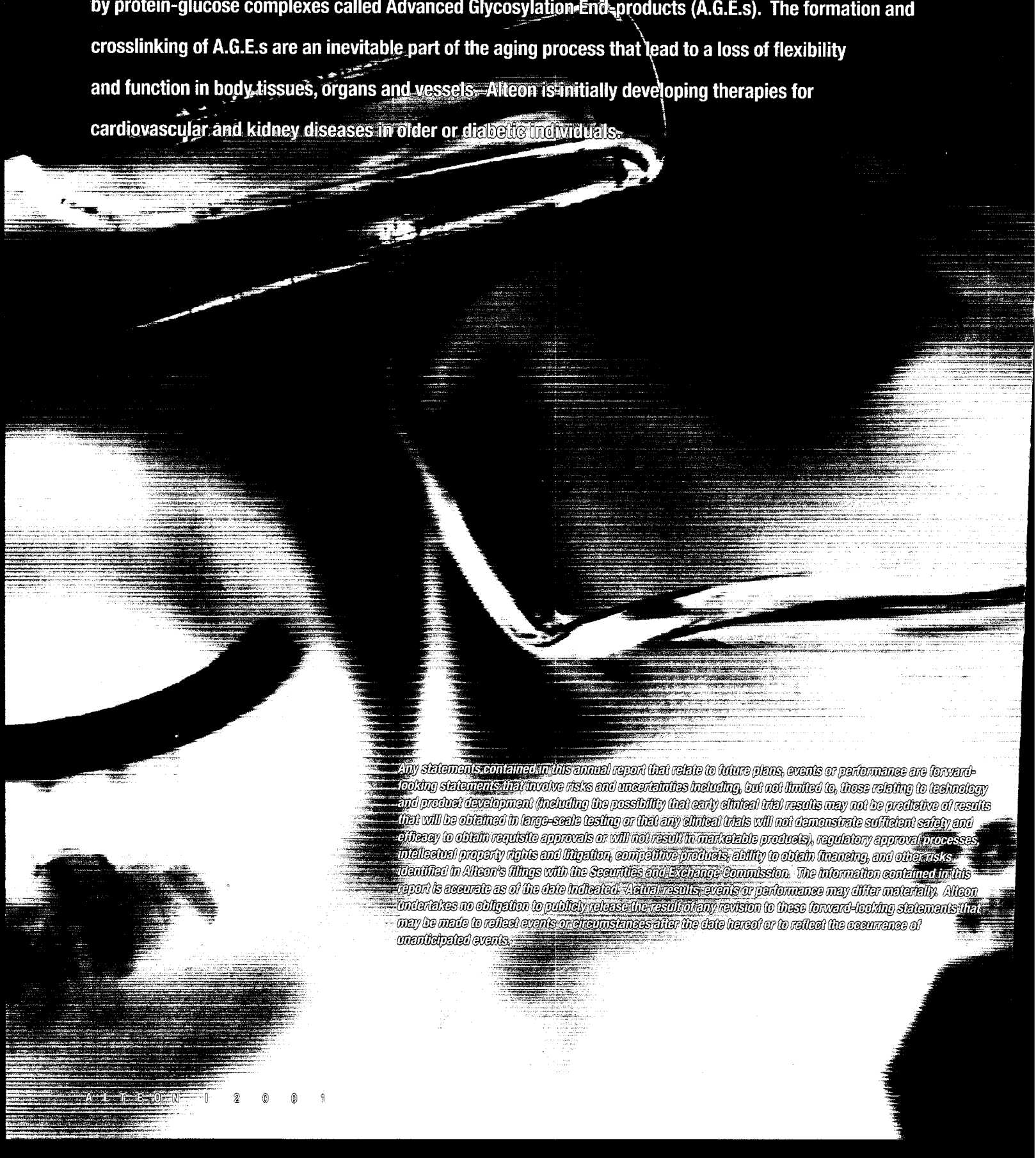
Alteon 2001

About Alteon

Alteon is developing several new classes of drugs that reverse or slow down diseases of aging and complications of diabetes. These compounds impact a fundamental pathological process caused by protein-glucose complexes called Advanced Glycosylation End-products (A.G.E.s). The formation and crosslinking of A.G.E.s are an inevitable part of the aging process that lead to a loss of flexibility and function in body tissues, organs and vessels. Alteon is initially developing therapies for cardiovascular and kidney diseases in older or diabetic individuals.



Any statements contained in this annual report that relate to future plans, events or performance are forward-looking statements that involve risks and uncertainties including, but not limited to, those relating to technology and product development (including the possibility that early clinical trial results may not be predictive of results that will be obtained in large-scale testing or that any clinical trials will not demonstrate sufficient safety and efficacy to obtain requisite approvals or will not result in marketable products), regulatory approval processes, intellectual property rights and litigation, competitive products, ability to obtain financing, and other risks identified in Alteon's filings with the Securities and Exchange Commission. The information contained in this report is accurate as of the date indicated. Actual results, events or performance may differ materially. Alteon undertakes no obligation to publicly release the result of any revision to these forward-looking statements that may be made to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

Dear Shareholders:

2001 marked true progress for Alteon, as we exceeded the clinical milestones and corporate objectives we had set forth at the beginning of the year. Our scientific and clinical pursuits have expanded significantly with the initiation of three ongoing clinical trials of our novel compound, ALT-711, the first A.G.E. Crosslink Breaker. The successful results of the completed Phase IIa trial of ALT-711 were published as "breakthrough information" in a leading peer-reviewed medical journal in September, resulting in increased interest in Alteon and ALT-711 from the scientific community and pharmaceutical industry, as well as from the investment community. Recent financings have provided us with sufficient capital to move forward with the development of this exciting compound and others from our extensive library of A.G.E.-related compounds. We were fortunate to appoint a highly qualified marketing professional to our Board, and recently we added an experienced pharmaceutical commercialization expert to our management team. Operationally and scientifically, we are well on course as we begin another important year.

Alteon's Lead A.G.E. Crosslink Breaker

Early in 2001, we announced positive results from a Phase IIa trial of ALT-711 in hypertensive patients with evidence of vascular stiffening. This data was featured in a late-breaking special session at the March 2001 American College of Cardiology meeting, and designated as "breakthrough information" in the September 25th issue of *Circulation: Journal of the American Heart Association.* ALT-711 was shown to restore the cardiovascular system to a younger state by reversing the stiffening of the arteries that occurs in aging patients, increasing the ability of the diseased large arteries to stretch by 11-18%, equivalent to bringing them 30% back to normal. In addition, treatment with ALT-711 resulted in a statistically significant reduction in pulse pressure. ALT-711 works by "cleaving" the glucose/protein bonds, known as advanced glycosylation end-product (A.G.E.) crosslinks, which accumulate in our body as we age, and are responsible for the progressive loss of flexibility and function of body tissues, organs and vessels. We believe that, through a unique mechanism of action that increases the elasticity of the vessel wall itself, ALT-711 represents a new therapeutic frontier in cardiovascular medicine. We are not aware of any other compound like ALT-711 that is currently prescribed or in clinical development.

The data from the Phase IIa study of ALT-711 supports its potential as a therapy for systolic hypertension, the most common form of hypertension in people over age 50, and the type least likely to be well-managed. This is due, in part, to the fact that of all the currently available drugs for high blood pressure, none can selectively lower systolic pressure without the risk of causing too low a diastolic pressure. Furthermore, not one of these hypertension agents directly acts on the age-related stiffening that causes systolic hypertension.

In August of 2001, an editorial in *The New England Journal of Medicine* stated that the control of hypertension is an important national priority, and that data points to systolic blood pressure (the top number in a blood pressure reading) as significantly more important than diastolic blood pressure (the bottom number) as a determinant of cardiovascular risk in elderly adults. The NEJM editorial suggests that clinical practice needs to shift focus to the management of systolic rather than diastolic hypertension. If successful, we believe that ALT-711 will address this unmet medical need.

ALT-711: Three Clinical Trials Ongoing

Because of the encouraging Phase IIa data on ALT-711, during 2001 we initiated two Phase IIb clinical trials in systolic hypertension: the SAPPHIRE (Systolic And Pulse Pressure Hemodynamic Improvement by Restoring Elasticity) and SILVER (Systolic Hypertension Interaction with Left VEntricular Remodeling) trials. Together, these trials will enroll approximately 630 patients with systolic hypertension at over 60 clinical sites in the U.S. Patients enrolled in these trials must be at least 50 years of age and have a systolic blood pressure of 150 mm Hg or greater, with diastolic pressure of less than 90 mm Hg. In the SILVER trial, patients must also have a thickening of the left ventricle, known as left ventricular hypertrophy or LVH, which occurs when the heart pumps against stiffer arterial walls. Each patient will be treated for six months. The targeted date for completion of both the SAPPHIRE and SILVER trials is around year-end.

As a component of Alteon's clinical strategy in developing ALT-711 for cardiovascular disease, we also initiated a Phase I trial of ALT-711 in patients with end-stage renal disease (ESRD) who are undergoing peritoneal dialysis (PD). PD is a method of dialysis that uses the patient's peritoneum (a membrane in the abdomen) to filter out waste products. This patient population has a limited five-year survival (less than 30%) and significant cardiovascular complications, which are the primary cause of death. We will soon be discussing with the FDA the next steps in moving forward with the development of ALT-711 for this critically ill patient population.

Finally, our clinical group is preparing for another Phase II trial of ALT-711 in cardiovascular disease, focused on diastolic heart failure. We expect to initiate this trial during 2002.

Building the Product Pipeline

With the belief that impacting the A.G.E. pathway will yield pharmaceutical compounds to treat many medical disorders, Alteon has extensively patented its A.G.E.-related compounds. We were the first company to focus its efforts on A.G.E. research, and all of the clinical and pre-clinical data generated thus far confirm the importance of this therapeutic area.

From a library of over 375 A.G.E. Crosslink Breakers, Alteon has also brought forth ALT-744, which is being clinically tested in skin aging as a cosmetic/cosmeceutical. We are conducting pre-clinical research on several other breaker compounds, and are evaluating their potential usefulness in treating other conditions that arise from the loss of flexibility and elasticity.

Key Personnel Additions

In October, we were fortunate to appoint Thomas A. Moore to our Board of Directors. Tom is President and CEO of Nelson Communications Worldwide, a leading healthcare marketing and communications company. He previously served as President of Procter & Gamble's Health Care Products Worldwide and is currently Chairman of the Board of The American Health Foundation.

More recently, we announced the appointment of Judith S. Hedstrom as Senior Vice President, Corporate Development. Judy is responsible for Alteon's commercial development strategy and implementation. She was most recently at McKinsey & Company, Inc., where she was a leader in the Pharmaceutical and Medical Products Practice, serving both large and emerging pharmaceutical clients. With over 20 years in the healthcare industry, Judy's expertise is in product development and commercialization.

Tom and Judy add considerable strength and diversity to the Alteon team, and we are delighted to be working with them.

Recent Financings

Positive Phase IIa data of ALT-711 last year was a pivotal event in a number of ways. Not only did it generate enthusiasm from the scientific community, but it also enabled us to meet our financial objectives by raising sufficient cash for an aggressive ALT-711 Phase IIb development program.

In January of 2002, we raised close to $20 million, including an $18.6 million financing from institutional investors, and $1.2 million through the sale of our New Jersey Net Operating Losses. We began 2002 with approximately $30 million in cash, providing us with the capital to accelerate the ALT-711 clinical plan, and allowing us flexibility in bringing forward other compounds to target the A.G.E. pathway.

Looking Forward

We are at a critical juncture in Alteon's corporate life cycle, and I would like to thank the entire Alteon team for its efforts and enthusiasm as we progress with our important programs. Realizing our goal of seeing our products through development to approval will take diligence and commitment, and I believe we are building a team that can make it happen. I also thank you, our shareholders, for your continued support.

Kenneth I. Moch
Chairman and Chief Executive Officer

April 9, 2002

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2001, or

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number 001-16043

ALTEON INC.

(Exact name of registrant as specified in its charter)

Delaware	**13-3304550**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

170 Williams Drive, Ramsey, New Jersey 07446

(Address of principal executive offices)

(Zip Code)

(201) 934-5000

(Registrant's telephone number, including area code)

Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Exchange On Which Registered
Common Stock, Par Value $.01 per share	American Stock Exchange

Securities Registered Pursuant to Section 12(g) of the Act:

None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes X No ___

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ ]

The aggregate market value of the equity stock held by non-affiliates of the registrant, based on the American Stock Exchange closing price of the Common Stock ($4.25 per share), as of February 20, 2002, was $134,651,713.

At February 20, 2002, 31,764,846 shares of the registrant's Common Stock, par value $.01 per share, were outstanding.

Documents Incorporated By Reference

Document	Where Incorporated
Proxy Statement for 2002 Annual Meeting of Stockholders	Part III

PART I

Item 1. Business.

Overview

We are a product-based biopharmaceutical company primarily engaged in the discovery and development of oral drugs to reverse or inhibit cardiovascular aging and diabetic complications. Our product candidates represent novel approaches to some of the largest pharmaceutical markets. Two of our compounds are in clinical development; several others are in early development. These pharmaceutical candidates were developed as a result of our research on the Advanced Glycosylation End-product ("A.G.E.") pathway, a fundamental pathological process and inevitable consequence of aging and diabetes that causes or contributes to many medical disorders, including cardiovascular, kidney and eye diseases.

A.G.E.s are glucose/protein complexes that form as a result of circulating blood glucose reacting with proteins. These A.G.E. complexes subsequently interact and bond (crosslink) with other proteins, resulting in "hardened" (stiffened) arteries, toughened tissues and impaired flexibility and function of many body organs. In healthy individuals, this pathological A.G.E.-formation process occurs slowly as the body ages. In diabetic patients, the rate of A.G.E. accumulation and the extent of protein crosslinking are accelerated because of high glucose levels.

Our current research and drug development activities targeting the A.G.E. pathway take three directions: the breaking of A.G.E. crosslinks between proteins in order to reverse damage ("A.G.E. Crosslink Breakers"); the prevention or inhibition of A.G.E. formation ("A.G.E.-Formation Inhibitors"); and the reduction of the A.G.E. burden through a novel class of anti-hyperglycemic agents, Glucose Lowering Agents, ("GLA"). We believe that we were the first company to focus on the development of compounds to treat diseases caused by A.G.E. formation and crosslinking. Since our inception, we have created an extensive library of novel compounds targeting the A.G.E. pathway, and have actively pursued patent protection for these discoveries. We have 100 issued U.S. patents and over 80 issued foreign patents focused primarily on A.G.E. technology.

ALT-711 is an A.G.E. Crosslink Breaker and our lead product candidate. ALT-711 offers the possibility of the first therapeutic approach to "breaking" A.G.E. crosslinks, the benefit of which may be to reverse tissue damage caused by aging and diabetes, thereby restoring flexibility and function to blood vessels and organs of the body. We are initially developing ALT-711 for the treatment of cardiovascular diseases. We have completed a 93-patient, placebo-controlled safety, efficacy and pharmacology trial of ALT-711, known as a Phase IIa clinical trial, in which patients received ALT-711 or placebo tablets once daily for eight weeks. Study results showed that ALT-711 patients experienced a statistically significant and clinically meaningful reduction in pulse pressure ($p<0.02$), defined as the difference between systolic and diastolic blood pressures. Results also showed a statistically significant increase in large artery compliance ($p<0.03$), an indicator of greater vascular flexibility and volume capacity. Additionally, the drug was well tolerated. This Phase IIa data was published as "breakthrough information" in the September 26, 2001 issue of the peer-reviewed journal, *Circulation: Journal of the American Heart Association.*

These positive results suggest that ALT-711 is a novel potential therapy for systolic hypertension, a disease that occurs as a result of vascular stiffening due to age or diabetes. As a result, we have initiated two companion Phase IIb trials, the SAPPHIRE (**S**ystolic **A**nd **P**ulse **P**ressure **H**emodynamic **I**mprovement by **R**estoring **E**lasticity) and SILVER (**S**ystolic **H**ypertension **I**nteraction with **L**eft **V****E**ntricular **R**emodeling) trials, to further assess ALT-711's activity in systolic hypertension. The compound is also under Phase I investigation in end-stage renal disease ("ESRD") patients undergoing peritoneal dialysis, a patient population that has significant cardiovascular disease, and is being evaluated for clinical testing in diastolic dysfunction, a major cause of heart failure.

A topical formulation of an A.G.E. Crosslink Breaker, ALT-744, is being clinically evaluated in skin aging for cosmetic applications. We continue to evaluate potential clinical trials in other cardiovascular and therapeutic indications where A.G.E. Crosslink Breaker compounds may address significant unmet needs.

We are actively evaluating product development opportunities from other classes of compounds in our patent estate. Pimagedine, an A.G.E.-Formation Inhibitor, did not reach statistical significance in its primary endpoint, the time to doubling of serum creatinine, in a Phase II/III clinical trial. Based on an ongoing evaluation of that data and positive evidence of activity in key secondary endpoints, we are actively exploring partnering and regulatory pathways for the continued development of the drug. In addition, we are utilizing our technical expertise in the field of diabetes to develop compounds focused on glucose regulation and control. We are evaluating our lead GLA compounds to determine the optimal strategy for pre-clinical development.

We were incorporated in Delaware in October 1986 under the name Geritech Inc. Our name was changed to Alteon Inc. in August 1991. We are headquartered at 170 Williams Drive, Ramsey, New Jersey 07446. Our web address is www.alteonpharma.com, and our telephone number is (201) 934-5000.

Our Business Strategy

Our strategy is to develop drug candidates from our proprietary portfolio of new chemical entities. Because of their novel mechanism of action, these compounds address large medical needs that are unmet by existing therapies. We will seek, as appropriate, to selectively out-license our drug candidates. As we continue clinical development of ALT-711, we will determine if it is appropriate to retain development and marketing rights for one or several indications in North America, while at the same time continuing to evaluate potential corporate partnerships for the further development and ultimate marketing of the compound. In addition to ALT-711, we have identified compounds in multiple chemical classes that warrant further evaluation and potential development.

