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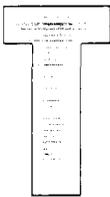
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FINANCIAL

START YOUR ENGINES

We're bringing drug discovery to life



Translating the genome into therapeutic products is an extremely exciting opportunity. Deltagen's experienced management team has prepared the company to distill this reservoir of unrefined genomic information into novel secreted protein and small-molecule therapeutics with the potential to enhance millions of lives.

Exploiting the potential of the genome requires the ability to define the best target opportunities and to have drug discovery capabilities to drive these targets to the marketplace. Building upon our core strength—our proprietary *in vivo* mammalian technology platform—we have recently expanded our credentials to include world-class chemistry capabilities. Deltagen's unique internal drug discovery engine has the potential to improve and accelerate the identification of new potential therapies. Our current discovery and development efforts are focused in the areas of oncology, metabolic disorders and inflammatory diseases.

On the road to becoming a leader in drug discovery

Deltagen has developed a powerful systems biology approach to the drug discovery process. Our Target Research and Development program enables us to produce disease models that provide a unique infrastructure for therapeutic research. This approach, supported by an array of genomic tools, provides us with the ability to turn the potential of the genome into a pipeline of future investigational drug candidates. By taking these steps, we have placed the company in what we believe to be a "target rich" position.

To take advantage of our "target rich" position, we have added key chemistry capabilities to advance our own clinical candidates. In January 2002, Deltagen acquired Bristol-Myers Squibb Pharma Research Labs, L.L.C., formerly known as CombiChem, Inc. The new subsidiary, Deltagen Research Laboratories, L.L.C., represents a transforming strategic move for our company, by integrating proven medicinal chemistry capabilities into our cutting-edge biology program. The acquisition enables Deltagen to expedite the development of small-molecule therapeutics from our pipeline of novel drug targets, such as DT011M, recently identified and validated by our living technology model as a key insulin mediator.

POWER STEERING

at the hands of an agile
and experienced senior
management team

The Deltagen Senior Management Team

Front row, left to right:

Mark W. Moore, Ph.D.
Chief Scientific Officer

William Matthews, Ph.D.
President and Chief Executive Officer

Back row, left to right:

Augustine G. Yee, J.D.
Senior Vice President of Corporate
Development and Secretary

John E. Burke, J.D.
Senior Vice President of Intellectual
Property and General Counsel

Peter L. Myers, Ph.D.
Executive Vice President,
Deltagen Research Laboratories

Richard H. Hawkins, M.B.A.
Chief Financial Officer



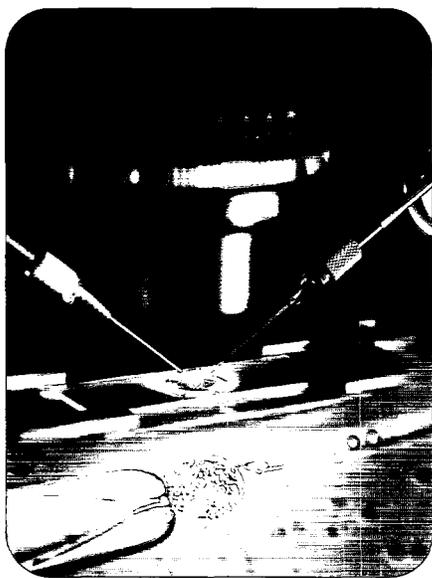
OUR ENGINE

a living technology platform



DeltaBase—a comprehensive library of mammalian gene utility data

DeltaBase™, Deltagen's premier database of *in vivo*-derived mammalian gene function information, represents an important internal resource as well as a valuable source of partnerships and revenue. DeltaBase is highly relevant to pharmaceutical collaborators because of its focus on important targets, such as ion channels, G protein-coupled receptors and proteases, which are readily accessible to small-molecule drugs. To date, Deltagen has established DeltaBase agreements with three of the most admired pharmaceutical companies in the world, GlaxoSmithKline plc, Pfizer Inc. and Merck & Co., Inc., as well as with emerging biopharmaceutical companies such as Vertex Pharmaceuticals, Inc. Our multimillion-dollar agreements with GlaxoSmithKline, Pfizer and Merck provide these companies with nonexclusive access to information related to genes selected for their biological interest to the pharmaceutical industry. With agreements in place with three of the largest pharmaceutical companies in the world, we are encouraged by the revenue-generating potential of DeltaBase.



Genetically modified stem cells are micro-injected into fertilized mouse eggs to create knockout mice.

To unlock the genome's potential with the ultimate goal of achieving a higher—and faster—rate of clinical success, researchers must develop new and more efficient processes to overcome the current bottlenecks in drug discovery. Deltagen's unique systems biology approach is designed to help clear the first and major hurdle of target discovery: lead validation.

Our proprietary *in vivo* mammalian gene knockout technology provides the company with a powerful vehicle that can identify and validate the utility of genomic targets within a living model at an extraordinary scale and speed. Our robust platform can potentially uncover clinically relevant information earlier and more efficiently in the discovery process, and thus accelerate the development of potential drug targets into meaningful therapies.

The power to transform genetic targets into novel, life-enhancing drugs

Our technology infrastructure will soon have the capacity to examine up to 1,000 *in vivo* mammalian targets per year—exponentially more than was ever thought possible by the biopharmaceutical industry. In effect, we've industrialized the knockout mammalian gene process, providing the medical research community with a drug discovery resource rarely seen before. As a result, Deltagen has successfully mined a rich pipeline of potential novel targets that we plan to bring forward in the next few years. The utility of these targets is protected by a deep and expanding intellectual property portfolio, and as of the end of 2001, we had filed more than 600 applications with the United States Patent and Trademark Office. And this number continues to grow as our pipeline expands.

The capabilities to create both secreted protein and small-molecule drugs

Our extensive target validation program allows Deltagen to advance both secreted protein and small-molecule drugs. Over the next few years, it is our goal to characterize the *in vivo* function and therapeutic potential of more than 1,000 secreted proteins. Commercially viable biotechnology drug candidates discovered through this program will be developed either as proteins or as antibody targets—internally by Deltagen or in alliance with premier partners. Our research agreement with Eli Lilly & Company demonstrates the strength of Deltagen's proprietary technology platform and provides our in-house secreted protein program with an opportunity to develop novel drugs with a world-class clinical development company.

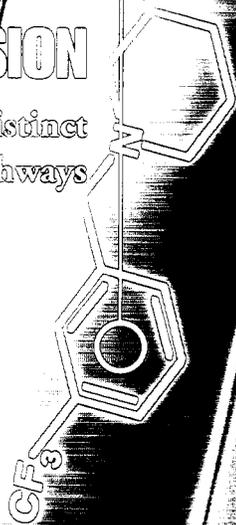
Last year we also initiated a major secreted protein collaboration with the biotechnology drug discovery company Hyseq Pharmaceuticals, Inc., which will provide gene sequences from its extensive intellectual property portfolio. These secreted proteins give Deltagen the unique opportunity to advance new therapeutics and to develop and commercialize potential drugs with Hyseq.

In our continued effort to move small-molecule targets toward the clinical candidate stage, Deltagen recently acquired the former CombiChem, thereby equipping itself with first-class computational, medicinal and analytical chemistry credentials. The new subsidiary, known as Deltagen Research Laboratories, integrates industry-proven chemistry experience with Deltagen's existing biology expertise—a coupling that boosts our ability to extract additional commercial value from the genome and furthers our small-molecule drug development efforts using our *in vivo*-validated targets. In collaborations with prior partners, CombiChem identified lead compounds in multiple therapeutic areas with an impressive 70 percent success rate. The capabilities of Deltagen Research Laboratories will serve to accelerate our development initiatives in oncology and in inflammatory and metabolic diseases by speeding up the screening of lead candidate compounds for newly identified targets, such as DT011M, a key insulin mediator believed to have clinical application in the treatment of obesity and diabetes.

This acquisition also means an expansion of our research and development staff and physical plant, with the addition of a 77,000-square-foot state-of-the-art facility in San Diego housing 22 chemistry laboratories, a new biology laboratory and approximately 70 scientists.

DUAL TRANSMISSION

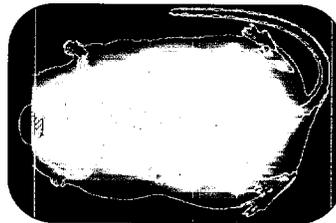
—the flexibility to travel two distinct drug development pathways



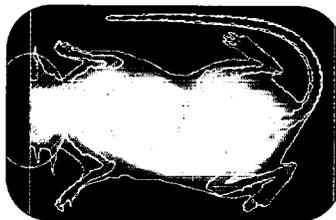
DT011M—a key mediator in insulin secretion

Through our Target Research and Development program, we are identifying a series of validated targets and moving them into a clinical candidate optimization stage using the expertise of Deltagen Research Laboratories. This program integrates the infrastructure of our proprietary DeltaBase™ library of *in vivo* mammalian gene function information with additional gene knockouts, disease challenge models and pathway analysis to provide a comprehensive systems biology approach to identifying novel targets for the treatment of disease. The program focuses on “druggable” gene families that are known to be responsive to small-molecule drugs, and is proving successful in validating targets in multiple diseases. We expect to move a number of targets into our chemistry pipeline during 2002.

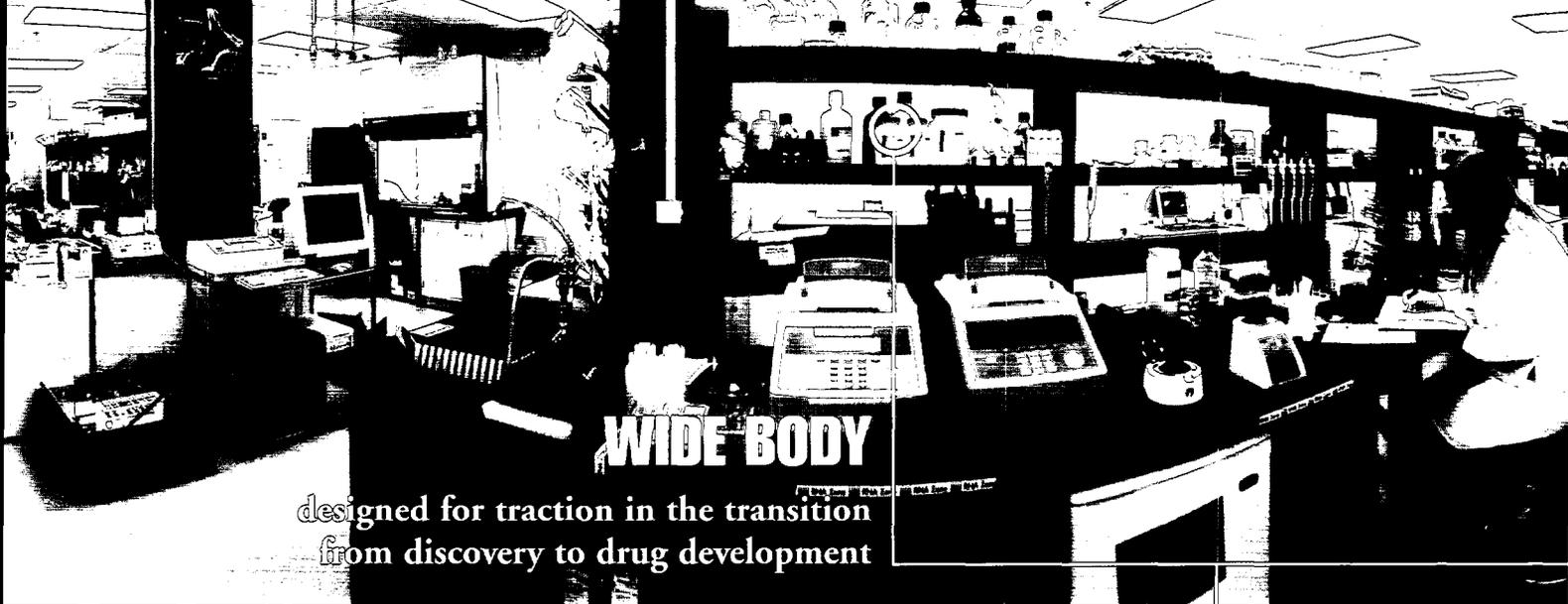
In January 2002, for example, Deltagen announced the identification of its first drug development target, DT011M. This target is believed to play a specific and important role in insulin secretion and hold clinical applications in the treatment of obesity and related metabolic disorders, including diabetes. Knockout mice in which DT011M was functionally deleted demonstrated an average 11 percent increase in body weight on a high-fat diet compared with a 36 percent gain for control mice on the same diet. The significant difference observed here may translate into an important opportunity for Deltagen, with more than 30 percent of Americans considered obese (a leading risk factor in diabetes) and diabetes care representing a more than \$100-billion market in the United States each year (10 percent of all healthcare dollars).



Noninvasive dual-beam densitometry of control mouse after three months on high-fat diet.



Noninvasive dual-beam densitometry of DT011M-knockout mouse after three months on high-fat diet.



WIDE BODY

designed for traction in the transition
from discovery to drug development

W

e believe Deltagen is on its way to becoming a leading drug discovery company that will create long-term value for its employees, stockholders, and current and future partners. Our internal discovery pipeline is “target rich”—and growing—and we are actively assembling a comprehensive and seasoned team to help us turn novel genomic drug targets into promising secreted protein and small-molecule drugs. In the last year, we have hired distinguished scientists with significant experience in moving drug candidates through the drug discovery and development process. And with the acquisition of CombiChem, Deltagen has added a critical piece to its powerful drug discovery program. With its new medicinal chemistry capabilities in place, Deltagen can begin to advance molecule targets into compound development. Our goal is to have a steady stream of Investigational New Drug (IND) applications by 2006 and to build an in-house staff of clinical, regulatory and marketing experts within a comparable time frame.

The bandwidth to bring
a product into development

ON TRACK

—putting the pieces in place to bring drug discovery to life

Drug Metabolism

Humanized mouse models

Xenobiotic receptor technology

Drug Discovery

High-throughput screening

Computational chemistry

Medicinal chemistry

Clinical candidate production

Drug Target Discovery and Validation

Industrialized *in vivo* knockout technology

Systematic array analysis

Cell-based assay systems



Deltagen Proteomics
—fueling our discovery
efforts in oncology

In keeping with our strategy of being a solution provider in genomic drug discovery, Deltagen Proteomics, our wholly owned subsidiary in Salt Lake City, provides us with an infrastructure to facilitate a more direct path to uncovering novel cancer therapeutics. With cancer research facing enormous challenges, there is tremendous difficulty finding new therapeutic approaches in this area. At Deltagen Proteomics, we are utilizing a proprietary suite of innovative technologies that single out the tumor cell to inhibit tumor growth. Using this approach, we believe scientists may be better able to recognize unexpected and promising new oncology targets. It is hoped that the elucidation of such specific targets and cellular pathways involved in the pathophysiology of cancer can ultimately lead to the creation of small-molecule screens to identify potentially important drug candidates. Current research efforts are under way in colon, breast, lung and prostate cancers.

Deltagen is also pursuing a drug candidate in-licensing strategy. To date, we have in-licensed the rights to develop an anti-CD123 human monoclonal antibody for the treatment of acute myelogenous leukemia—and are expecting to file an IND in the first half of 2003. By capitalizing on such opportunities, we are proactively building our pipeline and gaining valuable hands-on experience in the product development process.

Deltagen is broadening its reach and influence in the drug discovery industry with the addition of important enabling technologies. Our acquisition of Salt Lake City-based Arcaris, Inc. (now Deltagen Proteomics, Inc.) brings us a proprietary suite of complementary technologies—genetic-, proteomic-, and cell-biology-based—to empower and accelerate our drug discovery efforts in oncology.

To add to our drug metabolism and toxicology capabilities, we recently acquired the technology holdings of XenoPharm, Inc. This exciting technology, developed by scientists at the Salk Institute, Baylor College of Medicine and the University of Sydney (Australia), also represents revenue-generating opportunities for Deltagen. XenoPharm's transgenic, or "humanized," mouse models have the potential to become fundamental tools for metabolic profiling and for evaluating drug-drug interactions in drug discovery.

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended
December 31, 2001

Commission File Number
000-31147

DELTAGEN, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

94-3260659
(IRS Employer
Identification Number)

740 Bay Road
Redwood City, California 94063
(Address of principal executive offices) (Zip Code)

Telephone Number: (650) 569-5100

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

<u>Title of Each Class</u>	<u>Name of Each Exchange on Which Registered</u>
None	None

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:

Common Stock \$0.001 Par Value
(Title of Class)

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 No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) 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.

At March 14, 2002, the aggregate market value of the registrant's Common Stock held by non-affiliates of the registrant was approximately \$95,821,000.

At March 14, 2002, the number of shares outstanding of registrant's Common Stock was 35,256,086.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of Definitive Proxy Statement for the Company's 2002 Annual Meeting of Stockholders to be held on May 22, 2002, to be filed within 120 days of December 31, 2001, are incorporated by reference into Part III of this Form 10-K where indicated.

DELTAGEN, INC.

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For the fiscal year ended December 31, 2001

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INFORMATION REGARDING FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements. The forward-looking statements are contained principally in the sections entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business." These statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- limitations in the drug discovery process;
- the capabilities, development and marketing of our products and services;
- the benefits of knockout mice programs and, in particular, our technologies and methods;
- the requirements of pharmaceutical and biotechnology companies;
- our future revenues and profitability;
- our estimates regarding our capital requirements and needs for additional financing;
- plans for future products and services and for enhancements of existing products and services;
- our patent applications, licensed technology and proposed patents;
- our ability to attract customers and establish licensing and other agreements;
- our ability to raise additional financing;
- the expansion of our business into drug discovery and development;
- sources of revenues and anticipated revenues, including contributions from customers, license agreements and other collaborative efforts for the development and commercialization of products, and the continued viability and duration of those agreements and efforts;
- acquisitions; and
- liquidity.

This report contains information regarding the biotechnology and pharmaceutical industries that we obtained from private and public industry publications. These publications generally indicate that they have obtained their information from sources believed to be reliable, but do not guarantee the accuracy and completeness of their information. Although we believe that the publications are reliable, we have not independently verified their data.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential" and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss many of these risks in this prospectus in greater detail under the heading "Risk Factors." Also, these forward-looking statements represent our estimates and assumptions only as of the date of this report.

PART I

Item 1. Business

Overview

Deltagen is a leader in using *in vivo* derived mammalian gene function information to define the function and disease relevance of mammalian genes for the purposes of discovering and validating novel drug targets. Our proprietary information platform serves our major pharmaceutical partners and customers in their efforts to discover potential new drug therapies as well as our internal drug discovery efforts.

Our platform product, DeltaBase*, provides a database of *in vivo* mammalian gene function information on target genes selected for their disease relevance. We delete, or “knock out”, these genes in mice and then utilize an extensive, integrated analysis program to assess the function and potential pharmaceutical relevance of these genes and the proteins these genes encode. We also focus our efforts to determine the function of secreted proteins. We are undertaking the discovery and development of biotechnology drug candidates internally and in collaboration with other parties.

Our current customers and partners include the world’s largest pharmaceutical companies, GlaxoSmithKline plc, Merck & Co., Inc., Pfizer Inc., Eli Lilly and Company and Schering-Plough Research Institute as well as significant biotechnology and biopharmaceutical companies including Vertex Pharmaceuticals Incorporated, Hyseq, Inc. and Lexicon Genetics Incorporated.

We are also internally focusing on the discovery and development of biopharmaceutical products through our Target Research and Development, or TRD, program. Building on the DeltaBase platform, our TRD program adds comprehensive *in-depth* analysis to further characterize and identify potential key targets for the treatment of disease. The program currently focuses on the identification and validation of targets in oncology, metabolism, inflammatory diseases and certain areas of the central nervous system.

We have assembled an integrated drug discovery platform. With our newly acquired medicinal chemistry and drug discovery capabilities, coupled with our small molecule screening and drug metabolism technologies, our goal is to advance targets identified through our TRD program to identify clinical drug candidates that will have an improved chance of clinical success as well as a lower incidence of side effects.

We are implementing a strategy to integrate our:

- Target Research and Development program, an integrated systems biology infrastructure, comprising data generated from our platform of knockout animal models and pathophysiological analysis, our microarray-based mammalian gene expression data analysis known as DeltaXpress, disease challenge models and biochemical disease pathway analysis;
- *in vivo* mammalian gene function and secreted protein discoveries;
- internal target validation, lead compound drug discovery and optimization efforts through our comprehensive drug screening capabilities, computational design technologies integrated with medicinal and analytical chemistries and high-throughput parallel synthesis and purification capabilities;
- development and expansion of our own products and programs in collaboration with other companies and through our own internal programs, including the advancement of clinical biopharmaceutical drug candidates;

* Deltagen® is our registered trademark. DeltaBase™, DeltaSelect™, Delta-GT™ and DeltaXpress™ are our common law trademarks. XenoSensor Mice™ and ClearScreen™ are common law trademarks of our subsidiary XenoPharm, Inc. This report also contains brand names, logos, service marks and trademarks of other companies.

- commercialization of the intellectual property we generate on the use of mammalian genes and secreted proteins in drug development through alliances and collaborations with others and our own internal products and programs; and
- generation of information, products and services for pharmaceutical and biotechnology drug discovery efforts.

We have established collaborations and relationships with major pharmaceutical and biotechnology companies and research institutions in Europe and North America to accelerate the discovery of and commercialization of therapeutic and diagnostic products to improve human and animal health. These companies include Eli Lilly, GlaxoSmithKline, Hyseq, Merck, Pfizer, Schering-Plough Research Institute, Lexicon Genetics Incorporated and Vertex Pharmaceuticals Incorporated.

We have also integrated established drug discovery capabilities through the February 2002 acquisition from Bristol-Myers Squibb Company of Bristol-Myers Squibb Pharma Research Labs, L.L.C., or BMSPRL, formerly known as CombiChem, Inc. This subsidiary was renamed Deltagen Research Laboratories. The acquisition provides us with a well-recognized small molecule drug discovery operation.

Our recent acquisitions of Arcaris, Inc. and XenoPharm, Inc. further complement our internal drug discovery efforts. Arcaris, now a subsidiary known as Deltagen Proteomics, supplements our small molecule discovery program through its genetic, proteomic and cell-biological systems for identification and validation of drug targets and the creation of small molecule screens. XenoPharm provides a proprietary technology platform to evaluate drug metabolism of drug candidates, to improve the predictive value of cell- and animal-based biomedical research and predict the reaction of a drug candidate in a human system, thereby screening candidates for improved chances of clinical success.

We believe that our ability to determine gene function, to develop products and to identify potential drug candidates is a result of our leveraging of our technology platforms. Our genomics technologies, processes and information systems are integrated with one another and generate information on the function and relationships between genes and the proteins these genes encode and the usefulness of genes as new drug targets and proteins as new drug candidates. We have used these systems to establish and develop our products and programs that include our:

- large-scale program to generate mammalian gene knockout animals and to discover gene function;
- DeltaBase portfolio of gene knockout animal models and mammalian gene function data analysis and management database;
- mammalian gene knockout secreted protein discovery collaborations and programs;
- Target Research and Development program, which adds additional gene knockouts, disease challenge models, DeltaXpress microarray-based mammalian gene expression data and underlying disease pathway analysis to provide a comprehensive systems biology approach to assist in identifying key targets for the treatment of disease;
- internal characterization, evaluation and validation of targets, including those targets discovered and analyzed using our proprietary *in vivo* mammalian functional genomics programs, such as DT011M, a target we believe is involved in the mediation of insulin secretion and a potential target for the development of a drug for the treatment of obesity and related diseases such as diabetes;
- Deltagen Research Laboratories' drug discovery and candidate optimization capabilities, comprising the screening and identification of potent *in vitro* compounds, as well as lead optimization and identification of clinical nomination candidates;
- Deltagen Proteomics' small molecule target discovery and drug screening technologies;
- XenoPharm's drug metabolism and xenobiotic technology platform to potentially predict the reaction of a drug candidate in the human system; and
- internal early-stage biopharmaceutical product development programs, including our CD123 antigen program in-licensed as a potential treatment for Acute Myelogenous Leukemia.

Background

Overview

Pharmaceutical and biotechnology companies are continually challenged to develop and market increased numbers of drugs. This challenge has led to increased research and development spending and the development of a new research focus called genomics-based drug discovery. This new research effort involves understanding the relationship between genes and the functions they regulate. An organism's genetic information, or genome, is comprised of deoxyribonucleic acid, or DNA molecules. DNA itself is comprised of four different chemical subunits called nucleotide bases that are strung together in a precise sequence. Encoded within a DNA sequence are discrete sets of instructions, or genes, that collectively serve to regulate our biological processes by producing proteins. Alterations or mutations in these gene sequences form the basis of many diseases.

Understanding the critical role that genes play in regulating biological processes and disease has led to efforts to obtain information on all the genes contained within the human genome and the genomes of other organisms. International public and private genomics projects have generated vast amounts of data and identified many of the genes within the human genome. The human genome is believed to be comprised of approximately three billion nucleotide bases that encode approximately 30,000 to 40,000 genes. Approximately 3,000 to 10,000 of these genes and the proteins these genes encode may have potential as drug targets and drug candidates. Seeking to capitalize upon the opportunity to discover new drug targets, pharmaceutical, biotechnology and genomic companies are rapidly pursuing genomics-based drug discovery programs. We believe that a system that will enable a more rapid commercialization of these newly discovered genes and the proteins these genes encode can be of significant value to drug manufacturers.

Genomics-based drug discovery generally consists of:

- discovering and identifying DNA sequences that make up the genes within the genome;
- determining the function of the discovered genes so that their role in regulating biological processes and disease can be understood;
- using information on gene function and disease relevance to assess the value of a particular gene or its protein product as a target for drug discovery; and
- in the case of genes that are potential drug targets, utilizing high-volume chemistry and other drug discovery methods to target the relevant gene to produce a commercially viable drug.

Pharmaceutical, biotechnology and academic researchers have performed the initial task of identifying genes. However, identifying the genes is only the first hurdle of several significant current impediments to genomics-based drug discovery. The next key hurdles are determining gene function, identifying which genes can serve as viable drug targets and which proteins encoded by these genes can serve as viable drug candidates. Determining gene function with respect to a biological process or disease is a complex undertaking that requires extensive and detailed physiological analysis.

Discovering Gene Function

The scientific community has attempted to find efficient methods of determining the functions of individual genes for several decades. This process is particularly challenging for the pharmaceutical industry because drug development requires a very precise understanding of potential drug discovery targets. It is important that a pharmaceutical or biotechnology researcher understands all the possible ramifications of targeting a gene or its associated protein with a drug, including any potentially serious side effects of drug administration.

The drug discovery and development process is an expensive, time-consuming and lengthy process. Before a gene can be selected as a candidate for the drug discovery and development process, its complete functional role must be determined as thoroughly as possible. Determining whether a gene is a relevant target for drug

discovery is a process termed target validation. Currently, researchers generally use the standard or genetic approaches to drug target discovery and validation described below.

Standard Approach to Target Discovery and Validation

The objective of the standard approach to target discovery is to sort through the tens of thousands of gene sequences to find ones that can be analyzed using current techniques for determining *in vivo* biology, or the function of the gene in a living organism. Under the standard approach, researchers:

- identify a gene sequence;
- isolate and make an operational copy of the gene in order to facilitate physiological analysis of its function;
- find the tissues where the gene is active, or expressed, which may provide clues about the potential functional role of the gene;
- perform cell-based, or *in vitro*, experiments using potentially relevant cell types to define a potential role for the gene; and
- conduct studies in a living mammal, or *in vivo* studies, to determine the role of the gene in a whole organism, a key step in providing confirmation of the gene as a validated target for drug discovery.

The standard approach to target discovery is a time consuming, expensive and multi-staged process in which only a limited number of genes reach the final steps of the validation process. The lack of *in vivo* data early in this process can lead to the selection of genes based on criteria that do not necessarily or accurately reflect their functions in a living organism. This can lead to significant wasted time, effort and expense in selecting genes that represent valid targets.

Genetic Approach to Target Discovery and Validation

Since the function of a gene in an animal can vary widely from its function as determined by *in vitro* studies, it is preferable to obtain *in vivo* data at an early stage in the drug discovery process. To accomplish this, some pharmaceutical and biotechnology companies have employed a genetic approach that initially uses non-mammalian organisms to determine *in vivo* function. Under the genetic approach, researchers:

- choose a lower organism, such as a fly or worm, based on the compatibility of the organism with the specific organ system or function to be studied;
- create a functional mutation in the lower organism by using chemicals to produce a permanent genetic alteration that is reflected by an observable change in the organism;
- identify the mutated gene responsible for the observed change;
- find the equivalent gene in mammals; and
- conduct *in vivo* studies to determine the role of the gene in a whole organism, a key step in providing confirmation of the gene and the protein encoded by that gene as a validated target or candidate for drug discovery.

The genetic approach to target discovery is subject to a number of limitations. Under the genetic approach, researchers randomly mutate the genome. This may result in the identification of genes with interesting functions; however, these genes may not become valid drug targets because only certain subsets of genes are amenable to current drug discovery methods. In addition, since lower organisms are far less complex than mammals, they do not have many of the mammalian genes and their corresponding physiological functions. Thus, while lower organisms can provide information on gene function similarity with humans, their ability to provide information concerning how genes control mammalian physiology is limited. As a result, validation typically requires mammalian studies that are traditionally time-consuming and costly.

Determining Mammalian Gene Function

During the past decade, the preferred method for determining a gene's function in mammals has been to disrupt, or knock out, the gene in a mouse and to assess the physiological, pathological and behavioral consequences of removing the gene from the animal. The results of this analysis can determine the function and disease relevance of a particular gene and the potential of the gene and the protein encoded by that gene as a drug target or drug candidate.

Mice and humans are both higher mammals, and their genomes are similar in size and gene content. Therefore, performing knockouts of genes in mice has advantages over studies in non-mammalian organisms for defining the function and disease relevance of human genes. Additionally, mice are one of the few mammals for which approaches to genetic manipulation have been established. Because of the high degree of physiological and genetic similarity between mice and humans, the mouse gene knockout system has the potential to become an effective and widely accepted model for target validation studies.

A drawback of this model though has been the low-volume, high-cost and commercially unfeasible time-frames for production. Traditional approaches to create mouse knockouts allow a research team to create only a limited number of knockouts per year. As a result, mouse knockouts have often been used as the last step of the target validation process, if at all.

Despite the time-frame and labor intensive nature of the process, the academic scientific community has adopted the mouse knockout as a model for gene function studies. Information from these studies is often publicly available. However, this information is often fragmentary, difficult to obtain and is selectively and non-uniformly reported. In addition, when such information is available, it can be difficult to cross-reference or compare using standardized medical/scientific vocabulary or to compare with pre-existing models of disease.

Collectively, these limitations have made mouse knockouts difficult to use as a first-line drug discovery tool despite their utility in determining gene function.

Our Solution

We have developed an integrated target validation system that provides gene function information based on mouse knockouts at early stages of drug target discovery. Our solution moves directly from gene identification to determination of gene function in a mammalian organism on a commercially viable scale. Through our high-throughput system, targets are more readily identified and made available to our pharmaceutical partners and customers as well as to our own program for development of potential drug therapies.

