Altus Pharmaceuticals Inc.
Form 10-K
March 12, 2007

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

þ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)**
OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2006

OR

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)**
OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission File No. 000-51711

ALTUS PHARMACEUTICALS INC.
(Exact Name of Registrant as Specified in its Charter)

Delaware	**04-3573277**
(State or Other Jurisdiction of Incorporation or Organization)	*(I.R.S. Employer Identification No.)*
125 Sidney Street, Cambridge, Massachusetts	**02139**
(Address of Principal Executive Offices)	*(Zip Code)*

Registrant s telephone number, including area code:
(617) 299-2900
Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	**Name of Each Exchange on Which Registered**
Common Stock, $.01 par value	**The Nasdaq Global Market, LLC**

Securities registered pursuant to Section 12(g) of the Act:
NONE
(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES o NO þ

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. YES o NO þ

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 þ NO o

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o Accelerated filer o Non-accelerated filer þ

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). YES o NO þ

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold on The Nasdaq Global Market on June 30, 2006 was $410,446,726.

The number of shares outstanding of the registrant s common stock as of February 28, 2007 was 23,995,477.

DOCUMENTS INCORPORATED BY REFERENCE

None.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. The forward-looking statements are contained principally in, but not limited to, the sections entitled Business, Risk Factors and Management s Discussion and Analysis of Financial Condition and Results of Operations. These statements involve known and unknown risks, uncertainties and other important 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:

- the expected timing, progress or success of our preclinical research and development and clinical programs;
- our ability to successfully obtain sufficient supplies of our product candidates for use in clinical trials and toxicology studies and secure sufficient commercial supplies of our product candidates;
- the timing, costs and other limitations involved in obtaining regulatory approval for any of our product candidates;
- the potential benefits of our product candidates over other therapies;
- our ability to market, commercialize and achieve market acceptance for any of our product candidates that we are developing or may develop in the future;
- our estimate of market sizes and anticipated uses of our product candidates;
- our ability to enter into collaboration agreements with respect to our product candidates and the performance of our collaborative partners under such agreements;
- our ability to protect our intellectual property and operate our business without infringing upon the intellectual property rights of others;
- our estimates of future performance;
- our ability to raise sufficient capital to fund our operations; and
- our estimates regarding anticipated operating losses, future revenue, expenses, capital requirements and our needs for additional financing.

In some cases, you can identify forward-looking statements by terms such as anticipates, believes, could, estimates, expects, intends, may, plans, potential, predicts, projects, should, will, would and similar expressi identify forward-looking statements. Forward-looking statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Because of these risks and uncertainties, the forward-looking events and circumstances discussed in this Annual Report on Form 10-K may not transpire. We discuss many of these risks in Item 1A of this Annual Report on Form 10-K under the heading Risk Factors beginning on page 39.

Given these uncertainties, you should not place undue reliance on these forward-looking statements. Also, forward-looking statements represent our estimates and assumptions only as of the date of this document. You should read this document and the documents that we reference in this Annual Report on Form 10-K with the understanding

that our actual future results may be materially different from what we expect. Except as required by law, we do not undertake any obligation to update or revise any forward-looking statements contained in this Annual Report on Form 10-K, whether as a result of new information, future events or otherwise.

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PART I

ITEM 1. *BUSINESS*

Our Corporate Information

We were incorporated in Massachusetts in October 1992 as a wholly-owned subsidiary of Vertex Pharmaceuticals Incorporated, or Vertex, from whom we exclusively license specified patents underlying some of our product candidates. In February 1999, we were reorganized as an independent company, and in August 2001 we reincorporated in Delaware. Prior to May 2004, we were named Altus Biologics Inc. We have one subsidiary, Altus Pharmaceuticals Securities Corp., a Massachusetts corporation. Unless the context requires otherwise, references to Altus, we, our and us in this report refer to Altus Pharmaceuticals Inc. and our subsidiary.

Our principal executive offices are located at 125 Sidney Street, Cambridge, MA 02139, and our telephone number is (617) 299-2900. Our web site address is *www.altus.com.* The information contained on, or that can be accessed through, our web site is not incorporated by reference into this report. We have included our web site address as a factual reference and do not intend it to be an active link to our web site. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports, are available to you free of charge through the Investor Relations section of our web site as soon as reasonably practicable after such materials have been electronically filed with, or furnished to, the Securities and Exchange Commission.

Altus is a trademark of Altus Pharmaceuticals Inc. Each of the other trademarks, trade names or service marks appearing in this report belongs to its respective holder.

Business Overview

We are a biopharmaceutical company focused on the development and commercialization of oral and injectable protein therapeutics for gastrointestinal and metabolic disorders, with two product candidates advancing toward late stage clinical development. We use our proprietary protein crystallization technology to develop protein therapies which we believe will have significant advantages over existing products and will address unmet medical needs. Our product candidates are designed to degrade toxic metabolites in the gut or increase the amount of a protein that is in short supply in the body. We have successfully completed a Phase II clinical trial of ALTU-135 for the treatment of malabsorption due to exocrine pancreatic insufficiency and we have also successfully completed a Phase II clinical trial of ALTU-238 in adults for the treatment of growth hormone deficiency. We are developing ALTU-238 under an agreement with Genentech, Inc., or Genentech, relating to the development, manufacture and commercialization of this product candidate in North America. We have a pipeline of other product candidates in preclinical research and development. Our most advanced preclinical product candidate is ALTU-237, which is designed to treat hyperoxalurias, a series of conditions in which too much oxalate is present in the body, resulting in an increased risk of developing kidney stones and, in rare instances, crystal formations in other organs.

ALTU-135 for Malabsorption due to Exocrine Pancreatic Insufficiency

Our lead product candidate, ALTU-135, is an orally-administered enzyme replacement therapy consisting of three digestive enzymes, lipase, protease and amylase, for the treatment of malabsorption due to exocrine pancreatic insufficiency. Exocrine pancreatic insufficiency is a deficiency of digestive enzymes normally produced by the pancreas which leads to malabsorption of nutrients, malnutrition, impaired growth and shortened life expectancy. Exocrine pancreatic insufficiency can result from a number of diseases and conditions, including cystic fibrosis,

chronic pancreatitis and pancreatic cancer. According to IMS Health, global prescription sales of existing pancreatic enzyme replacement products were approximately $739 million in 2006.

We believe that ALTU-135, if approved, will have significant competitive advantages compared to existing pancreatic enzyme replacement therapies. We believe these potential advantages include:

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benefits associated with a drug that is microbially-derived and manufactured in a controlled environment, rather than a drug derived from pig pancreases, as is the case with existing pancreatic enzyme replacement therapies;

a significantly lower pill burden, allowing patients to take, on average, one capsule per meal or snack compared to, on average, four or five larger capsules per meal or snack with existing products;

a pre-specified and consistent ratio of lipase, protease and amylase;

more consistent and reliable dosing;

resistance to degradation early in the gastrointestinal tract, permitting enzyme activity later in the gastrointestinal tract where most digestion and absorption of fats, proteins and carbohydrates occurs;

the potential for an alternative dosage formulation, such as a liquid oral form, which is currently unavailable with existing therapies, for children and adults who are unable to swallow pills or capsules; and

testing in what we believe is the largest well-controlled, scientifically rigorous prospective clinical trial conducted to date in the treatment of cystic fibrosis patients with pancreatic insufficiency.

We believe that many of these advantages are a result of our proprietary protein crystallization technology, which enables improved product consistency and stability, as well as higher concentration and purity.

Existing pancreatic enzyme replacement products have been marketed since before enactment of the Food, Drug and Cosmetic Act, or FDCA, in 1938 and are not marketed under new drug applications, or NDAs, approved by the United States Food and Drug Administration, or FDA. In April 2004, the FDA issued a notice that manufacturers of existing pancreatic enzyme replacement products will be subject to regulatory action if they do not obtain approved NDAs for those products by April 28, 2008. We believe that some of the manufacturers of these products may not be able to satisfy the FDA s requirements for NDAs for these products.

In 2005, we completed a prospective, randomized, double-blind, dose-ranging Phase II clinical trial of the capsule form of ALTU-135. The results of this trial demonstrated that ALTU-135 was well tolerated and in the two higher dose treatment arms ALTU-135 showed a statistically significant improvement in fat absorption (p-value<0.001), the trial s primary endpoint, as well as a statistically significant improvement in protein absorption (p-value<0.001) and a statistically significant decrease in stool weight (p-value<0.001), each of which was a secondary endpoint in the study. In addition, we observed a positive trend, although not statistically significant, in carbohydrate absorption. However, the results of our Phase II clinical trial may not be predictive of the results in our planned Phase III clinical trial of ALTU-135. We expect to initiate a pivotal Phase III clinical efficacy trial of the capsule form of ALTU-135 in patients with cystic fibrosis in the second quarter of 2007 and a long-term safety study in cystic fibrosis patients and chronic pancreatitis patients with pancreatic insufficiency in the second quarter of 2007. The FDA and the European Medicines Agency, or EMEA, have granted ALTU-135 orphan drug designation, which generally provides a drug being developed for a rare disease or condition with marketing exclusivity for seven years in the United States and ten years in the European Union if it is the first drug of its type approved for such indication. In December 2006, the FDA informed us of its intention to revoke our orphan drug designation because it found the prevalence of pancreatic insufficiency exceeded the statutory 200,000 patient limit if all HIV/AIDS patients who suffer from fat malabsorption were included in the patient population. We responded to the FDA that it was never our intent to include HIV/AIDS patients in the orphan population since the vast majority of these patients display malabsorption for reasons other than pancreatic insufficiency. We proposed, if necessary, modifying our orphan drug designation to clarify the exclusion of

HIV/AIDS patients. We believe this proposal will enable us to preserve our orphan drug designation in the United States. Additionally, the FDA has granted ALTU-135 fast track designation and admission into its Continuous Marketing Application, or CMA, Pilot 2 Program, both of which are designed to facilitate interactions between a drug developer and the FDA during the drug development process.

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We have a collaboration with Dr. Falk Pharma GmbH, or Dr. Falk, a specialty pharmaceutical company headquartered in Germany, to commercialize ALTU-135 in Europe, the countries of the former Soviet Union, Israel and Egypt. We also have a strategic alliance agreement with Cystic Fibrosis Foundation Therapeutics, Inc., or CFFTI, which is funding a portion of the development of ALTU-135.

ALTU-238 for Growth Hormone Deficiency and Related Disorders

Our next most advanced product candidate, ALTU-238, is a crystallized formulation of human growth hormone, or hGH, that is designed to be injected once-weekly with a fine gauge needle for the treatment of growth hormone deficiency and hGH-related disorders. Based on reported revenues of existing products, global sales of hGH products exceeded $2.5 billion in 2006, and the market grew at a compound annual growth rate of approximately 9.1% from 2002 to 2006. We are developing ALTU-238 for both adult and pediatric populations as an alternative to current therapies. Current medical guidelines for clinical practice generally recommend daily administration of existing therapies by subcutaneous injection. In our Phase I and Phase II clinical trials, ALTU-238 demonstrated pharmacokinetic and pharmacodynamic parameters that are consistent with once-weekly administration. In our Phase II study, we identified doses of ALTU-238 that achieved insulin-like growth factor 1, or IGF-1, levels within the normal range for age and gender over the course of the study. IGF-1 is a naturally occurring hormone that stimulates the growth of bone, muscle and other body tissues in response to hGH and, in turn, regulates hGH release from the pituitary gland. In addition, once-per-week dosing of ALTU-238 also appeared to result in a consistent, linear dose response of hGH and IGF-1 levels in the blood, which we believe will enable physicians and patients to correlate a given dose of ALTU-238 to desired levels of hGH and IGF-1 in the blood. We believe that the convenience of once-weekly administration of ALTU-238, if approved, would improve patient acceptance and compliance, and thereby effectiveness.

We recently entered into an agreement with Genentech to develop, manufacture and commercialize ALTU-238. The agreement, which became effective on February 21, 2007, provides for an exclusive North American collaboration and license arrangement, which Genentech has the option to expand to a global arrangement. In connection with the North American agreement, we anticipate receiving a $15 million up-front payment in March 2007. Genentech also purchased 794,575 shares of our common stock on February 27, 2007 for an aggregate purchase price of $15 million. We have the potential to receive additional payments of approximately $148 million based upon the achievement of all development and commercialization milestones for North America. If Genentech exercises its option to extend the collaboration globally, we have the potential to receive additional payments of approximately $110 million, comprising an option exercise fee and payments contingent upon the achievement of all development and commercialization milestones relating to countries outside of North America. Genentech will be responsible for all ALTU-238 development and commercialization costs in North America and, if Genentech exercises its option to make this a global agreement, all such costs. We have the option to co-promote ALTU-238 with Genentech in North America. If we exercise this option, Genentech will pay us for our co-promotion efforts for a limited period of time. We are entitled to receive royalties based on annual net sales of hGH-related products resulting from the collaboration. Genentech has control over the development and commercialization of ALTU-238.

Pipeline and Technology

We also have a pipeline of product candidates in preclinical research and development that we are designing to address other areas of unmet need in gastrointestinal and metabolic disorders. Our most advanced preclinical product candidate is ALTU-237, which we are developing to treat hyperoxalurias, a series of conditions in which too much oxalate is present in the body, resulting in an increased risk of developing kidney stones and, in rare instances, crystal formations in other organs. Increased oxalate in the body can be the result of a variety of factors including excess dietary intake of oxalate, genetic disorders of metabolism, and disease states such as inflammatory bowel disease. The

oxalate combines with calcium in the urine causing formations of calcium oxalate crystals, which can grow into kidney stones. Kidney stones can be a serious medical condition. Kidney stones occur in 10% of adult men and 3% of adult women during their lifetimes. There are a variety of types of kidney stones, but calcium oxalate stones are the most common type

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in people who have kidney stone disease. We expect to file an investigational new drug application, or IND, for ALTU-237 for the treatment of hyperoxalurias in the first half of 2007.

We are currently testing our product candidate ALTU-236 in animal models for the treatment of phenylketonuria, or PKU, which currently lacks any approved pharmaceutical therapies. PKU is a rare, inherited, metabolic disorder that results from an enzyme deficiency that causes the accumulation of the amino acid phenylalanine in the body. If left untreated, PKU can result in mental retardation, swelling of the brain, delayed speech, seizures and behavior abnormalities.

We are also testing our product candidate ALTU-242 in animal models for the treatment of gout, a condition which we believe is in need of improved pharmaceutical therapies.

Our product candidates are based on our proprietary technology, which enables the large-scale crystallization of proteins for use as therapeutic drugs. We apply our technology to improve known protein drugs, as well as to develop other proteins into protein therapeutics. For example, our product candidate ALTU-135 is based on known enzymes to which we apply our proprietary crystallization technology with the goal of offering a new and improved drug. We have developed our product candidate ALTU-238 by applying our proprietary crystallization technology with the goal of offering an improved version of an approved drug. We believe that, by using our technology, we are able to overcome many of the limitations of existing protein therapies and deliver proteins in capsule and alternative dosage forms, such as a liquid oral form and extended-release injectable formulations. Our product candidates are designed to offer improvements over existing products, such as greater convenience, better safety and efficacy and longer shelf life. In addition, we believe that we may be able to reduce the development risk and time to market for our drug candidates because we apply our technology to existing, well-understood proteins with well-defined mechanisms of action. We believe that our technology is broadly applicable to different classes of proteins, including enzymes, hormones, antibodies, cytokines and peptides. To date, we have crystallized more than 70 proteins for use in our research and development programs. We currently hold worldwide rights to all of our preclinical product candidates.

Our Strategy

Our goal is to become a leading biopharmaceutical company focused on developing and commercializing protein therapies to address unmet medical needs in gastrointestinal and metabolic disorders. Our strategy to achieve this objective includes the following elements:

Focus on advancing our lead product candidates. We have two product candidates advancing toward late stage clinical development. We are preparing ALTU-135 for a pivotal Phase III clinical trial and a long-term safety study for the treatment of malabsorption due to exocrine pancreatic insufficiency. Based on our discussions with the FDA, we believe that the results of these two clinical trials will be sufficient to support an NDA filing for ALTU-135 with the FDA. In addition, we have completed a Phase II clinical trial of ALTU-238 in adult growth hormone deficient patients. We expect Genentech to advance ALTU-238 into a Phase III clinical trial in adults and Phase II and Phase III clinical trials in pediatric patients. We believe that these product candidates, if approved, will offer significant advantages over existing therapies. In addition, because these product candidates are based on well-understood proteins with known mechanisms of action, we believe we may be able to reduce their development risk and time to market.

Continue to build and advance our product pipeline for gastrointestinal and metabolic disorders. In addition to our product candidates in clinical development, we have built a pipeline of preclinical product candidates based on our proprietary protein crystallization technology. These product candidates are designed to address unmet needs for the treatment of hyperoxalurias, phenylketonuria, gout, and other gastrointestinal and metabolic diseases. We plan to apply the manufacturing, clinical and regulatory experience gained from our

two lead product candidates to advance a number of these preclinical product candidates into clinical trials over the next few years. We also plan to add additional product candidates to our pipeline through the application of our proprietary protein crystallization

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technology to existing protein therapeutics or known proteins with potential therapeutic use. We plan to file an IND for ALTU-237 for the treatment of hyperoxalurias in the first half of 2007.

Establish a commercial infrastructure. We plan to establish a commercial infrastructure and targeted specialty sales force to market ALTU-135 in North America. We may also exercise our right to co-promote ALTU-238 with Genentech in North America. In addition, we plan to leverage our sales and marketing capabilities by targeting the same groups of physician specialists with additional products that we bring to market either through our own development efforts or by in-licensing from others.

Selectively establish collaborations for our product candidates with leading pharmaceutical and biotechnology companies. We have established two such collaborations to date, including a collaboration with Dr. Falk for the commercialization of ALTU-135 in Europe, the countries of the former Soviet Union, Israel and Egypt and a collaboration with Genentech for the development and commercialization of ALTU-238 in North America. We intend to develop additional collaborations in markets outside of North America where we believe that having a collaborator will enable us to gain better access to those markets. We may also collaborate with other companies to accelerate the development of some of our early-stage product candidates, to co-commercialize our product candidates in North America in instances where we believe that a larger sales and marketing presence will expand the market or accelerate penetration, or to advance other business objectives.

Establish additional collaborations to apply our technology to other therapeutic proteins. We believe that our technology has broad applicability to many classes of proteins and can be used to enhance protein therapeutics developed by other parties. In the future, we may derive value from our technology by selectively collaborating with biotechnology and pharmaceutical companies that will use our technology for products that they are either currently marketing or developing.

Our Product Candidates

The following table summarizes key information about our product candidates that are in clinical trials and our most advanced preclinical research and development programs. All of the product candidates are based on our crystallization technology and are the result of our internal research and development efforts.

Product Candidate (Method of Delivery) Indication	Stage of Development	Commercial Rights	Status
ALTU-135 (oral) *Exocrine Pancreatic Insufficiency*	Phase II completed	Altus (United States and rest of world, except as noted below) Dr. Falk (Europe, the countries of the former Soviet Union, Israel and Egypt)	Phase III clinical efficacy trial and long-term safety study to support NDA submission are expected to begin in the second quarter of 2007. An alternative dosage form of ALTU-135 is in development for children and adults who have difficulty swallowing capsules.

ALTU-238 (injectable) *Growth Disorders*	Phase II completed	Altus (North America co-promote option, Europe and rest of world, subject to Genentech s option) Genentech (North America with option for rest of world)	Timing of a Phase III clinical trial in adults and Phase II and III clinical trials in pediatric patients expected to be finalized after the completion of a development plan with Genentech.

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Product Candidate (Method of Delivery) Indication	Stage of Development	Commercial Rights	Status
ALTU-237 (oral) *Hyperoxalurias*	Preclinical	Altus	IND enabling work in progress, with IND filing expected in the first half of 2007.
ALTU-236 (oral) *Phenylketonuria*	Preclinical	Altus	Preclinical testing in animal models
ALTU-242 (oral) *Gout*	Preclinical	Altus	Preclinical testing in animal models

ALTU-135 for Exocrine Pancreatic Insufficiency

Our lead product candidate, ALTU-135, is an orally administered enzyme replacement therapy for which we have successfully completed a Phase II clinical trial of its capsule form for the treatment of malabsorption due to exocrine pancreatic insufficiency. Pancreatic insufficiency is a deficiency of the digestive enzymes normally produced by the pancreas and can result from a number of disease conditions, including cystic fibrosis, chronic pancreatitis and pancreatic cancer. Patients with exocrine pancreatic insufficiency are currently treated with enzyme replacement products containing enzymes derived from pig pancreases. We believe that ALTU-135 represents a significant potential advancement as a therapeutic alternative for the treatment of these patients.

ALTU-135 contains three types of digestive enzymes derived from non-animal sources:

Lipase. We selected the lipase in ALTU-135, which is used for the digestion of fats, because it demonstrated the ability in *in vitro* and animal testing to be active across a wide range of acidity levels and more resistant to degradation in the harsh environment of the gastrointestinal tract when compared to other lipases. It also demonstrated the ability to break down a broader range of fats than existing animal-derived lipases and other microbial lipases. Because lipases are the most susceptible of the three enzymes to degradation in the gastrointestinal tract, we use our proprietary technology to both crystallize and cross-link the lipase for increased activity and stability;

Protease. We selected the protease in ALTU-135, which is used for the digestion of proteins, because it demonstrated the ability in *in vitro* and animal testing to break down as many types of proteins as the multiple proteases contained in existing products. We crystallize the protease for greater stability and concentration; and

Amylase. We selected the amylase in ALTU-135, which is used for the digestion of carbohydrates, because it demonstrated the ability in *in vitro* testing to be active in the highly acidic environment of the upper gastrointestinal tract. Because the amylase is stable in soluble form, we do not crystallize it.

A contract manufacturer produces these enzymes for us from microbial sources using separate fermentation and purification processes. The enzymes are then blended to achieve a pre-specified and consistent ratio of lipase to protease to amylase in each capsule.

Disease Background and Market Opportunity

We have designed ALTU-135 to treat malabsorption resulting from exocrine pancreatic insufficiency. Malabsorption is the failure to absorb adequate amounts of nutrients, such as fats, proteins and carbohydrates, in food and is clinically manifested as malnutrition, weight loss or poor weight gain, impaired growth, abdominal bloating, cramping and chronic diarrhea. Exocrine pancreatic insufficiency is a deficiency of digestive enzymes normally produced by the pancreas that results in poor absorption of essential nutrients from food. If not treated appropriately, exocrine pancreatic insufficiency generally leads to malnutrition, impaired growth and shortened life expectancy.

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According to IMS Health, the worldwide market for pancreatic enzyme replacement therapies grew at a compound annual growth rate of approximately 6% from $658 million in 2004 to approximately $739 million in 2006. The market for these products in 2006 was approximately $226 million in North America, $252 million in Europe and $261 million in the rest of the world according to IMS Health. Diseases and conditions with a prevalence of exocrine pancreatic insufficiency include:

Cystic fibrosis Cystic fibrosis is one of the most prevalent genetic disorders in the Caucasian population, according to the Medical Genetics Institute of Cedars-Sinai. According to the Cystic Fibrosis Foundation, this disease affects approximately 30,000 people in the United States. Approximately 90% of cystic fibrosis patients are prescribed pancreatic enzymes to treat exocrine pancreatic insufficiency. As of 2005, cystic fibrosis patients with exocrine pancreatic insufficiency had a median life expectancy of 31 years, compared to 50 years for those cystic fibrosis patients who have sufficient pancreatic enzymes.

Chronic pancreatitis In many patients, chronic pancreatitis is clinically silent and many patients with unexplained abdominal pain may have chronic pancreatitis that eludes diagnosis. As a result, according to The New England Journal of Medicine, the true prevalence of the disease is not known, although estimates range from 0.04% to 5% of the United States population. Based on survey data reported in Medscape General Medicine, we believe chronic pancreatitis results in more than 500,000 physician visits per year in the United States.

Pancreatic cancer The American Cancer Society estimates that approximately 30,000 people in the United States are diagnosed with pancreatic cancer each year. According to an industry estimate, approximately 65% of patients with pancreatic cancer will have some degree of fat malabsorption.

Limitations of Existing Products

Patients with exocrine pancreatic insufficiency are typically prescribed enzyme replacement products containing enzymes extracted from pig pancreases. Many of these products were available for human use prior to the passage of the FDCA in 1938, and all are currently marketed without NDAs approved by the FDA. In 1995, the FDA issued a final ruling requiring that these pancreatic enzyme products be marketed by prescription only, and in April 2004, the FDA issued a notice that manufacturers of these products will be subject to regulatory action if they do not obtain approved NDAs for these products by April 28, 2008. The FDA has also issued guidance, known as the PEP Guidance, that existing manufacturers of pancreatic enzyme products can follow in order to obtain FDA approval.

Existing pancreatic enzyme replacement therapies are derived from pig pancreases and are supposed to be taken with every meal and snack in order to permit the digestion and absorption by the patient of sufficient amounts of fats, proteins and carbohydrates. We believe that these products have a number of significant limitations that affect their ease of administration, safety and effectiveness, including:

High pill burden. Patients on existing pancreatic enzyme therapies are generally required to take, on average, four or five larger capsules per meal or snack, resulting in poor compliance and therefore reduced long-term efficacy, due to the following factors:

Degradation of enzymes in the gastrointestinal tract. A significant portion of the enzymes in existing products are degraded in the gastrointestinal tract prior to exerting their therapeutic effect. Some manufacturers have tried to address this issue by adding a protective coating to the enzymes, but this often results in a failure of the enzyme to dissolve and become active early enough in the gastrointestinal tract to break down foods and effectively assist with the digestive process.

Low concentration. Existing therapies are comprised of a mixture of enzymes and other materials found in a pig s pancreas. Based on comments submitted in response to the FDA s PEP Guidance in 2004 by manufacturers of existing products and the components of such products, we believe that manufacturers of these products are unable to concentrate the enzymes in the mixture to reduce the amount of material a patient must consume.

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Variability of therapeutic effect. Because existing products are extracted from pig pancreases, there is significant variability between different manufacturing batches. As a result, we believe that the therapeutic effect of these therapies is also significantly variable. Each time a patient refills a prescription, the patient may need to experiment with the number of pills taken per meal or snack to achieve effective digestion of his or her food intake.

Short shelf life. Existing enzyme therapies tend to lose activity quickly relative to other types of drugs. For example, the lipase, which is generally the most sensitive component in these products, is often degraded by the proteases also found in these products. Many manufacturers try to overcome this limitation by filling each capsule with more drug than specified on the label in order to achieve the stated label claim over time. This leads to inconsistent efficacy and raises safety concerns. We believe this also contributes to patient uncertainty about the number of capsules to take per meal or snack.

Product impurities. Existing enzyme therapies are poorly characterized and may contain impurities, including porcine viruses, tissue components and other contaminants. These impurities may increase the risk of antigenicity, or an immune system reaction.

Anticipated Advantages of ALTU-135

We believe that ALTU-135, if approved, will offer patients a more convenient and effective long-term therapy for the treatment of malabsorption due to exocrine pancreatic insufficiency because of the following features:

Reduced pill burden. ALTU-135 is a highly concentrated, pure and stable enzyme replacement therapy designed to be as effective as existing products with significantly fewer capsules. Based on the clinical trials we have conducted to date, we believe that most patients will be effectively treated with, on average, one capsule per meal or snack. We believe that this dosing will result in greater convenience for the patient, which will improve compliance and, therefore, long-term effectiveness of therapy. We believe that ALTU-135 will reduce the pill burden for patients due to the following factors:

Stability of enzymes in the gastrointestinal tract. We have designed ALTU-135 to withstand degradation, maintain its activity across the different pH levels in the gastrointestinal tract, and exert its therapeutic effect in the first part of the small intestine, or the duodenum, where most fats, proteins and carbohydrates are broken down and absorbed. We believe this design will provide a more effective treatment for patients than current pancreatic enzyme replacement products, which are often degraded earlier or later in the gastrointestinal tract.

High concentration. Two of the three enzymes in ALTU-135 are crystallized, resulting in a highly concentrated and pure product that requires less material to achieve a desired therapeutic effect.

Consistent activity. We have designed ALTU-135 to exhibit consistent enzyme activity from batch to batch. The enzymes in ALTU-135 are microbially derived and produced through fermentation. The amount of material and related enzyme activity in a capsule of ALTU-135 is tightly controlled, as each of the three enzymes in ALTU-135 is individually manufactured and added to the final drug product in a specific amount. We believe this will result in consistent product performance, eliminating the need for dose experimentation each time a patient refills a prescription.