Markets of Opportunity

Our research and development efforts have led us to an initial focus on cardiovascular disease, including systolic hypertension, as well as complications of diabetes. Targeting the A.G.E. pathway may impact a number of medical disorders related to aging and diabetes, thus potentially broadening our markets of opportunity.

The pre-clinical and clinical data generated to date on our A.G.E. Crosslink Breakers and A.G.E.-Formation Inhibitors demonstrate clear and consistent findings across several species, including rats, dogs, non-human primates and man.

Cardiovascular Disease

According to the American Heart Association, nearly 62 million Americans have one or more types of cardiovascular disease. Cardiovascular disease has been the number one killer of Americans since the early 1900's. The latest World Health Organization – International Society of Hypertension guidelines for the management of hypertension emphasize the importance of pulse pressure (the difference between systolic and diastolic pressures) and arterial stiffness as predictors of general cardiovascular risk. Currently available anti-hypertensive agents reduce pressure on the vessel wall in such a manner as to lower both systolic and diastolic blood pressures without significantly affecting pulse pressure. Our approach rapidly increases large artery elasticity, thereby reducing pulse pressure beyond what would be expected from restoring the dynamic range of the vessel wall with a reduction in blood pressure alone. Pharmacologic intervention targeting the stiffness of the cardiovascular system may decrease the incidence and severity of complications such as left ventricular hypertrophy ("LVH"), a thickening and stiffening of the heart tissue, and congestive heart failure. Published studies have shown that a 10mm Hg reduction in pulse pressure correlates with a 35% reduction in cardiovascular mortality.

Systolic Hypertension

Systolic hypertension, defined as elevated systolic blood pressure greater than 140mm Hg, is the most common form of hypertension in those over the age of 50, with an estimated prevalence of nearly 20 million Americans. It is associated with a significantly increased risk of overall mortality, cardiovascular mortality and congestive heart failure. According to the American Heart Association, it is the type of hypertension least likely to be well treated. The ability of ALT-711 to decrease pulse pressure and increase large artery compliance (see "A.G.E. Crosslink Breakers – ALT-711") offers an opportunity to provide a treatment option specifically for systolic hypertension. Although currently marketed anti-hypertensive agents are being used to treat the disease, it is not adequately treated by these therapies. ALT-711 is the first drug to show direct activity by targeting the stiff vessels that cause systolic hypertension. We believe that ALT-711 will provide additional benefit because it exerts its activity by a mechanism unique from currently marketed anti-hypertension drugs.

End-Stage Renal Disease/Left Ventricular Hypertrophy

As an important component of our clinical strategy in developing ALT-711 for cardiovascular disease, we are currently conducting a Phase I safety study of ALT-711 in the critically ill ESRD patient population undergoing peritoneal dialysis. ESRD is a condition in which the kidneys no longer function, resulting in an increase of waste products in the body that contribute to a number of cardiovascular complications. Peritoneal dialysis is a method of dialysis that uses the patient's peritoneum (a membrane in the abdomen) to filter out waste products. Latest statistics show that almost 25,000 of the 400,000 Americans living with ESRD are undergoing peritoneal dialysis. The ESRD patient population has a limited five-year survival (less than 30%) and significant cardiovascular complications, including LVH. LVH can lead to decreased cardiac output, the inability to meet the circulatory needs of the body and to heart failure itself.

Diastolic Dysfunction

Diastolic dysfunction is characterized by an impaired ability of the heart to relax after a contraction. When the ventricles (the heart's lower pumping chambers) do not relax normally, increased pressure and fluid in the blood vessels of the lungs may be a result (pulmonary congestion). It can also cause increased pressure and fluid in the blood vessels coming back to the heart (systemic congestion). Diastolic dysfunction is a major contributor to congestive heart failure.

Complications of Diabetes

The Diabetes Control and Complications Trial ("DCCT"), a multi-center clinical trial conducted by the National Institutes of Health, demonstrated that elevated blood glucose levels significantly increase the rate of progression of eye, kidney, blood vessel and nerve complications from diabetes. More than 50% of people with diabetes in the U.S. develop diabetic complications that range from mild to severe.

Overt Nephropathy

Kidney disease is a significant cause of morbidity and mortality in patients with Type 1 and Type 2 diabetes. It is a chronic and progressive disease. One of the early signs of kidney damage is microalbuminuria (characterized by leakage of small amounts of protein into the urine), which progresses to overt nephropathy (characterized by leakage of large amounts of protein into the urine) and ultimately to ESRD. Approximately 34% of patients with Type 1 diabetes and approximately 10-15% of patients with Type 2 diabetes develop nephropathy.

In a Phase II/III trial in diabetic patients with overt nephropathy, the ACTiON trial (**A** **C**linical **T**rial **I**n **O**vert **N**ephropathy), pimagedine therapy showed a statistically significant reduction in urinary protein excretion, although it did not reach statistical significance in its primary endpoint, the time to doubling of serum creatinine. ALT-946, another A.G.E.-Formation Inhibitor, has demonstrated the ability to slow the progression of overt nephropathy in a pre-clinical study.

Retinopathy

Approximately nine out of 10 people with diabetes eventually develop retinopathy, a complication that affects the blood vessels inside the eye and can lead to blindness. Each year, approximately 12,000 to 24,000 people lose their sight because of diabetes. The incidence and severity of retinopathy increases with the duration of diabetes. Though not a primary endpoint in the Phase II/III trial, pimagedine therapy did result in a statistically significant reduction in the progression of retinopathy. Pre-clinical evidence suggests that ALT-711 may have a positive impact on retinopathy.

Cardiovascular Complications

A significant portion of diabetic individuals develops cardiovascular diseases and complications due to the high levels of blood glucose and A.G.E.s within the body. According to the American Diabetes Association, heart disease is the leading cause of diabetes-related deaths. Heart disease death rates are two to four times higher in adults with diabetes than that of adults without diabetes. The risk of stroke is also two to four times higher in those with diabetes.

Skin Aging

Pre-clinical data has demonstrated the potential of A.G.E. Crosslink Breaker compounds to increase skin hydration and elasticity. A topical formulation of ALT-744, an A.G.E. Crosslink Breaker, is being clinically evaluated in skin aging for cosmetic applications.

Other Diseases

A.G.E.s have been shown to cause or contribute to many disorders beyond cardiovascular diseases and complications of diabetes, such as arthritis/inflammation, ophthalmic diseases, respiratory diseases and urological diseases, among others. We continue to evaluate potential indications for our compounds.

Our Technology: The A.G.E. Pathway in Aging and Diabetes

The harmful consequences of A.G.E. formation in man was proposed in 1986 by our scientific founders as an outgrowth of a research effort focused on diabetes. The foundation for our technology is the experimental evidence that intervention along the A.G.E. pathway provides significant benefit in slowing or reversing the development of serious diseases in the diabetic and aging populations. We are the pioneer in A.G.E. technology, and we have built an extensive patent estate covering our discoveries and compounds.

A.G.E.s are permanent structures that form when simple sugars such as glucose bind to the surface of proteins. As the body ages, A.G.E. complexes form on proteins continuously and naturally, though slowly throughout life, at a rate dependent upon glucose levels and on the body's natural ability to clear these pathological structures. A.G.E. complexes subsequently crosslink to other proteins, causing a progressive loss of flexibility and function in various tissues, blood vessels and organs.

The formation and crosslinking of A.G.E.s is a well-known process in food chemistry, where it is called the Maillard Reaction. The browning and toughening of food during the cooking process occurs, in part, as a result of the formation of A.G.E. complexes between sugars and the amino acids of proteins. The A.G.E. crosslink has been found to be unique in biology and is prevalent in animal models of aging and diabetes. Scientific literature suggests that the formation and subsequent crosslinking of A.G.E.s is an inevitable part of the aging process and diabetes that leads to a loss of flexibility and function in body tissues, organs and vessels.

The A.G.E. pathway may provide the scientific explanation for how and why many of the medical complications of the aging process occur with higher frequency and earlier in life in diabetic patients. Diabetic individuals form excessive amounts of A.G.E.s earlier in life than do non-diabetic individuals, due primarily to higher levels of blood sugar. For this reason, diabetes may be viewed as an accelerated form of aging.

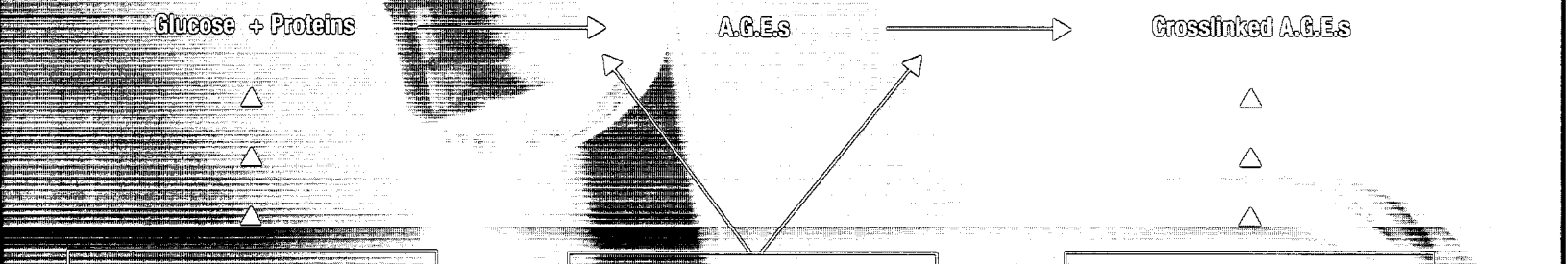
A.G.E.s and A.G.E. crosslinks are considered to be likely causative factors in the development of many age-related and diabetic disorders, including those associated with the cardiovascular and renal systems. For example, proteins in the body, such as collagen and elastin, which play an important role in maintaining the elasticity of the cardiovascular system, are prime targets for A.G.E. crosslinking. This stiffening process can impair the normal function of contractile organs, such as blood vessels, which depend on flexibility for normal function. Loss of flexibility of the vasculature may lead to a number of cardiovascular disorders, including systolic hypertension, diastolic dysfunction and LVH, and ultimately may lead to heart failure.

Studies conducted in animal models of diabetes and aging at numerous independent institutions worldwide demonstrate that A.G.E.s are a major factor contributing to many of the disorders of aging and diabetes, including cardiovascular, kidney and eye diseases, as well as atherosclerosis. Recent human clinical studies we performed confirm that impacting the A.G.E. pathway can have beneficial effects on these diseases.

The following chart illustrates the process of A.G.E. formation and crosslinking and is qualified by the more detailed description in the text. It also highlights those areas within the A.G.E. pathway where we are developing pharmaceutical agents to intervene therapeutically.

Technology and Product Pipeline

Our Technology Platform and Product Pipeline



Glucose Lowering Agents

New Chemical Class

(51 Compounds)

New Mechanism

— Improves pancreas function

— Increases insulin production

— Restores insulin sensitivity

A.G.E. Formation and Crosslink Inhibitors

9 New Chemical Classes

(852 Compounds)

New Mechanism

— Blocks A.G.E. cascade

— Improves renal function

Effects additive to conventional therapies

A.G.E. Crosslink Breakers

6 New Chemical Classes

(391 Compounds)

New Mechanism

— Breaks A.G.E. crosslinks

— Restores vascular function

— Restores heart function

Activity unlike any known drug

Effects additive to conventional therapies

Key Products in Development:

Lead Identification

— Ongoing

— Type 2 Diabetes

Pimagedine

Phase II/III

— Diabetic Kidney Disease

ALT-711

Phase II

— Systolic Hypertension

Phase I

— ESRD

ALT-744

Clinical Evalution

— Skin Aging

We incurred research and development expenditures of $8,461,000, $6,375,000, and $10,598,000 for the years ended December 31, 2001, 2000 and 1999, respectively.

A.G.E. Crosslink Breakers

By "breaking" A.G.E. crosslinks, these novel classes of compounds may have an impact on a number of medical disorders where loss of flexibility or elasticity leads to a loss in function. Our lead clinical candidate, ALT-711, has demonstrated in a Phase IIa trial the ability to reverse tissue damage and restore function to the cardiovascular system.

Additionally, we are evaluating the development of several compounds in the breaker class for other indications where A.G.E. crosslinking leads to abnormal function. Early clinical experience in human studies of ALT-711 suggests that urinary elastic dysfunction (leading to urinary incontinence) is a potential therapeutic target. The scientific literature also points to the possible utility of breaker compounds in ophthalmic and dermatological conditions, stiff joint disorders and treatment of complications in patients undergoing peritoneal dialysis.

We have identified six distinct chemical classes of A.G.E. Crosslink Breakers, and have a library of more than 390 compounds.

ALT-711

Through its unique mechanism of action, ALT-711 is the first compound that breaks A.G.E. crosslinks between proteins, both *in vitro* and *in vivo*. The compound is under Phase II clinical evaluation in cardiovascular disease, as well as in Phase I evaluation in ESRD patients undergoing peritoneal dialysis. ALT-711 is being evaluated in various pre-clinical models to assess its potential in a number of disease states.

In January 2001, we announced successful results from a Phase IIa clinical trial of ALT-711 evaluating the effects of the compound on the cardiovascular system. This trial, conducted at nine U.S. clinical sites, was a double-blind, placebo-controlled study evaluating the safety, efficacy and pharmacology of ALT-711. The trial enrolled 93 patients over the age of 50 with measurably stiffened large vessels, including systolic blood pressure of at least 140mm Hg and pulse pressure of at least 60mm Hg. Patients were randomized to receive oral doses of either 210mg of ALT-711 or placebo once daily for eight weeks. Patients were evaluated for cardiovascular elasticity and function as measured by pulse pressure, cardiovascular compliance, pulse wave velocity and cardiac output. Under this protocol, ALT-711 treatment was in addition to the best available therapeutic regimen chosen by the treating physicians.

Study results showed that patients who received ALT-711 experienced a statistically significant ($p<0.02$) and clinically meaningful reduction in the arterial pulse pressure, defined as the difference between systolic and diastolic blood pressures. Results also showed a statistically significant increase in large artery compliance ($p<0.03$), an indicator of greater vascular flexibility and volume capacity, using a traditional measurement of the ratio of stroke volume to pulse pressure. Additionally, the drug was well tolerated. This Phase IIa data was presented at the Special Sessions Presentation of "Late Breaking Clinical Trials" at the American College of Cardiology Annual Scientific Session in March 2001, and published as "breakthrough information" in the September 26, 2001 issue of the peer-reviewed journal, *Circulation: Journal of the American Heart Association.*

Based on the positive results of this trial, we initiated two Phase IIb efficacy trials of ALT-711 in systolic hypertension, the SAPPHIRE and SILVER trials. These trials further evaluate ALT-711's ability to lower systolic blood pressure and pulse pressure in aging and diabetic patients and extend the range of doses and the dosing period of ALT-711 used in the Phase IIa trial.

In the SAPPHIRE trial, ALT-711 will be tested in 450 patients at more than 60 sites throughout the U.S. Recruited patients will receive ALT-711 tablets once a day for six months, in addition to their existing medications. The study will consist of five treatment arms, comprised of four different dose levels of ALT-711 plus placebo. Patients enrolled in the trial must be older than 50 years of age and have systolic blood pressure of greater than 150mm Hg and diastolic blood pressure of less than 90mm Hg. The trial will include male and female, non-diabetic and diabetic patients.

The SILVER trial is designed as a companion trial to the SAPPHIRE trial, and is being conducted at the same clinical sites. Entry criteria are similar to that in the SAPPHIRE trial, except that patients will have LVH in addition to systolic hypertension. LVH is a thickening of the left ventricle of the heart that may result from hypertension. The trial will evaluate the blood pressure lowering effects of ALT-711 in approximately 180 patients who will be randomized to one of two treatment arms, ALT-711 or placebo.

The primary endpoints of both studies will be the change in systolic blood pressure and change in pulse pressure (the difference between the systolic and diastolic blood pressure). In addition, secondary endpoints will include additional blood pressure measurements and change in certain urological characteristics.

During 2001, we also initiated a Phase I trial assessing the safety of ALT-711 and the way the drug is metabolized in ESRD patients undergoing peritoneal dialysis. This patient population has a limited five-year survival (less than 30%) and significant cardiovascular complications, which are the primary cause of death. The Phase I study is an important component of our clinical strategy in developing ALT-711 for cardiovascular disease, and will provide data necessary for us to plan a Phase IIa trial of ALT-711 in these critically ill patients.

ALT-711 data is consistent across species. Studies in animal models in several laboratories around the world have demonstrated rapid reversal of impaired cardiovascular functions with ALT-711. In these pre-clinical models, ALT-711 reverses the stiffening of arteries, as well as stiffening of the heart, that accompanies the development of aging and diabetes. Pre-clinical studies of ALT-711 conducted by researchers from the National Institute on Aging and Johns Hopkins Geriatric Center demonstrated the ability of the compound to significantly reduce arterial stiffness in elderly Rhesus monkeys. In a pre-clinical study of ALT-711 in aged dogs, administration of ALT-711 for one month resulted in an approximate 40% decrease in age-related ventricular stiffness, or hardening of the heart, with an overall improvement in cardiac function. Reductions in blood pressure that have been observed in animal models of diabetic hypertension suggest that ALT-711 may prove beneficial in the treatment of systolic hypertension in the elderly or in the diabetic.

ALT-711 is a small, easily synthesized compound with a rapid mode of action. It is well absorbed from an oral tablet formulation. In addition to the Phase IIa trial, a series of Phase I safety and dose escalation studies were conducted. These trials have shown the drug to be well tolerated.

