalmefene for the treatment of pathological gambling in the United States and plans to initiate pivotal phase III clinical trials in 2005. The first indication could be valued at up to USD 13.2 million plus royalties. It is in the company strategy to sign licensing agreements in Europe during 2005.

STAND ALONE DRUG THERAPY FOR ALCOHOLISM

It is estimated that there are 30-60 million alcoholics and alcohol abusers in the western world. In the UK alone , the annual cost to the health service is almost £5 billion, and implicated in over 30,000 annual deaths.

ESTIMATED NUMBERS OF ALCOHOL-ABUSING PATIENTS AND PATIENTS SUFFERING FROM PATHOLOGICAL GAMBLING



*Gambling not recognized by physicians interviewed

Alcoholism represents a significant unmet medical need with no approved "stand alone" drug therapy available. The present drug therapies are combined with psychosocial interventions and aim at total abstinence. The efficacy of these therapies has been limited, and consequently, they have not been in frequent use.

BioTie is the first company to study the efficacy of a drug intended for the treatment of drinking problems, primarily focusing on decreasing the level of alcohol consumption, without further psychosocial treatment or a sole goal of abstinence.

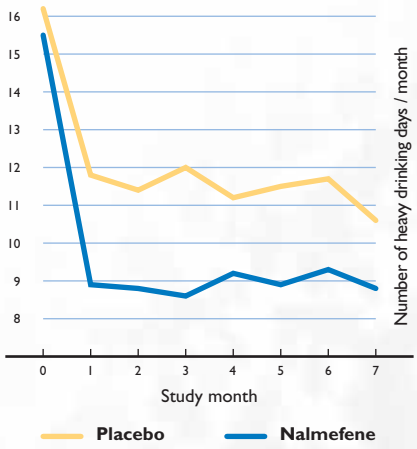
The company has completed the two clinical phase III trials with nalmefene tablet for the treatment of alcoholism. The primary goal was to reduce the number of heavy drinking days. In both trials the number of heavy drinking days was decreased by almost 50% in patients receiving nalmefene. Considerable improvement was seen in hepatic enzyme levels of the patients in the nalmefene group, whereas these levels in the placebo group remained unchanged or were slightly impaired. The patients receiving nalmefene felt that the treatment was beneficial more often than the patients receiving placebo. No serious adverse effects related to the use of nalmefene were observed.

PATHOLOGICAL GAMBLING

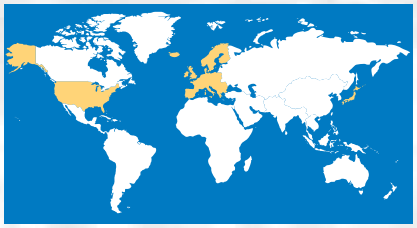
It is estimated that 1-3 per cent of the adult population in the United States and Europe suffer from pathological gambling. Pathological gambling represents a significant unmet medical need with no approved drug therapies available. The drug developed for this indication has significant market potential.

To the company's knowledge, the nalmefene phase II study completed in the US for the treatment of pathological gambling is the first large-scale clinical study aiming at developing a drug therapy for this indication. A validated psychometric scale measuring gambling-related thoughts, urges and behavior was used for primary evaluation of efficacy. The difference between the nalmefene and placebo groups was statistically significant. No serious adverse effects related to the use of nalmefene were observed during the study.

NALMEFENE DECREASED THE NUMBER OF HEAVY DRINKING DAYS

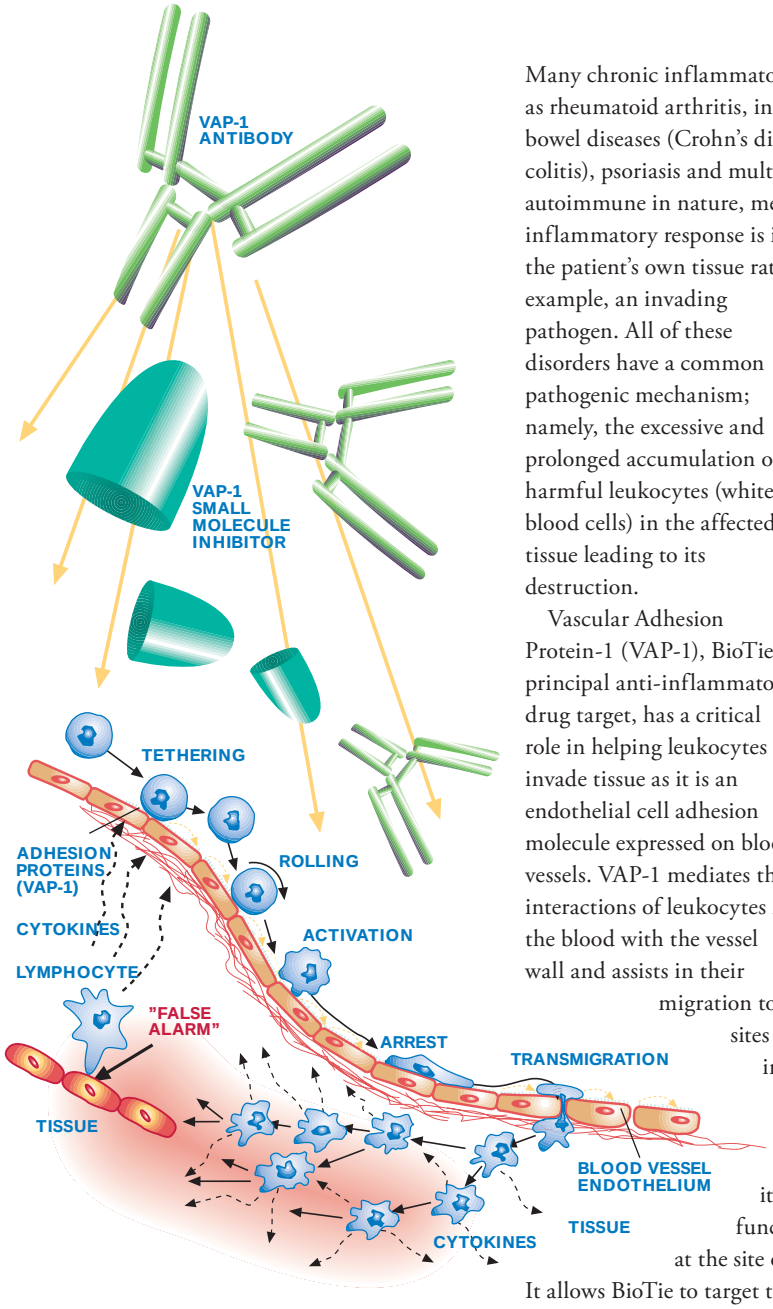


Nalmefene is indicated for reducing heavy alcohol use, without the sole goal of complete abstinence.



Patents/market exclusivity:
USA: ICD patent until 2017
Japan and EU: Alcoholism patent until 2011.
Market exclusivity for 10 years (Japan 6 years).

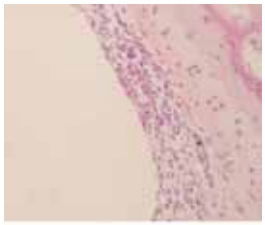
VAP-1 Anti-inflammatory Target



Many chronic inflammatory diseases such as rheumatoid arthritis, inflammatory bowel diseases (Crohn's disease, ulcerative colitis), psoriasis and multiple sclerosis are autoimmune in nature, meaning that an inflammatory response is initiated against the patient's own tissue rather than, for example, an invading pathogen. All of these disorders have a common pathogenic mechanism; namely, the excessive and prolonged accumulation of harmful leukocytes (white blood cells) in the affected tissue leading to its destruction.

Vascular Adhesion Protein-1 (VAP-1), BioTie's principal anti-inflammatory drug target, has a critical role in helping leukocytes invade tissue as it is an endothelial cell adhesion molecule expressed on blood vessels. VAP-1 mediates the interactions of leukocytes in the blood with the vessel wall and assists in their migration to sites of inflammation in tissue.

A key feature of VAP-1 is its specificity, since it is expressed in a functional form only at the site of inflammation. It allows BioTie to target the action of its anti-inflammatory drugs to specific physiological locations, for example to an inflamed joint or an inflamed section of bowel. Blocking VAP-1 function prevents harmful leukocyte migration into an inflammatory site and lets the inflammation resolve.



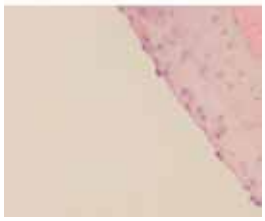


Fig. A: **Arthritic ankle joint space with synovial thickening and inflammatory cells.**

Fig B: **When treated with BioTie's anti-inflammatory compound, synovial thickening with inflammatory cells are not present in the ankle joint.**

VAP-1 function can be blocked using monoclonal antibodies or, since VAP-1 is also an enzyme and its adhesive function is dependent on the enzyme activity, VAP-1 mediated adhesion can also be blocked by small molecule inhibitors of the enzyme. Developing novel treatments for chronic inflammatory disease is the aim of BioTie's anti-VAP-1 drug development program, and rheumatoid arthritis is the primary target for anti-VAP-1 therapy. Other indications where anti-VAP-1 therapy is likely to prove useful include inflammatory bowel diseases, psoriasis and multiple sclerosis.

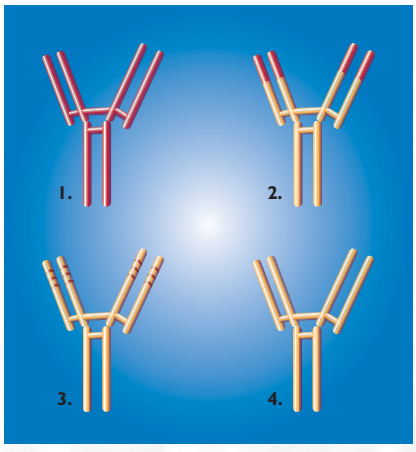
MONOCLONAL ANTIBODIES

Antibodies (immunoglobulins) are part of the natural immune defense system of the human body. Binding to their targets with great selectivity, antibodies can neutralize harmful foreign organisms such as invading bacteria and viruses by binding to their surface proteins. For an antibody to be developed as a drug a similar idea is applied; the drug antibody is designed to bind specifically to a disease-causing target molecule and block its function, thereby causing the desired therapeutic response. Antibody drugs can be made in many forms and are usually designed to resemble a natural human antibody as closely as possible so as to reduce the potential for unwanted immunogenicity. For example, fully human antibodies can be developed using a variety of state-of-the-art technologies.

Monoclonal antibodies are derived from clones i.e. identical copies of a single cell which all produce an identical antibody, and are produced in bioreactors employing special cell lines developed for manufacturing purposes.

The exploitation of monoclonal antibodies in the diagnosis and treatment of diseases has significantly increased. At present over 100 monoclonal antibodies are in clinical development, representing

'EVOLUTION' OF DRUG ANTIBODIES



Drug antibodies can be developed with using several different techniques. The aim of maximizing the regions of human origin is to reduce immune responses to foreign proteins and to increase product safety.

approximately 20 per cent of all biological products at this stage. Currently there are 17 therapeutic antibody drugs on the market.

VAP-1 ANTIBODY PROGRAM

In 2004, BioTie continued the development of a fully human anti-VAP-1 antibody that commenced in 2003. A humanized (non-chimeric) VAP-1 antibody was also developed. The progress in both approaches has been favorable, but in the summer BioTie decided to focus the activities in the antibody program on the development of a fully human anti-VAP-1 antibody. The selection process, in which dozens of new fully human antibody candidates have been screened, has produced an excellent clinical antibody candidate for which the cell line development for manufacturing has started.

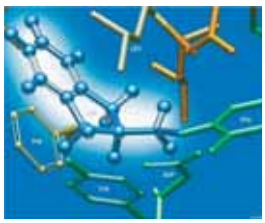
The most important collaboration partners of BioTie in 2004 in this program were Seikagaku Corp., a licensing partner for the antibody program, and the Universities of Turku, Cambridge and Birmingham.

VAP-1 SSAO ENZYME INHIBITOR

The enzymatic activity of VAP-1 mediates the adhesion of leukocytes to the endothelial cells lining the blood vessels. Blocking the enzymatic function of VAP-1 significantly decreases the accumulation of leukocytes in the inflammatory site.

During 2004 the three-dimensional structure of crystallized VAP-1 receptor was solved in collaboration with Åbo Akademi. The defined structure can be utilized in the further development of small molecule inhibitors. The company filed a patent application related to the three-dimensional structure of crystallized VAP-1.