We utilize proprietary molecular biology systems to more efficiently knock out genes in mice on a large scale and conduct a detailed analysis of the resulting physiological, pathological and behavioral effects in these mice. As a result, we assess the function of the gene in a mammal that is closely related genetically and physiologically to humans.

We believe our technology platform and approach offers significant advantages over the standard and genetic approaches, including:

- **INCREASING THE SCALE AND SPEED OF GENERATING MAMMALIAN GENE FUNCTION INFORMATION, DELIVERING VALIDATED GENE TARGETS AND DISCOVERING POTENTIAL SECRETED PROTEIN DRUG CANDIDATES.** For our DeltaBase product, we currently target, analyze and deliver detailed *in vivo* gene function information on approximately 250 different genes per year. By late 2002 we expect that we will have the ability to target, knock out and analyze up to approximately 1,000 genes, including up to approximately 500-700 secreted protein genes, per year. This is a significant improvement over traditional approaches that produced an estimate of only about 700 to 800 total worldwide reported mouse knockouts between 1991 and 1997.

Our proprietary high-throughput gene knockout and analysis system can be scaled-up to greater capacity if we determine additional production is required.

- **REDUCING THE COST OF DETERMINING GENE FUNCTION, PROVIDING VALIDATED GENE TARGETS AND IDENTIFYING POTENTIAL SECRETED PROTEIN DRUG CANDIDATES.** By providing a fully integrated target validation system as opposed to a multi-tier process, we believe we can reduce the number of steps and costs associated with the target validation process and the number of parties to whom royalties must be paid. Through our DeltaBase database product, we provide our subscribers with information on gene function and the potential of genes as viable drug targets earlier in the drug discovery process than under the standard or genetic approaches. We believe that early access to *in vivo* data allows selection of appropriate drug targets, increases efficiency and reduces costs by allowing our subscribers to focus on genes with high potential for successful drug development. This information may allow our subscribers to eliminate non-viable targets from potential development earlier in the discovery process. Our target validation system may also increase the efficiency and reduce the costs associated with our discovery of potential secreted protein drug candidates in our collaborative and our own internal secreted protein programs.
- **PRE-SELECTING COMMERCIALY RELEVANT MAMMALIAN GENE TARGETS.** We have focused our target validation efforts on gene families that we believe have the greatest potential for drug development. Worldwide genome sequencing efforts have identified many new members of the gene families currently targeted by the pharmaceutical and biotechnology industry, including over 2,500 members that we have initially selected that may have relevance to disease and are potential targets of drug discovery efforts.
- **PROVIDING ACCESS TO KNOCKOUT MAMMALIAN ANIMAL MODELS.** The preclinical testing, or animal testing, of drugs has often been impeded by the lack of animal models that can represent the human disease condition. We believe our fully integrated target validation system can produce and deliver relevant knockout mouse models that are of interest to the pharmaceutical and biotechnology industries, as well as to academic and research institutions. These knockout mouse models can be used for further research and development relating to gene function and disease analysis.
- **UTILIZING HUMAN CELL BASED SYSTEMS TO IDENTITY ONCOLOGICAL DRUG TARGETS.** The company is pursuing opportunities for drug discovery by exploiting nontraditional drug targets using a human cell based oncology platform technology. Through our acquisition of Arcaris (Deltagen Proteomics), we have access to genetic, proteomic and cell-biological systems with the goal of identifying and validating novel drug targets. The company has developed robust assays that, combined with our other technologies, may lead to selective and novel targets for cancer, without the biases inherent in other function-based strategies. The company's technology platform combines the traditional functional genomics approach with a unique strategy that allows us to modulate the function of proteins through retroviral expression vectors. This approach may lead to a more direct path to novel drug targets.
- **ALLOWING OUR CUSTOMERS TO STORE, ACCESS, MANIPULATE AND ANALYZE GENE FUNCTION INFORMATION THAT WE GENERATE.** We have developed a proprietary information technology infrastructure for the delivery, maintenance and use of the data we produce. We organize and will deliver our data in a manner that we believe will provide simple and rapid accessibility. Additionally, our data is compatible with standard computing tools used by the pharmaceutical and biotechnology industries.
- **RAPIDLY GENERATING INTELLECTUAL PROPERTY ON THE *IN VIVO* MAMMALIAN FUNCTIONAL ROLE OF GENES AND SECRETED PROTEINS.** We are pursuing intellectual property protection for our gene function discoveries and under certain of our programs, plan to grant our customers certain rights to use our intellectual property. Although we have filed over 600 applications with the U.S. Patent and Trademark Office, we currently hold only nine issued United States patents. None of these nine patents relate to knockout mice or gene function. Four of the patents

were acquired from our acquisition of Arcaris and five were acquired from our acquisition of BMSPRL, formerly known as CombiChem.

In addition to our DeltaBase gene function database program, we have our own internal and collaborative programs to discover novel, commercially relevant secreted proteins. Secreted proteins are proteins that play an important role in the formation, regulation, growth and maintenance of multi-cellular organisms. Examples of well-known secreted proteins discovered by other companies include insulin, human growth hormone, or HGH, and erythropoietin, or EPO. Using our core technology platforms, along with our other proprietary technologies, we have developed a secreted protein program that identifies and defines the mammalian *in vivo* function of mammalian secreted proteins. Specifically, we have proven genetic technologies that allow us to more rapidly identify and knock out secreted proteins in mice. We believe that our secreted protein discovery programs provide a foundation for developing and commercializing proprietary therapeutic protein products.

Our Strategy

Our goal is to continue to be a leader in the discovery and validation of novel drug targets using mammalian models as well as the leader in using *in vivo* derived gene function information to define the function and disease relevance of mammalian genes for the purpose of discovery and validating novel drug targets and to be a leader in providing this information to the pharmaceutical and biotechnology industries. We believe our data will improve the speed, efficiency and effectiveness of drug discovery benefitting not only our pharmaceutical partners and customers, but Deltagen's own internal drug development efforts. Additionally, we intend to use our powerful technology platforms along with our other proprietary technologies to discover novel therapeutic secreted proteins to provide a pipeline of potential drug candidates for collaborative programs or our own internal development or, in alliance with strategic partners, we may also choose to in-license potential secreted protein targets. As we have a limited operating history and an unproven business strategy, we cannot assure you that we will succeed in achieving our goals. The key elements of our strategy include:

- **BECOMING THE MOST COMPREHENSIVE SOURCE OF MAMMALIAN INFORMATION ON GENE FUNCTION AND TARGET VALIDATION.** We intend to further expand our current technology platforms and develop new programs and systems to increase the scale, scope and depth of our ability to determine mammalian gene function. Specifically, we have established an integrated systems biology program known as our Target Research and Development, or TRD, program. This TRD program expands on the standard DeltaBase platform by adding additional gene knockouts, disease challenge models and pathway analysis to provide a comprehensive approach to identifying key targets for the treatment of disease.
- **CONTINUING AND EXPANDING OUR BIOPHARMACEUTICAL AND DRUG DEVELOPMENT PROGRAMS.** We recently announced our internal discovery of DT011M, a target that appears to be a key component in insulin secretion and regulation. Drugs targeting DT011M may represent new biopharmaceutical products for the potential treatment of obesity and related diseases such as diabetes. DT011M is the first of an anticipated series of targets that we intend to advance through our Target Research and Development program, which will initially be focused in the areas of oncology, metabolism, inflammatory diseases and certain areas of the central nervous system. We will also continue to expand our efforts relating to CD123. We have in-licensed from the University of Kentucky rights to research, develop and commercialize methods and compounds targeting CD123, a unique marker for certain types of leukemic stem cells, as a potential treatment of Acute Myelogenous Leukemia, or AML. We plan to continue our early-stage evaluation and development of this potential approach for the treatment of AML and expect to continue advancing this program through collaborative or other efforts.
- **PURSuing THE DISCOVERY AND EARLY-STAGE DEVELOPMENT OF POTENTIAL SECRETED PROTEIN DRUG CANDIDATES FOUND THROUGH OUR SECRETED PROTEIN PROGRAM.** We plan to continue the development of our secreted protein discovery program in order

to provide a pipeline of secreted proteins to serve as potential drug discovery candidates. By late 2002 we expect that we will have the ability to target, knock out and analyze up to approximately 1,000 genes, including up to approximately 500-700 secreted protein genes, per year. We intend to pursue development of selected opportunities that arise from this program and in-licensing opportunities. This development may be internal or in collaboration with other pharmaceutical and biotechnology companies.

- **FOCUSING ON THE COMMERCIAL NEEDS OF OUR CUSTOMERS.** We plan to deliver valuable gene function information to our customers and allow them to concentrate on the drug discovery process downstream of target validation. By focusing our research process on target validation and obtaining functional information, we believe we provide our customers meaningful time and cost savings in their drug discovery efforts.
- **CONTINUING TO PURSUE INTELLECTUAL PROPERTY RIGHTS.** We are employing an intellectual property strategy to secure patent, trademark and copyright protection for what we believe to be our commercially relevant inventions, products, and methods. Under certain programs and collaborations, we intend to offer our customers access to certain of our intellectual property rights. Although we have filed over 600 applications with the U.S. Patent and Trademark Office, we hold only nine issued United States patents. None of these nine patents relate to knockout mice or gene function. Four of the patents were acquired from our acquisition of Arcaris and five were acquired from our acquisition of BMS PRL, formerly known as CombiChem. We believe that if we are able to secure patent rights around gene function and functional utility associated with the commercialization of genes, secreted proteins and our animal models, we may be able to generate licensing and other revenues associated with such rights.
- **ACQUIRING TECHNOLOGIES TO MEET OUR CONTINUING TARGET VALIDATION NEEDS AND THOSE OF OUR CUSTOMERS.** Our recent acquisitions of BMS PRL (Deltagen Research Laboratories), Arcaris (Deltagen Proteomics) and XenoPharm provide Deltagen with an integrated drug discovery platform combining a well established and recognized medicinal chemistry and drug discovery program with biological screening and drug metabolism capabilities. We intend to acquire and license additional products and programs, if we determine that these products or programs complement our existing target validation technologies or augment our existing information technology platforms.

Our Products and Programs

We have developed and plan to continue to develop technologies, products and programs that determine the function and disease relevance of genes in mammalian organisms. We have developed and are expanding the following products and programs:

DeltaBase

Overview

DeltaBase is our proprietary database that provides information, based on knockout mouse studies, on gene function and validated gene targets for drug discovery. We created DeltaBase to be marketed to the pharmaceutical and biotechnology industries to help define the role that genes play in biological processes and disease. We believe that DeltaBase is a valuable resource for mammalian gene function information and validated targets.

We have provided and expect to continue to provide gene function and target validation information through DeltaBase, on approximately 250 different mammalian genes per year. We select genes for DeltaBase based upon what we believe to be their potential to become useful drug targets. We generate information on these genes by comprehensively analyzing knockout mice generated through our proprietary, gene knockout methods. Each knockout mouse undergoes a standardized, detailed and extensive analysis in order to determine the function and

role that a particular gene plays in the mouse and that gene's suitability as a drug target. We believe that the body of gene function information delivered under DeltaBase provides an advantage to the drug discovery efforts of pharmaceutical and biotechnology companies by reducing the time required for target validation.

In addition to accessing target validation data, DeltaBase subscribers have access to the knockout mice used to generate this data. Access to these animals will allow DeltaBase subscribers to more rapidly pursue specific areas of interest.

DeltaBase Technologies

We designed DeltaBase to provide our subscribers with the ability to compare resulting phenotypic and gene function data across hundreds of different mammalian genes from different gene families selected for their potential commercial relevance to drug discovery. In order to generate, analyze, store, manipulate and deliver such large volumes of data and information, we have developed proprietary, high-volume, assembly-line methods to:

- **RAPIDLY AND EFFICIENTLY GENERATE LARGE NUMBERS OF KNOCKOUT MICE ANIMAL MODELS.** We utilize proprietary molecular biology systems to more efficiently knock out genes in mice on a large scale. We are able to move directly from a small amount of gene sequence information straight to the production of knockout mice and the determination of gene function and validated targets. Each stage of our knockout generation process has been scaled up for high-throughput production to generate and analyze approximately 250 gene knockout animal models per year for our DeltaBase program, which we believe is a significant improvement over historical, relatively limited production by others. This system can be readily scaled up to even greater capacity if we determine additional production is required.
- **SELECT MAMMALIAN GENES AND GENE FAMILIES TO IDENTIFY VALIDATED DRUG TARGETS.** In selecting the gene families for DeltaBase, we targeted those that have demonstrated their value as drug development targets, have led to the commercialization of successfully marketed drugs and present potential additional drug development targets. The current gene families represented in DeltaBase include the G-protein coupled receptors, ion channels and proteases. As part of the gene target selection process, we utilize information technology, statistical analysis and biological information systems to extract and analyze publicly available data on the human genome to search for additional genes and gene families with potential commercial relevance to drug discovery efforts. This application of statistical and mathematical models to genetics is known as bioinformatics. To date, our bioinformatics program has focused on an initial pipeline of over 2,500 potential targets for development under DeltaBase that we believe may be of interest to prospective pharmaceutical and biotechnology subscribers.
- **EXTENSIVELY ANALYZE THE KNOCKOUT MICE GENERATED.** We have developed and employ large-scale assembly-line analysis programs that provide detailed physiological, pathological and behavioral data. This analysis is performed on all major tissues and organ systems within the mouse. Moreover, this analysis of the entire organism may provide information on possible side effects and toxicology profiles associated with each gene and its function. We are in the process of developing detailed analytical programs in areas such as the central nervous system, cardiovascular system, infectious disease, inflammation and the immune system. We believe that the DeltaBase knockout mice can serve as efficient vehicles for the generation of additional complementary information and data on gene function.
- **ACCURATELY AND EFFICIENTLY CAPTURE, STORE, MANIPULATE AND DELIVER DATA GENERATED FROM THE ANALYSES OF KNOCKOUT MICE.** DeltaBase subscribers will have the ability to access, utilize and perform multifaceted analysis on the gene function data and information contained in DeltaBase. In addition, our proprietary information technology allows our customers to perform searches of the gene function analyses contained in DeltaBase, obtain detailed

scientific and pathology summaries of gene function findings and submit inquiries and questions to DeltaBase through a medical/scientific vocabulary search engine. To meet the needs of DeltaBase subscribers, the data and information is readily exportable and can be manipulated by information technology tools and other databases widely employed in the pharmaceutical and biotechnology industries.

Marketing and Customer Agreements

As of the end of 2001, we had DeltaBase agreements with GlaxoSmithKline and Pfizer. On February 8, 2002, we also entered into a DeltaBase agreement with Merck. Each of these agreements provides for payments aggregating approximately \$15 million for non-exclusive access to information related to 750 genes selected for their biological interest that have been functionally characterized and entered into DeltaBase. Under the DeltaBase agreements, GlaxoSmithKline, Pfizer, and Merck have the right to access DeltaBase information on gene function and validated gene targets based upon knockout mouse studies.

In May 2001, we entered into our first GeneClass DeltaBase subscription agreement with Vertex. Under the GeneClass DeltaBase agreement, Vertex has non-exclusive access to a subset of DeltaBase that contains *in vivo* mammalian gene function information on kinases, proteases and certain other gene families. We expect to receive an aggregate of \$1.9 million in subscription licensing fees over the three-year term.

Both the DeltaBase and the GeneClass DeltaBase agreements grant certain non-exclusive, worldwide licenses to knockout mice, materials and intellectual property rights under DeltaBase. In addition to the foregoing subscription licensing fees, we may receive additional payments based upon the achievement of designated milestones. We cannot assure you that we will receive any milestone payments since payments are entirely dependent upon the research, development and commercialization of products by GlaxoSmithKline, Pfizer, Merck and Vertex. Also, in our GeneClass DeltaBase agreement with Vertex, Vertex may make certain royalty payments to us for therapeutic and diagnostic products developed from Vertex's use of DeltaBase.

In September 2001, Lexicon Genetics became a subscriber to DeltaBase as part of our litigation settlement with Lexicon. Lexicon's subscription to DeltaBase includes non-exclusive, perpetual licenses to the 250 drug targets represented in DeltaBase as of September 2001 and the approximately 1,000 drug targets that were and are to be added to DeltaBase over the subsequent four years. Lexicon pays no subscription fees but will make certain milestone and royalty payments to us for therapeutic and diagnostic products developed from Lexicon's use of DeltaBase.

Secreted Protein Program

Overview

Secreted proteins represent proteins that are synthesized for export from the cell or to the surface membrane of the cell where they play a role in the communication between cells. These communication roles are essential for the formation, regulation, growth and maintenance of multi-cellular organisms. Examples of well-known secreted proteins discovered by other companies include insulin, human growth hormone and erythropoietin, or EPO.

The goal of our secreted protein program is to provide a potential pipeline of validated new biotechnology drug candidates either for internal development or development in alliance with strategic partners. We first identify new therapeutic proteins that have the potential to become drugs. This can be accomplished through our targeted genomics and proprietary bioinformatics technologies, our proprietary gene trap technologies licensed from the University of Edinburgh or in alliance with strategic partners. Once a target is identified, we determine the function of the secreted protein through our proprietary knockout platform technologies and phenotypic analysis programs. The resulting secreted protein discoveries have the potential to become candidates for further drug development. In addition, we also plan to acquire rights to additional potential secreted protein drug candidates through collaborations or alliances with others.

Secreted Protein Agreements and Collaborations

In August 2001, we entered into a secreted protein agreement with Lilly to evaluate, and potentially develop and commercialize, therapeutic secreted proteins. Under the terms of the agreement, Lilly will provide potential targets from its secreted protein pipeline for which we will further evaluate the therapeutic potential in mammalian models. Among those secreted proteins with potential therapeutic value, each company may select proteins for commercial development, with each company receiving royalties based on sales of therapeutic products. The agreement provides Lilly with certain acquisition, co-promotion, co-marketing and profit-sharing options with respect to therapeutic products developed and commercialized by us. The agreement also provides us with certain co-promotion, co-development and profit-sharing opportunities.

In October 2001, we entered into a collaboration agreement with Hyseq to research, develop and commercialize biopharmaceutical products based on secreted proteins. Under the terms of the agreement, Hyseq will provide us with gene sequences encoding secreted proteins and we will utilize its proprietary *in vivo* mammalian gene knockout technology to discover and validate potential commercially relevant biopharmaceutical drug targets. We and Hyseq will each have certain joint development and commercialization rights around potential biopharmaceutical drug targets discovered through the collaboration. We and Hyseq will share the collaboration's costs; Hyseq will provide us with approximately \$10 million in research and development payments over two years. In addition, we received \$10 million in equity proceeds from the sale of shares of our common stock to George B. Rathmann, Ph.D., chairman of the Board of Directors of Hyseq.

DeltaSelect

Overview

DeltaSelect is our custom gene knockout program that uses the platform technology employed in our DeltaBase database program. Our DeltaSelect program is different, however, because our customers select and identify to us the particular genes that they wish to have knocked out in mice. We provide customers with access to our gene knockout technologies and the resulting knockout mice, data and information generated under each DeltaSelect program. We believe that this program has provided validation of our proprietary platform technology and promoted interest in DeltaBase. The revenues generated from the DeltaSelect program have been \$1.3 million, \$926,000 and \$1.2 million in 2001, 2000 and 1999, respectively, and since 2000 have become a lower percentage of total revenues per year. We anticipate that revenues from DeltaSelect will continue to become less significant to total revenues and that DeltaSelect will be utilized only under very limited circumstances to develop new technologies, product offerings and programs in collaboration with pharmaceutical companies.

We have produced customized knockout mice at the direction of our customers for a limited number of pharmaceutical companies. Currently, we have outstanding DeltaSelect knockout programs under agreements with GlaxoSmithKline, Merck and Schering-Plough Research Institute.

DeltaSelect Technology

In addition to the proprietary platform technology developed by us, we are currently employing and developing additional technologies that can be used to create conditional knockout mice. Conditional knockout mice are mice where the gene of interest is removed under unique conditions in a specific tissue or cell type at selected and controlled times. We are currently developing conditional knockout systems for our DeltaSelect program using *Cre/lox* and FLP/FRT recombinase technologies.

Research Collaborations

We also enter into various research collaborations with select leading academic and other research institutions. In these research collaborations, we offer access to knockout mice to the institutions so that they can perform additional studies and analysis.

On February 19, 2002, we announced that we had signed a target validation and research collaboration agreement with Stanford University. Under the terms of the three-year collaboration, we and Stanford will mutually develop research projects for jointly selected genes under which we will provide Stanford non-exclusive access to knockout mice models using its proprietary high-throughput technology and Stanford will evaluate and conduct research on such materials. We will have options to obtain exclusive licenses to commercially develop in any and all fields certain inventions developed by Stanford. We will have rights to use, commercialize and sublicense results developed by Stanford under the research projects.

Drug Discovery and Biopharmaceutical Development Programs

Overview

We have established a Target Research and Development, or TRD, program to supplement our DeltaBase-related technologies and programs to provide a comprehensive, integrated systems biology infrastructure. We intend to discover and develop biopharmaceutical candidates using gene targets identified, evaluated and validated through the TRD program. DT011M, our first potential drug target developed and validated internally through the TRD program, is believed to be involved in insulin secretion. Compounds targeted to DT011M may be potential treatments for obesity and related diseases such as diabetes. We added additional small molecule target validation and evaluation capabilities through the acquisition in July 2001 of Arcaris, Inc., now our subsidiary known as Deltagen Proteomics. With validated targets in hand through our TRD program and through Deltagen Proteomics' technologies, lead compound discovery and clinical candidate optimization efforts will be made utilizing the drug discovery capabilities of Deltagen Research Laboratories, our subsidiary formed from the acquisition of BMSPRL, formerly known as CombiChem, from Bristol-Myers Squibb in February 2002.

Target Research and Development Program

We are dedicated to the internal discovery and development of biopharmaceutical products through our TRD program. This TRD program utilizes the basic infrastructure of the DeltaBase platform and adds additional gene knockouts, disease challenge models and pathway analysis to provide a comprehensive systems biology approach to identifying key targets for the treatment of disease. Our integrated systems biology approach provides us the ability to systematically address the key underlying pathways that produce disease states. Our TRD program, which focuses on "druggable" gene families, has to date analyzed hundreds of potential targets using our proprietary *in vivo* mammalian gene knockout technologies and its comprehensive phenotypic analysis program. Through extensive evaluation of these pipeline targets and their roles in specific mammalian biological pathways, we have identified numerous molecular targets that may play key roles in significant human disease states. Our objective with the TRD program is to produce validated targets in oncology, metabolism, inflammatory diseases and certain areas of the central nervous system. Select validated targets will be evaluated by Deltagen Research Laboratories, a wholly-owned subsidiary, to identify promising candidates for clinical testing. We intend to push forward into pre-clinical development, using our drug discovery capabilities, the first validated target from our TRD program, DT011M.

DT011M

On January 31, 2002, we announced the identification of DT011M, a key insulin-mediating drug target, for the potential treatment of obesity and related diseases such as diabetes. We have plans to initiate a chemical screening program and compound development efforts during 2002. DT011M was identified and validated as a potential target for the treatment of obesity and diabetes using disease challenge models.

CD 123 Antigen

In November 2000, we entered into an exclusive worldwide license agreement with the University of Kentucky to research, develop and commercialize methods and compounds targeting CD123, a unique marker

for certain types of leukemic stem cells. Recent studies suggest that the population of malignant cells found in acute myelogenous leukemia or AML arises from a rare population of these leukemic stem cells that express the CD123 protein at high levels. We believe that using CD123 as the target, it may be possible to design a new drug or antibody that will selectively kill only leukemic stem cells. We are continuing our early-stage evaluation and development of this potential approach for the treatment of AML and expect to continue advancing this program through pre-clinical efforts and possibly into clinical trials through collaborative or other efforts.

Acquisition of Arcaris, Inc.

On July 30, 2001, we acquired Arcaris, Inc., now our subsidiary known as Deltagen Proteomics. Located in Salt Lake City, Utah, Arcaris had developed technologies consisting of genetic, proteomic and cell-biological systems for identification and validation of drug targets and the creation of small molecule screens. The Arcaris acquisition added a new technology platform to our existing high-throughput efforts to identify and validate small molecule targets relevant to small molecule drug screening. The information generated through the Arcaris technologies will be utilized to advance the discovery of new disease targets by defining the role of novel non-traditional targets within intracellular pathways with particular relevance to oncology, viral and infectious diseases. Additionally, the Arcaris technologies will be used to facilitate the rapid development of small molecule screens against these identified targets.

Acquisition of BMSPRL, L.L.C. (formerly CombiChem, Inc.)

On February 16, 2002, we acquired the California-based BMSPRL, L.L.C., formerly known as CombiChem, Inc., from Bristol-Myers Squibb Company. The subsidiary was renamed Deltagen Research Laboratories. The acquisition provides us with an established and well-recognized small molecule drug discovery capability. The acquisition of Deltagen Research Laboratories significantly advances our efforts in using its validated targets for identifying lead candidate compounds for drug development. We plan to select a number of targets for compound development in 2002 from its internal *in vivo* mammalian technology platform, with particular emphasis on cancer, metabolic disorders and inflammatory diseases. Integration of Deltagen Research Laboratories will allow us to utilize the technology and expertise of an experienced team in efforts to discover compounds against its internal drug targets, including DT011M. Deltagen Research Laboratories enhances our ability to increase downstream value for its *in vivo* biology drug discovery engine. BMSPRL is a company with an integration of computational, medicinal and analytical chemistry capabilities coupled to biological screening. The company's 77,000 square feet state-of-the-art facilities in San Diego include 22 fully-equipped chemistry laboratories and a new biology facility. Deltagen Research Laboratories currently employs 70 scientists, including 53 in chemistry.

Acquisition of XenoPharm, Inc.

On March 14, 2002, we acquired XenoPharm, Inc., a San Diego, California-based private company. The entity will become our wholly-owned subsidiary. XenoPharm, which was incorporated in November 2000, provides a proprietary technology platform to pharmaceutical, biotechnology, chemical and agricultural companies to better understand and predict reactions of foreign substances, termed "xenobiotics," in human systems. XenoPharm's XenoSensor Mice, implanted with human SXR and CAR, coupled with XenoPharm's CleanScreen high-throughput screening assays provide a proprietary technology platform to improve the predictive value of cell- and animal-based biomedical research.

Customers

In 2000, we entered into DeltaBase Agreements with GlaxoSmithKline and Pfizer that provide these companies the right to access DeltaBase information on gene function and validated gene targets. In 2001, as part

of our litigation settlement, we entered into a DeltaBase Agreement with Lexicon Genetics Incorporated. Also, in 2001, we entered into a GeneClass DeltaBase Agreement with Vertex, and secreted protein agreements with Lilly and Hyseq. In early 2002, we entered into a DeltaBase Agreement with Merck.

Under our DeltaSelect program, we have entered into arrangements with major pharmaceutical companies where we produce customized standard, or unconditional, knockout mice. We have performed services or have continuing obligations under our DeltaSelect program for Schering-Plough Research Institute, Merck, Tularik, Inc. and GlaxoSmithKline. However, we plan to pursue future DeltaSelect arrangements only in very limited circumstances; therefore, we expect that there will be few, if any, new DeltaSelect customers.

Pfizer and GlaxoSmithKline accounted for 46% and 41%, respectively, of our revenues in 2001.

Research and Development

Including our subsidiaries, as of December 31, 2001, we employed a total of 356 full-time equivalent employees, of which 285 were dedicated to research and development activities. We have spent substantial funds over the past three years to develop our database and other programs and expect to continue to do so in the future. Research and development expenses were \$45.0 million, \$26.3 million and \$12.1 million in 2001, 2000 and 1999, respectively

Intellectual Property

Our policy is to pursue patent protection both in the United States and internationally around our commercially relevant products, techniques and methods. As of December 31, 2001, we had filed over 600 applications with the U.S. Patent & Trademark Office, or USPTO. We currently hold nine issued United States patents, four relating to the technologies of Deltagen Proteomics (formerly Arcaris) and five relating to those of Deltagen Research Laboratories (formerly BMSPL and CombiChem). Although we do not currently hold any issued patents related to knockout mice, we intend to continue filing applications covering nearly all of the knockout mice we produce. We also intend to pursue patent, copyright and trademark protection with respect to any information technologies, systems or other products that we believe would benefit from these protections. We cannot assure you, however, that any of our applications on file with the USPTO or foreign patent offices will result in the issuance of any patents, that our patent applications will have priority over others' applications, or that, if issued, any of our patents will offer protection against our competitors. Additionally, we cannot assure you that any patent issued to us will not be challenged, invalidated or circumvented in the future or that the rights created thereunder will provide a competitive advantage. Litigation may be necessary to enforce any patents issued to us, to protect trade secrets or know-how owned by us or to determine the enforceability, scope and validity of the proprietary rights of others.

Others may have filed and in the future are likely to file patent applications that are similar or identical to ours. To determine the priority of inventions, we may have to participate in interference proceedings declared by the USPTO that could result in substantial cost to us. We cannot assure you that any patent application of another will not have priority over patent applications filed by us. Our commercial success depends in part on our neither infringing patents or proprietary rights of third parties nor breaching any licenses that may relate to our technologies and products.

In addition, in certain patent offices around the world, third parties may institute opposition proceedings against our patent applications, in an effort to prevent their issuance as patents, or against issued patents that we may obtain. Such opposition proceedings may involve substantial costs and time to defend. In these instances, we cannot assure you that such third parties will not succeed in opposing the issuance of our patents or prevent the continued validity of our issued patents.

We have obtained licenses for certain technologies. However, we cannot assure you that we will be able to obtain licenses for technology patented by others on commercially reasonable terms, if at all, that we will be able to

develop alternative approaches if unable to obtain licenses, or that our current and future licenses will be adequate for the operation of our business. Our failure to obtain necessary licenses or to identify and implement alternative approaches could have a material adverse effect on our business, financial condition and results of operations.

We also rely upon trade secrets, technical know-how and continuing invention to develop and maintain our competitive position. We cannot assure you that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose such technology, or that we can meaningfully protect our trade secrets, or that we will be capable of protecting our rights to our trade secrets.

On May 24, 2000, Lexicon Genetics Incorporated filed a lawsuit against us in the United States District Court for the District of Delaware. The complaint in the lawsuit alleged that our methods of making knockout mice infringed United States Patent No. 5,789,215, the '215 patent, under which Lexicon claimed to be an exclusive licensee. In addition, on October 13, 2000, Lexicon and the University of Utah Research Foundation filed a lawsuit against us in the United States District Court for the Northern District of California. The complaint in this lawsuit alleged that we infringed United States Patents Nos. 5,631,153, 5,464,764, 5,627,059 and 5,487,992, or the Capecchi patents, under which Lexicon claimed to be an exclusive licensee. On September 20, 2001, we and Lexicon announced the settlement of the litigation. Under the terms of the settlement, we obtained a commercial license under the '215 patent and the Capecchi patents, Lexicon obtained a subscription to our DeltaBase product, and all of the claims and counterclaims in the litigation were dismissed with prejudice. Lexicon's subscription to DeltaBase includes non-exclusive, perpetual licenses to the 250 drug targets represented in DeltaBase as of September 2001 and the approximately 1,000 drug targets that were and are to be added to DeltaBase over the subsequent four years. Lexicon will make certain milestone and royalty payments to us for therapeutic and diagnostic products developed from Lexicon's use of DeltaBase. We will make payments to Lexicon for knockout mice generated by us on a fee-for-service basis. Neither we nor Lexicon will pay the other party any subscription or license fees.