Additional A.G.E. Crosslink Breakers

ALT-744 is another A.G.E. Crosslink Breaker in a topical formulation. It is being clinically evaluated in skin aging for cosmetic applications. We continue to evaluate other A.G.E. Crosslink Breakers from our library of compounds.

A.G.E.-Formation Inhibitors

A.G.E.-Formation Inhibitors are designed to prevent glucose/protein formation and crosslinking. This class of compounds may have broad applications in slowing down the key complications of diabetes.

We have identified nine distinct chemical classes of A.G.E.-Formation Inhibitors, encompassing a library in excess of 850 compounds.

Pimagedine

Pimagedine is our lead compound in the A.G.E.-Formation Inhibitor class. We conducted a randomized double-blind, placebo-controlled, multi-center, Phase II/III clinical trial to evaluate the safety and efficacy of pimagedine in Type 1 diabetic patients with overt nephropathy, the ACTION I trial. The primary objective of the trial was to evaluate the safety and efficacy of pimagedine in preserving kidney function in Type 1 patients. The trial enrolled 690 patients at 56 investigational sites in the U.S. and Canada. Patients were treated for a minimum of two years and received twice daily oral doses of pimagedine, adjusted for kidney function. Under this protocol, pimagedine treatment was in addition to the best available therapeutic regimen chosen by the treating physicians.

In November 1998, we announced results of an analysis of data from the ACTION I trial. Although the results showed that pimagedine reduced the risk of doubling of serum creatinine, the study's primary endpoint, the data did not reach statistical significance. However, pimagedine therapy did result in a statistically significant and clinically meaningful reduction of urinary protein excretion. Pimagedine also reduced, to a statistically significant extent, cholesterol and triglycerides as well as the progression of retinopathy. Additional data suggested a trend toward improvements in other measures of kidney function, including estimated creatinine clearance and glomerular filtration rate. The drug was generally well tolerated.

Based on an ongoing evaluation of that data and positive evidence of activity in key secondary endpoints, we are actively exploring partnering and regulatory pathways for the continued development of the drug.

Second-Generation A.G.E. Inhibitors

We are continuing to evaluate the A.G.E. Inhibitors in our patent portfolio in order to identify pre-clinical leads for further development.

Glucose Lowering Agents

High glucose levels (hyperglycemia of diabetes) accelerate the rate of A.G.E. formation and crosslinking. Controlling glucose levels has been shown to slow the rate of progression of diabetic complications. The GLA program arose from a search of plant-derived natural products that would exhibit a beneficial profile of glucose and lipid lowering of Type 2 diabetes. Several pre-clinical candidates that display these beneficial properties have been evaluated. They have demonstrated the ability to lower glucose and lipids, restore insulin sensitivity and stimulate increased insulin production.

We have identified one chemical class of GLA, which includes more than 50 compounds.

Collaborative Arrangements and License Agreements

We have entered into a number of licensing and collaboration agreements relating to the development and distribution of our A.G.E-related technology. We granted to Yamanouchi Pharmaceutical Co., Ltd. an exclusive license to commercialize our A.G.E.-Formation Inhibitor, pimagedine, in Japan, South Korea, Taiwan and The People's Republic of China. We have entered into an exclusive licensing arrangement with Roche Diagnostics GmbH for our technology for diagnostic applications, and we have also entered into clinical testing and distribution agreements with Gamida for Life which grant Gamida the exclusive right to distribute pimagedine, if successfully developed and approved for marketing, in Israel, Bulgaria, Cyprus, Jordan and South Africa. We have a license and supply agreement with IDEXX Laboratories, Inc. pursuant to which we licensed pimagedine to IDEXX as a potential therapeutic in companion animals (dogs, cats and horses) and our A.G.E. diagnostics technology for companion animal use. All of these agreements will entitle us to receive royalties on sales if any products covered by the agreements are developed and sold.

In October 2000, we entered into an agreement with HemoMax, LLC for the development of a novel technology designed to increase the delivery of oxygen to tissues in the body through enhanced blood circulation. On February 9, 2002, HemoMax advised us that because of uncertainties regarding its ability to receive patents adequate to support commercialization of the technology, it has decided to cease operations and liquidate.

We have also entered into a number of academic research and license agreements. Pursuant to an agreement with Rockefeller University, we have exclusive, royalty-free, worldwide and perpetual rights to the technology and inventions relating to A.G.E.s and other protein crosslinking, including those relating to the complications of aging and diabetes. See "—Patents, Trade Secrets and Licenses." We have also obtained an exclusive, worldwide, royalty-bearing license from Washington University for patents covering the use of pimagedine as an inhibitor of inducible nitric oxide synthase. In addition we received from The Picower Institute for Medical Research ("The Picower Institute") an exclusive worldwide, royalty-bearing license for certain commercial health care applications of A.G.E.-related inventions. See "—Patents, Trade Secrets and Licenses."

Manufacturing

We have no manufacturing facilities for either production of bulk chemicals or the manufacturing of pharmaceutical dosage forms. We rely on third-party contract manufacturers to produce the raw materials and chemicals used as the active drug ingredients in our products used in clinical trials, and we expect to rely on third parties to perform the tasks necessary to process, package and distribute these products in finished form.

We will inspect third-party contract manufacturers and their consultants to confirm compliance with current Good Manufacturing Practice ("cGMP") required for pharmaceutical products. We believe we will obtain sufficient quantities of bulk chemicals at reasonable prices to satisfy anticipated needs. There can be no assurance, however, that we can continue to meet our needs for supply of bulk chemicals or that manufacturing limitations will not delay clinical trials or possible commercialization. See "—Collaborative Arrangements and License Agreements."

Marketing and Sales

We retain worldwide marketing rights to our A.G.E. Crosslink Breaker compounds. We plan to market and sell our products, if successfully developed and approved, directly or through co-promotion or other licensing arrangements with third parties. Such arrangements may be exclusive or nonexclusive and may provide for marketing rights worldwide or in a specific market.

For certain of our products, we have licensed exclusive marketing rights, formed joint marketing arrangements or granted distribution rights within specified territories with our corporate partner, Roche. See "—Collaborative Arrangements and License Agreements."

Patents, Trade Secrets and Licenses

Proprietary protection for our product candidates, processes and know-how is important to our business. We aggressively file and prosecute patents covering our proprietary technology, and, if warranted, will defend our patents and proprietary technology. As appropriate, we seek patent protection for our proprietary technology and products in the U.S. and Canada and in key commercial European and Asia/Pacific countries. We also rely upon trade secrets, know-how, continuing technological innovation and licensing opportunities to develop and maintain our competitive position.

As of December 31, 2001, our patent estate of owned and/or licensed patent rights consisted of 100 issued U.S. patents and one allowed U.S. patent application, none of which expire prior to 2005, and 28 pending patent applications in the U.S., the majority of which are A.G.E.-related. We also own or have exclusive rights to over 80 issued patents in Europe, Japan, Australia and Canada.

We have five issued U.S. patents and five issued foreign patents, including one from the European Patent Office, as well as 21 pending patent applications in the U.S., covering certain novel compounds in the A.G.E. Crosslink Breaker category. These patents and additional patent applications contain compound, composition and method of treatment claims for several chemical classes of Crosslink Breaker compounds.

Pimagedine is not protected by a composition-of-matter patent but is protected by a series of use patents. In 1992, a U.S. patent on the use of pimagedine was issued to Rockefeller University and subsequently exclusively licensed to us with claims relating to the inhibition of A.G.E. formation. The patent claims the new use of a known agent for the treatment of the complications of aging and diabetes. In 1994, corresponding patents were granted in France, Germany, Italy, the United Kingdom and other European countries. A corresponding patent was issued in Japan in 1995. We continue to pursue and patent chemical analogs of known A.G.E.-Formation Inhibitors, as well as novel compounds having potential inhibitory properties.

We believe that our licensed and owned patents provide a substantial proprietary base that will allow us and our collaborative partners to commercialize products in this field. There can be no assurance, however, that pending or future applications will issue, that the claims of any patents which do issue will provide any significant appreciation of our technology or that our directed discovery research will yield compounds and products of therapeutic and commercial value.

In 1987, we acquired an exclusive, royalty-free, worldwide license (including the right to sub-license to others) to issued patents, patent applications and trade secrets from Rockefeller University relating to the A.G.E.-formation and crosslinking technology currently under development by us. Additional patent applications have since been filed on discoveries made in support of the technology from research conducted at Rockefeller University, The Picower Institute and our laboratories. Pursuant to our agreement with The Picower Institute, certain patentable inventions and discoveries relating to A.G.E. technology have been licensed exclusively to us. On December 31, 2001, The Picower Institute ceased operations, and we expect to assume all responsibility and costs for the worldwide filing and prosecution of patent applications and maintenance of patents for such inventions.

We intend to continue to focus our research and development efforts on the synthesis of novel compounds and on the search for additional therapeutic applications to expand and broaden our rights within our technological and patent base. We are also prepared to in-license additional technology that may be useful in building our proprietary position.

Where appropriate, we utilize trade secrets and unpatentable improvements to enhance our technology base and improve our competitive position. We require all employees, scientific consultants and contractors to execute confidentiality agreements as a condition of engagement. There can be no assurance, however, that we can limit unauthorized or wrongful disclosures of unpatented trade secret information.

We believe that our estate of licensed and owned issued patents, if upheld, and pending applications, if granted and upheld, will be a substantial factor in our success. The patent positions of pharmaceutical firms, including ours, are generally uncertain and involve complex legal and factual questions. Consequently, even though we are currently prosecuting such patent applications in the U.S. and foreign patent offices, we do not know whether any of such applications will result in the issuance of any additional patents or, if any additional patents are issued, whether the claims thereof will provide significant proprietary protection or will be circumvented or invalidated.

Competitors or potential competitors have filed for or have received U.S. and foreign patents and may obtain additional patents and proprietary rights relating to compounds or processes competitive with those of ours. Accordingly, there can be no assurance that our patent applications will result in patents being issued or that, if issued, the claims of the patents will afford protection against competitors with similar technology; nor can there be any assurance that others will not obtain patents that we would need to license or circumvent. See "—Competition."

Our success will depend, in part, on our ability to obtain patent protection for our products, preserve our trade secrets and operate without infringing on the proprietary rights of third parties. There can be no assurance that our current patent estate will enable us to prevent infringement by third parties or that competitors will not develop competitive products outside the protection that may be afforded by the claims of such patents. To the extent we rely on trade secrets and unpatented know-how to maintain our competitive technological position, there can be no assurance that others may not develop independently the same or similar technologies. Failure to maintain our current patent estate or to obtain requisite patent and trade secret protection, which may become material or necessary for product development, could delay or preclude us or our licensees or marketing partners from marketing their products and could thereby have a material adverse effect on our business, financial condition and results of operations.

Government Regulation

We and our products are subject to comprehensive regulations by the FDA in the U.S. and by comparable authorities in other countries. These national agencies and other federal, state and local entities regulate, among other things, the pre-clinical and clinical testing, safety, effectiveness, approval, manufacturing, labeling, marketing, export, storage, record keeping, advertising and promotion of our products.

The process required by the FDA before our products may be approved for marketing in the U.S. generally involves (i) pre-clinical new drug laboratory and animal tests, (ii) submission to the FDA of an investigational new drug application ("IND"), which must become effective before clinical trials may begin, (iii) adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug for its intended indication, (iv) submission to the FDA of a new drug application ("NDA") and (v) FDA review of the NDA in order to determine, among other things, whether the drug is safe and effective for its intended uses. There is no assurance that the FDA review process will result in product approval on a timely basis, if at all.

Pre-clinical tests include laboratory evaluation of product chemistry and formulation, as well as animal studies to assess the potential safety and efficacy of the product. Certain pre-clinical tests are subject to FDA regulations regarding current Good Laboratory Practices. The results of the pre-clinical tests are submitted to the FDA as part of an IND and are reviewed by the FDA prior to the commencement of clinical trials or during the conduct of the clinical trials, as appropriate.

Clinical trials are conducted under protocols that detail such matters as the objectives of the study, the parameters to be used to monitor safety and the efficacy criteria to be evaluated. Each protocol must be submitted to the FDA as part of the IND. Further, each protocol must be reviewed and approved by an institutional review board.

Clinical trials are typically conducted in three sequential phases, which may overlap. During Phase I, when the drug is initially given to human subjects, the product is tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. Phase II involves studies in a limited patient population to (i) evaluate preliminarily the efficacy of the product for specific targeted indications, (ii) determine dosage tolerance and optimal dosage and (iii) identify possible adverse effects and safety risks. Phase II/III trials are undertaken in order to further evaluate clinical efficacy and to further test for safety within an expanded patient population. The FDA may suspend clinical trials at any point in this process if it concludes that clinical subjects are being exposed to an unacceptable health risk.

We will need FDA approval of our products, including a review of the manufacturing processes and facilities used to produce such products before such products may be marketed in the U.S. The process of obtaining approvals from the FDA can be costly, time-consuming and subject to unanticipated delays. There can be no assurance that the FDA will grant approvals of our proposed products, processes or facilities on a timely basis, if at all. Any delay or failure to obtain such approvals would have a material adverse effect on our business, financial condition and results of operations. Moreover, even if regulatory approval is granted, such approval may include significant limitations on indicated uses for which a product could be marketed.

Among the conditions for NDA approval is the requirement that the prospective manufacturer's operating procedures conform to cGMP requirements, which must be followed at all times. In complying with those requirements, manufacturers (including a drug sponsor's third-party contract manufacturers) must continue to expend time, money and effort in the area of production and quality control to ensure compliance. Domestic manufacturing establishments are subject to periodic inspections by the FDA in order to assess, among other things, cGMP compliance. To supply a product for use in the U.S., foreign manufacturing establishments must comply with cGMP and are subject to periodic inspection by the FDA or by regulatory authorities in certain of such countries under reciprocal agreements with the FDA.

Both before and after approval is obtained, a product, its manufacturer and the holder of the NDA for the product are subject to comprehensive regulatory oversight. Violations of regulatory requirements at any stage, including the pre-clinical and clinical testing process, the approval process, or thereafter (including after approval) may result in various adverse consequences, including the FDA's delay in approving or refusal to approve a product, withdrawal of an approved product from the market and/or the imposition of criminal penalties against the manufacturer and/or NDA holder. In addition, later discovery of previously unknown problems may result in restrictions on such product, manufacturer or NDA holder, including withdrawal of the product from the market. Also, new government requirements may be established that could delay or prevent regulatory approval of our products under development.

The FDA has implemented accelerated approval procedures for certain pharmaceutical agents that treat serious or life-threatening diseases and conditions, especially where no satisfactory alternative therapy exists. We cannot predict the ultimate impact, however, of the FDA's accelerated approval of procedures on the timing or likelihood of approval of any of our potential products or those of any competitor. In addition, the approval of a product under the accelerated approval procedures may be subject to various conditions, including the requirement to verify clinical benefit in post-marketing studies, and the authority on the part of the FDA to withdraw approval under streamlined procedures if such studies do not verify clinical benefit.

For marketing outside the U.S., we will have to satisfy foreign regulatory requirements governing human clinical trials and marketing approval for drugs and diagnostic products. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary widely from country to country. We do not currently have any facilities or personnel outside of the U.S.

In addition to regulations enforced by the FDA, we are also subject to regulation under the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act and other present and potential future federal, state or local regulations. Our research and development involves the controlled use of hazardous materials, chemicals and various radioactive compounds. Although we believe that our safety procedures for handling and disposing of such materials comply with the standards prescribed by state and federal regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, we could be held liable for any damages that result and any such liability could exceed our resources.

Competition

A.G.E.s have been shown to contribute to many of the disorders of aging and diabetes, including cardiovascular, kidney and eye diseases. We are aware of several companies that have research and development activities in the A.G.E. field. Many companies are pursuing research and development of compounds for cardiovascular and kidney diseases and the lowering of glucose levels.

Many of our potential competitors have substantially greater financial, technical and human resources than ours and may be better equipped to develop, manufacture and market products. In addition, many of these companies have extensive experience in pre-clinical testing and human clinical trials. These companies may develop and introduce products and processes competitive with or superior to ours.

Our competition will be determined, in part, by the potential indications for which our compounds are developed and ultimately approved by regulatory authorities. For certain of our potential products, an important factor in competition may be the timing of market introduction of our or our competitors' products. Accordingly, the relative speed with which we can develop products, complete the clinical trials and approval processes and supply commercial quantities of the products to the market are important competitive factors. We expect that competition among products approved for sale will be based on, among other things, product efficacy, safety, reliability, availability, price and patent position. Our competitive position also depends upon our ability to attract and retain qualified personnel, obtain protection or otherwise develop proprietary products or processes and secure sufficient capital resources.

We are competing in an industry in which technologies can become obsolete over time, thereby reducing or eliminating the market for any pharmaceutical product. For example, competitive drugs based on other therapeutic mechanisms may be efficacious in treating cardiovascular disease or diabetic complications. The development by others of non-A.G.E.-related treatment modalities could render our products non-competitive. Therapeutic approaches being pursued by others include curing cardiovascular disease or diabetic complications via gene therapy or cell transplantation, as well as pharmaceutical intervention with agents such as the aldose reductase inhibitors.

Angiotensin converting enzyme inhibitors, angiotensin receptor blockers, calcium channel blockers, beta-blockers and diuretics are effective treatments for essential hypertension, a disease characterized by increased peripheral vascular resistance (essential hypertension closely related to diastolic blood pressure). Systolic hypertension, characterized by increased stiffness of the large arteries, is not usually associated with increased peripheral vascular resistance. In the absence of any marketed products that address the underlying pathology of systolic hypertension patients, treatments approved for essential hypertension are currently being prescribed to treat hypertension in these patients. However, these agents are of limited value where stiffness of the large arteries is the underlying pathology.