Longer shelf life. Based on stability studies performed as part of our development program, we believe that ALTU-135 capsules are significantly more stable than existing porcine-derived products, which offers the potential for a longer effective shelf life and more reliable and consistent dosing.

Alternative dosage formulation. We have completed a series of *in vivo* studies and are continuing formulation development activities of alternative dosage formulations of ALTU-135. We believe that an alternative dosage formulation is an important option for children and adults who are unable to swallow capsules.

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ALTU-135 Development Activities and Strategy

We have successfully completed a Phase II clinical trial of the capsule form of ALTU-135 and are preparing to advance this product candidate into a pivotal Phase III clinical efficacy trial in patients with cystic fibrosis and a long-term safety study in cystic fibrosis patients and chronic pancreatitis patients with pancreatic insufficiency, each in the second quarter of 2007. The FDA and the EMEA have granted ALTU-135 orphan drug designation for malabsorption due to exocrine pancreatic insufficiency. In December 2006, the FDA informed us of its intention to revoke our orphan drug designation because it found the prevalence of pancreatic insufficiency exceeded the statutory 200,000 patient limit if all HIV/AIDS patients who suffer from fat malabsorption were included in the patient population. We responded to the FDA that it was never our intent to include HIV/AIDS patients in the orphan population since the vast majority of these patients display malabsorption for reasons other than pancreatic insufficiency. We proposed, if necessary, modifying our orphan drug designation to clarify the exclusion of HIV/AIDS patients. We believe this proposal will enable us to preserve our orphan drug designation in the United States. The FDA has also granted ALTU-135 fast track designation. Fast track designation is designed to facilitate the development of new drugs and may be granted to a product with a specific indication where the FDA agrees that the product is intended to treat a serious or life threatening condition and demonstrates the potential to address unmet medical needs for that condition. Fast track designation also permits drug developers to submit sections of an NDA as they become available. In February 2004, ALTU-135 was also admitted to the FDA s CMA Pilot 2 Program. Under the CMA Pilot 2 program, one fast track designated product from each review division of the Center for Drug Evaluation and Research, or CDER, the center at the FDA that regulates drugs and therapeutic biologics, and the Center for Biologics Evaluation and Research, or CBER, the center at the FDA that regulates other biologics, is selected for frequent scientific feedback and interactions with the FDA, with a goal of improving the efficiency and effectiveness of the drug development process. If the Phase III clinical trial is successful, we plan to submit our NDA for ALTU-135 to the FDA in the first half of 2009.

We have completed four clinical trials of ALTU-135, three of which were in cystic fibrosis patients and one of which was in healthy volunteers. The following table summarizes the clinical trials of ALTU-135 that we have completed to date:

Trial	Number of Subjects	Primary Study Objective
Phase Ia	20 healthy volunteers	Safety and tolerability over 7 days of dosing
Phase Ib	23 cystic fibrosis patients	Safety, tolerability and clinical activity over 3 days of dosing
Phase Ic	8 cystic fibrosis patients	Safety, tolerability and clinical activity over 14 days of dosing
Phase II	129 cystic fibrosis patients	Safety, tolerability and efficacy over 28 days of dosing

Our clinical trials with cystic fibrosis patients assessed a number of different measures, or endpoints, of digestion and absorption. We assessed fat absorption by measuring a patient s fat intake over a specified period of time and comparing that to the amount of fat in their stool during the same period. This comparison enabled us to calculate the amount of fat a patient absorbed, using a metric known as the coefficient of fat absorption, or CFA. The same process was applied to determine protein absorption, using a metric called the coefficient of nitrogen absorption, or CNA. We measured carbohydrate absorption by analyzing a patient s blood glucose levels after a starch meal, using a test we refer to as the starch challenge test. In our Phase Ib and Phase II clinical trials, we also measured the number and weight of the patients stools.

Phase I Clinical Trials

In our three Phase I clinical trials, the capsule form of ALTU-135 was generally well tolerated at doses of up to four times the maximum recommended clinical dose. In addition, in our Phase Ib trial, we observed statistically significant evidence of clinical activity based on CFA, CNA and stool results when all cohorts in the Phase Ib were considered together. In the Phase Ic trial, we observed evidence of amylase activity based on a treatment-associated increase in maximum glucose levels in a small number of subjects.

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Phase II Clinical Trial

We successfully completed our Phase II clinical trial for ALTU-135 and presented the results of the trial at the North American Cystic Fibrosis Conference in October 2005. In the trial, ALTU-135 was well tolerated and showed a statistically significant improvement in fat absorption (p-value<0.001), the trial s primary endpoint, in the two higher dose treatment arms. In these treatment arms, we also observed a statistically significant improvement in protein absorption (p-value<0.001) and a statistically significant decrease in stool weight (p-value<0.001), each of which was a secondary endpoint in the study. In addition, we observed a positive trend, although not statistically significant, in carbohydrate absorption in these treatment arms.

We believe that this is the first clinical trial to demonstrate that the combination of the three enzymes in ALTU-135, lipase, protease and amylase, may be effective in treating pancreatic insufficiency. We also believe that this trial is the only trial to concurrently evaluate the impact of a fixed dose of enzyme replacement therapy on the absorption of fats, proteins and carbohydrates.

After the completion of the Phase II clinical trial, we performed additional manufacturing development work on ALTU-135. As part of this work, we evaluated the assays used to measure the enzymatic activity of ALTU-135 in our Phase II trial. We found that the standard US Pharmacopea, or USP, assay that was used to measure the lipase activity of porcine-derived lipase did not accurately measure the lipase activity of ALTU-135. This USP assay, which is the standard for measuring lipase activity, is specified for porcine material and has been in existence for more than 50 years. We retested the Phase II clinical trial material utilizing an improved version of the USP assay that was developed to accurately measure the activity of our microbially derived, non-porcine lipase and found that the activity of the lipase doses used in the Phase II clinical trial were 6,500, 32,500 and 130,000 units, rather than 5,000, 25,000 and 100,000 units as measured in the USP assay that we utilized previously. Based on the results from our Phase II clinical trial and earlier trials for ALTU-135, we believe that:

- a formulation of ALTU-135 consisting of 32,500 units of lipase, 25,000 units of protease and 3,750 units of amylase, representing a ratio of approximately 1.0:0.8:0.12, provides a clinically meaningful improvement in fat and protein absorption;
- most patients will be able to be treated with one small capsule of ALTU-135 per meal or snack; and
- patients with the most severe fat and protein malabsorption will realize the greatest benefit from treatment with ALTU-135.

Study Design and Demographics

The purpose of our Phase II clinical trial of ALTU-135 was to obtain initial efficacy data, select a dose level of ALTU-135 for further evaluation in our Phase III clinical trial and assess the safety and tolerability of ALTU-135 over a 28-day treatment period in cystic fibrosis patients with pancreatic insufficiency. We believe our Phase II clinical trial of ALTU-135 represents the largest prospective, randomized, double-blind, dose-ranging trial conducted to date in the treatment of cystic fibrosis patients with pancreatic insufficiency.

To establish a baseline period measurement of fat, protein and carbohydrate absorption, at the beginning of the trial patients were tested during a 72-hour period when they were not taking enzyme replacement therapy. Following this baseline period, ALTU-135 in capsule form was orally administered to patients with each of five meals or snacks per day for a period of 28 days. In the middle of the trial, we performed an additional measurement of fat, protein and carbohydrate absorption to establish these measurements for the treatment period. For both the baseline and treatment

period measurements, we assessed fat and protein absorption following a 72-hour, controlled, high-fat diet by examining stools collected from patients. The appropriate period for measuring fat and protein absorption was determined by using a blue dye stool marker, which facilitated accurate and complete stool collection. Changes in carbohydrate absorption were determined by measuring blood glucose responses using the starch challenge test. We assessed the clinical activity of the lipase component of ALTU-135 by measuring the change in CFA, the clinical activity of the protease component of ALTU-135 by measuring the change in CNA and the clinical activity of the amylase component of ALTU-135 by measuring the change in carbohydrate absorption.

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The Phase II clinical trial for ALTU-135 enrolled a total of 129 subjects with cystic fibrosis and pancreatic insufficiency in 26 cystic fibrosis centers in the United States. We believe the demographics and baseline characteristics of the patients in the trial generally reflect the cystic fibrosis patient population. Ninety-five percent of the patients in the trial were Caucasian. The trial consisted of patients between the ages of 11 and 55, with a median age of 21.

The study included three treatment arms of approximately equal size, with patients in each arm receiving a fixed dose of ALTU-135 in capsule form administered orally:

Treatment arm 1 6,500 units lipase: 5,000 units protease: 750 units amylase per meal or snack;

Treatment arm 2 32,500 units lipase: 25,000 units protease: 3,750 units amylase per meal or snack, which is the dose we have selected to use in our planned Phase III clinical trials; and

Treatment arm 3 130,000 units lipase: 100,000 units protease: 15,000 units amylase per meal or snack.

The trial did not include a placebo arm, as we assessed efficacy based on the differences in fat, protein and carbohydrate absorption between the baseline period and the treatment period.

Efficacy Results

Of the 129 patients who were enrolled in the trial, 117 patients had valid stool collections during the ALTU-135 treatment period. We used this subset of patients for our main efficacy analyses. The results of the Phase II clinical trial showed a statistically significant improvement in CFA from the baseline period to the treatment period (p-value<0.001) for patients in treatment arms 2 and 3. The results of the trial also showed a statistically significant difference between on-treatment CFAs for patients in treatment arms 2 and 3 relative to treatment arm 1; therefore, the trial achieved its primary efficacy endpoint. We also observed a statistically significant improvement in CNA from the baseline period to the treatment period (p-value<0.001) and a statistically significant decrease in stool weight from the baseline period to the treatment period (p-value<0.001) for patients in treatment arms 2 and 3. The trial results also indicated a trend, although not statistically significant, toward improvement in carbohydrate absorption for patients in treatment arms 2 and 3.

We also observed statistically significant improvements in CNA from the baseline period to the treatment period for patients in treatment arms 2 and 3, as compared to patients in treatment arm 1. In addition, changes in CFA and CNA were highly correlated (r=0.844, p-value<0.001), supporting the 1.0:0.8 ratio of the units of lipase and protease in the formulation. The correlation coefficient, r, is the measure of correlation between two sets of data. Based on the results of our Phase II clinical trial, we have selected a formulation of ALTU-135 consisting of 32,500 units of lipase, 25,000 units of protease and 3,750 units of amylase as the dose level for testing in our proposed Phase III clinical trial.

In treatment arm 2 there was an average 11.4 percentage point increase in CFA, from 55.6% to 67.0%, and an average 12.5 percentage point increase in CNA, from 58.8% to 71.3%, from the baseline period to the treatment period. In treatment arm 3 there was an average 17.3 percentage point increase in CFA, from 52.2% to 69.7%, and an average 17.5 percentage point increase in CNA, from 56.8% to 74.6%, from the baseline period to the treatment period. There was not a statistically significant difference between these results. Based on these increases in CFA and CNA, we believe that cystic fibrosis patients suffering from malabsorption who are treated with ALTU-135 may experience clinically meaningful improvements in fat and protein absorption, resulting in an overall improvement in nutritional status. We also believe that an improvement in nutritional status may lead to weight maintenance or weight gain in patients, both of which are important elements in the overall health of cystic fibrosis patients and others

suffering from pancreatic insufficiency. According to the Cystic Fibrosis Foundation 2003 Patient Registry, more than 90% of cystic fibrosis patients take currently available pancreatic enzyme replacement therapies and approximately 35% of cystic fibrosis patients are in urgent need of improved nutrition.

Clinicians who treat cystic fibrosis patients typically recommend a high fat diet consistent with the diet in our Phase II clinical trial. Patients in our Phase II clinical trial consumed, on average, 100 grams of fat per

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day. In these patients, an average increase in fat absorption of 10 percentage points would equate to 10 grams of additional fat absorbed per day. According to the FDA, there are nine calories in a gram of fat. As a result, an improvement in CFA of 10 percentage points would equate to an additional 90 calories absorbed per day. Over a period of one year, such a 90 calorie per day increase would result in an improvement in weight of approximately nine pounds, allowing patients to either maintain weight that they may have otherwise lost or gain weight. For these reasons, we believe that an improvement in CFA of 10 percentage points or more could represent a clinically meaningful benefit to patients with pancreatic insufficiency.

To gain a better understanding of the clinical impact of treatment with ALTU-135, we further analyzed the data on CFA and CNA improvements in our Phase II clinical trial, specifically focusing on differences experienced by patients who began the trial with lower levels of fat and protein absorption during the baseline period, as compared with patients who began the trial with higher baseline levels of fat and protein absorption. We examined two groups: patients who absorbed 40% or less of their fat or protein intake during the baseline period, and patients who absorbed more than 40%, but less than 80%, of their fat or protein intake during the baseline period. In this retrospective analysis, we looked only at data from patients in treatment arms 2 and 3, and we pooled these two groups for purposes of the analysis, as there were no statistically significant differences between these treatment arms in improvements in CFA and CNA.

When we analyzed those patients who absorbed 40% or less of their fat or protein intake during the baseline period we observed the following results:

- an average increase in CFA of 31 percentage points for combined treatment arms 2 and 3, from the baseline period to the treatment period (number of patients, or n=21)

- an average increase in CNA of 36 percentage points for combined treatment arms 2 and 3, from the baseline period to the treatment period (n=9)

In patients with fat or protein absorption of more than 40%, but less than 80%, during the baseline period, we observed the following results:

- an average increase in CFA of 9 percentage points for combined treatment arms 2 and 3, from the baseline period to the treatment period (n=50)

- an average increase in CNA of 13 percentage points for combined treatment arms 2 and 3, from the baseline period to the treatment period (n=60)

Based on these data, we believe cystic fibrosis patients in these subgroups had a clinically meaningful response to ALTU-135. In particular, those subjects who had the most severe fat or protein malabsorption, which we define as patients with a CFA or CNA of 40% or less during the baseline period, responded the most from their treatment with ALTU-135. Based on our discussions with the FDA to date, we expect that in our Phase III clinical trial of ALTU-135, the FDA will look for ALTU-135 to provide patients who have a lower baseline CFA level a substantially greater percentage point increase in CFA than the percentage point increase in patients who have a higher baseline CFA level in order to demonstrate clinically meaningful improvement. We believe that a statistically significant improvement in carbohydrate absorption will not be required by the FDA in order to obtain approval for ALTU-135.

As noted above, the trial results also indicated a trend toward improvement in carbohydrate absorption for patients in treatment arms 2 and 3. To obtain additional insight with respect to carbohydrate absorption, we further analyzed the data retrospectively by examining all three treatment arms using a responder analysis that excluded subjects with cystic fibrosis-related diabetes, because those subjects were receiving diabetes medications that could have

confounded the results. In this subgroup (n=81), we observed a marked increase in the number of subjects whom we considered responders in treatment arms 2 and 3 compared to treatment arm 1. We defined responders as patients who achieved a minimum predetermined level of glucose change during the treatment period as compared to the pre-treatment period. The number of subjects achieving this response in treatment arm 2 was statistically significant when compared to treatment arm 1 (p-value<0.01) and was approaching statistical significance for treatment arm 3 (p-value=0.0644) compared to treatment arm 1.

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Safety and Tolerability Results

There were no statistically significant differences among the three treatment arms in the incidence of adverse events, or AEs, the number of related AEs, or the number of serious adverse events, or SAEs. The majority of AEs were mild in intensity, similar to previous ALTU-135 studies in cystic fibrosis subjects, and the most frequently reported AEs were gastrointestinal disorders. There were no clear differences across the treatment arms for any AEs considered to be related to ALTU-135. The majority of the SAEs were gastrointestinal and pulmonary related, which were consistent with the subjects underlying cystic fibrosis disease. Of the SAEs, only one was considered by an investigator in the trial as probably or possibly related to treatment with ALTU-135.

There were no major safety concerns identified regarding laboratory values, vital signs or physical exams. Abnormal liver transaminase values with frequent fluctuations were common among the subjects during the pre-treatment, treatment and follow-up periods, and are common in the cystic fibrosis population in general. We observed, however, more frequent liver transaminase elevations in subjects during the treatment and follow-up periods compared to the pre-treatment period. In a 1999 published study of 124 children with cystic fibrosis who were followed for four years, it was found that 80% had abnormal elevations in liver transaminases. Overall transaminase elevations experienced by patients in our Phase II trial were transient, asymptomatic and not associated with increases in bilirubin. Increases in bilirubin are typically associated with harm to the liver. In addition to normal to abnormal transaminase shifts, abnormal to normal transaminase shifts were also observed across treatment groups. A causal relationship between ALTU-135 treatment and elevated liver transaminases is unclear because of the underlying liver disease, which is estimated to occur in up to 37% of cystic fibrosis patients according to published studies, and other complicating factors in these patients, including diabetes and infections. We also believe that ALTU-135 is not absorbed into the body from the gastrointestinal tract.

Planned Phase III Clinical Trial in Cystic Fibrosis Patients

We have met with the FDA to discuss the results of our Phase II clinical trial and our planned Phase III clinical trial for the capsule form of ALTU-135. Based on the results of our Phase II clinical trial and our discussions with the FDA, we have designed our pivotal Phase III clinical trial of ALTU-135 to be a multicenter, randomized, double-blind, placebo-controlled clinical study to determine, as the primary endpoint, the efficacy of ALTU-135 in the treatment of fat malabsorption in cystic fibrosis patients with exocrine pancreatic insufficiency through measurement of CFA. The trial will also include secondary efficacy endpoints, including the evaluation of ALTU-135 in the treatment of protein and carbohydrate absorption through measurement of CNA and use of the starch challenge test and in decreasing the weight and frequency of stools in patients. In the trial, we also plan to evaluate the safety and tolerability of ALTU-135 over an approximate two month dosing period.

Our current protocol is designed to evaluate approximately 150 cystic fibrosis patients over the age of seven with exocrine pancreatic insufficiency at cystic fibrosis centers primarily in the United States and Europe. This sample size is designed to allow demonstration of improvements in CFA in the overall study population, as well as in the subgroups of patients with off-enzyme, baseline CFAs of less than 40% and greater than or equal to 40%. Patients with baseline CFAs of greater than 80% will be excluded from the trial. At the beginning of the trial, we will obtain baseline measurements of fat, protein and carbohydrate absorption during a hospital stay of up to one week. This hospital stay will begin with a period during which the patient will not receive any enzyme replacement therapy. We will then assess fat and protein absorption following a 72-hour, controlled, high-fat diet by examining stools collected from patients. We plan to use a similar high-fat diet and stool collection process as we used in our Phase II trial. The timing of the stool collection as well as the amount of stool collected will be determined using a blue dye stool marker, which facilitates accurate and complete stool collection. Changes in carbohydrate absorption will be determined by measuring blood glucose responses using the starch challenge test.

Once the baseline period is complete, patients will be released from the hospital and placed on open-label therapy with ALTU-135. All of the patients in the trial will take one capsule of ALTU-135 containing

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32,500 units of lipase, 25,000 units of protease and 3,750 units of amylase with each meal or snack for approximately four weeks. The dose of lipase is based on the recent manufacturing and assay work that we performed, which demonstrated that the middle dose in our Phase II clinical trial contained 32,500 units of lipase activity. After this four-week period, patients will return to the hospital for up to one week for a second in-hospital stay. During this hospital stay, patients will be randomized on a one-to-one basis, and stratified based on whether their baseline measurements of CFA place them in the subgroup of patients having absorption of less than 40% or the subgroup of patients having absorption of greater than or equal to 40% but not more than 80% to receive either ALTU-135 or placebo. Fat, protein and carbohydrate absorption will be measured using the same process that was used to establish the baseline level during the first in-hospital stay. A comparison of each patient s measurements during the two in-hospital periods will be performed in the analysis of the endpoints for the trial. After the second in-hospital stay, patients will go on open-label therapy with ALTU-135 for one week to complete the study. The protocol for this trial is not final and may change as a result of our ongoing discussions with the FDA. We expect to initiate the Phase III clinical efficacy trial of the capsule form of ALTU-135 in the second quarter of 2007 and expect to complete the clinical testing in this trial in the second quarter of 2008.

Long-Term Safety Study

We are also planning to initiate a clinical study evaluating the long-term safety of ALTU-135 in the treatment of cystic fibrosis and chronic pancreatitis patients with exocrine pancreatic insufficiency in the second quarter of 2007. This study will evaluate the safety of ALTU-135 following one year of open-label treatment in order to provide the necessary six-month and 12-month exposure data for approval of an NDA. Based on our discussions with the FDA, we expect that the initial NDA filing for ALTU-135 will be required to include 12-month safety data. We plan to enroll approximately 240 patients with pancreatic insufficiency, which will include eligible patients from our Phase III clinical trial of ALTU-135. The safety of ALTU-135 will be evaluated based on adverse events, physical examinations, vital signs and standard clinical laboratory testing during the one-year study period.

ALTU-238 for Growth Hormone Deficiency and Related Disorders

ALTU-238 is a crystallized formulation of hGH that is designed to be administered once weekly through a fine-gauge needle for the treatment of hGH disorders in both pediatric and adult populations. Based on reported revenues of existing products, these indications generated approximately $2.5 billion in worldwide sales of hGH in 2006, and the market grew at a compound annual growth rate of approximately 9.1% from 2002 to 2006. We are developing ALTU-238 as a long-acting, growth hormone product that can allow patients to avoid the inconvenience of daily injections as recommended by current medical guidelines for existing products. We have used our proprietary protein crystallization technology and formulation expertise to develop ALTU-238 without altering the underlying molecule or requiring polymer encapsulation. Since hGH is a known protein molecule with an established record of safety and efficacy, we believe that ALTU-238 may have less development risk than most pharmaceutical product candidates at a similar stage of development.

We have successfully completed two clinical trials of ALTU-238, a Phase I trial in healthy adults and a Phase II trial in growth hormone deficient adults. Both trials were designed to determine the safety, pharmacokinetics and pharmacodynamics of ALTU-238. Pharmacokinetics refers to the process by which a drug is absorbed, distributed, metabolized and eliminated by the body. Pharmacodynamics refers to the process by which a drug exerts its biological effect. In the Phase II trial, ALTU-238 demonstrated a pharmacokinetic and pharmacodynamic profile that we believe is supportive of a once-per-week dosing regimen for growth hormone deficient adults. The study identified doses of ALTU-238 that achieved IGF-1 levels within the normal range for age and gender over the course of the study. IGF-1 is a naturally occurring hormone that stimulates the growth of bone, muscle and other body tissues in response to hGH and, in turn, regulates hGH release from the pituitary gland. The study also indicated that once-per-week dosing of ALTU-238 appeared to result in a consistent, linear dose response of hGH and IGF-1 levels in the blood. ALTU-238

was generally well tolerated, and there were no serious adverse events reported in either study.

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We recently entered into an agreement with Genentech to develop, manufacture and commercialize ALTU-238. The agreement, which became effective on February 21, 2007, provides for an exclusive North American collaboration and license arrangement, which Genentech has the option to expand to a global arrangement. In connection with the North American agreement, we anticipate receiving a $15 million up-front payment in March 2007. Genentech also purchased 794,575 shares of our common stock on February 27, 2007 for an aggregate purchase price of $15 million. We have the potential to receive additional payments of approximately $148 million based upon the achievement of all development and commercialization milestones for North America. If Genentech exercises its option to expand the collaboration globally, we have the potential to receive additional payments of approximately $110 million, comprising an option exercise fee and payments contingent upon the achievement of all development and commercialization milestones relating to countries outside of North America. Genentech will be responsible for all ALTU-238 development and commercialization costs in North America and, if Genentech exercises its option to make this a global agreement, all such costs. We have the option to co-promote ALTU-238 with Genentech in North America. If we elect to exercise this option, Genentech will pay us for our co-promotion efforts for a limited period of time. We will receive royalties based on annual net sales of hGH-related products resulting from the collaboration. Genentech has control over the development and commercialization of ALTU-238.

We expect Genentech to initiate a Phase III clinical trial in growth hormone deficient adults and a Phase II clinical trial and a Phase III clinical trial in pediatric patients. We have agreed to supply ALTU-238 for future clinical trials. We expect that Genentech will supply the hGH that will be used in the manufacture of ALTU-238 for use in these clinical trials following the completion of any necessary preclinical or clinical equivalence testing. Genentech is responsible for the manufacture of ALTU-238 for commercialization.

In the event Genentech does not exercise its option to make the arrangement global, we retain the right to develop and commercialize ALTU-238 outside North America and to enter into collaboration with respect to such activities.

Disease Background, Market Opportunity and Limitations of Existing Products

Growth hormone, which is secreted by the pituitary gland, is the major regulator of growth in the body. Growth hormone directly stimulates the areas of bones known as epiphyseal growth plates, which are responsible for bone elongation and growth. Growth hormone also causes growth indirectly by triggering the release of insulin-like growth factor 1, or IGF-1, from tissues throughout the body. In addition, growth hormone contributes to proper bone density and plays an important role in various metabolic functions, including lipid breakdown, protein synthesis and insulin regulation.

Growth hormone deficiency typically results from an abnormality within the pituitary gland that impairs its ability to produce or secrete growth hormone. A deficiency of growth hormone can result in reduced growth in children and lead to short stature. Because the growth plates in the long bones fuse and additional cartilage and bone growth can no longer occur after puberty, hGH replacement therapy does not cause growth in adults. However, low levels of hGH in adults are also frequently associated with other metabolic disorders, including lipid abnormalities, decreased bone density, obesity, insulin resistance, decreased cardiac performance and decreased muscle mass. These disorders typically become increasingly apparent after a prolonged period of hGH deficiency, as occurs in adulthood.

Patients with growth hormone deficiency are typically treated with growth hormone replacement therapy. Growth hormone is also prescribed for many patients suffering from a range of other diseases or disorders, including pediatric growth hormone deficiency, adult growth hormone deficiency, being small for gestational age and idiopathic short stature in children. According to industry estimates:

- 1 in 3,500 children suffer from growth hormone deficiency;

1 in 10,000 adults suffer from growth hormone deficiency;

between 3% and 10% of births annually are small for gestational age; and

between 2% and 3% of children are affected by idiopathic short stature.

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Growth hormone is also used to treat Turner Syndrome, Prader Willi Syndrome and short bowel syndrome. The percentage of patients for whom hGH is prescribed varies significantly by indication. We believe that a once-weekly formulation of hGH, such as ALTU-238, may result in increased use in a number of these indications.

Currently, many of the FDA-approved hGH products are also in clinical development for additional indications, including Crohn s disease, female infertility, bone regeneration and a variety of other genetic and metabolic disorders. There are currently ten FDA-approved hGH products on the market in the United States from eight manufacturers, all of which use essentially the same underlying hGH molecule. Current medical guidelines for clinical practice generally recommend daily administration of existing products by subcutaneous injection. We believe that the primary differences between these products relate to their formulation and the devices employed for their delivery.

We believe that the burden of frequent injections significantly impacts quality of life for both adults and children being treated with hGH therapy and often leads to reduced compliance or a reluctance to initiate therapy. For example, we estimate that a standard course of treatment for pediatric growth hormone deficient patients typically lasts approximately six years and requires more than 1,800 injections. Faced with this protracted treatment regime, pediatric patients often take days off and miss treatment. For adults with growth hormone deficiency, the benefits of hGH treatment are more subtle and relate to metabolic function and organ health instead of increased height. As a consequence, and in contrast to hGH deficient children, many adults with growth hormone deficiency do not initiate hGH therapy, and of those who do, many fail to continue treatment.

Anticipated Advantages of ALTU-238

We expect that ALTU-238, if approved, will offer patients a more convenient and effective long-term therapy because of the following features:

Convenience of once-weekly dosing. Based on the results of our Phase I and Phase II clinical trials, we believe that ALTU-238 will offer growth hormone deficient patients the convenience of a once-weekly injection. We believe this will improve compliance and thereby increase long-term effectiveness of therapy and potentially expand the market.

Administration with a fine gauge needle. ALTU-238 is designed to provide extended release without changing the chemical structure or using polymers to encapsulate the component hGH molecules. To date, there has not been an hGH therapy approved by the FDA for administration once per week. The only hGH therapy approved by the FDA for administration less frequently than once per week was withdrawn from the market and required polymeric encapsulation for its extended release formulation. This necessitated the use of a substantially larger needle and prolonged injection time. We have designed ALTU-238 using our protein crystallization technology so that, as the crystals dissolve, the hGH is released over an extended period. This allows ALTU-238 to be administered with a 29 or 30 gauge, insulin-like needle.