Competition

We face significant competition in the area of genomics-based research from for-profit companies such as Celera Genomics, Curagen, Inc., Exelixis, Inc., GeneLogic, Inc., Human Genome Sciences, Inc., Incyte Pharmaceuticals, Inc., Lexicon Genetics Incorporated and Millennium Pharmaceuticals, Inc., among others, many of which have substantially greater financial, scientific and human resources than we do. In addition, the Human Genome Project and a large number of universities and other not-for-profit institutions, many of which are funded by the U.S. and foreign governments, are also conducting research to discover genes and their function.

We face, and will continue to face, significant competition in our efforts to validate drug targets and to secure funding for research. Many other companies have or are developing capabilities in the use of living organisms, including the analysis of human genetic profiles, to define gene function. These competitors include such companies as Lexicon Genetics Incorporated, Exelixis, Inc., Variagenics Inc., deCODE Genetics Inc. and Devgen N.V. Additionally, many genomics companies may expand their capabilities to determine gene function. We also believe that some pharmaceutical and biotechnology companies are discussing the possibility of working together to discover the functions of genes and share gene function-related data among themselves. The formation of this type of consortium could reduce the customer base for our gene function-related business. Further, as we expand our range of programs, products and services, such as our secreted protein and small molecule drug discovery and development programs, we will compete with additional companies, many of which have substantially greater financial, scientific and human resources than we do and some of which may be our customers at that time or potential customers including, Merck, GlaxoSmithKline and Pfizer. We may also be competing directly with biotechnology drug companies, such as Genentech Inc., Amgen Inc. and Abgenix Inc., that have significantly greater experience and expertise in discovering and developing biopharmaceuticals, such as secreted proteins, antibodies and other small molecule compounds.

Companies focused specifically on other organisms, such as fruit flies, worms and yeast, use methods of identifying potential drug targets that are different than ours. In addition, pharmaceutical, biotechnology and other genomics companies, as well as a number of universities and other not-for-profit institutions, are seeking to develop competing technologies. Many of these competitors have substantially greater financial, scientific and human resources than we do. Many of these competitors also have substantially greater experience than we do in their respective fields. As a result, our competitors may succeed in developing products and technologies earlier than we do or in developing products and technologies that are more effective than ours.

We believe that the principal competitive factors in selling our products and services are the quality and reliability of the gene function information, the volume of the gene function information, the features and ease of use of database products and the cost and pricing of competing products. We believe that we compete favorably with respect to these factors; however, our market is rapidly changing and we expect to face further competition from new market entrants and consolidation of our existing competitors. In addition, as we increasingly expand the scope of our commercial activities into drug discovery and development, we expect to encounter new and significant challenges that we may not be able to avoid or effectively address or accomplish. Such challenges include the financial, scientific and human resources requirements to conduct clinical trials and to deal with submissions to and interactions with the United States Food and Drug Administration, or FDA and other regulatory agencies worldwide.

Government Regulation

Regulation of Animal Use

The federal Animal Welfare Act, or AWA, governs the humane handling, care, treatment and transportation of some animals used in research activities in the United States. Rats, birds and mice, including the mice in our knockout programs, are currently excluded from the definition of "animal" and, therefore, are not subject to regulation under the AWA. However, the United States Department of Agriculture, which enforces the AWA, has been sued on this matter and agreed, as part of the settlement of this lawsuit on September 25, 2000, to begin the process of changing the regulations issued under the AWA to include rats, mice and birds within its coverage. Congress subsequently prohibited, in the Agricultural Appropriations Act for fiscal year 2001 and again for fiscal year 2002, the expenditure of any money or the commencement rulemaking for the purpose of changing the regulations with respect to including rats, mice and birds prior to October 1, 2002. We cannot predict whether mice will at any time after such date be included under the AWA. The AWA imposes a wide variety of specific regulations on producers and users of animal subjects, most notably personnel, facilities and statistical standards, cage size, feeding, watering and shipping conditions and environmental enrichment methods. If the USDA decides to include mice in its regulations, we could be required to alter our production operation for these models, including adding production capacity, new equipment and additional employees. It is possible that the USDA's actions will negatively affect our operations. In addition, although we do not anticipate the addition of mice to the AWA, if such addition were to happen, to require significant expenditures, it is possible that the AWA, when amended, may be more stringent than we expect and require significant expenditures. Any future amendments to the AWA or other laws or regulations may also require significant expenditures by us.

Furthermore, some states have their own regulations, including general anti-cruelty legislation, which establish certain standards in handling animals. To the extent that we provide products and services overseas, we also have to comply with foreign laws, such as the European Convention for the Protection of Animals During International Transport and other anti-cruelty laws. The Council of Europe is presently considering proposals to more stringently regulate animal research.

Regulation of Genetically Modified Organisms

Since we are in the business of developing animals containing changes in their genetic make-up, we may become subject to a variety of laws, guidelines, regulations and treaties specifically directed at genetically

modified organisms, or GMOs. The area of environmental releases of GMOs is rapidly evolving and is currently subject to intense regulatory scrutiny, particularly internationally. Current laws, guidelines and other requirements typically include confinement requirements for preventing the spread of GMOs into the environment. Examples of these guidelines in the U.S. include the National Institutes' of Health "Guidelines for Research Involving Recombinant DNA Molecules" and the USDA's "Guidelines for Research Involving the Planned Introduction into the Environment of Genetically Modified Organisms". Although these guidelines typically apply only to federally-funded activities, if we were to become subject to similar laws in the future, we could incur compliance costs.

The Biosafety Protocol, or the BSP, is also of particular importance to our international operations. The BSP, a treaty adopted in Montreal, Canada in late 1999, is expected to be ratified in many countries, although the timeframe is uncertain. Many industrialized and non-industrialized countries will be signatories to the BSP. Although the U.S. is not subject to the BSP, if ratified, the BSP is expected to cover shipments from the U.S. to countries abroad that have signed the BSP. The BSP is also expected to cover the importation of living modified organisms, a category that could include our animals. If our animals are not contained as described in the BSP, our animals could be subject to the potentially extensive import requirements of countries that are signatories to the BSP.

Regulation of New Drugs or Biological Drugs for Human Use

We are planning to engage in the development and commercialization of therapeutic products that will be regulated by governmental authorities in the United States and other countries. Those governmental authorities, including the Food and Drug Administration, or the FDA, extensively regulate the testing, manufacturing, labeling, advertising, promotion, export and marketing, among other things, of therapeutic products. Any new therapeutic product administered to human patients is regulated as a drug or a biological drug and requires regulatory approval before it may be commercialized.

In the United States, our potential therapeutic products likely will be regulated as human drugs, including biological drugs. The FDA will require us to file and obtain approval of a Biologics License Application, or BLA, (for biologics) or a New Drug Application, or NDA, (for other drugs) before we can commercialize any such products. BLAs and NDAs cover both the facility in which the products are manufactured and the products themselves. Generally, biological drug regulation is more rigorous than other drug regulation, particularly because biologics are subject to lot-to-lot release requirements whereas other drugs are not.

The steps required before approval of a new human drug (including a biological drug) for marketing in the United States generally include:

- preclinical laboratory tests and animal tests;
- the submission to the FDA of an Investigational New Drug, or IND, application for human clinical testing, which must become effective before human clinical trials may lawfully commence;
- adequate and well-controlled human clinical trials to establish the safety and efficacy of the product;
- the submission to the FDA of a BLA or NDA;
- FDA review of the BLA or NDA; and
- satisfactory completion of an FDA inspection of the manufacturing facilities at which the product is made to assess compliance with current Good Manufacturing Practices which includes elaborate testing, control, documentation and other quality assurance procedures.

The testing and approval process requires substantial time, effort and financial resources. After approval is obtained, a supplemental approval is generally required for each proposed new indication and for many different types of manufacturing changes. The supplement often contains data similar to that submitted in the original BLA or NDA.

Preclinical studies include laboratory evaluation of the product chemistry, formulation, and stability, as well as animal studies to assess the safety and potential efficacy of the product. Preclinical safety tests must be conducted by laboratories that comply with FDA regulations regarding Good Laboratory Practices. The results of the preclinical studies, together with manufacturing information and analytical data are submitted to the FDA as part of the IND and are reviewed by FDA before the commencement of clinical trials. The IND automatically will become effective in 30 days unless the FDA, before that time, raises concerns or questions and imposes a "clinical hold". In such case, the IND sponsor must resolve with the FDA any outstanding concerns before the trial can proceed. Once trials have commenced, the FDA may stop the trials by imposing a clinical hold because of concerns about, for example, the safety of the product being tested or the adequacy of the trial design.

Clinical trials involve the administration of investigational products to healthy volunteers or patients under the supervision of a qualified principal investigator consistent with an informed consent. An independent Institutional Review Board, or IRB, must review and approve each clinical trial at each institution at which the study will be conducted. The IRB will consider, among other things, ethical factors, the safety of human subjects and the possible liability of the institution.

Clinical trials typically are conducted in three sequential phases, but the phases may overlap. In Phase I, the initial introduction of the drug into human subjects, the drug is usually tested for safety or adverse effects, dosage tolerance, absorption, metabolism, distribution, excretion and pharmacodynamics. Phase II clinical trials usually involve studies in a limited patient population to evaluate the efficacy of the drug for specific, targeted indications, to determine dosage tolerance and optimal dosage and to identify possible adverse effects and safety risks. Phase III clinical trials generally further evaluate clinical efficacy and test further for safety within an expanded patient population and at multiple clinical sites. The goal of these studies is to obtain definitive statistical and clinical evidence of the efficacy and safety of the drug and dosage regimens. Phase IV clinical trials are conducted after approval to gain additional experience from the treatment of patients in the intended therapeutic indication. If the FDA approves a product, additional clinical trials may be necessary. A company may be able to use the data from these clinical trials to meet all or part of any Phase IV clinical trial requirement. These clinical trials are often referred to as Phase III/IV post-approval clinical trials.

In some cases, drug reviews may proceed under the accelerated approval regulations, "fast track" statutory provisions, or the expedited review regulations. The accelerated approval provisions apply to products used in the treatment of serious or life-threatening illnesses that appear to provide meaningful therapeutic benefits over existing treatments. The expedited review regulations apply to products for life-threatening and severely debilitating illnesses, especially where no satisfactory alternative therapy exists. These regulations permit approval of such products at the end of Phase II, or before clinical research is completed based on the drug's effect on a clinical endpoint or surrogate endpoint. FDA retains considerable discretion to determine eligibility for expedited and accelerated review and approval mechanisms.

The results of the preclinical studies and clinical trials, together with detailed information on the manufacture and composition of the product, are submitted to the FDA in the NDA or BLA requesting approval to market the product. Before approving an NDA or BLA, the FDA will inspect the facilities at which the product is manufactured and will not approve the product unless the manufacturing facility is in compliance with current Good Manufacturing Practices. The FDA may delay approval of an NDA or BLA if applicable regulatory criteria are not satisfied, require additional testing or information, and/or require postmarketing testing and surveillance to monitor safety, purity or potency of a product. It may also limit the indicated uses for which an approval is given. There can be no assurance that FDA will approve any future NDAs or BLAs or that manufacturing facilities will pass FDA preapproval inspections.

Pervasive and Continuing Human Drug Regulation

Any future drug approvals that are granted remain subject to continual FDA review, and newly discovered or developed safety or efficacy data may result in withdrawal of products from the market. Moreover, if and

when such approval is obtained, the manufacture and marketing of future drugs will remain subject to extensive regulatory requirements administered by the FDA and other regulatory bodies, including compliance with current Good Manufacturing Practices, adverse event reporting requirements and the FDA's general prohibitions against promoting products for unapproved or "off-label" uses. Companies are subject to inspection and market surveillance by the FDA for compliance with these regulatory requirements. Domestic manufacturing facilities are subject to biennial inspections by the FDA and must comply with the FDA's Good Manufacturing Practices regulations. In complying with these regulations, manufacturers must spend funds, time and effort in the areas of production, record keeping, personnel and quality control to ensure full technical compliance. The FDA stringently applies regulatory standards for manufacturing. Failure to comply with the requirements can, among other things, result in warning letters, product seizures, recalls, fines, injunctions, suspensions or withdrawals of regulatory approvals, operating restrictions and criminal prosecutions. Any such enforcement action could have a material adverse effect on us. Unanticipated changes in existing regulatory requirements or the adoption of new requirements could also have a material adverse effect on us.

Foreign Regulation

Companies are subject to a variety of regulations governing clinical trials and sales of their products outside the United States. Companies must obtain approval of their products by the comparable non-U.S. regulatory authorities prior to the commencement of product marketing in the country whether or not the company has obtained FDA approval. The approval process varies from country to country and the time needed to secure approval may be longer or shorter than that required for FDA approval. The European Union requires approval of a Marketing Authorization Application by the European Medicines Evaluation Agency. These applications require the completion of extensive preclinical and clinical studies and manufacturing and controls information.

Other Regulations

We are also subject to a variety of other federal and state laws and regulations in the U.S. and in other countries pertaining to our facilities, the shipment, exportation and importation of various articles and health and safety matters. For example, the Department of Transportation and various international guidelines and regulations govern the transport of different types of materials. The Bureau of Export Administration of the Department of Commerce exercises export controls over technology such as our gene database. The Department of Health and Human Services and USDA both regulate various types of articles that present the possibility of spreading communicable and other diseases, including the regulation of vectors, such as animals and articles that present risks of other harm to plants, human beings and other animals. The Environmental Protection Agency has responsibility for facility emissions and other environmental matters, including the regulation of new chemical substances, which could include gene sequences.

Employees

As of December 31, 2001, we employed 299 employees. After taking into account part-time employees and contractors, we employed 356 full-time equivalent employees as of that date. Of these, 38 hold Ph.D.s and 23 hold other advanced degrees. None of our employees are represented by a labor union. We consider our relations with our employees to be good.

Executive Officers of Registrant

William Matthews, Ph.D., a co-founder of our company, has served as our President since February 1997 and as our Chief Executive Officer since December 1998. Dr. Matthews has served as one of our directors since February 1997. Prior to founding our company, Dr. Matthews worked at Genentech, Inc., from June 1992 to January 1997 where he established and ran a program in stem cell biology. Dr. Matthews received his Ph.D. in cell biology from Southwestern Medical School in Dallas, followed by post-doctoral fellowships at Harvard Medical School and Princeton University.

Mark W. Moore, Ph.D., a co-founder of our company, has served as our Chief Scientific Officer and Treasurer since February 1997. Prior to founding our company, Dr. Moore worked from August 1991 to January 1997 at Genentech, Inc. where he established and directed Genentech's gene knockout program in mice. Dr. Moore was a Leukemia Society of America post-doctoral fellow in molecular and cellular immunology in the laboratory of Dr. Michael Bevan at Scripps Clinic. Following his post-doctoral work, Dr. Moore served on the faculty of the Norris Cancer Center at the University of Southern California. Dr. Moore received his A.B. in biochemistry from Princeton University and his Ph.D. in biology from Brandeis University.

Richard H. Hawkins has served as our Chief Financial Officer since September 2000. Prior to joining us, Mr. Hawkins was an independent consultant. From March 1984 until July 1999, Mr. Hawkins was employed by McKesson Corporation where he served as Chief Financial Officer from September 1996 until July 1999. Mr. Hawkins received his B.S. in Chemistry from Stanford University and his M.B.A. from the University of Chicago. He is a licensed Certified Public Accountant.

Peter L. Myers, Ph.D., joined our company in February 2002 as Executive Vice President of Deltagen Research Laboratories through the acquisition from Bristol-Myers Squibb Company of BMSPL (formerly CombiChem), where Dr. Myers most recently served as Vice President. Dr. Myers had held various positions at CombiChem, including as a Director, Vice President, Chief Scientific Officer and Chief Operating Officer. Prior to CombiChem, Dr. Myers served as Vice President, Drug Discovery and Development at Onyx Pharmaceuticals Inc. from November 1993 through March 1995. Prior to that, Dr. Myers served as Vice President, Chemistry Research of Glaxo Inc. Research Institute from January 1991 through January 1993. Dr. Myers holds a B.S. in Chemistry and a Ph.D. in Organic Chemistry from Leeds University.

John E. Burke currently serves as our General Counsel and Senior Vice President of Intellectual Property. From December 1999 through December 2001 Mr. Burke served as our Vice President of Intellectual Property. Prior to joining us, Mr. Burke was Of Counsel with the law firm of Pillsbury Madison & Sutro LLP from 1996 to 1999. Prior to that time, he was a patent and intellectual property attorney with the law firm of Schwegman, Lundberg, Woessner & Kluth from 1995 to 1996, and served as Corporate Patent Counsel for Cortech, Inc., from 1993 to 1995. Mr. Burke was also a patent attorney with the law firm of Morgan & Finnegan from 1990 to 1992. Mr. Burke is admitted to practice before the U.S. Court of Appeals for the Federal Circuit, the U.S. Supreme Court, and the U.S. Patent and Trademark Office and is a member of the California, New York and Colorado state bars. Mr. Burke received his B.S. in chemical/biochemical engineering from Rutgers College of Engineering and his J.D. from Rutgers School of Law.

Augustine G. Yee currently serves as our Senior Vice President of Corporate Development and Corporate Secretary. From April 1999 through December 2001, Mr. Yee served as our General Counsel and Vice President of Corporate Development. Prior to joining us, Mr. Yee was a patent and intellectual property litigation attorney with the law firm of Lyon & Lyon LLP from 1993 to 1995, and a corporate securities and technologies attorney with Pillsbury Madison & Sutro LLP from 1995 to 1999, where he represented pharmaceutical, biotechnology and information technology companies in the licensing and corporate securities areas. Mr. Yee was formerly a law clerk to the Honorable Edward Rafeedie, United States District Court, Central District of California, and is admitted to practice before the U.S. Patent and Trademark Office. Mr. Yee received his B.S. in molecular biology from the University of California at San Diego and his J.D. from Pepperdine University School of Law.

Terry R. Coley, Ph.D., has served as our Vice President of Information Technology since September 1999. Prior to joining us, Dr. Coley was co-founder and CEO of Virtual Chemistry, Inc., from January 1996 to August 1999. At Virtual Chemistry, Dr. Coley established software teams to engineer custom software for biotechnology and pharmaceutical companies. Prior to that time, Dr. Coley worked as a molecular modeling software development project leader at Molecular Simulations Inc. Dr. Coley received his B.S. in chemistry and computer science from the University of Illinois and his Ph.D. in computational chemistry from the California Institute of Technology.

Other Key Employees

Brian E. Crowley has served as our Director of Finance since August 1999. Prior to joining us, Mr. Crowley was the Director of Finance for the Dataconferencing product division at Polycom, Inc. from January 1997 to February 1998 and the General Accounting Manager from November 1994 to January 1997. Prior to that time, Mr. Crowley served as controller at The LAN Guys Inc. and Conductus, Inc., and as an associate at PricewaterhouseCoopers LLP. Mr. Crowley received his B.S. from St. Mary's College of California and his M.B.A. from the University of Notre Dame. He is a licensed Certified Public Accountant.

Jeanne Y. Jew has served as our Vice President of Business Development since October 2001. Ms. Jew received her Bachelor of Arts degree in Psychology from Wesleyan University and Master of Business Administration degree in International Business and Finance from the Johnson Graduate School of Management at Cornell University. Prior to joining Deltagen, Ms. Jew was vice president of Business Development at Corixa Corporation, directing new business development activities and managing their research collaborations and partnerships. Ms. Jew has also held the position of senior director of Business Development at Coulter Pharmaceutical, Inc. She has also held business development positions at Genentech, Inc. and Scios, Inc.

Alexander Kamb, Ph.D., has served as the Vice President of Research and Development of Deltagen Proteomics since August 2001. Dr. Kamb received his bachelor's degree from Harvard University in 1982 and his Ph.D. from the California Institute of Technology in 1988. His postdoctoral work in protein crystallography was carried out at the University of California, San Francisco. In 1992 Dr. Kamb joined Myriad Genetics, Inc., a genomics company in Salt Lake City, Utah, where he served as director of Research and was involved in directing groups that identified genes responsible for familial melanoma and breast cancer. Prior to joining Deltagen, Dr. Kamb was president and chief executive officer at Arcaris, Inc. As vice president of Research and Development at Deltagen Proteomics, Inc, a wholly-owned subsidiary of Deltagen, Inc., he currently directs research efforts focused on discovery of novel pharmaceutical targets.

Robert Klein, Ph.D., has served as Vice President of Technology Development since June 2000. Prior to that time, Dr. Klein held positions as Director of Molecular Biology from June 1998 through June 2000 and Senior Scientist from May 1997 through June 1998 at Deltagen. Prior to joining Deltagen, Dr. Klein worked at Genentech, Inc. from August 1993 through May 1997 where he was involved in Genentech's functional genomics program. Dr. Klein also served as a project team leader for Genentech's lead protein therapeutic for treatment of Parkinson's disease. Dr. Klein received his A.B. in biochemistry from the University of California at Berkeley and his Ph.D. in biology from the Massachusetts Institute of Technology.

Paul H. Laland has served as our Vice President of Corporate Communications since February 2001. Prior to joining us, Mr. Laland was executive vice president and head of Health Technology at GCI Group, a public and investor relations practice dedicated to biotechnology and genomics, from 1999 to February 2001. From 1995 to 1999 Mr. Laland served as director of Corporate Communications at Genentech, Inc. and from 1992 to 1995 was associate director of Corporate Communications at Synergen, Inc. Mr. Laland holds a B.A. in Communications from University of Utah.

Stephen J. Peroutka, M.D., Ph.D., joined Deltagen as Vice President of Clinical Research in November 2001. Dr. Peroutka received his A.B. degree from Cornell University in 1975. He obtained his M.D. and Ph.D. degrees in 1979 and 1980, respectively, from the Johns Hopkins University School of Medicine. After completing an internship in Internal Medicine at Stanford University in 1981, Dr. Peroutka was Resident and Fellow in the Department of Neurology at the Johns Hopkins Hospital. Dr. Peroutka was an Assistant Professor of Neurology and Pharmacology at Stanford University from 1984 to 1990 and was Chief, Neurology Service, at the Palo Alto Veteran's Administration Hospital from 1988 to 1990. In 1990, he joined Genentech, Inc. where he

established the Department of Neuroscience and became its first Director in 1991. In 1993, Dr. Peroutka founded and served as the President and CEO of Spectra Biomedical, Inc., a biotechnology company dedicated to the use of association genetics as a novel approach to optimize drug development. In June, 1997, Spectra Biomedical, Inc. was acquired by Glaxo Wellcome Inc. Dr. Peroutka was then Chief Medical Officer at Collabra Pharma in 2000-2001. He serves on the Editorial Board of numerous medical and scientific journals and is an elected member of the Board of Directors of the American Headache Society.

Dan Shochat, Ph.D., has served as our Vice President of Pharmaceutical Development since February 2001. Prior to joining us, Dr. Shochat was employed by Coulter Pharmaceutical where he was Senior Vice President and Chief Financial Officer since 1998 and Vice President, Research and Development from March 1995. From July 1988 to April 1995, Dr. Shochat served as Director of Biotechnology Development at the Medical Research division of American Cyanamid, Inc., where he was responsible for the worldwide program in monoclonal antibodies for the treatment of cancer. He received his B.S. and M.S. degrees from Hebrew University in Israel and a Ph.D. in Biochemistry from L.S.U. Medical School in New Orleans.

Kay Slocum has served as our Vice President of Human Resources since March 2001. Prior to joining us, Ms. Slocum was Vice President of Human Resources at Coulter Pharmaceuticals, Inc. from 1996 until February 2001. She served as an independent consultant from 1995 to 1996. From 1993 to 1995 Ms. Slocum was Manager, Corporate Employee Development of Varian Associates, Inc. Ms. Slocum holds a B.A. in Sociology from Southern Illinois University and a M.S. in Industrial Relations from Loyola University of Chicago.

RISKS

We expect to continue to incur substantial losses and we may never achieve profitability, which in turn may harm our future operating performance and may cause the market price of our stock to decline.

We have had net losses every year since our inception in 1997 and, as of December 31, 2001, had an accumulated deficit of \$99.1 million. We had net losses of \$48.5 million, \$32.2 million, and \$13.8 million in 2001, 2000 and 1999, respectively. The 2000 net loss is before a \$22.4 million deemed dividend-related to the beneficial conversion of our preferred stock. Because we anticipate significant expenditures for our research and development programs and for the development, implementation and support of our gene function database, we expect to report substantial net losses through at least the next several years. We may never achieve profitability. If we do not become profitable within the time frame expected by securities analysts or investors, the market price of our stock will likely decline. If we do achieve profitability, we may not sustain or increase profitability in the future.

We expect that our expenditures will continue to increase, due in part to:

- continued investment in the research and development of our new and existing products and our technology, including increased investment for the development, implementation and support of our gene function database, our standard and conditional knockout programs, our secreted protein programs and identification of lead candidate compounds for drug development;
- our recent acquisition of Arcaris, Inc. and BMS PRL, L.L.C.; and
- our increasing investment in management and other employees, sales and marketing programs, customer service and operational and financial controls.

We will need to raise additional capital that may not be available, which if not available, will adversely affect our operations.

With our recent acquisitions and our expanding scope of activities, we expect that our expenditures, and our underlying burn rate, will increase significantly. Our products and services may not produce revenues that, together with our existing cash and other resources, are adequate to meet our cash needs. We plan to fund our

operations for at least the next twelve months from our existing cash balances and cash flows, but we will in the future seek to raise additional funds from the sale of stock, either through private financing and/or a public offering, or from debt financing. Our cash requirements depend on numerous factors, including:

- our ability to attract and retain customers for our gene function database and other products and services;
- expansion of facilities to support development activities;
- expenses in connection with the development and expansion of our gene function database, our secreted protein or other products and services;
- expenditures in connection with license agreements and acquisitions of and investments in complementary technologies and businesses;
- increased expenditures relating to our expanded and further expanding commercial activities in biopharmaceutical drug discovery and development;
- the need to increase research and development spending to keep up with competing technologies and market developments; and
- expenditures as we expand our sales, marketing and customer service organizations and improve our management, operational and financial systems.

Substantial capital has been used to fund our operating losses. Since inception, we have experienced negative cash flow from operations and expect to experience significant negative cash flow from operations for the near future.

We require substantial amounts of capital, and will require substantially increased amounts of capital in the future, to fund our business operations. The continued development of our drug discovery and development efforts requires significant amounts of capital. The rate at which our capital is utilized is affected by the operational and developmental costs incurred and the extent to which our products gain acceptance.

We continue to evaluate alternative means of financing to meet our needs on terms that are attractive to us. We currently anticipate that our available funds will be sufficient to meet our projected needs to fund operations for at least the next twelve months. We expect that we will need to raise additional capital to fund our operations by 2003.

If we are not able to obtain needed capital, we will have to take actions to conserve our cash balances, including significantly reducing our operating expenses, downsizing our corporate headquarters staff and closing existing facilities, all of which would likely have a material adverse effect on our business, financial condition and our ability to reduce losses or generate profits.

When we need additional funding, we may be unable to obtain it on favorable terms, or at all. For example, we may be forced to enter into financing arrangements at significant discounts. If adequate funds are not available, we may have to curtail operations significantly or obtain funds by entering into arrangements requiring us to relinquish rights to certain technologies, products or markets. In addition, if we raise funds by selling stock or convertible securities, our existing stockholders could suffer dilution.

We are a relatively new public company with an unproven and evolving business strategy, and our limited history of operations makes evaluation of our business and prospects difficult.

We have had a limited operating history and are at an early stage of development. Our strategy of offering a gene function database and using knockout mice to enable our customers to pursue promising candidates for drug target development is unproven. Additionally, our pricing models for offering our products and services are

unproven. We currently have four subscribers for our DeltaBase gene function database, only three of which are paying subscription fees. We have generated only limited revenues amounting to approximately \$9.9 million, \$2.1 million and \$1.2 million for the fiscal years 2001, 2000 and 1999, respectively. Our success will depend on, among other things, our ability to enter into future licensing and other agreements on favorable terms, our ability to determine and generate information on those genes which have potential use as drug targets and the commercialization of products using our data. Our sales force may not succeed in marketing our database product, and our employees may not succeed in implementing and operating our database in a manner that is satisfactory to our subscribers. Furthermore, the plans for our secreted protein and conditional knockout programs are unproven, and we cannot be sure that we will ever be able to develop these programs or that any program that we develop will be commercially successful. As a result of these factors, it is difficult to evaluate our prospects, and our future success is more uncertain than if we had a longer or more proven history of operations.

We currently have only four DeltaBase subscribers and one GeneClass DeltaBase customer and may not succeed unless we can attract more customers.

DeltaBase, our database product, is our principal source of revenue. We also expect that the majority of our revenues for the next few years will be derived from fees under our DeltaBase agreements. We may also derive revenues from royalties received from these users.

We currently have only four DeltaBase customers (including Lexicon which does not involve the receipt of any subscription fees) and one GeneClass DeltaBase customer. Because of our reliance on revenue generated under our DeltaBase agreements, we will likely not succeed unless we can attract more DeltaBase customers. In addition, we cannot be sure of the terms under which we may enter into future agreements, such as fees payable to us or the term of the agreements, if any. Also, if our database is not acceptable to our prospective customers, it may not generate revenues and our business and financial condition will be materially harmed.

We may not be able to comply with minimum performance levels or restrictive provisions or other obligations that may be contained in any agreements, such as minimum data delivery requirements. In addition, we may experience unforeseen technical complications in the processes we use to generate functional data for our gene database and functional genomics resources. These complications could materially delay or limit the use of our gene function database, substantially increase the anticipated cost of generating data or prevent us from implementing our processes at appropriate quality and scale levels, thereby causing our business to suffer.

We currently have only three customers for our DeltaSelect program. Revenues from our DeltaSelect program has historically not been significant, and we expect to enter into only a limited number, if any, of future DeltaSelect agreements. To succeed we must attract customers for our DeltaBase and other programs. Our existing and future agreements may not be renewed and may be terminated without penalty in the event either party fails to fulfill its obligations under one of these agreements. Failure to renew or the cancellation of these agreements by one of our customers could result in a significant loss of revenues.

Over the past several years, companies in the pharmaceutical industry have undergone significant consolidation. As such companies merge, we will have fewer potential customers for our products. Also, if two or more of our present or future customers merge, we may not be able to receive the same fees under agreements with the combined entities that we were able to receive under agreements with these customers prior to their merger. Moreover, if one of our customers merges with an entity that is not a customer, the new combined entity may prematurely terminate our agreement. Any of these developments could materially harm our business or financial condition.

There have been very few drugs developed and commercialized using genomics-based research and, therefore, the future of our products and programs is uncertain.

Very few of the limited number of drugs developed to date using genomics-based research have reached the commercial market. We cannot assure you that genomics-based drug development efforts will ultimately be

commercially successful. We have not proven our ability either to identify drug targets with definite commercial potential or commercialize drug targets that we do identify. We cannot assure you that a particular gene function in a mouse will have any correlation to a human patient's response to a particular drug. It is difficult to successfully select those genes with the most potential for commercial development. Furthermore, we do not know that any products based on genes that are the subject of our research can be successfully developed or commercialized. If commercial opportunities are not realized from genomics-based research, our existing customers could stop using our products or we could have difficulty attracting or retaining customers and, in any event, we would not realize any product royalties.