Results of the DCCT showed that tight glucose control reduced the incidence of diabetic complications. Numerous companies are pursuing other methods to manage glucose control and to reduce the incidence of diabetic complications. In addition, several companies have initiated research with drugs that inhibit vascularization as a potential treatment of diabetic retinopathy. In the event one or more of these initiatives are successful, the market for some of our products may be reduced or eliminated.

Medical and Clinical Advisors

Our Medical and Clinical Advisors consist of individuals with recognized expertise in the medical and pharmaceutical science and related fields who advise us about present and long-term scientific planning, research and development. These advisors consult and meet with our management informally on a frequent basis. All advisors are employed by employers other than us and may have commitments to, or consulting or advisory agreements with, other entities that may limit their availability to us. These companies may also be competitors of ours. The advisors have agreed, however, not to provide any services to any other entities that might conflict with the activities that they provide us. Each member also has executed a confidentiality agreement for our benefit.

The following persons are Medical and Clinical Advisors:

George L. Bakris, M.D., F.A.C.P., F.C.P., Professor of Preventive and Internal Medicine, Vice Chairman, Department of Preventive Medicine and Director, Hypertension/Clinical Research Center, Rush-Presbyterian/St. Luke's Medical Center; President, American College of Clinical Pharmacology.

Leslie Z. Benet, Ph.D., Professor, University of California San Francisco, School of Pharmacy, Department of Biopharmaceutical Sciences; Chairman of the Board, AvMax, Inc.; former Chairman, Department of Biopharmaceutical Sciences of the University of California San Francisco.

Michael A. Brownlee, M.D., Anita and Jack Saltz Professor of Diabetes Research, Departments of Medicine and Pathology, Albert Einstein College of Medicine.

Edward D. Frohlich, M.D., Distinguished Scientist of the Alton Ochsner Clinic Foundation; Professor of Medicine and Physiology at Louisiana State University; Clinical Professor of Medicine and Adjunct Professor of Pharmacology at Tulane University; President, Society of Geriatric Cardiology.

Richard J. Glassock, M.D., M.A.C.P., Professor Emeritus, University of California Los Angeles, School of Medicine; Past-President, National Kidney Foundation; Past-President, American Society of Nephrology.

Jan Lessem, M.D., Ph.D., F.A.C.C., Chief Medical Officer and Vice President, Clinical Research and Development, OraPharma, Inc.; former Vice President and Corporate Officer, Drug Strategy and Medical Director, Takeda America, Inc.; former Director of Clinical Investigations, SmithKline Beecham Pharmaceuticals.

Lawrence Resnick, M.D., Professor of Medicine, Division of Cardiovascular Pathophysiology, Hypertension Center, New York Presbyterian Hospital/Weill Medical College of Cornell Medical Center.

Employees

As of February 20, 2002, we employed 33 persons (six of whom held a Ph.D., M.D. or other advanced degree), of whom 20 were engaged in research and development and 13 were engaged in administration and management. We believe that we have been successful in attracting skilled and experienced personnel. Our employees are not covered by collective bargaining agreements, but all employees are covered by confidentiality agreements. We believe that our relationship with our employees is good.

Forward-Looking Statements and Cautionary Statements

Statements in this Form 10-K that are not statements or descriptions of historical facts are "forward-looking" statements under Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995, and are subject to numerous risks and uncertainties. These forward-looking statements and other forward-looking statements made by us or our representatives are based on a number of assumptions. The words "believe," "expect," "anticipate," "intend," "estimate" or other expressions, which are predictions of or indicate future events and trends and which do not relate to historical matters, identify forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements as they involve risks and uncertainties, and actual results could differ materially from those currently anticipated due to a number of factors, including those set forth in this section and elsewhere in this Form 10-K. These factors include, but are not limited to, the risks set forth below. The forward-looking statements represent our judgment and expectations as of the date of this Report. We assume no obligation to update any such forward-looking statements.

If we do not obtain sufficient additional funding to meet our needs, we may have to curtail or discontinue the research, product development, pre-clinical testing and clinical trials of some or all of our product candidates.

We anticipate that our existing available cash and cash equivalents and short-term investments will be adequate to satisfy our working capital requirements for our current operations into 2003. While we expect to apply a portion of the proceeds of our recent financings to the Phase IIb trials of ALT-711, the timing and extent of ALT-711's clinical development will be determined by our ability to secure additional financing. In addition, we will require substantial new funding in order to continue the research, product development, pre-clinical testing and clinical trials of our other product candidates, including ALT-711 and pimagedine. We will also require additional funding for operating expenses, the pursuit of regulatory approvals for our product candidates and the establishment of marketing and sales capabilities.

Our future capital requirements will depend on many factors, including continued scientific progress in our research and development programs, the size and complexity of these programs, progress with pre-clinical testing and clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in filing, prosecuting and enforcing patent claims, competing technological and market developments, the establishment of additional collaborative arrangements, the cost of manufacturing arrangements, commercialization activities and the cost of product in-licensing and strategic acquisitions, if any. Our cash reserves and other liquid assets may not be adequate to satisfy our capital and operating requirements.

If we do not successfully develop any products, we may not derive any revenues.

All of our product candidates are in research or clinical development. We may not succeed in the development and marketing of any therapeutic or diagnostic product. To achieve profitable operations, we must, alone or with others, successfully identify, develop, introduce and market proprietary products. Such products will require significant additional investment, development and pre-clinical and clinical testing prior to potential regulatory approval and commercialization.

We have not yet requested or received regulatory approval for any product from the FDA or any other regulatory body. Before obtaining regulatory approvals for the commercial sale of any of our products under development, we must demonstrate through pre-clinical studies and clinical trials that the product is safe and effective for use in each target indication. The results from pre-clinical studies and early clinical trials may not be predictive of results that will be obtained in large-scale testing. In addition, some or all of the clinical trials we undertake may not demonstrate sufficient safety and efficacy to obtain the requisite regulatory approvals, which could prevent the creation of marketable products.

The development of new pharmaceutical products is highly uncertain and subject to a number of significant risks. Potential products that appear to be promising at early stages of development may not reach the market for a number of reasons. Potential products may be found ineffective or cause harmful side effects during pre-clinical testing or clinical trials, fail to receive necessary regulatory approvals, be difficult to manufacture on a large scale, be uneconomical, fail to achieve market acceptance or be precluded from commercialization by proprietary rights of third parties. We may not be able to undertake additional clinical trials. In addition, our product development efforts may not be successfully completed, we may not obtain regulatory approvals, and our products, if introduced, may not be successfully marketed or achieve customer acceptance. We do not expect any of our products, including ALT-711 and pimagedine, to be commercially available for a number of years, if at all.

If we are unable to derive revenues from product sales, we may never be profitable.

All of our revenues to date have been generated from collaborative research agreements and financing activities, or interest income earned on these funds. We have not received any revenues from product sales. We may not realize product revenues on a timely basis, if at all.

At December 31, 2001, we had an accumulated deficit of $149,009,000. We anticipate that we will incur substantial, potentially greater losses in the future. Our products under development may not be successfully developed and our products, if successfully developed, may not generate revenues sufficient to enable us to earn a profit. We expect to incur substantial additional operating expenses over the next several years as our research, development and clinical trial activities increase. We do not expect to generate revenues from the sale of products, if any, for a number of years. Our ability to achieve profitability depends, in part, on our ability to enter into agreements for product development, obtain regulatory approval for our products and develop the capacity, or enter into agreements, for the manufacture, marketing and sale of any products. We may not obtain required regulatory approvals, or successfully develop, manufacture, commercialize and market product candidates, and we may never achieve product revenues or profitability.

Prior stock option repricing may have an adverse effect on our future financial performance.

Based on the performance of our stock, we repriced certain employee stock options on February 2, 1999, in order to bolster employee retention. As a result of this repricing, options to purchase 1.06 million shares of stock were repriced and certain vesting periods related to these options were modified or extended. This repricing may have a material adverse impact on future financial performance based on Interpretation No. 44, "Accounting for Certain Transactions Involving Stock Compensation, An Interpretation of APB Opinion No. 25." This interpretation requires us to record compensation expense or benefit, which is adjusted every quarter, for increases or decreases in the fair market value of the repriced options based on changes in our stock price from the value at July 1, 2000, until the repriced options are exercised, forfeited or expire.

If we are not able to form and maintain the collaborative relationships that our business strategy requires, then our programs will suffer and we may not be able to develop products.

Our strategy for developing and deriving revenues from our products depends, in large part, upon entering into arrangements with research collaborators, corporate partners and others.

We have established collaborative arrangements with Yamanouchi Pharmaceutical Co., Ltd., Roche Diagnostics GmbH, IDEXX Laboratories, Inc. and Gamida for Life with respect to the development of drug therapies and diagnostics utilizing our scientific platforms. To succeed, we will have to develop additional relationships. We are seeking to establish new collaborative relationships to provide the funding necessary for continuation of our product development, but such effort may not be successful. If we are unable to enter into or manage additional collaborations, our programs may suffer and we may be unable to develop products.

If we are unable to maintain our collaborative relationships, our product development may be delayed and disputes over rights to technology may result.

We will, in some cases, be dependent upon outside partners to conduct pre-clinical testing and clinical trials and to provide adequate funding for our development programs. Our corporate partners may have all or a significant portion of the development and regulatory approval responsibilities. Failure of the corporate partners to develop marketable products or to gain the appropriate regulatory approvals on a timely basis, if at all, would have a material adverse effect on our business, financial condition and results of operations.

In most cases, we will not be able to control the amount and timing of resources that our corporate partners devote to our programs or potential products. If any of our corporate partners breached or terminated its agreements with us or otherwise failed to conduct its collaborative activities in a timely manner, the pre-clinical or clinical development or commercialization of product candidates or research programs could be delayed, and we would be required to devote additional resources to product development and commercialization or terminate certain development programs.

Disputes may arise in the future with respect to the ownership of rights to any technology we develop with third parties. These and other possible disagreements between us and collaborators could lead to delays in the collaborative research, development or commercialization of product candidates or could require or result in litigation or arbitration, which would be time-consuming and expensive and would have a material adverse effect on our business, financial condition and results of operations.

Any corporate partners we have may develop, either alone or with others, products that compete with the development and marketing of our products. Competing products, either developed by the corporate partners or to which the corporate partners have rights, may result in their withdrawal of support with respect to all or a portion of our technology, which would have a material adverse effect on our business, financial condition and results of operations.

If we cannot successfully develop a marketing and sales force or maintain suitable arrangements with third parties to market and sell our products, our ability to deliver products may be impaired.

For certain of our products, we have licensed exclusive marketing rights to our corporate partners or formed collaborative marketing arrangements within specified territories in return for royalties to be received on sales, a share of profits or beneficial transfer pricing. These agreements are terminable at the discretion of our partners upon as little as 90 days' prior written notice. If the licensee or marketing partner terminates an agreement or fails to market a product successfully, our business, financial condition and results of operations may be adversely affected.

We currently have no experience in marketing or selling pharmaceutical products. In order to achieve commercial success for any approved product, we must either develop a marketing and sales force or, where appropriate or permissible, enter into arrangements with third parties to market and sell our products. We might not develop successfully marketing and sales experience. Further, we may not be able to enter into marketing and sales agreements with others on acceptable terms, and any such arrangements, if entered into, may be terminated. If we develop our own marketing and sales capability, it will compete with other companies that currently have experienced, well funded and larger marketing and sales operations. To the extent that we enter into co-promotion or other sales and marketing arrangements with other companies, revenues will depend on the efforts of others, which may not be successful.

If we cannot successfully form and maintain suitable arrangements with third parties for the manufacturing of the products we may develop, our ability to develop or deliver products may be impaired.

We have no experience in manufacturing products for commercial purposes and do not have manufacturing facilities. Consequently, we are dependent on contract manufacturers for the production of products for development and commercial purposes. The manufacture of our products for clinical trials and commercial purposes is subject to cGMP regulations promulgated by the FDA. In the event that we are unable to obtain or retain third-party manufacturing for our products, we will not be able to commercialize such products as planned. We may not be able to enter into agreements for the manufacture of future products with manufacturers whose facilities and procedures comply with cGMP and other regulatory requirements. Our current dependence upon others for the manufacture of our products may adversely affect our profit margin, if any, on the sale of future products and our ability to develop and deliver such products on a timely and competitive basis.

If we are not able to protect the proprietary rights that are critical to our success, the development and any possible sales of our product candidates could suffer and competitors could force our products completely out of the market.

Our success will depend on our ability to obtain patent protection for our products, preserve our trade secrets, prevent third parties from infringing upon our proprietary rights and operate without infringing upon the proprietary rights of others, both in the U.S. and abroad.

Competitors may develop competitive products outside the protection that may be afforded by the claims of our patents. We are aware that other parties have been issued patents and have filed patent applications in the U.S. and foreign countries with respect to other agents which impact A.G.E. or the formation of A.G.E. crosslinks.

The degree of patent protection afforded to pharmaceutical inventions is uncertain and our potential products are subject to this uncertainty. Pimagedine is not a novel compound and is not covered by a composition-of-matter patent. The patents covering pimagedine are use patents containing claims covering therapeutic indications and the use of pimagedine to inhibit the formation of A.G.E.s. Competitors may develop and commercialize pimagedine or pimagedine-like products for indications outside of the protection provided by the claims of our use patents. Physicians, pharmacies and wholesalers could then substitute for our pimagedine products. Substitution for our pimagedine products would have a material adverse effect on our business, financial condition and results of operations. Use patents may afford a lesser degree of protection in certain foreign countries due to their patent laws. In addition, although we have several patent applications pending to protect proprietary technology and potential products, these patents may not be issued, and the claims of any patents, which do issue, may not provide significant protection of our technology or products. In addition, we may not enjoy any patent protection beyond the expiration dates of our currently issued patents.

We also rely upon unpatented trade secrets and improvements, unpatented know-how and continuing technological innovation to maintain, develop and expand our competitive position, which we seek to protect, in part, by confidentiality agreements with our corporate partners, collaborators, employees and consultants. We also have invention or patent assignment agreements with our employees and certain, but not all, corporate partners and consultants. Relevant inventions may be developed by a person not bound by an invention assignment agreement. Binding agreements may be breached, and we may not have adequate remedies for such breach. In addition, our trade secrets may become known to or be independently discovered by competitors.

If we fail to obtain regulatory approvals for our products, the commercial use of our products will be limited.

Our research, pre-clinical testing and clinical trials of our product candidates are, and the manufacturing and marketing of our products will be, subject to extensive and rigorous regulation by numerous governmental authorities in the U.S. and in other countries where we intend to test and market our product candidates.

Prior to marketing, any product we develop must undergo an extensive regulatory approval process. This regulatory process, which includes pre-clinical testing and clinical trials and may include post-marketing surveillance of each compound to establish its safety and efficacy, can take many years and can require the expenditure of substantial resources. Data obtained from pre-clinical and clinical activities is susceptible to varying interpretations that could delay, limit or prevent regulatory approval. In addition, we may encounter delays or rejections based upon changes in FDA policy for drug approval during the period of product development and FDA regulatory review of each submitted NDA. We may encounter similar delays in foreign countries. We may not obtain regulatory approval for the drugs we develop. Moreover, regulatory approval may entail limitations on the indicated uses of the drug. Further, even if we obtain regulatory approval, a marketed drug and its manufacturer are subject to continuing review and discovery of previously unknown problems with a product or manufacturer which may have adverse effects on our business, financial condition and results of operations, including withdrawal of the product from the market. Violations of regulatory requirements at any stage, including pre-clinical testing and clinical trials, the approval process or post-approval, may result in various adverse consequences including the FDA's delay in approving, or its refusal to approve, a product withdrawal of an approved product from the market and the imposition of criminal penalties against the manufacturer and NDA holder. None of our products has been approved for commercialization in the U.S. or elsewhere. We may not be able to obtain FDA approval for any products. Failure to obtain requisite governmental approvals or failure to obtain approvals of the scope requested will delay or preclude our licensees or marketing partners from marketing our products or limit the commercial use of such products and will have a material adverse effect on our business, financial condition and results of operations.

If we are not able to compete successfully with other companies in the development and marketing of cures and therapies for diabetes, cardiovascular diseases and the other conditions for which we seek to develop products, we may not be able to continue our operations.

We are engaged in pharmaceutical fields characterized by extensive research efforts and rapid technological progress. Many established pharmaceutical and biotechnology companies with resources greater than ours are attempting to develop products that would be competitive with our products. Other companies may succeed in developing products that are safer, more efficacious or less costly than any we may develop and may also be more successful than us in production and marketing. Rapid technological development by others may result in our products becoming obsolete before we recover a significant portion of the research, development or commercialization expenses incurred with respect to those products.

Certain technologies under development by other pharmaceutical companies could result in a cure for diabetes or the reduction of the incidence of diabetes and its complications. For example, a number of companies are investigating islet cell transplantation as a possible cure for Type 1 diabetes. Results of a study conducted by the National Institutes of Health, known as the Diabetes Control and Complications Trial, published in 1993, showed that tight glucose control reduced the incidence of diabetic complications. Several pharmaceutical companies have introduced new products for glucose control for the management of hyperglycemia in Type 2 diabetes. In addition, several large companies have initiated or expanded research, development and licensing efforts to build a diabetic pharmaceutical franchise focusing on diabetic nephropathy, neuropathy, retinopathy and related conditions. An example of this is research seeking anti-angiogenesis drugs for the potential treatment of diabetic retinopathy. It is possible that one or more of these initiatives may reduce or eliminate the market for some of our products.

In addition, a broad range of cardiovascular drugs is under development by many pharmaceutical and biotechnology companies. It is possible that one or more of these initiatives may reduce or eliminate the market for some of our products.

If governments and third-party payers continue their efforts to contain or decrease the costs of health care, we may not be able to commercialize our products successfully.