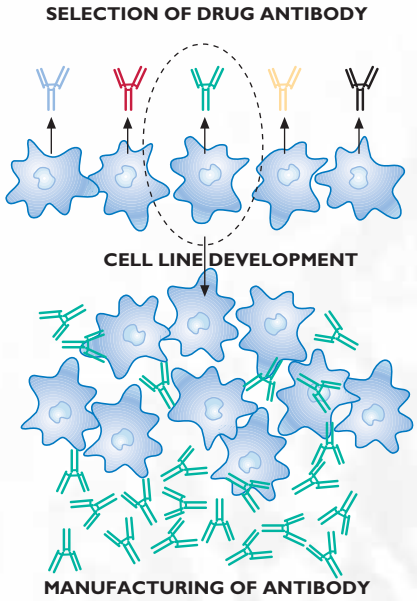
The small molecule inhibitors developed by BioTie have proved effective in rheumatoid arthritis models generally used by the pharmaceutical industry. VAP-1 SSAO small molecule inhibitors reduce the clinical symptoms of experimental adjuvant arthritis in rats in a statistically significant manner compared with a control group receiving placebo. The results support the view that the VAP-1 SSAO enzyme plays a crucial role in inflammatory diseases, and therapy based on VAP-1 blocking may thus be clinically valuable. The VAP-1 SSAO small molecule inhibitor is developed for oral administration in the treatment of chronic inflammatory diseases such as rheumatoid arthritis.

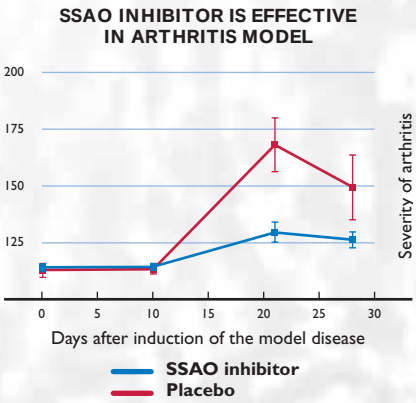


Three dimensional model of SSAO inhibitor at VAP-1 active site (inhibitor shown in blue).

DEVELOPMENT PARTNER FOR SMALL MOLECULE VAP-1 INHIBITOR PROGRAM

In December 2004 Roche and BioTie entered into a collaboration and option agreement to develop BioTie's proprietary small molecule VAP-1 SSAO inhibitor program targeting inflammatory diseases. Roche will contribute its expertise to BioTie's development of VAP-1 SSAO small molecule inhibitor candidates. At defined stages, Roche will have exclusive option rights to exclusively license any VAP-1 SSAO inhibitor candidate worldwide, excluding Japan, Taiwan, Singapore, New Zealand, and Australia.



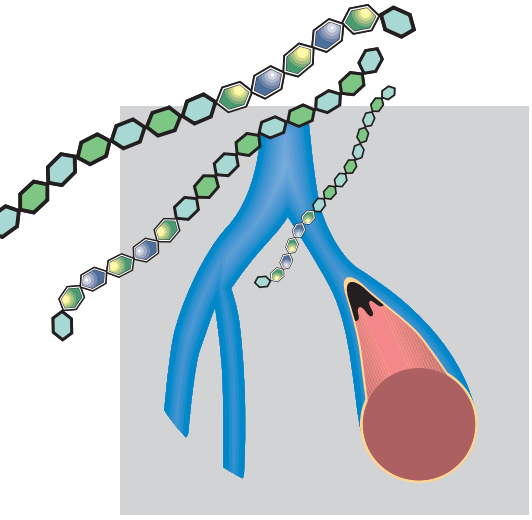


In an arthritis model, BioTie's compound has a strong anti-inflammatory effect (blue line).

The licensing agreement with Seikagaku Corp. for the VAP-1 antibody program covers Japan, Taiwan, Singapore, New Zealand and Australia. Seikagaku will also have a licensing option to BioTie's small-molecule SSAO enzyme inhibitor. It covers the same territory as the antibody agreement.

The collaboration and option agreement with Roche for the small molecule VAP-1 SSAO inhibitor program is global, excluding the territory mentioned in the Seikagaku agreement.

Other Research Projects



Bioheparin is primaryily indicated for thromboembolic diseases, such as deep vein thrombosis, pulmonary embolism and prolonged chest pain due to coronary attery disease.

BioTie's other drug development projects include integrin inhibitors and applications of glycobiology such as biotechnologically produced heparin called bioheparin, a disaccharide molecule acting as a TNF-α pathway inhibitor and sulfated linear polysaccharides. These drug development projects are currently at the discovery research or preclinical study phase.

GLYCOBIOLOGY OPENING NEW OPPORTUNITIES

Glycobiology focuses on studying the role of carbohydrates in the body. Following genomics and proteomics, the application of glycobiology is expected to form the next major breakthrough in the development of novel drug therapies. Clinically the most widely used carbohydrate drug is animal-derived heparin that is used for the treatment of thrombosis. Other drug development applications of glycobiology include drug therapy for cancer, infectious diseases, inflammatory diseases, rejection reactions or prevention of diseases by vaccines. BioTie is investigating the possibilities of using carbohydrate-based drugs for the treat-ment of thrombosis, inflammatory diseases and cancer.

RECOMBINANT BIOHEPARIN

Animal-derived heparin has been used in the treatment of patients since the 1940's. BioTie's sulfated linear polysaccharide, bioheparin represents a new, non-animal-derived, carbohydrate drug molecule produced using a technology patented by the company. Bioheparin is primarily intended for the treatment of thrombo-embolic diseases, such as deep vein thrombosis, pulmonary embolism and unstable angina.

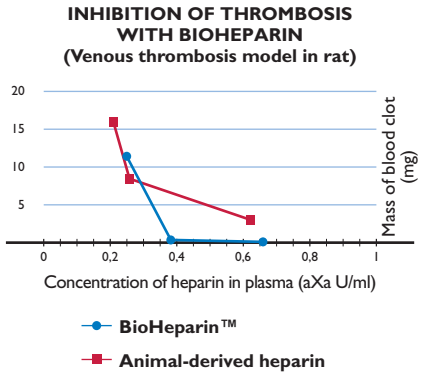
BioTie has been developing recombinant Bioheparin since 1996, when the company joined the first EU-funded Research Consortium, whose aim was to develop biotechnologically manufactured heparins.

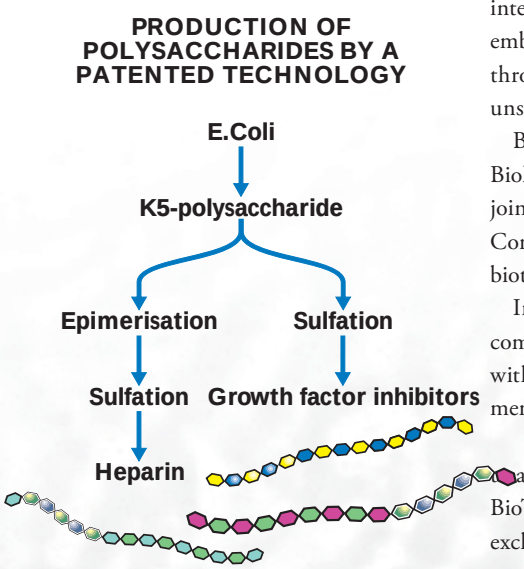
In spring 2004 BioTie signed a commercial research and option agreement with Sanofi-Aventis for the joint development of a new oral recombinant heparin-like product for the prevention and treatment of blood coagulation disorders. BioTie has granted Sanofi-Aventis an exclusive one-year right to negotiate a licensing agreement, for which exclusive option Sanofi-Aventis has agreed to pay BioTie up to total of five million euros in signing fee and milestone payments.

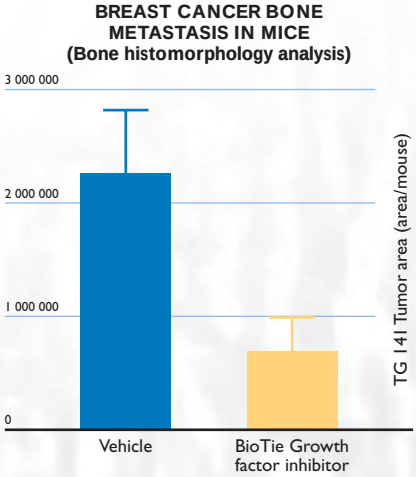
SULFATED LINEAR POLYSACCHARIDES IN THE TREATMENT OF CANCER

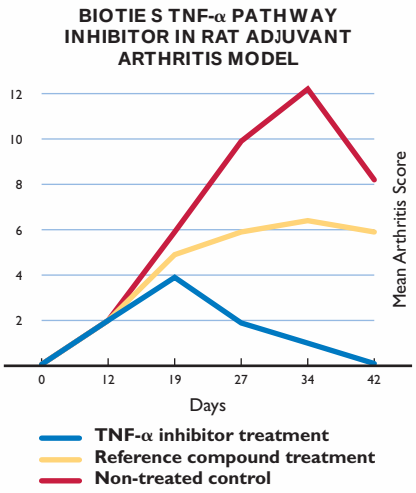
By utilizing the production technology of bioheparin, growth factor inhibitors of cancer cells can also be produced. The efficacy of such inhibitors has already been shown by studies measuring the formation of breast cancer metastases in mice.

During the year 2004, BioTie continued to participate in one research consortium financed by the EU focusing on new applications for modified polysaccharide compounds. BioTie has the rights of first refusal concerning the commercial utilization of the research discoveries resulting from the consortium. BioTie is investigating the possibilities of using modified linear polysaccharides in the treatment of inflammation and cancer.







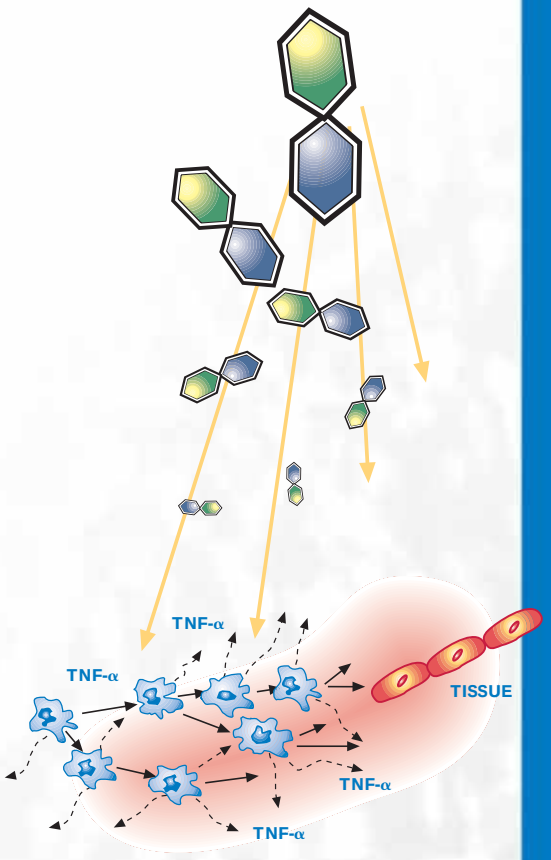


HEPARIN-DERIVED TNF-α PATHWAY INHIBITOR

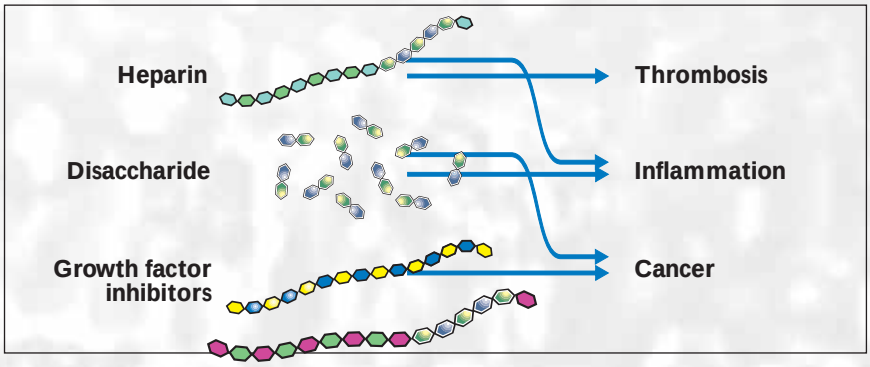
In clinical studies, heparin has been shown to inhibit inflammation independently of its known anti-coagulant activity. The administration of very low doses of heparin or of chemically modified heparins lacking anti-coagulant activity has been shown to inhibit delayed-type hypersensitivity (DTH) reactions and arthritis. Certain sulfated disaccharides generated by enzymatic cleavage of heparin inhibit the production of a key inflammatory mediator, TNF-α (tumor necrosis factor α).

In January 2005, BioTie in-licensed global IP rights to heparin-derived disaccharide compound, which has demonstrated efficacy in several animal models of inflammation. This molecule is an orally available small molecule inhibitor with TNF-α pathway inhibitor activity.

The in-licensing agreement also includes an option to develop certain disaccharide compounds for the treatment of cancer.

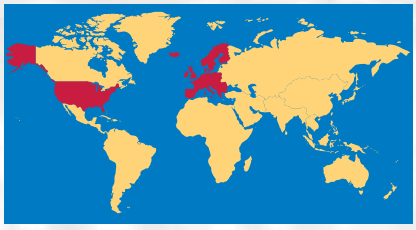


Inflammation is the clinical expression of chemical mediators such as TNF-α in the immune response. Compounds such heparin derived disaccharides shows to inhibit TNF-α may be useful in the treatment of inflammatory diseases such as rheumatoid arthritis.