In addition, we have designed ALTU-238 to be manufactured using well-established equipment and processes consistent with other injectable protein products. We believe this will provide flexibility in the scale-up and commercial production of ALTU-238, if approved.

ALTU-238 Development Activities and Strategy

We have completed a Phase I clinical trial of ALTU-238 in healthy adults and a Phase II clinical trial in adults with growth hormone deficiency. The results of the completed trials are summarized in the tables below. Based on the results of these trials, we expect Genentech to advance ALTU-238 into a Phase III clinical trial in growth hormone

deficient adults and into Phase II and Phase III clinical trials in growth hormone deficient children.

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Phase I Clinical Trial

In our Phase I clinical trial, we evaluated the safety, tolerability and the pharmacokinetic and pharmacodynamic profile of ALTU-238 in healthy adults. The following is a summary of our Phase I clinical trial for ALTU-238:

ALTU-238 Phase I Clinical Trial Summary

Title	A Single Blind, Single Dose, Randomized, Placebo-Controlled, Parallel Group Study of ALTU-238 in Normal Healthy Adults to Determine Pharmacokinetics, Pharmacodynamics and Drug Safety
Design	Forty-five subjects received one of the following treatment regimens: a single injection of ALTU-238 at a dose of 2.8 mg, 8.4 mg or 16.8 mg of hGH, administered to 6 subjects at each dose; a single injection of ALTU-238 at a dose of 24.5 mg of hGH administered to 7 subjects; 7 daily injections of Nutropin AQ, a daily, FDA-approved hGH product, at a dose of 2.4 mg of hGH, administered to 6 subjects; a single injection of Nutropin AQ at a dose of 3.5 mg of hGH, administered to 6 subjects; and a single injection of placebo, administered to 8 subjects.
Administration	Each regimen was administered to patients as a subcutaneous injection.
Safety Results	ALTU-238 was generally well tolerated and easily administered through 29 and 30 gauge needles. There were no serious adverse events reported in the clinical trial, and the percentage of subjects who experienced adverse events was comparable among treatment groups. Subjects across all treatment groups experienced injection site reactions, the most common of which were redness, hardening of the skin and swelling.
Clinical Activity Results	We observed a dose-dependent rise in hGH and IGF-1 concentrations following a single dose of ALTU-238. The pharmacokinetic profile of ALTU-238 at a dose of 16.8 mg indicated that the maximum concentration of hGH in the blood was achieved in approximately 51 hours and was less than the maximum concentration of hGH in the blood from a daily dose of 2.4 mg of Nutropin AQ. The IGF-1 pharmacodynamic profile over a seven-day period after a single injection of ALTU-238 at a dose of 16.8 mg was comparable to that observed with the same aggregate amount of hGH delivered through seven daily injections of Nutropin AQ.

Phase II Clinical Trial

In our Phase II clinical trial, we evaluated ALTU-238 in adults with growth hormone deficiency. The primary objective of the trial was to determine the safety and tolerability of ALTU-238, as well as its pharmacokinetic and pharmacodynamic profile, when administered over a three-week period. The goal of the pharmacokinetic and

pharmacodynamic analyses was to confirm the once weekly dosing profile of ALTU-238 in growth hormone deficient adults. The following is a summary of our Phase II clinical trial:

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ALTU-238 Phase II Clinical Trial Summary

Title	A Phase II, Multi-Center, Multi-Dose, Randomized, Open-Label, Parallel Group Study of Extended Release Crystalline Formulation of Recombinant Human Growth Hormone
Design	Growth hormone deficient men and women between the ages of 16 and 60 were randomized to receive either 5.6 mg of ALTU-238 or 11.2 mg of ALTU-238 administered in three weekly subcutaneous injections. Enrollment for the study was planned for a minimum of 12 patients with a maximum of 20 patients, including at least 4 patients in the 5.6 mg dose group and at least 6 patients in the 11.2 mg dose group. A total of 13 patients were enrolled and analyzed for safety (6 patients in the 5.6 mg group and 7 patients in the 11.2 mg group); and 11 of these patients were analyzed for the pharmacokinetics and pharmacodynamics of ALTU-238 at the end of the first week, and 10 of these patients were analyzed for the pharmacokinetics and pharmacodynamics of ALTU-238 at the end of the third week. The patients who were enrolled but not analyzed were disqualified due to documentation issues.
Administration	For each dose level, three injections of ALTU-238 were administered as subcutaneous injections one week apart.
Safety Results	ALTU-238 was generally well tolerated. There were no serious adverse events, and no patients were discontinued due to an adverse event. The majority of adverse events were considered mild or moderate in severity. There was no apparent dose-related difference between the treatment groups for the overall reporting of adverse events. Mild to moderate injection site reactions were common. We also observed changes in serum insulin and glucose, which were expected following administration of growth hormone.
Clinical Activity Results	ALTU-238, administered through a subcutaneous injection, produced hGH and IGF-1 concentrations in the blood that support a once-per-week dosing regimen. A dose response was observed for both the maximum concentration and the total concentration for hGH and IGF-1 in the blood between the 5.6 mg and 11.2 mg dose levels. As a result, we believe the dose to patients can be adjusted without causing unexpectedly large changes in blood levels of either hGH or IGF-1. In addition, the IGF-1 profiles of the patients were relatively unchanged following three weekly injections, indicating that maximum IGF-1 concentration levels will be maintained in a consistent range following repeated weekly dosing with ALTU-238.

The pharmacokinetic and pharmacodynamic results from the Phase II clinical trial confirmed our view as to the appropriateness of once weekly dosing of ALTU-238 in adults with growth hormone deficiency and we believe that ALTU-238, if approved, can be administered once weekly.

Phase III Clinical Trial

We have met with the FDA and EMEA to discuss the results of our Phase I and II clinical trials, the planned Phase III clinical trial of ALTU-238 in growth hormone deficient adults and our planned Phase II and Phase III clinical trials of

ALTU-238 in pediatric patients.

Our Preclinical Research and Development Programs

We are currently developing a pipeline of preclinical product candidates that are designed to either substitute protein that is in short supply in the body or degrade the toxic metabolites in the gut and remove

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them from the blood stream. We are developing all of these product candidates for oral delivery to address areas of unmet need in gastrointestinal and metabolic disorders, including: an enzyme that degrades oxalate for the treatment of hyperoxalurias; an enzyme that degrades phenylalanine for the treatment of phenylketonuria and an enzyme that degrades urate for the treatment of gout. We believe that our proprietary, crystallized formulations of these product candidates will represent novel or improved therapies for the treatment of these disorders. Our three most advanced preclinical product candidates are described below.

ALTU-237 for Treatment of Hyperoxalurias and Kidney Stones

Our lead preclinical product candidate, ALTU-237, is an orally-administered crystalline formulation of an oxalate-degrading enzyme which we have designed for the treatment of hyperoxalurias including primary hyperoxaluria, enteric hyperoxaluria and kidney stones in individuals with a risk or history of recurrent kidney stones. There are no current effective pharmacological treatments for primary hyperoxaluria, enteric hyperoxaluria or recurrent kidney stones. We plan to file an IND for ALTU-237 for the treatment of hyperoxaluria in the first half of 2007.

Hyperoxalurias are a series of conditions where too much oxalate is present in the body resulting in an increased risk of kidney stones and, in rare instances, crystal formations in other organs. Increased oxalate in the body can result from eating foods that are high in oxalate, over-absorption of oxalate from the intestinal tract, and abnormalities of oxalate production by the body. Oxalate is a natural end-product of metabolism, does not appear to be needed for any human body process and is normally more than 90% excreted by the kidney. Since calcium is also continuously excreted by the kidney into the urine, oxalate can combine with calcium, causing formations of calcium-oxalate crystals which can grow into a kidney stone. In preclinical studies using rodent models, ALTU-237, delivered orally, demonstrated an ability to reduce oxalate levels in urine. We believe that reducing oxalate levels in urine may be indicative of a reduction of oxalate in the body and therefore may result in a decrease in kidney stones.

Over-absorption of oxalate from the intestinal tract, or enteric hyperoxaluria, is often associated with intestinal diseases such as inflammatory bowel disease and cystic fibrosis, or may occur in patients following gastric surgery. Primary hyperoxaluria is a rare, inherited and, if left untreated, fatal metabolic disease that results in the accumulation of oxalate in the body. Although there are variations in the disease, primary hyperoxaluria is characterized by the shortage of an enzyme in the liver, which results in excess levels of oxalate production in the body. Unfortunately, oxalate cannot be further metabolized, and it can only be eliminated from the body by the kidney, leading to an increase in urinary excretion, and causing hyperoxaluria. Based on prevalence data from an industry article, we estimate that between 1-in-60,000 and 1-in-120,000 children in North America and Europe are born with primary hyperoxaluria.

According to the National Kidney Foundation, kidney stone disease is a common disorder of the urinary tract affecting approximately 20 million Americans. According to Disease Management, between 70% and 75% of kidney stones are composed of calcium oxalate crystals and up to 50% of patients who do not follow recommended guidelines will suffer from a repeated kidney stone incident within five years of their initial incident. According to the National Kidney and Urologic Diseases Information Clearinghouse, in 2000, kidney stones led to approximately 600,000 emergency room visits.

Preclinical Results

In a series of preclinical studies using rodent models, ALTU-237, delivered orally, demonstrated an ability to reduce oxalate levels in urine. One such study was designed to measure the impact of ALTU-237 on the reduction of hyperoxaluria in a genetic mouse model for primary hyperoxaluria. In this study, the mice were further challenged with ethylene glycol to mimic the human disease, which involves nephrocalcinosis, renal failure and potentially death.

The four week study included forty-four mice that received one of the following treatment regimens:

5 mg, 25 mg, or 80 mg of ALTU-237 was orally administered to 11 mice at each dose

11 mice received no treatment and served as a control group

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In the study, ALTU-237 therapy resulted in a sustained reduction of urinary oxalate levels as evidenced by a reduction in urinary oxalate of 30 to 50 percent in all treatment groups as compared to the control group. In addition, a reduction in nephrocalcinosis and an increase in survival rate was observed in mice in the two lower dose groups and there was no nephrocalcinosis, renal failure or death in any mouse in the high dose group.

Based in part on these results, we believe ALTU-237 could be the first effective oral therapeutic agent specifically designed to reduce oxalate levels and prevent the formation of kidney stones. Furthermore, we believe that these results suggest that we may be able to use our proprietary protein crystallization technology to orally deliver enzymes to the gastrointestinal tract, where they can exert a therapeutic effect by drawing out toxic metabolites from the body. This therapeutic approach is currently utilized by some existing drugs. For example, Renagel, marketed by Genzyme Corporation, removes excess levels of phosphate in the body in patients with chronic kidney disease by delivering drug to the gastrointestinal tract, where it binds to the phosphate and removes it from the body. If we are successful in our design of ALTU-237, we believe that this program will provide a template for our other research and preclinical programs that rely on the same fundamental science and mechanism of action.

ALTU-236 for Treatment of Hyperphenylalanemia

We are also developing ALTU-236, an orally-administered enzyme replacement therapy designed to reduce the long-term effects associated with excess levels of phenylalanine, also known as hyperphenylalanemia. According to the National Institutes of Health, phenylketonuria, or PKU, which is the most severe form of hyperphenylalanemia, affects approximately 1-in-15,000 newborns in the United States. PKU is a rare, inherited, metabolic disorder that results from an enzyme deficiency that causes the accumulation of the amino acid phenylalanine in the body. If left untreated, PKU can result in mental retardation, swelling of the brain, delayed speech, seizures and behavior abnormalities. Virtually all newborns in the United States and in many other countries are screened prior to leaving the hospital for PKU. PKU and hyperphenylalanemia are currently treated by placing patients on a phenylalanine restricted diet. This diet is expensive and difficult to maintain and does not avoid many of the long-term effects of PKU. There are currently no approved drugs to treat PKU. We are currently testing ALTU-236 in animal models.

ALTU-242 for Treatment of Gout

We are also developing ALTU-242, an orally-administered enzyme designed to reduce the long-term effects associated with excess levels of urate, the cause of gout. Excess levels of urate can precipitate and form crystals in joints causing a painful erosive arthritis commonly referred to as gout. Gout is a common disorder that affects at least 1% of the population in Western countries and is the most common inflammatory joint disease in men older than 40 years of age. We intend to begin testing ALTU-242 in animal models in 2007.

Our Protein Crystallization Technology and Approach

Historically, scientists have crystallized proteins primarily for use in x-ray crystallography to examine the structure of proteins in small batches. In contrast, we are using our technology to crystallize proteins in significantly larger amounts for use as therapeutic drugs. This requires the crystallization process to be both reproducible and scalable, and our technology is designed to enable large scale crystallization with batch-to-batch consistency.

Crystallized proteins are more stable, pure and concentrated than proteins in solution. For example, one protein crystal may contain several billion molecules of the underlying protein. We believe that these characteristics will enable improved storage and delivery, permitting delivery of the protein molecules with fewer capsules or smaller injection volumes.

Once a protein is in the crystallized state, we formulate it for either oral or injectable delivery. For our product candidates that will be delivered orally, we use our crystallization technology to deliver proteins to the gastrointestinal tract, where they can exert their therapeutic effect locally. In situations where we need to

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confer a higher level of stability to a protein, such as in the lipase component of ALTU-135, we cross-link protein molecules in crystals together using multi-functional cross-linking agents. For our product candidates that are injected, we use our crystallization technology to develop highly concentrated and stable proteins that can be formulated for extended release.

Our approach to developing therapeutic product candidates using crystallized proteins is comprised of the following general elements:

Establish initial crystallization conditions. Once we choose a target protein, we rapidly screen hundreds of crystallization conditions both manually and using robotics. We define the conditions under which a soluble protein could crystallize, including protein concentration, pH and temperature of crystallization.

Identify key crystallization conditions and initial crystallization scale up. After we identify the initial conditions, we focus on the critical crystallization conditions to define a robust and reproducible crystallization process. We then scale the process from single drops, to microliter scale, to milliliter scale, and finally, to liter scale.

Select crystallization process and crystal. If there is more than one successful crystallization process and resulting crystals, we use our target product profile to choose the best protein crystal for the given application based on crystal size, shape and other characteristics.

We apply our proprietary protein crystallization technology to existing, well-understood proteins in the development of our product candidates. We believe our technology is broadly applicable to all classes of proteins, including enzymes, hormones, antibodies, cytokines and peptides. To date, we have crystallized more than 70 proteins for evaluation in our product candidates and preclinical research and development programs.

Collaborations

Cystic Fibrosis Foundation Therapeutics, Inc.

In February 2001, we entered into a strategic alliance agreement with CFFTI, an affiliate of the Cystic Fibrosis Foundation. Under this agreement, which was amended in 2001 and 2003, we and CFFTI have agreed to collaborate for the development of ALTU-135 and specified derivatives of ALTU-135 in North America for the treatment of malabsorption due to exocrine pancreatic insufficiency in patients with cystic fibrosis and other indications. The agreement, in general terms, provides us with funding from CFFTI for a portion of the development costs of ALTU-135 upon the achievement of specified development and regulatory milestones, up to a total of $25.0 million, in return for specified payment obligations described below and our obligation to use commercially reasonable efforts to develop and bring ALTU-135 to market in North America for the treatment of malabsorption due to exocrine pancreatic insufficiency in patients with cystic fibrosis and other indications. CFFTI has also agreed to provide us with reasonable access to its network of medical providers, patients, researchers and others involved in the care and treatment of cystic fibrosis patients, and to use reasonable efforts to promote the involvement of these parties in the development of ALTU-135. In connection with the agreement, we also issued CFFTI warrants to purchase a total of 261,664 shares of common stock at an exercise price of $0.02 per share. We believe that our relationship with the Cystic Fibrosis Foundation will help facilitate our development of ALTU-135.

As of December 31, 2006, we had received a total of $18.4 million of the $25.0 million available under the agreement. In addition, we may receive an additional milestone payment of $6.6 million, less an amount determined by when we achieve the milestone. The alliance is managed by a steering committee, comprised of an equal number of representatives from us and CFFTI, which generally oversees the progress of our clinical development of ALTU-135

and reviews the schedule and achievement of milestones under our agreement.

Under the terms of the agreement, we granted CFFTI an exclusive license under our intellectual property rights covering ALTU-135 and specified derivatives for use in all applications and indications in North America, and CFFTI granted us back an exclusive sublicense of the same scope, including the right to grant further sublicenses. Our exclusive license to CFFTI continues in effect until the earliest to occur of our

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payment in full of all license fees due under the agreement, as described below; our termination of the agreement on account of a material default or bankruptcy of CFFTI; the parties mutual agreement not to proceed with development following a deadlock of the alliance steering committee; or the alliance steering committee s determination that ALTU-135 is not safe or effective for the treatment of exocrine pancreatic insufficiency; or, solely due to scientific or medical reasons, that ALTU-135 should not be developed or marketed.

Our exclusive sublicense from CFFTI continues in effect until our license to CFFTI terminates or CFFTI terminates the agreement on account of our failure to meet specified milestones, our determination not to continue development after an unresolved deadlock of the alliance steering committee, or our material default or bankruptcy. If CFFTI terminates the agreement due to our breach, it would retain its exclusive license to ALTU-135 and our sublicense from CFFTI would terminate. Upon termination of the agreement by us due to a breach by CFFTI, the license granted to CFFTI by us to ALTU-135 will terminate.

If ALTU-135 is approved by the FDA, we are obligated to pay CFFTI a license fee equal to the aggregate amount of milestone payments we have received from CFFTI, plus interest, up to a maximum of $40.0 million, less the fair market value at the time of approval of the shares of stock underlying the warrants we issued to CFFTI. This fee, together with accrued interest, will be due in four annual installments, commencing 30 days after the approval date. We are required to pay an additional $1.5 million to CFFTI within 30 days after the approval date. In addition, we are obligated to pay royalties to CFFTI on worldwide net sales by us or our sublicensees of ALTU-135 for any and all indications until the expiration of specified United States patents covering ALTU-135. We have the option to terminate our ongoing royalty obligation by making a one-time payment to CFFTI, but we currently do not expect to do so. We are also required to pursue, prosecute, maintain and defend all patents covered by the agreement at our own expense.

Dr. Falk Pharma GmbH

In December 2002, we entered into a development, commercialization and marketing agreement with Dr. Falk for the development by us of ALTU-135 and the commercialization by Dr. Falk of ALTU-135, if approved, in Europe, the countries of the former Soviet Union, Israel and Egypt. Under the agreement, we granted Dr. Falk an exclusive, sublicensable license under specified patents that cover ALTU-135 to commercialize ALTU-135 for the treatment of symptoms caused by exocrine pancreatic insufficiency.

As of December 31, 2006, we had received upfront and milestone payments from Dr. Falk under the agreement totaling 11.0 million, which was $12.9 million based on exchange rates in effect at the time we received the milestone payments. In addition, we may receive from Dr. Falk an additional 15.0, which was $19.8 million based on exchange rates at December 31, 2006, in milestone payments based on the achievement of specified clinical and regulatory milestones. We are also eligible to receive royalties on net sales of ALTU-135 by Dr. Falk and its affiliates during the term of the license, as described below.

Under the terms of the agreement, each party is responsible for using commercially reasonable efforts to perform specified responsibilities relating to the development of ALTU-135, and Dr. Falk is responsible for using commercially reasonable efforts to obtain regulatory approvals and to commercialize ALTU-135 in the licensed territory. The agreement contemplates that, under the direction of a steering committee consisting of an equal number of representatives from us and Dr. Falk, we will conduct specified clinical trials, including an international Phase III clinical trial, required to support applications for regulatory approvals of ALTU-135 in the licensed territory. Dr. Falk has agreed to pay a portion of the development expenses, including costs relating to the process of obtaining regulatory approval, project management costs, statistical design and studies, and preparation of reports, that we incur in connection with the conduct of an international Phase III clinical trial. Expenses relating to other clinical trials conducted for the purpose of obtaining regulatory approvals in the licensed territory will be borne entirely by Dr. Falk.

The collaboration is coordinated through the steering committee. We maintain ultimate decision-making authority with respect to clinical development matters, subject to an obligation to exercise our decision-making authority in a manner that is consistent with the objective of managing an effective and efficient international Phase III clinical trial that satisfies the development, regulatory and commercialization requirements of the

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North American territory and the licensed territory and leveraging clinical development activities in both territories. Based on our interactions with the FDA and EMEA, we believe that there may be different requirements relating to the design of a Phase III efficacy trial for ALTU-135 in the United States and Europe. We are discussing with Dr. Falk an alternate strategy for the Phase III clinical development of ALTU-135 in the European Union. Dr. Falk has responsibility for and control of commercialization matters in the licensed territory.

Under the agreement, we are responsible for supplying such quantities of ALTU-135 as may be required for the conduct of clinical trials, subject to the development expense allocation provisions of the agreement. We are also responsible for establishing a commercial scale manufacturing process for ALTU-135, for sourcing ALTU-135 from contract manufacturers, for ensuring that a second source supplier exists and, if Dr. Falk elects to purchase its requirements for commercial supply from us, for supplying Dr. Falk s requirements of ALTU-135 for commercial sale in the licensed territory. If Dr. Falk elects to purchase its requirements of ALTU-135 from us, which we expect it to do because we have not granted Dr. Falk a license to manufacture ALTU-135, the price at which Dr. Falk will purchase its requirements will equal the greater of a fixed percentage of specified Dr. Falk resale prices and our fully burdened manufacturing costs, and the other terms and conditions of supply will be governed by a commercial supply and distribution agreement to be negotiated by the parties. If our fully burdened manufacturing costs exceed the fixed percentage of the specified Dr. Falk resale prices, Dr. Falk is entitled to offset the excess against royalties due us up to a specified maximum offset amount.

Under the terms of the agreement, the license to Dr. Falk will continue in each country in the licensed territory until the later of the expiration of the last-to-expire of specified patents that cover ALTU-135 in that country or 12 years from the date of first commercial sale of ALTU-135 in that country. The current patents and the pending patent applications, if issued as patents, relating to ALTU-135 that are relevant to our agreement with Dr. Falk will expire between 2011 and 2025, excluding any extensions that we may receive. The agreement may be terminated by Dr. Falk for convenience by providing written notice to us within 30 days after Dr. Falk s receipt of the final report for the Phase III clinical trial of ALTU-135. In addition, subject to specified conditions, Dr. Falk may terminate the agreement if the manufacture, use or sale of ALTU-135 in the licensed territory is enjoined due to infringement of third-party patent rights or if a clinical hold with respect to ALTU-135 is imposed in a specified country. Either party may terminate the agreement upon the commitment of an uncured material breach by the other party or upon the occurrence of specified bankruptcy or insolvency events involving the other party. Upon termination of the agreement by Dr. Falk due to a material breach by us, Dr. Falk will retain the license to ALTU-135 at a reduced royalty and have no further obligation to pay additional milestone payments. Upon termination of the agreement by us due to a material breach by Dr. Falk, the license granted to Dr. Falk to ALTU-135 will terminate.

Genentech, Inc.

In December 2006, we entered into a collaboration and license agreement with Genentech, which became effective on February 21, 2007, relating to the development, manufacture and commercialization of ALTU-238 and other pharmaceutical products containing crystallized human growth hormone using our proprietary technology. The collaboration and license agreement currently covers development and commercialization rights in North America. Genentech has an option to extend the collaboration globally by providing notice to us within a specified timeframe.

In consideration of the rights granted to Genentech under the agreement, Genentech agreed to pay us an amount equal to $15 million within 30 days after the effectiveness of the agreement. In connection with the agreement, Genentech also purchased 794,575 shares of our common stock on February 27, 2007 for an aggregate purchase price of $15 million. We have the potential to receive additional payments of approximately $148 million based upon the achievement of all development and commercialization milestones. We are entitled to receive royalties based on annual net sales of specified products resulting from the collaboration. We have the option to co-promote products with Genentech in North America. If we exercise this option, Genentech will pay us for our co-promotion efforts for a

limited period of time. Genentech agreed to pay on-going development, manufacturing, regulatory and commercialization costs relating to the products for

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commercialization in North America, and, in the event that Genentech exercises its option to expand the agreement globally, such costs for commercialization in the rest of the world.

If Genentech exercises its option to extend the collaboration outside North America, we would have the potential to receive additional payments of approximately $110 million, comprising an option exercise fee and payments based upon the achievement of all development and commercialization milestones relating to countries outside of North America. In such event, Genentech has agreed to make royalty payments based on any annual net sales of products resulting from the collaboration outside of North America.

If Genentech does not exercise its option to extend the collaboration to countries outside North America, we will retain rights to develop, manufacture and commercialize products outside of North America. In that event, subject to our material compliance with our obligations under the agreement, Genentech has agreed to make available to us for development and commercialization of collaboration products outside of North America both clinical and other data in exchange for a payment by us equal to a percentage of development costs and to supply hGH for a specified period of time on terms to be agreed.

We and Genentech will jointly own any intellectual property which we, alone or with Genentech, develop in the course of work on the collaboration. Genentech has granted us a non-exclusive license under specified technology developed pursuant to the collaboration, to make and sell any product, other than the products on which we are collaborating with Genentech. We are obligated to pay Genentech royalties based on annual net sales of any such products.

Genentech has the exclusive right to develop and commercialize hGH products utilizing our technology and has a right of first negotiation, and, if we and Genentech cannot agree on terms within a specified period of time, a right of first refusal, with respect to licensing some of our crystallization technology relating to hGH and not otherwise licensed to Genentech under the agreement. Genentech has agreed not to take specified steps towards the development or sale of competing hGH products for a specified period of time.

The development and commercialization activities under the collaboration are overseen by a steering committee comprised of members of both companies. In the event of any disagreement, however, Genentech has the ultimate decision-making authority. Genentech also has control over the development and commercialization of the licensed products.

We have agreed to supply ALTU-238 for use in clinical trials. We expect that Genentech will supply the hGH that will be used in the manufacture of ALTU-238 for use in clinical trials, following the completion of any necessary preclinical or clinical equivalence testing. Genentech has agreed to be responsible for the manufacture of ALTU-238 for commercialization.

The agreement will expire when all royalty obligations end on a country-by-country and product-by-product basis. The royalty obligations with respect to each product run for the longer of ten years following the first commercial sale of such product or the life of specified patent rights. Genentech may terminate the agreement with or without cause on 180 days notice or on shorter notice following the occurrence of specified regulatory events or events relating to our insolvency. Genentech may also terminate the agreement following an acquisition of us by a third party. In that event, Genentech s obligations to pay royalties and the other material financial provisions of the agreement would continue. Either party may terminate the agreement in the event of the other party s uncured material default, as defined in the agreement. In the event that Genentech terminates the agreement due to some types of breaches by us, Genentech may retain the licenses we have granted, subject to the payment of royalties to us, and Genentech may be entitled in specified circumstances to credit milestones against future royalties otherwise payable to us. If we terminate the agreement due to certain breaches by Genentech, or if Genentech terminates the agreement for convenience,

Genentech has agreed to provide us with certain rights and information to support the continued development and commercialization of products by us subject to the payment of royalties to Genentech.

Manufacturing

We do not own or operate manufacturing facilities for the production of clinical or commercial quantities of any of our product candidates. We currently have no plans to build our own clinical- or commercial-scale

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manufacturing capabilities, and we expect for the foreseeable future to rely on contract manufacturers for both clinical and commercial supplies of our products. Although we rely on contract manufacturers, we have personnel with manufacturing experience to oversee the relationships with our contract manufacturers.

Amano

Amano Enzyme, Inc., or Amano, manufactures our clinical supplies of the crystallized and cross-linked lipase, the crystallized protease, and the amylase enzymes that comprise the active pharmaceutical ingredients, or APIs, for ALTU-135. We entered into a five-year cooperative development agreement with Amano in November 2002, which was amended in October 2005, to collaborate on process development and scale-up of API production for ALTU-135. Amano has built a plant near Nagoya, Japan to produce the enzymes for ALTU-135 in large-scale batches using microbial fermentation. The plant has not been inspected or approved by the FDA, EMEA or the Japanese Ministry of Health, Labour and Welfare. Under our agreement, Amano has supplied the APIs for ALTU-135 for our non-clinical and clinical trials to date and has agreed to supply us with APIs for our Phase III clinical trial and additional toxicology studies at a specified transfer price. Under our agreement, Amano may not sell to other parties the APIs for ALTU-135 for use in specified competitive products. We use a third party, Patheon Inc., to perform fill, finish and packaging services for ALTU-135.