There may be ethical and other concerns surrounding the use of genetic information that could limit our ability to develop and sell our existing products and new products.

The genetic screening of humans has raised ethical issues regarding the confidentiality and appropriate uses of the resulting information. Government authorities may regulate or prohibit the use of genetic testing to determine genetic predispositions to certain conditions. The FDA currently is considering different mechanisms for regulating certain types of genetic tests. To the extent any of our technology or products based on our technology involve human genetic testing, such products could be subject to additional FDA regulation in the future. Additionally, the public may disfavor and reject the use of genetic testing. It is possible that the government authorities and the public may fail to distinguish between the genetic screening of humans and genomic and proteomic research. If this occurs, our products and the processes for which our products are used may be subject to government regulations intended to affect genetic screening. Further, if the public fails to distinguish between the two fields, it may pressure our customers to discontinue the research and development initiatives for which our products are used. If this occurs, the potential market for our products could be reduced, which could seriously harm our financial condition and results of operations.

Results of our product development are uncertain.

We intend to pursue an aggressive product development program. Successful product development in the biotechnology industry is highly uncertain, and very few research and development projects produce a commercial product. Product candidates that appear promising in the early phases of development, such as in early human clinical trials, may fail to reach the market for a number of reasons, such as:

- the product candidate did not demonstrate acceptable clinical trial results even though it demonstrated positive preclinical trial results;
- the product candidate was not effective in treating a specified condition or illness;
- the product candidate had harmful side effects on humans;
- the necessary regulatory bodies (such as the FDA) did not approve the product candidate for an indicated use;
- the product candidate was not economical to manufacture;
- other companies or people have proprietary rights to the product candidate (e.g. patent rights) and will not permit its sale on reasonable terms, or at all; and
- the product candidate is not cost effective in light of existing therapeutics.

We cannot guarantee we will be able to produce commercially successful products. Further, clinical trial results are frequently susceptible to varying interpretations by scientists, medical personnel, regulatory personnel, statisticians and others, which may delay, limit or prevent further clinical development or regulatory approvals of a product candidate. Also, the length of time that it takes to complete clinical trials and obtain regulatory approval for product marketing varies significantly by product and by the indicated use of a product. Therefore, we cannot predict the length of time to complete necessary clinical trials and obtain regulatory approval. In

addition, we have no experience in conducting clinical trials, obtaining regulatory approval, manufacturing, marketing and selling of a pharmaceutical product. Each of these is a significant challenge that will require substantial investments of financial, scientific and human resources, and our ability to successfully meet these challenges is uncertain.

Our DeltaBase customers will control the development and commercialization of products, which may mean that our research efforts will never result in any royalty payments or third party product sales.

Our DeltaBase agreements with our customers may provide us with rights to obtain milestone payments and/or royalties from the commercial development of therapeutic or diagnostic compounds derived from access to our mice, database, technology or intellectual property. However, we may not be able to obtain these rights under future agreements. Our ability to obtain these rights depends in part on the advantages and novelty of our technologies, the validity of our intellectual property, the usefulness of our data and our negotiating position relative to each potential customer.

We will have limited or no control over the resources that any customer may devote to product based on their access to our database. These customers may breach or terminate their agreements with us, and they are not obligated to conduct any product discovery, development or commercialization activities at all. Further, our customers may decide not to develop products arising out of our agreements or may not devote sufficient resources to the development, approval, manufacture, marketing or sale of these products. If any of these events occurs, our customers may not develop or commercialize any products based on our gene function research, technologies or intellectual property, we would not receive milestone payments or royalties on product sales and the results of our operations would suffer. Furthermore, our customers may resist sharing revenue derived from the successful commercialization of a drug through royalty payments or others may have competing claims to all or a portion of such revenues.

Our ability to discover, develop or commercialize products could be adversely affected if our research and marketing collaborations are terminated.

Under certain of our agreements, particularly our secreted protein collaboration agreements, we share with our collaborators certain co-development, co-promotional and co-marketing rights to pharmaceutical products based on our discoveries. Many of these collaborators have much greater financial, scientific and human resources capabilities and more experience than us in developing, marketing, promoting and selling pharmaceutical products. As a result, our ability to discover, develop and commercialize products will depend on the continuation of these collaborations. If any of these collaborations are terminated, we may not be able to enter into acceptable collaborations with other collaborators that have similar resources or experience. In addition, our existing collaborations may not be successful. Disputes may arise between us and our collaborators as to a variety of matters, including financing obligations under our agreements and ownership of intellectual property rights. These disputes may be both costly and time-consuming and may result in delays in the development and commercialization of products.

We may be required to defend lawsuits or pay damages for product liability claims.

Product liability is a major risk in testing and marketing biotechnology and pharmaceutical products. We face substantial product liability exposure in human clinical trials and for products that we sell after regulatory approval. Product liability claims, regardless of their merits, could be costly and divert management's attention, or adversely affect our reputation and the demand for our products. When we reach the clinical trial stage with our future products, we intend to engage and maintain product liability and other insurance coverage, as commercially appropriate in view of our product portfolio, sales volumes and claims experienced to date, among other considerations. However, this insurance may not provide us with adequate coverage against potential liabilities either for clinical trials or commercial sales. In addition, insurers may not offer us product liability insurance at reasonable rates, or at all, or may offer inadequate coverage limits for our potential liabilities.

There are a finite number of gene families upon which pharmaceutical and biotechnology companies focus their research, which limits our potential revenue and growth.

Our current and potential subscribers and customers traditionally focus their research and development efforts on a finite number of gene families that they view as reliable drug targets. Once we provide functional information on these gene families, our ability to attract and retain subscribers to our database will depend, in part, on the willingness of our subscribers to expand their research and development activities to other gene families. If our customers do not do this, we may lose existing subscribers or fail to attract new subscribers for our database services and, as a result, our business and financial condition may be significantly harmed. In addition, we have made and will continue to make significant investments in our database and knockout programs that we may not recoup if we cannot find additional target opportunities.

We may fail to meet market expectations, which could cause our stock price to decline.

The following are among the factors that could cause our operating results to vary significantly from market expectations:

- changes in the demand for and pricing of our products and services;
- the nature, pricing and timing of other products and services provided by us or our competitors;
- changes in the research and development budgets of our customers;
- acquisition, licensing and other costs related to the expansion of our operations;
- the timing of milestones, licensing and other payments under the terms of our customer agreements and agreements pursuant to which others license technology to us;
- our capital needs and availability of additional capital;
- expenses related to, and the results of, patent filings and other proceedings relating to intellectual property rights, including litigation and similar expenses; and
- our unpredictable revenue sources as described below.

Our revenues will be unpredictable and this may harm our financial condition.

The amount and timing of revenues that we may have from our business will be unpredictable because:

- the timing of our DeltaBase, DeltaSelect and other agreements are determined largely by our customers and subscribers;
- our DeltaBase agreements with GlaxoSmithKline, Pfizer and Merck are coterminous, each terminating upon our delivery of DeltaBase in June 2003, and, although renewable beyond such date, may not be renewed;
- whether any products are commercialized and generate royalty payments depends on the efforts, timing and willingness of our customers;
- we do not expect to receive any milestone or royalty payment under licenses and other arrangements for a substantial period of time, if ever;
- to date, we have entered into only four customer agreements for our DeltaBase gene function database and one agreement for our GeneClass DeltaBase, and may not enter into any additional DeltaBase agreements; and
- our sales cycle is lengthy, as described below.

As a result, our results may be below market expectations. If this happens, the price of our common stock may decline.

We expect that our sales cycle will be lengthy, which will cause our revenues to be unpredictable and our business to be difficult to manage.

Our ability to identify and obtain subscribers for our gene function database product and other services depends upon whether customers believe that our products and services can help accelerate drug discovery efforts. Our sales cycle will be lengthy because of the need to educate potential customers and sell the benefits of our products and services to a variety of constituencies within potential subscriber companies. These companies are large organizations with many different layers and types of decision-makers. In addition, each database subscription and development program or services agreement will involve the negotiation of unique terms and issues which will take a significant amount of time. We may expend substantial funds and management effort with no assurance that a subscription program or services agreement will result. Actual or proposed mergers or acquisitions of our prospective customers may also affect the timing and progress of our sales efforts. Any of these developments could harm our business or financial condition.

We may have conflicts or be in competition with our customers, which will hurt our business prospects.

We may pursue opportunities in fields, such as secreted proteins and other drug discovery and development that could conflict with those of our customers. Moreover, disagreements could arise with our customers or their partners over rights to our intellectual property or our rights to share in any of the future revenues of compounds or therapeutic approaches developed by our customers. These kinds of disagreements could result in costly and time-consuming litigation and could have a negative impact on our relationship with existing customers. Any conflict with our customers could reduce our ability to attract additional customers or enter into future customer agreements. Some of our customers could also become competitors in the future. Our customers could develop competing products, preclude us from entering into agreements with their competitors or terminate their agreements with us prematurely.

We experience intense competition from other entities engaged in the study of genes, and this competition could adversely affect our business.

The human and mouse genomes contain a finite number of genes. The human genome has been mapped and identified. Our competitors have identified and will continue to identify the sequence of numerous genes in order to obtain proprietary positions with respect to those genes. In addition, our competitors may seek to identify and determine the biological function of numerous genes in order to obtain intellectual property rights with respect to specific uses of these genes, and they may accomplish this before we do. We believe that the first company to determine the functions of commercially relevant genes or the commercially relevant portions of the genome will have a competitive advantage.

A number of companies, institutions and government-financed entities are engaged in gene sequencing, gene discovery, gene expression analysis, gene function determination and other gene-related service businesses. Many of these companies, institutions and entities have greater financial and human resources than we do and have been conducting research longer than we have. In particular, a significant portion of this research is being conducted by private companies and under the international Human Genome Project, a multi-billion dollar program funded, in part, by the U.S. government, which completed and released its initial rough draft of the human genome in June 2000; a final, high-quality sequence analysis is expected as early as 2003. Furthermore, other entities have and will continue to discover and establish a patent position in genes or gene sequences that we wish to study. Significant competition also arises from entities using standard target identification approaches, traditional knockout mouse technology and other functional genomics technologies. These competitors may have or may acquire intellectual property rights in functional or other data that are superior to or dominant over our rights. These competitors may also develop products earlier than we do, obtain regulatory approvals faster than we can and invent products and techniques that are more effective than ours. Furthermore, other methods for conducting functional genomics research may ultimately prove more advanced, in some or all respects, to the use of knockout mice. In addition, technologies more advanced than or superior to our gene trap

technology and gene function identification technology may be developed, thereby rendering our gene trap and gene function identification technologies obsolete. As we expand our range of products and services, such as our secreted protein and biopharmaceutical development programs, we will compete with additional companies, some of which may be our customers at that time or our potential customers.

Some of our competitors have developed commercially available databases containing gene sequence, gene expression, gene function, genetic variation or other functional genomic information and are marketing or plan to market their data to pharmaceutical and biotechnology companies. Additional competitors may attempt to establish databases containing this information in the future. We expect that competition in our industry will continue to intensify. We also believe that some pharmaceutical and biotechnology companies are discussing the possibility of working together to discover the functions of genes and share gene function-related data among themselves. The formation of this type of consortium could reduce the prospective customer base for or interest in our gene function-related business. Moreover, the pharmaceutical industry has undergone significant mergers and this trend is expected to continue. This concentration of the industry could further limit our potential customer base and therefore materially harm our business.

If we fail to properly manage our growth, our business could be adversely affected.

We expect to continue to experience significant growth in the number of our employees and the scope of our operations, including an increase in the scale of our mouse knockout program, as well as our secreted protein and biopharmaceutical drug discovery and development programs. As of February 28, 2002, we had approximately 440 full-time equivalent employees. We expect our number of employees to continue to increase for the foreseeable future. In addition, we have substantially increased the scale of our knockout mouse production in the last year and expect to continue doing so for the foreseeable future. Our overall growth and need to develop many different areas of our company have placed, and may continue to place, a strain on our management and operations. If we are unable to manage our growth effectively, our losses could increase. The management of our growth will depend, among other things, upon our ability to broaden our management team and attract, hire, train and retain skilled employees. Our success will also depend on the ability of our officers and key employees to continue to implement and improve our operational and other systems. We will also be required to expend funds, which may be substantial, to improve our operational, financial and management controls, reporting systems and procedures.

We also have multiple offices and facilities in North America and Europe, which presents significant challenges and strain on our management and operations. In addition to our corporate headquarters in Redwood City, California, we currently have offices or facilities in Menlo Park, Alameda and San Carlos, California, as well as facilities in Strasbourg, France for Deltagen Europe, S.A., in Salt Lake City, Utah for Deltagen Proteomics and in San Diego, California for Deltagen Research Laboratories. In addition, we have commenced work on our Redwood City facilities to establish laboratories to meet our growing size and scope of research activities. It is presently estimated that this project, which involves both equipment purchases and build out of current facilities, will cost approximately \$30 million and is expected to be substantially complete in the third quarter of 2002. These estimates may materially differ from our expectations. We may also acquire additional offices or facilities in the event that we merge with or acquire other companies. These additional offices or facilities will present even greater challenges and strain on management and operations.

Our merger with Arcaris might not produce the expected benefits.

To date, we have operated primarily in the field of genomics-based information, products and programs market, and have not had significant experience operating in the proteomics field. It may turn out that there are no advantages or "synergies" to adding Arcaris' research capabilities to our product line and technology platform. There are no assurances that the technologies used by Arcaris will not infringe third party intellectual property rights or that it will be able to obtain all licenses necessary to use its current technologies. Moreover, there is no assurance that Arcaris' operations, which are located in Salt Lake City, Utah, can be successfully

integrated into our operations or that any of the benefits expected from such integration will be realized. Although Arcaris will remain as our separate operating subsidiary of (renamed Deltagen Proteomics), we intend to explore the integration of certain aspects of the operations of Arcaris with our operations. Furthermore, there can be no assurance that the operations, management and personnel of the two companies will be compatible or that we or Arcaris will not experience the loss of key personnel. The Arcaris acquisition could result in the incurrence of contingent liabilities and amortization expenses related to intangible assets, which could adversely affect our results of operations and financial condition.

Our merger with BMS PRL, L.L.C., formerly known as CombiChem, Inc., might not produce the expected benefits.

To date, we have operated primarily in the field of genomics-based information, products and programs market, and have no experience in drug discovery and development activities such as medicinal chemistry, high-throughput compound screening, and chemical synthesis. It may turn out that there are no advantages or “synergies” to adding BMS PRL’s research capabilities to our product line and technology platform. Moreover, there is no assurance that BMS PRL’s operations, which are located in San Diego, California, can be successfully integrated into our operations or that any of the benefits expected from such integration will be realized. Although BMS PRL will become our subsidiary (renamed Deltagen Research Laboratories), there can be no assurance that the operations, management and personnel of the two companies will be compatible or that we or BMS PRL will not experience the loss of key personnel. The BMS PRL acquisition could result in the incurrence of contingent liabilities and amortization expenses related to intangible assets, which could adversely affect our results of operations and financial condition. We do not currently expect the need in the next few years to make significant capital investments in equipment or facilities for Deltagen Research Laboratories, as BMS PRL at the time we acquired it had a 77,000 square foot facility, including 22 modern chemistry laboratories and a newly-added biology laboratory. We also do not anticipate the need to hire additional research staff, as BMS PRL at the time we acquired it employed 70 scientists, including 53 in chemistry. However, we cannot assure you that our needs or focus will not change or that such changes may require us to expand or supplement Deltagen Research Laboratories’ facilities or supplement its research staff.

Our acquisition of XenoPharm might not produce the expected benefits.

It may turn out that there are no advantages or “synergies” to adding XenoPharm’s research capabilities to Deltagen’s product line and technology platform. Moreover, there is no assurance that XenoPharm’s technology can be successfully integrated into Deltagen’s operations or that any of the benefits expected from such integration will be realized. XenoPharm continues to incur legal expenses in connection with its patent applications and the patent applications of its licensors. It is expected that these expenses will increase as the level of patent prosecution increases. In the case of certain of these patent applications, it is our understanding that several major pharmaceutical companies have also filed patent applications covering such technologies and these pharmaceutical companies have sufficient capital resources to withstand potentially costly and lengthy patent interference and opposition proceedings, if they should choose to challenge these applications or any patents issuing therefrom. We cannot assure that we will prevail in any such proceedings. If we do not prevail, the value of these technologies will likely be significantly reduced.

We may engage in future acquisitions, which could adversely affect your investment in us as we may never realize any benefits from such acquisitions, which also could be expensive and time consuming.

We may acquire and license additional products and programs, if we determine that these products or programs complement our existing technology or augment our existing information technology platforms. We currently have no firm commitments or agreements with respect to any material acquisitions. If we do undertake any transactions of this sort, the process of integrating an acquired business, technology, service or product may result in operating difficulties and expenditures and may absorb significant management attention that would otherwise be available for ongoing development of our business. Moreover, we may never realize the anticipated

benefits of any acquisition. Future acquisitions could result in potentially dilutive issuances of equity securities, the incurrence of debt and contingent liabilities and amortization expenses related to goodwill and other intangible assets, which could adversely affect our results of operations and financial condition.

We depend on key employees in a competitive market for skilled personnel, and without additional employees, we cannot grow or achieve profitability.

We are highly dependent on the principal members of our management, operations and scientific staff, including William Matthews, Ph.D., our President and Chief Executive Officer, and Mark W. Moore, Ph.D., our Chief Scientific Officer. The loss of either of their services would harm our business.

Our future success also will depend in part on the continued service of our key scientific, software, legal, consultant and management personnel and our ability to identify, hire and retain additional personnel, including customer service, marketing and sales staff. We experience intense competition for qualified personnel. We may be unable to attract and retain personnel necessary for the development and expansion of our business. Moreover, our business is located in the San Francisco Bay Area of California, where demand for personnel with the skills we seek is extremely high and is likely to remain high. Because of this competition, our compensation costs may increase significantly.

We currently have only nine issued U.S. patents, and if we are unable to protect our proprietary information, our business will be adversely affected.

Our business and competitive position depends upon our ability to protect and exploit our proprietary techniques, methods, compositions, inventions, database information and software technology. However, our strategy of obtaining such proprietary rights around as many genes as possible is unproven. Unauthorized parties may attempt to obtain and use information that we regard as proprietary. Although we intend for our gene function database subscription agreements to require our potential subscribers to control access to our database and information, policing unauthorized use of our database information and software may be difficult.

We currently have in the United States no registered copyrights and only one registered trademark. We currently have nine issued United States patents, but none of these relate to knockout mice. Patents have issued to other entities based on claims relating to knockout mice. In addition, many applications have been filed seeking to protect partial human gene sequences, many of which are based primarily on gene sequence information alone. Some of these applications have issued as patents. Some of these may claim sequences that we have used or may use in the future to generate knockout mice in our gene knockout program or that we have used or may use in the future to discover and develop biopharmaceutical products. In addition, other applications have been filed which seek to protect methods of using genes and gene expression products, some of which attempt to assign biological function to the DNA sequences based on laboratory experiments, computer predictions, mathematical algorithms and other methods. The issuance of these applications as patents will depend, in part, upon whether practical utility can be sufficiently established for the claimed sequences and whether sufficient correlation exists between the experimental results, predictions, algorithms and other methods and actual functional utility. The patent application process before the U.S. Patent and Trademark Office and other similar agencies in other countries is confidential in nature. Although certain patent applications are published prior to issuance, as each application is evaluated independently and confidentially, we cannot predict whether applications have been filed or which, if any, will ultimately issue as patents. However, it is probable that patents will be issued to our competitors claiming knockout mice, partial human gene sequences and methods of using genes and gene expression products.

Numerous applications have been filed by other entities claiming gene sequences. Many patents have already issued and we expect more will issue in the future. In addition, others may discover uses for genes or proteins other than uses covered in any patents issued to us, and these other uses may be separately patentable. We may not be able to obtain additional issued patents on our patent applications because our patent applications

may not meet the requirements of the patent office. The holder of a patent covering a particular use of a gene or a protein, isolated gene sequence or deduced amino acid sequence could exclude us from using that gene, protein or sequence. In addition, a number of entities make gene information, techniques and methods publicly available, which may affect our ability to obtain patents.

Some of our patent applications may claim compositions, methods or uses that may also be claimed in patent applications filed by others. In some or all of these applications, a determination of priority of inventorship may need to be decided in an interference proceeding before the U.S. Patent and Trademark Office. Regardless of the outcome, this process is time-consuming and expensive.

Issued patents may not provide commercially meaningful protection against competitors. Other companies or institutions may challenge our or our customers' patents or independently develop similar products that could result in a legal action. In the event any researcher or institution infringes upon our or our customers' patent rights, enforcing these rights may be difficult and can be time-consuming. Others may be able to design around these patents or develop unique products or technologies providing effects or results similar to our products or technologies.

Our ability to use our patent rights to limit competition in the creation and use of knockout mice, as well as our ability to obtain patent rights, may be more limited in certain markets outside of the United States because the protections available in other jurisdictions may not be as extensive as those available domestically.

We pursue a policy of having our employees, consultants and advisors execute nondisclosure and nonuse confidentiality agreements, as well as proprietary information and invention agreements when they begin working for us. However, these agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure. We also cannot prevent others from independently developing technology or software that might be covered by copyrights issued to us, and trade secret laws do not prevent independent development.

We may be subject to litigation and infringement claims that may harm our business or reputation, be costly and divert management's attention.

The technology we use in our business may subject us to claims that we infringe on the patents or proprietary rights of others. The risk of this occurring will tend to increase as the genomics, biotechnology and software industries expand, more patents are issued and other companies attempt to discover gene function through mouse gene knockouts and engage in other genomics-related businesses. Furthermore, many of our competitors and other companies performing research on genes have already applied for patents covering some of the genes upon which we perform research, and many patents have already been issued which cover these genes, as well as genes we may wish to use in the future.

In 1998, Lexicon Genetics Incorporated, one of our competitors, informed us that it was a co-exclusive licensee under a patent covering certain isogenic DNA technology that may be used to modify the genome of a target cell. On May 24, 2000, Lexicon Genetics Incorporated filed a lawsuit against us in the United States District Court for the District of Delaware. The complaint in the lawsuit alleged that our methods of making knockout mice infringed United States Patent No. 5,789,215, or the '215 patent, under which Lexicon claimed to be an exclusive licensee. In addition, on October 13, 2000, Lexicon and the University of Utah Research Foundation filed a lawsuit against us in the United States District Court for the Northern District of California. The complaint in this lawsuit alleged that we infringed United States Patents Nos. 5,631,153, 5,464,764, 5,627,059 and 5,487,992, or the Capecchi patents, under which Lexicon claimed to be an exclusive licensee. On September 20, 2001, we and Lexicon announced the settlement of the litigation. Under the terms of the settlement, we obtained a commercial license under the '215 patent and the Capecchi patents, Lexicon obtained a subscription to our DeltaBase product, and all of the claims and counterclaims in the litigation were dismissed with prejudice. Lexicon's subscription to DeltaBase includes non-exclusive, perpetual licenses to the 250 drug

targets represented in DeltaBase as of September 2001 and the approximately 1,000 drug targets that were and are to be added to DeltaBase over the subsequent four years. Lexicon will make certain milestone and royalty payments to us for therapeutic and diagnostic products developed from Lexicon's use of DeltaBase. We will make payments to Lexicon for knockout mice generated by us on a fee-for-service basis. Neither we nor Lexicon will pay the other party any subscription or license fees.

We may be involved in future lawsuits alleging patent infringement or other intellectual property rights violations. In addition, litigation may be necessary to:

- assert claims of infringement;
- enforce our patents, if any;
- protect our trade secrets or know-how; and
- determine the enforceability, scope and validity of the proprietary rights of others.

We may be unsuccessful in defending or pursuing these lawsuits. Regardless of the outcome, litigation can be very costly, can divert management's efforts and could materially affect our business, operating results, financial condition and cash flows. An adverse determination may subject us to significant liabilities or restrict or prohibit us from selling our products.

Because our nine issued U.S. patents are not related to knockout mice, and because knockout mouse and gene-related patents even if obtained may not be enforceable, our intellectual property may not have any material value, which would diminish our business prospects.

One of our strategies is to obtain proprietary rights around as many gene knockouts as possible. Although we have filed patent applications covering the large majority of knockout mice we have produced, we do not currently have any issued patents related to knockout mice. We rely on a combination of copyright and trademark law, trade secrets, non-disclosure agreements and contractual provisions in our agreements with our customers to establish and maintain intellectual property rights. While the U.S. Patent and Trademark Office in the past has issued patents to others covering function of genes, knockout mice, types of cells, gene sequences and methods of testing cells, we do not know whether or how courts may enforce those patents, if that becomes necessary. If a court finds these types of inventions to be unpatentable, or interprets them narrowly, the benefits of our strategy may not materialize and our business and financial condition could be significantly harmed.

Our rights to the use of technologies licensed to us by third parties are not within our control, and without these technologies, our products and programs may not be successful and our business prospects could be harmed.

We rely, in part, on licenses to use certain technologies that are material to our business, including a secreted protein gene trap that we license exclusively from the University of Edinburgh. We do not own the patents that underlie these licenses. Our rights to use these technologies and employ the inventions claimed in the licensed patents are subject to our licensors abiding by the terms of those licenses and not terminating them. In many cases, we do not control the prosecution or filing of the patents to which we hold licenses. Some of the licenses under which we have rights, such as the license from the University of Edinburgh, provide us with exclusive rights in specified fields, but we cannot assure you that the scope of our rights under these and other licenses will not be subject to dispute by our licensors or third parties.

Our activities involve hazardous material and may subject us to environmental liability, which would seriously harm our financial condition.

Our research and development activities involve the controlled use of hazardous and radioactive materials and generate biological waste. We are subject to federal, state and local laws and regulations governing the storage, handling and disposal of these materials and waste products. Although we believe that our safety

procedures for handling and disposing of these materials and wastes comply with legally prescribed standards, the risk of accidental contamination or injury from these materials cannot be completely eliminated. We may be sued for any injury or contamination that results from our use or the use by third parties of these materials, and our liability may exceed our insurance coverage and our total assets. Future environmental regulations could require us to incur significant costs.

Compliance with governmental regulations regarding animal welfare and genetically modified organisms could increase our operating costs or adversely affect our customers' ability to obtain governmental approval of gene based products, which would adversely affect the commercialization of our technology.

The Animal Welfare Act, or AWA, is the federal law that currently covers animals in laboratories. It applies to institutions or facilities using any regulated live animals for research, testing, teaching or experimentation, including diagnostic laboratories and private companies in the pharmaceutical and biotechnology industries. Rats, birds and mice, including the mice in our knockout programs, are currently excluded from the definition of "animal" and, therefore, are not subject to regulation under the AWA. However, the United States Department of Agriculture, which enforces the AWA, has been sued on this matter and agreed, as part of the settlement of this lawsuit on September 25, 2000, to begin the process of changing the regulations issued under the AWA to include rats, mice and birds within its coverage. Congress subsequently prohibited, in the Agricultural Appropriations Act for fiscal year 2001 and again for fiscal year 2002, the expenditure of any money or commencing rulemaking for the purpose of changing the regulations with respect to including rats, mice and birds prior to October 1, 2002. We cannot predict whether mice will at any time after such date be included under the AWA.

Currently, the AWA imposes a wide variety of specific regulations which govern the humane handling, care, treatment and transportation of certain animals by producers and users of research animals, most notably personnel, facilities, sanitation, cage size, feeding, watering and shipping conditions. We cannot assure you that the USDA will not in the future include rats, mice and birds in its regulations and that we will not become subject to registration, inspections and reporting requirements. Compliance with the AWA could be expensive, and current or future regulations could impair our research and production efforts.

Since we develop animals containing changes in their genetic make-up, we may become subject to a variety of laws, guidelines, regulations and treaties specifically directed at genetically modified organisms, or GMOs. The area of environmental releases of GMOs is rapidly evolving and is currently subject to intense regulatory scrutiny, particularly internationally. If we become subject to these laws we could incur substantial compliance costs. For example, the Biosafety Protocol, or the BSP, a recently adopted treaty, is expected to cover certain shipments from the U.S. to countries abroad that have signed and ratified the BSP. The BSP is also expected to cover the importation of living modified organisms, a category that could include our animals. If our animals are not contained as described in the BSP, our animals could be subject to the potentially extensive import requirements of countries that are signatories to the BSP.

If we, or our collaborators, do not comply with government regulations, we may not be able to develop or sell our technologies and products.

Any future drug approvals that are granted remain subject to continual FDA review, and newly discovered or developed safety or efficacy data may result in withdrawal of products from the market. Moreover, if and when such approval is obtained, the manufacture and marketing of future drugs will remain subject to extensive regulatory requirements administered by the FDA and other regulatory bodies, including compliance with current Good Manufacturing Practices, adverse event reporting requirements and the FDA's general prohibitions against promoting products for unapproved or "off-label" uses. Companies are subject to inspection and market surveillance by the FDA for compliance with these regulatory requirements. Domestic manufacturing facilities are subject to biennial inspections by the FDA and must comply with the FDA's Good Manufacturing Practices regulations. In complying with these regulations, manufacturers must spend funds, time and effort in the areas of

production, record keeping, personnel and quality control to ensure full technical compliance. The FDA stringently applies regulatory standards for manufacturing. Failure to comply with the requirements can, among other things, result in warning letters, product seizures, recalls, fines, injunctions, suspensions or withdrawals of regulatory approvals, operating restrictions and criminal prosecutions. Any such enforcement action could have a material adverse effect on us. Unanticipated changes in existing regulatory requirements or the adoption of new requirements could also have a material adverse effect on us.

Ethical and social issues may limit or discourage the use of knockout mice or other genetic processes, which could reduce our revenues and adversely affect our business.

Governmental authorities could, for social or other purposes, limit the use of genetic processes or prohibit the practice of our gene trap and knockout mouse technologies. Public attitudes may be influenced by claims that genetically engineered products are unsafe for consumption or pose a danger to the environment. The subject of genetically modified organisms, like knockout mice, has received negative publicity and aroused public debate. In addition, animal rights activists could protest or make threats against our facilities, which may result in property damage. Ethical and other concerns about our methods, particularly our use of knockout mice, could adversely affect our market acceptance.

Almost all of our knockout mouse research and storage is conducted at our San Francisco Bay Area facilities in San Carlos, Menlo Park, Alameda and Redwood City, and a natural disaster at one or more of these facilities is possible and could result in a prolonged interruption of our business.

We conduct most of our scientific and all of our management activities at our San Carlos, Menlo Park, Alameda and Redwood City facilities in California. All of these locations are in or proximate to seismically active areas. We have taken precautions to safeguard our mouse colony including through insurance, storage of animals off-site at a back-up facility in Massachusetts, the freezing of sperm and the storage of embryonic stem cells, or ES cells, to allow for the regeneration of mice. However, a natural disaster, such as an earthquake, fire, flood or outbreak of infectious disease, could cause substantial delays. This could interrupt mouse breeding, cause us to incur additional expenses and adversely affect our reputation with customers.

Security risks in electronic commerce or unfavorable internet regulations may deter future use of our products and services.