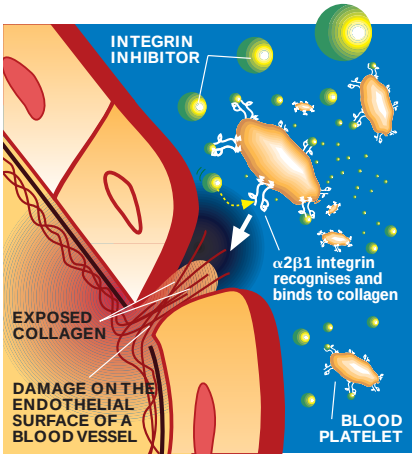


Research and option agreement with Sanofi-Aventis of bioheparin covers the whole world.

The TNF-α pathway inhibitor license from Biokine covers EU and the USA

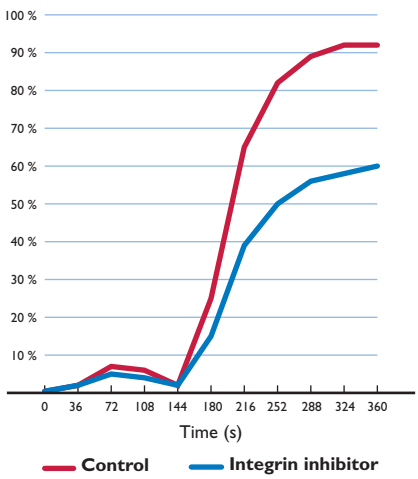


Integrin Inhibitors



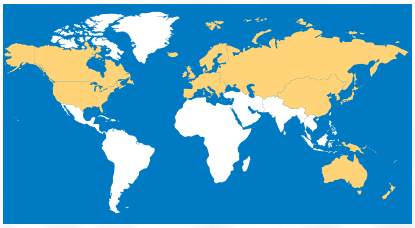
Thrombus formation requires activation and aggregation of blood platelets. Antithrombotic therapy using α2β1 integrin inhibitors is targeted to inhibit thrombosis by blocking the binding of platelets to collagen fibrils exposed upon endothelial damage.

INTEGRIN INHIBITORS DECREASE BLOOD PLATELET AGGREGATION



Blood platelet activation and aggregation are the first steps in thrombus formation. In this study the integrin inhibitor is shown to decrease the collagen mediated platelet aggregation.

Integrin patent protection on page 21.



Interactions between cells and collagen are necessary for many physiological functions. The same interactions may, however, also promote mechanisms associated with diseases, such as thrombosis and cancer spread. In this drug discovery project, BioTie has been concentrating on the collagen receptor known as α2β1 integrin and the company is developing compounds inhibiting this receptor for the prevention of thrombus formation and cancer.

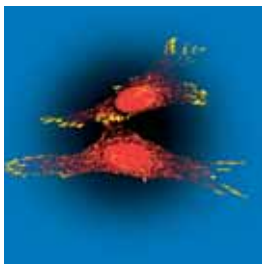
TREATMENT OF THROMBOSIS BY USING AN α2βI INTEGRIN INHIBITOR

Adhesion of blood platelets to collagen is mediated by α2β1 integrin. The endothelial cell layer of the healthy arterial wall prevents the interaction of circulating blood platelets with collagen. At the site of endothelial damage, collagen is exposed and the platelets adhere to the damaged endothelial surface initiating a cascade of events leading to thrombus formation. Preventing blood platelets from adhering to collagen and subsequent activation of the blood platelets will prevent thrombus formation.

Due to genomic polymorphism, some people have a larger quantity of α2β1 integrin on the surface of their platelets, and consequently, an increased risk of thrombosis. Epidemiological studies have shown that high levels of α2β1 integrin can be considered a significant risk factor for coronary and cerebral thrombosis in people of working age. Blocking α2β1 integrin function, especially in patients with high levels of α2β1 integrin, would be useful beneficial in prevention of thrombosis.

TREATMENT OF CANCER WITH α2βI INTEGRIN INHIBITOR

Cancer cells also use integrins when moving through tissues and when forming metastases. Melanoma, prostate cancer, gastric cancer and ovarian cancer are diseases in which the α2β1 integrin seems to contribute to the spread of the cancerous cells. In patients with prostate cancer α2β1 integrin is a mediator in the formation of prostate cancer metastases into bone.



Cancer cells (osteosarcoma cells) attached on the collagen surface via α2β1 integrin. Yellow color shows the adhesion sites where the α2β1 receptor is localized.

α2βI INTEGRIN AS A TARGET FOR DRUG DEVELOPMENT

The drug discovery program is based on the three-dimensional structure of the part of the integrin receptor responsible for binding to collagen, the so-called I-domain. Computer-aided modeling of integrin and an I-domain binding peptide sequence originally isolated from snake venom have been utilized in the design of small molecule inhibitors against α2β1 function. The company submitted a patent application for the first inhibitors isolated in 2003.

The inhibitors have been shown to prevent the interaction of human blood platelets after contact with collagen as well as adhesion of cancer cells to collagen and their penetration through collagen matrices in laboratory conditions. The research program has been conducted in collaboration with the University of Turku, Åbo Akademi University and the University of Jyväskylä.

POSSIBLE APPLICATIONS OF COLLAGEN RECEPTOR α2βI INTEGRIN INHIBITORS

Cardiovascular diseases
- **Myocardial infarction**
- **Stroke**
- **diabetes related retinopathy**

Cancer diseases
- **Melanoma**
- **Ovarian cancer**
- **Gastric cancer**
- **Bone metastases prostate cancer**
- **Inhibition of tumor angiogenesis of cancer growth**

Board of Directors

Juha Jouhki, Riku Rautsola, Piet Serrure and Hannu Hanhijärvi

Hannu Hanhijärvi
Chairman of the Board of Directors

D.D.S., Ph.D., born 1947. Director of the Venture Capital Life Sciences Unit of the Finnish National Fund for Research and Development (Sitra). Member of the Board of Directors of BioTie since 1998.

Before joining Sitra, he served in several management positions within the Finnish pharmaceutical and health care industry, i.a. as Vice President of R&D in Leiras Pharmaceutical Company 1986-96, and Group Vice President of R&D and QC in Leaf Group, Amstelveen, Holland 1996-98. Dr. Hanhijärvi has also acted as professor of pharmacology and toxicology of about 15 years (1971-1986), including Lasby Visiting Professorship in the University of Minnesota 1980-81.

Dr. Hanhijärvi is a member or chairman of the Board of Directors in the following Finnish companies: MedIn Oy (chairman), Juvantia Pharma Oy (chairman), Biopatron Oy (chairman), Unicrop Oy (deputy chairman), Hormos Medical Oy (deputy chairman), Gensos Oy and Focus Inhalation Oy.

Riku Rautsola
Member of the Board of Directors

Ph.D. (Econ), born 1954. CEO of American VIRxSYS Corporation. Board member of BioTie since 2004.

Mr. Rautsola has over 20 years of biotechnology and pharmaceutical industry before becoming CEO and President of VIRxSYS in 2005 he was CEO of Borean Pharma in 2003-2004. He was previously the CEO of biotechnology company Cosmix Molecular Biologicals Ltd 2001-2003. Before 2001, Rautsola has held several management positions at Boehringer Ingelheim, Beiersdorf, manufacturer of dermatological skin-care and wound care products and Fresenius, specialized in manufacturing of dialysis and infusion therapy products and services. Founding Member and Chairman (2000–2001) of Accelerating Access, a public and private initiative of UN and the pharmaceutical industry to make HIV therapeutics broadly available for the Developing Countries.

Mr. Rautsola holds several medical patents. Mr. Rautsola is also a Board member of VIRxSYS.

Juha Jouhki
Member of the Board of Directors

M.Sc. (Eng.), born 1966. Managing Director of Thominvest Oy. Member of the Board of Directors of BioTie since 2002.

Mr. Jouhki is one of the co-founders of ContrAl Clinics and Contral Pharma. In 1996-1999, he served as Managing Director of ContrAl Clinics and in 1998-2002 as Chairman of the Board of Directors of Contral Pharma. Mr. Jouhki has also worked in the maritime shipping industry.

He has been and is a member of the Board of Directors in many companies, such as Thominvest Oy, Dreadnought Finance Oy, Procarbon AB, Neomedit Oy, Alimetrics Oy, Unicrop Oy, Bevesys Oy, and Interquest Oy.

Piet Serrure
Member of the Board of Directors

M.Sc. (Econ), born 1954. Managing Director of Belgian venture capital consultancy company Origo Management. Board member of BioTie since 2004. Mr. Serrure has 19 years of experience in the Venture Capital Industry. Mr. Serrure started his VC career at Benevent in 1985 and later, in 1992, founded the Belgian branch of Parnib (NIB Capital) where he was Director and CEO until 2001. Mr. Serrure founded Origo Management in 2001. Previously, Mr. Serrure held positions also with Du Pont de Nemours and Arthur Andersen.

Mr. Serrure was a member of the Board of Directors and of the Executive Committee of the "European Private Equity and Venture Capital Association" (EVCA).

Management

Jari Saarinen
President and CEO

M.Sc. (Econ.), born 1959. Mr. Saarinen has been employed by BioTie since 2000, as Chief Financial Officer from 2000-2002. Prior to BioTie, he was Deputy General Manager, Global Services Division of MacGREGOR Group in 1999-2000 and Senior Vice President, Finance of MacGREGOR Group in 1992-1998. In 1983-1992 he held various Controller positions in the Kone Corporation in Finland, the United States and Canada.

Mr. Saarinen is a Board member of Biovian Ltd.

Kai Lähdesmäki
Vice President, Business Development

M.Sc. (Pol. Sc.), born 1945. Mr. Lähdesmäki has been employed by BioTie since 1999. Prior to BioTie, he was President and Member of the Board of Directors of MediNet International Ltd in 1990-1999. In the years 1973-1990, he served at Farmos Group Ltd in various management positions as Area Sales Manager, Export Director, and for the last six years as V.P. International Division and member of the internal Board of the company.

Mr. Lähdesmäki is Chairman of the Board of Delsitech Ltd and a Board member of StickTech Ltd.

Timo Veromaa
Vice President, Research and Development

M.D., Ph.D., Special Competence in Pharmaceutical Medicine, born 1960. Dr. Veromaa has been employed by BioTie since 1998. Previously Dr. Veromaa was Medical Director of Schering Oy 1996-1998 and Research and Program Manager of Collagen Corporation (California, USA) in 1994-1996. Postdoctoral Fellow at Stanford University (California, USA) in 1990-1993 and Scientist at the University of Turku in 1985-1990.

Network of Scientific Collaboration

BioTie has created close collaborations for key areas of its drug development operations, namely, basic research, drug development and production technologies and drug production.

EXTENSIVE NETWORK OF TOP RESEARCHERS TO SUPPORT DRUG DEVELOPMENT

BioTie has an extensive collaborative network of Finnish and international researchers, through which the company has access to a large pool of international high-quality research projects.

The most important academic collaborative partners of the company include:

:: Professor David Adams, University of Birmingham. During the last few years, Professor Adams's research group has been studying leukocyte adhesion mechanisms and diseases of the liver.

:: Mike Clark, PhD, University of Cambridge. Dr. Clark is one of the pioneers in the development of monoclonal antibody drugs.

:: Professor Jyrki Heino, University of Turku. Professor Heino's research group focuses on the structure-function analysis of integrin and the cell signaling related to collagen receptors. Professor Heino's research group was the first to describe the binding of the α2β1-integrin receptor and its peptide ligand at the molecular level.

:: Professor Sirpa Jalkanen, University of Turku and National Public Health Institute. Professor of the Academy of Finland and Director of the Center of Excellence. She has been involved in the analysis of leukocyte migration mechanisms in connection with physiological and pathological conditions for more than fifteen years.

:: Professor Mark Johnson, Åbo Akademi University. Head of information and structure unit. At present his research group is studying the three-dimensional stucture of proteins and drug discovery work using structure based drug design.

:: Dr. Karl-Anders Karlsson and the glycobiological research group at the University of Gothenburg. Dr.Karlsson's research group is a leader in the research of the infection mechanisms of pathogens. By using its glycolipid libraries separated from human and animal tissue, the group has characterized several carbohydrate receptors.

:: Professor Riitta Lassila, Helsinki University Hospital, has focused on the investigation of the mechanisms involved in blood coagulation. As a part of the research the role of different adhesion molecules, like α2β1-integrin on thrombus formation has been studied.

:: Professor Ulf Lindahl, University of Uppsala. His research work has focused on the structure, biosynthesis and function of carbohydrates such as heparin. The development project of a technology suitable for the production of bioheparin and other similar sugar structure molecules arose from projects financed by the EU Commission.

:: Professor Benito Casu and Dr. Giangiacomo Torri, Istituto Scientifico di Chimica e Biochimica "G. Ronzoni", Italy. Experts in carbohydrates similar to heparin.

:: BioTie has an active collaboration with the University of Szeged and the Bay Zoltan Foundation (Szeged, Hungary). BioTie has synthesized and patented novel organic small molecules with the group of Professor Ferenc Fülop. Research groups of Professor György Falkay and Dr. Tibor Krenacs have evaluated the effect of compounds developed by BioTie in animal models of inflammation.