Under the terms of the agreement with Amano, each party has contributed technology used for the production of the APIs in ALTU-135. Each party owns intellectual property created solely by it, and jointly owns any intellectual property created jointly. Pursuant to our agreement, Amano has notified us that it will not be the primary manufacturer of the APIs for the initial commercial supply of ALTU-135. We expect to negotiate a new agreement with Amano that governs the commercial supply of some of the APIs for ALTU-135. Amano will be required to grant licenses of its technology to other contract manufacturers which we mutually select, and we will be required to pay Amano a royalty based on the cost of the materials supplied to us by such other contract manufacturers. We are obligated under our agreement with Amano to use best efforts to develop and commercialize ALTU-135. In connection with our entry into the agreement with Lonza described below, Amano has agreed to transfer technology relating to ALTU-135 to Lonza.

Our agreement with Amano expires in November 2007, unless mutually extended by the parties. The agreement may be terminated by either party upon an uncured material breach by the other party or upon specified bankruptcy or insolvency events involving the other party. In addition, either party may terminate the agreement without cause on one year s written notice to the other party. If the agreement terminates for any reason, our licenses under the agreement survive forever and, in the case of a termination for our material breach or a termination by us for reasons other than Amano s material breach, we must pay Amano royalties on worldwide sales of ALTU-135.

Lonza

In November 2006, we entered into a six year manufacturing and supply agreement with Lonza for the manufacturing and supply of commercial quantities of the crystallized and cross-linked lipase, the crystallized protease and the amylase enzymes that comprise the APIs for ALTU-135. This agreement provides for the transfer of manufacturing technology to Lonza, the installation of specialized manufacturing equipment for the manufacturing process, the validation of the manufacturing facility, and the supply of these enzymes for commercial purposes. We plan to continue to use a third party to perform fill, finish and packaging services for the commercial supply of ALTU-135.

Under the agreement, Lonza has agreed to manufacture the APIs in accordance with defined specifications and applicable cGMP and international regulatory requirements. Subject to customary notice, reservation and forecasting procedures, Lonza has agreed to reserve capacity at its facility for supply of the APIs that we believe will meet our needs for APIs for use in the commercial launch of ALTU-135. We must provide binding purchase orders to Lonza annually, and we have committed to purchase a specified number of batches, and a specified percentage of our

requirements, from Lonza during specified periods. However, if Lonza is unable to meet specified production and delivery requirements, we have the right to reduce payments or engage third-party suppliers, depending on the extent of the shortfall. If Lonza builds or acquires more

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capacity that is appropriate for the manufacture of the APIs, we agreed to use commercially reasonable efforts to purchase additional batches of the APIs from Lonza.

The agreement is subject to automatic renewal at the expiration of its six year term for successive two year terms unless we provide Lonza with notice prior to expiration of each term of our decision to terminate. Each party has the right to terminate the agreement upon the occurrence of an uncured material breach or the bankruptcy of the other party. We have the right to terminate the agreement in the event that we cease development or commercialization of ALTU-135 due to toxicity, efficacy or other technical or business considerations, in which case we must make a payment to Lonza if we have not already purchased from Lonza a specified value of APIs. Lonza has the right to terminate the agreement in the event that we do not order a defined quantity of enzymes for delivery from the capacity reserved for us by Lonza for the production of ALTU-135. Lonza also has the right to terminate the agreement if we fail to arrange for the delivery of certain materials and technology that are necessary for Lonza to manufacture the enzymes in accordance with the specifications for production.

ALTU-238

To date, we have purchased hGH from Sandoz GmbH, or Sandoz, a subsidiary of Novartis AG. However, under our collaboration and license agreement with Genentech, Genentech agreed to supply the hGH for the continued development and commercialization of ALTU-238.

In our agreement with Genentech, we are initially responsible for the manufacture and supply of clinical quantities of ALTU-238 using hGH supplied by Genentech until Genentech determines otherwise. We have completed small-scale cGMP runs of ALTU-238 at a contract manufacturer for our completed Phase I and II clinical trials. However, we will need to produce ALTU-238 for our future clinical trials at a larger scale. To do so, we entered into a drug production and clinical supply agreement with Althea Technologies, Inc., or Althea, in August 2006. Under this agreement, Althea has agreed to modify an existing production facility, and test and validate its manufacturing operations for the production of ALTU-238. The agreement terminates following the production of a defined number of manufacturing runs of ALTU-238, from which we intend to supply planned clinical trials. The agreement is subject to early termination by either party in the event of an uncured material breach by or bankruptcy of the other party. Althea s liability to us for any breach of the agreement is limited to an obligation to replace those products which do not conform to requirements.

In addition, we and Althea have agreed to negotiate an agreement under which Althea will provide ALTU-238 for commercial supply. If, within one year after the termination or expiration of the agreement, other than a termination due to Althea s uncured material breach, we enter into an agreement with a third party to provide commercial supply of ALTU-238, we must make a one-time payment to Althea.

Sales and Marketing

If we receive regulatory approval for any of our product candidates, we plan to commence commercialization activities by building a focused sales and marketing organization. Our sales and marketing strategy is to:

Build our own North American sales force. We plan to establish a commercial infrastructure and targeted specialty sales force to market our product candidates in North America. Our sales efforts for ALTU-135, if approved, will initially be focused on the 500 pediatric pulmonologists who are in approximately 100 cystic fibrosis care centers throughout the United States, as well as the 5,000 key gastroenterologists and pancreatologists who prescribe products for exocrine pancreatic insufficiency. For ALTU-238, we may exercise our option to co-promote ALTU-238 in North America, in which case we would initially focus on the approximately 400 key prescribing pediatric endocrinologists and approximately 3,000 adult endocrinologists

who treat patients with growth hormone deficiency. Because the target groups for ALTU-238 are primarily hospital-based and concentrated in major metropolitan areas, we believe that the market for ALTU-238 can be addressed with a specialized sales force that targets these key prescribers. We also plan to leverage our sales and marketing capabilities by targeting the same groups of physician specialists with multiple products that we bring to market either through our own development efforts or by in-licensing from others.

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Assemble a commercial organization. We plan to continue to build a marketing, managed care and sales management organization to create and implement marketing strategies for ALTU-135, ALTU-238 and other product candidates in our product pipeline. We expect that our marketing organization will oversee any products that we market through our own sales force and oversee and support our sales and reimbursement efforts. The responsibilities of the marketing organization will include developing educational initiatives with respect to approved products and establishing appropriate product messaging according to the product label. We also plan to conduct post-approval marketing studies for our products to provide further data on the safety and efficacy. As we develop our pipeline products, we will evaluate whether to expand our marketing and sales efforts.

Selectively establish collaborations for our product candidates with leading pharmaceutical and biotechnology companies. Subject to our existing collaborations, we may enter into additional collaborations in markets outside of North America for our product candidates, where we believe that having a partner will enable us to gain better access to those markets. In addition, we may co-commercialize our product candidates in North America with pharmaceutical and biotechnology companies to achieve a variety of business objectives, including expanding the market or accelerating penetration. We may also collaborate with such companies to accelerate the development of selected early-stage product candidates.

Competition

Our major competitors are pharmaceutical and biotechnology companies in the United States and abroad that are actively engaged in the discovery, development and commercialization of products to treat gastrointestinal and metabolic disorders. Any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future.

Many of the entities developing and marketing potentially competing products may have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing than we do. These entities also compete with us in recruiting and retaining qualified scientific and management personnel, as well as in acquiring technologies complementary to our programs.

Our commercial opportunity will be reduced or eliminated if our competitors develop and commercialize products that are more effective, have fewer side effects, are more convenient or are less expensive than any products that we may develop. In addition, our ability to compete may be affected because in some cases insurers and other third-party payors seek to encourage the use of generic products. This may have the effect of making branded products less attractive, from a cost perspective, to buyers.

If our two clinical-stage product candidates are approved, they will compete with currently marketed drugs and potentially with drug candidates currently in development for the same indications, including the following:

ALTU-135. If approved, ALTU-135, the product candidate we are developing for the treatment of malabsorption due to exocrine pancreatic insufficiency, will compete with currently marketed porcine-derived pancreatic enzyme replacement therapies from Axcan Pharma, Johnson & Johnson, and Solvay Pharmaceuticals, as well as from generic drug manufacturers such as KV Pharmaceutical and IMPAX Laboratories. In April 2004, the FDA issued a notice that manufacturers of existing pancreatic enzyme replacement products will be subject to regulatory action if they do not obtain approved NDAs for these products by April 28, 2008. We believe that some of the manufacturers of these products may not be able to satisfy the FDA s requirements for NDAs. In addition, we understand that Biovitrum, Eurand and Meristem

Therapeutics have product candidates in clinical development that could compete with ALTU-135. However, the product candidates from Biovitrum and Meristem contain only lipase and we believe that the product candidate from Eurand is porcine-derived.

ALTU-238. If approved, ALTU-238, the product candidate we are developing as a once-weekly treatment for hGH deficiency and related disorders, will compete with approved hGH therapies from

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companies such as BioPartners, Eli Lilly, Genentech, Novo Nordisk, Pfizer, Sandoz, Serono and Teva Pharmaceutical Industries. In addition, we understand that ALTU-238 may compete with product candidates in clinical development from some of these companies and from others, including LG Life Sciences, which is developing a long-acting hGH therapy based on an encapsulated microparticle technology.

ALTU-237. If approved, ALTU-237, the product candidate we are developing for the treatment of hyperoxalurias, may compete with products in development at companies such as Amsterdam Molecular Therapeutics, Medix, NephroGenex, and OxThera.

Key differentiating elements affecting the success of all of our product candidates are likely to be their convenience of use and efficacy and safety profile compared to other therapies.

Intellectual Property

We actively seek patent protection for the proprietary technology that we consider important to our business, including compounds, compositions and formulations, their methods of use and processes for their manufacture. In addition to seeking patent protection in the United States, we generally file patent applications in Canada, Europe, Japan and additional countries on a selective basis in order to further protect the inventions that we consider important to the development of our business worldwide. We also rely on trade secrets, know-how, continuing technological innovation and in-licensing opportunities to develop and maintain our proprietary position. Our success depends in part on our ability to obtain and maintain proprietary protection for our product candidates, technology and know-how, to operate without infringing the proprietary rights of others, and to prevent others from infringing our proprietary rights.

Our patent portfolio includes patents and patent applications with claims relating to protein crystals, both cross-linked and non-cross-linked, as well as compositions of specific protein crystals, such as lipase and hGH, and methods of making and using these compositions. In addition, we currently have patent applications relating to compositions and formulations containing both cross-linked and non-cross-linked protein crystals and patent applications relating to some of our later stage pipeline products that are not yet in clinical trials.

As of December 31, 2006, our patent estate on a worldwide basis includes 13 patents issued in the United States, 33 issued in current member states of the European Patent Convention and 21 issued in other countries, many of which are foreign counterparts of our United States patents, as well as more than 100 pending patent applications, with claims covering all of our product candidates.

Four of our issued United States patents, expiring between 2014 and 2016, relate to ALTU-135 and have claims covering cross-linked protein crystals, cross-linked enzyme crystals and methods of using those crystals in enzyme and oral protein therapy. We also have five pending United States patent applications relating to ALTU-135, which if issued as patents, would expire between 2017 and 2025. Some of these applications include claims covering a combination of lipase, protease and amylase in specific formulations and methods of treatment using these formulations. We also have 43 issued foreign patents, expiring between 2011 and 2021, relating to ALTU-135 and pending foreign patent applications, which if issued as patents, would expire between 2011 and 2025.

We have five pending United States patent applications relating to ALTU-238, which if issued as patents, would expire between 2019 and 2027, and include claims relating to hGH crystals with an extended release profile and methods of treating hGH deficiency associated disorders using such hGH crystals. We also have pending foreign patent applications relating to ALTU-238, which if issued as patents, would expire between 2019 and 2027.

Four of our United States patents, which have claims covering cross-linked protein or enzyme crystals and methods of using those crystals in enzyme and oral protein therapy, also relate to ALTU-237. These patents expire between 2014 and 2016. Additionally, we have three pending United States patent applications relating to ALTU-237, which if issued as patents, would expire between 2026 and 2027. Some of these applications include claims covering specific oxalate degrading enzyme formulations, methods of making formulations, and methods of treatment using these formulations.

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Our patent estate includes patent applications relating to some of our other product candidates. These patent applications, assuming they issue as patents, would expire between 2017 and 2024. We also have nine other issued United States patents and various foreign counterparts that relate to cross-linked protein crystal biosensors, methods of using cross-linked crystals of thermolysin as a catalyst, specific methods of making cross-linked crystals with controlled dissolution properties, stabilized protein crystals, protein crystal formulations as catalysts in organic solvents and cross-linked glycoprotein crystals.

We hold an exclusive, royalty-free, fully-paid license from Vertex to patents relating to cross-linked enzyme crystals, including the four issued United States patents relating to ALTU-135 and ALTU-237 and two other issued United States patents relating to biosensors and thermolysin, as well as to a number of corresponding foreign patents and patent applications and know-how, including improvements developed by Vertex or its collaborators through February 2004. Under this license, Vertex retains non-exclusive rights to use the licensed Vertex patents and know-how to develop and commercialize small molecule drugs for human or animal therapeutic uses. We also granted to Vertex a non-exclusive, royalty-free, fully-paid license, under our patents and know-how with respect to cross-linked protein crystals that we have acquired, developed or licensed through February 2004, for Vertex s use in small molecule drug development and commercialization for human or animal therapeutic uses. The licenses with respect to patents, unless otherwise terminated earlier for cause, terminate on a country-by-country basis upon the expiration of each patent covered by the license.

We also have rights to specified technology developed by Amano under our cooperative development agreement with Amano, as described above under the section entitled Manufacturing.

Individual patents extend for varying periods depending on the effective date of filing of the patent application or the date of patent issuance, and the legal term of the patents in the countries in which they are obtained. Generally, patents issued in the United States are effective for:

the longer of 17 years from the issue date or 20 years from the earliest effective filing date, if the patent application was filed prior to June 8, 1995; and

20 years from the earliest effective filing date, if the patent application was filed on or after June 8, 1995.

The term of foreign patents varies in accordance with provisions of applicable local law, but typically is 20 years from the earliest effective filing date. In addition, in some instances, a patent term in the United States and outside of the United States can be extended to recapture a portion of the term effectively lost as a result of the health authority regulatory review period. These extensions, which may be as long as five years, are directed to the approved product and its approved indications. We intend to seek such extensions as appropriate.

The patent positions of companies like ours are generally uncertain and involve complex legal and factual questions. Our ability to maintain and solidify our proprietary position for our technology will depend on our success in obtaining effective claims and enforcing those claims once granted. We do not know whether any of our patent applications or those patent applications that are licensed to us will result in the issuance of any patents or if issued will assist our business. Our issued patents and those that may issue in the future, or those licensed to us, may be challenged, invalidated or circumvented. This could limit our ability to stop competitors from marketing related products and reduce the length of term of patent protection that we may have for our products. In addition, the rights granted under any of our issued patents may not provide us with proprietary protection or competitive advantages against competitors with similar technology. Our competitors may develop similar technologies, duplicate any technology developed by us, or use their patent rights to block us from taking the full advantage of the market. Because of the extensive time required for development, testing and regulatory review of a potential product, it is

possible that a related patent may remain in force for a short period following commercialization, thereby reducing the advantage of the patent to our business and products.

In addition to patents, we may rely, in some circumstances, on trade secrets to protect our technology. However, trade secrets are difficult to protect. We seek to protect the trade secrets in our proprietary technology and processes, in part, by entering into confidentiality agreements with commercial partners,

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collaborators, employees, consultants, scientific advisors and other contractors and into invention assignment agreements with our employees and some of our commercial partners and consultants. These agreements are designed to protect our proprietary information and, in the case of the invention assignment agreements, to grant us ownership of the technologies that are developed. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors.

Many of our employees, consultants and contractors have worked for others in the biotechnology or pharmaceutical industries. We try to ensure that, in their work for us, they do not use the proprietary information or know-how of others. To the extent that our employees, consultants or contractors use proprietary information owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Government Regulation and Product Approval

Government authorities in the United States, at the federal, state and local level, and other countries extensively regulate, among other things, the research, development, testing, manufacture, labeling, packaging, promotion, storage, advertising, distribution, marketing and export and import of products such as those we are developing.

United States Government Regulation

In the United States, the information that must be submitted to the FDA in order to obtain approval to market a new drug varies depending on whether the drug is a new product whose safety and effectiveness has not previously been demonstrated in humans or a drug whose active ingredients and some other properties are the same as those of a previously approved drug. A new drug will follow the NDA route, and a new biologic will follow the biologic license application, or BLA, route.

NDA and BLA Approval Processes

In the United States, the FDA regulates drugs and some biologics under the FDCA, and in the case of the remaining biologics, also under the Public Health Service Act, and implementing regulations. Failure to comply with the applicable United States requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. These sanctions could include:

the FDA s refusal to approve pending applications;

license suspension or revocation;

withdrawal of an approval;

a clinical hold;

warning letters;

product recalls;

product seizures;

total or partial suspension of production or distribution; or

injunctions, fines, civil penalties or criminal prosecution.

Any agency or judicial enforcement action could have a material adverse effect on us. The process of obtaining regulatory approvals and the subsequent substantial compliance with appropriate federal, state, local, and foreign statutes and regulations require the expenditure of substantial time and financial resources.

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The process required by the FDA before a drug or biologic may be marketed in the United States generally involves the following:

completion of nonclinical laboratory tests according to good laboratory practice regulations, or GLP;

submission of an IND, which must become effective before human clinical trials may begin;

performance of adequate and well-controlled human clinical trials according to good clinical practices, or GCP, to establish the safety and efficacy of the proposed drug for its intended use;

submission to the FDA of an NDA or BLA;

satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is produced to assess compliance with cGMP to assure that the facilities, methods and controls are adequate to preserve the drug s identity, strength, quality and purity or to meet standards designed to ensure the biologic s continued safety, purity and potency; and

FDA review and approval of the NDA or BLA.

Once a pharmaceutical candidate is identified for development, it enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information and analytical data, to the FDA as part of the IND. Some preclinical or non-clinical testing may continue even after the IND is submitted. In addition to including the results of the preclinical studies, the IND will also include a protocol detailing, among other things, the objectives of the first phase of the clinical trial, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated if the first phase lends itself to an efficacy determination. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, specifically places the clinical trial on clinical hold. The FDA can also place a trial on clinical hold at any time after it commences. In these cases, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin or resume.

All clinical trials must be conducted under the supervision of one or more qualified investigators in accordance with GCP regulations. These regulations include the requirement that all research subjects provide informed consent. Further, an Institutional Review Board, or IRB, at each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution. Each new clinical protocol must be submitted to the FDA as part of the IND. Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and more frequently if serious adverse events occur.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

Phase I: The drug is initially introduced into healthy human subjects or patients with the disease and tested for safety, dosage tolerance, pharmacokinetics, pharmacodynamics, absorption, metabolism, distribution and excretion. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.

Phase II: Involves studies in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage

tolerance and optimal dosage.

Phase III: Clinical trials are undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population at geographically dispersed clinical study sites. These studies are intended to establish the overall risk-benefit ratio of the product and provide, if appropriate, an adequate basis for product labeling.

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Phase I, Phase II and Phase III testing may not be completed successfully within any specified period, if at all. The FDA or an IRB or the sponsor may suspend or terminate a clinical trial at any time for various reasons, including a finding that the research subjects or patients are being exposed to an unacceptable health risk.

Concurrent with clinical trials, companies usually complete additional animal studies and must also must develop additional information about the chemistry and physical characteristics of the drug and finalize a process for manufacturing the product in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and the manufacturer must develop methods for testing the quality, purity and potency of the final drugs. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf-life.

The results of product development, preclinical studies and clinical studies, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, results of chemical studies and other relevant information are submitted to the FDA as part of an NDA or BLA requesting approval to market the product. The submission of an NDA or BLA is subject to the payment of user fees, but a waiver of such fees may be obtained under specified circumstances. The FDA reviews all NDAs and BLAs submitted before it accepts them for filing. It may request additional information rather than accept an NDA or BLA for filing. In this event, the NDA or BLA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing.

Once the submission is accepted for filing, the FDA begins an in-depth review. The FDA may refuse to approve an NDA or BLA if the applicable regulatory criteria are not satisfied or may require additional clinical or other data. Even if such data is submitted, the FDA may ultimately decide that the NDA or BLA does not satisfy the criteria for approval. The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacture is cGMP-compliant to assure and preserve the product s identity, strength, quality and purity. The FDA reviews a BLA to determine, among other things whether the product is safe, pure and potent and the facility in which it is manufactured, processed, packed or held meets standards designed to assure the product s continued safety, purity and potency. Before approving an NDA or BLA, the FDA will inspect the facility or facilities where the product is manufactured and tested.

Satisfaction of FDA requirements or similar requirements of state, local and foreign regulatory authorities typically takes at least several years and the actual time required may vary substantially, based upon, among other things, the type, complexity and novelty of the product or disease. Government regulation may delay or prevent marketing of potential products for a considerable period of time and impose costly procedures upon our activities. Success in early stage clinical trials does not assure success in later stage clinical trials. Data obtained from clinical activities are not always conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. The FDA may not grant approval on a timely basis, or at all. Even if a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited which could restrict the commercial application of the products. Further, even after regulatory approval is obtained, later discovery of previously unknown problems with a product may result in restrictions on the product or even complete withdrawal of the product from the market. Delays in obtaining, or failures to obtain regulatory approvals for any drug candidate could substantially harm our business and cause our stock price to drop significantly. In addition, we cannot predict what adverse governmental regulations may arise from future United States or foreign governmental action.

Expedited Review and Approval

The FDA has various programs, including fast track, priority review and accelerated approval, that are intended to expedite or simplify the process for reviewing drugs and provide for approval on the basis of surrogate endpoints. Even if a drug qualifies for one or more of these programs, the FDA may later decide that the drug no longer meets the conditions for qualification or that the time period for FDA review or

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approval will be shortened. Generally, drugs that may be eligible for these programs are those for serious or life-threatening conditions, those with the potential to address unmet medical needs, and those that offer meaningful benefits over existing treatments. Fast track designation applies to the combination of the product and the specific indication for which it is being studied. Although fast track and priority review do not affect the standards for approval, the FDA will attempt to facilitate early and frequent meetings with a sponsor of a fast-track designated drug and expedite review of the application for a drug designated for priority review. Drugs that receive an accelerated approval may be approved on the basis of adequate and well-controlled clinical trials establishing that the drug product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform post-marketing clinical trials.

Continuous Marketing Applications Pilot 2

In conjunction with the reauthorization of the Prescription Drug User Fee Act of 1992, or PDUFA, the FDA agreed to meet specific performance goals, one of which was to conduct pilot programs to explore CMAs. Under one of the CMA pilot programs called Pilot 2, one fast-track designated product from each review division of CDER and CBER is selected for frequent scientific feedback and interactions with the FDA, with a goal of improving the efficiency and effectiveness of the drug development process. In order to be eligible for participation, the drug or biologic must (1) have been designated fast track, (2) have been the subject of an end-of-Phase I meeting or another type of meeting that FDA determines is equivalent, and (3) not be on clinical hold. Applicants must make a formal application as described in an FDA Guidance on the subject and will be evaluated based on the FDA s overall assessment of:

the potential value of enhanced interaction, emphasizing the potential public health benefit resulting from development of the product;

the likelihood that concentrated scientific dialogue will facilitate the availability of a promising novel therapy; and

the applicant s demonstration of commitment to product development as evidenced by a thorough consideration of the rationale for participation in Pilot 2.

A maximum of one fast-track product per review division in CDER and CBER will be chosen to participate.

Once an applicant is selected for participation in Pilot 2, the review division and the applicant will finalize an agreement on the nature of the timelines for feedback and interactions between the applicant and the FDA. Pilot 2 agreements and activities for each application will continue through September 30, 2007, the pilot program completion date, unless (1) an NDA or BLA is submitted, (2) the applicant withdraws the product from the pilot program, or (3) the agreement is terminated by the FDA because the drug or biologic no longer meets the pre-application criteria or the applicant deviates significantly from the negotiated developmental plan or has other significant disagreements with FDA.

In November 2003, ALTU-135 was granted a fast track designation for treatment of malabsorption in patients with partial or complete exocrine pancreatic insufficiency. In February 2004, ALTU-135 was accepted into the Pilot 2 program pending agreement on a schedule of interactions with the FDA.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or

more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making available in the United States a drug for this type of disease or condition will be recovered from sales in the United States for that drug. Orphan drug designation must be requested before submitting an NDA. After the FDA grants orphan drug designation, the identity of

the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications to market the same drug for the same indication, except in very limited circumstances, for seven years. Orphan drug exclusivity, however, also could block the approval of one of our products for seven years if a competitor obtains approval of the same drug for the same use as defined by the FDA or if our product candidate is determined to be contained within the competitor s product for the same indication or disease.

The FDA initially granted orphan drug designation for ALTU-135. In December 2006, the FDA informed us of its intention to revoke our orphan drug designation because it found the prevalence of pancreatic insufficiency exceeded the statutory 200,000 patient limit if all HIV/AIDS patients who suffer from fat malabsorption were included in the patient population. We responded to the FDA that it was never our intent to include HIV/AIDS patients in the orphan population since the vast majority of these patients displaying malabsorption do so for reasons other than pancreatic insufficiency. We proposed, if necessary, modifying our orphan drug designation to clarify the exclusion of HIV/AIDS patients. We believe this proposal will enable us to preserve our orphan drug designation in the United States. We intend to file for orphan drug designation for our other product candidates that meet the criteria for orphan designation. We may not be awarded orphan exclusivity for any of our product candidates or indications. In addition, obtaining FDA approval to market a product with orphan drug exclusivity may not provide us with a material commercial advantage.

Pediatric Exclusivity

The FDA Modernization Act of 1997 included a pediatric exclusivity provision that was extended by the Best Pharmaceuticals for Children Act of 2002. Pediatric exclusivity is designed to provide an incentive to manufacturers for conducting research about the safety of their products in children. Pediatric exclusivity, if granted, provides an additional six months of market exclusivity in the United States for new or currently marketed drugs. Under Section 505A of the FDCA, six months of market exclusivity may be granted in exchange for the voluntary completion of pediatric studies in accordance with an FDA-issued Written Request. The FDA may not issue a Written Request for studies on unapproved or approved indications where it determines that information relating to the use of a drug in a pediatric population, or part of the pediatric population, may not produce health benefits in that population.

We have not requested or received a Written Request for such pediatric studies, although we may ask the FDA to issue a Written Request for such studies in the future. To receive the six-month pediatric market exclusivity, we would have to receive a Written Request from the FDA, conduct the requested studies, and submit reports of the studies in accordance with a written agreement with the FDA or, if there is no written agreement, in accordance with commonly accepted scientific principles. The FDA may not issue a Written Request for such studies if we ask for one, and it may not accept the reports of the studies. The current pediatric exclusivity provision is scheduled to end on October 1, 2007, and it may not be reauthorized, or may be reauthorized in a more limited form.

FDA Policy on Drugs to Treat Exocrine Pancreatic Insufficiency

Drugs to treat exocrine pancreatic insufficiency have been marketed in the United States since before the passage of the FDCA in 1938. Most of these drugs were available as over the counter, or OTC, drug products. As part of an OTC drug review, and between 1979 to 1991, the FDA evaluated the safety and effectiveness of drug products used to treat exocrine pancreatic insufficiency. In July 1991, the FDA announced that it had concluded that all exocrine pancreatic insufficiency drug products, whether marketed on an OTC or a prescription basis, were new drugs for which an approved application would be required for marketing. On April 28, 2004, the FDA published a notice in the Federal

Register reiterating its determination that all pancreatic extract drug products are new drugs requiring an approved NDA for marketing, indicating that they should be marketed as prescription drugs only, and stating that after April 28, 2008, any prescription exocrine

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pancreatic insufficiency drug product being marketed without an approved NDA will be subject to regulatory action.

In 2006, the FDA issued final guidance titled Guidance for Industry Exocrine Pancreatic Drug Products Submitting NDAs, also termed the PEP Guidance. The PEP Guidance represents the FDA s current thinking on the topic, but does not bind the FDA or any other person. An alternative approach may be used to submit an NDA if the approach satisfies the requirements of the applicable law and regulations. The FDA has approved an NDA for only one pancreatic enzyme product, although the product is not currently on the market.