In certain foreign markets, pricing and/or profitability of prescription pharmaceuticals are subject to government control. In the U.S., we expect that there will continue to be federal and state initiatives to control and/or reduce pharmaceutical expenditures. In addition, increasing emphasis on managed care in the U.S. will continue to put pressure on pharmaceutical pricing. Cost control initiatives could decrease the price that we receive for any products we may develop and sell in the future and have a material adverse effect on our business, financial condition and results of operations. Further, to the extent that cost control initiatives have a material adverse effect on our corporate partners, our ability to commercialize our products may be adversely affected.

Our ability to commercialize pharmaceutical products may depend, in part, on the extent to which reimbursement for the products will be available from government health administration authorities, private health insurers and other third-party payers. Significant uncertainty exists as to the reimbursement status of newly approved health care products, and third-party payers, including Medicare, are increasingly challenging the prices charged for medical products and services. Third-party insurance coverage may not be available to patients for any products developed by us. Government and other third-party payers are increasingly attempting to contain health care costs by limiting both coverage and the level of reimbursement for new therapeutic products and by refusing in some cases to provide coverage for uses of approved products for disease indications for which the FDA has not granted labeling approval. If adequate coverage and reimbursement levels are not provided by government and other third-party payers for our products, the market acceptance of these products would be adversely affected.

If the users of the products we develop claim that our products have harmed them, we may be subject to costly and damaging product liability litigation, which could have a material adverse effect on our business, financial conditions and results of operations.

The use of any of our potential products in clinical trials and the sale of any approved products, including the testing and commercialization of ALT-711 or pimagedine, exposes us to liability claims resulting from the use of products or product candidates. A claim, which was subsequently settled, was made by a participant in one of our clinical trials, and additional claims might be made directly by other such participants, consumers, pharmaceutical companies or others. We maintain product liability insurance coverage for claims arising from the use of our products in clinical trials. However, coverage is becoming increasingly expensive, and we may not be able to maintain or acquire insurance at a reasonable cost or in sufficient amounts to protect us against losses due to liability that could have a material adverse effect on our business, financial conditions and results of operations. We may not be able to obtain commercially reasonable product liability insurance for any product approved for marketing in the future and insurance coverage and our resources may not be sufficient to satisfy any liability resulting from product liability claims. A successful product liability claim or series of claims brought against us could have a material adverse effect on our business, financial condition and results of operations.

If we are unable to attract and retain the key personnel on whom our success depends, our product development, marketing and commercialization plans could suffer.

We are highly dependent on the principal members of our management and scientific staff. The loss of services of any of these personnel could impede the achievement of our development objectives. Furthermore, recruiting and retaining qualified scientific personnel to perform research and development work in the future will also be critical to our success. We may not be able to attract and retain personnel on acceptable terms given the competition between pharmaceutical and health care companies, universities and non-profit research institutions for experienced scientists. In addition, we rely on consultants to assist us in formulating our research and development strategy. All of our consultants are employed outside of us and may have commitments to or consulting or advisory contracts with other entities that may limit their availability to us.

Our operations involve a risk of injury or damage from hazardous materials, and if an accident were to occur, we could be subject to costly and damaging liability claims, which could have a material adverse effect on our business, financial condition and results of operations.

Our research and development activities involve the controlled use of hazardous materials and chemicals. Although we believe that our safety procedures for handling and disposing of hazardous materials comply with the standards prescribed by state and federal regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of an accident, we could be held liable for any damages or fines that result. Such liability could have a material adverse effect on our business, financial condition and results of operations.

Item 2. Properties.

We lease a 37,000 square foot building in Ramsey, New Jersey, which contains our executive and administrative offices and research laboratory space. The lease, which commenced on November 1, 1993, has a 10-year term. In addition, the lease has two five-year renewal options.

Item 3. Legal Proceedings.

On October 20, 2000, Charles L. Grimes, one of our stockholders, and his wife, Jane Gillespie Grimes, filed a complaint against us in the Court of Chancery in Delaware, claiming breach of an alleged agreement with us which would have purportedly entitled Mr. Grimes to purchase 10% of our private placement of $6,235,000 of common stock and warrants in September 2000. We filed a motion to dismiss stating that Mr. and Mrs. Grimes had failed to state a claim as a matter of law. Pursuant to a decision and order of the Delaware Chancery Court, the case was dismissed on April 12, 2001. Mr. and Mrs. Grimes have filed an appeal to the Supreme Court of Delaware. On January 16, 2002, the Supreme Court of Delaware heard oral argument on the appeal of Mr. and Mrs. Grimes, and the court has directed that oral argument on this appeal be heard *en banc* at a later date.

Item 4. Submission of Matters to a Vote of Security Holders.

Not applicable.

PART II

Item 5. Market for the Company's Common Equity and Related Stockholder Matters.

Our Common Stock traded on the American Stock Exchange ("Amex") since August 7, 2000, under the symbol "ALT." Prior to August 7, 2000, our Common Stock was traded on the Over-the-Counter Bulletin Board ("OTCBB") under the symbol "ALTN." The following table sets forth, for the calendar periods indicated, the range of high and low sale prices for our Common Stock on Amex or OTCBB, as applicable:

2001	High	Low
First Quarter	$ 6.5000	$ 3.1500
Second Quarter	4.7100	2.7000
Third Quarter	3.4900	2.2500
Fourth Quarter	4.9300	2.3300
2000	**High**	**Low**
First Quarter	$ 5.0000	$ 0.9062
Second Quarter	3.6250	1.5000
Third Quarter	3.5625	2.1250
Fourth Quarter	8.3125	2.8750

As of February 20, 2002, there were 316 holders of the common stock. On February 20, 2002, the last sale price reported on the Amex for the common stock was $4.25 per share.

We have neither paid nor declared dividends on our common stock since our inception and do not plan to pay dividends in the foreseeable future. Any earnings that we may realize will be returned to finance our growth.

The market prices for securities of biotechnology and pharmaceutical companies, including ours, have historically been highly volatile, and the market has from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. Factors, such as fluctuations in our operating results, announcements of technological innovations or new therapeutic products by us or others, clinical trial results, developments concerning agreements with collaborators, governmental regulation, developments in patent or other proprietary rights, public concern as to the safety of drugs developed by us or others, future sales of substantial amounts of common stock by existing stockholders and general market conditions, can have an adverse effect on the market price of the common stock.

Item 6. Selected Financial Data.

The selected financial data set forth below should be read in conjunction with the audited financial statements and related notes included elsewhere in this Annual Report on Form 10-K. The selected financial data, for the five years ended December 31, 2001, has been derived from our audited financial statements.

Year Ended December 31,	2001	2000	1999	1998	1997
			(in thousands, except per share data)		
Statement of Operations Data:					
Revenues:					
Investment income	$ 452	$ 570	$ 835	$ 1,321	$ 1,510
Other income	—	—	600	—	—
Total revenues	452	570	1,435	1,321	1,510
Expenses:					
Research and development (which includes non-cash stock compensation expense in 2001 and 2000 of $165 and $353, respectively)	8,461	6,375	10,598	24,592	23,264
Elimination of previously accrued loss contingency	—	—	—	(1,771)	—
General and administrative (which includes non-cash stock compensation expense in 2001 and 2000 of $657 and $891, respectively)	4,761	5,313	4,357	4,842	3,633
Interest	—	—	—	4	25
Total expenses	13,222	11,688	14,955	27,667	26,922
Loss before income tax benefit	(12,770)	(11,118)	(13,520)	(26,346)	(25,412)
Income tax benefit	1,187	1,548	2,588	—	—
Net loss	(11,583)	(9,570)	(10,932)	(26,346)	(25,412)
Preferred stock dividends	3,204	2,945	2,707	2,207	1,091
Common stock warrant deemed dividends	210	—	—	—	—
Net loss applicable to common stockholders	$ (14,997)	$ (12,515)	$ (13,639)	$ (28,553)	$ (26,503)
Basic/diluted loss per share to common stockholders	$ (0.61)	$ (0.63)	$ (0.72)	$ (1.57)	$ (1.60)
Weighted average common shares used in computing basic/diluted loss per share	24,556	19,861	19,055	18,211	16,566
Balance Sheet Data:					
Cash, cash equivalents and short-term investments	$ 10,726	$ 9,955	$ 12,370	$ 24,132	$ 28,974
Working capital	9,758	9,754	10,425	20,093	22,390
Total assets	13,233	13,389	15,021	27,652	33,508
Accumulated deficit	(149,009)	(134,011)	(121,496)	(107,857)	(79,303)
Stockholders' equity	10,871	11,453	12,827	23,338	26,455

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Overview

We are a product-based biopharmaceutical company primarily engaged in the discovery and development of oral drugs to reverse or inhibit cardiovascular aging and diabetic complications. Our product candidates represent novel approaches to some of the largest pharmaceutical markets. Two of our compounds are in clinical development; several others are in early development. These pharmaceutical candidates were developed as a result of our research on the A.G.E. pathway, a fundamental pathological process and inevitable consequence of aging that causes or contributes to many medical disorders, including cardiovascular, kidney and eye diseases.

Our lead compound, ALT-711, is initially being developed for cardiovascular indications, including systolic hypertension. We have completed a Phase IIa trial to evaluate the effect of ALT-711 on cardiovascular compliance. Based on the positive results of this trial, we have initiated two Phase IIb efficacy trials of ALT-711, the SAPPHIRE and SILVER trials. The compound is also under Phase I investigation in ESRD patients undergoing peritoneal dialysis.

As we continue clinical development of ALT-711, we will determine if it is appropriate to retain development and marketing rights for one or several indications in North America, while at the same time continuing to evaluate potential corporate partnerships for the further development and ultimate marketing of the compound in other territories throughout the world.

A topical formulation of an A.G.E. Crosslink Breaker, ALT-744, is being clinically evaluated in skin aging for cosmetic applications. We continue to evaluate product development opportunities from among our A.G.E. Crosslink Breaker compounds and other classes of compounds in our patent estate.

Since our inception in October 1986, we have devoted substantially all of our resources to research, drug discovery and development programs. To date, we have not generated any revenues from the sale of products and do not expect to generate any such revenues for a number of years, if at all. We have incurred an accumulated deficit of $149,009,000 as of December 31, 2001, and expect to incur operating losses, potentially greater than losses in prior years, for a number of years.

We have financed our operations through proceeds from an initial public offering of common stock in 1991, public offerings of common stock, private placements of common and preferred equity securities, revenue from present and former collaborative relationships, reimbursement of certain of our research and development expenses by our collaborative partners, investment income earned on cash balances and short-term investments and the sale of a portion of our New Jersey State Net Operating Losses carryforwards.

In January 2002, we completed a public offering of 4,450,000 shares of common stock, which provided net proceeds of approximately $18,588,000.

In July 2001, we completed a public offering of 4,500,000 shares of common stock, which provided net proceeds of approximately $9,365,000. In connection with this offering, certain previously issued warrants were repriced pursuant to antidilution provisions connected to the warrants.

In March 2000, the Financial Accounting Standards Board ("FASB") released Interpretation No. 44, "Accounting for Certain Transactions Involving Stock Compensation, An Interpretation of APB Opinion No. 25." The interpretation became effective on July 1, 2000, but in some circumstances applies to transactions that occur prior to the effective date. Under the interpretation, stock options that are repriced must be accounted for as variable-plan arrangements until the options are exercised, forfeited or expire. This requirement applies to any options repriced after December 15, 1998. On February 2, 1999, we repriced certain stock options. The total compensation expense resulting from the repricing and included in net loss for the years ended December 31, 2001 and December 31, 2000 is $822,000 and $1,244,000, respectively. As of December 31, 2001, there are approximately 605,000 repriced options outstanding.

In 2001, 2000 and 1999, we sold $6,243,000, $14,129,000 and $27,687,000, respectively, of our gross State net operating loss carryforwards and $802,000, $590,000 and $645,000, respectively, of our State research and development tax credit carryforwards under the State of New Jersey's Technology Business Tax Certificate Transfer Program (the "Program"). The Program allows qualified technology and biotechnology business in New Jersey to sell unused amounts of net operating loss carryforwards and defined research and development tax credits for cash. The proceeds from the sale in 2001, 2000 and 1999 were approximately $1,187,000, $1,548,000 and $2,588,000, respectively, and such amounts were recorded as a tax benefit in the statements of operations. The proceeds from the sale of the net operating loss carryforwards and the research and development tax credit carryforwards sold in 2001 were received on January 4, 2002.

Our business is subject to significant risks including, but not limited to, (i) our ability to obtain funding, (ii) the risks inherent in our research and development efforts, including clinical trials, (iii) uncertainties associated with obtaining and enforcing our patents and with the patent rights of others, (iv) the lengthy, expensive and uncertain process of seeking regulatory approvals, (v) uncertainties regarding government reforms and product pricing and reimbursement levels, (vi) technological change and competition, (vii) manufacturing uncertainties and (viii) dependence on collaborative partners and other third parties. Even if our product candidates appear promising at an early stage of development, they may not reach the market for numerous reasons. Such reasons include the possibilities that the products will prove ineffective or unsafe during clinical trials, will fail to receive necessary regulatory approvals, will be difficult to manufacture on a large scale, will be uneconomical to market or will be precluded from commercialization by proprietary rights of third parties. These risks and others are discussed under the heading "Forward-Looking Statements and Cautionary Statements."

Results of Operations

Years Ended December 2001, 2000, 1999

Revenues

Total revenues for 2001, 2000 and 1999 were $452,000, $570,000 and $1,435,000, respectively. Revenues were derived from interest earned on cash and cash equivalents and short-term investments, and in 1999, the $600,000 payment under an option agreement with Taisho Pharmaceutical Co., Ltd., pursuant to which they were granted an option by us (which expired without being exercised) to acquire a license to ALT-711 in certain territories. The decrease in revenues in 2001 over 2000 was attributed to a decrease in cash and cash equivalents and short-term investment balances, as well as decreased interest rates.

Operating Expenses

Total expenses increased to $13,222,000 in 2001 from $11,688,000 in 2000, and decreased from $14,954,000 in 1999, and in each year consisted primarily of research and development expenses. Research and development expenses were $8,461,000 in 2001, $6,375,000 in 2000 and $10,598,000 in 1999, and include non-cash stock compensation expense of $165,000, $353,000 and $0, respectively. Research and development expenses consist primarily of third-party expenses associated with pre-clinical and clinical studies, manufacturing costs, including the development and preparation of clinical supplies, personnel and personnel-related expenses and an allocation of facility expense.

Research and development expenses increased in 2001 from 2000 by $2,086,000, or 32.7%. This increase was primarily related to the increase in manufacturing costs and additional expenditures for the Crosslink Breaker program. In 2001, approximately $1,730,000 was spent on third-party costs related to the Crosslink Breaker program, which included various pre-clinical and clinical programs and the initiation of the Phase IIb trials. The 2001 results also included manufacturing costs of approximately $1,916,000. These costs included the production costs of supplies for the ongoing clinical programs, and finalizing the development of manufacturing processes for the production of Phase III clinical trials and potential commercialization of ALT-711. The Phase IIb SAPPHIRE and SILVER trials were initiated during 2001, and are currently enrolling patients. The release of the data from these trials is targeted for year-end 2002. In 2000, approximately $2,115,000 of third-party costs were incurred on the Crosslink Breaker program, which included the Phase IIa trial. The Phase IIa trial was completed in 2000, and the data was released in 2001. The development and successful commercialization of ALT-711 are subject to substantial risks which are described in this Report. See, for example, "Forward-Looking Statements and Cautionary Statements—If we do not successfully develop any products, we may not derive any revenues."

Research and development expenses decreased in 2000, from 1999, by $4,223,000, or 39.8%, primarily due to decreased expenses related to the pimagedine program, conclusion of the ACTION I trial and the closure of the ESRD trials and related personnel expenses. Third-party costs associated with those programs were approximately $3,697,000 in 1999. The ACTION I trial was completed in 1998. Although the results showed that pimagedine reduced the risk of doubling of serum creatinine, the study's primary endpoint, the data did not reach statistical significance. However, pimagedine therapy did result in a statistically significant and clinically meaningful reduction of urinary protein excretion. Pimagedine also reduced, to a statistically significant extent, cholesterol and triglycerides as well as the progression of

retinopathy. Additional data suggested a trend toward improvements in other measures of kidney function, including estimated creatinine clearance and glomerular filtration rate. The ESRD trial was closed in April 1999, after the Company evaluated the program as part of the overall evaluation of pimagedine. Data for the study was inconclusive.

General and administrative expenses were $4,761,000 in 2001, decreased from $5,313,000 in 2000 and increased from $4,356,000 in 1999. The changes in general and administrative expenses consist primarily of non-cash stock compensation expense of $657,000, $891,000 and $0, in 2001, 2000 and 1999, respectively.

Net Loss

At December 31, 2001, we had available Federal net operating loss carryforwards, which expire in various amounts from the years 2006 through 2020, of approximately $135,500,000 and State net operating loss carryforwards, which expire in the years 2002 through 2007, of approximately $85,100,000. In addition, we had Federal research and development credit carryforwards of approximately $5,100,000 and State research and development tax credit carryforwards of approximately $1,600,000. We had net losses of $11,584,000 in 2001, $9,570,000 in 2000 and $10,932,000 in 1999.

Liquidity and Capital Resources

We had cash, cash equivalents and short-term investments at December 31, 2001, of $10,726,000 compared to $9,955,000 at December 31, 2000. This is an increase in cash, cash equivalents and short-term investments for the 12 months ended December 31, 2001, of $771,000. This consisted of $9,843,000 of financing activities related to a public offering of common stock and proceeds from stock option exercises. This was offset by $9,032,000 of cash used in operations, consisting primarily of research and development expenses, personnel and related costs, facility expenses and approximately $50,000 of capital expenditures.

In January 2002, we completed a public offering of 4,450,000 shares of common stock, which provided net proceeds of approximately $18,588,000.