:: The company participates in a research program financed by the European Union: Heparanase Inhibitors in Antiangiogenic and Antimetastatic Cancer Therapy (HEPARANASE). The researchers participating in the programs represent the highest expertise in the target area in Europe. The company has the right of first refusal concerning the utilization of new discoveries and technologies. The HEPARANASE 2002–2005 program studies the ability of K5-based polysaccharides to prevent the neovascularization necessary for cancer growth and the formation of metastases. The HEPARANASE program is coordinated by Professor Benito Casu (Ronzoni Institute, Italy).

:: Professor Suck Won Kim, University of Minnesota, Psychiatry Department. Dr. Kim is an expert in drug therapies for impulse control disorders.

:: Chief Physician Rauno Mäkelä, A-Clinic Foundation, the largest substance abuse treatment and prevention organization in Finland.

:: Dr. Jon Grant, Brown Medical School, Director, Impulse Control Disorders Clinic. An expert in drug therapies for impulse control disorders.

Patents

KEY PATENTS AND PATENT APPLICATIONS

Nalmefene patent families	**Granted**
• US 4882335	21.11.1989
• US 5096715	17.11.1992
• US 5086058	4.2.1992
• EP 0346830	10.5.1995
• EP 0531415	20.11.1996
• EP 0429039	08.03.1995
• JP 3059213	21.4.2000
• US 5780479 (exclusive license/Minnesota University)	14.7.1998
• International patent application WO 03/015783	pending

VAP-1 monoclonal antibody patent families	
• US 5580780	3.12.1996
• US 6066321	23.5.2000
• US 5512442	30.4.1996
• EP 0656906	8.9.1999
• JP 3431922	23.5.2003
• JP 3500384	5.12.2003
• International patent application WO 03/093319	pending
• International patent application WO 99/58572 (non-exclusive license/Cambridge University)	pending

VAP-1 SSAO inhibitor patent families	
• US 6624202	23.9.2003
• European patent application EP979271 and corresponding patent applications in the United States and Japan	pending
• European patent applications EP 1301495 and EP 1414426 both corresponding patent applications in the United States and Japan	pending
• European patent application EP 1313718 corresponding patent application in Japan	pending

Other research projects

Integrin inhibitors

• US 6096707	1.8.2000
• EP 0994898	26.3.2003
• Japan patent application	pending

Sulfated linear polysaccharides

• US 6764844	20.7.2004
• European patent application EP0986639 and corresponding patent applications in United States and Japan	pending
• International patent applications WO 02/46379 (co-owned/Inalco)	pending
• Several patent applications based on international patent applications WO 96/14425, WO 98/42754, WO 01/72848, WO 01/02597 (semi-exclusive license/Inalco)	pending
• Several patent applications based on international patent applications WO 02/050125, WO 03/106504, WO 03/106505, WO 03/106506 (exclusive license/Glycores)	pending

Glycobiology

• European patent application EP1417214 and corresponding patent applications in United States and Japan	pending
• European patent application EP1419393 and corresponding patent applications in United States and Japan	pending

Report From The Board Of Directors

REVIEW OF 2004 OPERATIONS

BioTie is a drug development company focusing on dependence disorders, inflammatory diseases and thrombosis. As the nalmefene programme has reached commercialization phase, the Company will focus on inflammatory diseases and thrombosis in the future.

Candidate drugs are primarily developed until phase II clinical studies (Proof of Concept). Research and product development is carried out in cooperation with academic research groups and with contract research organizations and contract manufacturing organizations.

EFFICIENCY IMPROVEMENT PROGRAM COMPLETED

The company completed the efficiency improvement program during first quarter 2004 that was started when BioTie, Contral Pharma and Carbion merged in October 2002. As a result the cash flow improved to -6.1 million euros in 2004 compared to -25.7 million euros in 2002.

DRUG DEVELOPMENT PROJECTS

Nalmefene program

In November Biotie Therapies Corp. and Somaxon Pharmaceuticals, Inc. announced that Somaxon has exercised its option to license nalmefene in North America. The companies signed a cooperation and option agreement on nalmefene in July 2004. The partnership agreement on the first indication (pathological gambling) could be valued at up to USD 13.2 million plus royalties.

Under the terms of the agreement, BioTie has granted Somaxon an exclusive license in North America to clinically develop, manufacture and market nalmefene for the treatment of impulse control disorders, alcoholism and alcohol abuse as well as nicotine dependence. Somaxon intends to initially develop nalmefene for the treatment of pathological gambling in the United States and plans to initiate pivotal phase III clinical trials in 2005. Currently, there is no approved pharmacotherapy specifically labelled for use in pathological gambling in the United States.

Somaxon paid BioTie USD 3 million as signing fee in addition to the already paid option fee of USD 0.2 million in June 2004. The remaining milestone payments add up to USD 10 million for the lead indication, pathological gambling, subject to achieving certain development milestones. BioTie will receive additional milestone payments if nalmefene will be developed for additional indications. Additionally, BioTie will receive royalty on sales of nalmefene in North America if approved by the FDA for indications, where BioTie has IPR protection, including pathological gambling.

Nalmefene is a specific and selective opioid receptor antagonist, which has demonstrated good safety and efficacy in a phase II clinical study in the U.S. in patients diagnosed with pathological gambling disorder and in two phase III studies in the U.K. and in Finland in patients suffering from alcoholism and alcohol abuse.

If approved by the FDA, it is the intention of Somaxon to market nalmefene to psychiatrists who treat pathological gambling through its own sales organization. If nalmefene receives appropriate labelling, a co-marketing partner would allow the company to expand the marketing efforts to also cover general practictioners. According to the agreement BioTie will receive a predetermined share of the revenues if nalmefene is sublicensed to a third party.

During the financial year 2004 the company finalized the analysis of the previously completed clinical studies with nalmefene. The result were presented in June 2004 at the Annual Meeting of the International Society of Addiction Medicine in Helsinki.

Recombinant heparin program

BioTie signed, on March 9, 2004, a commercial research and option agreement with Aventis for the joint development of a new oral heparin like product for the prevention and treatment of blood coagulation disorders.

Under the terms of the agreement, BioTie granted Aventis the exclusive right to negotiate a licensing agreement until 31.3.2005. Aventis has agreed to pay BioTie 5 million euros in signing fee and milestone payments for this exclusive option, subject to meeting the agreed development milestones.

In accordance with the option agreement BioTie and Aventis continued the work aiming to optimize recombinant heparin compounds to meet the agreed specifications.

In addition to the signing fee of 1 million euros, Aventis paid the first milestone payment of 1 million euros in April when the agreed milestone was reached.

Vascular Adhesion Protein-1 (VAP-1)

BioTie's proprietary drug development target, Vascular Adhesion Protein-1 (VAP-1), is a dual-function molecule with enzymatic and adhesion activities. VAP-1 contributes to the adhesion of white blood cells to endothelial cells. It is greatly amplified in blood vesselsin in inflammation. The VAP-1 SSAO enzyme contributes to the production of molecules that exacerbate inflammation. VAP-1 specific monoclonal antibodies and VAP-1 SSAO small molecule inhibitors have been shown in animal models to be potent inhibitors of disease activity.

The company focused in the development of fully human antibodies in its VAP-1 antibody program during the reporting period. Co-operation with Seikagaku Corporation proceeded as planned.

VAP-1 SSAO small molecule inhibitor program

The preclinical program of VAP-1 SSAO small-molecule inhibitors progressed as planned.

In December, Roche Pharmaceuticals and BioTie announced a collaboration and option agreement to develop BioTie's proprietary small molecule VAP-1 SSAO inhibitor program targeting inflammatory diseases.

Under the terms of the agreement, Roche will contribute its expertise to BioTie's development of VAP-1 SSAO small molecule inhibitor candidates. At defined stages, Roche will have exclusive option rights to exclusively license any VAP-1 inhibitor candidate worldwide, excluding Japan, Taiwan, Singapore, New Zealand, and Australia. By extending its

option right to phase IIb, Roche could pay BioTie EUR 5 million and BioTie will retain all rights to any compounds developed until a license is granted.

α2β1 integrin small molecule inhibitor program

The screening and preclinical development of new α2β1 integrin inhibitors continued in cooperation with the University of Turku, Åbo Akademi University and the University of Jyväskylä. α2β1 integrin inhibitors provide new methods for preventing thromboses caused by vascular damage as well as preventing cancer metastasis.

REVENUES

Revenues for the financial year stood at EUR 4.5 million and consisted of the signing fee and milestone payments of the research and drug development agreement signed by Aventis, EUR 2 million and option and signing fee paid by Somaxon, EUR 2.5 million (USD 3.2 million). During the previous year the revenues consisted mainly of signing fee of Seikagaku lisencing agreement, EUR 2.2 million.

Aventis withholds 5% withholding tax from the signature fee and milestone payment. Somaxon will withhold 5% withholding tax from the option and signing fee. According to the tax treaties between respective countries, BioTie may deduct withholding tax from income tax payable in Finland during the year the payment was made or the following year. The withholding tax is reported under income tax but it is not booked in receivables as it is uncertain whether it can be utilized.

FINANCIAL RESULTS

The net loss for the financial year was EUR -7.1 million. The corresponding figure for the previous year was EUR -12.4 million. Research and development costs for the period amounted to EUR 9.2 million (in 2003 EUR 11.9 million). Patent costs have been booked as expenses.

FINANCING

BioTie's equity ratio was -119.7 % on December 31, 2004 (-32.3 % in 2003). Cash and cash equivalents totaled EUR 7.0 million on December 31, 2004 (EUR 10.4 million in 2003). Taking into account Tekes funding already granted the company will have liquid assets to finance its operations to the middle of 2005 without any revenue.

The National Technology Agency (Tekes) has granted additional funding EUR 1.4 million for Biotie Therapies' Integrin project. The R&D subsidy granted in June covers drug development costs of the project from March 2004 to February 2006. The funding granted covers 50 per cent of the costs of the project. The subsidy will be paid to BioTie after BioTie has presented to Tekes account of the realization of the costs of the project in question and after Tekes has approved the account. In order to receive full subsidy, BioTie must show a total of EUR 2.9 million of expenditure arising out of the project.

The National Technology Agency (Tekes) has granted additional funding EUR 3.3 million for Biotie Therapies' VAP-1 SSAO small molecule inhibitor program. The R&D funding granted covers drug development costs of the project from August 2004 to July 2006. The share of capital loan funding is EUR 2.3 million and share on R&D subsidy EUR 1.0 million. The funding granted covers 50 per cent of the costs of the project. The subsidy and capital loan will be paid to BioTie after BioTie has presented to Tekes an account of the realization of the costs of the project in question and after Tekes has approved the account. EUR 0.7 million of the capital loan will be paid in advance. In order to receive the full amount of granted financing, BioTie must show a total of EUR 6.7 million of expenditure arising out of the program.

EQUITY

The company has 6.0 million euros worth of non-capital R&D loans granted by Tekes. According to the decision made by Tekes the loans may be convertible into capital loans. The conversion of each loan requires separate approval from Tekes. Tekes has so far approved the conversion of one loan of 1.15 million euros to capital loan. BioTie's board made a decision on this matter on January 26, 2005. Depending on the development of equity, BioTie may also decide to request the conversion of other loans to capital loans.

INVESTMENTS AND CASH FLOW

The company's investments during the financial year amounted to EUR 54 thousand (EUR 57 thousand in 2003). The investments mainly comprised of equipment purchased for research and development operations. Cash flow before financing items was EUR -6.1 million (EUR -12.1 million in 2003).

PERSONNEL

As the final phase of the company's efficiency improvement program, BioTie decided in January to close down the unit at Viikki, Helsinki and concentrate the operations in Turku. The efficiency improvement program commenced on the merger of BioTie, Contral Pharma and Carbion at the end of 2002. The Viikki unit had 16 employees working in discovery phase research and support functions. The co-determination negotiations resulted in a personnel reduction of 14 employees.

During the reporting period, the company's personnel was on average 47 (66 in 2003) and at the end of the financial year 46 (55 on 31.12.2003).

SHAREHOLDERS' MEETINGS HELD DURING THE REPORTING PERIOD

The Annual General Meeting

The Annual General Meeting of Biotie Therapies Corp. was held on March 25, 2004. The Annual General Meeting adopted the income statement and balance sheet including the income statement and balance sheet for the group concerning the financial year from January 1 –

December 31, 2003. The Annual General Meeting made a resolution that the company shall not distribute dividend from the financial year 2003 and that the parent company's loss of the financial year amounting to EUR 12 432 779.10 be transferred to shareholders' equity.

THE BOARD OF DIRECTORS AND AUDITORS

The Annual General Meeting discharged the members of the Board of Directors and the President and CEO from liability concerning the financial year from January 1 – December 31, 2003. The Annual General Meeting resolved that the Board of Directors of Biotie Therapies Corp. shall consist of four members and re-elected to the Board of Directors Hannu Hanhijärvi and Juha Jouhki and as new members Riku Rautsola and Piet Serrure. Johan Kronberg, Authorized Public Accountant and PricewaterhouseCoopers Oy Authorized Public Accountants were elected as auditors of Biotie Therapies Corp.

Jari Saarinen acted as President and CEO of Biotie Therapies Corp.