Post-Approval Requirements

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory standards is not maintained or if problems occur after the product reaches the market. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further FDA review and approval. In addition, the FDA may require testing and surveillance programs to monitor the effect of approved products that have been commercialized, and the FDA has the power to prevent or limit further marketing of a product based on the results of these post-marketing programs.

Any drug products manufactured or distributed by us pursuant to FDA approvals are subject to continuing regulation by the FDA, including, among other things:

- record-keeping requirements;
- reporting of adverse experiences with the drug;
- providing the FDA with updated safety and efficacy information;
- drug sampling and distribution requirements;
- notifying the FDA and gaining its approval of specified manufacturing or labeling changes;
- complying with certain electronic records and signature requirements; and
- complying with FDA promotion and advertising requirements.

Drug manufacturers and their subcontractors are required to register their manufacturing facilities with the FDA and some state agencies, and are subject to periodic unannounced inspections by the FDA and some state agencies for compliance with cGMP and other laws.

We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products. Future FDA and state inspections may identify compliance issues at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct.

From time to time, legislation is passed in Congress that could significantly change the statutory provisions governing the approval, manufacturing and marketing of products regulated by the FDA. In addition, FDA regulations and guidance are often revised or reinterpreted by the agency in ways that may significantly affect our business and our products. It is impossible to predict whether legislative changes will be enacted, or FDA regulations, guidance or interpretations changed or what the impact of such changes, if any, may be.

Foreign Regulation

In addition to regulations in the United States, we will be subject to a variety of foreign regulations governing clinical trials and commercial sale and distribution of our products. Whether or not we obtain FDA approval for a product, we must obtain approval by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. The approval process varies from country to country and the time may be longer or shorter than that required for FDA approval.

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The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country.

Under European Union regulatory systems, we may submit marketing authorization applications either under a centralized or decentralized procedure. The centralized procedure, which is compulsory for medicines produced by biotechnology and optional for those which are highly innovative, provides for the grant of a single marketing authorization that is valid for all European Union member states. The decentralized procedure provides for mutual recognition of national approval decisions. Under this procedure, the holder of a national marketing authorization may submit an application to the remaining member states. Within 90 days of receiving the applications and assessments report each member state must decide whether to recognize approval. If a member state does not recognize the marketing authorization, the disputed points are eventually referred to the European Commission, whose decision is binding on all member states.

As in the United States, we may apply for designation of our products as orphan drugs for the treatment of specific indications in the European Union before the application for marketing authorization is made. Orphan drugs in the European Union enjoy economic and marketing benefits, including a 10-year market exclusivity period for the approved indication for the same or similar drug, unless another applicant can show that its product is safer, more effective or otherwise clinically superior to the orphan-designated product.

Reimbursement

Sales of biopharmaceutical products depend in significant part on the availability of coverage through third-party payment systems. We anticipate third-party payors will provide coverage and reimbursement for our products. It will be time consuming and expensive for us to seek coverage from third-party payors for newly-approved drugs, and the scope of such coverage might be more limited than the purposes for which the FDA approves the drug. Eligibility for coverage does not imply that any drug will be reimbursed in all cases or at a rate that would be sufficient to allow us to sell our products on a competitive and profitable basis. Interim payments for new drugs, if applicable, might not be sufficient to cover our costs, and such payment might not be made permanent. Reimbursement rates vary according to the use of the drug, the clinical setting in which it is used, and whether it is administered by a physician in connection with a specific service or procedure. Reimbursement rates may be based upon payments allowed for lower-cost products that are already covered; may be incorporated into unprofitable composite rates for other services; and may reflect budgetary constraints, political considerations, and imperfections in data affecting government-funded health care programs. Drug prices may be reduced by mandatory discounts or rebates imposed by third party payors. Third party payors often follow the coverage and reimbursement policies established by government-funded health care programs such as Medicare. As a result, Medicare coverage and reimbursement policies may affect the pricing and profitability of drugs whether or not Medicare beneficiaries are expected to comprise a significant portion of the patients using the drug.

The levels of revenues and profitability of biopharmaceutical companies may also be affected by the continuing efforts of government and third party payors to contain or reduce the costs of health care through various means. For example, in some foreign markets, pricing reimbursement or profitability of therapeutic and other pharmaceutical products is subject to governmental control. In Canada, this practice has led to lower priced drugs than in the United States. As a result, importation of drugs from Canada into the United States may result in reduced product revenues.

In the United States there have been, and we expect that there will continue to be, a number of federal and state proposals to implement governmental pricing reimbursement controls. The Medicare Prescription Drug and Modernization Act of 2003 imposed new requirements for the distribution and pricing of prescription drugs that may affect the marketing of our products, if we obtain FDA approval for those products. Under this law, Medicare was extended to cover a wide range of prescription drugs other than those directly administered by physicians in a hospital

or medical office. Competitive regional private drug plans were authorized to establish lists of approved drugs, or formularies, and to negotiate rebates and other price control arrangements with drug companies. Proposals to allow the government to directly negotiate Medicare drug prices with drug companies, if enacted, might further constrain drug prices, leading to reduced revenues and profitability. While

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we cannot predict whether any future legislative or regulatory proposals will be adopted, the adoption of such proposals could have a material adverse effect on our business, financial condition and profitability.

In addition, in some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market.

Employees

We believe that our success will depend greatly on our ability to identify, attract and retain capable employees. As of December 31, 2006, we had 144 employees, of whom 34 hold Ph.D. or M.D. degrees. 103 of our employees are primarily engaged in research and development activities, and 41 are primarily engaged in general and administrative activities. We believe that relations with our employees are good. None of our employees is represented under a collective bargaining agreement.

ITEM 1A. *RISK FACTORS*

Our business is subject to numerous risks. We cannot assure investors that our assumptions and expectations about our business will prove to have been correct. Important factors could cause our actual results to differ materially from those indicated or implied by forward-looking statements. Such factors that could cause or contribute to such differences include those factors discussed below. We undertake no intention or obligation to update or revise any forward-looking statements in this Annual Report, whether as a result of new information, future events or otherwise.

Our existing and potential stockholders should consider carefully the risks described below and the other information in this Annual Report, including the Special Note Regarding Forward Looking Statements, our Management s Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and the related notes appearing elsewhere in this Annual Report. We may be unable, for many reasons, including those that are beyond our control, to implement our current business strategy. If any of the following risks actually occur, they may materially harm our business, our financial condition and our results of operations. In that event, the market price of our common stock could decline.

Risks Related to Our Business and Strategy

If we fail to obtain the additional capital necessary to fund our operations, we will be unable to successfully develop and commercialize our product candidates and may be restricted in our ability to finance discovery of our next generation of product candidates.

We will require substantial future capital in order to continue to complete clinical development and commercialize our clinical-stage product candidates, ALTU-135 and ALTU-238, and to conduct the research and development and clinical and regulatory activities necessary to bring our other product candidates, including ALTU-237, into clinical development. Our future capital requirements will depend on many factors, including:

- the progress and results of our toxicology studies and proposed Phase III clinical efficacy trial and long-term safety study for ALTU-135 and any other trials we may initiate based on the results of these trials or additional discussions with regulatory authorities;

the results of the planned clinical trials for ALTU-238 that we or our collaborator may initiate;

the timing, progress and results of ongoing manufacturing development work for ALTU-135, ALTU-238 and ALTU-237;

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the results of our preclinical studies and testing for our earlier stage research products and product candidates, and any decisions to initiate clinical trials if supported by the preclinical results;

the costs, timing and outcome of regulatory review of our product candidates in clinical development, and any of our preclinical product candidates that progress to clinical trials;

the costs of establishing commercial operations, including sales and marketing functions, should any of our product candidates approach marketing approval and/or be approved, and of establishing commercial manufacturing and distribution arrangements;

the outcome of the decision by Genentech as to whether to exercise its option to make our collaboration agreement for ALTU-238 a global arrangement;

the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our issued patents, ensuring freedom to operate under any third party intellectual property rights, and defending intellectual property-related claims;

our ability to establish and maintain collaborative arrangements and obtain milestone, royalty and other payments from collaborators; and

the extent to which we acquire or invest in businesses, products or technologies.

Additional funds may not be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available to us on a timely basis, we may be required to:

terminate or delay preclinical studies, clinical trials or other development activities for one or more of our product candidates; or

delay our establishment of sales, marketing and commercial operations capabilities or other activities that may be necessary to commercialize our product candidates.

Based on our operating plans, we estimate that our net cash used in operating activities will be between $55 million and $65 million in 2007. We currently expect that our existing cash resources, investment securities and payments, including milestone payments, we expect to receive under agreements with our existing collaborators will be sufficient to support the development of our product candidates and our other operations through the middle of 2008. We do not expect that we will be required to make any payments to our existing collaborators for ALTU-135 prior to regulatory approval of ALTU-135. However, our operating plan may change as a result of many factors, including factors currently unknown to us, and we may need additional funds sooner than planned. We do not expect our available funds to be sufficient to fund the completion of the development of any of our product candidates, and we expect that we will need to raise additional funds prior to being able to market any products. Additional funding may not be available to us on acceptable terms, or at all.

We are obligated under our agreement with CFFTI and under the terms of our redeemable preferred stock to make significant payments upon the occurrence of specified events. We may not have sufficient resources to make these payments when they become due.

If we receive FDA approval for ALTU-135 or related products, we must pay one of our collaborators, CFFTI, an amount equal to CFFTI s aggregate funding to us plus interest, up to a maximum of $40.0 million, less the fair market

value of the shares of common stock underlying the warrants we issued to CFFTI. This amount, together with accrued interest, will be due in four annual installments, commencing 30 days after the approval date. We will also be required to pay an additional $1.5 million to CFFTI within 30 days after the approval date. These initial payments to CFFTI, if we receive FDA approval of ALTU-135, will be due before we receive revenue from commercial sales of the product, which could require us to raise additional funds or make it difficult for us to make the payments in a timely manner. In addition, if the holder of our redeemable preferred stock elects to redeem those shares on or after December 31, 2010, we will be required to pay an aggregate of $7.2 million plus dividends accrued after that date. We may require additional funding to make any such payments. Additional funds for these purposes may not be available to us on acceptable terms, or at all.

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We have a history of net losses, which we expect to continue for at least several years and, as a result, we are unable to predict the extent of any future losses or when, if ever, we will achieve, or be able to maintain, profitability.

We have incurred significant losses since 1999, when we were reorganized as a company independent from Vertex. At December 31, 2006, our accumulated deficit was $175.8 million and we expect to continue to incur losses for at least the next several years. We have only been able to generate limited amounts of revenue from license and milestone payments under our collaboration agreements, and payments for funded research and development, as well as from products we no longer sell. We expect that our annual operating losses will continue to increase over the next several years as we expand our research, development and commercialization efforts.

We must generate significant revenue to achieve and maintain profitability. All of our product candidates are still in early-to-mid stages of development. Even if we succeed in developing and commercializing one or more of our product candidates, we may not be able to generate sufficient revenue or achieve or maintain profitability. Our failure to become and remain profitable would depress the market price of our common stock and could impair our ability to raise capital, expand our business, diversify our product offerings or continue our operations.

Our competitors may develop products that are less expensive, safer or more effective, which may diminish or prevent the commercial success of any product candidate that we bring to market.

Competition in the pharmaceutical and biotechnology industries is intense. We face competition from pharmaceutical and biotechnology companies, as well as numerous academic and research institutions and governmental agencies engaged in drug discovery activities or funding, both in the United States and abroad. Some of these competitors have greater financial resources than us, greater experience in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing than we do, and have products or are pursuing the development of product candidates that target the same diseases and conditions that are the focus of our drug development programs, including those set forth below. In addition, there may be others of which we are unaware.

ALTU-135. If approved, ALTU-135, the product candidate we are developing for the treatment of malabsorption due to exocrine pancreatic insufficiency, will compete with currently marketed porcine-derived pancreatic enzyme replacement therapies from companies such as Axcan Pharma, Johnson & Johnson, and Solvay Pharmaceuticals, as well as from generic drug manufacturers such as KV Pharmaceutical and IMPAX Laboratories. In addition, we understand that Biovitrum, Eurand and Meristem Therapeutics have product candidates in clinical development that could compete with ALTU-135.

ALTU-238. If approved, ALTU-238, the product candidate we are developing as a once-weekly treatment for hGH deficiency and related disorders in collaboration with Genentech, will compete with existing approved hGH therapies from companies such as BioPartners, Eli Lilly, Genentech, Novo Nordisk, Pfizer, Sandoz, Serono and Teva Pharmaceutical Industries. In addition, we understand that ALTU-238 may compete with product candidates in clinical development from some of these companies and others, including LG Life Sciences, which is developing a long-acting hGH therapy based on an encapsulated microparticle technology.

ALTU-237. If approved, ALTU-237, the product candidate we are developing for the treatment of hyperoxalurias, may compete with products in development at companies such as Amsterdam Molecular Therapeutics, Medix, NephroGenex, and OxThera.

Existing products to treat exocrine pancreatic insufficiency have been marketed in the United States since before the passage of the Federal Food, Drug, and Cosmetic Act, or FDCA, in 1938 and are currently marketed without

FDA-approved NDAs. In 1995, the FDA issued a final rule requiring that these pancreatic enzyme products be marketed by prescription only, and in April 2004, the FDA issued a notice that manufacturers of these products will be subject to regulatory action if they do not obtain approved NDAs for

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their products by April 28, 2008. Despite the FDA s announced position, the agency may not pursue regulatory action against these companies if they fail to meet the 2008 deadline because there are currently no other products on the market for the treatment of exocrine pancreatic insufficiency. The level of competition that ALTU-135, if approved, will face from these products in the United States will depend on whether the manufacturers of these products obtain approved NDAs by the deadline set by the FDA and, if they are unable to do so, whether the FDA takes regulatory action against these manufacturers and the nature of any such action. The nature of the competition that ALTU-135, if approved, faces from existing pancreatic enzyme products could affect the market acceptance of ALTU-135 or require us to lower the price of ALTU-135, which would negatively impact our margins and our ability to achieve profitability.

Raising additional capital by issuing securities or through collaboration and licensing arrangements may cause dilution to existing stockholders, restrict our operations or require us to relinquish proprietary rights.

We may seek the additional capital necessary to fund our operations through public or private equity offerings, debt financings, and collaboration and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, existing stock ownership interests will be diluted, and the terms of such securities may include liquidation or other preferences that adversely affect the rights of our existing stockholders. In addition, many of the warrants that we have issued contain anti-dilution provisions that will result in the issuance of additional shares of common stock upon exercise, and thus further dilution, if we issue or are deemed to issue equity at a per share price less than the exercise price of the warrants. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions such as incurring additional debt, making capital expenditures, or declaring dividends. If we raise additional funds through collaboration and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms that are not favorable to us.

We may not be successful in maintaining our existing collaborations or in establishing and maintaining additional collaborations on acceptable terms, which could adversely affect our ability to develop and commercialize our products.

An element of our business strategy is to establish collaborative arrangements with third parties, particularly with regard to development, regulatory approval, sales, marketing and distribution of our products outside of North America. We may also collaborate with other companies to accelerate the development of some of our early-stage product candidates, to co-commercialize our product candidates in North America in instances where we believe that a larger sales and marketing presence will expand the market or accelerate penetration, or to advance other business objectives. The process of establishing new collaborative relationships is difficult, time-consuming and involves significant uncertainty. We face, and will continue to face, significant competition in seeking appropriate collaborators. Moreover, if we do establish collaborative relationships, our collaborators may fail to fulfill their responsibilities or seek to renegotiate or terminate their relationships with us due to unsatisfactory clinical results, a change in business strategy, a change of control or other reasons. If we are unable to establish and maintain collaborative relationships on acceptable terms, we may have to delay or discontinue further development of one or more of our product candidates, undertake development and commercialization activities at our own expense or find alternative sources of funding.

For example, we have entered into a collaboration agreement with CFFTI under which we have received significant funding for the development of ALTU-135. We are also eligible to receive an additional payment if we achieve a specified milestone under the agreement. Additionally, the collaboration provides us with access to the Cystic Fibrosis Foundation s network of medical providers, patients, researchers and others involved in the care and treatment of cystic fibrosis patients. Our agreement with CFFTI provides for an exclusive license from us to CFFTI, and an exclusive sublicense back with a right to further sublicense from CFFTI, of intellectual property rights covering the

development and commercialization of ALTU-135 in North America. The agreement with CFFTI requires us to use commercially reasonable efforts to develop and commercialize ALTU-135 in North America for the treatment of malabsorption due to exocrine pancreatic insufficiency in

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patients with cystic fibrosis and other indications. We are also required to meet specified milestones under the agreement by agreed upon dates. If we are unable to satisfy our obligations under the agreement, we may lose further funding under the agreement and lose our exclusive sublicense to ALTU-135 in North America, which will materially harm our business.

In addition, we have entered into a collaboration and license agreement with Genentech under which Genentech has agreed to fund the continued development and commercialization of ALTU-238 in North America. Should there be unsatisfactory clinical results, delays in development or other unsatisfactory developments that result in a delay or a failure to obtain marketing approval, we will not earn the milestones payable under the agreement nor will we earn royalties payable on commercial sales or have the opportunity to participate in the commercialization of the product.

The success of ALTU-238 depends heavily on our collaboration with Genentech, which was established only recently. If Genentech is unable or determines not to further develop or commercialize ALTU-238, or experiences significant delays in doing so, our business will be materially harmed.

We entered into a collaboration and license agreement with Genentech, which became effective on February 21, 2007, related to the development and commercialization of ALTU-238 for the treatment of human growth hormone deficiency. We are substantially dependent on Genentech for the success of ALTU-238. We do not have a long history of working with Genentech and cannot predict the success of the collaboration. Genentech will have control over the conduct and timing of development efforts with respect to ALTU-238. Although we have had discussions with Genentech regarding its current plans and intentions with regard to the clinical development of ALTU-238, Genentech is currently preparing the development plan. Genentech may revise its stated plan for ALTU-238, which could result in delays in the clinical development of ALTU-238. Genentech s failure to devote sufficient financial and other resources to the development plan may result in delayed or unsuccessful development of ALTU-238, which could lead to the non-payment or delay in payment of milestones under our agreement with Genentech and may preclude or delay commercialization of ALTU-238 and any royalties we could receive on commercial sales. Because the license we granted to Genentech is exclusive, our business will be harmed if Genentech does not commercialize ALTU-238 successfully.

In the event Genentech fails to exercise the option that it has to make our arrangement global, we may be required to seek a second collaborator for ALTU-238 outside the United States. In that event, we will have the added risk of managing two collaborations for the same product candidate. This would require a second technology transfer as well as the coordination of dual supply chains and separate development programs. This could result in a loss of the advantage of global coordination and economies of scale as well as a greater risk that conflicts could arise between the two collaborations.

Development and commercialization activities under the collaboration with Genentech are overseen by a steering committee. However, ultimate decision-making authority for these activities is vested in Genentech, which limits significantly our ability to influence the development and commercialization of ALTU-238.

With respect to commercialization, Genentech will generally commercialize ALTU-238, if approved, pursuant to an exclusive license and pay us a royalty on net sales. We have an option to co-promote ALTU-238 with Genentech in North America. If we exercise our option, we may not be able to develop our own sales and marketing force to co-promote successfully ALTU-238.

Genentech may terminate the collaboration without cause upon not less than 180 days prior written notice and on shorter notice under other circumstances. Either party may terminate the collaboration pursuant to an uncured material default, as defined in the license agreement. Any loss of Genentech as a collaborator in the development or commercialization of ALTU-238, any dispute over the terms of, or decisions regarding, the collaboration or other

adverse developments in our relationship with Genentech would materially harm our business and might accelerate our need for additional capital.

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We are in discussions with our collaborator Dr. Falk regarding its claim that we have breached a representation in our collaboration agreement. If we are unable to successfully resolve this matter, our business may be materially harmed.

We have entered into a collaboration agreement with Dr. Falk. We have received substantial funding from Dr. Falk for the development and commercialization of ALTU-135 in Europe, the countries of the former Soviet Union, Egypt and Israel, and we are eligible to receive additional payments if we achieve specified milestones under the agreement. Dr. Falk has asserted that there is a third-party European patent issued in specified countries, including Germany, France and the United Kingdom, with claims that may be relevant to ALTU-135 and, therefore, that we breached a representation in our agreement with Dr. Falk and may be liable for damages under our agreement. We do not believe that we breached our agreement, and we have been in discussions with Dr. Falk for some time to resolve this matter. We also believe that if this patent were asserted against us, it is likely that we would not be found to infringe any valid claim of the patent relevant to our development and commercialization of ALTU-135. However, if the patent were successfully asserted against us or Dr. Falk and we were unable to obtain a license on commercially acceptable terms, we and Dr. Falk would be prevented during the patent term from commercializing ALTU-135 in the covered countries. Based on our current development timeline for ALTU-135 in Europe and excluding any patent term extensions, we expect that the patent in question would expire approximately two years after we would expect to receive marketing authorization for ALTU-135 in Europe. We may not reach a resolution of this matter with Dr. Falk, or prevail if the patent were asserted against us, or, if necessary, be able to obtain a license under the patent on commercially acceptable terms, if at all. If we are unable to do so, our business could be materially harmed.

We and our collaborators may not achieve our projected research and development goals in the time frames we announce and expect, which could have an adverse impact on our business and could cause our stock price to decline.

We set goals for and make public statements regarding the timing of activities, such as the commencement and completion of preclinical studies and clinical trials, anticipated regulatory approval dates and developments and milestones under our collaboration agreements. The actual timing of these events can vary dramatically due to a number of factors such as delays or failures in our or our collaborators preclinical studies or clinical trials, the amount of time, effort and resources committed to our programs by our collaborators and the uncertainties inherent in the regulatory approval process. We cannot be certain that our or our collaborators preclinical studies and clinical trials will advance or be completed in the time frames we announce or expect, that we or our collaborators will make regulatory submissions or receive regulatory approvals as planned or that we or our collaborators will be able to adhere to our current schedule for the achievement of key milestones under any of our internal or collaborative programs. If we or our collaborators fail to achieve one or more of these milestones as planned, our business will be materially adversely affected and the price of our common stock could decline.

Risks Related to Development of Our Product Candidates

If we or our collaborators are unable to commercialize our lead product candidates, or experience significant delays in doing so, our business will be materially harmed.

We have invested a significant portion of our time and financial resources to date in the development of oral and injectable crystallized protein therapies, including ALTU-135, ALTU-238, and ALTU-237, for the treatment of gastrointestinal and metabolic disorders. Our ability and the ability of our collaborative partners to successfully develop and commercialize our product candidates, and therefore our ability to generate revenues, will depend on numerous factors, including:

successfully scaling up the manufacturing processes for, and obtaining sufficient supplies of, our product candidates, in order to complete our clinical trials and toxicology studies on a timely basis;

receiving marketing approvals from the FDA and foreign regulatory authorities;

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arranging for commercial-scale supplies of our products with contract manufacturers whose manufacturing facilities operate in compliance with current good manufacturing practice regulations, or cGMPs, including the need to scale up the manufacturing process for commercial scale supplies;

establishing sales, marketing and distribution capabilities on our own, including if we exercise our right to co-promote ALTU-238 in North America under our agreement with Genentech, through collaborative agreements or through third parties;

establishing favorable pricing from foreign regulatory authorities; and

obtaining commercial acceptance of our product candidates, if approved, in the medical community and by third-party payors and government pricing authorities.

If we are not successful in commercializing ALTU-135, ALTU-238 or ALTU-237, or are significantly delayed in doing so, our business will be materially harmed.

Because our product candidates are in clinical development, there is a significant risk of failure.

Of the large number of drugs in development, only a small percentage result in the submission of an NDA to the FDA, and even fewer are approved for commercialization. We will only receive regulatory approval to commercialize a product candidate if we can demonstrate to the satisfaction of the FDA or the applicable foreign regulatory authority, in well-designed and conducted clinical trials, that the product candidate is safe and effective and otherwise meets the appropriate standards required for approval for a particular indication. Clinical trials are lengthy, complex and extremely expensive processes with uncertain results. A failure of one or more of our clinical trials may occur at any stage of testing. We have limited experience in conducting and managing the clinical trials necessary to obtain regulatory approvals, including approval by the FDA.

We have not yet completed Phase III clinical trials for any of our product candidates in clinical development, and we have not advanced, and may never advance, any of our other product candidates into clinical trials. We have completed a Phase II clinical trial for the capsule form of ALTU-135 and plan to conduct a Phase III clinical trial for ALTU-135 beginning in the second quarter of 2007. In order for ALTU-135 to be approved by the FDA, we will be required to demonstrate in the Phase III clinical trial, to a statistically significant degree, that ALTU-135 improves absorption of fat in patients suffering from malabsorption as a result of exocrine pancreatic insufficiency. We will also be required to demonstrate the safety of ALTU-135 in a long-term study. However, we may not be successful in meeting the primary or secondary endpoints for the Phase III clinical trial or the goal of the long-term safety study. The possibility exists that even if these trials are successful; we may still be required or may determine it is desirable to perform additional studies for approval or in order to achieve a broad indication for the labeling of the drug. In addition, we will need to complete specified toxicology studies in animals before submitting an NDA, and the results of those studies may not demonstrate sufficient safety.

The ability to recruit and enroll patients in a Phase III clinical trial and a safety study for ALTU-135 depends on the availability and willingness of patients to participate in experimental research, the conduct of recruitment activities that respect human subject protection, and recommendations by physicians to their patients to participate in our clinical trials. We have limited experience with earlier stage clinical trials, and we are developing our capabilities to conduct Phase III clinical trials, which usually involve a larger number of patients. However, in the execution of any Phase III clinical trial, we intend to rely in part on third party contractors to assist with these activities. The design of our Phase III clinical trial for ALTU-135 includes one off-enzyme period for all patients and an additional off-enzyme period for half of the patients, which may make it difficult to enroll patients and, if enrolled, may cause them to drop

out of the trial. Off-enzyme periods can be uncomfortable for these patients. Any predictions about the timing of enrollment or the completion of clinical trials are subject to the risks inherent in these activities.

For ALTU-238, we have completed a Phase I clinical trial in healthy adults and a Phase II clinical trial in adults with hGH deficiency. Under our collaboration and license agreement with Genentech, Genentech has the right to plan and determine the future clinical development plan for ALTU-238. We will no longer control

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the level of resources or the timing for the clinical development of ALTU-238. We expect that Genentech will initiate a Phase III clinical trial. However, the efficacy of ALTU-238 has not yet been tested in a human clinical trial, and ALTU-238 may prove not to be clinically effective as an extended-release formulation of hGH. In addition, it is possible that patients receiving ALTU-238 will suffer additional or more severe side effects than we observed in our Phase I and Phase II clinical trials, which could delay or preclude regulatory approval of ALTU-238 or limit its commercial use.

ALTU-237 has not yet entered human clinical trials. It is possible that based on a review of the preclinical data by the FDA following the filing of an IND, we could be required to conduct additional preclinical research, be requested to file additional information or data, or be required to change our Phase I clinical trial development plans prior to initiating our first human clinical study of that product candidate. This could delay or preclude clinical development or regulatory approval of ALTU-237.

If we observe serious or other adverse events during the time our product candidates are in development or after our products are approved and on the market, we may be required to perform lengthy additional clinical trials, may be denied regulatory approval of such products, may be forced to change the labeling of such products or may be required to withdraw any such products from the market, any of which would hinder or preclude our ability to generate revenues.

In connection with our completed Phase II clinical trial of ALTU-135, there was one serious adverse event considered by an investigator in our clinical trials as probably or possibly related to treatment with that product candidate. There have not been any serious adverse events related to our other product candidates. The one serious adverse event in our Phase II clinical trial of ALTU-135 involved a subject in the lowest dose group who developed distal intestinal obstructive syndrome, or DIOS, which resolved itself without further complications. DIOS is a condition that is unique to cystic fibrosis and occurs due to the accumulation of viscous mucous and fecal material in the colon. According to a 1987 study, DIOS is relatively common in cystic fibrosis patients, occurring in about 16% of those patients. In our Phase II clinical trial of ALTU-135, we also observed elevated levels of liver transaminases, which can be associated with harm to the liver. These elevations were transient and asymptomatic and were not reported as drug-related serious adverse events. Elevation of liver transaminases is common among cystic fibrosis patients. The elevations we observed may or may not have been caused by ALTU-135. The increases we observed were not associated with increases in bilirubin, which are typically associated with harm to the liver.