In July 2001, we completed a public offering of 4,500,000 shares of common stock, which provided net proceeds of approximately $9,365,000. In connection with this offering, certain previously issued warrants were repriced pursuant to antidilution provisions connected to the warrants.

In 2001, 2000 and 1999, we sold $6,243,000, $14,129,000 and $27,687,000, respectively, of our gross State net operating loss carryforwards and $802,000, $590,000 and $645,000, respectively, of our State research and development tax credit carryforwards under the State of New Jersey's Technology Business Tax Certificate Transfer Program (the "Program"). The Program allows qualified technology and biotechnology businesses in New Jersey to sell unused amounts of net operating loss carryforwards and defined research and development tax credits for cash. The proceeds from the sale in 2001, 2000 and 1999 were $1,187,000, $1,548,000 and $2,588,000, respectively, and such amounts were recorded as a tax benefit in the statements of operations. The proceeds from the sale of the net operating loss carryforwards and the research and development tax credit carryforwards sold in 2001 were received on January 4, 2002. As of December 31, 2001, we had State net loss carryforwards and State research and development tax credit carryforwards available for sale of approximately $85,100,000 and $1,600,000, respectively. The State renews the Program annually and limits the aggregate proceeds to $10,000,000. We cannot be certain if we will be able to sell any or all of these carryforwards under the Program.

We anticipate that our existing available cash and cash equivalents and short-term investments will be adequate to satisfy our working capital requirements for our current operations into 2003.

The amount of our future capital requirements will depend on numerous factors, including the progress of our research and development programs, the conduct of pre-clinical tests and clinical trials, the development of regulatory submissions, the costs associated with protecting patents and other proprietary rights, the development of marketing and sales capabilities and the availability of third-party funding.

Because of our long-term capital requirements, we may seek access to the public or private equity markets whenever conditions are favorable. We may also seek additional funding through corporate collaborations and other financing vehicles, potentially including off-balance sheet financing through limited partnerships or corporations. There can be no assurance that such funding will be available at all or on terms acceptable to us. If adequate funds are not available, we may be required to curtail significantly one or more of our research or development programs. If we obtain funds through arrangements with collaborative partners or others, we may be required to relinquish rights to certain of our technologies or product candidates.

Our current priorities are the evaluation and possible continued development of ALT-711, our lead A.G.E. Crosslink Breaker candidate, and determining the optimal course for the continued development of pimagedine. We are focusing our resources on the development of ALT-711. As we continue clinical development of ALT-711, we will determine if it is appropriate to retain development and marketing rights for one or several indications in North America, while at the same time, continuing to evaluate potential corporate partnerships for the further development and ultimate marketing of the compound throughout the world. In addition, we are actively exploring partnering and regulatory pathways for the continued development of pimagedine. As described above, we believe that additional development of this compound and other product candidates will require us to find additional sources of funding.

Effective August 7, 2000, our Common Stock was approved for listing on the American Stock Exchange under the symbol "ALT."

In December 1999, the Securities and Exchange Commission ("SEC") issued Staff Accounting Bulletin No. 101 ("SAB 101"), "Revenue Recognition in Financial Statements." SAB 101 summarizes certain of the SEC's views in applying generally accepted accounting principles to revenue recognition in financial statements. The adoption of SAB 101 had no impact on the accompanying financial statements.

In August 2001, the FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" ("SFAS No. 144"), which is effective for fiscal years beginning after December 15, 2001, and addresses financial accounting and reporting for the impairment or disposal of long-lived assets. This statement supersedes SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of" ("SFAS No. 121"), and the accounting and reporting provisions of Accounting Principles Board Opinion No. 30, "Reporting the Results of Operations—Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions" ("APB No. 30"), for the disposal of a segment of a business. We plan to adopt the standard on January 1, 2002, and do not expect that the adoption of SFAS No. 144 will have a material effect on our results of operations or financial position.

Item 7a. Quantitative and Qualitative Disclosures About Market Risk.

Our exposure to market risk for changes in interest rates relates primarily to our investment in marketable securities. We do not use derivative financial instruments in our investments. Our investments consist primarily of debt instruments of the U.S. government, government agencies, financial institutions and corporations with strong credit ratings. The table below presents principal amounts and related weighted average interest rates expected by maturity date for our investment portfolio. There are no maturities after 2002, and our exposure is limited based on the short-term nature of these investments.

Assets:	2001
Cash equivalents:	
Fixed Rate	$4,249,439
Average interest rate	2.06%
Short-term investments:	
Fixed Rate	$6,476,384
Average interest rate	2.96%
Total investment securities:	$10,725,823
Average interest rate	2.64%

Item 8. Financial Statements and Supplementary Data.

a) The financial statements required to be filed pursuant to this Item 8 are appended to this Annual Report on Form 10-K. A list of the financial statements filed herewith is found at "Index to Financial Statements and Schedules" on page 24.

b) The unaudited quarterly financial data for the two-year period ended December 31, 2001 is as follows:

	Revenues	Expenses	Loss Before Income Tax Benefit	Net Loss Applicable to Common Stockholders	Basic/Diluted Loss Per Share
		(in thousands, except per share amounts)			
2001					
First Quarter	$ 153	$ 4,181	$ (4,028)	$ (4,793)	$ (0.21)
Second Quarter	101	2,407	(2,306)	(3,096)	(0.14)
Third Quarter	107	2,321	(2,214)	(3,239)	(0.13)
Fourth Quarter	91	4,313	(4,222)	(3,869)	(0.13)
Total Year	$ 452	$ 13,222	$ (12,770)	$ (14,997)	$ (0.61)
2000					
First Quarter	$ 166	$ 2,762	$ (2,596)	$ (3,305)	$ (0.17)
Second Quarter	143	2,402	(2,259)	(2,983)	(0.15)
Third Quarter	110	3,339	(3,229)	(3,977)	(0.20)
Fourth Quarter	151	3,185	(3,034)	(2,250)	(0.11)
Total Year	$ 570	$ 11,688	$ (11,118)	$ (12,515)	$ (0.63)

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

Not applicable.

PART III

Item 10. Directors and Executive Officers of the Company.

The information called for by Item 10 is incorporated by reference from the information under the caption "Election of Directors," "Executive Officers" and "Section 16(a) Beneficial Ownership Reporting Compliance" in our Proxy Statement for our 2002 Annual Meeting of Stockholders to be held on June 5, 2002.

Item 11. Executive Compensation.

The information called for by Item 11 is incorporated by reference from the information under the caption "Executive Compensation" in our Proxy Statement for our 2002 Annual Meeting of Stockholders to be held on June 5, 2002.

Item 12. Security Ownership of Certain Beneficial Owners and Management.

The information called for by Item 12 is incorporated by reference from the information under the caption "Security Ownership of Certain Beneficial Owners and Management" in our Proxy Statement for our 2002 Annual Meeting of Stockholders to be held on June 5, 2002.

Item 13. Certain Relationships and Related Transactions.

Not applicable.

PART IV

Item 14. Exhibits, Financial Statement Schedules and Reports on Form 8-K.

(a) Financial Statements:

Our audited financial statements, financial statement schedules and the Report of Independent Public Accountants are appended to this Annual Report on Form 10-K. Reference is made to the "Index to Financial Statements and Schedules" on page 24.

(b) Reports on Form 8-K:

On December 18, 2001, we filed a current report on Form 8-K, dated December 10, 2001, announcing the issuance of a key patent covering glucose lowering agents.

On November 13, 2001, we filed a current report on Form 8-K, dated November 7, 2001, announcing the initiation of a Phase I human testing of ALT-711 in ESRD patients undergoing peritoneal dialysis.

On October 25, 2001, we filed a current report on Form 8-K, dated October 23, 2001, announcing the initiation of a second Phase IIb trial of ALT-711 in systolic hypertension.

On October 19, 2001, we filed a current report on Form 8-K, dated October 18, 2001, announcing the appointment of Thomas A. Moore to the Board of Directors.

(c) Exhibits.

The exhibits required to be filed are listed on the Index to Exhibits attached hereto, which is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized this 6th day of March 2002.

ALTEON INC.
By: /s/ Kenneth I. Moch
Kenneth I. Moch
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Kenneth I. Moch Kenneth I. Moch	Chairman of the Board, President and Chief Executive Officer (principal executive officer)	March 6, 2002
/s/ Elizabeth O'Dell Elizabeth O'Dell	Vice President, Finance, Secretary and Treasurer (principal accounting officer)	March 6, 2002
/s/ Edwin Bransome, Jr., M.D. Edwin Bransome, Jr., M.D.	Director	March 6, 2002
/s/ Marilyn G. Breslow Marilyn G. Breslow	Director	March 6, 2002
/s/ Alan J. Dalby Alan J. Dalby	Director	March 6, 2002
/s/ David McCurdy David McCurdy	Director	March 6, 2002
/s/ Thomas A. Moore Thomas A. Moore	Director	March 6, 2002
/s/ George M. Naimark, Ph.D. George M. Naimark, Ph.D.	Director	March 6, 2002
/s/ Mark Novitch, M.D. Mark Novitch, M.D.	Director	March 6, 2002

Form 10-K – Item 14(a)(1)
Alteon Inc.
Index to Financial Statements and Schedules **Page**

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To the Stockholders and Board of Directors of Alteon Inc.:

We have audited the accompanying balance sheets of Alteon Inc. (a Delaware corporation) as of December 31, 2001 and 2000, and the related statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2001. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the U.S. Those standards require that we plan and 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. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Alteon Inc. as of December 31, 2001 and 2000, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the U.S.

ARTHUR ANDERSEN LLP

Roseland, New Jersey
January 22, 2002

Balance Sheets

December 31,	2001	2000
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 4,249,439	$ 3,600,328
Short-term investments	6,476,384	6,354,479
Other current assets	1,394,765	1,735,660
Total current assets	12,120,588	11,690,467
Property and equipment, net	1,109,676	1,696,082
Deposits and other assets	2,815	2,815
Total assets	$ 13,233,079	$ 13,389,364
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable	$ 307,153	$ 304,779
Accrued expenses	2,054,980	1,631,579
Total current liabilities	2,362,133	1,936,358
Commitment and Contingencies	—	—
Stockholders' Equity:		
Preferred stock, $.01 par value; 1,993,329 shares authorized, and 992 and 912 of Series G and 2,980 and 2,739 of Series H shares issued and outstanding, as of December 31, 2001 and December 31,2000, respectively	40	37
Common stock, $.01 par value; 80,000,000 shares authorized, and 27,314,846 and 22,399,660 shares issued and outstanding as of December 31, 2001 and December 31, 2000, respectively	273,148	223,997
Additional paid-in capital	159,596,934	145,241,265
Accumulated deficit	(149,008,641)	(134,011,423)
Accumulated other comprehensive income/(loss)	9,465	(870)
Total stockholders' equity	10,870,946	11,453,006
Total liabilities and stockholders' equity	$ 13,233,079	$ 13,389,364

The accompanying notes are an integral part of these balance sheets.

Statements of Operations

Year ended December 31,	2001	2000	1999
Revenues:			
Investment income	$ 451,518	$ 570,444	$ 834,661
Other income	—	—	600,000
Total revenues	451,518	570,444	1,434,661
Expenses:			
Research and development (which includes non-cash variable stock compensation expense in 2001 and 2000 of $164,988 and $353,065, respectively)	8,461,476	6,375,380	10,598,008
General and administrative (which includes non-cash variable stock compensation expense in 2001 and 2000 of $657,295 and $890,604, respectively)	4,760,747	5,312,750	4,356,447
Total expenses	13,222,223	11,688,130	14,954,455
Loss before income tax benefit	(12,770,705)	(11,117,686)	(13,519,794)
Income tax benefit	1,186,921	1,547,763	2,588,210
Net loss	(11,583,784)	(9,569,923)	(10,931,584)
Preferred stock dividends	3,203,906	2,945,451	2,707,844
Common stock warrant deemed dividends	209,528	—	—
Net loss applicable to common stockholders	$ (14,997,218)	$ (12,515,374)	$ (13,639,428)
Basic/diluted loss per share to common stockholders	$ (0.61)	$ (0.63)	$ (0.72)
Weighted average common shares used in computing basic/diluted loss per share	24,555,885	19,860,847	19,054,750

The accompanying notes are an integral part of these statements.

Statements of Stockholders' Equity

	Preferred Stock Shares	Preferred Stock Amount	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income/(Loss)	Total Stockholders' Equity
Balances at DECEMBER 31, 1998	3,086	$31	18,814,740	$188,147	$131,005,033	$ (107,856,621)	$ 1,768	$23,338,358
Net loss	—	—	—	—	—	(10,931,584)	—	(10,931,584)
Change in unrealized gains/(losses)	—	—	—	—	—	—	(475)	(475)
Comprehensive loss	—	—	—	—	—	—		(10,932,059)
Issuance of Series G and H preferred stock dividends	271	3	—	—	2,707,841	(2,707,844)	—	—
Exercise of employee stock options	—	—	374,961	3,750	162,691	—	—	166,441
Compensation expense in connection with the issuance of non-qualified stock options, stock option modifications and options granted to non-employees	—	—	—	—	253,948	—	—	253,948
DECEMBER 31, 1999	3,357	34	19,189,701	191,897	134,129,513	(121,496,049)	1,293	12,826,688
Net loss	—	—	—	—	—	(9,569,923)	—	(9,569,923)
Change in unrealized gains/(losses)	—	—	—	—	—	—	(2,163)	(2,163)
Comprehensive loss	—	—	—	—	—	—		(9,572,086)
Issuance of Series G and H preferred stock dividends	294	3	—	—	2,945,448	(2,945,451)	—	—
Exercise of employee stock options	—	—	375,871	3,759	500,786	—	—	504,545
Private placement of common stock and warrants	—	—	2,834,088	28,341	6,103,151	—	—	6,131,492
Compensation expense related to variable plan employee stock options	—	—	—	—	1,243,669	—	—	1,243,669
Compensation expense in connection with the issuance of non-qualified stock options, stock option modifications and options granted to non-employees	—	—	—	—	318,698	—	—	318,698
DECEMBER 31, 2000	3,651	37	22,399,660	223,997	145,241,265	(134,011,423)	(870)	$11,453,006
Net loss	—	—	—	—	—	(11,583,784)	—	(11,583,784)
Change in unrealized gains/(losses)	—	—	—	—	—	—	10,335	10,335
Comprehensive loss	—	—	—	—	—	—		(11,573,449)
Issuance of Series G and H preferred stock dividends	321	3	—	—	3,203,903	(3,203,906)	—	—
Exercise of employee stock options	—	—	415,186	4,151	428,698	—	—	432,849
Public offering of common stock	—	—	4,500,000	45,000	9,365,080	—	—	9,410,080
Compensation expense related to variable plan employee stock options	—	—	—	—	822,283	—	—	822,283
Common stock warrant deemed dividends	—	—	—	—	209,528	(209,528)	—	—
Compensation expense in connection with the issuance of non-qualified stock options, stock option modifications and options granted to non-employees	—	—	—	—	326,177	—	—	326,177
DECEMBER 31, 2001	3,972	$40	27,314,846	$273,148	$159,596,934	$ (149,008,641)	$ 9,465	$10,870,946

The accompanying notes are an integral part of these statements.

Statements of Cash Flows

Year ended December 31,	2001	2000	1999
Cash flows from operating activities:			
Net loss	$ (11,583,784)	$ (9,569,923)	$ (10,931,584)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	636,565	765,601	743,820
Stock compensation expense	326,177	318,698	253,948
Non-cash compensation expense related to variable plan employee stock options	822,283	1,243,669	—
Changes in operating assets and liabilities:			
Other current assets	340,895	(1,486,677)	25,162
Other assets	—	—	257,265
Accounts payable and accrued expenses	425,775	(257,844)	(2,119,073)
Net cash used in operating activities	(9,032,089)	(8,986,476)	(11,770,462)
Cash flows from investing activities:			
Capital expenditures	(50,159)	(62,377)	(157,969)
Purchases of marketable securities	(16,743,570)	(11,550,202)	(54,461,475)
Sales and maturities of marketable securities	16,632,000	12,227,817	60,719,408
Net cash (used in) provided by investing activities	(161,729)	615,238	6,099,964
Cash flows from financing activities:			
Net proceeds from issuance of common stock	9,842,929	6,636,037	166,441
Net cash provided by financing activities	9,842,929	6,636,037	166,441
Net increase/(decrease) in cash and cash equivalents	649,111	(1,735,201)	(5,504,057)
Cash and cash equivalents, beginning of period	3,600,328	5,335,529	10,839,586
Cash and cash equivalents, end of period	$ 4,249,439	$ 3,600,328	$ 5,335,529
Non-cash transactions:			
Preferred stock dividends	3,203,906	2,945,451	2,707,844
Common stock warrant deemed dividends	209,528	—	—

The accompanying notes are an integral part of these statements.

NOTE 1 — Summary of Significant Accounting Policies

Organization and Business

Alteon Inc. ("Alteon" or the "Company") is a product-based biopharmaceutical company engaged in the discovery and development of oral drugs to reverse or inhibit cardiovascular aging and diabetic complications. The Company's product candidates represent novel approaches to some of the largest pharmaceutical markets, such as cardiovascular and kidney diseases. The Company conducts its business in one operating segment. Alteon's proprietary technology focuses on Advanced Glycosylation End-products ("A.G.E.s"). A.G.E.s ultimately form crosslinks with adjacent proteins, leading to a loss of flexibility and function in body tissues, vessels and organs. All of the Company's products are in research or development, and no revenues have been generated from product sales.

The Company's lead A.G.E. Crosslink Breaker compound, ALT-711, is initially being developed for cardiovascular indications, including systolic hypertension. Alteon completed a Phase IIa trial to evaluate the effect of ALT-711 on cardiovascular compliance. Based on the positive results of this trial, Alteon initiated two Phase IIb efficacy trials of ALT-711, the SAPPHIRE (**S**ystolic **A**nd **P**ulse **P**ressure **H**emodynamic **I**mprovement by **R**estoring **E**lasticity) and SILVER (**S**ystolic Hypertension **I**nteraction with **L**eft **V**E**n**tricular **R**emodeling) trials. The compound is also under Phase I investigation in end-stage renal disease ("ESRD") patients undergoing peritoneal dialysis.