At its organization meeting, convened immediately after the Annual General Meeting, the Board of Directors elected Hannu Hanhijärvi as the Chairman of the Board of Directors.

GROUP STRUCTURE

The parent company of the group is Biotie Therapies Corp. The group has a subsidiary named Biotie International Oy, which was not operational during the financial year.

AUTHORIZATION TO INCREASE SHARE CAPITAL AND DISPOSE OWN SHARES

The Annual General Meeting authorized the Board of Directors to resolve, in accordance with the proposal of the Board of Directors, on increase of the share capital in one or more issues through new issue by emitting new shares with a book equivalent value of EUR 0.02.

On the basis of the authorization the company's share capital may be increased in one or more issues so that the company's share capital may increase by EUR 154 000 at maximum and the number of shares by 7 700 000 shares at maximum.

The Annual General Meeting authorized the Board of Directors to decide on the conveyance of the company's own shares in the company's possession. The authorization covers the 819 000 shares with a book equivalent value of EUR 0.02 in the company's possession, which correspond to less than 1.9 per cent of the company's share capital and all voting rights.

CHANGING THE PROVISIONS OF THE CONVERTIBLE CAPITAL LOAN AGREEMENTS

The Annual General Meeting decided to renew the convertible capital loans originally approved in 1999 and approved the amendment of the provisions of the loans so that the previous conversion period of the loans was extended until December 31, 2005, or, provided that the loan capitals will not be paid by then, until the loan capitals have been paid or converted into shares of the company. The loan capitals amounting to FIM 15 million in the aggregate, i.e. approximately EUR 2.5 million, may be converted into 1 278 000 new shares of the company with a book equivalent value of EUR 0.02 at the maximum. The Board of Directors of Biotie Therapies Corp. approved on 10 June the subscriptions of the convertible capital loans. The loans were offered to the original loan holders(Keskinäinen Vakuutusyhtiö Tapiola, Keskinäinen Eläkevakuutusyhtiö Tapiola, Suomen Itsenäisyyden Juhlarahasto, BioFund Ventures I Ky, Innoventure Oy, Aboa Venture Ky I and Dreadnought Finance Oy). When subscribing for the new convertible capital loans, the creditors renounced the earlier loans in accordance with the resolution of the Annual General Meeting of Shareholders.

USE OF THE PREMIUM FUND TO COVER THE LOSSES

The provisions of certain capital loan agreements set forth an obligation for Biotie Therapies Corp. (formerly Contral Pharma Ltd.) to transfer funds from the share premium fund to cover the loss of the company as shown in the balance sheet. Due to the above, the Annual General Meeting resolved that EUR 21 898 574.47 shall be transferred from the premium fund to cover the loss shown in the balance sheet as at December 31, 2003. The transfer decreased the restricted equity of the company by the transferred amount.

OPTION PROGRAMS

Biotie Therapies Corp. has issued option rights by 31.12.2004 pursuant to a total of seven different option programs. As a result of these option rights, the share capital of BioTie may be increased by a maximum of EUR 54,113.82, corresponding to 2,705,691 shares.

OPTION PROGRAM 2004

Based on the authorization of the Annual General Meeting the Board of Directors of Biotie Therapies Corp. resolved in its meeting of 14 January 2004 to issue option rights, which were offered for subscription, in deviation from the shareholders' pre-emptive subscription right, entire personnel of the company and to a wholly owned subsidiary nominated by the Board of Directors. In accordance with the decision made by the Board of Directors, a prerequisite for the subscription of the option rights was that the holder of a subscription right surrenders, in connection with the subscription, the possible option rights the company has issued previously. The subscriptions of the option rights have been made and they have been registered in the trade register.

The option rights shall entitle the holder to subscribe for a maximum of 2,000,000 new shares of Biotie Therapies Corp. in the aggregate. Due to the subscriptions the share capital of the company may increase by a maximum of EUR 40,000. In the

event the shares subscribed on the basis of the issued option rights are subscribed in full, the proportion of the subscribed shares shall be approximately 4.4 percent of the share capital of the company after the registration of the increase in the share capital, without taking into account the new shares to be possibly subscribed pursuant to the convertible loans and other option schemes issued by the company. The terms and conditions of the option rights have been published by a stock exchange release on 14 January 2004.

THE REQUEST FOR A SPECIAL AUDIT

On 24 March 2004, the State Provincial Office of Western Finland rejected the application for a special audit subject to chapter 10, section 14 of the Finnish Companies Act made by certain minority shareholders on July 17, 2003.

ADOPTION OF THE IFRS ACCOUNTING STANDARDS

The company will present the first IFRS financial statement with comparatives for the year 2005. The first IFRS interim report is presented at 31.3.2005. Preparation for the adoption of the IFRS standard compliant accounting system has progressed as planned.

BioTie will apply IFRS 1 "First-time Adoption of International Financial Reporting Standards" business combination exemption, which allows first time adopter not to apply IFRS rules retrospectively to business combinations taken place prior to the transition date 1.1.2004.

The most significant change in conversion to IFRS is the inclusion of capital loans as part of the liabilities. In addition the interest of capital loans shall be recognized as an expense to the income statement and as a liability in the balance sheet. Currently capital loans are included in the shareholders' equity and the interest effect is not recognized as a liability, but disclosed in the notes.

In addition i.e. the recognition of options as an expense, treatment of development costs and recognizing revenue from license fees causes changes to the current practice. The option schemes granted after 7.11.2002 and for which the vesting period is not expired by the 1.1.2005 are recognized as an expense. The older option schemes are not affected by this change. The development costs should be capitalized according to IFRS when the IAS 38 criteria are met. For now BioTie's drug development projects are at the research phase and have not yet fulfilled the IFRS capitalization criteria. License contracts' signing fee should be recognized as revenue over the length of the contract instead of the current treatment where the signing fee is recognized as revenue when the contract has been signed.

CORPORATE GOVERNANCE

BioTie complies with the corporate governance recommendation issued on 1 July 2004 by HEX Integrated Markets Ltd, the Central Chamber of Commerce and the Confederation of Finnish Industry and Employers.

EVENTS AFTER THE REPORTING PERIOD

In January 2005, BioTie announced the signing of a licensing agreement covering BTT-1507 (previously BKT104), a compound developed by Biokine Therapeutics. BTT-1507 is an orally available small molecule compound with potent anti-inflammatory effect in animal models of inflammation. The anti-inflammatory properties of BTT-1507 were first isolated and characterized by scientists from the Weizmann Institute of Science in Israel. BTT-1507 is proposed to work via a novel mechanism, which inhibits the production and secretion of TNF-α.

Under the terms of the agreement, BioTie will receive the global exclusive license for BTT-1507, which BioTie intends to develop for the treatment of inflammatory diseases. BioTie is responsible for the development costs in the early stage of the project and will pay to Biokine Therapeutics milestone payments in accordance with the progress of the project and royalties based on revenue in connection of the potential commercialization.

FUTURE OUTLOOK

In the short term, BioTie focuses its research and development operations on the following projects:
:: Bioheparin for the treatment of thrombosis
:: VAP-1 antibody for the treatment of inflammatory diseases
:: Small molecule VAP-1 SSAO inhibitor for the treatment of inflammatory diseases
:: BTT-1507, a small molecule anti-TNF inhibitor compound for the treatment of inflammatory diseases
:: α2β1 integrin inhibitor for the treatment of thrombosis, cancer and inflammatory diseases.

The company aims at entering into a licensing agreement with a collaboration partner for European rights of nalmefene during 2005. In the recombinant oral heparin project BioTie and Aventis are continuing the work aiming to optimize the development compound. The current agreement with Aventis is in force until 31.3.2005.

The company does not expect to receive milestone payments from agreement with Seikagaku Corporation and Somaxon Pharmaceuticals during 2005.

Operating cost are expected to remain approximately at the same level as in 2004. The company is assessing different options for financing of its operations.

THE BOARD OF DIRECTORS PROPOSAL FOR HANDLING OF THE LOSS

The Board of Directors proposes that no dividend from the financial year 2004 will be paid, and that the loss of the financial year EUR -7,083,023.72 will be transferred to shareholders´ equity.

Income Statement

1 000 €	Group 1.1.-31.12.2004	Group 1.1.-31.12.2003	Parent company 1.1.-31.12.2004	Parent company 1.1.-31.12.2003
Revenues	**4 457**	**2 243**	**4 457**	**2 243**
Cost of sales	0	0	0	0
Gross profit	4 457	2 243	4 457	2 243
Research and development expenses	-9 244	-11 888	-9 244	-11 888
General and administrative expenses	-2 921	-3 082	-2 921	-3 082
Merger goodwill depreciation	0	0	-624	-477
Consolidation goodwill depreciation	-624	-477	0	0
Other operating income	1 253	1 542	1 253	1 542
Other operating expenses	0	-734	0	-734
Operating profit (loss)	**-7 080**	**-12 395**	**-7 080**	**-12 395**
Financial income and expenses	214	180	214	180
Profit (loss) before extraordinary items	**-6 866**	**-12 215**	**-6 866**	**-12 215**
Extraordinary items +/-	0	0	0	0
Profit (loss) before appropriations and taxes	**-6 866**	**-12 215**	**-6 866**	**-12 215**
Taxes	-217	-218	-217	-218
Net income (loss)	**-7 083**	**-12 433**	**-7 083**	**-12 433**

Balance Sheet

1 000 €	Group 31.12.2004	Group 31.12.2003	Parent company 31.12.2004	Parent company 31.12.2003
ASSETS				
Fixed assets and other long-term investments				
Intangible assets	1 347	1 633	1 347	1 633
Merger goodwill	0	0	0	626
Consolidation goodwill	0	626	0	0
Tangible assets	149	249	149	249
Investments	10	10	19	19
	1 505	**2 518**	**1 514**	**2 527**
Current assets				
Current receivables	1 147	1 090	1 147	1 090
Securities	4 170	8 985	4 170	8 985
Cash in hand and at banks	2 863	1 437	2 854	1 429
	8 180	**11 512**	**8 172**	**11 504**
Total	**9 686**	**14 030**	**9 686**	**14 030**
EQUITY AND LIABILITIES				
Shareholders´ equity				
Share capital	878	874	878	874
Share premium fund	13	21 899	13	21 899
Retained earnings	-5 404	-14 870	-5 404	-14 870
Net income for the period	-7 083	-12 433	-7 083	-12 433
Capital loans	13 336	10 958	13 336	10 958
	1 739	**6 428**	**1 740**	**6 428**
Mandatory provisions	23	450	23	450
Liabilities				
Long-term debt	6 210	5 885	6 210	5 885
Current liabilities	1 714	1 267	1 714	1 267
	7 923	**7 152**	**7 923**	**7 152**
Total	**9 686**	**14 030**	**9 686**	**14 030**

Cash Flow

1 000 €	Group 1.1.-31.12.2004	Group 1.1.-31.12.2003	Parent company 1.1.-31.12.2004	Parent company 1.1.-31.12.2003
Cash flow from operating activities				
Operating profit	-7 080	-12 395	-7 080	-12 395
Depreciation	1 067	1 081	1 067	1 081
Taxes	-217	-218	-217	-218
Change in mandatory provisions	-427	423	-427	423
Change in working capital	389	-1 071	389	-1 071
Financial income and expenses	214	180	214	180
Net cash from operating activities	-6 055	-12 000	-6 055	-12 000
Cash flow from investing activities				
Capital expenditure	-54	-57	-54	-57
Net cash used in investing activities	-54	-57	-54	-57
Cash flow before financing activities	-6 109	-12 057	-6 109	-12 057
Cash flow from financing activities				
Change in long-term debt	2 703	3 304	2 703	3 304
Share issue	17	10 485	17	10 485
Net cash from financing activities	2 719	13 788	2 719	13 788
Net increse (+) or decrese (-) in cash and cash equivalents	-3 390	1 731	-3 390	1 731
Cash and cash equivalents at the beginning of the period	10 422	8 691	10 414	8 682
Cash and cash equivalents at the end of the period	7 033	10 422	7 024	10 414

ACCOUNTING PRINCIPLES

Biotie Therapies Corporation's financial statements have been prepared in accordance with Finnish legislation, which in all material respects is based on the provisions of EU Directives 4 and 7.

The scope of consolidated financial statements

The financial statements include the subsidiary Biotie Therapies International Ltd, which has been consolidated by using the acquisition cost method. The intra-group transactions have been eliminated.

Research and development costs

Research and development costs are charged as expenses during the year in which they occur.

Fixed assets

Fixed assets have been recorded in the balance sheet at their direct acquisition cost, allowing for depreciation according to plan. Depreciation is based on estimated useful life of various assets as follows:

	Useful life (years)	*Depreciation method*
Machinery and equipment	4	Straight-line depreciation
Computer programs	4	Straight-line depreciation
Patents	10	Straight-line depreciation
Consolidation goodwill	3	Straight-line depreciation

Computer programs and equipment used in R&D are fully depreciated during the year they are acquired in accordance with the Act on Taxation of Business income.

Leasing

Leasing payments are charged to rental expense. The company has no significant lease contracts. Leasing commitments are disclosed in the notes to financial statements.