If the incidence of these events increases in number or severity, if a regulatory authority believes that these events constitute an adverse effect caused by the drug, or if other effects are identified either during future clinical trials or after any of our drug candidates are approved and on the market:

- we may be required to conduct additional pre-clinical or clinical trials, make changes in labeling of any such products, reformulate any such products, or implement changes to or obtain new approvals of our or our contractors or collaborators manufacturing facilities or processes;
- regulatory authorities may be unwilling to approve our product candidates or may withdraw approval of our products;
- we may experience a significant drop in the sales of the affected products;
- our reputation in the marketplace may suffer; and
- we may become the target of lawsuits, including class action suits.

Any of these events could prevent approval or harm sales of the affected products or could substantially increase the costs and expenses of commercializing and marketing any such products.

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If clinical trials for our product candidates are prolonged or delayed, we may be unable to commercialize our product candidates on a timely basis, or at all, which would require us to incur additional costs and delay our receipt of any revenue from potential product sales.

We may encounter problems with our ongoing or planned clinical trials that could cause us or a regulatory authority to delay or suspend those clinical trials or delay the analysis of data derived from them. A number of events or factors, including any of the following, could delay the completion of our ongoing and planned clinical trials and negatively impact our ability to obtain regulatory approval for, and to market and sell, a particular product candidate, including our clinical-stage product candidates:

- conditions imposed on us by the FDA or any foreign regulatory authority regarding the scope or design of our clinical trials;
- delays in obtaining, or our inability to obtain or maintain, required approvals from institutional review boards, or IRBs, or other reviewing entities at clinical sites selected for participation in our clinical trials;
- delays in the completion of manufacturing development work for our product candidates, such as the delays we experienced in 2006 relating to ALTU-135 and ALTU-238;
- insufficient supply or deficient quality of our product candidates or other materials necessary to conduct our clinical trials;
- difficulties enrolling subjects in our clinical trials, including finding pediatric subjects with hGH deficiency who have not previously received hGH therapy for our pediatric trials of ALTU-238;
- delays in the clinical development of ALTU-238, which is now controlled by Genentech in North America, and which Genentech has the option to control in the rest of the world;
- high drop-out rates of subjects in our clinical trials;
- negative or inconclusive results from clinical trials, or results that are inconsistent with earlier results, that necessitate additional clinical studies;
- serious or unexpected drug-related side effects experienced by subjects in clinical trials; or
- failure of our third-party contractors or our investigators to comply with regulatory requirements or otherwise meet their contractual obligations to us in a timely manner.

Our clinical trials and those of our collaborators may not begin as planned, may need to be redesigned, and may not be completed on schedule, if at all. For example, on July 24, 2006, we announced that we expected to perform additional manufacturing development work before initiating the planned Phase III clinical trial of ALTU-135 in order to ensure a consistent production process for that product candidate. In addition, on that same date, we announced that the schedule for delivery of equipment for the production of ALTU-238 had been delayed due to several changes to the design specifications for that equipment, which would result in a delay in the initiation of planned Phase III trials of ALTU-238. Delays in our clinical trials may result in increased development costs for our product candidates, which could cause our stock price to decline and could limit our ability to obtain additional financing. In addition, if one or more of our clinical trials are delayed, our competitors may be able to bring products to market before we do, and the commercial advantage, profitability or viability of our product candidates, including our clinical-stage product

candidates, could be significantly reduced.

Conducting clinical studies in Eastern Europe involves risks not typically associated with U.S. studies which may result in timing, cost and/or quality problems in our planned clinical trials for our product candidates.

We expect that a significant number of the patients in our upcoming clinical trials will be enrolled in Eastern European countries. We plan to conduct these trials in compliance with good clinical practices. However, ensuring compliance with good clinical practices at Eastern European clinical sites will involve

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risks, including risks associated with language barriers and the fact that some European clinical investigators have only limited experience in conducting clinical studies in accordance with standards set forth by the FDA and the European Medicines Agency, or EMEA. We will seek to mitigate this risk by monitoring and auditing the ongoing performance of our studies, using both our employees and outside contract research organizations, to ensure compliance with good clinical practices and all other regulatory requirements. Failure to attain and document good clinical practices compliance would adversely impact the value of any data generated from these trials. In addition, should it require more time or money than we currently anticipate to perform any required site training, monitoring or auditing activities, these trials could be delayed, exceed their budgets, or both, which could have a material adverse impact on our business.

We may fail to select or capitalize on the most scientifically, clinically or commercially promising or profitable indications or therapeutic areas for our product candidates.

We have limited technical, managerial and financial resources to determine the indications on which we should focus the development efforts related to our product candidates. We may make incorrect determinations. Our decisions to allocate our research, management and financial resources toward particular indications or therapeutic areas for our product candidates may not lead to the development of viable commercial products and may divert resources from better opportunities. Similarly, our decisions to delay or terminate drug development programs may also be incorrect and could cause us to miss valuable opportunities. For example, we will need to allocate our resources among ALTU-135, ALTU-237 and ALTU-236, and other preclinical product candidates. If we invest in the advancement of a candidate which proves not to be viable, we will have fewer resources available for potentially more promising candidates.

Risks Related to Regulatory Approval of Our Product Candidates and Other Government Regulations

If we or our collaborators do not obtain required regulatory approvals, we will be unable to commercialize our product candidates, and our ability to generate revenue will be materially impaired.

ALTU-135, ALTU-238, ALTU-237 and any other product candidates we may discover or acquire and seek to commercialize, either alone or in conjunction with a collaborator, are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries relating to the testing, manufacture, safety, efficacy, recordkeeping, labeling, packaging, storage, approval, advertising, promotion, sale and distribution of drugs. In the United States and in many foreign jurisdictions, rigorous preclinical testing and clinical trials and an extensive regulatory review process must be successfully completed before a new drug can be sold. We have not obtained regulatory approval for any product. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays.

The time required to obtain approval by the FDA is unpredictable but typically takes many years following the commencement of clinical trials, depending upon numerous factors, including the complexity of the product candidate and the disease to be treated. Our product candidates may fail to receive regulatory approval for many reasons, including:

- a failure to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a product candidate is safe and effective for a particular indication;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or other regulatory authorities for approval;
- an inability to demonstrate that a product candidate s benefits outweigh its risks;

an inability to demonstrate that the product candidate presents an advantage over existing therapies;

the FDA s or comparable foreign regulatory authorities disagreement with the manner in which we or our collaborators interpret the data from preclinical studies or clinical trials;

the FDA s or comparable foreign regulatory authorities failure to approve the manufacturing processes or facilities of third-party contract manufacturers of clinical and commercial supplies; and

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a change in the approval policies or regulations of, or the specific advice provided to us by, the FDA or comparable foreign regulatory authorities or a change in the laws governing the approval process.

The FDA or comparable foreign regulatory authorities might decide that the data are insufficient for approval and require additional clinical trials or other studies. Furthermore, even if we do receive regulatory approval to market a commercial product, any such approval may be subject to limitations on the indicated uses for which we or our collaborative partner may market the product. It is possible that none of our existing product candidates or any product candidates we may seek to develop or have developed by a collaborative partner will ever obtain the appropriate regulatory approvals necessary for us or our collaborators to begin selling them.

Failure to obtain regulatory approvals or to comply with regulatory requirements in foreign jurisdictions would prevent us or our collaborators from marketing our products internationally.

We intend to have our product candidates marketed outside the United States, including in Germany, Japan, the United Kingdom, France, Egypt, Israel and the countries of the former Soviet Union. In order to market products in the European Union and many other non-United States jurisdictions, we or our collaborators must obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. We have no experience in obtaining foreign regulatory approvals for our product candidates. The approval procedures vary among countries and can involve additional and costly preclinical and clinical testing and data review. The time required to obtain approval in other countries may differ from that required to obtain FDA approval. The foreign regulatory approval process may include all of the risks associated with obtaining FDA approval. Approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or by the FDA. We or our collaborators may not receive necessary approvals to commercialize our products in any market. The failure to obtain these approvals could harm our business and result in decreased revenues from milestones or royalties in our collaboration agreements.

We also face challenges arising from the different regulatory requirements imposed by United States and foreign regulators with respect to clinical trials. The EMEA often imposes different requirements than the FDA with respect to the design of a pivotal Phase III clinical trial. For example, we believe that, based on our discussions with the EMEA, we will be required to conduct a trial comparing ALTU-135 with a currently marketed pancreatic enzyme replacement therapy in order to obtain regulatory approval in the European Union. Our agreement with Dr. Falk contemplates that we will conduct a combined Phase III clinical trial, with both United States and European clinical sites, to be performed in a manner consistent with the requirements of both the FDA and the EMEA. However, the FDA has not required a comparison of ALTU-135 with a currently marketed pancreatic enzyme replacement therapy in a clinical trial and, in light of what we believe to be the different requirements of the FDA and EMEA, we are discussing with Dr. Falk an alternate strategy for the Phase III clinical development of ALTU-135 in the European Union. A failure to develop and reach agreement on a successful strategy with Dr. Falk could result in the delay of or prevent the marketing approval of ALTU-135 by the EMEA and could also result in a claim by Dr. Falk that we breached our agreement with them. If we agree on a strategy that involves a comparison of ALTU-135 with a currently marketed pancreatic enzyme replacement therapy in Europe, it is possible the FDA could delay its approval of ALTU-135 until the comparison study is completed. If the study is completed and it does not demonstrate an advantage of ALTU-135 over the currently marketed pancreatic enzyme replacement therapy, the commercial profitability and viability of ALTU-135 could be materially and adversely affected in Europe as well as the United States.

Our product candidates will remain subject to ongoing regulatory requirements even if they receive marketing approval, and if we fail to comply with these requirements, we could lose these approvals, and the sales of any approved commercial products could be suspended.

Even if we receive regulatory approval to market a particular product candidate, the product will remain subject to extensive regulatory requirements, including requirements relating to manufacturing, labeling, packaging, adverse event reporting, storage, advertising, promotion, distribution and record keeping. Even if regulatory approval of a product is granted, the approval may be subject to limitations on the uses for which

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the product may be marketed or to the conditions of approval, or contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the product, which could reduce our revenues, increase our expenses and render the approved product candidate not commercially viable.

In addition, as clinical experience with a drug expands after approval because it is typically used by a larger and more diverse group of patients after approval than during clinical trials, side effects and other problems may be observed after approval that were not seen or anticipated during pre-approval clinical trials or other studies. Any adverse effects observed after the approval and marketing of a product candidate could result in limitations on the use of or withdrawal of any approved products from the marketplace. Absence of long-term safety data may also limit the approved uses of our products, if any. If we fail to comply with the regulatory requirements of the FDA and other applicable United States and foreign regulatory authorities, or previously unknown problems with any approved commercial products, manufacturers or manufacturing processes are discovered, we could be subject to administrative or judicially imposed sanctions or other setbacks, including:

- restrictions on the products, manufacturers or manufacturing processes;
- warning letters;
- civil or criminal penalties;
- fines;
- injunctions;
- product seizures or detentions;
- import or export bans or restrictions;
- voluntary or mandatory product recalls and related publicity requirements;
- suspension or withdrawal of regulatory approvals;
- total or partial suspension of production; and
- refusal to approve pending applications for marketing approval of new products or supplements to approved applications.

If we or our collaborators are slow to adapt, or are unable to adapt, to changes in existing regulatory requirements or adoption of new regulatory requirements or policies, we or our collaborators may lose marketing approval for our products when and if any of them are approved, resulting in decreased revenue from milestones, product sales or royalties.

We deal with hazardous materials and must comply with environmental laws and regulations, which can be expensive and restrict how we do business.

Our activities and those of our third-party manufacturers on our behalf involve the controlled storage, use and disposal of hazardous materials, including microbial agents, corrosive, explosive and flammable chemicals and other hazardous compounds. We and our manufacturers are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials. Although we believe that

the safety procedures for handling and disposing of these materials comply with the standards prescribed by these laws and regulations, we cannot eliminate the risk of accidental contamination or injury from these materials.

In the event of an accident, state or federal authorities may curtail our use of these materials and interrupt our business operations. In addition, we could be liable for any resulting civil damages which may exceed our financial resources and may seriously harm our business. While we believe that the amount of insurance we currently carry, providing coverage of $1 million, should be sufficient for typical risks regarding our handling of these materials, it may not be sufficient to cover pollution conditions or other extraordinary or unanticipated events. Furthermore, an accident could damage, or force us to shut down, our operations. In addition, if we

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develop a manufacturing capacity, we may incur substantial costs to comply with environmental regulations and would be subject to the risk of accidental contamination or injury from the use of hazardous materials in our manufacturing process.

Risks Related to Our Dependence on Third Parties

We have no manufacturing capacity, and we have relied and expect to continue to rely on third-party manufacturers to produce our product candidates.

We do not own or operate manufacturing facilities for the production of clinical or commercial quantities of our product candidates or any of the compounds that we are testing in our preclinical programs, and we lack the resources and the capabilities to do so. As a result, we currently rely, and we expect to rely in the future, on third-party manufacturers to supply the active pharmaceutical ingredients, or APIs, for our product candidates and to produce and package our drug products. Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured product candidates or products ourselves, including:

- reliance on the third party for manufacturing process development, regulatory compliance and quality assurance;
- limitations on supply availability resulting from capacity and scheduling constraints of the third party;
- the possible breach of the manufacturing agreement by the third party because of factors beyond our control; and
- the possible termination or non-renewal of the agreement by the third party, based on its own business priorities, at a time that is costly or inconvenient for us.

For example, on July 24, 2006, we announced that the schedule for delivery of equipment for the production of ALTU-238 had been delayed due to several changes to the design specifications for that equipment, which would result in a delay in the initiation of the planned Phase III clinical trial of ALTU-238. Our current and anticipated future dependence upon others for the manufacture of our product candidates may adversely affect our future profit margins and our ability to develop our product candidates and commercialize any products that receive regulatory approval on a timely basis.

We currently rely on a limited number of manufacturers for the clinical and commercial supply of each of our product candidates, which could delay or prevent the clinical development and commercialization of our product candidates.

We currently depend on single source suppliers for each of our product candidates. Any disruption in production, inability of a supplier to produce adequate quantities of clinical and other material to meet our needs or other impediments could adversely affect our ability to successfully complete the clinical trials and other studies of our product candidates, delay submissions of our regulatory applications or adversely affect our ability to commercialize our product candidates in a timely manner, or at all.

We currently rely on two contract manufacturers to provide us with ALTU-135 for our Phase III clinical trial. Amano Enzyme Inc., located in Nagoya, Japan, is the sole supplier of the enzymes that comprise the APIs for ALTU-135. Patheon Inc., located in Ontario, Canada, is the sole manufacturer of the ALTU-135 drug product which contains the three APIs. Both Amano and Patheon have only supplied us with materials for our clinical trials and our toxicology studies. In addition, Amano s manufacturing facility that produces the APIs for ALTU-135 has not been inspected or

approved by the FDA, EMEA or the Japanese Ministry of Health, Labour and Welfare. Pursuant to our agreement with Amano, it has notified us that it will not be the primary manufacturer of the APIs for the initial commercial supply of ALTU-135. Any dispute over the terms of, or decisions regarding, our collaboration with Amano or other adverse developments in our relationship with Amano would materially harm our business and might accelerate our need for additional capital.

We entered into an agreement with Lonza in November 2006 for the commercial scale-up and supply of ALTU-135. We are in the process of working with Lonza to transfer from Amano and us the technology required to manufacture the APIs for ALTU-135. Switching manufacturers will require the cooperation of

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Amano, training of personnel, and validation of Lonza s processes. Changes in manufacturing processes or procedures, including a change in the location where the drug is manufactured or a change of a third-party manufacturer, may require prior review and approval from the FDA and satisfaction of comparable foreign requirements. This review may be costly and time-consuming and, if we obtain the required marketing approvals, could delay or prevent the launch of a product. If we are unable to successfully transition the manufacture of the APIs for ALTU-135 from Amano and ourselves to Lonza, our commercialization of ALTU-135 could be delayed, prevented or impaired and the costs related to ALTU-135 may increase.

With respect to ALTU-238, we have purchased the hGH, the API in ALTU-238, for our clinical trials to date from Sandoz. Genentech, with whom we recently entered into a collaboration for ALTU-238, is a manufacturer of hGH. We expect Genentech to manufacture and supply the hGH for ALTU-238 for commercial supply. We are planning to conduct a bioequivalence study in connection with the transition from hGH provided by Sandoz to hGH provided by Genentech, although the FDA has not advised us that a bioequivalence study is required. We cannot be certain the results of this bioequivalence study will be favorable.

We have an agreement with Althea, a contract manufacturing organization, for Althea to use the hGH supplied to it to produce the clinical supplies for our planned clinical trials of ALTU-238. We will need to transfer the manufacturing process for ALTU-238 to Althea and validate this process. Furthermore, prior to the initiation of manufacturing activities for ALTU-238 at Althea we will need to complete additional activities including the delivery, installation and qualification of specialized manufacturing equipment specific to ALTU-238. Delays in these activities, particularly in the delivery of specialized manufacturing equipment, has in the past delayed and could delay again the planned clinical trials for ALTU-238 and result in additional unforeseen expenses.

Our agreement with Althea covers only the manufacture of ALTU-238 for the planned clinical trials of ALTU-238. Although Genentech has agreed to supply the hGH for commercialization of ALTU-238, we or Genentech will need to negotiate an additional agreement under which Althea would provide the commercial supply of ALTU-238 or find an alternative commercial manufacturer. Switching manufacturers would require cooperation with Althea, technology transfers, training, and validation of the alternative manufacturer s processes, and, under some circumstances, will require us to make a specified payment to Althea. Changes in manufacturing processes or procedures, including a change in the location where the drug is manufactured or a change of a third-party manufacturer, may require prior review and approval from the FDA and satisfaction of comparable foreign requirements. This review may be costly and time-consuming and could delay or prevent the launch of a product. If we or Genentech are unable to secure another contract manufacturer for ALTU-238 at an acceptable cost, the commercialization of ALTU-238 could be delayed, prevented or impaired, and the costs related to ALTU-238 may increase. Any dispute over the terms of, or decisions regarding, our collaboration with Althea or other adverse developments in our relationship would materially harm our business and might accelerate our need for additional capital.

We do not have any agreements in place to manufacture our other product candidates on a commercial scale. In order to commercialize our product candidates, our existing suppliers will need to scale up their manufacturing of our product candidates and/or transfer the technology to a commercial supplier. We may be required to fund capital improvements to support scale-up of manufacturing and related activities. Our existing manufacturers may not be able to successfully increase their manufacturing capacity for any of our product candidates for which we obtain marketing approval in a timely or economic manner, or at all. We may need to engage other manufacturers to provide commercial supplies of our product candidates. It may be difficult for us to enter into commercial supply arrangements on a timely basis or on acceptable terms, which could delay or prevent our ability to commercialize our product candidates. If our existing manufacturers are unable or unwilling to increase their manufacturing capacity or we are unable to establish alternative arrangements, the development and commercialization of our product candidates may be delayed or there may be a shortage in supply.

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Any performance failure on the part of our or our collaborators existing or future manufacturers could delay clinical development or regulatory approval of our product candidates or commercialization of any approved products.

The failure of any of our or our collaborators contract manufacturers to achieve and maintain high manufacturing standards could result in patient injury or death, product liability claims, product recalls, product seizures or withdrawals, delays or failures in testing or delivery, cost overruns, failure of regulatory authorities to grant marketing approvals, delays, suspensions or withdrawals of approvals, injunctions, fines, civil or criminal penalties, or other problems that could seriously harm our business. Contract manufacturers may encounter difficulties involving production yields, quality control and quality assurance. These manufacturers are subject to ongoing periodic unannounced inspection by the FDA and corresponding state and foreign agencies which audit strict compliance with cGMP and other applicable government regulations and corresponding foreign standards. However, we or our collaborators may have limited control over third-party manufacturers compliance with these regulations and standards. Present or future manufacturers might not be able to comply with cGMP and other FDA or international regulatory requirements.

We rely on third parties to conduct, supervise and monitor our clinical trials, and those third parties may not perform satisfactorily, including failing to meet established deadlines for the completion of such trials.

We rely on third parties such as contract research organizations, medical institutions and clinical investigators to enroll qualified patients and conduct, supervise and monitor our clinical trials. Our reliance on these third parties for clinical development activities reduces our control over these activities. Our reliance on these third parties, however, does not relieve us of our regulatory responsibilities, including ensuring that our clinical trials are conducted in accordance with good clinical practice regulations, or GCP, and the investigational plan and protocols contained in the IND. Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors. In addition, they may not complete activities on schedule, or may not conduct our preclinical studies or clinical trials in accordance with regulatory requirements or our trial design. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, our efforts to obtain regulatory approvals for, and commercialize, our product candidates may be delayed or prevented.

Because we have entered into and may enter into in the future sales or collaboration transactions, we will be dependent upon our collaborators, and we may be unable to prevent them from taking actions that may be harmful to our business or inconsistent with our business strategy.

Our current licensing and collaboration agreements or any that we may enter into with respect to our product development candidates may reduce or eliminate the control we have over the development and commercialization of our product candidates. Our current or future collaborators may decide to terminate a development program under circumstances where we might have continued such a program, or may be unable or unwilling to pursue ongoing development and commercialization activities as quickly as we would prefer. A collaborative partner may follow a different strategy for product development and commercialization that could delay or alter development and commercial timelines and likelihood of success. A collaborator may also be unwilling or unable to fulfill its obligations to us, including its development and commercialization responsibilities. Our collaborators will likely have significant discretion in determining the efforts and level of resources that they dedicate to the development and commercialization of our product candidates. In addition, although we seek to structure our agreements with potential collaborators to prevent the collaborator from developing and commercializing a competitive product, we are not always able to negotiate such terms and the possibility exists that our collaborators may develop and commercialize, either alone or with others or through an in-license or acquisition, products that are similar to or competitive with the products that are the subject of the collaboration with us. If any collaborator terminates its collaboration with us or

fails to perform or satisfy its obligations to us, the development, regulatory approval or commercialization of our product candidate would be delayed or may not occur and our business and prospects could be materially and adversely affected for that reason. Likewise, if we fail to fulfill our obligations under a collaboration and license agreement, our

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collaborator may be entitled to damages, to terminate the agreement, or terminate or reduce its financial payment obligations to us under our collaborative agreement.

Our collaborations with outside scientists and consultants may be subject to restriction and change.

We work with chemists, biologists and other scientists at academic and other institutions, and consultants who assist us in our research, development, regulatory and commercial efforts. These scientists and consultants have provided, and we expect that they will continue to provide, valuable advice on our programs. These scientists and consultants are not our employees, may have other commitments that would limit their future availability to us and typically will not enter into non-compete agreements with us. If a conflict of interest arises between their work for us and their work for another entity, we may lose their services. In addition, we will be unable to prevent them from establishing competing businesses or developing competing products. For example, if a key principal investigator identifies a potential product or compound that is more scientifically interesting to his or her professional interests, his or her availability could be restricted or eliminated.

Risks Related to Commercialization of Our Product Candidates

If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our product candidates, we may be unable to generate product revenue.

We have no commercial products, and we do not currently have an organization for the sales and distribution of pharmaceutical products. In order to successfully commercialize any products that may be approved in the future by the FDA or comparable foreign regulatory authorities, we must build our sales and marketing capabilities or make arrangements with third parties to perform these services. Though we currently plan to retain North American commercialization rights to our products in circumstances where we believe that we can successfully commercialize such products on our own or with a partner, we may not be able to successfully develop our own sales and marketing force for product candidates for which we have retained marketing rights. In addition, we may co-promote our product candidates in North America with our collaborators, or we may rely on other third parties to perform sales and marketing services for our product candidates, in order to achieve a variety of business objectives, including expanding the market or accelerating penetration. If we develop our own sales and marketing capability, we may be competing with other companies that currently have experienced and well-funded sales and marketing operations.

If we do enter into arrangements with third parties to perform sales and marketing services, our product revenues may be lower than if we directly sold and marketed our products and any revenues received under such arrangements will depend on the skills and efforts of others. If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with third parties, we may not be able to generate product revenue and may not become profitable.

If physicians and patients do not accept our future products, we may be unable to generate significant revenue, if any.

Even if we or our collaborators receive regulatory approval for our product candidates, these product candidates may not gain market acceptance among physicians, healthcare payors, government pricing agencies, patients and the medical community. Physicians may elect not to recommend or patients may elect not to use these products for a variety of reasons, including:

- prevalence and severity of adverse side effects;
- ineffective marketing and distribution support;

timing of market introduction of competitive products;

lack of availability of, or inadequate reimbursement from managed care plans and other third-party or government payors;

lower demonstrated clinical safety and efficacy compared to other products;

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other potential advantages of alternative treatment methods; and

lack of cost-effectiveness or less competitive pricing.

If our approved drugs fail to achieve market acceptance, we will not be able to generate significant revenue, if any.

If the government and third-party payors fail to provide coverage and adequate payment rates for our future products, if any, our revenue and prospects for profitability will be harmed.

In both domestic and foreign markets, our sales of any future products will depend in part upon the availability of reimbursement from third-party payors. Such third-party payors include government health programs such as Medicare and Medicaid, managed care providers, private health insurers and other organizations. These third-party payors are increasingly attempting to contain healthcare costs by demanding price discounts or rebates and limiting both coverage on which drugs they will pay for and the amounts that they will pay for new drugs. As a result, they may not cover or provide adequate payment for our drugs.

We might need to conduct post-marketing studies in order to demonstrate the cost-effectiveness of any future products to such payors satisfaction. Such studies might require us to commit a significant amount of clinical development resources and management time as well as incur significant financial and other expense. Our future products might not ultimately be considered cost-effective. Adequate third-party reimbursement might not be available to enable us to maintain price levels sufficient to realize an appropriate return on investment in product development.

In the United States there have been, and we expect that there will continue to be, a number of federal and state proposals to implement governmental pricing reimbursement controls. The Medicare Prescription Drug and Modernization Act of 2003 imposed new requirements for the distribution and pricing of prescription drugs that may affect the marketing of our products, if we obtain FDA approval for those products. Under this law, Medicare was extended to cover a wide range of prescription drugs other than those directly administered by physicians in a hospital or medical office. Competitive regional private drug plans were authorized to establish lists of approved drugs, or formularies, and to negotiate rebates and other price control arrangements with drug companies. Proposals to allow the government to directly negotiate Medicare drug prices with drug companies, if enacted, might further constrain drug prices, leading to reduced revenues and profitability. While we cannot predict whether any future legislative or regulatory proposals will be adopted, the adoption of such proposals could have a material adverse effect on our business, financial condition and profitability.

Foreign governments tend to impose strict price controls on pharmaceutical products, which may adversely affect our revenues, if any.

In some foreign countries, particularly the countries of the European Union, Canada and Japan, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. In some countries, the pricing is limited by the pricing of existing or comparable therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our ability to enter into collaborative development and commercialization agreements and our revenues from these agreements could be adversely affected.

There is a substantial risk of product liability claims in our business. If we are unable to obtain sufficient insurance, a product liability claim against us could adversely affect our business.

We face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face even greater risks upon any commercialization by us of our product candidates. We have product liability insurance covering our clinical trials in the amount of $10 million, which we believe is adequate to cover any current product liability exposure we may have. However, liabilities may

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exceed the extent of our coverage, resulting in material losses. Clinical trial and product liability insurance is becoming increasingly expensive. As a result, we may be unable to obtain sufficient insurance or increase our existing coverage at a reasonable cost to protect us against losses that could have a material adverse effect on our business. An individual may bring a product liability claim against us if one of our products or product candidates causes, or is claimed to have caused, an injury or is found to be unsuitable for consumer use. Any product liability claim brought against us, with or without merit, could result in:

liabilities that substantially exceed our product liability insurance, which we would then be required to pay from other sources, if available;

an increase of our product liability insurance rates or the inability to maintain insurance coverage in the future on acceptable terms, or at all;

withdrawal of clinical trial volunteers or patients;

damage to our reputation and the reputation of our products, resulting in lower sales;

regulatory investigations that could require costly recalls or product modifications;

litigation costs; and

the diversion of management s attention from managing our business.

Risks Related to Our Intellectual Property

If the combination of patents, trade secrets and contractual provisions that we rely on to protect our intellectual property is inadequate to provide us with market exclusivity, our ability to successfully commercialize our product candidates will be harmed and we may not be able to operate our business profitably.

Our success depends, in part, on our ability to obtain, maintain and enforce our intellectual property rights both domestically and abroad. The patent position of biotechnology companies is generally highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. The validity, enforceability and commercial value of these rights, therefore, are highly uncertain.