A topical formulation of an A.G.E. Crosslink Breaker, ALT-744, is being clinically evaluated in skin aging for cosmetic applications. The Company continues to evaluate product development opportunities from its A.G.E. Crosslink Breaker compounds and other classes of compounds in its patent estate.

The Company's business is subject to significant risks including, but not limited to, (i) its ability to obtain funding, (ii) its uncertainty of future profitability, (iii) the risks inherent in its research and development efforts, including clinical trials, (iv) uncertainties associated with obtaining and enforcing its patents and with the patent rights of others, (v) the lengthy, expensive and uncertain process of seeking regulatory approvals, (vi) uncertainties regarding government reforms and product pricing and reimbursement levels, (vii) technological change and competition, (viii) manufacturing uncertainties and (ix) dependence on collaborative partners and other third parties. Even if the Company's product candidates appear promising at an early stage of development, they may not reach the market for numerous reasons. Such reasons include the possibilities that the products will prove ineffective or unsafe during clinical trials, will fail to receive necessary regulatory approvals, will be difficult to manufacture on a large scale, will be uneconomical to market or will be precluded from commercialization by proprietary rights of third parties. Alteon will require substantial additional funding in order to continue the research, product development, pre-clinical testing and clinical trials of its product candidates. If adequate funding is not available, the Company may be required to curtail significantly one or more of its research or development programs and other Company activities.

Pervasiveness of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents and Short-Term Investments

Cash and cash equivalents include cash and highly liquid investments, which have a maturity of less than three months at the time of purchase. Short-term investments are considered available-for-sale and are recorded at fair market value, as determined by quoted market value. As of December 31, 2001 and 2000, short-term investments were invested in debt instruments of the U.S. government, government agencies, financial institutions and corporations with strong credit ratings. They consist of the following:

December 31,	2001	2000
U.S. government agency funds	$ 5,479,434	$ 2,651,255
Corporate obligations	996,950	3,703,224
	$ 6,476,384	$ 6,354,479

The amortized cost of short-term investments was $6,466,919 and $6,355,349 at December 31, 2001 and December 31, 2000, respectively. Gross unrealized gains or losses are not significant.

Property and Equipment

Property and equipment are stated at cost. Depreciation and amortization are computed using the straight-line method over the useful lives of owned assets, which range from three to five years. Leasehold improvements and equipment under capital leases are amortized using the straight-line method over the shorter of the lease term or the useful life of the assets.

Research and Development

Expenditures for research and development are charged to operations as incurred.

Stock-Based Compensation

The Company accounts for employee stock-based compensation and awards issued to non-employee directors under Accounting Principles Board Opinion No. 25 ("APB Opinion No. 25") and related interpretations. Stock option awards issued to consultants and contractors are accounted for in accordance with the provision of Statement of Financial Accounting Standard No. 123 ("SFAS No. 123"), which requires options issued to these parties to be valued at their fair market value when computing compensation.

Net Loss Per Share

Basic loss per share is computed by dividing net loss applicable to common stockholders by the weighted average number of shares outstanding during the year. Diluted loss per share is the same as basic loss per share, as the inclusion of common stock equivalents would be antidilutive.

Comprehensive Income/(Loss)

The only comprehensive income/(loss) items the Company has are unrealized gains/(losses) on available-for-sale investments and net loss.

Revenue Recognition

In December 1999, the Securities and Exchange Commission ("SEC") issued Staff Accounting Bulletin No. 101 ("SAB 101"), "Revenue Recognition in Financial Statements." SAB 101 summarizes certain of the SEC's views in applying generally accepted accounting principles to revenue recognition in financial statements. The adoption of SAB 101 had no impact on the accompanying financial statements.

Recently Issued Accounting Standards

In August 2001, the Financial Accounting Standards Board ("FASB") issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" ("SFAS No. 144"), which is effective for fiscal years beginning after December 15, 2001, and addresses financial accounting and reporting for the impairment or disposal of long-lived assets. This statement supersedes SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of" ("SFAS No. 121"), and the accounting and reporting provisions of Accounting Principles Board Opinion No. 30, "Reporting the Results of Operations—Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions" ("APB No. 30"), for the disposal of a segment of a business. Alteon plans to adopt the standard on January 1, 2002, and does not expect that the adoption of SFAS No. 144 will have a material effect on the Company's results of operations
or financial position.

During June 2001, the FASB issued Statements of Financial Accounting Standards No. 141, "Business Combinations" ("SFAS No. 141") and No. 142, "Goodwill and Other Intangible Assets" ("SFAS No. 142"). SFAS No. 141 changes the accounting for business combinations, requiring that all business combinations be accounted for using the purchase method and that intangible assets be recognized as assets apart from goodwill if they arise from contractual or other legal rights, or if they are separable or capable of being separated from the acquired entity and sold, transferred, licensed, rented or exchanged. SFAS No. 141 is effective for all business combinations initiated after June 30, 2001. SFAS No. 142 specifies the financial accounting and reporting for acquired goodwill and other intangible assets. Goodwill and intangible assets that have indefinite useful lives will not be amortized, but rather will be tested at least annually for impairment. SFAS No. 142 is effective for fiscal years beginning after December 15, 2001.

SFAS No. 142 requires that the useful lives of intangible assets acquired on or before June 30, 2001, be reassessed and the remaining amortization periods adjusted accordingly. Previously recognized intangible assets deemed to have indefinite lives shall be tested for impairment. Goodwill recognized on or before June 30, 2001, shall be assigned to one or more reporting units and shall be tested for impairment as of the beginning of the fiscal year in which SFAS No. 142 is initially applied in its entirety. The Company is required to and will adopt SFAS No. 142 as of January 1, 2002. Based on the Company's current activities, the Company does not believe the adoption of these pronouncements will have an impact on the Company's results of operations, cash flows or financial position.

Reclassifications

Certain prior year amounts have been reclassified to conform to current year presentation.

NOTE 2 — Property and Equipment

December 31,	2001	2000
Laboratory equipment	$ 1,183,034	$ 1,167,780
Furniture and equipment	686,560	686,560
Computer equipment	409,496	374,589
Leasehold improvements	5,215,069	5,215,069
	7,494,159	7,443,998
Less: Accumulated depreciation & amortization	(6,384,483)	(5,747,916)
	$ 1,109,676	$ 1,696,082

Depreciation and amortization expense was $636,565, $765,601 and $743,820 for the years ended December 31, 2001, 2000 and 1999, respectively.

NOTE 3 — Collaborative Research and Development Agreement

In December 1997, Alteon and Genentech, Inc. ("Genentech") entered into a stock purchase agreement and a development collaboration and license agreement providing for the development and marketing of pimagedine, a second-generation A.G.E.-Formation Inhibitor. Pursuant to the stock purchase agreement, Genentech purchased Common Stock, Series G Preferred Stock and Series H Preferred Stock for an aggregate purchase price of $37,544,000 (See Note 7). Genentech's obligations to purchase shares of Alteon's stock terminated December 31, 1998. Pursuant to a letter agreement dated February 11, 1999, between Alteon and Genentech, the development collaboration and license agreement terminated effective June 30, 1999.

NOTE 4 — Other Development Agreements

Alteon has entered into a number of licensing and collaboration agreements relating to the development and distribution of its A.G.E-related technology. The Company granted to Yamanouchi Pharmaceutical Co., Ltd. an exclusive license to commercialize our A.G.E.-Formation Inhibitor, pimagedine, in Japan, South Korea, Taiwan and The People's Republic of China. Alteon has entered into an exclusive licensing arrangement with Roche Diagnostics GmbH for Alteon's technology for diagnostic applications, and we have also entered into clinical testing and distribution agreements with Gamida for Life which grant Gamida the exclusive right to distribute pimagedine, if successfully developed and approved for marketing, in Israel, Bulgaria, Cyprus, Jordan and South Africa. Alteon has a license and supply agreement with IDEXX Laboratories, Inc. pursuant to which the Company licensed pimagedine to IDEXX as a potential therapeutic in companion animals (dogs, cats and horses) and Alteon's A.G.E. diagnostics technology for companion animal use. All of these agreements will entitle Alteon to receive royalties on sales if any products covered by the agreements are developed and sold.

In October 2000, Alteon entered into an agreement with HemoMax, LLC for the development of a novel technology designed to increase the delivery of oxygen to tissues in the body through enhanced blood circulation. On February 9, 2002, HemoMax advised Alteon that because of uncertainties regarding its ability to receive patents adequate to support commercialization of the technology, it has decided to cease operations and liquidate.

In August 1999, Alteon and Taisho Pharmaceutical Co., Ltd. entered into an agreement under which Taisho was granted an exclusive option through December 31, 1999, to acquire a license to Alteon's lead A.G.E. Crosslink Breaker, ALT-711, for Japan, South Korea, Taiwan and The People's Republic of China for a non-refundable option fee of $600,000. This amount is reflected in other income in the statement of operations. The option expired on December 31, 1999.

Alteon has also entered into a number of academic research and license agreements. Pursuant to an agreement with Rockefeller University, we have exclusive, royalty-free, worldwide and perpetual rights to the technology and inventions relating to A.G.E.s and other protein crosslinking, including those relating to the complications of aging and diabetes. The Company also obtained an exclusive, worldwide, royalty-bearing license from Washington University for patents covering the use of pimagedine as an inhibitor of inducible nitric oxide synthase. In addition Alteon received from The Picower Institute for Medical Research ("The Picower Institute") an exclusive worldwide, royalty-bearing license for certain commercial health care applications of A.G.E.-related inventions. On December 31, 2001, The Picower Institute ceased operations, and we expect to assume all responsibility and costs for the worldwide filing and prosecution of patent applications and maintenance of patents for such inventions.

Alteon's commercial partners may develop, either alone or with others, products that compete with the development and marketing of the Company's products. Competing products, either developed by the commercial partners or to which the commercial partners have rights, may result in their withdrawal of support with respect to all or a portion of the Company's technology, which would have a material adverse effect on the Company's business, financial condition and results of operations.

The Company has also entered into various arrangements with independent research laboratories to conduct studies in conjunction with the development of the Company's technology. The Company receives certain rights to inventions or discoveries that may arise from this research.

NOTE 5 — Accrued Expenses

December 31,	2001	2000
Accrued clinical trial expense	$ 1,379,693	$ 848,745
Accrued professional fees	191,000	291,000
Accrued payroll and related expenses	224,287	167,680
Accrued rent	100,673	155,585
Accrued patent fees	85,571	111,529
Other	73,756	57,040
	$ 2,054,980	$ 1,631,579

NOTE 6 — Contingencies and Commitments

Commitments

The Company leases its headquarters and research facility and related equipment and furniture under non-cancelable operating leases. As of December 31, 2001, future minimum rentals under operating leases that have initial or remaining non-cancelable terms in excess of one year are as follows:

	Operating Leases
2002	$ 536,500
2003	447,000
Thereafter	—
	$ 983,500

Rent expense for each of the years in the three-year period ended December 31, 2001 was $599,655, $586,294 and $573,962, respectively.

Contingencies

The Company is party to various claims and lawsuits arising in the normal course of business. In the opinion of management, these suits and claims will not result in judgments or settlements which, in the aggregate, would have a material adverse effect on the Company's condition or the results of operations.

NOTE 7 — Stockholders' Equity

Common/Preferred Stock Issuances

In July 2001, Alteon completed a public offering of 4,500,000 shares of common stock, which provided net proceeds of approximately $9,365,000. In connection with this offering, certain previously issued warrants were repriced from $3.40 to $2.25 per share pursuant to antidilution provisions connected to the warrants. Such repricing resulted in a $209,528 deemed dividend on the underlying common stock.

In September 2000, Alteon entered into an agreement with several investors pursuant to which Alteon sold, in a private placement, an aggregate of 2,834,088 shares of common stock and warrants to purchase 1,133,636 shares of common stock (the "Warrants") for an aggregate purchase price of $6,235,000. The adjusted exercise price of the Warrants is $2.25 per share, while the term is seven years.

In December 1997, the Company and Genentech entered into a stock purchase agreement pursuant to which Genentech agreed to buy shares of Common Stock, Series G Preferred Stock and Series H Preferred Stock (See Note 3). In December 1997, Genentech purchased Common Stock and Series G Preferred Stock for an aggregate purchase price of $15,000,000. On July 27, 1998 and October 1, 1998, Genentech purchased $8,000,000 and $14,544,000 respectively, of Series H Preferred Stock. As of December 31, 2001, 2000 and 1999 respectively, approximately $3,204,000, $2,945,000 and $2,708,000 of Preferred Stockholder Dividends were recorded. Series G Preferred Stock and Series H Preferred Stock Dividends are payable quarterly in shares at a rate of 8.5%. Each share of Series G Preferred Stock and Series H Preferred Stock is convertible upon 70 days' prior written notice into a number of shares of common stock determined by dividing $10,000 by the average of the closing sales price of the common stock, as reported on the American Stock Exchange for the 20 business days immediately preceding the date of conversion.

In connection with an April 1997 offering, warrants to purchase 60,000 shares of common stock at an exercise price of $4.025 per share are still outstanding.

Stock Option Plan

The Company has established two stock option plans for its employees, officers, directors, consultants and independent contractors. Options to purchase up to 4,192,000 shares of common stock may be granted under the first plan, and options to purchase up to 7,000,000 shares of common stock may be granted under the second plan.

The plans are administered by a committee of the Board of Directors, which may grant either non-qualified or incentive stock options. The committee determines the exercise price and vesting schedule at the time the option is granted. Options vest over various periods and may expire no later than 10 years from date of grant. Each option entitles the holder to purchase one share of common stock at the indicated exercise price. The plans also provide for certain antidilution and change in control rights, as defined.

The following table summarizes the activity in the Company's stock options:

	Options	Exercise Price Range Per Share	Weighted Average Exercise Price Per Share
Balance, December 31, 1998	4,799,260		$ 5.39
Granted	1,928,701	$ 0.780 - 1.125	0.99
Exercised	(374,961)	0.300 - 0.600	0.44
Canceled	(1,277,804)	0.810 - 15.000	3.88
Balance, December 31, 1999	5,075,196		$ 3.40
Granted	1,105,820	$ 1.630 - 7.000	4.57
Exercised	(375,871)	0.600 - 5.130	1.34
Canceled	(550,326)	0.600 - 9.500	1.12
Balance, December 31, 2000	5,254,819		$ 4.02
Granted	873,942	$ 2.600 - 4.150	3.13
Exercised	(415,186)	0.844 - 1.125	1.04
Canceled	(1,008,269)	0.813 - 11.150	8.53
Balance, December 31, 2001	4,705,306		$ 3.15

The following table summarizes information regarding stock options outstanding at December 31, 2001:

	Options Outstanding at December 31, 2001			Options Exercisable at December 31, 2001	
Range of Exercise Prices	Number of Shares	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number of Shares Exercisable	Weighted Average Exercise Price
$0.7810 - 1.0630	1,493,512	6.15	$ 0.9500	1,433,356	$ 0.9532
1.1250 - 3.5200	1,179,593	8.81	1.9770	585,156	1.2970
3.5625 - 5.1250	1,238,076	7.76	3.9428	725,235	4.0525
5.3750 - 15.0000	794,125	5.49	7.7841	592,412	8.0511
$0.7810 - 15.0000	4,705,306	7.13	$ 3.1484	3,336,159	$ 2.9476

The weighted average fair value of the options granted was $3.13, $2.54 and $0.53 during 2001, 2000 and 1999, respectively. Included in options at December 31, 2001, are 1,095,000 options granted to certain executives with option prices ranging from $0.875 per share to $3.90 per share, the fair market value on the date of grant. Such options vest upon the earlier of five years after grant or upon achievement of certain Company milestones.

The Company accounts for its stock option plans for options granted to employees and non-employee directors under APB Opinion No. 25, under which no compensation cost (excluding those options granted below fair market value) has been recognized. Had compensation costs for these plans been determined consistent with SFAS No. 123, the Company's pro forma net loss and loss per share applicable to common stockholders for 2001, 2000 and 1999 would have been $16,507,000, $13,651,000 and $13,935,000, and $0.67, $0.69 and $0.73, respectively. Stock option awards issued to consultants and contractors have been accounted for in accordance with SFAS No. 123. The 2001, 2000 and 1999 pro forma net loss and loss per share applicable to common stockholders reflects a benefit of $53,000, $157,000 and $1,458,000, respectively, for the reversal of previously recognized pro forma compensation costs on options forfeited. Consistent with SFAS No. 123, the Company elected not to estimate these forfeitures in the prior period pro forma compensation cost calculation. Because SFAS No. 123 has not been applied to options granted prior to January 1, 1995, the resulting pro forma compensation cost may not be representative of that to be expected in future years.

Under SFAS No. 123, the fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions used for grants in 2001, 2000 and 1999, respectively; risk free interest rates ranging from 2.04% to 5.30%, 5.24% to 6.64% and 4.73% to 6.07%, respectively; expected life of 2.02 years over the vesting periods; expected dividend yield of 0%; and expected volatility of 70%.

In March 2000, the FASB released Interpretation No. 44, "Accounting for Certain Transactions Involving Stock Compensation, An Interpretation of APB Opinion No. 25." The interpretation became effective on July 1, 2000, but in some circumstances applies to transactions that occurred prior to the effective date. Under the interpretation, stock options that are repriced must be accounted for as variable-plan arrangements until the options are exercised, forfeited or expire. This requirement applies to any options repriced after December 15, 1998. On February 2, 1999, the Company repriced certain stock options. The total non-cash stock compensation expense resulting from the repricing for the years ended December 31, 2001 and December 31, 2000 is $822,283 and $1,243,669 respectively, which includes research and development charges of $164,988 and $353,065, and general and administrative charges of $657,295 and $890,604, respectively. As of December 31, 2001, there are approximately 605,000 repriced options outstanding.