Mandatory provisions

Mandatory provisions in the balance sheet are defined as commitments related to the current or prior financial years which on the balance sheet are certain or likely to materialize, but there is uncertainty as to the amount or the timing of the obligation. The estimated provisions are based on information available on the balance sheet date.

Pension liabilities

The pension plan has been arranged with external insurance companies. Pension costs are included in personnel costs.

Subsidies

R&D subsidies are presented in other operating income or in the balance sheet.

Foreign currency

Receivables and liabilities in foreign currencies have been valued at the closing rate of the balance sheet date.

1 000 €	Group 1.1. – 31.12.2004	Group 1.1. – 31.12.2003	Parent company 1.1. – 31.12.2004	Parent company 1.1. – 31.12.2003
1. REVENUES				
Aventis-collaboration and option agreement	2 000	0	2 000	0
Somaxon-licensing agreement	2 475	0	2 457	0
Seikagaku-licensing agreement	0	2 178	0	2 178
Service business	0	65	0	65
Total	4 457	2 243	4 457	2 243
2. PERSONAL COSTS				
Wages and salaries	2 281	3 604	2 281	3 604
Pension expenses	351	519	351	519
Other personnel expenses	222	225	222	225
Total	2 854	4 348	2 854	4 348
Salaries to president and remuneration of board members	263	246	263	246
The average number of peronnel	47	66	47	66
Personnel at the end of period	46	55	46	55
3. DEPRECIATION				
Intangible rights	310	420	310	420
Merger goodwill	0	0	626	0
Consolidation goodwill	626	477	0	477
Intangible rights, R&D	1	7	1	7
Machinery and equipment	115	173	115	173
Machinery and equipment, R&D	15	3	15	3
Total*)	1 067	1 081	1 067	1 081
*) of which related to R&D computer programs and equipment	17	10	17	10
4. OTHER OPERATING INCOME				
Research and development subsidies from The National Technology Agency (Tekes)	891	1 285	891	1 285
Research and development subsidies of EU	94	60	94	60
Ministry of Trade and Industry	7	0	7	0
Rents	250	175	250	175
Other	11	22	11	22
Total	1 253	1 542	1 253	1 542
5. OTHER OPERATING EXPENSES				
Costs from the share issues	0	734	0	734
Total	0	734	0	734
6. FINANCIAL INCOME AND EXPENSES				
Interest income	274	237	274	237
Other financial income	0	1	0	1
Interest expenses	-60	-55	-60	-55
Other financial expenses	0	-2	0	-2
Total	214	180	214	180

7. FIXED ASSETS AND OTHER LONG-TERM INVESTMENTS

Group = Parent company	Other long-term investments	Intangible assets	Intangible assets R&D	Machinery and equipment
Historical cost on 1.1.2004	1 098	3 058	833	899
Capital expenditure 1.1.–31.12.	0	24	1	14
Historical cost on 31.12.2004	1 098	3 082	834	913
Accumulated depreciation	-1 098	-1 425	-833	-650
Total before depreciation	0	1 657	1	263
Depreciation	0	-310	-1	-115
Net book value on 31.12.2004	0	1 347	0	149

Group = Parent company	Machinery and equipment R&D	Consolidation/ Merger goodwill	Total
Historical cost on 1.1.2004	1 282	1 431	8 600
Capital expenditure 1.1.–31.12.	15	0	54
Historical cost on 31.12.2004	1 297	1 431	8 654
Accumulated depreciation	-1 282	-805	-6 092
Total before depreciation	15	626	2 562
Depreciation	-15	-626	-1 067
Net book value on 31.12.2004	0	0	1 495

8. GROUP COMPANIES		**2004**	**2003**
Biotie Therapies International Ltd, Turku	Book value 9	100%	100%
Ownership in partner companies			
Contral America Inc., USA		25%	25%

1 000 €	Group 1.1. - 31.12.2004	Group 1.1. - 31.12.2003	Parent company 1.1. - 31.12.2004	Parent company 1.1. - 31.12.2003
9. CURRENT RECEIVABLES				
VAT-receivables	159	90	159	90
Other receivables	75	53	75	53
Prepaid expenses and accrued income*)	914	947	914	947
Total	1 147	1 090	1 147	1 090
*) of which R&D subsidy	544	768	544	768
10. SHORT-TERM INVESTMENTS				
Market value	4 255	9 171	4 255	9 171
Book value	4 170	8 985	4 170	8 985
Difference	85	186	85	186

1 000 €	Group 1.1. - 31.12.2004	Group 1.1. - 31.12.2003	Parent company 1.1. - 31.12.2004	Parent company 1.1. - 31.12.2003
11.SHAREHOLDERS´ EQUITY				
Share capital at the beginning of the period	874	349	874	349
Share issue		524		524
Share subscription with option rights	4		4	
Share capital at the end of the period	878	874	878	874
Share premium fund at the beginning of the period	21 899	23 661	21 899	11 938
Transfer from retained earnings		-11 723		
Share issue		9 960		9 960
Transfer from retained earnings	-21 899		-21 899	
Share subscription with option rights	13		13	
Share premium fund at the end of the period	13	21 899	13	21 899
Retained earnings at the beginning of the period	-27 303	-26 593	-27 302	-14 870
Transfer from share premium fund	21 899	11 723	21 899	
Retained earning at the end of the period	-5 404	-14 870	-5 404	-14 870
Net income (loss) for period	-7 083	-12 433	-7 083	-12 433
Capital loans at the beginning of the period	10 958	8 288	10 958	8 288
Change during period	2 377	2 670	2 377	2 670
Capital loans at the end of the period	13 336	10 958	13 336	10 958
Shareholders´equity, total	**1 739**	**6 428**	**1 740**	**6 428**
Distributable funds at the end of the period	-12 487	-27 303	-12 487	-27 303

Changes in numbers of shares and share capital

Measure	Par value/ Accounting equivalent value (EUR)	Subscribtion price (EUR)	Number of shares before	Number of shares after	Change in share capital (EUR)	New share capital (EUR)	Registered[1)]
Foundation	1,68	1,68	0	20 000	33 638	33 638	11.5.1998
New issue	1,68	67,28	20 000	25 500	9 250	42 888	6.5.1999
New issue	1,68	84,10	25 500	27 100	2 691	45 579	8.10.1999
Split 1:10	0,17	–	27 100	271 000	–	45 579	12.6.2000
Share subscription with option rights	0,17	0,17	271 000	320 600	8 342	53 921	15.8.2000
Merger compensation	0,17	0,17	320 600	686 755	61 583	115 504	21.2.2001
New issue	0,17	100,00	686 755	761 755	12 614	128 118	29.5.2001
Share subscription with option rights	0,17	0,17	761 755	762 375	104	128 222	29.5.2001
New issue	0,17	101,00	762 375	801 978	6 661	134 883	10.1.2002
Bonus issue	0,18	–	801 978	801 978	9 473	144 356	3.6.2002
Split 1:9	0,02	–	801 978	7 217 802	–	144 356	3.6.2002
Share subscription with option rights	0,02	0,02	7 217 802	7 648 722	8 618	152 974	3.6.2002
Conversion of interest debt	0,02	5,60	7 648 722	7 704 072	1 107	154 082	8.10.2002
New issue, Institutional Offering	0,02	5,60	7 704 072	10 401 922	53 957	208 038	8.10.2002
Consolidation of BioTie	0,02	2,38	10 401 922	17 033 722	132 636	340 675	31.10.2002
Consolidation of Carbion	0,02	2,38	17 033 722	17 459 559	8 517	349 191	31.10.2002
Share subscription with option rights	0,02	0,02	17 459 559	17 474 559	300	349 491	30.4.2003
New issue	0,02	0,40	17 474 559	43 686 397	524 237	873 728	26.6.2003
Share subscription with option rights	0,02	0,02	43 686 397	43 850 497	3 282	877 010	6.2.2004
Share subscription with option rights	0,02	0,35	43 850 497	43 889 233	775	877 785	8.9.2004
Share subscription with option rights	0,02	0,02	43 889 233	43 907 436	364	878 149	29.12.2004

1) *Date refers to date of registration in the Trade Register maintained by the National Board of Patents and Registration*

1.860 shares were subscribed on 31.12.2004. The corresponding increase in share capital will be registered during 2005.

Non-convertible capital loans
The National Technology Agency (TEKES) has granted capital loans of EUR 13,819,958.41. EUR 10,835,834.41 have been paid to the company by the end of the financial year. EUR 10,813,045.41 have been recorded as capital loans and EUR 22,789.00 as long-term liabilities. The amount recorded as long-term liabilities will be booked as capital loans as soon as the approved expenses are accrued and settlement concerning expenses has been approved.

The loan period is 8 years. The interest rate is the base rate set by the Ministry of Finance minus 1%, however, at least 3%. The loans are instalment-free for 4 or 5 years, after that loans will be paid in equal shares. Accumulated interests on capital loans are recorded as expenses in the financial statement and as increase of long-term liabilities in the balance sheet until end of the year 2001.

Convertible bonds
The company had a convertible bond of EUR 2,522,818.90. The subscription period that entitles to subscribe a total of 1,278,000 shares of the company, began on June 1, 2000, and will end on December 31, 2005. Or, provided that the loan capitals will not be paid by then, until the loan capitals have been paid or converted into shares of the company. Par value of the shares is in total EUR 25.560. The interest rate is 10% pa. Accumulated interest of convertible bonds, EUR 1,528,884.29 is not recorded to financial statement.

1 000 €	Group 31.12.2004	Group 31.12.2003	Parent company 31.12.2004	Parent company 31.12.2003
Accumulated interest on capital loans	2 494	1 708	2 494	1 708
Recorded as expenses	176	176	176	176
Total	2 670	1 884	2 670	1 884

12. OPTIONS (STATUS 31.12.2004)

1. Options 1998

Number of option rights, total	12 000
Subscribed	12 000
Shares subscribed	12 000
Option rights remaining	0
Entitling to subscribe a total of 0 shares	
Subscription period	1.1.2000–31.12.2004
Subscription terms	90 shares for one option right 1 share for EUR 0.02

2. Options 2000 I

Number of option rights, total	560
Subscribed	560
Shares subscribed	0
Option rights remaining	560
Entitling to subscribe a total of 50 400 shares	
Subscription period	31.8.2003–31.12.2004
Subscription terms	90 shares for one option right 1 share for EUR 6.33

3. Options 2000 II

Number of option rights, total	1 100
Subscribed	1 100
Shares subscribed	0
Option rights remaining	1 100
Entitling to subscribe a total of 99 000 shares	
Subscription period	A-series (550): 31.8.2002–31.12.2004 B-series (550): 1.9.2003–31.12.2004
Subscription terms	90 shares for one option right 1 share for EUR 6.33

4. Options 2002 I

Number of option rights, total	12 000
Subscribed	12 000, of which 3 000 cancelled
Shares subscribed	0
Option rights remaining	9 000
Entitling to subscribe a total of 81 000 shares	
Subscription period	C-series (4500): 1.5.2004–1.5.2005 D-series (4500): 1.10.2005–1.10.2006
Subscription terms	9 shares for one option right 1 share for EUR 6.78

5. Options 2002 II

Number of option rights, total	38 736
Subscribed	38 736
Shares subscribed	38 736
Option rights remaining	0
Entitling to subscribe a total of 0 shares	
Subscription period	1.1.2003–31.3.2006
Subscription terms	1 shares for one option right 1 share for EUR 0.35

6. Options 2002 III

Number of option rights, total	475 291
Subscribed	475 291
Shares subscribed	0
Option rights remaining	475 291
Entitling to subscribe a total of 475 291 shares	
Subscription period	A-series (178 721): 1.11.2002-31.12.2005
	B-series (170 087): 1.1.2003-31.12.2005
	C-series (63 241): 1.1.2003-31.12.2005
	D-series (63 242): 1.1.2004-31.12.2005
Subscription terms	1 shares for one option right
	A and B sarja: 1 share for EUR 4.32
	C and D sarja: 1 share for EUR 10.74

7. Options 2004

Number of option rights, total	2 000 000
Subscribed	2 000 000
Shares subscribed	0
Option rights remaining	2 000 000
Entitling to subscribe a total of 2 000 000 shares	
Subscription period	A-series (800 000): 1.1.2005-31.12.2009
	B-series (600 000): 1.1.2006-31.12.2009
	C-series (600 000): 1.1.2007-31.12.2009
Subscription terms	1 shares for one option right
	A series: 1 share for EUR 0.90
	B series: 1 share for EUR 0.98
	C series: 1 share for EUR 1.07

1 000 €	Group 1.1. - 31.12.2004	Group 1.1. - 31.12.2003	Parent company 1.1. - 31.12.2004	Parent company 1.1. - 31.12.2003
13. MANDATORY PROVISIONS				
Provision for social costs, option program	1	0	1	0
Rents for unutilized premises	22	27	22	27
Costs for closure of the operations in Viikki	0	423	0	423
Total	23	450	23	450
14. LONG-TERM LIABILITIES				
Loans from The National Technlogy Agency (Tekes)	6 033	5 708	6 033	5 708
Interest of Capital loans	176	176	176	176
Total	6 210	5 885	6 210	5 885

15. INSTALMENTS OF CAPITAL LOANS AND LONG-TERM LIABILITIES

	Capital loans	Long-term liabilities	Total
Due next year	5 333	0	
Due next 2-5 years	5 220	2 816	
Due after 5 years	2 784	3 218	
Total	13 336	6 033	19 369

16. CURRENT LIABILITIES				
Advances received	23	43	23	43
Accounts payable	766	502	766	502
Other debts	473	72	473	72
Accrued expenses and prepaid income*)	451	651	451	651
Total	1 714	1 267	1 714	1 267
*) of which accrued vacation pay	314	386	314	386
17. CONTINGENT LIABILITIES				
Due next year	211	280	211	280
Due later on	201	172	201	172
Total	411	451	411	451

18. DEFERRED TAX RECEIVABLES

Deferred tax assets arising from previous years´losses are not recorded in the balance sheet

19. OWN SHARES

The parent company of the group possesses 819 000 own shares at EUR 0,92 per share, the market value of the shares was EUR 753.480 at the end of the financial period. The company has received the shares in the merger with Contral Clinics. The shares are not recorded in the balance sheet.