Our patents may not protect us against our competitors. The issuance of a patent is not conclusive as to its scope, validity or enforceability. The scope, validity or enforceability of our patents can be challenged in litigation. Such litigation is often complex, can involve substantial costs and distraction and the outcome of patent litigation is often uncertain. If the outcome is adverse to us, third parties may be able to use our patented inventions and compete directly with us, without payment to us. Third parties may also be able to circumvent our patents by design innovations. We may not receive any additional patents based on the applications that we have filed and are currently pending.

Because patent applications in the United States and many foreign jurisdictions are typically not published until 18 months after filing or, in some cases, not at all, and because publications of discoveries in the scientific literature often lag behind actual discoveries, neither we nor our licensors or collaborators can be certain that we or they were the first to make the inventions claimed in patents or pending patent applications, or that we or they were the first to file for protection of the inventions set forth in these patent applications. Assuming the other requirements for patentability are met, in the United States, the first to make the claimed invention is entitled to the patent, and outside the United States, the first to file is entitled to the patent.

Many of the proteins that are the APIs in our product candidates are off-patent. Therefore, we have obtained and are seeking to obtain patents directed to novel compositions of matter, formulations, methods of manufacturing and methods of treatment to protect some of our products. Such patents may not, however, prevent our competitors from developing products using the same APIs but different manufacturing methods or formulation technologies that are not covered by our patents.

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If third parties successfully assert that we have infringed their patents and proprietary rights or challenge the validity of our patents and proprietary rights, we may become involved in intellectual property disputes and litigation that would be costly, time consuming, and could delay or prevent the development or commercialization of our product candidates.

Our ability to commercialize our product candidates depends on our ability to develop, manufacture, market and sell our product candidates without infringing the proprietary rights of third parties. Third parties may allege our product candidates infringe their intellectual property rights. Numerous United States and foreign patents and pending patent applications, which are owned by third parties, exist in fields that relate to our product candidates and our underlying technology, including patents and patent applications claiming compositions of matter of, methods of manufacturing, and methods of treatment using, specific proteins, combinations of proteins, and protein crystals. For example, we are aware of some issued United States and/or foreign patents that may be relevant to the development and commercialization of our product candidates. However, we believe that, if these patents were asserted against us, it is likely that we would not be found to infringe any valid claim of the patents relevant to our development and commercialization of these products. If any of these patents were asserted against us and determined to be valid and construed to cover any of our product candidates, including, without limitation, ALTU-135 and ALTU-238, our development and commercialization of these products could be materially adversely affected. With respect to one of these patents, Dr. Falk, which holds a license from us to commercialize ALTU-135 in Europe, has asserted that we would be liable for damages to Dr. Falk if the patent were successfully asserted against us. We do not believe that Dr. Falk s assertion has merit, and we are in discussions with Dr. Falk concerning this matter. The outcome of these discussions is uncertain.

Although we believe it is unlikely that we would be found to infringe any valid claim of these patents, we may not succeed in any action in which the patents are asserted against us. In order to successfully challenge the validity of any United States patent, we would need to overcome a presumption of validity. This burden is a high one requiring clear and convincing evidence. If any of these patents were found to be valid and we were found to infringe any of them, or any other patent rights of third parties, we would be required to pay damages, stop the infringing activity or obtain licenses in order to use, manufacture or sell our product candidates. Any required license might not be available to us on acceptable terms, or at all. If we succeeded in obtaining these licenses, payments under these licenses would reduce any earnings from our products. In addition, some licenses might be non-exclusive and, accordingly, our competitors might gain access to the same technology as that which was licensed to us. If we failed to obtain a required license or were unable to alter the design of our product candidates to make the licenses unnecessary, we might be unable to commercialize one or more of our product candidates, which could significantly affect our ability to establish and grow our commercial business.

In order to protect or enforce our patent rights, defend our activities against claims of infringement of third-party patents, or to satisfy contractual obligations to licensees of our own intellectual property, we might be required to initiate patent litigation against third parties, such as infringement suits or nullity, opposition or interference proceedings. We and our collaborators may enforce our patent rights under the terms of our major collaboration and license agreements, but neither we nor our collaborators is required to do so. In addition, others may sue us for infringing their patent rights or file nullity, opposition or interference proceedings against our patents, even if such claims are without merit.

Intellectual property litigation is relatively common in our industry and can be costly. Even if we prevail, the cost of such litigation could deplete our financial resources. Litigation is also time consuming and could divert management s attention and resources away from our business. Furthermore, during the course of litigation, confidential information may be disclosed in the form of documents or testimony in connection with discovery requests, depositions or trial testimony. Disclosure of our confidential information and our involvement in intellectual property litigation could

materially adversely affect our business. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could significantly limit our ability to continue our operations.

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Many of our employees were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. While we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees have inadvertently or otherwise used or disclosed intellectual property, trade secrets or other proprietary information of any such employee s former employer. Litigation may be necessary to defend against these claims and, even if we are successful in defending ourselves, could result in substantial costs or be distracting to management. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel.

If we are unable to protect our trade secrets, we may be unable to protect our interests in proprietary technology, processes and know-how that is not patentable or for which we have elected not to seek patent protection.

In addition to patented technology, we rely upon unpatented proprietary technology, processes and know-how, including particularly our manufacturing know-how relating to the production of the crystallized proteins used in the formulation of our product candidates. In an effort to protect our unpatented proprietary technology, processes and know-how, we require our employees, consultants, collaborators, contract manufacturers and advisors to execute confidentiality agreements. These agreements, however, may not provide us with adequate protection against improper use or disclosure of confidential information, in particular as we are required to make such information available to a larger pool of people as we seek to increase production of our product candidates and their component proteins. These agreements may be breached, and we may not become aware of, or have adequate remedies in the event of, any such breach. In addition, in some situations, these agreements may conflict with, or be subject to, the rights of third parties with whom our employees, consultants, collaborators, contract manufacturers or advisors have previous employment or consulting relationships. Also, others may independently develop substantially equivalent technology, processes and know-how or otherwise gain access to our trade secrets. If we are unable to protect the confidentiality of our proprietary technology, processes and know-how, competitors may be able to use this information to develop products that compete with our products, which could adversely impact our business.

If we fail to comply with our obligations in the agreements under which we license development or commercialization rights to products or technology from third parties, we could lose license rights that are important to our business or incur financial obligations based on our exercise of such license rights.

Several of our collaboration agreements provide for licenses to us of technology that is important to our business, and we may enter into additional agreements in the future that provide licenses to us of valuable technology. These licenses impose, and future licenses may impose, various commercialization, milestone and other obligations on us. If we fail to comply with these obligations, the licensor may have the right to terminate the license even where we are able to achieve a milestone or cure a default after a date specified in an agreement, in which event we would lose valuable rights and our ability to develop our product candidates. For example, under the terms of our strategic alliance agreement with CFFTI, we granted CFFTI an exclusive license under our intellectual property rights covering ALTU-135 and specified derivatives for use in all applications and indications in North America, and CFFTI granted us back an exclusive sublicense of the same scope, including the right to grant sublicenses. CFFTI has the right to retain its exclusive license and terminate our sublicense if we fail to meet specified development milestones, there occurs an unresolved deadlock under the agreement and we discontinue our development activities, there occurs a material default in our obligations under the agreement not cured on a timely basis, including a failure to make required license fee payments to CFFTI on a timely basis if ALTU-135 is approved by the FDA, or a bankruptcy or similar proceeding is filed by or against us. The retention by CFFTI of its exclusive license to ALTU-135 and termination of our sublicense would have a material adverse effect on our business.

In addition, we rely on Amano s intellectual property relating to the manufacturing process used to produce the APIs for ALTU-135, as well as upon technology jointly developed by us and Amano related to the production of those enzymes. Amano is required to grant a license to us of its proprietary technology and its rights under technology jointly developed during our collaboration, which we may sublicense to contract

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manufacturers we mutually select. Our agreement with Amano requires us to pay Amano a royalty based on the cost of the materials supplied to us by other contract manufacturers. If we were to breach our agreement with Amano, we would be required to pay Amano a higher royalty based on net sales of ALTU-135 to retain our rights to Amano s independently and jointly-developed process technology.

Risks Related to Our Employees and Growth

Our future success depends on our ability to retain our chief executive officer, our chief scientific officer and other key executives and to attract, retain and motivate qualified personnel.

We are a small company with 144 employees as of December 31, 2006. Our success depends on our ability to attract, retain and motivate highly qualified management and scientific personnel. In particular, we are highly dependent on Sheldon Berkle, our President and Chief Executive Officer, Dr. Alexey L. Margolin, our Chief Scientific Officer, and the other principal members of our executive and scientific teams. All of the arrangements with these principal members of our executive and scientific teams may be terminated by us or the employee at any time without notice. Although we do not have any reason to believe that we may lose the services of any of these persons in the foreseeable future, the loss of the services of any of these persons might impede the achievement of our research, development and commercialization objectives.

Recruiting and retaining qualified scientific personnel and sales and marketing personnel will also be critical to our success. We may not be able to attract and retain these personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific personnel from universities and research institutions. We do not maintain key person insurance on any of our employees.

As we evolve from a company primarily involved in drug research and development into one that may become involved in the commercialization of drug products, we may have difficulty managing our growth, which could disrupt our operations.

As we advance our drug candidates through the development process, we will need to expand our development, regulatory, manufacturing, sales and marketing capabilities or contract with other organizations to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with various contract manufacturers, collaborative partners, suppliers and other organizations. Our ability to manage our operations and growth requires us to continue to improve our operational, financial and management controls, reporting systems and procedures. Such growth could place a strain on our management, administrative and operational infrastructure. We may not be able to make improvements to our management information and control systems in an efficient or timely manner and may discover deficiencies in existing systems and controls. In addition, the physical expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

Risks Related to Our Common Stock and Public Company Compliance Requirements

Our stock price has been and is likely to continue to be volatile.

Investors should consider an investment in our common stock as risky and subject to significant loss and wide fluctuations in market value. Our common stock has only been publicly traded since January 26, 2006, and accordingly there is a limited history on which to gauge the volatility of our stock price. The stock market has experienced significant volatility, particularly with respect to pharmaceutical, biotechnology and other life sciences

company stocks. The volatility of pharmaceutical, biotechnology and other life sciences company stocks may not relate to the operating performance of the companies represented by the stock. Some of the

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factors that may cause the market price of our common stock, which has been between $10.75 and $25.70 per share from the time of our initial public offering until March 9, 2007, to continue to fluctuate include:

- delays in or results from our clinical trials or studies;
- our entry into or the loss of a significant collaboration, disputes with a collaborator, or delays in the progress of a collaborative development program;
- results of clinical trials conducted by others on drugs that would compete with our product candidates;
- delays or other problems with manufacturing our product candidates or approved products;
- failure or delays in advancing product candidates from our preclinical programs, or other product candidates we may discover or acquire in the future, into clinical trials;
- failure or discontinuation of any of our research programs;
- regulatory review delays, changes in regulatory requirements, new regulatory developments or enforcement policies in the United States and foreign countries;
- developments or disputes concerning patents or other proprietary rights;
- introduction of technological innovations or new commercial products by us or our competitors;
- changes in estimates or recommendations by securities analysts, if any, who cover our common stock;
- failure to meet estimates or recommendations by securities analysts, if any, who cover our common stock;
- public concern over our product candidates or any approved products;
- litigation;
- sales, future sales or anticipated sales of our common stock by us or our stockholders;
- general market conditions;
- changes in the structure of health care payment systems;
- failure of any of our product candidates, if approved, to achieve commercial success;
- economic and other external factors or other disasters or crises; and
- period-to-period fluctuations in our financial results.

These and other external factors may cause the market price and demand for our common stock to fluctuate substantially, which may limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock. In addition, in the past, when the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders brought a lawsuit against us, we could incur substantial costs defending the

lawsuit regardless of the outcome. Such a lawsuit could also divert the time and attention of our management.

We have limited experience attempting to comply with public company obligations. Attempting to comply with these requirements will increase our costs and require additional management resources, and we still may fail to comply.

As a newly public company, we face and will continue to face substantial growth in legal, accounting, administrative and other costs and expenses as a public company that we did not incur as a private company. Compliance with the Sarbanes-Oxley Act of 2002, as well as other rules of the Securities and Exchange Commission, or SEC, the Public Company Accounting Oversight Board and The Nasdaq Global Market has resulted in a significant initial cost to us as well as an ongoing increase in our legal, audit and financial compliance costs. We expect to be required to include the reports required by Section 404 of the Sarbanes-

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Oxley Act relating to internal control over financial reporting in our Form 10-K for the fiscal year ending December 31, 2007. We have commenced a formal process to evaluate our internal controls for purposes of Section 404, and we cannot assure that our internal control over financial reporting will prove to be effective. Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. We have commenced a formal process to evaluate our internal control over financial reporting. Given the status of our efforts, coupled with the fact that guidance from regulatory authorities in the area of internal controls continues to evolve, substantial uncertainty exists regarding our ability to comply by applicable deadlines. Any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results or cause us to fail to meet our reporting obligations. Ineffective internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock.

If the estimates we make and the assumptions on which we rely in preparing our financial statements prove inaccurate, our actual results and our stock price may vary significantly.

Our financial statements have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates, accruals and judgments that affect the reported amounts of our assets, liabilities, revenues and expenses and related disclosure. Such estimates and judgments include the carrying value of our property, equipment and other assets, revenue recognition and the value of certain accrued expenses. We base our estimates, accruals and judgments on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. However, these estimates and judgments, or the assumptions underlying them, may change over time. For example, since the inception of our collaboration agreements with CFFTI and Dr. Falk, we have adjusted our estimated costs to complete the development program for ALTU-135 on four occasions, including during the third quarters of 2005 and 2006, resulting in cumulative changes in our revenue at each time of the change in the estimate. During the third quarter of 2005, we reduced our estimated development costs for ALTU-135, which resulted in a $3.3 million increase in our cumulative revenue in the third quarter of 2005. During the third quarter of 2006, we increased our estimated development costs for ALTU-135, which resulted in a $3.7 million decrease in our cumulative revenue in the third quarter of 2006. Given the possibility that our estimates may change, our actual financial results may vary significantly from the estimates contained in our financial statements and our stock price could be adversely affected.

Insiders have substantial influence over us which could delay or prevent a change in corporate control or result in the entrenchment of management and the board of directors.

Our directors and executive officers, together with their affiliates and related persons as of February 28, 2007, beneficially owned, in the aggregate, approximately 35% of our outstanding common stock. As a result, these stockholders, if acting together, may have the ability to influence significantly the outcome of matters submitted to our stockholders for approval, including the election and removal of directors and any merger, consolidation or sale of all or substantially all of our assets. In addition, these persons, acting together, may have the ability to control the management and affairs of our company. Accordingly, this concentration of ownership may harm the market price of our common stock by:

delaying, deferring or preventing a change in control;

entrenching our management and the board of directors;

impeding a merger, consolidation, takeover or other business combination involving Altus; or

discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of Altus.

Entities affiliated with Warburg Pincus Private Equity VIII, L.P., or Warburg Pincus, one of our principal stockholders, are entitled to designate up to two individuals as candidates to our board of directors, for so long as Warburg Pincus owns at least 2,691,935 shares of our common stock, or one individual for so long as

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Warburg Pincus owns at least 1,794,623 shares of our common stock. We have agreed to nominate and use our reasonable efforts to cause the election of such candidates. Currently, Stewart Hen and Jonathan S. Leff are the members of our board of directors designated by Warburg Pincus.

A significant portion of our total outstanding shares may be sold into the market in the near future. This could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. We had 23,995,477 shares of common stock outstanding as of February 28, 2007. Holders of an aggregate of 12,747,339 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. We have registered all shares of common stock issuable under our equity compensation plans and they can now be freely sold in the public market upon issuance. A decline in the price of shares of our common stock might impede our ability to raise capital through the issuance of additional shares of our common stock or other equity securities, and may cause our stockholders to lose part or all of their investments in our shares of common stock.

Provisions of our charter, bylaws, and Delaware law may make an acquisition of us or a change in our management more difficult.

Certain provisions of our certificate of incorporation and bylaws could discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions could limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. Stockholders who wish to participate in these transactions may not have the opportunity to do so. Furthermore, these provisions could prevent or frustrate attempts by our stockholders to replace or remove our management. These provisions:

allow the authorized number of directors to be changed only by resolution of our board of directors;

establish a classified board of directors, such that not all members of the board are elected at one time;

authorize our board of directors to issue without stockholder approval blank check preferred stock that, if issued, could operate as a poison pill to dilute the stock ownership of a potential hostile acquirer to prevent an acquisition that is not approved by our board of directors;

require that stockholder actions must be effected at a duly called stockholder meeting and prohibit stockholder action by written consent;

establish advance notice requirements for stockholder nominations to our board of directors or for stockholder proposals that can be acted on at stockholder meetings;

limit who may call stockholder meetings; and

require the approval of the holders of 80% of the outstanding shares of our capital stock entitled to vote in order to amend certain provisions of our restated certificate of incorporation and restated bylaws.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may, unless certain criteria are met, prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a prescribed period of time.

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ITEM 1B. ***UNRESOLVED STAFF COMMENTS***

Not applicable.

ITEM 2. ***PROPERTIES***

As of March 9, 2007, we leased or subleased a total of approximately 52,250 square feet of office and laboratory space. The leased and subleased properties are described below:

Location	Approximate Square Footage	Use	Expiration Date
625 Putnam Avenue, Cambridge, MA	15,750	Laboratory and Office	(1)
125 Sidney Street, Cambridge, MA	20,500	Laboratory and Office	(1)
195 Albany Street, Cambridge, MA	16,000	Laboratory and Office	12/31/08

(1) Cancelable upon 12 months written notice by either party.

We are presently considering options to expand and consolidate our facilities.

ITEM 3. ***LEGAL PROCEEDINGS***

We are not currently a party to any material legal proceedings.

ITEM 4. ***SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS***

No matters were submitted to a vote of our security holders during the quarter ended December 31, 2006.

PART II

ITEM 5. ***MARKET FOR REGISTRANT S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES***

Market Information

Our common stock is traded on The Nasdaq Global Market under the symbol ALTU .

The following table sets forth, for the periods indicated, the range of high and low sales prices for our common stock since our initial public offering on January 26, 2006 through December 31, 2006:

2006	High	Low
First Quarter (from January 26, 2006)	$ 25.70	$ 15.00
Second Quarter	23.11	16.65
Third Quarter	19.23	10.75
Fourth Quarter	20.50	15.36

As of February 28, 2007, there were approximately 80 holders of record and approximately eight beneficial stockholders of our common stock.

Dividends

We have never paid or declared any cash dividends on our common stock and we do not anticipate paying any cash dividends on our common stock in the foreseeable future. In addition, the terms of our redeemable preferred stock prohibit us from declaring and paying dividends on our common stock until we have paid all accrued but unpaid dividends on our redeemable preferred stock. We intend to retain all available funds and any future earnings, if any, to fund the development and expansion of our business.

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Use of Proceeds from Registered Securities

We registered shares of our common stock in connection with our initial public offering under the Securities Act of 1933, as amended, or the Securities Act. Our Registration Statement on Form S-1 (No. 333-129037) in connection with our initial public offering was declared effective by the SEC on January 25, 2006. The offering commenced as of January 26, 2006 and did not terminate before all securities were sold. The offering was co-managed by Merrill Lynch, Pierce, Fenner & Smith Incorporated, Morgan Stanley & Co. Incorporated and Cowen and Company, LLC. A total of 8,050,000 shares of common stock was registered and sold in the initial public offering, including 1,050,000 shares of common stock sold upon exercise of the underwriters over-allotment option. No payments for expenses related to the initial public offering were made directly or indirectly to (i) any of our directors, officers, or their associates, (ii) any person owning 10% or more of any class of our equity securities, or (iii) any of our affiliates. The net proceeds of the initial public offering, approximately $110.2 million, were invested in investment grade securities. The dollar weighted average effective maturity of the portfolio is less than 9 months, and no security has an effective maturity in excess of 12 months. As of February 28, 2007, we have used approximately $60 million of the net proceeds of the initial public offering to fund our operations including preparatory activities for the Phase III trial for the capsule form of ALTU-135, activities related to the Phase II trial of ALTU-238 and preparation for Phase III trials, activities related to the development of our preclinical product candidates and general corporate purposes. There has been no material change in the planned use of proceeds from our initial public offering as described in our final prospectus filed with the SEC pursuant to Rule 424(b).

Recent Sales of Unregistered Securities

During the year ended December 31, 2006, we sold 8,669 shares of common stock to employees or former employees through the exercise of options that were not registered under the Securities Act. These shares were issued pursuant to written compensatory plans or arrangements with our employees, directors and consultants, in reliance on the exemption from registration provided by Rule 701 under the Securities Act. In addition, common stock warrants were exercised on a net issuance exercise basis, resulting in 344,087 shares of common stock that were not registered under the Securities Act and additional warrants were exercised by the payment of cash resulting in 25,346 shares of common stock that were not registered under the Securities Act. These shares were issued pursuant to the exemption from registration provided by Section 4(2) of the Securities Act. No underwriters were involved in the foregoing sales of securities.

Repurchase of Equity Securities

None.

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ITEM 6. ***SELECTED CONSOLIDATED FINANCIAL DATA***

The following table sets forth selected consolidated financial data for the years ended December 31, 2006, 2005, 2004, 2003 and 2002. This data, which is derived from our audited consolidated financial statements, should be read in conjunction with our audited consolidated financial statements and related notes which are included elsewhere in this Annual Report, and Management s Discussion and Analysis of Financial Condition and Results of Operations included in Item 7 below. Historical results are not necessarily indicative of operating results to be expected in the future.

	Years Ended December 31,				
	2006	2005	2004	2003	2002
	(In thousands, except per share amounts)				
Consolidated Statements of Operations Data:					
Revenue					
Contract revenue	$ 5,107	$ 8,288	$ 4,045	$ 2,613	$ 1,885
Product sales			185	1,268	483
Total revenue	5,107	8,288	4,230	3,881	2,368
Operating expenses					
Cost of product sales			87	578	241
Research and development	50,316	26,742	19,095	13,282	13,174
General, sales and administrative	14,799	8,611	6,320	5,533	6,859
Total operating expenses	65,115	35,353	25,502	19,393	20,274
Loss from operations	(60,008)	(27,065)	(21,272)	(15,512)	(17,906)
Interest income	5,022	1,018	646	405	853
Interest expense	(697)	(825)	(469)	(251)	(156)
Foreign currency (loss) gain and other	3	(252)	138	164	(81)
Net loss	(55,680)	(27,124)	(20,957)	(15,194)	(17,290)
Preferred stock dividends and accretion	(1,286)	(10,908)	(8,588)	(4,905)	(4,905)
Net loss attributable to common stockholders	$ (56,966)	$ (38,032)	$ (29,545)	$ (20,099)	$ (22,195)
Basic and diluted net loss per share attributable to common stockholders	$ (2.75)	$ (22.13)	$ (17.33)	$ (11.92)	$ (13.16)
Shares used in computing basic and diluted net loss per share attributable to common stockholders	20,739	1,719	1,704	1,687	1,687

	As of December 31,

	2006	2005	2004	2003	2002
			(In thousands)		
Consolidated Balance Sheet Data:					
Cash, cash equivalents and marketable securities	$ 85,914	$ 30,061	$ 52,638	$ 22,636	$ 31,808
Working capital	71,307	14,249	41,612	16,817	30,020
Total assets	96,461	40,584	62,824	29,117	41,792
Deferred revenue	8,367	13,644	10,617	12,865	9,888
Long-term debt, net of current portion	2,874	3,708	3,821	1,964	1,664
Redeemable preferred stock	6,281	119,373	108,465	58,230	53,325
Total stockholders equity (deficit)	69,422	(104,947)	(68,112)	(47,627)	(27,920)

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ITEM 7. *MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS*

You should read the following discussion and analysis of financial condition and results of operations together with the Selected Consolidated Financial Data included in Item 6 above and our consolidated financial statements and related notes appearing elsewhere in this Annual Report. In addition to historical financial information, the following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this document, particularly in Item 1A above.

Overview

We are a biopharmaceutical company focused on the development and commercialization of oral and injectable protein therapeutics for gastrointestinal and metabolic disorders, with two product candidates in clinical development. We are using our proprietary protein crystallization technology to develop protein therapies, which we believe will have significant advantages over existing products and will address unmet medical needs. Our product candidates are designed to either increase the amount of a protein that is in short supply in the body or degrade the toxic metabolites in the gut and remove them from the blood stream. Our two lead product candidates are ALTU-135, for which we have completed a Phase II clinical trial in cystic fibrosis patients for the treatment of malabsorption due to exocrine pancreatic insufficiency, and ALTU-238, for which we have completed a Phase II clinical trial in adults for the treatment of growth hormone deficiency. Our lead preclinical product candidate, ALTU-237, is an orally-administered crystalline formulation of an oxalate-degrading enzyme, which we have designed for the treatment of hyperoxalurias. We plan to file an IND for ALTU-237 for the treatment of hyperoxalurias in the first half of 2007. We also have a pipeline of other product candidates in preclinical research and development. We have generated significant losses as we have advanced our lead product candidates in clinical development and expect to continue to generate losses as ALTU-135 and ALTU-238 move into later stages of clinical development, and as ALTU-237 and our other pre-clinical product candidates advance to clinical trials. As of December 31, 2006, we had an accumulated deficit of $175.8 million.

On January 31, 2006, we completed an initial public offering of 8,050,000 shares of common stock at a price of $15.00 per share. Net proceeds to us from the offering were approximately $110.2 million, net of underwriting discounts and commissions and offering expenses of approximately $10.6 million. We intend to use our existing cash resources to fund a portion of the development and commercialization activities for ALTU-135, and the remainder to fund research and development activities for our preclinical product candidates and general corporate purposes, including capital expenditures and working capital.

Financial Operations Overview

Revenue. Our contract revenue through 2006 consists of amounts earned under collaborative research and development agreements relating to ALTU-135 with CFFTI and Dr. Falk.

In February 2001, we entered into a strategic alliance agreement with CFFTI to collaborate on the development of ALTU-135 and specified derivatives of ALTU-135 in North America for the treatment of malabsorption due to exocrine pancreatic insufficiency in patients with cystic fibrosis and other indications. The agreement, in general terms, provides us with funding from CFFTI for a portion of the development costs of ALTU-135 upon the achievement of specified development milestones, up to a total of $25.0 million, in return for specified payment obligations and our obligation to use good faith reasonable efforts to develop and bring ALTU-135 to market in North

America. As of December 31, 2006, we had received a total of $18.4 million of the $25.0 million available under the CFFTI agreement and recognized cumulative revenue of $11.8 million. Under the terms of the agreement, we may receive an additional milestone payment of $6.6 million, less an amount determined by when we achieve the milestone.

If we are successful in obtaining FDA approval of ALTU-135, we will be required to pay CFFTI a license fee equal to the aggregate amount of milestone payments we have received from CFFTI, plus interest, up to a

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maximum of $40.0 million, less the fair market value of the shares of stock underlying the warrants we issued to CFFTI. This fee, plus interest on the unpaid balance, will be due in four annual installments, commencing 30 days after the approval date. We are also required to pay an additional $1.5 million to CFFTI within 30 days after the approval date. In addition, we are obligated to pay royalties to CFFTI consisting of a percentage of worldwide net sales by us or our sublicensees of ALTU-135 for any and all indications until the expiration of specified United States patents covering ALTU-135. We have the option to terminate our ongoing royalty obligation by making a one-time payment to CFFTI, but we currently do not expect to do so. Under the agreement, CFFTI has also agreed to provide us with reasonable access to its network of medical providers, patients, researchers and others involved in the care and treatment of cystic fibrosis patients, and to use reasonable efforts to promote the involvement of these parties in the development of ALTU-135.

In connection with the execution of the CFFTI agreement and the first amendment of the agreement, we have issued to CFFTI warrants to purchase a total of 261,664 shares of our common stock at an exercise price of $0.02 per share, including 174,443 warrants with a fair value of $1.7 million issued at the time of the agreement in February 2001. The fair value of the 174,443 warrants is being recognized as a discount to contract revenue and amortized against the gross revenue earned under the contract. As of December 31, 2006, approximately $0.9 million remains to be amortized against future revenues under the agreement.