We do provide access to our gene function database on the Internet. A fundamental requirement to conduct our business over the Internet is the secure transmission of confidential information over public networks. Advances in computer capabilities, new discoveries in the field of cryptography or other developments may result in a compromise or breach of the security measures we use to protect the content in our gene function database. Anyone who is able to circumvent our security measures could misappropriate our proprietary information or confidential customer information or cause interruptions in our operations. We may be required to incur significant costs to protect against security breaches or to alleviate problems caused by breaches, and these efforts may not be successful. Further, a well-publicized compromise of security could deter people from using the Internet to conduct transactions that involve transmitting confidential information. For example, recent attacks by computer hackers on major e-commerce web sites have heightened concerns regarding the security and reliability of the Internet.

Because of the growth in electronic commerce, the U.S. Congress has held hearings on whether to further regulate providers of services and transactions in the electronic commerce market, and federal and state authorities could enact laws, rules and regulations affecting our business and operations. If enacted, these laws, rules and regulations could make our business and operations more costly and burdensome as well as less efficient.

We rely on third-party data sources, and without these sources, our products and programs would be incomplete and less appealing to customers, seriously harming our business prospects.

We rely on scientific and other data supplied by third parties, and all of the gene sequence data for our internal programs comes from public genomics data. This data could be defective, be improperly generated or contain errors or other defects, which could corrupt our gene function database and our other programs and services. In addition, we cannot guarantee that our sources acquired this data in compliance with legal requirements. In the event of any such defect, corruption or finding of noncompliance, our business prospects could be adversely affected.

Our common stock may experience extreme price and volume fluctuations, which could lead to costly litigation for us and make an investment in us less appealing.

The market price of our common stock may fluctuate substantially due to a variety of factors, including:

- announcements of technological innovations or new products by us or our competitors;
- developments or disputes concerning patents or proprietary rights, including announcements with respect to infringement claims or lawsuits, interference proceedings, or other litigation against us or our licensors;
- the timing and development of our products and services;
- media reports and publications about genetics and gene-based products;
- changes in pharmaceutical and biotechnology companies' research and development expenditures;
- announcements concerning our competitors, or the biotechnology or pharmaceutical industry in general;
- changes in government regulation of genetic research or gene-based products, and the pharmaceutical or medical industry in general;
- general and industry-specific economic conditions;
- actual or anticipated fluctuations in our operating results;
- changes in financial estimates or recommendations by securities analysts;
- changes in accounting principles; and
- the loss of any of our key scientific or management personnel.

In addition, the stock market has experienced extreme price and volume fluctuations. The market prices of the securities of biotechnology companies, particularly companies like ours without consistent product revenues and earnings, have been highly volatile and may continue to be highly volatile in the future. This volatility has often been unrelated to the operating performance of particular companies. For example, the stock prices of many biotechnology companies, even those that would benefit from publicly available gene sequence information, declined on news of the announcement by former President Clinton and British Prime Minister Blair that, as their respective governments had each advocated before, gene sequence information should be freely available in the public domain. In the past, securities class action litigation has often been brought against companies that experience volatility in the market price of their securities. Moreover, market prices for stocks of biotechnology-related and technology companies, particularly following an initial public offering, frequently reach levels that bear no relationship to the operating performance of such companies. These market prices generally are not sustainable and are subject to wide variations. Whether or not meritorious, litigation brought against us could result in substantial costs, divert management's attention and resources, and harm our financial condition and results of operations.

The future sale of common stock could negatively affect our stock price.

We had 32,077,012 shares of common stock outstanding at December 31, 2001. An additional 2,647,481 unregistered shares were issued in February 2002 in conjunction with the acquisition of BMS PRL, L.L.C. An additional 498,251 unregistered shares were issued in March 2002 in conjunction with the acquisition of XenoPharm, Inc.

If our common stockholders sell substantial amounts of common stock in the public market, or the market perceives that such sales may occur, the market price of our common stock could fall. The holders of approximately 17.2 million shares of our common stock have rights, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. Furthermore, if we were to include in a company-initiated registration statement shares held by those holders pursuant to the exercise of their registration rights, those sales could impair our ability to raise needed capital by depressing the price at which we could sell our common stock.

Our principal stockholders, executive officers and directors own a significant percentage of our stock, and as a result, the trading price for our shares may be depressed and these stockholders can take actions that may be adverse to your interests.

As of December 31, 2001, our executive officers and directors, and entities affiliated with them, beneficially own, in the aggregate, approximately 55.0% of our common stock. This significant concentration of share ownership may adversely affect the trading price for our common stock because investors often perceive disadvantages in owning stock in companies with controlling shareholders. These stockholders, acting together, will have the ability to exert substantial influence over all matters requiring approval by our stockholders, including the election and removal of directors and any proposed merger, consolidation or sale of all or substantially all of our assets. In addition, they could dictate the management of our business and affairs. This concentration of ownership could have the effect of delaying, deferring or preventing a change in control, or impeding a merger or consolidation, takeover or other business combination that could be favorable to you.

Our incorporation documents and Delaware law may inhibit a takeover that stockholders consider favorable and could also limit the market price of your stock.

Our restated certificate of incorporation and bylaws contain provisions that could delay or prevent a change in control of our company. Some of these provisions:

- authorize the issuance of preferred stock which can be created and issued by the board of directors without prior stockholder approval, commonly referred to as "blank check" preferred stock, with rights senior to those of common stock;
- provide for a classified board of directors; and
- prohibit stockholder action by written consent.

In addition, we are governed by the provisions of Section 203 of Delaware General Corporate Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us. These and other provisions in our amended and restated certificate of incorporation and bylaws and under Delaware law could reduce the price that investors might be willing to pay for shares of our common stock in the future and result in the market price being lower than it would be without these provisions.

We face significant competition in our future drug discovery and development efforts.

Many organizations are actively attempting to identify, optimize and generate lead compounds for potential pharmaceutical development. We will compete in our drug discovery efforts with the research departments of

pharmaceutical companies, biotechnology companies, combinatorial chemistry companies and research and academic institutions, as well as other computationally based drug discovery companies. Many of these competitors have greater financial and human resources and more experience in research and development than we have. Historically, large pharmaceutical companies have maintained close control over their research activities, including the synthesis, screening and optimization of chemical compounds. Many of these companies, which represent one of the largest potential markets for our products and services, are internally developing combinatorial and computational approaches and other methodologies to improve productivity, including major investments in robotics technology to permit the automated parallel synthesis of compounds. In addition, these companies may already have large collections of compounds previously synthesized or ordered from chemical supply catalogs or other sources against which they may screen new targets. Other sources of compounds include compounds extracted from natural products, such as plants and microorganisms, and compounds created using rational drug design. Academic institutions, governmental agencies and other research organizations are also conducting research in areas in which we are working, either on their own or through collaborative efforts. We anticipate that we will face increased competition in the future as new companies enter the market and advanced technologies become available. Our drug discovery processes may be rendered obsolete or uneconomical by technological advances or by entirely different approaches developed by one or more of our competitors. The existing drug discovery approaches of our competitors or new approaches or technology developed by our competitors may be more effective than those developed by us.

Our drug discovery technology is unproven and has not been shown to be successful in discovering new commercially viable drugs.

We have only very recently acquired drug discovery capabilities through our acquisition in February 2002 of BMS PRL formerly known as CombiChem, from Bristol-Myers Squibb Company. This subsidiary was renamed Deltagen Research Laboratories. We have not yet shown that our newly-acquired drug discovery technologies can successfully be used to discover drug candidates that ultimately become commercial products. Development of new drugs is highly uncertain. Our drug discovery process may not result in drug candidates that will be safe or effective or commercially successful as products.

Item 2. Properties

Our operating facilities include corporate headquarters, principal executive offices and research facilities as follows:

	Lease Expiration Date	Square Feet
Alameda, CA	Feb-06	32,000
San Carlos, CA	Feb-04	20,000
Menlo Park, CA—1003 Hamilton	Jul-04	28,938
Menlo Park, CA—1210 Hamilton	Nov-05	24,636
Menlo Park, CA—1255 Hamilton	Nov-05	22,237
Redwood City, CA—700 Bay Road	Jul-10	132,347
Redwood City, CA—740 Bay Road	Jul-10	60,985
San Diego, CA	Jan-15	77,539
Salt Lake City, UT	Feb-04	27,538
Strasbourg, France	Feb-04	6,405

We expect to complete animal and laboratory facility improvements in Redwood City, California, by the third quarter of 2002. We expect to complete the construction of our new 50,000 square foot research facility in France by late 2003.

We believe that facilities will be adequate for our current needs and that suitable additional space or alternative space, if necessary, will be available in the future on commercially reasonable terms.

Item 3. Legal Proceedings

On May 24, 2000, Lexicon Genetics Incorporated filed a lawsuit against us in the United States District Court for the District of Delaware. The complaint in the lawsuit alleged that our methods of making knockout mice infringed United States Patent No. 5,789,215, or the '215 patent, under which Lexicon claimed to be an exclusive licensee. In addition, on October 13, 2000, Lexicon and the University of Utah Research Foundation filed a lawsuit against us in the United States District Court for the Northern District of California. The complaint in this lawsuit alleged that we infringed United States Patents Nos. 5,631,153, 5,464,764, 5,627,059 and 5,487,992, or the Capecchi patents, under which Lexicon claimed to be an exclusive licensee. On September 20, 2001, we and Lexicon announced the settlement of the litigation. Under the terms of the settlement, we obtained a commercial license under the '215 patent and the Capecchi patents, Lexicon obtained a subscription to our DeltaBase product, and all of the claims and counterclaims in the litigation were dismissed with prejudice. Lexicon's subscription to DeltaBase includes non-exclusive, perpetual licenses to the 250 drug targets represented in DeltaBase as of September 2001 and the approximately 1,000 drug targets that were and are to be added to DeltaBase over the subsequent four years. Lexicon will make certain milestone and royalty payments to us for therapeutic and diagnostic products developed from Lexicon's use of DeltaBase. We will make payments to Lexicon for knockout mice generated by us on a fee-for-service basis. Neither we nor Lexicon will pay the other party any subscription or license fees.

We may be involved in additional litigation, investigations or proceedings in the future. Any litigation, investigation or proceeding, with or without merit, could be costly and time-consuming and could divert our management's attention and resources, which in turn could harm our business and financial results and cash flows.

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

None.

PART II

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

Our common stock has been traded on the Nasdaq National Market under the symbol DGEN since our initial public offering on August 3, 2000. The following table sets forth, for the periods indicated, the highest and lowest closing sale prices for our common stock, as reported by the Nasdaq National Market.

	<u>High</u>	<u>Low</u>
Fiscal 2000		
Third Quarter (beginning August 2, 2000)	\$32.00	\$15.00
Fourth Quarter	31.00	7.50
Fiscal 2001		
First Quarter	\$10.13	\$ 4.95
Second Quarter	12.55	4.80
Third Quarter	9.51	6.71
Fourth Quarter	10.40	5.59

Holders

As of December 31, 2001, there were approximately 209 holders of record of our common stock.

Dividends

We have not paid any cash dividends on our common stock in the past. We currently intend to retain any earnings for use in our business and do not anticipate paying any cash dividends on our common stock in the foreseeable future.

Sale of Unregistered Securities

During the fourth quarter of fiscal 2001, we issued an aggregate of 1,508,978 shares of our common stock at a price of \$6.63 per share pursuant to a private placement with one investor, George B. Rathmann, Ph.D., chairman of the Board of Directors of Hyseq. The shares were issued pursuant to an exemption by reason of Section 4(2) of the Securities Act of 1933. This sale was made without general solicitation or advertising. The investor represented that it was an accredited investor. We have an obligation to file a Registration Statement on Form S-3 covering the resale of such securities in November 2002. All net proceeds from the sale of such securities will go to the investor who offers and sells its shares. We have not received and will not receive any proceeds from the sale of these common shares.

Use of Proceeds from the Sale of Registered Securities

On August 2, 2000, our Registration Statement on Form S-1 (File No. 333-34668), the IPO Registration Statement, was declared effective by the Securities and Exchange Commission. The IPO Registration Statement registered a total of 7,000,000 shares of common stock, all of which were issued and sold by us. The offering was led by a group consisting of Salomon Smith Barney Inc., FleetBoston Robertson Stephens, Inc. and U.S. Bancorp Piper Jaffray Inc. The offering commenced on August 3, 2000, and was closed on August 8, 2000. The shares sold by us were sold at an aggregate offering price of \$105.0 million, netting proceeds of approximately \$95.9 million to us after underwriting fees of approximately \$7.4 million and other offering expenses of approximately \$1.7 million. On August 30, 2000, the underwriters' exercised their over-allotment option for the purchase of approximately 1,025,000 shares. The shares sold by us were sold at an aggregate offering price of \$15.4 million, netting proceeds of approximately \$14.3 million to us after underwriting fees of approximately \$1.1 million and other offering expenses.

Since the effective date of the IPO Registration Statement, the net offering proceeds of \$110.2 million have been invested in bank deposits, money market funds, corporate debt securities and obligations of government agencies.

	(in thousands)
Repayment of indebtedness	\$ 1,477
Purchase and installation of equipment and build out of facilities	7,618
Used in operations	24,627
Bank deposits and temporary investments	<u>76,478</u>
Net offering proceeds	<u>\$110,200</u>

Item 6. Selected Consolidated Financial Data

SELECTED CONSOLIDATED FINANCIAL DATA

The consolidated statement of operations data for each of the three years in the period ended December 31, 2001 and the consolidated balance sheet data at December 31, 2001 and 2000 are derived from the audited consolidated financial statements included in this report. The statement of operations data for the year ended December 31, 1998 and for the period from January 28, 1997 (date of inception) to December 31, 1997 and the balance sheet data at December 31, 1999, 1998 and 1997 are derived from audited financial statements not included in this report. Our historical results are not necessarily indicative of results to be expected for future periods. The consolidated financial data set forth below should be read in conjunction with the accompanying consolidated financial statements of the Company and related notes thereto, and Management's Discussion and Analysis of Financial Condition and Results of Operations.

	Years Ended December 31,				Period from
	2001	2000	1999	1998	January 28, 1997 (date of inception) to December 31, 1997
(in thousands, except per share data)					
Consolidated Statements of Operations Data:					
Revenue	\$ 9,910	\$ 2,080	\$ 1,240	\$ 381	\$ —
Costs and expenses:					
Research and development	45,033	26,262	12,144	3,360	879
General and administrative	17,038	11,068	2,932	638	416
Total costs and expenses	62,071	37,330	15,076	3,998	1,295
Loss from operations	(52,161)	(35,250)	(13,836)	(3,617)	(1,295)
Interest income (expense), net	3,704	3,029	(11)	265	40
Net loss	(48,457)	(32,221)	(13,847)	(3,352)	(1,255)
Deemed dividend related to beneficial conversion feature of preferred stock	—	(22,360)	—	—	—
Net loss attributable to common stockholders	<u>\$(48,457)</u>	<u>\$(54,581)</u>	<u>\$(13,847)</u>	<u>\$(3,352)</u>	<u>\$(1,255)</u>
Net loss per common share, basic and diluted	\$ (1.64)	\$ (4.32)	\$ (12.82)	\$ (8.00)	\$ —
Weighted average shares used in computing net loss per share, basic and diluted	29,489	12,621	1,080	419	—
Consolidated Balance Sheet Data:					
Cash and cash equivalents	\$ 61,363	\$ 93,352	\$ 848	\$ 8,635	\$ 987
Marketable securities	15,118	24,981	—	—	—
Working capital	61,554	107,707	(3,801)	7,741	829
Total assets	109,050	130,059	6,774	11,280	1,958
Capital lease obligations, less current portion	28	15	22	65	—
Loans payable, less current portion	3,059	3,248	2,233	—	—
Redeemable convertible preferred stock	—	—	14,447	14,447	2,980
Total stockholders' equity (deficit)	83,671	110,864	(15,367)	(4,545)	(1,213)

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

MANAGEMENT'S DISCUSSION AND ANALYSIS
OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read this report and the documents that we reference in this report completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

YOU SHOULD READ THE FOLLOWING DISCUSSION AND ANALYSIS IN CONJUNCTION WITH "SELECTED CONSOLIDATED FINANCIAL DATA" AND OUR CONSOLIDATED FINANCIAL STATEMENTS AND THE ACCOMPANYING NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS.

Overview

Deltagen, founded in 1997, is a leader in using *in vivo* derived mammalian gene function information to define the function and disease relevance of mammalian genes for the purposes of discovering and validating novel drug targets. Our proprietary information platform serves our major pharmaceutical partners and customers in their efforts to discover potential new drug therapies as well as us in our internal drug discovery efforts.

Our platform product, DeltaBase, provides a database of *in vivo* mammalian gene function information on target genes selected for their disease relevance. We delete, or "knock out," these genes in mice and then utilize an extensive, integrated analysis program to assess the function and potential pharmaceutical relevance of these genes and the proteins these genes encode. We also focus our efforts to determine the function of secreted proteins. We are undertaking the discovery and development of biotechnology drug candidates internally and in collaboration with other parties.

Our current customers and partners include the world's largest pharmaceutical companies, GlaxoSmithKline plc, Merck & Co., Inc., Pfizer Inc., Eli Lilly and Company and Schering-Plough Research Institute as well as significant biotechnology and biopharmaceutical companies including Vertex Pharmaceuticals Incorporated, Hyseq, Inc. and Lexicon Genetics Incorporated.

We are also internally focusing on the discovery and development of biopharmaceutical products through our Target Research and Development, or TRD, program. Building on the DeltaBase platform, our TRD program adds comprehensive in-depth analysis to further characterize and identify potential key targets for the treatment of disease. The program currently focuses on the identification and validation of targets in oncology, metabolism, inflammatory diseases and certain areas of the central nervous system.

We have assembled an integrated drug discovery platform. With our newly acquired medicinal chemistry and drug discovery capabilities, coupled with our small molecule screening and drug metabolism technologies, our goal is to advance targets identified through our TRD program to identify clinical drug candidates that will have an improved chance of clinical success as well as a lower incidence of side effects.

We are implementing a strategy to integrate our:

- Target Research and Development program, an integrated systems biology infrastructure, comprising data generated from our platform of knockout animal models and pathophysiological analysis, our microarray-based mammalian gene expression data analysis known as DeltaXpress, disease challenge models and biochemical disease pathway analysis;
- *in vivo* mammalian gene function and secreted protein discoveries;

- internal target validation, lead compound drug discovery and optimization efforts through our comprehensive drug screening capabilities, computational design technologies integrated with medicinal and analytical chemistries and high-throughput parallel synthesis and purification capabilities;
- development and expansion of our own products and programs in collaboration with other companies and through our own internal programs, including the advancement of preclinical biopharmaceutical drug candidates;
- commercialization of the intellectual property we generate on the use of mammalian genes and secreted proteins in drug development through alliances and collaborations with others and our own internal products and programs; and
- generation of information, products and services for pharmaceutical and biotechnology drug discovery efforts.

We have established collaborations and relationships with major pharmaceutical and biotechnology companies and research institutions in Europe and North America to accelerate the discovery of and commercialization of therapeutic and diagnostic products to improve human and animal health. These companies include Eli Lilly, GlaxoSmithKline, Hyseq, Merck, Pfizer, Schering-Plough Research Institute, Lexicon Genetics Incorporated and Vertex Pharmaceuticals Incorporated.

Our recent acquisitions of Arcaris, Inc. and XenoPharm, Inc. further complement our internal drug discovery efforts. Arcaris, now a subsidiary known as Deltagen Proteomics, supplements our small molecule discovery program through its genetic, proteomic and cell-biological systems for identification and validation of drug targets and the creation of small molecule screens. XenoPharm provides a proprietary technology platform to evaluate drug metabolism of drug candidates, to improve the predictive value of cell- and animal-based biomedical research and predict the reaction of a drug candidate in a human system, thereby screening candidates for improved chances of clinical success.

We have also integrated established drug discovery capabilities through the February 2002 acquisition from Bristol-Myers Squibb Company of Bristol-Myers Squibb Pharma Research Labs, L.L.C., or BMSPRRL, formerly known as CombiChem, Inc. This subsidiary was renamed Deltagen Research Laboratories. The acquisition provides us with a well-recognized small molecule drug discovery operation.

We believe that our ability to determine gene function, to develop products and to identify potential drug candidates is a result of our leveraging of our technology platforms. Our genomics technologies, processes and information systems are integrated with one another and generate information on the function and relationships between genes and the proteins these genes encode and the usefulness of genes as new drug targets and proteins as new drug candidates. We have used these systems to establish and develop our products and programs that include our:

- large-scale program to generate mammalian gene knockout animals and to discover gene function;
- DeltaBase portfolio of gene knockout animal models and mammalian gene function data analysis and management database;
- mammalian gene knockout secreted protein discovery collaborations and programs;
- Target Research and Development program, which adds additional gene knockouts, disease challenge models, DeltaXpress microarray-based mammalian gene expression data and underlying disease pathway analysis to provide a comprehensive systems biology approach to assist in identifying key targets for the treatment of disease;
- internal characterization, evaluation and validation of targets, including those targets discovered and analyzed using our proprietary *in vivo* mammalian functional genomics programs, such as DT011M, a

target we believe is involved in the mediation of insulin secretion and a potential target for the development of a drug for the treatment of obesity and related diseases such as diabetes;

- Deltagen Research Laboratories' drug discovery and candidate optimization capabilities, comprising the screening and identification of potent *in vitro* compounds, as well as lead optimization and identification of clinical nomination candidates;
- Deltagen Proteomics' small molecule target discovery and drug screening technologies;
- XenoPharm's drug metabolism and xenobiotic technology platform to potentially predict the reaction of a drug in a human system; and
- internal early-stage biopharmaceutical product development programs, including our CD123 antigen program in-licensed as a potential treatment for Acute Myelogenous Leukemia.

To date, we have generated revenue from our DeltaBase and DeltaSelect programs.

DeltaBase is our proprietary database that provides information, based on knockout mouse studies, on gene function and validated gene targets for drug discovery. We created DeltaBase to be marketed to the pharmaceutical and biotechnology industries to help define the role that genes play in biological processes and disease. We have provided and expect to continue to provide gene function and target validation information through DeltaBase on approximately 250 different mammalian genes per year. We select genes for DeltaBase based upon what we believe to be their potential to become useful drug targets. We generate information on these genes by comprehensively analyzing knockout mice generated through our proprietary gene knockout methods. Each knockout mouse undergoes a standardized, detailed and extensive analysis in order to determine the function and role that a particular gene plays in the mouse and that gene's suitability as a drug target. In addition to accessing target validation data, DeltaBase subscribers will have access to the knockout mice used to generate this data.

The DeltaSelect program was our initial program. Customers received target validation information for selected genes on a fee-for-service basis. This program was provided to validate our proprietary technology and promote interest in the DeltaBase product that became available in 2000. We believe that the DeltaSelect program has provided validation of our proprietary platform technology and promoted interest in DeltaBase, however, the revenues generated from the DeltaSelect program have to date not been significant and have with time become historically less significant. We anticipate that revenues from DeltaSelect will continue to become less significant and that DeltaSelect will be utilized only under very limited circumstances to develop new technologies, product offerings and programs in collaboration with pharmaceutical companies.

We have DeltaBase agreements with GlaxoSmithKline and Pfizer, and have entered into a DeltaBase agreement with Merck in February 2002. Each of these agreements provides for payments aggregating approximately \$15 million in exchange for three years' worth of DeltaBase targets. In addition, we may receive additional fees for access to certain intellectual property. We began recognizing revenue from the GlaxoSmithKline agreement in the fourth quarter of 2000. Revenue from the Pfizer agreement began to be recognized in the first quarter of 2001. In the first nine months of 2000 and the previous years, we derived all of our revenue from the development and analysis of knockout mice under our DeltaSelect program. We anticipate that the vast majority of our revenues in the next several years will be derived from periodic subscription license fees under agreements with DeltaBase subscribers. Our current DeltaBase agreements with GlaxoSmithKline, Pfizer and Merck are coterminous, each terminating upon our delivery of DeltaBase in June 2003, and, although renewable beyond such date, may not be renewed.

Revenue for 2001, 2000, 1999 and 1998 is as follows:

<u>Revenue</u>	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>
		(in thousands)		
DeltaBase	\$8,554	\$1,154	\$ —	\$ —
DeltaSelect	1,295	926	1,240	381
Other	61	—	—	—
Total	<u>\$9,910</u>	<u>\$2,080</u>	<u>\$1,240</u>	<u>\$ 381</u>

Under our revenue recognition policy, revenues are recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered and meet all customer-specified criteria, the price is fixed and determinable and collectibility is reasonably assured. Revenue derived from DeltaBase agreements is recognized on a straight-line basis over the term in which services are to be provided. Research and development collaboration agreements specify milestones to be met and the payments associated with meeting each milestone. Revenue derived from these contracts is recognized upon completion of the milestone. The amount of revenue recognized upon completion of each milestone is such that the earned revenue, as a percentage of total anticipated revenue, approximates the costs incurred in achieving the related milestone, as a percentage of the total anticipated costs. Where the contract does not specify milestones and payment is upon completion of the contract, revenue is recognized based on the percentage-of-completion method of accounting. Any payments received in advance of the completion of a milestone or services performed are recorded as deferred revenue.

We had net losses of \$48.5 million, \$32.2 million and \$13.8 million in 2001, 2000 and 1999, respectively. The net loss attributable to common stockholders for the year ended December 31, 2000, was \$54.6 million, after deducting a dividend of \$22.4 million relating to a beneficial conversion feature on our Series C redeemable convertible preferred stock. Our losses have resulted primarily from costs incurred in connection with research and development activities, from general and administrative costs associated with our operations and non-cash charges for amortization of unearned stock-based compensation costs. This amortization was \$3.9 million, \$10.9 million and \$2.8 million in 2001, 2000 and 1999, respectively. Research and development expenses have consisted primarily of salaries and related personnel costs, material costs, facility costs and legal expenses resulting from intellectual property filings and other expenses related to the development of our DeltaBase, DeltaSelect and secreted protein programs. We expense our research and development costs as they are incurred. General and administrative expenses have consisted primarily of salaries and related expenses for executive, finance and other administrative personnel, professional and other corporate expenses including business development and general legal activities. In connection with the development and expansion of our gene function database, our secreted protein program, and our internal drug development activities, we expect to incur increasing research and development and general and administrative costs. As a result, we will need to generate significantly higher revenues to achieve profitability. We expect to report substantial net losses through the next several years.

We account for stock-based employee compensation arrangements in accordance with provisions of Accounting Principles Board Opinion No. 25 (APB 25), "Accounting for Stock Issued to Employees" and related interpretations and comply with the disclosure provisions of Statement of Financial Accounting Standards No. 123 (SFAS 123), "Accounting for Stock-Based Compensation."

Under APB 25, compensation expense is based on the difference, if any, on the date of the grant, between the fair value of our stock and the exercise price. SFAS 123 defines a "fair value" based method of accounting for an employee stock option or similar equity investment. The pro forma disclosures of the difference between compensation expense included in net loss and the related cost measured by the fair value method are presented in Note 12 of the notes to our consolidated financial statements.

We account for equity instruments issued to non-employees in accordance with the provisions of SFAS 123 and Emerging Issues Task Force Issue No. 96-18 (EITF 96-18), "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services" and Financial Accounting Standards Board Interpretation No. 28 (FIN 28), "Accounting for Stock Appreciation Rights and Other Variable Stock Option or Award Plans."

During 2000 and 1999, we recorded unearned stock-based compensation of approximately \$12.0 million and \$10.4 million, respectively. These amounts are being amortized as charges to operations over the respective vesting period of the individual stock options, generally four years. During 2001, we reversed approximately \$1.8 million of unearned stock-based compensation related to unvested stock options due to employee terminations and changes in the fair market value of our common stock.

We may incur additional stock-based compensation expense in the future as a result of both options or other securities granted at below fair market value and fluctuations in the market value of our stock that have a direct impact on the value of options and warrants held by non-employees.

We had federal net operating loss carryforwards as of December 31, 2001 and 2000, of approximately \$79.2 million and \$36.6 million, respectively. We had state net operating loss carryforwards as of December 31, 2001 and 2000, of approximately \$79.2 million and \$27.1 million, respectively. We also had federal and state research and development tax credit carryforwards as of December 31, 2001 and 2000, of approximately \$6.9 million and \$2.9 million, respectively. The net operating loss and credit carryforwards will expire at various dates beginning in 2005, if not utilized. Due to the uncertainty regarding the ultimate utilization of the net operating loss carryforwards, we have not recorded any benefit for losses, and a valuation allowance has been recorded for the entire amount of the net deferred asset. Utilization of net operating losses and credits may be substantially limited due to the change in ownership provisions of the Internal Revenue Code of 1986 and similar state provisions. Certain future sales of our stock could restrict our ability to utilize our net operating loss carryforwards. The annual limitation may result in the expiration of net operating losses and credits before utilization.

Major Developments Since December 31, 2000

Acquisition of Arcaris, Inc.

On July 30, 2001, we acquired Salt Lake City, Utah-based Arcaris, Inc. Arcaris had developed technologies consisting of genomic, proteomic and cell-biological systems for identification and validation of potential drug targets and the creation of certain assay systems. The total purchase price of approximately \$7.9 million consisted of cash of \$450,000 and 766,894 shares of common stock valued at \$6.75 million and 77,281 vested stock options valued at \$418,000 and direct acquisition costs of \$312,000. The acquisition was accounted for using the purchase method of accounting. Accordingly, the results of operations of Arcaris and estimated fair value of assets acquired and liabilities assumed were included in our consolidated financial statements from July 30, 2001. The Arcaris acquisition added a new technology platform to our existing high-throughput efforts to identify and validate small molecule targets relevant to small molecule drug screening. The information generated through the Arcaris technologies will be utilized to advance the discovery of new disease targets by defining the role of novel non-traditional targets within intracellular pathways with particular relevance to oncology, viral and infectious diseases. Additionally, the Arcaris technologies will be used to facilitate the rapid development of small molecule screens against these identified targets.

Acquisition of BMS PRL, L.L.C. (formerly CombiChem, Inc.)

On February 16, 2002, we acquired the California-based BMS PRL, L.L.C., formerly known as CombiChem, Inc., from Bristol-Myers Squibb Company for 2,647,481 unregistered shares of our common stock valued at approximately \$23.5 million. The subsidiary was renamed Deltagen Research Laboratories. The acquisition provides us with an established and well-recognized small molecule drug discovery capability. The acquisition of Deltagen Research Laboratories significantly advances our efforts in generating lead candidate compounds for drug development. We plan to select a number of targets for potential compound development in 2002 from our internal *in vivo* mammalian technology platform, with particular emphasis on cancer, metabolic disorders and inflammatory diseases. Integration of Deltagen Research Laboratories will allow us to utilize the technology and expertise of an experienced team in efforts to discover potential compounds against internal drug targets, including DT011M. DT011M is our potential insulin-mediating drug target for the treatment of obesity and related diseases such as diabetes. BMS PRL is a company with an integration of computational, medicinal and analytical chemistry capabilities coupled to biological screening. The company's 77,000 square foot facilities in San Diego include 22 fully-equipped chemistry laboratories and a new biology facility. As of February 16, 2002, Deltagen Research Laboratories employed 70 scientists, including 53 in chemistry.