PROPOSAL TO THE ANNUAL GENERAL MEETING

The Board of Directors proposes to transfer the loss EUR -7 083 023,72 of the period to retained earnings.

Helsinki, January 26, 2005

Hannu Hanhijärvi
Chairman of the Board

Jari Saarinen
President and CEO

Juha Jouhki

Riku Rautsola

Piet Serrure

AUDITOR'S REPORT

To the shareholders of Biotie Therapies Corp.

We have audited the accounting, the financial statements and the corporate governance of Biotie Therapies Corp. for the period 1.1. - 31.12.2004. The financial statements, which include the report of the Board of Directors, consolidated and parent company income statements, balance sheets and notes to the financial statements, have been prepared by the Board of Directors and the President and CEO. Based on our audit we express an opinion on these financial statements and on corporate governance of the parent company.

We have conducted the audit in accordance with Finnish Standards on Auditing. Those standards require that we perform the audit to obtain reasonable assurance about whether 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, assessing the accounting principles used and significant estimates made by the management as well as evaluating the overall financial statement presentation. The purpose of our audit of corporate governance is to examine that the members of the Board of Directors and the President and CEO of the parent company have legally complied with the rules of the Companies' Act.

In our opinion the financial statements have been prepared in accordance with the Accounting Act and other rules and regulations governing the preparation of financial statements. The financial statements give a true and fair view, as defined in the Accounting Act, of both the consolidated and parent company's result of operations as well as of the financial position. The financial statements with the consolidated financial statements can be adopted and the members of the Board of Directors and the President and CEO of the parent company can be discharged from liability for the period audited by us. The proposal by the Board of Directors regarding the distributable assets is in compliance with the Companies' Act.

Turku February 4, 2005

PricewaterhouseCoopers Oy
Authorised Public Accountants

Johan Kronberg
APA

Tomi Moisio
APA

Key Figures

1 000 €	1.1.2004 - 31.12.2004 12 months	1.1.2003 - 31.12.2003 12 months	1.1.2002 - 31.12.2002 12 months	1.1.2001 - 31.12.2001 12 months	1.1.2000 - 31.12.2000 12 months
BUSINESS DEVELOPMENT					
Revenues	4 457	2 243	153	173	0
Personnel on average	47	66	115	32	9
Personnel at end of the period	46	55	112	44	10
Research and development expenses	9 244	11 888	21 541	6 333	3 478
Capital expenditure	54	57	1 090	729	10
PROFITABILITY					
Operating profit (loss)	-7 080	-12 395	-26 256	-6 684	-3 059
as percentage of revenues, %	-158,90	-552,60	-17 177,50	-3 863,60	-
Profit (loss) before extraordinary items	-6 866	-12 215	-25 916	-6 497	-3 088
as percentage of revenues, %	-154,10	-544,50	-16 954,80	-3 755,50	-
Profit (loss) before taxes	-6 866	-12 215	-26 236	-6 497	-3 088
as percentage of revenues, %	-154,10	-544,50	-17 164,70	-3 755,50	-
BALANCE SHEET					
Cash and cash equivalents	7 033	10 422	8 691	6 276	2 013
Shareholders´equity	1 739	6 428	5 706	6 951	299
Balance sheet total	9 686	14 030	13 520	7 934	2 684
FINANCIAL RATIONS					
Return on equity, %	-	-	-	-	-
Return on capital employed, %	-66,8	-103,9	-288,5	-174,1	-245,8
Equity ratio, %	-119,7	-32,3	-19,1	22,0	-163,1
Gearing, %	-106,4	-138,0	-181,0	-57,4	-60,8
PER SHARE DATA					
Earing per share (EPS), €	-0,16	-0,40	-2,49	-0,85	-0,99
Shareholders´equity per share, €	-0,26	-0,10	-0,13	0,22	-1,24
Dividend per share, €	-	-	-	-	-
Pay-out ratio, %	-	-	-	-	-
Effecting dividend yield, %	-	-	-	-	-
P/E ratio	-	-	-	-	-
Share price					
- Lowest share price, €	0,72	0,40	0,67		
- Highest share price, €	1,50	1,61	2,66		
- Average share price, €	1,14	0,71	1,13		
- 1.12. share price, €	0,92	0,80	0,67		
Market capitalization, mill.€	40,4	34,9	11,7		
Trade of shares					
- Number of shares traded	17 561 900	12 189 112	446 478		
- As percentage of all shares, %	40,0	27,9	2,6		
Adjusted weighted average number of shares during the period	43 864 315	31 116 906	10 376 551	7 268 435	3 061 227
Adjusted weighted average number at the end of the period	43 907 436	43 686 397	19 399 508	8 019 779	3 458 889
Adjusted weighted average number of shares during the period, fully diluted	47 784 186	33 336 433	9 574 876		
Adjusted number of shares at the end of the period, fully diluted	47 891 127	45 905 924	17 559 570		

Formulas For The Calculation Of The Financial Ratios

In the following formulas capital loans are included in terest bearing liabilities and not in shareholders´equity

Return on equity %

$$\frac{\text{Profit (loss) before extraordinary items - taxes}}{\text{Shareholders´equity - capital loan}} \times 100$$

Return on capital employed %

$$\frac{\text{Profit (loss) before taxes + interest expenses and other financial expenses}}{\text{Balance sheet total - advances received}} \times 100$$

Equity ratio %

$$\frac{\text{Shareholders´equity}}{\text{Balance sheet total -advances received}}$$

Gearing %

$$\frac{\text{Interes bearing liabilities -cash and cash equivalents}}{\text{Shareholders´equity}}$$

Earnings per share (EPS)

$$\frac{\text{Profit before extraordinary items, appropriations and taxes - minority interest - taxes}}{\text{Adjusted average number of shares during the period}}$$

Shareholders´equity per share

$$\frac{\text{Shareholders´ equity}}{\text{Adjusted average number of shares during the period}}$$

Dividend per share

$$\frac{\text{Dividends paid for the fiscal year}}{\text{Adjusted number of shares at the end of the period}}$$

Pay-out ratio

$$\frac{\text{Dividends paid for the fiscal year}}{\text{Profit before taxation - income taxes - minority interests}} \times 100$$

Effectice dicidend yield

$$\frac{\text{Dividend per share}}{\text{Average share price at the end of the period}} \times 100$$

P/E Ratio

$$\frac{\text{Average share price ath teh end of the period}}{\text{Earnings per share (EPS)}}$$

Share Capital And Shares

The shares of Biotie Therapies Corp. are traded in the NM List of the Helsinki Exchanges. All the shares are of the same type and carry identical rights. All the shares can be transferred freely and each share produces one vote. The counter book value of each share is EUR 0.02.

The share capital of Biotie Therapies Corp. increased during the financial year by EUR 4 421 through subscriptions made on the basis of option rights to EUR 878 149, and the number of shares by 221 039 to 43 907 436 shares. In addition on December 31, 2004 1 860 shares were subscribed based on option rights. The corresponding increase of share capital will be registered during 2005.

In accordance with the Articles of Association, the minimum number of shares is 10 000 000 and the maximum 100 000 000 shares.

LISTING AND TICKER CODE

The share of the company was transferred from the Prelist to the NM List of the Helsinki Exchanges on October 8, 2003. The share's ticker code is BTH1V and the lot size in NM List of the Helsinki Exchanges is 100 shares.

BIOTIE'S SHARE PRICE DEVELOPMENT

At the end of the financial year, BioTie's share price was EUR 0.92, the highest price was EUR 1.50 and the lowest EUR 0.72. The average rate was EUR 1.14. BioTie's market capitalization at the beginning of the financial year was EUR 35 million and at the end of the financial year EUR 40 million.

The average monthly trading during the financial year was 1 463 492 shares. The value of shares traded during the financial year totaled EUR 20 million. The Finnish taxation value of BioTie's shares in 2004 was EUR 0.64 per share.

THE BOARD'S AUTHORITY TO INCREASE SHARE CAPITAL AND TRANSFER THE COMPANY'S OWN SHARES

The Board of Directors' authorization to issue shares is valid until March 24, 2005. The share capital can be increased on authorization by a maximum of EUR 154 000 i.e. 7 700 000 shares. The Board of Directors has the authorization to assign the company's own shares up to March 24, 2005. The authorization covers the 819 000 shares possessed by the company.

SHAREHOLDERS

At the end of the financial year, BioTie's shareholders numbered 4 968 (compared to 3740 shareholders in the beginning of 2004). The ten largest shareholders owned 65.85 % of the shares. The number of nominee-registered and foreign-registered shares totaled 242 369 shares i.e. 0.6 % of the shares.

BOARD OF DIRECTORS' AND PRESIDENT'S HOLDINGS

The Members of the Board of Directors and the President own altogether 897 970 shares of BioTie, i.e. 2.1 % of the total number of shares. Furthermore, based on option rights, they may subscribe for a maximum of (300.000) shares which would represent 0.7 % of the shares. The Members of the Board of Directors and the President would jointly hold 2.6 % of the shares if their option rights were exercised.

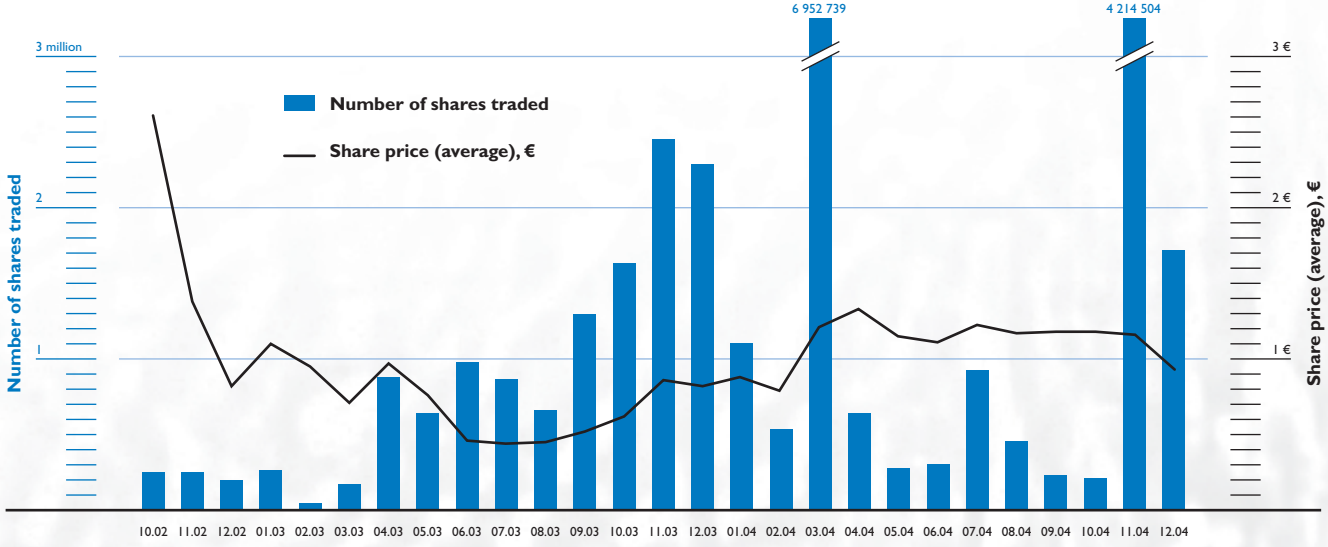
OPTION SCHEMES

Biotie Therapies Corp. has issued option rights by 31.12.2004 pursuant to a total of seven different option programs. As a result of these option rights, the share capital of BioTie may be increased by a maximum of EUR 54 113.82, corresponding 2 705 691 shares.

INSIDERS

The company follows the insider directives of the Helsinki Exchanges that entered into force on March 1, 2000.