NOTE 8 — Savings and Retirement Plan

The Company maintains a savings and retirement plan under Section 401(k) of the Internal Revenue Code which allows eligible employees to annually contribute a portion of their annual salary to the plan. In 1998, the Company began making discretionary contributions at a rate of 25% of an employee's contribution up to a maximum of 5% of the employee's base salary. The Company made contributions of $38,669, $30,530 and $49,000 for the years ended December 31, 2001, 2000 and 1999, respectively.

NOTE 9 — Related Party Transactions

Since the Company's inception, the Company has entered into certain collaborative agreements with organizations with which Dr. Anthony Cerami, a former member of the Company's Board of Directors, was affiliated. These organizations included The Picower Institute, The Rockefeller University, Cerami Consulting Corporation and the Kenneth S. Warren Laboratories, Inc. The Company paid to the organizations $0, $0 and $243,000 in 2001, 2000, and 1999, respectively. In addition, the Company paid patent maintenance fees for technology related to the organizations of $17,000, $120,000 and $73,000 in 2001, 2000 and 1999, respectively. Although the Company has terminated its collaborative relationship with The Picower Institute, the Company has a royalty obligation on all net sales and other revenues associated with certain technologies developed, payable to The Picower Institute's successor. Effective May 17, 1999, the Company terminated its consulting agreement with Cerami Consulting Corporation and its research agreement with Kenneth S. Warren Laboratories, Inc. In addition, Dr. Cerami resigned from the Company's Board of Directors on April 19, 1999.

Prior to 2000, the Company had a Scientific Advisory Board. The Chairman and two other Scientific Advisory Board members provided consulting services to the Company. Consulting fees paid to these members totaled $55,000 in 1999.

NOTE 10 — Income Taxes

At December 31, 2001, the Company had available Federal net operating loss carryforwards, which expire in the years 2006 through 2020, of approximately $135,500,000 for income tax purposes and State net operating loss carryforwards, which expire in the years 2002 through 2007, of approximately $85,100,000. In addition, the Company has Federal research and development tax credit carryforwards of approximately $5,100,000 and State research and development tax credit carryforwards of approximately $1,600,000. The amount of Federal net operating loss and research and development tax credit carryforwards which can be utilized in any one period may become limited by Federal income tax regulations if a cumulative change in ownership of more than 50% occurs within a three-year period.

The components of the deferred tax assets and the valuation allowance are as follows:

December 31,	2001	2000
Net operating loss carryforwards	$ 51,300,000	$ 47,700,000
Research and development credit	6,700,000	7,100,000
Other temporary differences	4,100,000	2,400,000
Gross deferred tax assets	62,100,000	57,200,000
Valuation allowance	(62,100,000)	(57,200,000)
Net deferred tax assets	$ —	$ —

A valuation allowance was established since the realization of the Company's deferred tax assets is uncertain. In 2001, 2000 and 1999, the Company sold $6,243,000, $14,129,000 and $27,687,000, respectively, of its gross State net operating loss carryforwards and $802,000, $590,000 and $645,000, respectively, of its State research and development tax credit carryforwards under the State of New Jersey's Technology Business Tax Certificate Transfer Program (the "Program"). The Program allows qualified technology and biotechnology business in New Jersey to sell unused amounts of net operating loss carryforwards and defined research and development tax credits for cash. The proceeds from the sale in 2001, 2000 and 1999 were approximately $1,187,000, $1,548,000 and $2,588,000, respectively, and such amounts were recorded as a tax benefit in the statements of operations. The proceeds from the sale of the net operating loss carryforwards and the research and development tax credit carryforwards sold in 2001 were received on January 4, 2002. The State renews the Program annually and limits the aggregate proceeds to $10,000,000. Due to the uncertainty at any time as to the Company's ability to effectuate the sale of Alteon's available State net operating losses, since the Company has no control or influence over the program, the benefits are recorded once the agreement with the counterpart is signed and the sale is approved by the State.

NOTE 11 — Subsequent Event

In January 2002, Alteon completed a public offering of 4,450,000 shares of common stock, which provided net proceeds of approximately $18,588,000.

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Exhibit No.	Description of Exhibit
3.1	Restated Certificate of Incorporation, as amended. (Incorporated by reference to Exhibit 3.1 to the Company's Report on Form 10-Q filed on November 10, 1999).
3.2	Certificate of the Voting Powers, Designations, Preference and Relative Participating, Optional and Other Special Rights and Qualifications, Limitations or Restrictions of Series F Preferred Stock of the Company. (Incorporated by reference to Exhibit 3.2 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000).
3.3	Certificate of Retirement dated September 10, 2000, of Alteon Inc. (Incorporated by reference to Exhibit 3.1 to the Company's Report on Form 10-Q filed on November 10, 1999).
3.4	Certificate of Designations of Series G Preferred Stock of Alteon Inc. (Incorporated by reference to Exhibit 3.4 to the Company's Annual Report on Form 10-K for the year ended December 31, 1997).
3.5	Certificate of Amendment of Certificate of Designations of Series G Preferred Stock of Alteon Inc. (Incorporated by reference to Exhibit 3.4 to the Company's Report on Form 10-Q filed on August 14, 1998).
3.6	Certificate of Designations of Series H Preferred Stock of Alteon Inc. (Incorporated by reference to Exhibit 3.5 to the Company's Annual Report on Form 10-K for the year ended December 31, 1997).
3.7	Amended Certificate of Designations of Series H Preferred Stock of Alteon Inc. (Incorporated by reference to Exhibit 3.6 to the Company's Report on Form 10-Q filed on August 14, 1998).
3.8	Certificate of Retirement dated November 20; 2000, of Alteon Inc. (Incorporated by reference to Exhibit 3.8 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000).
3.9	Certificate of Amendment to Restated Certificate of Incorporation of Alteon Inc., dated June 7, 2001 (Incorporated by reference to Exhibit 3.8 to the Company's Report on Form 10-Q filed on August 14, 2001).
3.10	By-laws, as amended. (Incorporated by reference to Exhibit 3.7 to the Company's Report on Form 10-Q filed on May 12, 1999).
4.1	Stockholders' Rights Agreement dated as of July 27, 1995, between Alteon Inc. and Registrar and Transfer Company, as Rights Agent. (Incorporated by reference to Exhibit 4.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000).
4.2	Amendment to Stockholders' Rights Agreement dated as of April 24, 1997, between Alteon Inc. and Registrar and Transfer Company, as Rights Agent. (Incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on May 9, 1997).
4.3	Registration Rights Agreement dated as of April 24, 1997, between Alteon Inc. and the investors named on the signature page thereof. (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on May 9, 1997).
4.4	Form of Common Stock Purchase Warrant. (Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on May 9, 1997).
4.5	Amendment to Stockholders' Rights Agreement dated as of December 1, 1997, between Alteon Inc. and Registrar and Transfer Company, as Rights Agent. (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on December 10, 1997).
4.6	Registration Rights Agreement dated September 29, 2000. (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on October 5, 2000).
4.7	Form of Series 1 Common Stock Purchase Warrant. (Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on October 5, 2000).
4.8	Form of Series 2 Common Stock Purchase Warrant. (Incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on October 5, 2000).
10.1†	Amended and Restated 1987 Stock Option Plan. (Incorporated by reference to Exhibit 10.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 1997).
10.2†	Amended 1995 Stock Option Plan.
10.3	Form of Employee's or Consultant's Invention Assignment, Confidential Information and Non-Competition Agreement executed by all key employees and consultants as employed or retained from time to time. (Incorporated by Reference to Exhibit 10.1 to the Company's Registration Statement on Form S-1 (File Number 33-42574), which became effective on November 1, 1991).
10.4	Amendment and Assignment of Research and Option Agreement dated as of September 25, 1987, among Telos Development Corporation ("Telos"), The Rockefeller University ("The Rockefeller"), the Company and Anthony Cerami. (Incorporated by reference to Exhibit 10.5 to the Company's Registration Statement on Form S-1 (File Number 33-42574), which became effective on November 1, 1991).

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10.5	License Agreement dated as of September 25, 1987, among Telos, Applied Immune Sciences, Inc., the Company and The Rockefeller, as amended by letter agreement dated September 25, 1987, and letter agreement dated August 15, 1991. (Incorporated by reference to Exhibit 10.6 to the Company's Registration Statement on Form S-1 (File Number 33-42574), which became effective on November 1, 1991).
10.6*	License Agreement dated as of June 16, 1989, between the Company and Yamanouchi Pharmaceutical Co., Ltd. ("Yamanouchi"). (Incorporated by reference to Exhibit 10.17 to the Company's Registration Statement on Form S-1 (File Number 33-42574), which became effective on November 1, 1991).
10.7*	Research and License Agreement dated as of September 5, 1991, between the Company and The Picower Institute for Medical Research. (Incorporated by reference to Exhibit 10.29 to the Company's Registration Statement on Form S-1 (File Number 33-42574), which became effective on November 1, 1991).
10.8	Lease Agreement dated January 11, 1993, between Ramsey Associates and the Company. (Incorporated by reference to Exhibit 10.8 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000).
10.9*	License Agreement dated as of December 30, 1994, between the Company and Corange International Limited. (Incorporated by reference to Exhibit 10.9 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000).
10.10*	Research Collaboration and License Agreement dated as of June 2, 1995, between Washington University and the Company. (Incorporated by reference to Exhibit 10.10 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000).
10.11	Distribution Agreement dated September 25, 1995, between the Company and Eryphile BV. (Incorporated by reference to Exhibit 10.11 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000).
10.12†	Employment Agreement dated as of October 21, 2000, between the Company and Elizabeth O'Dell. (Incorporated by reference to Exhibit 10.12 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000).
10.13†	Alteon Inc. Change in Control Severance Benefits Plan. (Incorporated by reference to Exhibit 10.13 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000).
10.14	Preferred Stock Investment Agreement dated as of April 24, 1997, between Alteon Inc. and the investors named on the signature page thereof. (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 9, 1997).
10.15*	License and Supply Agreement dated June 17, 1997, between IDEXX Laboratories, Inc. and Alteon Inc. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 10-Q filed on August 13, 1997).
10.16	Stock Purchase Agreement dated as of December 1, 1997, between Alteon Inc. and Genentech, Inc. (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 10, 1997).
10.17†	Amended and Restated Employment Agreement dated as of December 15, 1998, between the Company and Kenneth I. Moch (Incorporated by reference to Exhibit 10.28 to the Company's Annual Report on Form 10-K for the year ended December 31, 1999).
10.18	Letter Agreement dated February 11, 2000, between the Company and Genentech, Inc. (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 19, 1999).
10.19†	Consulting Agreement dated as of December 15, 1998, between the Company and Mark Novitch, M.D., as amended by letter agreement dated as of January 18, 2001. (Incorporated by reference to Exhibit 10.19 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000).
10.20†	Employment Agreement dated as of March 14, 2000, between the Company and Robert deGroof, Ph.D. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 10-Q filed on May 12, 2000).
10.21	Common Stock and Warrants Purchase Agreement dated as of September 29, 2000, among Alteon Inc. and EGM Medical Technology Fund, L.P., EGM Technology Offshore Fund, Narragansett I, L.P., Narragansett Offshore, Ltd., S.A.C. Capital Associates, LLC, SDS Merchant Fund, LP and Herriot Tabuteau. (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on October 5, 2000).
10.22*	Development Services Agreement dated September 25, 2000. (Incorporated by reference to Exhibit 10.2 to the Company's Report on Form 10-Q filed on November 13, 2000).
10.23†	Letter Agreement dated December 3, 2001, between the Company and Kenneth I. Moch amending Amended and Restated Employment Agreement dated as of December 15, 1998.
23.1	Consent of Independent Public Accountants.
99.1	Letter to Commission Pursuant to Temporary Note 3T.

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* Confidentiality has been granted for a portion of this exhibit.

† Denotes a management contract or compensatory plan or arrangement required to be filed as an exhibit pursuant to Item 14(c) to this Form 10-K.

Board of Directors

Kenneth I. Moch
Chairman of the Board
President and Chief Executive Officer
Alteon Inc.

Edwin D. Bransome, Jr., M.D.
Professor of Medicine and Physiology Emeritus
Medical College of Georgia
Past President, United States Pharmacopoeia

Marilyn G. Breslow
President
W.P. Stewart & Co., Inc.

Alan J. Dalby
Retired Chairman, Reckitt Benckiser plc
Former Chairman and Chief Executive Officer
Cambridge NeuroScience, Inc.
Former Executive Vice President, Smith Kline Beckman Corporation

David K. McCurdy
President, Electronic Industries Alliance
Former Congressman, U.S. House of Representatives, Fourth District, Oklahoma

Thomas A. Moore
President and Chief Executive Officer
Nelson Communications Worldwide

George M. Naimark, Ph.D.
President, Naimark & Barba, Inc.
President, Naimark & Associates, Inc.

Mark Novitch, M.D.
Retired Vice Chairman and Chief Compliance Officer
The Upjohn Company
Former Deputy Commissioner of the Food and Drug Administration (FDA)

Corporate Officers

Kenneth I. Moch
President and Chief Executive Officer

Robert C. deGroof, Ph.D.
Senior Vice President, Scientific Affairs

Judith S. Hedstrom
Senior Vice President, Corporate Development

Elizabeth A. O'Dell
Vice President, Finance, Treasurer and Secretary

Corporate Information

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www.alteonpharma.com

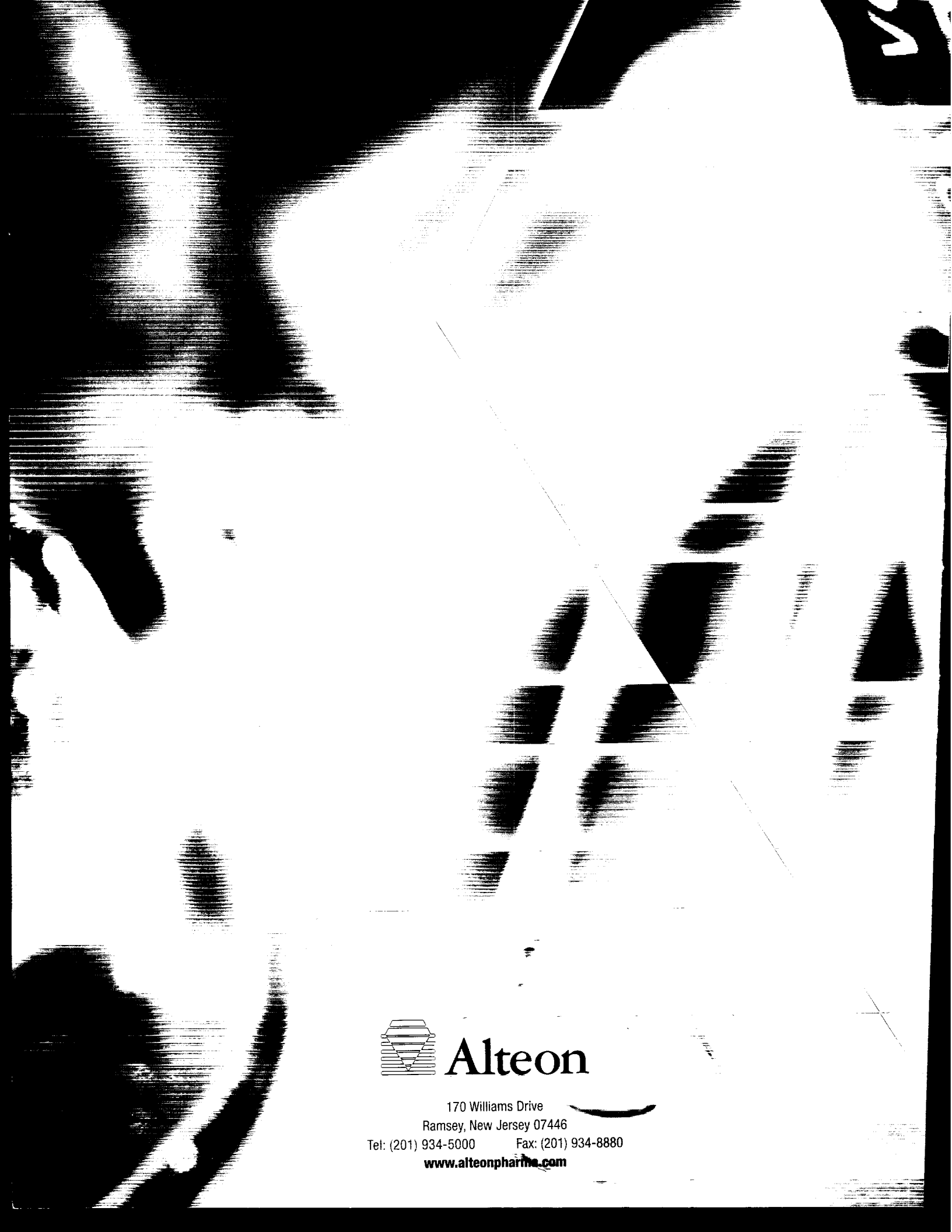
Legal Counsel
Smith, Stratton, Wise, Heher & Brennan, LLP
Princeton, New Jersey

Independent Public Accountants
Arthur Andersen LLP
Roseland, New Jersey

Transfer Agent
Registrar and Transfer Company
10 Commerce Drive
Cranford, New Jersey 07016
1-800-368-5948

Inquiries regarding transfers, lost certificates and changes of address should be directed to the transfer agent.

Annual Meeting
Date: June 5, 2002
Time: 9:00 AM
Place: Sheraton Crossroads
One International Blvd.
Mahwah, New Jersey 07430



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