Eli Lilly Secreted Protein Collaboration Agreement

In August, 2001, we entered into a secreted protein agreement with Eli Lilly and Company to evaluate, and potentially develop and commercialize, therapeutic secreted proteins. Under the terms of the agreement, Lilly will provide potential targets from its secreted protein pipeline for which we will further evaluate the therapeutic potential in mammalian models. Among those secreted proteins with potential therapeutic value, each company may select proteins for commercial development, with each company receiving royalties based on sales of therapeutic products. The agreement provides Lilly with certain acquisition, co-promotion, co-marketing and profit-sharing options with respect to therapeutic products developed and commercialized by us. The agreement also provides us with certain co-promotion, co-development and profit-sharing opportunities.

Hyseq Secreted Protein Collaboration Agreement

In October 2001, we entered into a collaboration agreement with Hyseq, Inc. to research, develop and commercialize biopharmaceutical products. Under the terms of the agreement, Hyseq will provide us with gene sequences encoding secreted proteins and we will utilize our proprietary *in vivo* mammalian gene knockout technology to discover and validate potential commercially relevant biopharmaceutical targets. We and Hyseq will each have certain joint development and commercialization rights around potential biopharmaceutical drug targets discovered through the collaboration. We and Hyseq will share the collaboration's costs; Hyseq will provide us with approximately \$10 million in research and development payments over two years. In addition, we received \$10 million in equity proceeds from the sale of 1,508,978 shares of our common stock at a price of \$6.63 per share, which was the average closing price of our common stock on the NASDAQ National Market for the ten days prior to the purchase, to George B. Rathmann, Ph.D., chairman of the Board of Directors of Hyseq.

Merck DeltaBase Agreement

On February 8, 2002, we entered into a license agreement to provide Merck & Co., Inc. with access to our proprietary DeltaBase product, a resource tool for the understanding of *in vivo* mammalian gene function information. Merck will have non-exclusive access to information related to 750 genes selected for their biological interest that have been functionally characterized and entered into DeltaBase. Merck will also have access to certain of the corresponding DeltaBase intellectual property rights.

Stanford Collaboration Agreement

On February 19, 2002, we announced that we had signed a target validation and research collaboration agreement with Stanford University. Under the terms of the three-year collaboration, we and Stanford will mutually develop research projects for jointly selected genes under which we will provide Stanford non-exclusive access to knockout mice models using its proprietary high-throughput technology and Stanford will evaluate and conduct research on such materials. We will have options to obtain exclusive licenses to commercially develop in any and all fields certain inventions developed by Stanford. We will have rights to use, commercialize and sublicense results developed by Stanford under the research projects.

Acquisition of XenoPharm, Inc.

On March 14, 2002, we acquired XenoPharm, Inc., a San Diego, California-based private company for 498,251 shares of our unregistered common stock valued at approximately \$4.0 million and paid certain transaction expenses. Up to an additional 1,449,275 shares of unregistered common stock may be issued upon the achievement of certain key milestones. The entity will become our wholly-owned subsidiary. XenoPharm, which was incorporated in November 2000, provides a proprietary technology platform to pharmaceutical, biotechnology, chemical and agricultural companies to better understand and predict reactions of foreign substances, termed "xenobiotics," in human systems. XenoPharm's XenoSensor Mice, implanted with human SXR and CAR, coupled with XenoPharm's CleanScreen high-throughput screening assays provide a proprietary technology platform to improve the predictive value of cell- and animal-based biomedical research. The operating expenses of XenoPharm are expected to be insignificant in 2002.

RESULTS OF OPERATIONS

Years Ended December 31, 2001 and 2000

Contract revenue increased by \$7.8 million to \$9.9 million in 2001 from \$2.1 million in 2000. The increase was due primarily to increased revenue from our DeltaBase gene function database product. DeltaBase revenue in 2001 was \$8.6 million compared to \$1.2 million in 2000. In 2001, all of our DeltaBase and DeltaSelect revenue came from contracts with GlaxoSmithKline, Merck, Pfizer, Schering-Plough Research Institute and Tularik, Inc.

Research and development expenses increased by \$18.7 million to \$45.0 million in 2001 from \$26.3 million in 2000. The increase was attributable to continued growth of research and development activities, including \$15.1 million related to increased personnel and laboratory supply costs to support development of our gene function database and our DeltaSelect and secreted protein programs and \$6.5 million in higher depreciation and amortization and facilities expenses related to the addition of facilities in 2001. The amortization of unearned stock-based compensation decreased by \$3.0 million to \$2.9 million in 2001 from \$5.9 million in 2000.

General and administrative expenses increased by \$5.9 million to \$17.0 million in 2001 from \$11.1 million in 2000. The increase included \$5.3 million related to staffing and infrastructure costs, \$3.7 million related to legal and business consulting fees and \$1.1 million in higher depreciation and amortization and facilities expenses related to the addition of facilities in 2001. The amortization of unearned stock-based compensation decreased by \$4.0 million to \$1.0 million from \$5.0 million in 2000.

Net interest income increased by \$675,000 to \$3.7 million in 2001 from \$3.0 million in 2000. This change resulted from increased average cash and investment balances during 2001 as a result of the completion of our initial public offering during the third quarter of 2000 partially offset by lower interest rates on cash investments.

Years Ended December 31, 2000 and 1999

Contract revenue increased by \$840,000 to \$2.1 million in 2000 from \$1.2 million in 1999. The increase was due to revenue from our DeltaBase gene function database product. In 2000, all of our revenue came from contracts with GlaxoSmithKline, Merck, Pfizer, Roche Bioscience, Schering-Plough and Tularik.

Research and development expenses increased by \$14.1 million to \$26.3 million in 2000 from \$12.1 million in 1999. The increase was attributable to continued growth of research and development activities, including \$8.1 million related to increased personnel and laboratory supply costs to support development of our gene function database and our DeltaSelect and secreted protein programs and \$1.7 million in higher depreciation and amortization and facilities expenses related to the addition of a second facility in July 1999. The amortization of unearned stock-based compensation represents \$4.3 million of the increase in research and development expenses.

General and administrative expenses increased by \$8.1 million to \$11.1 million during 2000 from \$2.9 million in 1999. The increase included \$3.3 million related to staffing and infrastructure costs and \$1.0 million related to legal and business consulting fees. The amortization of unearned stock-based compensation contributed to \$3.8 million of the increase in general and administrative expenses.

We had net interest income of \$3.0 million in 2000 and net interest expense of \$11,000 in 1999. This change resulted from increased cash and investment balances as a result of an additional private equity financing and the completion of our initial public offering during 2000.

Liquidity and Capital Resources

We have financed our operations from inception primarily through issuances of equity securities, contract payments to us under our DeltaSelect and DeltaBase agreements and equipment financing arrangements.

Through December 31, 2001, we had received net proceeds of \$157.9 million from issuances of equity securities, \$19.9 million from customer agreements and \$8.7 million from equipment financing arrangements.

At December 31, 2001, we had \$61.4 million in cash and cash equivalents compared with \$93.4 million at December 31, 2000. In addition, at December 31, 2001, we had \$15.1 million in marketable securities representing highly liquid commercial paper and government agency securities. We used \$41.8 million in cash for operating activities in 2001. This consisted primarily of the net loss for the period of \$48.5 million and increased accounts receivable, deposits and other assets of \$4.4 million offset in part by non-cash charges of \$9.5 million, including \$3.3 million related to depreciation and amortization expenses and \$3.9 million related to the amortization of unearned stock-based compensation and increased accounts payable and accrued expenses of \$2.8 million. Investment activities used \$600,000 in cash in 2001 including \$54.5 million related to the purchase of marketable securities, \$7.6 million related to capital expenditures, \$2.7 million in facility related security deposits and \$762,000 related to the acquisition of Arcaris in July 2001 offset in part by \$65.0 million related to the maturities of marketable securities. We received \$10.4 million in cash from financing activities in 2001, which consisted primarily of net proceeds from the sale of common stock for \$10.2 million and \$2.5 million from loan proceeds. This was offset partially by loan and capital lease repayments of \$1.9 million.

In December 1998, March 1999, June 2000 and June 2001, we entered into loan agreements of \$1.8 million, \$1.5 million, \$2.9 million and \$2.5 million, respectively, which were fully drawn down during 1999, 2000 and 2001. As of December 31, 2001, the entire \$5.5 million outstanding balance was collateralized by property and equipment. Amounts outstanding under these loans accrued interest at a weighted average rate of approximately 12.16% and are due in monthly installments through 2005.

With the February 2002 acquisition of Deltagen Research Laboratories and the expansion of our drug discovery efforts, we expect that our operating expenses will increase significantly. Operating expenses associated with Deltagen Research Laboratories will likely exceed \$20.0 million in 2002. In addition, we have commenced work on our Redwood City facilities to establish laboratories to meet the growing size and scope of research activities. It is presently estimated that this project, which involves both equipment purchases and tenant improvements for laboratory and animal space, will cost approximately \$30.0 million and will be substantially complete by the third quarter of 2002. Our Deltagen Europe S.A. subsidiary is also expected to begin construction of a 50,000 square feet research facility in Strasbourg, France in mid-2002. This facility is expected to cost \$6.0 million to \$7.0 million and is expected to be financed through a \$6.2 million ten-year lease purchase financing arrangement provided by a consortium of banks and local governmental agencies.

At December 31, 2001 we had the following contractual cash obligations:

<u>Year Ending December 31,</u>	<u>Operating Leases</u>	<u>Capital Leases (1)</u>	<u>Debt (1)</u>	<u>Total</u>
	(in thousands)			
2002	\$ 8,935	\$ 11	\$2,382	\$11,328
2003	10,335	9	1,862	12,206
2004	9,163	8	939	10,110
2005	8,851	—	313	9,164
2006	7,683	—	—	7,683
Thereafter	<u>28,610</u>	<u>—</u>	<u>—</u>	<u>28,610</u>
Total	<u>\$73,577</u>	<u>\$ 28</u>	<u>\$5,496</u>	<u>\$79,101</u>

(1) Excludes interest

We have issued standing letters of credit totaling \$2.8 million as credit support for operating leases. These letters of credit are collateralized by cash deposits of an equal amount and automatically renew on an annual basis during the lease term. These cash deposits are classified as restricted cash on the consolidated balance sheet (see Notes 3 and 4 to the Consolidated Financial Statements).

The debt agreements have restrictive covenants requiring minimum unrestricted cash balances, generally twelve month cash needs. If unrestricted cash balances fall below the minimum levels, we will be required to provide cash security deposits of up to \$316,000.

On February 16, 2002, we acquired BMSPL, L.L.C. The business unit has been renamed Deltagen Research Laboratories. The remaining obligations as of February 16, 2002 for operating leases and capital leases were assumed by us. At December 31, 2001 this business had the following contractual obligations.

<u>Year Ending December 31,</u>	<u>Operating Leases</u>	<u>Capital Leases</u>	<u>Total</u>
	(in thousands)		
2002	\$ 2,954	\$790	\$ 3,744
2003	2,959	52	3,011
2004	2,964	—	2,964
2005	2,671	—	2,671
2006	2,373	—	2,373
Thereafter	18,982	—	18,982
Total	<u>\$32,903</u>	<u>\$842</u>	<u>\$33,745</u>

At December 31, 2001 we had approximately \$6.2 million in committed financing available for the construction of the research and design facility for Deltagen Europe S.A.

On February 28, 2002, we entered into a loan agreement with a financial institution to obtain one or more loans totaling up to \$4.0 million. A corresponding amount of machinery, equipment, and other property is pledged as collateral for each loan. On March 1, 2002, we received loan proceeds of \$2.4 million and \$1.0 million, respectively, under this agreement for a total financing of \$3.4 million. The loans bear interest rates of 8.87% and 8.98%, respectively, and are to be repaid in 36 monthly installments beginning in March 2002. If unrestricted cash is less than twelve month cash needs, we will be required to provide a letter of credit to the lender of \$1.7 million which would restrict an equal amount of cash. The repayment obligation for principal is as follows:

<u>Year Ending December 31,</u>	<u>Amount</u>
	(in thousands)
2002	\$ 816
2003	1,030
2004	1,125
2005	436
Total	<u>\$3,407</u>

We believe that our current cash and cash equivalents and marketable securities balances, together with revenues from subscriptions to our gene function database and collaborative research agreements, will be sufficient to fund our operations for at least the next twelve months. We continue to evaluate alternative means of financing to meet our long term needs. These include the possible sale of additional equity or debt securities, equipment financing, secured bank lines of credit and various facility improvement financing arrangements. Additional financing may not be available on terms acceptable to us or at all. The sale of additional equity or convertible debt securities may result in additional dilution to our stockholders. Any debt financing may have restrictive covenants that adversely affect our operating plans and flexibility.

We have not paid any cash dividends on our common stock in the past. We currently intend to retain any earnings for use in the business and do not anticipate paying any cash dividends on our common stock in the foreseeable future.

Recent Accounting Pronouncements

In July 2001, the Financial Accounting and Standards Board, ("FASB") issued Statements of Financial Accounting Standards No. 141 ("SFAS 141"), "Business Combinations," and No. 142 ("SFAS 142"), "Goodwill and Other Intangible Assets." SFAS 141 requires that all business combinations initiated after June 30, 2001 be accounted for under a single method—the purchase method. Use of the pooling-of-interests method is no longer

permitted. SFAS 142 requires that goodwill no longer be amortized to earnings, but instead be reviewed for impairment upon initial adoption of the Statement and on an annual basis going forward. The amortization of goodwill will cease upon adoption of SFAS 142. The provisions of SFAS 142 will be effective for fiscal years beginning after December 15, 2001. The Company has adopted the provisions of SFAS 142 in connection with the acquisition of Arcaris, Inc.

In August 2001, the FASB issued Statement of Financial Accounting Standards No. 143 ("SFAS 143"), "Accounting for Asset Retirement Obligations," which is effective for fiscal years beginning after June 15, 2002. SFAS 143 addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated asset retirement costs. SFAS No. 143 requires, among other things, that the retirement obligations be recognized when they are incurred and displayed as liabilities on the balance sheet. In addition, the asset's retirement costs are to be capitalized as part of the asset's carrying amount and subsequently allocated to expense over the asset's useful life. The Company believes that the adoption of SFAS 143 will not have a material effect on the financial position or results of operations of the Company.

In October 2001, the FASB issued Statement of Financial Accounting Standards No. 144 ("SFAS 144"), "Accounting for the Impairment or Disposal of Long-Lived Assets," which is effective for fiscal years beginning after December 15, 2001 and interim periods within those fiscal periods. SFAS 144 supersedes FASB Statement No. 121 and APB Opinion No. 30, however, it retains the requirement of Opinion No. 30 to report discontinued operations separately from continuing operations and extends that reporting to a component of an entity that either has been disposed of (by sale, by abandonment, or in a distribution to owners) or is classified as held for sale. SFAS 144 addresses financial accounting and reporting for the impairment of certain long-lived assets and for long-lived assets to be disposed of. The Company believes that SFAS 144 will not have a material impact on the financial position or results of operations of the Company.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We invest our excess cash primarily in obligations of governmental agencies and marketable debt securities of financial institutions and corporations with strong credit ratings. These instruments have maturities of twenty- four months or less when acquired. We do not utilize derivative financial instruments, derivative commodity instruments or other market risk sensitive instruments, positions or transactions in any material fashion. Accordingly, we believe that, while the instruments we hold are subject to changes in the financial standing of the issuer of such securities, we are not subject to any material risks arising from changes in interest rates, foreign currency exchange rates, commodity prices, equity prices or other market changes that affect market risk sensitive instruments.

Our loans payable of \$5.5 million at December 31, 2001 carry fixed interest rates ranging from 10.87% to 12.75% per annum with payments due in 36 or 48 monthly installments. Our capital lease obligations of \$39,000 at December 31, 2001 carry fixed interest rates ranging from 0% to 10.39% per annum with payments due in 36 monthly installments.

The following table presents, as of December 31, 2001, the future principal amounts and related weighted average interest rate by year for our cash and cash equivalents, marketable securities and debt obligations.

	Expected Maturity date (as of December 31, 2001)						Total
	2002	2003	2004	2005	2006	Thereafter	
	(in thousands)						
Assets:							
Cash and cash equivalents	\$61,363	\$ —	\$ —	\$ —	\$ —	\$ —	\$61,363
Marketable securities	15,118	—	—	—	—	—	15,118
Weighted average interest rate . . .	2.39%	—	—	—	—	—	
Liabilities:							
Capital lease obligations	\$ 11	\$ 20	\$ 8	\$ —	\$ —	\$ —	\$ 39
Weighted average interest rate . . .	3.98%	4.46%	—	—	—	—	
Loans payable	\$ 2,382	\$1,863	\$ 939	\$ 312	\$ —	\$ —	\$ 5,496
Weighted average interest rate . . .	12.22%	12.35%	12.49%	12.49%	—	—	

Prior to February, 2001 we operated solely in the United States. Beginning February 15, 2001, our European subsidiary, Deltagen Europe S.A. began operations. The expenses of these European operations have not been material and all sales of our products to date have been made in U.S. dollars. Accordingly, we have not had any material exposure to foreign currency rate fluctuations.

Item 8. Consolidated Financial Statements and Supplementary Data

DELTAGEN, INC.

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REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Stockholders
of Deltagen, Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of stockholders' equity (deficit) and of cash flows present fairly, in all material respects, the financial position of Deltagen, Inc., and its subsidiaries at December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001 in conformity with accounting principles generally accepted in the United States of America. 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 of these statements in accordance with auditing standards generally accepted in the United States of America, which 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PRICEWATERHOUSECOOPERS LLP

San Jose, California
February 8, 2002, except as to Note 18,
which is as of March 14, 2002

DELTAGEN, INC.
CONSOLIDATED BALANCE SHEETS

	December 31,	
	2001	2000
	(in thousands, except share data)	
Assets		
Current assets:		
Cash and cash equivalents	\$ 61,363	\$ 93,352
Marketable securities	15,118	24,981
Accounts receivable, net of allowance for doubtful accounts of \$170 and \$84, respectively	2,511	1,682
Prepaid expenses	2,207	945
Total current assets	81,199	120,960
Property, plant and equipment, net	16,672	8,635
Goodwill and other intangible assets, net	5,267	—
Notes receivable from related parties	495	175
Other assets	5,417	289
Total assets	\$109,050	\$130,059
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 4,131	\$ 1,140
Accrued liabilities	5,864	3,669
Current portion of capital lease obligations	11	25
Current portion of loans payable	2,382	1,599
Current portion of deferred revenue	7,257	6,820
Total current liabilities	19,645	13,253
Capital lease obligations, less current portion	28	15
Loans payable, less current portion	3,059	3,248
Other long-term accrued liabilities	990	—
Deferred revenue, less current portion	1,657	2,679
Total liabilities	25,379	19,195
Commitments and contingencies (see Note 4)		
Stockholders' equity:		
Preferred stock, \$0.001 par value:		
Authorized: 5,000,000 shares		
Issued and outstanding: none	—	—
Common stock, \$0.001 par value:		
Authorized: 75,000,000 shares		
Issued and outstanding: 32,077,012 and 29,867,963 shares at December 31, 2001 and 2000, respectively	32	30
Additional paid-in capital	186,595	171,064
Unearned stock-based compensation	(3,019)	(8,750)
Notes receivable from stockholders	(805)	(805)
Accumulated deficit	(99,132)	(50,675)
Total stockholders' equity	83,671	110,864
Total liabilities and stockholders' equity	\$109,050	\$130,059

The accompanying notes are an integral part of these consolidated financial statements

DELTAGEN, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2001	2000	1999
	(in thousands, except per share data)		
Revenue	\$ 9,910	\$ 2,080	\$ 1,240
Costs and expenses:			
Research and development	45,033	26,262	12,144
General and administrative	17,038	11,068	2,932
Total costs and expenses	62,071	37,330	15,076
Loss from operations	(52,161)	(35,250)	(13,836)
Interest income	4,451	3,560	251
Interest expense	(747)	(531)	(262)
Net loss	48,457	(32,221)	(13,847)
Deemed dividend related to beneficial conversion feature of preferred stock ..	—	(22,360)	—
Net loss attributable to common stockholders	<u>\$(48,457)</u>	<u>\$(54,581)</u>	<u>\$(13,847)</u>
Net loss per common share, basic and diluted	\$ (1.64)	\$ (4.32)	\$ (12.82)
Weighted average shares used in computing net loss per share, basic and diluted	29,489	12,621	1,080

The accompanying notes are an integral part of these consolidated financial statements

DELTAGEN, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

For the three years ended December 31, 2001

	Common Stock		Additional	Unearned	Notes	Accumulated	Total
	Shares	Amount	Paid-in	Stock-based	Receivable	Deficit	Stockholders' Equity (Deficit)
			Capital	Compensation	from Stockholders		
	(in thousands, except share data)						
Balances, December 31, 1998	1,811,268	\$ 2	\$ 73	\$ (13)	\$ —	\$ (4,607)	\$ (4,545)
Stock options exercised at \$0.31 per share	272,465	—	84	—	—	—	84
Issuance of warrants	—	—	185	—	—	—	185
Repurchase of unvested restricted stock	(14,048)	—	(1)	—	—	—	(1)
Unearned stock-based compensation	—	—	10,354	(10,354)	—	—	—
Amortization of unearned stock-based compensation	—	—	—	2,757	—	—	2,757
Net loss	—	—	—	—	—	(13,847)	(13,847)
Balances, December 31, 1999	2,069,685	2	10,695	(7,610)	—	(18,454)	(15,367)
Stock options exercised for cash and notes receivable from stockholders	1,603,925	2	1,388	—	(805)	—	585
Issuance of common stock related to initial public offering, net of issuance costs	8,025,000	8	110,183	—	—	—	110,191
Conversion of redeemable convertible preferred stock to common stock	18,137,486	18	36,789	—	—	—	36,807
Repurchase of unvested restricted stock	(8,864)	—	(3)	—	—	—	(3)
Exercise of warrants	40,736	—	—	—	—	—	—
Unearned stock-based compensation	—	—	12,012	(12,012)	—	—	—
Amortization of unearned stock-based compensation	—	—	—	10,872	—	—	10,872
Beneficial conversion feature related to issuance of Series C redeemable convertible preferred stock	—	—	22,360	—	—	—	22,360
Deemed dividend related to beneficial conversion feature of Series C redeemable convertible preferred stock	—	—	(22,360)	—	—	—	(22,360)
Net loss	—	—	—	—	—	(32,221)	(32,221)
Balances, December 31, 2000	29,867,968	30	171,064	(8,750)	(805)	(50,675)	110,864
Stock options exercised for cash	51,929	—	164	—	—	—	164
Repurchase of unvested restricted stock	(149,549)	—	(51)	—	—	—	(51)
Issuance of stock related to employee stock purchase plan	30,792	—	246	—	—	—	246
Additional issuance costs related to initial public offering	—	—	(168)	—	—	—	(168)
Issuance of common stock and stock options related to the acquisition of Arcaris, Inc., net of issuance costs	766,894	1	7,168	—	—	—	7,169
Issuance of common stock	1,508,978	1	9,999	—	—	—	10,000
Unearned stock-based compensation	—	—	(1,827)	1,827	—	—	—
Amortization of unearned stock-based compensation	—	—	—	3,904	—	—	3,904
Net loss	—	—	—	—	—	(48,457)	(48,457)
Balances, December 31, 2001	<u>32,077,012</u>	<u>\$ 32</u>	<u>\$186,595</u>	<u>\$ (3,019)</u>	<u>\$(805)</u>	<u>\$(99,132)</u>	<u>\$ 83,671</u>

The accompanying notes are an integral part of these consolidated financial statements

DELTAGEN, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2001	2000	1999
	(in thousands)		
Cash flows from operating activities:			
Net loss	\$(48,457)	\$(32,221)	\$(13,847)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	2,707	1,499	677
Amortization of equipment under capital lease	22	32	28
Provisions for bad debt	86	—	104
Amortization of warrants issued in connection with loans	45	48	37
Amortization of intangibles in connection with Arcaris Acquisition	561	—	—
Amortization of unearned stock-based compensation expense	3,904	10,872	2,757
Amortization of discount of marketable securities	(655)	—	—
Lease loss	1,312	—	—
Write-off of in-process research and development	907	—	—
Changes in operating assets and liabilities:			
Accounts receivable	(907)	(1,097)	(332)
Prepaid expenses	(1,181)	(740)	(143)
Other assets	(2,354)	24	(150)
Accounts payable	1,890	(2,829)	901
Accrued liabilities	921	2,685	889
Deferred revenue	(585)	8,553	387
Net cash used in operating activities	<u>(41,784)</u>	<u>(13,174)</u>	<u>(8,692)</u>
Cash flows from investing activities:			
Purchase of marketable securities	(54,482)	(24,981)	—
Maturities of marketable securities	65,000	—	—
Acquisition of property, plant and equipment	(5,402)	(3,319)	(874)
Acquisition of Arcaris, net of cash acquired	(762)	—	—
Leasehold improvements	(2,235)	(861)	(1,147)
Increase in restricted cash	(2,719)	(150)	—
Net cash used in investing activities	<u>(600)</u>	<u>(29,311)</u>	<u>(2,021)</u>
Cash flows from financing activities:			
Principal payments under capital lease obligations	(25)	(32)	(41)
Repayment of loans payable	(1,904)	(848)	(416)
Proceeds from the issuance of debt	2,453	2,911	3,300
Issuance of notes receivable to related parties	(320)	(175)	—
Proceeds from the issuance of common stock, net of issuance costs	9,832	110,191	—
Proceeds from the issuance of preferred stock, net of issuance costs	—	22,360	—
Proceeds from the issuance of common stock under stock option plan, net of stock repurchased	113	582	83
Proceeds from the issuance of common stock under employee stock purchase plan	246	—	—
Net cash provided by financing activities	<u>10,395</u>	<u>134,989</u>	<u>2,926</u>
Net increase (decrease) in cash and cash equivalents	(31,989)	92,504	(7,787)
Cash and cash equivalents, beginning of year	93,352	848	8,635
Cash and cash equivalents, end of year	<u>\$ 61,363</u>	<u>\$ 93,352</u>	<u>\$ 848</u>
Supplemental disclosures of cash flow information:			
Cash paid for interest	\$ 701	\$ 483	\$ 225
Supplemental disclosures of non-cash investing and financing activities:			
Property and equipment acquired under capital lease obligations	\$ 24	\$ 20	\$ —
Property and equipment acquired with accounts payable	\$ 874	\$ 993	\$ 1,444
Unearned stock-based compensation	\$ —	\$ 12,012	\$ 10,354
Reversal of unearned stock-based compensation	\$ 1,827	\$ —	\$ —
Issuance of notes receivable in exchange for common stock	\$ —	\$ 805	\$ —
Issuance of common stock and stock options in connection with Arcaris, Inc. acquisition	\$ 7,169	\$ —	\$ —

The accompanying notes are an integral part of these consolidated financial statements

DELTAGEN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. FORMATION AND BUSINESS OF THE COMPANY

Deltagen, founded in 1997 and headquartered in Redwood City, California, is a leader in using *in vivo* mammalian gene function information to define the function and disease relevance of mammalian genes for the purpose of discovering and validating novel drug targets. The Company's proprietary information platform serves the Company's customers in their efforts to discover potential new drug therapies as well as the Company's internal drug discovery efforts.

The Company's commercial operations commenced during 2000 at which time it emerged from the development stage. The Company has incurred net losses since inception of \$99.1 million and is expected to incur losses for at least the next several years as research and development activities are expanded. To date, the Company has financed its operations primarily through sales of equity securities, contract payments under DeltaSelect and DeltaBase agreements and equipment financing arrangements. The Company will finance its operations primarily through its cash and cash equivalents and marketable securities and future revenues. The Company expects to require additional funding and may sell additional shares of its common or preferred stock through private placements or further public offerings, or it may seek additional credit facilities.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures 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.

Concentration of Credit Risk and Major Customers

Cash, cash equivalents and marketable securities are held in two financial institutions. Management regularly reviews these financial institutions for creditworthiness. By policy, the Company limits concentration of credit risk by diversifying its investments among a variety of high-quality credit issuers.

The Company's accounts receivable relate to contracts, and there is no collateral required for these accounts receivable. In 2001, two customers individually accounted for 46% and 41% of the Company's total revenue and accounted for 37% and 58% of the net accounts receivable balance at December 31, 2001. In 2000, two customers individually accounted for 56% and 18% of the Company's total revenue. At December 31, 2000, one customer individually accounted for 86% of the net accounts receivable balance. In 1999, three customers individually accounted for 64%, 20% and 14% of the Company's total revenue.

Certain Risks and Uncertainties

The Company's services are concentrated in highly competitive markets that are characterized by rapid technological advances, frequent changes in customer requirements and evolving regulatory requirements and industry standards. Any failure by the Company to anticipate or to respond adequately to technological

DELTAGEN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

developments in its industry, changes in customer requirements or changes in regulatory requirements or industry standards, or any significant delays in the development or introduction of services could have a material adverse effect on the Company's business and operating results.

Fair Value of Financial Instruments

Carrying amounts of certain of the Company's financial instruments, including cash and cash equivalents, marketable securities, accounts receivable, accounts payable and accrued liabilities approximate fair value due to their relatively short maturities. Based upon borrowing rates currently available to the Company for loans and capital leases with similar terms, the carrying value of its debt and capital lease obligations approximate fair value.

Cash and Cash Equivalents and Restricted Cash

Investments with an original maturity of 90 days or less as of the date of purchase are considered cash equivalents. Cash equivalents consist of money market funds, corporate debt securities and obligations of governmental agencies. Restricted cash consists of certificates of deposit held with financial institutions as security deposits for various building leases and letters of credit.

Marketable Securities

The Company has classified its marketable securities as "available-for-sale" and they are carried at amortized cost which approximates fair value. Interest income is recorded using an effective interest rate, with the associated premium or discount amortized to "interest income." Unrealized gains and losses are reported net of related taxes as a separate component of stockholders' equity until realized. Realized gains and losses on sales of all such securities are reported in earnings and computed using the specific identification method.

Property, Plant and Equipment

Property, plant and equipment are stated at cost, net of accumulated depreciation and amortization. Depreciation is computed using the straight-line method over the estimated useful life of the asset; seven years for laboratory equipment, three years for computer equipment and six years for furniture and fixtures. Leasehold improvements and property, plant and equipment under capital leases are amortized over the lesser of their estimated useful lives or the term of the lease. Upon retirement or sale, the cost and related accumulated depreciation are removed from the accounts and any related gain or loss is reflected in operations. Maintenance and repairs are charged to operations as incurred.

Goodwill and other intangible assets

Goodwill and other intangible assets primarily consist of goodwill and purchased technology related to the acquisition of Arcaris, Inc. (Note 6). The amount allocated to completed technology is being amortized over the estimated useful life of three years using the straight-line method. In accordance with Statements of Financial Accounting Standards No. 142, goodwill will not be systematically amortized, but rather the Company will perform an annual assessment for impairment by applying a fair-value-based test.

DELTAGEN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Impairment of Long-Lived Assets

The Company accounts for long-lived assets under Statement of Financial Accounting Standards No. 121 (SFAS No. 121), "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of," which requires the Company to review for impairment of long-lived assets whenever events or changes in circumstances indicate that the carrying amount of an asset might not be recoverable. When such an event occurs, management determines whether there has been an impairment by comparing the anticipated undiscounted future net cash flows to the related asset's carrying value. If an asset is considered impaired, the asset is written down to fair value, which is determined based either on discounted cash flows or appraised values, depending on the nature of the asset.