TRADING VOLUME AND AVERAGE TRADING PRICE OF BIOTIE'S SHARES, OCT 31, 2002 – DEC. 31, 2004



THE TEN LARGEST SHAREHOLDERS OF BIOTIE ON 17 JANUARY, 2005

	Shareholder	Number of shares	% of shares
1	FINNISH INDUSTRY INVESTMENT LTD	10 604 102	24.61
2	FINNISH FUND FOR RESEARCH AND DEVELOPMENT (SITRA)	9 924 566	23.03
3	Funds administred by BioFund Management Oy:		
	BIO FUND VENTURES III KY	1 785 715	4.14
	BIO FUND VENTURES I KY	972 683	2.26
4	DREADNOUGHT FINANCE OY	992 316	2.30
5	JOUHKI JUHA HEIKKI TAPIO	897 970	2.08
6	Funds administred by Aboa Venture Management Oy:		
	ABOA VENTURE KY 1	542 142	1.26
	ABOA VENTURE KY II	336 747	0.78
	GANAL VENTURE KY	7 906	0.02
	KARHU PÄÄOMARAHASTO KY	7 871	0.02
7	THE LOCAL GOVERNMENT PENSIONS INSTITUTION	834 581	1.94
8	OY H. KUNINGAS & CO AB	551 564	1.28
9	THOMINVEST OY	487 500	1.13
10	LASSILA MARKUS KALERVO	398 901	0.93
TEN LARGEST SHAREHOLDERS, TOTAL		**28 344 564**	**65.78**
	Other shareholders	14 743 872	34.22
	Total shares issued	43 088 436	100.00
	Then number of the company's own shares held by Biotie Therapies Corp. is 819 000.	819 000	

DISTRIBUTION OF SHAREHOLDERSDECEMBER 31, 2004

Number of shares	Shareholders	% of shares
1-500	2 565	1.30
501-1000	808	1.58
1001-10000	1 388	10.63
10001-100000	175	10.87
100001-500000	22	11.80
500001-	10	63.70
Total	**4 968**	**99.88**
In joint account		0.13

TYPE OF SHAREHOLDERS DECEMBER 31, 2004

	% of shares
Corporations	43.87
Financial and insurance institutions	3.04
Public entities	2.02
Households	26.79
Non-profit organizations	24.07
Foreign	0.08
Nominee registered	0.47

Main Stock Exchange Releases In 2004 In Brief

January 14,2004
Decision of the board of directors to issue a new option scheme
The option rights shall entitle the holder to subscribe for a maximum of 2 000 000 new shares of Biotie Therapies Corp. in the aggregate. Due to the subscriptions the share capital of the company may increase by a maximum of EUR 40 000.

January 29,2004
BioTie finanlizes co-determination procedure concerning it's unit in Viikki
As the final phase of the company's efficiency improvement program, Biotie Therapies Corp. is focusing its operations to Turku. The program was initiated by the merger of BioTie, Contral Pharma and Carbion at the end of 2002. The unit at Viikki, Helsinki, will be closed down as the company focuses its operations to Turku. A total of 16 people have been employed in discovery phase research and support functions at the Viikki unit. The employment agreement of 14 employees has been terminated after the conclusion of the co-determination procedure.

March 9, 2004
BioTie signs research, development and collaboration agreement with Aventis
BioTie announced the signing of a commercial research and option agreement with Aventis for the joint development of a new pharmaceutical product for the prevention and treatment of blood coagulation disorders. Under the terms of the agreement, BioTie has granted Aventis an exclusive right to negotiate a license agreement as well as to assess and conduct clinical research on the BioTie developed products. For this exclusive option Aventis has agreed to pay BioTie during the next twelve months 5 million euros in signing fee and milestone payments. The signing fee is payable once the agreement has entered into force, and milestone payments are payable in accordance with jointly agreed development milestones. BioTie and Aventis are now aiming to optimise this NCE, which is designed to become a recombinant oral heparinoid.

March 24, 2004
BioTie reaches first milestone in the BioTie-Aventis co-operation agreement
In consideration of the exclusive rights granted by BioTie to Aventis, BioTie has received confirmation that it has reached the first milestone agreed in the Co-operation agreement signed on March 9, 2004. Consequently, Aventis will pay BioTie EUR 1 million milestone payment in addition to the signing fee (EUR 1 million) during April 2004, totaling EUR 2 million.

July 5, 2004
The National Technology Agency (Tekes) finances BioTie's integrin project with EUR 1.4 million
The National Technology Agency (Tekes) has granted additional funding EUR 1.4 million for BioTie's Integrin project. The R&D subsidy granted in June covers drug development costs of the project from March 2004 to February 2006. The funding granted covers 50 per cent of the costs of the project.

November 12,2004
BioTie enters into a licensing agreement with Somaxon Pharmaceuticals for the North American rights to nalmefene
BioTie and Somaxon Pharmaceuticals announced that Somaxon has exercised its option to license nalmefene in North America. The companies signed a cooperation and option agreement on nalmefene in July 2004. Under the terms of the agreement, BioTie has granted Somaxon an exclusive license in North America to clinically develop, manufacture and market nalmefene for the treatment of impulse control disorders, alcoholism and alcohol abuse and nicotine dependence. Somaxon intends to initially develop nalmefene for the treatment of patho-logical gambling in the United States and plans to initiate pivotal phase III clinical trials in 2005. Currently, there is no approved pharmacological treatment for pathological gambling in the United States.

Somaxon will pay BioTie USD 3 million as license fee and up to USD 10 million in milestone payments for the lead indication, pathological gambling, subject to achieving certain development milestones. BioTie will receive additional milestone payments if nalmefene is developed for additional indications. Somaxon has already paid BioTie an option fee of USD 0.2 million in June 2004. Additionally, BioTie will receive royalty on sales of nalmefene in North America if approved by the FDA for indications, where BioTie has IPR protection, including pathological gambling.

November 17, 2004
The National Technology Agency (Tekes) finances BioTie's VAP-1 SSAO small molecule inhibitor program with EUR 3.3 million
The National Technology Agency (Tekes) has granted additional funding EUR 3.3 million for Biotie Therapies' VAP-1 SSAO small molecule inhibitor program. The R&D funding granted covers drug development costs of the project from August 2004 to July 2006. The share of capital loan funding is EUR 2.3 million and share on R&D subsidy EUR 1.0 million. The funding granted covers 50 per cent of the costs of the project.

December 20, 2004
Roche and BioTie collaborate on small molecule VAP-1 inhibitor program
Roche and BioTie signed a collaboration and option agreement to develop BioTie's proprietary small molecule vascular adhesion protein-1 (VAP-1) program targeting inflammatory diseases. Under the terms of the agreement, Roche will contribute its expertise to BioTie's development of VAP-1 small molecule inhibitor candidates. At defined stages, Roche will have exclusive option rights to exclusively license any VAP-1 inhibitor candidate worldwide, excluding Japan, Taiwan, Singapore, New Zealand, and Australia. By extending its option rights to phase IIb, Roche could pay BioTie EUR 5 million and BioTie will retain all rights to any compounds developed until a license is granted to Roche.

Business Model

The revenues of biotechnology and drug development companies comprise of
:: upfront payments
:: milestone payments
:: royalties from the sales of products agreed on in cooperation agreements.

The amount of payments for drug development projects depends on the development stage and market potential of the project, as well as the type of agreement and the scope of the licensed rights.

UPFRONT PAYMENTS

Upfront payments are usually paid upon entering a collaboration agreements. The amount of the upfront payment depends on the project's market potential, development phase, scope of collaboration and the number of potential indications. The payments for an early-stage (preclinical or clinical phase I studies) candidate drug amount to a few million dollars, while the average payments for a candidate drug at a later phase (clinical phase III studies and marketing authorization) amount to tens of millions of dollars. The largest upfront payments have been as high as hundreds of millions of dollars.

MILESTONE PAYMENTS

Milestone payments are made when the compound passes important steps in the development process. Typical milestones include showing the efficacy of the candidate drug in animal tests (so-called Proof of Principle) and completion of phase I and II clinical studies (so-called Proof of Concept) or phase III clinical studies as well as applying for and obtaining marketing authorization.

Milestone payments vary from tens of millions to hundreds of millions of dollars depending on the product's development stage.

ROYALTIES

The flow of sales-related revenues of drug development and biotechnology companies commences after the drug has been launched to the market and the company licensing the drug has started to pay sales royalties to the licensor. Royalties are calculated as percentage of the sales of the product. In many cases, the contracting parties do not publish the royalty percentage.

The amount of royalty varies greatly depending on the development phase of the product. The royalties of early-stage products (discovery phase or phase I clinical studies) vary from a few per cent to ten per cent. The royalties for later-stage products (phase II-III clinical studies and sales authorization) can be as high as tens of per cent.

Glossary

Adhesion
Adhering, clinging together.

Angiogenesis
Formation of new blood vessels (e.g. in cancerous tumors).

Antibody
A protein which is produced by the immune system of humans and higher animals and which binds to a specific antigen (e.g. a microbe).

Antigen
A foreign substance that stimulates an immune response.

Autoimmune disease
A disease where an individual's immune system attacks its own tissues. Tissues under such an attack are damaged in the process. E.g. rheumatoid arthritis.

Bioheparin
Biotechnologically produced heparin.

Biotechnology
The application of biological research techniques for the development of products which improve human health, animal health and agriculture.

Collagen
The most important structural protein of the body. Gives the tissues their structural strength.

Crohn's disease
An inflammatory bowel disease where the inflammation goes through the entire bowel wall in a certain region of the intestine (regional ileitis).

Endothelium
The thin layer of specialized epithelial cells that line the cavities of the heart and the blood and lymph vessels.

Enzyme
A protein that facilitates a biochemical reaction in a cell. In general, these biochemical reactions cannot occur unless the enzyme is present.

Glycosaminoglycan
A sugar compound present in the body.

GMP
Good Manufacturing Practice. A quality assurance system required by authorities and for use in the manufacture of drugs.

Heparin
A drug that prevents the blood from clotting. Structurally, heparin is a linear sulfated polysaccharide.

Inflammation
A reaction focused on a physical, chemical or biological damage, characterized by increased blood flow and increased permeability of blood vessel walls. Clinical symptoms include redness, swelling and pain.

Inflammatory Bowel Disease (IBD)
Inflammatory Bowel Disease, for example, ulcerative colitis and Crohn's disease.

Immune defense
A defense system of the body that eliminates intruders with the purpose to protect the body from pathogens (see autoimmune disease).

Impulse control disorders (ICD)
These disorders include e.g. pathological gambling, kleptomania and pyromania.

Indication
The purpose of use of a drug or the disease for which the drug is used.

Infection
Invasion of the body by pathogens such as bacteria or viruses resulting in an infectious disease. For example, influenza, viral infection of the respiratory tract marked by fever.

Inhibitor
Blocker; a factor that inhibits or slows down e.g. an enzymatic reaction or physiological functions.

Integrin
Intercellular receptor.

Leukocyte
White circulating blood cells, the common name for granulocytes, lymphocytes and monocytes in the blood and connective tissue.

Monoclonal antibody
An antibody produced by identical, cloned cells.

Nalmefene
Studied and used for the treatment of alcoholism, nalmefene acts by blocking opioid receptors in the central nervous system.

Opioid receptor
A receptor in the central nervous system, into which e.g. beta-endorphin binds. Changes in opioid receptor -mediated neurotransmission are important in the development of dependence disorders.

Peptide
Amino acids chained together by peptide bonds.

Polysaccharide
Chain formed by sugar rings.

Protein
A biological molecule consisting of many amino acids chained together by peptide bonds. The sequence of amino acids in a protein is determined by the sequence of nucleotides in a DNA molecule.

Proof of Concept
That stage of drug development confirming that the findings of animal tests are also applicable in humans.

Psoriasis
A chronic skin disease marked by faster than normal growth of keratinocytes. The symptoms include reddish, distinctive lesions covered with scales.

Receptor
A protein usually found on the surface of a cell. It transmits messages into the cell from, e.g. hormones, growth factors or neurotransmitters.

Rheumatoid arthritis
A chronic, autoimmune disease of the joints marked by destruction of tissues particularly in the synovial membranes. Often leads to disability.

Small molecule drugs
Drug substances that have a low molecular weight. Small molecules penetrate cell

membranes and the blood brain barrier more easily than larger molecular weight compounds such as proteins, peptides and carbohydrates. They can usually be administered orally.

Small molecule heparin
A heparin derivative with smaller molecular weight than that of so-called non-fractionated heparin.

SSAO
Semicarbazide-sensitive amine oxidase. The SSAO enzyme of the VAP-1 molecule produces substances that amplify the inflammatory reaction, e.g. hydrogen peroxide.

Synthesis
Manufacture of compounds, e.g. drug substances.

Thrombosis
Blood clot.

VAP-1
Vascular Adhesion Protein-1. An adhesion molecule that mediates white blood cell adhesion and migration from the blood into tissues. VAP-1 also produces substances that amplify the inflammatory reaction through its SSAO enzyme activity. Target for the company's anti-inflammatory drugs.

VAP technology
Focusing on the research of VAP-1 (see VAP-1) protein and factors affecting it. The goal is to develop drug therapies blocking VAP-1 function.

84576 | lahtinen-mantere | 03.05

Biotie Therapies Corp.
Turku Technology Center, BioCity
Tykistökatu 6,
FI-20520 Turku, FINLAND
Telephone +358 2 274 8900
Telefax +385 2 274 8910
www.biotie.com