Foreign currency

The Company uses the U.S. dollar as the functional currency for all of its foreign subsidiaries. Accordingly, gains and losses from translation of foreign currency financial statements into U.S. dollars are included in results of operations. The effect of foreign currency exchange rate fluctuations was not material for all periods presented.

Income Taxes

The Company accounts for income taxes under the liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

Revenue Recognition

Revenues are recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered and meet all customer-specified criteria, the price is fixed and determinable and collectibility is reasonably assured. Revenue derived from DeltaBase agreements is recognized on a straight-line basis over the term in which services are to be provided. Research and development collaboration agreements specify milestones to be met and the payments associated with meeting each milestone. Revenue derived from these contracts is recognized upon completion of the milestone. The amount of revenue recognized upon completion of each milestone is such that the earned revenue, as a percentage of total anticipated revenue, approximates the costs incurred in achieving the related milestone, as a percentage of the total anticipated costs. Where the contract does not specify milestones and payment is upon completion of the contract, revenue is recognized based on the percentage-of-completion method of accounting. Any payments received in advance of the completion of a milestone or services performed are recorded as deferred revenue.

Research and Development Expenditures

Research and development costs, including development costs of the Company's database product that do not meet the capitalization criteria of Statement of Financial Accounting Standards No. 86 (SFAS No. 86), "Accounting for the Cost of Computer Software to Be Sold, Leased or Otherwise Marketed," are charged to operations as incurred.

DELTAGEN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Accounting for Stock-Based Compensation

The Company accounts for stock-based employee compensation arrangements in accordance with provisions of Accounting Principles Board Opinion No. 25 (APB 25), "Accounting for Stock Issued to Employees" and related interpretations and complies with the disclosure provisions of Statement of Financial Accounting Standards No. 123 (SFAS 123), "Accounting for Stock-Based Compensation."

Under APB 25, compensation expense is based on the difference, if any, on the date of the grant, between the fair value of the Company's stock and the exercise price. SFAS 123 defines a "fair value" based method of accounting for an employee stock option or similar equity investment. The pro forma disclosures of the difference between compensation expense included in net loss and the related cost measured by the fair value method are presented in Note 12.

The Company accounts for equity instruments issued to non-employees in accordance with the provisions of SFAS 123 and Emerging Issues Task Force Issue No. 96-18 (EITF 96-18), "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services" and Financial Accounting Standards Board Interpretation No. 28 (FIN 28), "Accounting for Stock Appreciation Rights and Other Variable Stock Option or Award Plans,"

Net Loss Per Share

Basic earnings per share is calculated based on the weighted average number of common shares outstanding during the period. Diluted earnings per share would give effect to the dilutive effect of common stock equivalents consisting of restricted stock, stock options and warrants. Potentially dilutive securities have been excluded from the diluted earnings per share calculations as they have an antidilutive effect due to the Company's net losses.

A reconciliation of the numerator and denominator used in the net loss per share calculations is as follows:

	Years Ended December 31,		
	2001	2000	1999
	(in thousands except per share data)		
Numerator—Basic and diluted:			
Net loss	\$(48,457)	\$(32,221)	\$(13,847)
Deemed dividend related to beneficial conversion of preferred stock	—	(22,360)	—
Net loss attributable to common stockholders	<u>\$(48,457)</u>	<u>\$(54,581)</u>	<u>\$(13,847)</u>
Denominator—Basic and diluted:			
Weighted average shares of common stock outstanding ..	30,424	14,122	1,849
Less: Weighted average shares subject to repurchase ...	(935)	(1,501)	(769)
Weighted average shares used in basic and diluted net loss per share	<u>29,489</u>	<u>12,621</u>	<u>1,080</u>
Net loss per share attributable to common stockholders ..	<u>\$ (1.64)</u>	<u>\$ (4.32)</u>	<u>\$ (12.82)</u>

DELTAGEN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following unvested common stock subject to repurchase, outstanding options and warrants (prior to the application of the treasury stock method) and convertible preferred stock (on an as-converted basis) were excluded from the computation of diluted net loss per share as they had an antidilutive effect:

	Years Ended December 31,		
	2001	2000	1999
	(in thousands)		
Unvested common stock subject to repurchase	649	1,385	710
Options to purchase common stock	6,853	3,057	1,788
Preferred stock	—	—	10,939
Warrants to purchase preferred stock	—	—	43
Warrants to purchase common stock	<u>472</u>	<u>472</u>	<u>—</u>
Total common stock equivalents excluded from the computation of earnings per share as their effect was antidilutive	<u>7,974</u>	<u>4,914</u>	<u>13,480</u>

Reclassification

Certain prior year financial statement amounts have been reclassified to conform to the current year's presentation. These reclassifications had no impact on previously reported total assets, net loss or stockholders' equity.

Recent Accounting Pronouncements

In July 2001, the Financial Accounting and Standards Board ("FASB") issued Statements of Financial Accounting Standards No. 141 ("SFAS 141"), "Business Combinations," and No. 142 ("SFAS 142"), "Goodwill and Other Intangible Assets." SFAS 141 requires that all business combinations initiated after June 30, 2001 be accounted for under a single method—the purchase method. Use of the pooling-of-interests method is no longer permitted. SFAS 142 requires that goodwill no longer be amortized to earnings, but instead be reviewed for impairment upon initial adoption of the Statement and on an annual basis going forward. The amortization of goodwill will cease upon adoption of SFAS 142. The provisions of SFAS 142 will be effective for fiscal years beginning after December 15, 2001. The Company has adopted the provisions of SFAS 142 in connection with the acquisition of Arcaris, Inc.

In August 2001, the FASB issued Statement of Financial Accounting Standards No. 143 ("SFAS 143"), "Accounting for Asset Retirement Obligations," which is effective for fiscal years beginning after June 15, 2002. SFAS 143 addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated asset retirement costs. SFAS No. 143 requires, among other things, that the retirement obligations be recognized when they are incurred and displayed as liabilities on the balance sheet. In addition, the asset's retirement costs are to be capitalized as part of the asset's carrying amount and subsequently allocated to expense over the asset's useful life. The Company believes that the adoption of SFAS 143 will not have a material effect on the financial position or results of operations of the Company.

DELTAGEN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

In October 2001, the FASB issued Statement of Financial Accounting Standards No. 144 ("SFAS 144"), "Accounting for the Impairment or Disposal of Long-Lived Assets," which is effective for fiscal years beginning after December 15, 2001 and interim periods within those fiscal periods. SFAS 144 supersedes FASB Statement No. 121 and APB Opinion No. 30, however, it retains the requirement of Opinion No. 30 to report discontinued operations separately from continuing operations and extends that reporting to a component of an entity that either has been disposed of (by sale, by abandonment, or in a distribution to owners) or is classified as held for sale. SFAS 144 addresses financial accounting and reporting for the impairment of certain long-lived assets and for long-lived assets to be disposed of. The Company believes that SFAS 144 will not have a material impact on the financial position or results of operations of the Company.

3. BALANCE SHEET COMPONENTS

Marketable securities consist of the following (in thousands):

	December 31, 2001			Maturity Dates
	Amortized Cost	Unrealized Gains (Losses)	Estimated Fair Value	
Commercial paper	\$ 4,968	\$ 31	\$ 4,999	01/2001
Medium term notes	5,167	—	5,167	08/2003
U.S. Government agencies	4,983	—	4,983	11/2003
	\$15,118	\$ 31	\$15,149	

	December 31, 2000			Maturity Dates
	Amortized Cost	Unrealized Gains (Losses)	Estimated Fair Value	
Commercial paper	\$24,981	\$(37)	\$24,944	01/2001-02/2001
	\$24,981	\$(37)	\$24,944	

There were no realized gains or losses recognized on the disposal of marketable securities in 2001 and 2000. Unrealized gains and losses were considered immaterial for both 2001 and 2000 and, thus, not recorded.

Property, plant and equipment consists of the following (in thousands):

	December 31,	
	2001	2000
Land	\$ 1,472	\$ —
Laboratory equipment	11,021	6,237
Computer-related equipment	3,600	1,873
Furniture and fixtures	1,619	292
Leasehold improvements	5,852	2,764
Total	23,564	11,166
Less: Accumulated depreciation and amortization	(6,892)	(2,531)
Net	\$16,672	\$ 8,635

Depreciation and amortization expense was \$2,729,000, \$1,531,000 and \$705,000 for the years ended December 31, 2001, 2000 and 1999, respectively.

Property and equipment includes \$137,000, \$113,000 and \$93,000 of computers, vehicles and related equipment under capital lease at December 31, 2001, 2000 and 1999, respectively. Accumulated amortization of assets under capital lease totaled \$94,000, \$72,000 and \$40,000 at December 31, 2001, 2000 and 1999, respectively.

DELTAGEN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

In connection with the Arcaris, Inc. acquisition in July 2001, the Company recorded goodwill and other intangible assets (Note 6). Goodwill and other intangible assets consist of the following (in thousands):

	December 31,	
	2001	2000
Goodwill	\$1,788	\$ —
Completed technology	4,040	—
	5,828	—
Less: Accumulated amortization	561	—
Net	\$5,267	\$ —

Other assets consist of the following (in thousands):

	2001	2000
	Deposits	\$1,657
Restricted cash	2,869	150
Other	891	43
Total	\$5,417	\$ 289

Accrued liabilities consist of the following (in thousands):

	2001	2000
	Accrued professional fees	\$ 844
Accrued payroll/vacation	1,843	1,017
Deferred rent	369	65
Other	2,808	1,568
Total	\$5,864	\$3,669

4. COMMITMENTS AND CONTINGENCIES

Operating Leases

The Company leases its facilities in San Carlos, California, under an operating lease that expires in February 2004, with an option to extend the lease for five additional years. Under the terms of the lease, the Company is responsible for maintenance costs, taxes and insurance.

The Company leases its facilities in Menlo Park, California, under an operating lease that expires in July 2004, with an option to extend the lease for five additional years. Under the terms of the lease, the Company is responsible for 53% of the operating expenses, tax expenses, tenant's share of common area and tenant's share of utilities. In conjunction with the lease agreement, a standby letter of credit of \$150,000 was issued in November 1999 with a financial institution, in favor of the landlord, as collateral for the fulfillment of the contract obligations. The letter of credit is collateralized by a cash deposit of the same amount and is automatically renewed on an annual basis, unless notice of cancellation is provided by 30 days in advance.

DELTAGEN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The Company leases a second facility in Menlo Park, California, under an operating lease that expires in November 2005. Under the terms of the lease, the Company is responsible for 9.43% of the operating expenses, tenant's share of common area, tenant's share of utilities and 15.36% of tax expenses. In conjunction with the lease agreement, a standby letter of credit of \$133,422 was issued in January 2001 with a financial institution, in favor of the landlord, as collateral for the fulfillment of the contract obligations. The letter of credit is collateralized by a cash deposit of the same amount and is automatically renewed on an annual basis, unless notice of cancellation is provided by 30 days in advance.

The Company leases a third facility in Menlo Park, California, under an operating lease that expires in November 2005. Under the terms of the lease, the Company is responsible for 10.44% of the operating expenses, tenant's share of common area, tenant's share of utilities and 22.57% of tax expenses. In conjunction with the lease agreement, a standby letter of credit of \$147,816 was issued in January 2001 with a financial institution, in favor of the landlord, as collateral for the fulfillment of the contract obligations. The letter of credit is collateralized by a cash deposit of the same amount and is automatically renewed on an annual basis, unless notice of cancellation is provided by 30 days in advance.

The Company leases a fourth facility in Alameda, California, under an operating lease that expires in February 2006. Under the terms of the lease, the Company is responsible for 100% of the operating expenses, tenant's share of common area, tenant's share of utilities and 100% of tax expenses. In conjunction with the lease agreement, a standby letter of credit of \$211,200 was issued in August 2001 with a financial institution, in favor of the landlord, as collateral for the fulfillment of the contract obligations. The letter of credit is collateralized by a cash deposit of the same amount and is automatically renewed on an annual basis, unless notice of cancellation is provided by 30 days in advance.

The Company leases additional facilities in Redwood City, California, under operating leases which expire in July 2010. Under the terms of the leases, the Company is responsible for 100% of the operating expenses, tenants share of common area, tenants share of utilities and tax expenses. In conjunction with the lease agreements, two standby letters of credit totaling \$2,201,481 were issued in July 2001 with a financial institution, in favor of the landlords, as collateral for the fulfillment of the contract obligations. The letters of credit are collateralized by cash deposits of the same amount and will be automatically renewed on an annual basis, unless notice of cancellation is provided 30 days in advance.

The Company leases additional facilities in Salt Lake City, Utah, under operating leases which expire in February 2004. Under the terms of the leases, the Company is responsible for 31.8% of the operating expenses, tenants share of common area, tenants share of utilities and tax expenses.

DELTAGEN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Rent expense for the years ended December 31, 2001, 2000 and 1999, was \$3,283,000, \$980,000 and \$496,000, respectively.

Future minimum lease payments at December 31, 2001, are as follows:

<u>Year Ending December 31,</u>	<u>Amount</u> <u>(in thousands)</u>
2002	\$ 8,935
2003	10,335
2004	9,163
2005	8,851
2006	7,683
Thereafter	<u>28,610</u>
Total	<u>\$73,577</u>

Legal Matters

On May 24, 2000, Lexicon Genetics Incorporated filed a lawsuit against us in the United States District Court for the District of Delaware. The complaint in the lawsuit alleged that our methods of making knockout mice infringed United States Patent No. 5,789,215 (the '215 patent), under which Lexicon claimed to be an exclusive licensee. In addition, on October 13, 2000, Lexicon and the University of Utah Research Foundation filed a lawsuit against us in the United States District Court for the Northern District of California. The complaint in this lawsuit alleged that we infringed United States Patents Nos. 5,631,153, 5,464,764, 5,627,059 and 5,487,992 (the Capecchi patents), under which Lexicon claimed to be an exclusive licensee. On September 20, 2001, the Company and Lexicon announced the settlement of the litigation. Under the terms of the settlement, the Company obtained a commercial license under the '215 patent and the Capecchi patents, Lexicon obtained a subscription to the Company's DeltaBase product, and all of the claims and counterclaims in the litigation were dismissed with prejudice. Lexicon's subscription to DeltaBase includes non-exclusive, perpetual licenses to the 250 drug targets represented in DeltaBase as of September 2001 and the approximately 1,000 drug targets that were and are to be added to DeltaBase over the subsequent four years. Lexicon will make certain milestone and royalty payments to the Company for therapeutic and diagnostic products developed from Lexicon's use of DeltaBase. The Company will make payments to Lexicon for knockout mice generated by the Company on a fee-for-service basis. Neither the Company nor Lexicon will pay the other party any subscription or license fees.

5. RESEARCH AND DEVELOPMENT COLLABORATIONS AND LICENSE AGREEMENTS

The Company has entered into several significant research and development collaborations.

In July 1998, the Company entered into a research contract with Merck & Co., Inc., to provide Knockout Mice Projects for a value of \$850,000. A second contract was entered into in December 1999 to provide additional Knockout Mice Projects for an estimated value of \$1,000,000. Each project is divided into milestones and payments are made based on achievement of these. Revenues recognized relating to the first contract were \$225,000, \$161,000, and \$179,000 in 2001, 2000 and 1999, respectively. Revenues recognized relating to the second contract were \$272,000 and \$11,000 in 2001 and 2000, respectively. Deferred revenues related to the agreements were \$326,000, and \$408,000 at December 31, 2001 and 2000, respectively.

In October 1998, the Company entered into a research contract with Roche Bioscience, a division of Syntex (USA) Inc., to provide Knockout Mice Projects. Payments to the Company were based on the achievement of

DELTAGEN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

specific milestones. The revenues recognized relating to this contract were \$62,000 and \$249,000 in 2000 and 1999, respectively. There were no deferred revenues related to this agreement at December 31, 2001 and 2000 and no further work is to be performed under this agreement.

In December 1998, the Company entered into a research contract with Pfizer Inc. to provide Knockout Mice Projects. The total value of the contract is \$1,069,000. The payments are based on the completion of each milestone. The revenues recognized relating to this contract were \$124,000, \$155,000 and \$790,000 in 2001, 2000 and 1999, respectively. Deferred revenues related to this agreement were \$112,000 at December 31, 2000. There was no deferred revenue related to this agreement at December 31, 2001.

The Company entered into a research contract with Tularik, Inc. in February 1998 to perform phenotypic analysis on sets of knockout mice and to deliver to Tularik breeding pairs of mice. The total contract has an expected value of \$500,000. An initial payment of \$250,000 was received. The Company may derive additional revenues from royalties paid by Tularik on a semi-annual basis. Royalties are equal to 1% of the net sales of royalty bearing products until the tenth anniversary of the first commercial sale of the royalty-bearing product, on a country-by-country basis. Additional royalty payments, based on a predetermined amount, will be made by Tularik upon initiation of a major phase of additional studies based on Deltagen-delivered projects. No royalties have been recognized or received as at December 31, 2001. The revenues relating to this contract amount to \$129,000, \$132,000 and \$22,000 in 2001, 2000 and 1999, respectively. Deferred revenues related to this agreement were \$8,000 and \$137,000 at December 31, 2001 and 2000, respectively.

In December 1999, the Company entered into a research contract with Schering-Plough Research Institute to provide Knockout Mice Projects. The expected value of the contract is \$1,000,000. Payments are based upon completion of each milestone. The revenues relating to this contract amount to \$488,000 and \$383,000 in 2001 and 2000, respectively. Deferred revenues related to this agreement were \$129,000 and \$337,000 at December 31, 2001 and 2000, respectively.

On March 15, 2000, the company negotiated the basic terms of a three-year consulting arrangement research collaboration agreement with Institut de Génétique et de Biologie Moléculaire et Cellulaire (IGBMC), a scientific institution. Deltagen determines which projects are to be conducted by IGBMC in the area of functional genomics and particularly knockout animals and disruption technologies. In conjunction with this agreement, a three-year warrant to purchase 457,143 shares of Series C preferred stock of Deltagen at a price of \$3.13 per share was granted to IGBMC as of July 25, 2000. The warrant will vest in its entirety on the four-month anniversary of the commencement date of consulting work performed by IGBMC under the agreement. The chief executive officer of IGBMC is the father of one of the members of Deltagen's board of directors. The agreement has not yet become effective. For the purpose of valuing the warrants in accordance with EITF 96-18, no measurement date has occurred; therefore, no value has been attributed to these warrants.

On June 27, 2000, the Company entered into its first DeltaBase subscription agreement with GlaxoSmithKline plc. Under the DeltaBase agreement, GlaxoSmithKline has the right to access DeltaBase information on gene function and validated gene targets based upon knockout mouse studies. The DeltaBase agreement also grants GlaxoSmithKline non-exclusive, worldwide licenses to knockout mice, materials and intellectual property rights under DeltaBase. The Company will receive an aggregate of \$5,000,000 in subscription licensing fees during each year of the three-year term. In addition, the Company may receive additional licensing fees for access to its intellectual property and additional payments on milestones achieved and on products developed by GlaxoSmithKline, if any, using DeltaBase information, materials and related intellectual property. The revenues recognized relating to this agreement were \$3,961,000 and \$1,154,000 in 2001 and 2000, respectively. Deferred revenues related to this agreement were \$2,410,000 and \$1,416,000 at December 31, 2001 and 2000, respectively.

DELTAGEN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

On December 22, 2000, the Company entered into its second DeltaBase subscription agreement with Pfizer Inc. Under the DeltaBase agreement, Pfizer has the right to access DeltaBase information on gene function and validated gene targets based upon knockout mouse studies. The DeltaBase agreement also grants Pfizer non-exclusive, worldwide licenses to knockout mice, materials and intellectual property rights under DeltaBase. The Company will receive an aggregate of \$15,300,000 in subscription licensing and access fees over the three-year term of the agreement. In addition, the Company may receive additional licensing fees for access to its intellectual property and additional payments on milestones achieved and on products developed by Pfizer Inc., if any, using DeltaBase information, materials and related intellectual property. Revenues recognized relating to this agreement were \$4,371,000 in 2001. Deferred revenues related to this agreement were \$5,979,000 and \$7,050,000 at December 31, 2001 and 2000 respectively.

On May 7, 2001, the Company entered into its first GeneClass DeltaBase subscription agreement with Vertex Pharmaceuticals Incorporated. Under the GeneClass DeltaBase agreement, Vertex has the right to access GeneClass DeltaBase information on gene function and validated gene targets based upon knockout mouse studies. The GeneClass DeltaBase agreement also grants Vertex non-exclusive, worldwide licenses to knockout mice, materials and intellectual property rights under GeneClass DeltaBase. The Company may receive up to an aggregate of \$1.9 million in subscription licensing fees over the three-year term of the agreement. In addition, the Company may receive additional licensing fees for access to its intellectual property and additional payments on certain milestones achieved and royalties on products developed by Vertex, if any, using DeltaBase information, materials and related intellectual property. The revenues recognized relating to this agreement were \$172,000 in 2001. Deferred revenues related to this agreement were \$53,000 at December 31, 2001.

On August 1, 2001, the Company entered into an agreement with Eli Lilly and Company to evaluate, and potentially develop and commercialize therapeutic secreted proteins. Under the terms of the agreement, Lilly will provide targets from its secreted protein pipeline for which the Company will further evaluate the therapeutic potential of such secreted proteins in mammalian models. Each company may select secreted proteins for commercial development with each company receiving royalties based on sales of therapeutic products. The agreement provides Lilly with certain acquisition, co-promotion, co-marketing and profit sharing options with respect to therapeutic products developed and commercialized by the Company. The agreement also provides the Company with certain co-promotion, co-development and profit sharing opportunities. No revenue was recognized from this agreement in 2001.

On October 9, 2001, the Company entered into a collaboration agreement with Hyseq, Inc. to research, develop and commercialize biopharmaceutical products. Under the terms of the agreement, Hyseq will provide the Company with gene sequences encoding secreted proteins and the Company will utilize its proprietary in vivo mammalian gene knockout technology to discover and validate potential commercially relevant biopharmaceutical drug targets. The Company and Hyseq will each have certain joint development and commercialization rights around potential biopharmaceutical drug targets discovered through the collaboration. The Company and Hyseq will share the collaboration's costs; Hyseq will provide the Company with approximately \$10 million in research and development payments over two years. In addition, the Company received \$10 million in equity proceeds from the sale of 1,508,978 shares of the Company's common stock at a price of \$6.63 per share, which was the average closing price of the Company's common stock on the NASDAQ National Market for the ten days prior to the purchase, to George B. Rathmann, Ph.D., chairman of the Board of Directors of Hyseq. No revenue was recognized from this agreement in 2001.

6. ACQUISITION

On July 30, 2001, the Company acquired Arcaris, Inc. Located in Salt Lake City, Utah, Arcaris has developed technologies consisting of genetic, proteomic and cell-biological systems for identification and

DELTAGEN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

validation of drug targets and the creation of small molecule screens. The total purchase price of approximately \$7,931,000 consisted of cash of \$450,000 and 766,894 shares of common stock valued at \$6,751,000 and 77,281 vested stock options valued at \$418,000 and direct acquisition costs of \$312,000. Further, the Company may be required to issue up to an additional 516,000 shares of common stock pursuant to the terms of certain earn out provisions. The acquisition was accounted for using the purchase method of accounting. Accordingly, the results of operations of Arcaris and estimated fair value of assets acquired and liabilities assumed were included in the Company's consolidated financial statements from July 30, 2001. The Arcaris acquisition adds a new technology platform to the Company's existing high-throughput efforts to identify and validate small molecule targets relevant to small molecule drug screening. The information generated through the Arcaris technologies will be utilized to advance the discovery of new disease targets by defining the role of novel non-traditional targets within intracellular pathways with particular relevance to oncology, viral and infectious diseases. Additionally, the Arcaris technologies will be used to facilitate the rapid development of small molecule screens against these identified targets.

The total purchase price was allocated to the estimated fair value of assets acquired and liabilities assumed based on independent appraisals and management estimates as follows (in thousands):

Tangible net assets acquired:	
Accounts receivable, net	\$ 8
Prepaid expenses and other current assets	81
Property and equipment, net	2,231
Other assets	55
Accounts payable and accrued liabilities	<u>(1,179)</u>
Tangible net assets acquired	1,196
Acquired in-process research and development	907
Completed technology	4,040
Excess of purchase price over net assets acquired	<u>1,788</u>
Total purchase price	<u>\$ 7,931</u>

In connection with the purchase of Arcaris, the Company recorded a \$907,000 charge to in-process research and development. The amount was determined by identifying research projects for which technological feasibility had not been established and no alternative future uses existed. The value of the projects identified to be in progress was determined by estimating the cost to recreate the technology and the future cash flows from the projects once commercially feasible, discounting the net cash flows back to their present value and then applying a percentage of completion to the calculated value. The net cash flows from the identified projects are expected to commence at various times in 2002, and were based on estimates of revenues, cost of revenues, research and development costs, selling, general and administrative costs and applicable income taxes for the projects. The percentage of completion for the projects was determined based on man months expended to date as a percentage of total project man months for the project. The discount rates used in the present value calculations were typically derived from a weighted-average cost of capital analysis based upon comparable public companies, adjusted upward to reflect additional risks inherent in the development life cycle. Such discount rates ranged between 22% and 27% for all projects. Development of the technologies remains a substantial risk to the Company due to factors including the remaining effort to achieve technological feasibility, rapidly changing customer markets and competitive threats from other companies.

The amount allocated to completed technology is being amortized over the estimated useful life of three years using the straight-line method.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The amount of the purchase price in excess of the tangible net assets acquired was recorded as goodwill and will be periodically evaluated for impairment in accordance with FAS 142.

The following unaudited pro forma summary is provided for illustrative purposes only and is not necessarily indicative of the consolidated results of operations for future periods or that actually would have been realized had the Company and Arcaris been a consolidated entity during the periods presented. The summary combines the results of operations as if Arcaris had been acquired as of the beginning of the periods presented. The impact of certain acquisition adjustments such as amortization of completed technology and the charge related to the write-off of the acquired in-process research and development has been excluded from the periods presented as they arose from the acquisition of Arcaris.

	Years Ended December 31,	
	2001	2000
	(In thousands, except per share data) (unaudited)	
Revenues	\$ 10,090	\$ 2,227
Net loss	\$(49,943)	\$(60,400)
Net loss per common share, basic and diluted	\$ (1.67)	\$ (4.51)

7. CAPITAL LEASE OBLIGATIONS

In June 1998, the Company entered into a three-year capital lease agreement for \$93,000, bearing interest at 10.58% per year. The leased equipment includes various items of computer hardware.

In June 2000, the Company entered into a three-year capital lease agreement for \$20,000, bearing interest at 10.39% per year. The leased equipment includes a vehicle and related equipment.

In December 2001, the Company entered into a three-year capital lease agreement for \$24,000, bearing 0.0% interest. The leased equipment includes a vehicle and related equipment.

At December 31, 2001, future minimum lease payments under the non-cancellable capital lease are as follows:

Year Ending December 31,	Amount (in thousands)
2002	\$ 12
2003	21
2004	8
Total minimum lease payments	41
Less: Amount representing interest	(2)
Present value of future minimum lease payments	39
Less: Current portion	(11)
Total capital lease obligations, net current portion	\$ 28

8. LOANS PAYABLE

In December 1998, the Company entered into a loan agreement with a financial institution to obtain one or more loans totaling up to \$1,800,000. A corresponding amount of machinery, equipment and other property is pledged as collateral for each loan.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

In January 1999 and March 1999, the Company incurred loans of \$872,000 and \$928,000, respectively, for a total financing of \$1,800,000. These loans bear respective interest rates of 10.87% and 11.11% and are required to be repaid in 48 monthly installments, beginning in January 1999 and April 1999, respectively.

In accordance with this loan agreement, the financial institution received a warrant to purchase 23,510 shares of the Company's Series B preferred stock at a price of \$1.53 per share. The warrant term is seven years and expires in January 2006. The value of the warrant was calculated using the Black-Scholes pricing model and has been charged to additional paid-in capital and is being amortized to interest expense over the life of the loan. The assumptions used in the Black-Scholes model are as follows: dividend yield of 0%, term of seven years, expected volatility of 75% and risk-free interest rate of 4.96%. In September 2000, the warrant was exercised.

The Company recorded a loan discount related to these warrants of \$99,000, of which \$23,000, \$26,000 and \$21,000 have been amortized to interest expense during the years ended December 31, 2001, 2000 and 1999, respectively.

In March 1999, the Company entered into a loan agreement with a financial institution to obtain up to six loans totaling up to \$1,500,000. A corresponding amount of machinery, equipment and other property is pledged as collateral for each loan.

In June 1999 and November 1999, the Company incurred loans of \$919,000 and \$581,000, respectively, obtaining a total financing of \$1,500,000. These loans bear respective interest rates of 11.25% and 11.89% and are required to be repaid in 48 monthly installments, beginning in July 1999 and November 1999, respectively.

In March 1999, in conjunction with this loan agreement, the Company issued a warrant to purchase 19,591 shares of Series B preferred stock at a price of \$1.53 per share. The warrant has a seven-year term and expires in March 2006. The value of the warrant was calculated using the Black-Scholes pricing model and has been charged to additional paid-in capital and is being amortized to interest expense over the life of the loan. The assumptions used in the Black-Scholes model are as follows: dividend yield of 0%, term of seven years, volatility of 75% and risk-free interest rate of 5.23%. In September 2000, the warrant was exercised.

The Company recorded a loan discount related to these warrants of \$86,000, of which \$22,000, \$22,000 and \$16,000 have been amortized to interest expense during the years ended December 31, 2001, 2000 and 1999, respectively.

In June 2000, the Company entered into a loan agreement with a financial institution to obtain one or more loans totaling up to \$6,500,000. A corresponding amount of machinery, equipment and other property is pledged as collateral for each loan.

During June 2000, the Company incurred loans of \$1,262,000 and \$1,649,000 for a total financing of \$2,911,000. These loans bear respective interest rates of 12.75% and 12.49% and are required to be repaid in 36 and 48 monthly installments, respectively, beginning in July 2000.

During June 2001, the Company entered into a loan with a financial institution in the amount of \$2,453,000. This loan bears interest at 12.49% and is required to be repaid in 48 monthly installments beginning in July 2001. A corresponding amount of machinery, equipment and other property is pledged as collateral for this loan.

The loan agreements have restrictive covenants requiring minimum unrestricted cash balances, generally twelve month cash needs. If unrestricted cash balances fall below the minimum levels, the Company will be required to provide cash deposits of up to \$316,000.

DELTAGEN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The related loans payable balances at December 31, 2001, are as follows:

	<u>Amount</u> (in thousands)
Notes payable in monthly installments at interest rates ranging from 10.87% to 12.75% maturing from January to May 2005	\$ 5,496
Less: Current portion	(2,382)
Less: Discount due to warrants	(55)
Loans payable, less current portion	<u>\$ 3,059</u>

Future principal payments of loans payable at December 31, 2001, are as follows:

<u>Year Ending December 31,</u>	<u>Amount</u> (in thousands)
2002	\$2,382
2003	1,862
2004	939
2005	313
Total	<u>\$5,496</u>

9. PROPERTY PLANT AND EQUIPMENT FINANCING

In August 2001, the Company's wholly-owned Deltagen Europe S.A. subsidiary entered into a lease purchase arrangement associated with the construction of a research and development facility in France. Under the terms of the arrangement, the Company paid \$1,520,000 for the purchase of land and paid approximately \$718,000 in security deposits in conjunction with a ten-year financing arrangement that provides approximately \$6,200,000 in funds for construction of a 50,000 square-foot research and development building. The land and security deposits are collateral for the loan. The loans were provided by a consortium of banks and local governmental agencies. The loans bear interest at the average monthly money market rates plus 1.5% during construction. Once construction is completed, approximately \$2,700,000 of the loan bears interest at the three-month Euro Interbank Offered Rate, plus 1.5% and approximately \$3,500,000 bears interest at 1.5%.

10. NOTES RECEIVABLE FROM RELATED PARTIES

In April 2001, the Company received promissory notes from certain officers for \$150,000 and \$110,000, respectively. The promissory notes are collateralized by 58,824 and 43,137 shares of common stock, bear annual interest at 4.94% and are payable in April 2006 or earlier upon employee termination.

In March 2001, the Company received a promissory note from an employee for \$60,000. The promissory note bears annual interest at 4.75% and is payable in March 2002 or earlier upon employee termination.

In March and May 2000, the Company received promissory notes from two officers for \$50,000 each. The promissory notes are collateralized by real estate and accrue interest at 6.80% and 6.08%, respectively. The principal amount of the notes and all accrued and unpaid interest are due and payable in May 2004.

In July 2000, the Company received a promissory note from an employee for \$75,000. The promissory note is collateralized by real estate, bears annual interest at 6.62% and is payable in July 2004.

11. REDEEMABLE CONVERTIBLE PREFERRED STOCK

In February and May 1997, the Company issued 3,428,571 shares of Series A redeemable convertible preferred stock at \$0.88 per share for net proceeds of \$2,980,000. In February and July 1998, the Company issued 7,510,206 shares of Series B redeemable convertible preferred stock at \$1.53 per share for net proceeds of \$11,467,000. In January 2000, the Company issued 7,198,709 shares of Series C redeemable convertible

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

preferred stock at \$3.13 per share for net proceeds of \$22,360,000. The difference between the conversion price of the Series C redeemable convertible preferred stock and the fair market value of the common stock on the transaction date resulted in a beneficial conversion feature of approximately \$22,360,000, which has been reflected as a preferred stock dividend in the December 31, 2000, financial statements.

Upon the closing of the Company's initial public offering, all of the Company's outstanding redeemable convertible preferred stock converted into 18,137,486 shares of common stock.

12. STOCKHOLDERS' EQUITY (DEFICIT)

Stock Split

In July 2000, the Company effected an 8-for-7 forward split of its preferred and common stock. All common stock data and common stock option plan information in these financial statements has been restated to reflect the split.

Common Stock

At December 31, 2001, the Company had reserved sufficient shares of common stock for issuance upon the exercise of stock options and warrants. Common stockholders are entitled to dividends as and when declared by the board of directors subject to prior rights of the preferred stockholders. The holders of each share of common stock are entitled to one vote.

In August 2000, the Company completed its initial public offering of 8,025,000 shares of common stock, including 1,025,000 shares in connection with the exercise of the underwriters over-allotment option, at a price of \$15.00 per share, that raised approximately \$110,191,000, net of underwriting discounts, commissions and other offering costs. Upon the closing of the offering, all of the Company's redeemable convertible preferred stock converted into 18,137,486 shares of common stock.

Common stock held by certain employees and non-employees is subject to stock purchase agreements whereby the Company has the option to repurchase unvested shares upon termination of employment at the initial issuance price. The Company's right to repurchase these shares generally lapses at the rate of 25% per year from the date of the agreement. At December 31, 2001 and 2000, 649,450 and 1,384,997 shares of common stock remain subject to the Company's right of repurchase, respectively.

2000 Employee Stock Purchase Plan

In April 2000, the board of directors adopted the 2000 Employee Stock Purchase Plan (the "2000 ESPP"). Under the 2000 ESPP, 1,142,857 shares of common stock have been reserved for issuance, subject to increase on the first day of each fiscal year. The 2000 ESPP contains overlapping 24-month offering periods and successive 6-month accumulation periods. The price of stock purchased under the ESPP shall be the lower of 85% of the fair market value of such shares on the last trading day in such accumulation period or 85% of the fair market value of such shares on the last trading day before the commencement of the applicable offering period. During 2001 and 2000, 30,792 and zero shares, respectively, were purchased under the 2000 ESPP.

Stock Option Plans

In April 1998, the Company adopted the 1998 Stock Incentive Plan (the "1998 Plan"). The 1998 Plan provides for the granting of stock options and restricted shares to employees and consultants of the Company. Options granted under the 1998 Plan may be either incentive stock options or nonqualified stock options. Incentive stock options (ISOs) may be granted only to Company employees (including officers and directors who are also employees). Nonqualified stock options (NSOs) may be granted to Company employees and consultants. At December 31, 2001, the Company has reserved 4,293,462 shares of common stock for issuance under the 1998 Plan.

Options under the Plan may be granted for periods of up to ten years or five years in the case of a 10% stockholder and at prices no less than 85% of the fair market value of a share on the date of grant, provided,

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

however, that the exercise price of an ISO and NSO may not be less than 100% and 85% of the fair market value of a share on the date of grant, respectively, and the exercise price of an ISO and NSO granted to a 10% shareholder may not be less than 110% of the fair market value of a share on the date of grant, respectively. To date, options granted generally vest over four years.

In April 2001, the Company adopted the 2000 Stock Incentive Plan (the "2000 Plan"). The 2000 Plan provides for the granting of incentive stock options (ISOs) only to employees and non-statutory stock options, restricted shares, stock units or stock appreciation rights (SARs) to employees, non-employee directors and consultants.

Under the 2000 Plan, at December 31, 2001 7,154,714 shares of common stock have been authorized for issuance that will terminate no later than 2011. On January 1 of each year the number of shares reserved for issuance may be increased, but limited to a total of 45,714,286 authorized shares.

Certain stock options granted are subject to acceleration of vesting in the event of a change in control of the Company. The purchase price for restricted shares and the exercise price for stock options and SARs will be determined by the Committee in charge of the 2000 Plan administration. The exercise price of an ISO may not be less than 100% of the fair market value of a share on the date of grant and the term may not exceed ten years or five years in the case of a 10% stockholder.

In connection with the acquisition of Arcaris, Inc., in July 2001, the Company assumed the Arcaris, Inc. 1997 Equity Incentive Plan (the "1997 Plan"). The 1997 Plan provides for the granting of stock options, stock bonuses and restricted stock to employees, directors and consultants of the Company. Under the 1997 Plan, ISOs may be granted only to Company employees (including officers and directors who are also employees) and NSOs may be granted to Company employees and consultants.

Options under the 1997 Plan may be granted for periods of up to ten years or five years in the case of a 10% stockholder and at prices no less than 85% of the fair market value of a share on the date of grant provided, however, that the exercise price of an ISO and NSO may not be less than 100% and 85% of the fair market value of a share on the date of grant, respectively, and the exercise price of an ISO and NSO granted to a 10% stockholder may not be less than 110% of the fair market value of a share on the date of grant, respectively.

Activity under the plans is as follows:

	Options Available for Grant	Outstanding Options		
		Number of Options	Aggregate Price	Weighted Average Exercise Price
(in thousands, except per share amount)				
Balances, December 31, 1998	745	806	247	0.31
Additional shares reserved	914	—	—	—
Options granted	(1,364)	1,364	418	0.31
Options exercised	—	(272)	(84)	0.31
Options cancelled	110	(110)	(34)	0.31
Balances, December 31, 1999	405	1,788	547	0.31
Additional shares reserved	7,314	—	—	—
Options granted	(2,942)	2,942	30,365	10.32
Options exercised	—	(1,604)	(1,390)	0.87
Options cancelled	69	(69)	(314)	4.54
Balances, December 31, 2000	4,846	3,057	29,208	9.55
Options granted	(4,311)	4,311	35,105	8.14
Options exercised	—	(52)	(164)	3.15
Options cancelled	463	(463)	(10,192)	22.01
Balances, December 31, 2001	998	6,853	\$ 53,957	\$ 7.87

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The options outstanding and vested and exercisable by exercise price at December 31, 2001, are as follows:

Exercise Price	Number Outstanding	Options Outstanding		Options Vested and Exercisable	
		Weighted Average Contractual Life (in years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
		(in thousands, except per share data)			
\$ 0.31 to \$ 4.24	1,244	7.4	\$ 0.81	804	\$ 0.77
\$ 5.00 to \$10.88	4,078	9.3	\$ 7.94	447	\$ 7.99
\$11.06 to \$13.00	1,179	8.8	\$12.39	342	\$12.38
\$16.88 to \$18.00	352	8.8	\$16.95	104	\$16.97
	<u>6,853</u>	8.9	\$ 7.87	<u>1,696</u>	\$ 6.01

At December 31, 2000 and 1999, outstanding options to purchase 503,000 shares and 247,000 shares of common stock were exercisable and vested at a weighted average exercise price of \$0.85 and \$0.31 per share, respectively.

Pro Forma Stock-based Compensation

The Company has adopted the disclosure-only provisions of SFAS 123. Had compensation cost been determined based on the fair value at the grant date for the awards consistent with the provisions of SFAS 123, the Company's net loss would have been as follows:

	Years Ended December 31,		
	2001	2000	1999
	(in thousands, except per share data)		
Net loss attributable to common stockholders—as reported . .	\$(48,457)	\$(54,581)	\$(13,847)
Net loss attributable to common stockholders—pro forma . . .	\$(60,138)	\$(58,107)	\$(13,921)
Basic and diluted net loss per common share:			
As reported	\$ (1.64)	\$ (4.32)	\$ (12.82)
Pro forma	\$ (2.04)	\$ (4.60)	\$ (12.89)

Such pro forma disclosures may not be representative of future compensation cost because options vest over several years and additional grants are made each year. The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing method with the following assumptions for grants:

	Years Ended December 31,		
	2001	2000	1999
Risk-free interest rate	5.06%	6.09%	5.88%
Expected life	5 years	5 years	5 years
Expected dividends	—	—	—
Volatility	95.3%	75%	0%

The expected life is based on the assumption that stock options on average are exercised one year after they are fully vested. The risk-free interest rate was calculated in accordance with the grant date and the life term of the options.

Based on the above assumptions, the weighted average fair values per share of options granted under the Plans were \$6.14, \$10.54 and \$7.86 for the years ended December 31, 2001, 2000 and 1999, respectively.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The fair value of each 2000 ESPP share is estimated on the date of issuance using the Black-Scholes option pricing model with the following weighted average assumptions:

	<u>2001</u>
Expected dividend yield	0.0%
Risk-free interest rate	4.22%
Expected volatility	95.3%
Expected life (in years)	0.5

The weighted average grant date fair value of the 2000 ESPP shares issued during 2001 was \$2.95 per share.

Unearned Stock-based Compensation

During 2000 and 1999, the Company issued stock options and restricted shares to certain employees with exercise prices below the deemed fair value of the Company's common stock at the date of grant. In accordance with the requirements of APB 25, the Company has recorded unearned stock-based compensation for the difference between the exercise price of the stock options and the deemed fair value of the Company's common stock at the date of grant. This unearned stock-based compensation is amortized to expense over the period during which the options vest, generally four years, using the method set out in FIN 28. Under the FIN 28 method, each vested tranche of options is accounted for as a separate option grant awarded for past services. Accordingly, the compensation expense is recognized over the period during which the services have been provided. The Company has recorded unearned stock-based compensation for options and restricted shares granted to employees of \$10,415,000 and \$10,178,000 for the years ended December 31, 2000 and 1999, of which \$4,056,000, \$9,786,000, and \$2,651,000 have been amortized to expenses during fiscal years 2001, 2000 and 1999.

For stock options and restricted stock granted to non-employees, generally for future services, the fair value of the options, measured using the Black-Scholes option pricing model, is initially recorded as unearned stock-based compensation on the date of grant. As the non-employee fulfills the terms of the option grants relating to continued service to the Company, the Company revalues the remaining unvested options, with the change in fair value from period to period represented as additional unearned stock-based compensation. As a result, the stock-based compensation expense will fluctuate as the fair market value of the Company's common stock fluctuates. The unearned stock-based compensation is amortized to expense over the period during which services are performed, generally four years, using the method set out in FIN 28. Amortization of unearned stock-based compensation for options granted to non-employees was \$1,086,000 and \$106,000 for the years ended December 31, 2000 and 1999, respectively. During the year ended December 31, 2001, the Company reversed \$152,000 of previously recognized unearned stock-based compensation related to unvested stock options due to changes in the fair market value of the Company's common stock.

Notes Receivable From Stockholders

In March 2000, the Company issued 514,286 shares of common stock to two officers in exchange for full recourse promissory notes of \$805,000. The promissory notes are collateralized by the common stock and accrue interest at 6.8% per annum. The principal and all accrued and unpaid interest are due and payable in March 2004, or upon the termination of employment.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Warrants

In September 2000, the Company issued a warrant to purchase 15,000 shares of common stock at \$16.88 per share to a non-employee. The warrant is fully vested and exercisable for three years from the date of issuance. The fair value of the warrant of approximately \$265,000 was expensed in the year ended December 31, 2000.

The fair value of the warrant calculated on the date of issuance was determined using the Black-Scholes option pricing model with the following assumptions: dividend yield of 0%; expected term of the warrant of three years; risk-free interest rate of 5.86% and volatility of 75%.

13. EMPLOYEE BENEFIT PLAN

In 1999, the Company established a 401(k) Plan to provide tax-deferred salary deductions for all eligible employees. Participants may make voluntary contributions to the Plan of up to 20% of their compensation, limited by certain Internal Revenue Service restrictions. The Company's matching contribution is discretionary as determined by the board of directors. The Company has not contributed to the plan since its inception.

14. RELATED PARTIES

In connection with the research and development contract with Tularik, described in Note 5, Tularik purchased 489,797 shares of Series B redeemable convertible preferred stock at a price of \$1.53 per share in February 1998. Upon the closing of the Company's initial public offering the 489,797 shares of Series B redeemable convertible preferred stock converted into 489,797 shares of common stock. There were no outstanding receivables relating to this agreement at December 31, 2001 and 2000.

15. INCOME TAXES

The components of the net deferred tax assets as of December 31, 2001 and 2000:

	December 31,	
	2001	2000
	(in thousands)	
Deferred tax assets:		
Net operating loss carryforwards	\$ 31,555	\$ 14,032
Research and experimental credits	5,598	2,462
Cumulative temporary differences	6,944	6,640
Total	44,097	23,134
Deferred tax liabilities:		
Depreciation and amortization	153	1,050
Net deferred tax assets	43,944	22,084
Valuation allowance	(43,944)	(22,084)
Total	\$ —	\$ —

The Company has established a valuation allowance against its deferred tax assets due to the uncertainty surrounding the realization of such assets.

At December 31, 2001, the Company had federal and state operating loss carryforwards of approximately \$79,215,000 and \$79,211,000, respectively, and federal and state tax credits of approximately \$3,101,000 and \$3,783,000, respectively. These carryforwards will expire between 2005 and 2021, if not utilized.

The U.S. federal income tax rules may restrict the utilization of the operating loss and tax credit carryforwards in the case of an "ownership change" of a corporation.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

16. SEGMENT INFORMATION

The Company operates in one segment, using one measure of profitability to manage its business. Revenues for geographic regions are based upon the customer's location.

Following is a summary of geographic information related to customers:

	Revenue			Long-lived Assets		
	2001	2000	1999	2001	2000	1999
	(in thousands)			(in thousands)		
United States	\$5,870	\$ 905	\$1,240	\$20,283	\$8,635	\$4,973
Europe	4,040	1,175	—	1,656	—	—
Total	<u>\$9,910</u>	<u>\$2,080</u>	<u>\$1,240</u>	<u>\$21,939</u>	<u>\$8,635</u>	<u>\$4,973</u>

17. SELECTED QUARTERLY FINANCIAL DATA (unaudited)

Selected quarterly financial data for 2001 and 2000 is summarized as follows:

	2001 Quarters Ended			
	Mar. 31	June 30	Sept. 30	Dec. 31
	(in thousands, except per share data)			
Revenue	\$ 2,451	\$ 2,735	\$ 2,265	\$ 2,459
Loss from operations	\$ (8,643)	\$(12,961)	\$(15,287)	\$(15,270)
Net loss attributable to common stockholders ..	\$ (7,072)	\$(11,859)	\$(14,634)	\$(14,892)
Net loss per common share, basic and diluted ..	\$ (0.25)	\$ (0.41)	\$ (0.50)	\$ (0.48)
Weighted average number of shares	28,601	28,835	29,504	31,078

	2000 Quarters Ended			
	Mar. 31	June 30	Sept. 30	Dec. 31
	(in thousands, except per share data)			
Revenue	\$ 286	\$ 268	\$ 206	\$ 1,320
Loss from operations	\$ (7,386)	\$ (8,989)	\$ (9,593)	\$ (9,282)
Net loss attributable to common stockholders ..	\$(29,655)	\$ (8,864)	\$ (8,589)	\$ (7,473)
Net loss per common share, basic and diluted ..	\$ (18.56)	\$ (5.27)	\$ (0.44)	\$ (0.26)
Weighted average number of shares	1,598	1,681	19,437	28,345

Net loss attributable to common stockholders in the first quarter of 2000 included a deemed dividend related to the beneficial conversion feature of preferred stock of \$22,360,000 and related net loss per share of \$13.99.

DELTAGEN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

18. SUBSEQUENT EVENTS

Acquisition of BMSPRL, L.L.C.

On February 16, 2002, the Company completed the acquisition of BMSPRL, L.L.C., formerly known as CombiChem, Inc., from Bristol-Myers Squibb Company for 2,647,481 unregistered shares of the Company's common stock valued at approximately \$23,500,000. The subsidiary, located in San Diego, California, was renamed Deltagen Research Laboratories, or DRL. The addition of DRL will enable the Company to advance its in vivo validated targets by identifying lead candidate compounds for drug development. The acquisition will be accounted for using the purchase method of accounting.

Merck DeltaBase Agreement

On February 8, 2002, the Company entered into its third DeltaBase subscription agreement with Merck & Co., Inc. Under the DeltaBase agreement, Merck has the right to access DeltaBase information on gene function and validated gene targets based upon knockout mouse studies. The DeltaBase agreement also grants Merck non-exclusive, worldwide licenses to knockout mice, materials and intellectual property rights under DeltaBase. The Company will receive an aggregate of \$15,250,000 in subscription licensing and access fees during the term of the agreement. Merck will have non-exclusive access to information related to 750 genes and access to certain of the corresponding DeltaBase intellectual property rights.

Loans Payable

On February 28, 2002, the Company entered into a loan agreement with a financial institution to obtain one or more loans totaling up to \$4,000,000. A corresponding amount of machinery, equipment, and other property is pledged as collateral for each loan. On March 1, 2002, the Company received loan proceeds of \$2,406,000 and \$1,000,000, respectively, under this agreement for a total financing of \$3,407,000. The loans bear interest rates of 8.87% and 8.98%, respectively, and are to be repaid in 36 monthly installments beginning in March 2002.

Acquisition of XenoPharm, Inc.

On March 14, 2002, the Company acquired XenoPharm, Inc., a San Diego, California-based private company for 498,251 unregistered shares of the Company's common stock valued at approximately \$4,000,000, plus up to 1,449,275 shares of common stock upon the satisfaction of certain milestones. The entity will become a wholly-owned subsidiary. XenoPharm, which was incorporated in November 2000, provides a proprietary technology platform to pharmaceutical, biotechnology, chemical and agricultural companies to better understand and predict reactions of foreign substances, termed "xenobiotics," in human systems. XenoPharm's XenoSensor Mice, implanted with human SXR and CAR, coupled with XenoPharm's CleanScreen high-throughput screening assays provide a proprietary technology platform to improve the predictive value of cell- and animal-based biomedical research.

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

None.

PART III

Item 10. Directors and Executive Officers of the Registrant

Some of the information required by this item is incorporated by reference from Deltagen's Definitive Proxy Statement for its 2002 Annual Meeting of Stockholders under the captions "Election of Directors" and "Section 16(a) Beneficial Ownership Reporting Compliance." See also Item 1 above regarding the executive officers.

Item 11. Executive Compensation

The information required by this item is incorporated by reference from Deltagen's Definitive Proxy Statement for its 2002 Annual Meeting of Stockholders under the caption "Executive Compensation."

Item 12. Security Ownership of Certain Beneficial Owners and Management

The information required by this item is incorporated by reference from Deltagen's Definitive Proxy Statement for its 2002 Annual Meeting of Stockholders under the caption "Ownership of Management and Principal Stockholders."

Item 13. Certain Relationships and Related Transactions

The information required by this item is incorporated by reference from Deltagen's Definitive Proxy Statement for its 2002 Annual Meeting of Stockholders under the captions "Compensation Committee Interlocks and Insider Participation," "Indemnification Agreements" and "Management Indebtedness."

Indemnification Agreements

Our restated certificate of incorporation and bylaws provide that we will indemnify each of our directors and officers to the fullest extent permitted by the Delaware General Corporation Law. Further, we have entered into indemnification agreements with each of our directors and officers.

PART IV

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

- (a) The following documents are filed as part of this report:
 - (1) Financial Statements of the Company are included in Part II, Item 8:
 - Report of Independent Accountants
 - Consolidated Balance Sheets
 - Consolidated Statements of Operations
 - Consolidated Statements of Stockholders' Equity (Deficit)
 - Consolidated Statements of Cash Flows
 - Notes to Consolidated Financial Statements

All other schedules are omitted because of the absence of conditions under which they are required or because the required information is included in the financial statements or notes thereto.

- (3) Exhibits:

See attached Exhibit Index.

- (b) The Company filed the following reports on Form 8-K during the fourth quarter of fiscal 2001:

None.

EXHIBIT INDEX

Set forth below is a list of exhibits that are being filed or incorporated by reference into this Form 10-K:

<u>Exhibit No.</u>	<u>Exhibit</u>
2.1*	Purchase Agreement with Bristol-Myers Squibb Company dated February 8, 2002 (1)
2.2*	Amendment to Purchase Agreement with Bristol-Myers Squibb Company dated February 14, 2002 (1)
2.3†*	Agreement and Plan of Merger and Reorganization with Arcaris, Inc. dated July 24, 2001 (2)
2.4†*	Agreement and Plan of Merger and Reorganization with Xenopharm, Inc. dated January 15, 2002
3(i).1	Restated Certificate of Incorporation
3(ii).1	Bylaws of the Registrant (4)
4.1	Specimen Common Stock Certificate (4)
4.2	Investors' Rights Agreement dated May 27, 1999 (4)
4.3	Investors' Rights Agreement dated January 21, 2000 (4)
4.4	Common Stock Purchase Agreement with Rathmann Family Trust dated October 10, 2001
4.5	Registration Rights Agreement dated February 16, 2002 (5)
10.1.1	1998 Stock Incentive Plan (4)
10.1.2	Form of Option Agreement under 1998 Stock Incentive Plan (4)
10.2.1	2000 Stock Incentive Plan (4)
10.2.2	Form of Incentive Option Agreement under 2000 Stock Incentive Plan (4)
10.2.3	Form of Nonstatutory Stock Option Agreement under 2000 Stock Incentive Plan (4)
10.3	2000 Employee Stock Purchase Plan (4)
10.4†	Agreement with University of Edinburgh (4)
10.5.1	Lease Agreement for 1031 Bing Street, San Carlos, California (4)
10.5.2	Addendum to Lease Agreement (4)
10.5.3	First Amendment to Lease Agreement (4)
10.6	Lease Agreement for 1003 Hamilton Avenue, Menlo Park, California (4)
10.7	Form of Indemnification Agreement (4)
10.8	Agreement with William Matthews, Ph.D. (4)
10.9	Agreement with Mark W. Moore, Ph.D. (4)
10.10	Agreement with Augustine G. Yee, Esq. (4)
10.11	Agreement with Terry Coley, Ph.D. (4)
10.12	Series B Preferred Stock Warrant issued to Silicon Valley Bank (4)
10.13	Series B Preferred Stock Warrant issued to LMSI (4)
10.14	Agreement with IGBMC (4)
10.15	Promissory Note between Deltagen and William Matthews, Ph.D. (4)
10.16	Promissory Note between Deltagen and Mark W. Moore, Ph.D. (4)
10.17†	Agreement with Roche Biosciences, Inc. dated October 2, 1998 (4)
10.18†	Agreement with Pfizer, Inc. dated December 22, 1998 (4)
10.19†	Agreement with Schering-Plough dated December 16, 1999 (4)
10.20†	Agreement with Merck dated December 21, 1999 (4)
10.21†	Agreement with Glaxo dated June 27, 2000 (4)
10.22†	Collaboration Agreement with Glaxo dated June 27, 2000 (4)
10.23†	Agreement with Affymetrix, Inc. dated July 12, 2000 (4)
10.24	Series C Preferred Stock Warrant issued to IGBMC (4)
10.25	Lease Agreements for 1210 and 1255 Hamilton Court, Menlo Park, California (6)
10.26†	Agreement with Pfizer, Inc. dated July 1, 2000 (6)
10.27	Agreement with John E. Burke (6)
10.28	Agreement with Richard Hawkins (6)

<u>Exhibit No.</u>	<u>Exhibit</u>
10.29	Agreement with Brian Crowley (6)
10.30	Lease Agreement for 740 Bay Road, Redwood City, California (7)
10.31.1	Sublease Agreement for 700 Bay Road, Redwood City, California (7)
10.31.2	Consent to Sublease Agreement for 700 Bay Road, Redwood City, California (7)
10.32†	Agreement with Hyseq, Inc. dated October 9, 2001
10.33	Lease Purchase Agreement dated August 29, 2001
10.34	Loan Agreement dated August 29, 2001
10.35	Guarantor Agreement dated August 29, 2001
10.36†	Research Subscription Agreement with Merck & Co., Inc. dated February 8, 2002
10.37	Promissory Note between Deltagen and Augustine Yee dated April 16, 2001
10.38	Promissory Note between Deltagen and Terry Coley dated April 16, 2001
10.39	Lease Agreement for 4570 Executive Drive, San Diego, California
10.40	Agreement with Peter L. Myers
21	Subsidiaries
23.1	Consent of PricewaterhouseCoopers LLP, Independent Accountants
24.1	Power of Attorney. See page 84.

- (1) Incorporated by reference to the identically numbered exhibits filed with the Registrant's Current Report on Form 8-K (File No. 000-31147) filed on March 4, 2002.
- (2) Incorporated by reference to Exhibit 10.32 filed with the Registrant's Quarterly Report on Form 10-Q (File No. 000-31147) filed on August 9, 2001.
- (3) Incorporated by reference to Exhibit 3.(ii).2 filed with Registrant's Registration Statement on Form S-1 (File No. 333-34668) declared effective on August 2, 2000.
- (4) Incorporated by reference to the identically numbered exhibits filed with the Registrant's Registration Statement on Form S-1 (File No. 333-34668) declared effective on August 2, 2000.
- (5) Incorporated by reference to Exhibit 2.3 filed with Registrant's Current Report on Form 8-K (File No. 000-31147) filed on March 4, 2002.
- (6) Incorporated by reference to the identically numbered exhibits filed with the Registrant's Annual Report on Form 10-K (File No. 000-31147) filed on April 2, 2001.
- (7) Incorporated by reference to the identically numbered exhibits filed with the Registrant's Quarterly Report on Form 10-Q (File No. 000-31147) filed on August 9, 2001.

† Confidential treatment has been requested with respect to portions of these agreements.

* The schedules and exhibits to these agreements, as set forth in the respective Table of Contents thereto (if any), have not been filed herewith, pursuant to Item 601(b)(2) of Regulation S-K. The Registrant agrees to furnish supplementally a copy of any omitted schedule or exhibit to the Commission upon request.

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-67526) and Forms S-8 (No. 333-67216 and No. 333-43818) of Deltagen, Inc. of our report dated February 8, 2002, except as to Note 18, which is as of March 14, 2002 relating to the consolidated financial statements, which appears in this Form 10-K.

/s/ PRICEWATERHOUSECOOPERS LLP

San Jose, California
March 29, 2002

DELTAGEN OFFICERS**John E. Burke, J.D.**

Senior Vice President of Intellectual Property and General Counsel

Terry R. Coley, Ph.D.

Vice President of Information Technology

Brian E. Crowley, M.B.A.

Director of Finance

Richard H. Hawkins, M.B.A.

Chief Financial Officer

Jeanne Y. Jew, M.B.A.

Vice President of Business Development

Alexander Kamb, Ph.D.

Vice President of Research and Development, Deltagen Proteomics

Robert D. Klein, Ph.D.

Vice President of Technology Development

Paul H. Laland

Vice President of Corporate Communications

William Matthews, Ph.D.

President and Chief Executive Officer

Mark W. Moore, Ph.D.

Chief Scientific Officer

Peter L. Myers, Ph.D.

Executive Vice President, Deltagen Research Laboratories

Stephen J. Peroutka, M.D., Ph.D.

Vice President of Clinical Research

Dan Shochat, Ph.D.

Vice President of Pharmaceutical Development

Kay A. Slocum

Vice President of Human Resources

Augustine G. Yee, J.D.

Senior Vice President of Corporate Development and Secretary

BOARD OF DIRECTORS**Constantine E. Anagnostopoulos, Ph.D.**

Former Corporate Officer, Monsanto Company; General Partner, Gateway Venture Partners

Philippe Chambon, M.D., Ph.D.

General Partner, The Sprout Group

William Matthews, Ph.D.

President and Chief Executive Officer, Deltagen, Inc.

Thomas A. Penn

General Partner, Meridian Venture Partners

F. Noel Perry, M.B.A.

Founder and Managing Director, Baccharis Capital

William A. Scott, Ph.D.

Adjunct Professor, The Rockefeller University; Former Chief Executive Officer and Board Member, Physiome Sciences

Nicholas J. Simon III, M.B.A.

General Partner, MPM Capital

LEGAL COUNSEL**Orrick, Herrington & Sutcliffe LLP****INDEPENDENT ACCOUNTANTS****PricewaterhouseCoopers LLP****TRANSFER AGENT AND REGISTRAR****EquiServe Trust Company, N.A.**150 Royal Street
Canton, MA 02021**COMMON STOCK INFORMATION****Symbol: DGEN****Stock Exchange: Nasdaq****INVESTOR RELATIONS****Nina Ferrari**Senior Director, Investor Relations
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Suite 400
San Diego, CA 92121
Phone: 858-625-6400**Deltagen Europe S.A.**Ventana Building
Rue Geiler de Kaysersberg
Parc d'Innovation
67400 Illkirch, France
Phone: 33 3 90 40 61 04**ANNUAL MEETING**

The annual meeting of stockholders will be held on Wednesday, May 22, 2002, at 10:00 a.m. at the Stanford Park Hotel, 100 El Camino Real, Menlo Park, California.

All statements in this annual report that are not historical are forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those set forth in the forward-looking statements, including the risks cited in the risk factors sections of the Deltagen Annual Report on Form 10-K filed with the Securities and Exchange Commission and Deltagen's other securities filings with the Commission.

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