In December 2002, we entered into a development, commercialization and marketing agreement with Dr. Falk for the development by us of ALTU-135 and the commercialization by Dr. Falk of ALTU-135, if approved, in Europe, the countries of the former Soviet Union, Israel and Egypt. Under the agreement, we granted Dr. Falk an exclusive, sublicensable license under specified patents that cover ALTU-135 to commercialize ALTU-135 for the treatment of symptoms caused by exocrine pancreatic insufficiency. As of December 31, 2006, we had received upfront and milestone payments from Dr. Falk under the agreement totaling 11.0 million, which equated to $12.9 million based on exchange rates in effect at the times we received the milestone payments, and recognized cumulative revenue of $10.2 million. Because our planned Phase III clinical trial is not an international Phase III clinical trial which supports EMEA marketing approval, we do not expect to receive any reimbursement from Dr. Falk for this trial. Dr. Falk holds all commercialization and marketing rights in the licensed territory, and we are entitled to receive royalties based on the net sales of ALTU-135 in the licensed territory and revenue for the ALTU-135 capsules supplied by us to Dr. Falk. Under the terms of the agreement, the license to Dr. Falk will continue in each country in the licensed territory until the later of the expiration of the last-to-expire of specified patents that cover ALTU-135 in that country or 12 years from the date of first commercial sale of ALTU-135 in that country.

In December 2006, we entered into a collaboration agreement with Genentech, Inc. for the development, manufacture and commercialization of ALTU-238. The effective date of the agreement was February 21, 2007, following expiration of the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended. Under the terms of the agreement, we granted Genentech exclusive rights and a license to make and have made, use and import ALTU-238, and to sell ALTU-238 in North America following FDA approval. Genentech also has the option to expand the agreement to a global agreement. The agreement, in general terms, provides that Genentech will assume full responsibility for the development, manufacture and commercialization of ALTU-238.

Pursuant to the agreement, Genentech agreed to make specific cash payments to us, including an up-front payment of $30 million, which consists of $15 million in non-refundable license fee payments and $15 million in exchange for 794,575 shares of common stock. Genentech also agreed to make cash payments to us based on the achievement of performance milestones during the clinical development, regulatory approval and commercialization process in the aggregate of approximately $148 million, and to reimburse us for various development, manufacturing, regulatory, and commercialization activities that we perform on Genentech s behalf. If Genentech exercises its global option, it may be required to pay us an additional $110 million in upfront payments and milestones. In addition, Genentech will pay us royalties on any future net sales of ALTU-238 in the licensed territory, whether North America or worldwide.

Under the Genentech agreement, we have the option to elect to co-promote ALTU-238 in North America.

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In addition to contract revenue under our collaborations, we have also received research and development funding through grants from various United States government and non-government institutions. Research and development funding generally compensates us for a portion of our costs for development and testing related to collaborative research programs or grants.

Historically, our product sales consisted of revenue from the sale of crystallized enzymes for use as catalysts for the production of small molecule drugs and related development activities for use in pharmaceutical manufacturing processes. We stopped selling these products during the first half of 2004. Accordingly, since 2004 we have not generated revenue from product sales, and do not anticipate doing so in the future.

Cost of Product Sales. Cost of product sales represents the cost of manufacturing the crystallized enzyme catalysts discussed immediately above and consisted primarily of third-party contract manufacturing expenses. For products made internally, the costs consist primarily of payroll and payroll-related expenses, chemicals, supplies and overhead expenses.

Research and Development Expense. Research and development expense consists primarily of expenses incurred in developing and testing product candidates, including:

- salaries and related expenses for personnel, including stock-based compensation expenses;
- fees paid to professional service providers in conjunction with independently monitoring our clinical trials and evaluating data in conjunction with our clinical trials;
- costs of contract manufacturing services;
- costs of materials used in clinical and non-clinical trials;
- performance of non-clinical trials, including toxicity studies in animals; and
- depreciation of equipment used to develop our products and costs of facilities.

We expense research and development costs as incurred.

We have completed our Phase II clinical trial of the capsule form of ALTU-135 and are designing and preparing for our Phase III clinical trial and the long-term safety study, which we expect will begin in the second quarter of 2007, and conducting related development activities. Our current estimate of the total costs we will incur to complete the development of ALTU-135 and file an NDA with the FDA is approximately $137.5 million, excluding non-cash compensation expense and depreciation. We revised this estimate during the third quarter of 2006 from a previous estimate of $118.0 million, due to changes in specific assumptions related to the cost of manufacturing and the conduct of the Phase III clinical trials. The possibility exists that we may revise this estimate in the future. As of December 31, 2006, we had incurred approximately $69.8 million of these total costs. We have also completed a Phase II clinical trial of ALTU-238. From January 1, 2003, the date on which we began separately tracking development costs for ALTU-238, through December 31, 2006, we incurred approximately $26.6 million in total development costs for this product candidate. The amount of resources we devote to ALTU-238 in the future is subject to Genentech s development plan and whether Genentech exercises its option to extend our agreement globally. The parties may agree to have Altus conduct certain efforts that would be subject to reimbursement by Genentech. We expect to file an IND for ALTU-237 in the first half of 2007. Through December 31, 2006, we have incurred approximately $6.8 million in total development costs for this pre-clinical product candidate. We expect our research

and development costs to increase substantially in the foreseeable future as we move ALTU-135 into Phase III trials, file an IND and initiate clinical trials for ALTU-237 and continue the development of our pre-clinical pipeline.

Product candidates in clinical development have higher associated development costs than those in the preclinical stage since the former involve testing on humans while the latter involve shorter-term animal studies. Moreover, as a product candidate moves into later-stage clinical trials, such as from Phase I to Phase II or Phase II to Phase III, the costs are significantly higher due to the increased size and length of the later stage trials.

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The successful development of our product candidates is highly uncertain. At this time, we cannot reasonably estimate or know the nature, timing and estimated costs of the efforts that will be necessary to complete the remainder of the development of ALTU-238, ALTU-237 or any of our preclinical product candidates, or the period, if any, in which material net cash inflows will commence. This is due to the numerous risks and uncertainties associated with developing drugs, including the uncertainty of:

- the scope, rate of progress and expense of our clinical trials and other research and development activities;
- the potential benefits of our product candidates over other therapies;
- our ability to market, commercialize and achieve market acceptance for any of our product candidates that we are developing or may develop in the future;
- future clinical trial results;
- whether Genentech will decide to exercise its option to make our collaboration agreement for ALTU-238 a global agreement;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish;
- the expense and timing of regulatory approvals; and
- the expense of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights.

A change in the outcome of any of these variables with respect to the development of a product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. For example, if the FDA or other regulatory authority were to require us to conduct clinical trials beyond those which we currently anticipate will be required for the completion of clinical development of a product candidate or if we experience significant delays in enrollment in any of our clinical trials, we would be required to expend significant additional financial resources and time on the completion of clinical development.

General, Sales and Administrative Expense. General, sales and administrative expense consists primarily of salaries and other related costs for personnel, including stock-based compensation expenses, in our executive, sales, marketing, finance, accounting, information technology and human resource functions. Other costs primarily include facility costs not otherwise included in research and development expense, advertising and promotion expenses, trade shows and professional fees for legal services, including patent-related expenses, and accounting services.

We expect that general and administrative expenses will increase in the future due to increased payroll, expanded marketing and administrative infrastructure, increased consulting, legal, accounting and investor relations expenses associated with being a public company and costs incurred to seek collaborations with respect to any of our product candidates.

Interest and Other Income (Expense), Net. Interest income consists of interest earned on our cash and cash equivalents and marketable securities. Interest expense consists of interest incurred on capital leases and other debt financings, which are primarily equipment loans. Other income (expense), net consists primarily of foreign currency gains (losses).

Preferred Stock Dividends and Accretion. Preferred stock dividends and accretion consists of cumulative but undeclared dividends payable and accretion of the issuance costs and warrants, where applicable, on our redeemable preferred stock and Series B and C convertible preferred stock. The issuance costs on these shares and warrants were recorded as a reduction to the carrying value of the preferred stock when issued, and are accreted to preferred stock ratably through December 31, 2010 by a charge to additional paid-in capital and earnings attributable to common stockholders. As of January 31, 2006, the cumulative dividends payable on the Series B and C convertible preferred stock totaled $20.9 million. Upon the completion of our initial public offering on January 31, 2006, the Series B and Series C convertible preferred stock converted into an

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aggregate of 10,385,710 shares of common stock, and the cumulative but unpaid dividends on the Series B and C convertible preferred stock were satisfied through the issuance of 1,391,828 shares of common stock at the price of the common stock sold in the offering. Accordingly, there are no shares of Series B or Series C convertible preferred stock currently outstanding, and we no longer record preferred dividends and accretion on the Series B and Series C convertible preferred stock.

Critical Accounting Policies and Significant Judgments and Estimates

Our discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements and notes, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue, accrued expenses, deemed fair valuation of stock related to stock-based compensation and income taxes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. A summary of our significant accounting policies is contained in Note 2 to our Consolidated Financial Statements included elsewhere in this Annual Report. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements.

Revenue. Substantially all the revenue we recognize is contract revenue from collaborative agreements. We follow the provisions of the Securities and Exchange Commission s Staff Accounting Bulletin (SAB) No. 104, *Revenue Recognition* (SAB No. 104), Emerging Issues Task Force (EITF) Issue No. 00-21*, Accounting for Revenue Arrangements with Multiple Deliverables* (EITF 00-21)*,* and EITF Issue No. 99-19, *Reporting Revenue Gross as a Principal Versus Net as an Agent* (EITF 99-19).

Contract revenue includes revenue from collaborative license and development agreements with biotechnology and pharmaceutical companies for the development and commercialization of our product candidates. The terms of the agreements typically include non-refundable license fees, funding of research and development, payments based upon achievement of clinical development and commercial milestones and royalties on product sales. Contract revenue also includes non-refundable research and development funding under collaborative agreements with corporate partners and grants from various non-government institutions. Research and development funding generally reimburses us for a portion or all of the development and testing related to the collaborative research programs or grants.

Collaborative agreements are often multiple element arrangements, providing for a license as well as research and development services. We analyze agreements with multiple element arrangements to determine whether the deliverables under the agreement, including research and development services, can be separated or whether all of the deliverables must be accounted for as a single unit of accounting in accordance with EITF 00-21. We recognize upfront license payments as revenue upon delivery of the license only if the license has standalone value and the fair value of the undelivered performance obligations under the collaborative agreement can be determined. If the fair value of the undelivered performance obligations can be determined, such obligations would then be accounted for separately. If the license is considered to either (1) not have standalone value or (2) have standalone value but the fair value of any of the undelivered performance obligations cannot be determined, the arrangement would then be accounted for as a single unit of accounting.

When we determine that an arrangement should be accounted for as a single unit of accounting, we determine the period during which the performance obligations will be performed and the revenue related to payments will be recognized. Revenue is limited to the lesser of the cumulative amount of payments received or the cumulative amount

of revenue earned as of the period ending date.

If we can reasonably estimate the level of effort required to complete our performance obligations under an arrangement accounted for as a single unit of accounting and such performance obligations are provided on a best-efforts basis, we recognize revenue from such arrangement using the proportional performance method.

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We use an input based measure, specifically direct costs, to determine proportional performance, because, for our current agreements, we believe the use of an input based measure is a more accurate reflection of the level of effort related to our research and development collaborations than an output based measure, such as milestones. The impact of fluctuation in exchange rates under collaborative agreements that are denominated in a foreign currency is reflected in deferred revenue at the time cash is received and in revenue at each reporting period.

Under the proportional performance method, periodic revenue related to upfront license payments is recognized as the percentage of actual effort expended in that period to total effort budgeted for all of our performance obligations under the arrangement. Significant management judgment is required in determining the level of effort required under an arrangement and the period over which we expect to complete the related performance obligations. These estimates include the period of development, the size and complexity of the clinical trials and the cost and availability of clinical supplies. We review our estimates quarterly, and may change our estimates in the future, resulting in a change in the amount of cumulative revenue recognized as of the date of the change in estimate. Since the inception of our collaboration agreements with CFFTI and Dr. Falk, we have adjusted our estimated costs to complete the development program for ALTU-135 on four occasions, including during the third quarters of 2005 and 2006, resulting in cumulative changes in our revenue at each time of the change in the estimate. During the third quarter of 2005, we reduced our estimated development costs for ALTU-135, which resulted in a $3.3 million increase in our cumulative revenue in the third quarter of 2005. During the third quarter of 2006, we increased our estimated development costs for ALTU-135, which resulted in a $3.7 million decrease in our cumulative revenue in the third quarter of 2006. The possibility exists that revenue may increase or decrease in future periods as estimated costs of the underlying program increase or decrease or as exchange rates impact the value of foreign currency denominated collaborations, without additional cash inflows from the collaborative partner or non-government institution. For example, as of December 31, 2006, if our estimated total development costs for ALTU-135 were to increase by 10%, it would result in a $2.0 million reduction of cumulative revenue. If our estimated total development costs for ALTU-135 were to decrease by 10%, it would result in a $2.4 million increase in cumulative revenue.

Reimbursement of research and development costs is recognized as revenue provided the provisions of EITF Issue No. 99-19 are met, the amounts are fixed and determinable and collection of the related receivable is reasonably assured.

Contract amounts which are not due until the customer accepts or verifies the research results are not recognized as revenue until the customer s acceptance or verification of the results is evidenced and collection is probable. In the event warrants are issued in connection with a collaborative agreement, contract revenue is recorded net of amortization of the estimated fair value of the related warrants.

Deferred revenue at December 31, 2006 and 2005 consists of payments received in advance of revenue recognized under collaborative agreements. Since the payments received under the collaborative agreements are non-refundable, the termination of a collaborative agreement prior to its completion could result in an immediate recognition of deferred revenue relating to payments already received from the collaborative partner but not previously recognized as revenue.

Research and development funding under grants from the United States government and its agencies is recognized as revenue as development costs are incurred and billed in accordance with the terms of the grant.

Accrued Expenses. As part of the process of preparing consolidated financial statements we are required to estimate accrued expenses. This process involves identifying services which have been performed on our behalf and estimating the level of service performed and the associated cost incurred for such service as of each balance sheet date in our consolidated financial statements. Examples of estimated expenses for which we accrue include contract service fees, such as amounts paid to clinical monitors, data management organizations, clinical sites and investigators in

conjunction with clinical trials, and fees paid to contract manufacturers in conjunction with the production of materials for clinical and non-clinical trials, and professional service fees. In connection with these service fees, our estimates are most affected by our

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understanding of the status and timing of services provided relative to the actual levels of services incurred by such service providers. In the event that we do not identify costs which have begun to be incurred or we under- or over-estimate the level of services performed or the costs of such services, our reported expenses for such period would be too low or too high, and revenue may be overstated or understated to the extent such expenses relate to collaborations accounted for using the proportional performance method. The date on which specified services commence, the level of services performed on or before a given date and the cost of such services is often judgmental. We attempt to mitigate the risk of inaccurate estimates, in part, by communicating with our service providers when other evidence of costs incurred is unavailable.

Stock-Based Compensation. On January 1, 2006, we adopted Statement of Financial Accounting Standards (SFAS) No. 123(R), *Share-Based Payment* (SFAS 123(R)), as required, using the modified prospective transition method. We continue to determine the fair value of the equity instruments using the Black-Scholes option-pricing model and to recognize compensation cost ratably over the appropriate vesting period. Prior to January 1, 2006, we had accounted for stock-based compensation in accordance with the fair value recognition provisions of SFAS 123, *Accounting for Stock-Based Compensation* (SFAS 123), which are similar to those in SFAS 123(R) except that SFAS 123 allowed forfeitures to be accounted for as they occur. As a result, the adoption of SFAS 123(R) did not have a material impact on our comparative results.

We account for transactions in which goods and services are received in exchange for equity instruments based on the fair value of such goods and services received or the deemed fair value of the equity instruments issued, whichever is more reliably measured. The fair value is recorded as stock-based compensation expense ratably over the vesting period. When equity instruments are granted or sold in exchange for the receipt of goods or services and the value of those goods or services can not be readily estimated, as is true in connection with most stock options and warrants granted to employees, directors, consultants and other non-employees, we determine the fair value of the equity instruments using all relevant information, including application of the Black-Scholes option-pricing model and, in specified situations, input from valuation specialists, all of which require various estimates and assumptions. Different estimates and assumptions can yield materially different results. The factors which most affect charges or credits to operations related to stock-based compensation include: the deemed fair value of the common stock underlying the equity instruments for which stock-based compensation is recorded; the volatility of such deemed fair value; the estimated life of the equity instrument; and the assumed risk-free rate of return.

Because there was no public market for shares of our common stock prior to our initial public offering in January 2006, we had to estimate the fair value of our common stock for accounting purposes before that date. Factors that we considered when determining the fair value of our common stock included:

- pricing of private sales of our convertible preferred stock;
- prior valuations of stock grants and convertible preferred stock sales and the effect of events, including the progression of our product candidates, that have occurred between the time of the grants or sales;
- comparative rights and preferences of the security being granted compared to the rights and preferences of our other outstanding equity;
- comparative values of public companies discounted for the risk and limited liquidity provided for in the shares issued;
- perspective provided by valuation specialists;

any perspective provided by any investment banks, including the likelihood of an initial public offering and the potential value of the company in an initial public offering; and

general economic trends.

If our estimates of the deemed fair value of these equity instruments or other judgments and assumptions had been too high or too low, it would have had the effect of overstating or understating expenses.

The fair value of our equity instruments, excluding preferred stock, granted prior to our consideration of a public offering was historically determined by our Board of Directors based upon information available to it

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on the measurement dates. However, in 2005, we performed a retrospective analysis to determine the deemed fair market value of our common stock for accounting purposes in light of the potential for an initial public offering. This retrospective analysis addressed the deemed fair market value of our common stock at key points in time in 2004 and 2005. We performed our analysis in accordance with several elements of a practice aid issued by the American Institute of Certified Public Accountants entitled *Valuation of Privately Held Company Equity Securities Issued as Compensation.* We used two primary valuation methodologies within the market approach in the practice aid, including a Guideline Public Company Analysis, or comparable company IPO analysis, and a Guideline Transactions Analysis, or comparable company M&A analysis, to determine the estimated deemed fair market value of our equity during the period discussed above. We then allocated value between the preferred stock and the common stock under each analysis and arrived at the value of the common stock based on a probability-weighted expected return methodology. Now that our common stock is publicly traded, we will use the value of that stock to determine the fair value of any equity instruments we issue going forward.

Upon the initial filing of our Registration Statement on Form S-1 on October 17, 2005, we began utilizing a volatility factor in the Black-Scholes model to value options granted to employees. Prior to such date, we had excluded a volatility factor, as permitted for private companies under the provisions of SFAS No. 123. We believe the use of a volatility factor will cause our employee stock-based compensation expense to increase going forward.

Income Taxes. As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves estimating our actual current tax exposure together with assessing temporary differences resulting from differing treatments of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities. As of December 31, 2006, we had federal tax net operating loss carryforwards of $129.9 million, which expire starting in 2020, federal research and development credit carryforwards of $0.8 million and total net deferred tax assets of $55.7 million. We have recorded a valuation allowance of $55.7 million as an offset against these otherwise recognizable net deferred tax assets due to the uncertainty surrounding the timing of the realization of the tax benefit. In the event that we determine in the future that we will be able to realize all or a portion of our net deferred tax asset, an adjustment to the deferred tax valuation allowance would create an income tax benefit in the period in which such a determination is made. The Tax Reform Act of 1986 contains provisions that may limit the utilization of net operating loss carryforwards and credits available to be used in any given year in the event of a change in ownership. Given our change in ownership as a result of the initial public offering, our utilization of net operating loss carryforwards may be limited.

Results of Operations

Years Ended December 31, 2006, 2005 and 2004:

Revenue

	Years Ended December 31,			% Increase (Decrease)	
	2006	2005	2004	2005 to 2006	2004 to 2005
	(Dollars in thousands)				
Contract revenue	$ 5,107	$ 8,288	$ 4,045	(38)%	105%
Product sales			185		(100)%
Total revenue	$ 5,107	$ 8,288	$ 4,230	(38)%	96%

Overview: Contract revenue is primarily generated from revenue recognized under the proportional performance method from our collaborative agreements for ALTU-135 with CFFTI and Dr. Falk. Under this methodology, to the extent we incur direct development costs each year to advance ALTU-135, we recognize revenue based on the proportion of actual costs spent to our estimate of total direct development costs. The fluctuations in contract revenue from year-to-year reflects the effects of two factors: a) the level of development spending on ALTU-135, which directly correlates to revenue recognized, and b) changes to our

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estimate in total direct development costs for ALTU-135, which may necessitate a positive or negative cumulative revenue adjustment.

2006 as compared to 2005. Contract revenue for 2006 decreased 38%, or $3.2 million, from 2005. The decrease reflects the combined unfavorable impact of $7.0 million resulting from a negative revenue adjustment of $3.7 million in the third quarter of 2006 due to an increase in our estimate of total development costs for ALTU-135 coupled with a positive adjustment of $3.3 million recognized in the third quarter of 2005 resulting from a reduction of our estimated development costs at that time. Offsetting the combination of these adjustments was additional revenue recorded in 2006 directly correlated to the increase in development spending on ALTU-135 in 2006.

2005 as compared to 2004. Contract revenue for 2005 increased 105%, or $4.3 million, from 2004 due primarily to an increase in development activities relating to ALTU-135 and a reduction of our estimated development costs for ALTU-135 in the third quarter of 2005, resulting in a $3.3 million positive adjustment to cumulative revenue. Product sales were $0.2 million in 2004 and ceased thereafter due to our decision to stop selling crystallized enzymes for use as catalysts in the production of small molecule drugs during the first half of 2004.

Cost of product sales

We incurred no cost of product sales in 2006 or 2005 as compared to $0.1 million in 2004. In 2006 and 2005, there were no product sales.

Research and development expense

	Years Ended December 31,			% Increase (Decrease)	
	2006	2005	2004	2005 to 2006	2004 to 2005
	(Dollars in thousands)				
ALTU-135	$ 21,447	$ 12,262	$ 11,540	75%	6%
ALTU-238	13,889	7,687	3,604	81%	113%
ALTU-237	6,795				
Other research and development	8,185	6,793	3,951	20%	72%
Total research and development	$ 50,316	$ 26,742	$ 19,095	88%	40%

2006 as compared to 2005. Research and development expense for 2006 increased due primarily to an increase in third-party development costs relating to ALTU-135, ALTU-238 and our pre-clinical product candidates, increased non-cash compensation expense and an increase in personnel. During 2006, we incurred $6.4 million in costs related to payments made to Lonza to purchase equipment to establish its manufacturing facility and start-up costs paid to Lonza for the manufacture of the commercial supply of active pharmaceutical ingredients, or API s, in ALTU-135. Other ALTU-135 costs for the period related to the manufacturing of materials for planned toxicity and Phase III studies, including increased formulation and process development work for ALTU-135, as well as activities relating to a technical transfer to Amano of processes related to the manufacture of the APIs in ALTU-135. ALTU-238 costs during 2006 related to: (1) the completion of a Phase II clinical trial in growth hormone deficient adults; (2) the purchase of materials for ongoing process development and formulation activities related to our planned Phase III clinical trials in adults and Phase II and Phase III clinical trials in pediatric patients; (3) facility modification costs, technology transfer costs and validation costs relating to our clinical supply agreement with Althea for ALTU-238;

and (4) Phase III-related toxicology studies. In addition, we incurred increased pre-clinical costs in 2006 primarily related to ALTU-237. Prior to 2006, we did not separately track costs relating to ALTU-237. To support this increased level of activity, our research and development headcount increased to 103 full-time employees at December 31, 2006 from 78 full-time employees at December 31, 2005.

Product candidates in clinical development have greater associated development costs than those in the research or preclinical stage, and as a product candidate moves to later stage clinical trials, such as a Phase III clinical trial, the costs are higher due to the increased size and length of the clinical trial versus an earlier

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stage clinical trial. As a result, we anticipate that our research and development costs will continue to increase in coming periods as ALTU-135 progresses into Phase III clinical trials, ALTU-237 begins Phase I trials and as our pre-clinical product candidates advance in our pipeline. The amount of resources we will devote to ALTU-238 in the future is subject to Genentech s development plan and whether Genentech exercises its option to extend our agreement globally. The parties may agree to have Altus conduct certain efforts that would be subject to reimbursement by Genentech.

2005 as compared to 2004. Research and development expense for 2005 increased due primarily to an increase in development costs relating to ALTU-135 and ALTU-238. During 2005, we completed a Phase II clinical trial for ALTU-135 and filed an IND, completed a Phase I clinical trial and started a Phase II clinical trial for ALTU-238. To support the increased activities, our headcount in the research and development area increased to 78 full-time employees as of December 31, 2005 from 57 as of December 31, 2004.

General, sales and administrative expense

	Years Ended December 31,			% Increase (Decrease)	
	2006	2005	2004	2005 to 2006	2004 to 2005
	(Dollars in thousands)				
Personnel	$ 4,991	$ 3,762	$ 2,862	33%	31%
Legal services	2,116	1,330	1,140	59%	17%
General insurance	807	172	212	369%	(19)%
Marketing costs	1,276	499	199	156%	151%
Consulting and professional services	1,787	898	543	99%	65%
Stock-based compensation	1,495	425	158	252%	169%
Other general and administrative	2,327	1,525	1,206	53%	26%
Total general, sales and administrative	$ 14,799	$ 8,611	$ 6,320	72%	36%

2006 as compared to 2005. General, sales and administrative expenses for the year ended December 31, 2006 increased from the prior year primarily due to increased costs associated with being a public company and an increase in marketing costs as we build our marketing infrastructure as our product candidates, ALTU-135 and ALTU-238, advance through clinical trials. As a result of completing our initial public offering in January 2006, our legal costs, general insurance costs and consulting and professional service costs have increased by $2.3 million. In addition, our stock based compensation expense for 2006 increased by $1.1 million as we added personnel into the general, sales and administrative group as well as changed our assumptions used to value stock options under SFAS 123(R). We expect that general, sales and administrative expenses will continue to increase in the future due to increased payroll, expanded infrastructure, increased consulting, legal, accounting and investor relations expenses associated with being a public company and costs incurred to seek collaborations with respect to our product candidates.

2005 as compared to 2004. General, sales and administrative expenses for the year ended December 31, 2005 increased from the prior year primarily due to increased personnel costs, legal costs and marketing costs, as well as an increase in stock based compensation. During 2005, we continued to grow our general, sales and administrative departments and granted an increased number of stock options during 2005 as compared to 2004 as part of the growth. In addition, in light of our then contemplated initial public offering, we performed a retrospective analysis of the fair value of our common stock to determine the deemed fair market value of our common stock for accounting purposes

which resulted in additional stock based compensation expense being recognized during 2005. This retrospective analysis did not affect 2004 expense.

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Other income (expense) net

	Years Ended December 31,			% Increase (Decrease)	
	2006	2005	2004	2005 to 2006	2004 to 2005
	(Dollars in thousands)				
Interest income	$ 5,022	$ 1,018	$ 646	393%	58%
Interest expense	(697)	(825)	(469)	(16)%	76%
Foreign currency (loss) gain and other	3	(252)	138	(101)%	(283)%
Total other income (expense) net	$ 4,328	$ (59)	$ 315	(7,436)%	(119)%

2006 as compared to 2005. Interest income increased in 2006 over 2005 primarily due to higher investment balances as a result of the proceeds from our initial public offering in January 2006 and, to a lesser degree, higher average interest rates in 2006. Interest expense was slightly lower in 2006 based on lower outstanding principal balances. Foreign currency gains and losses were immaterial in 2006 compared to a $0.3 million loss in 2005.

2005 as compared to 2004. Interest income increased in 2005 over 2004 due primarily to higher investment balances from funds received from our Series C preferred stock financing in May 2004 and, to a lesser degree, higher average interest rates in 2005. Interest expense was higher in 2005 due to an increase in our average debt outstanding in 2005 and higher interest rates on 2005 borrowings. We recognized foreign currency losses of $0.3 million in 2005 compared to a foreign exchange gain of $0.1 million in 2004.

Preferred stock dividends and accretion

	Years Ended December 31,			% Increase (Decrease)	
	2006	2005	2004	2005 to 2006	2004 to 2005
	(Dollars in thousands)				
Preferred stock dividends and accretion	$ 1,286	$ 10,908	$ 8,588	(88)%	27%

2006 as compared to 2005. Preferred stock dividends and accretion decreased in 2006 due to the automatic conversion of all shares of Series B preferred stock and Series C preferred stock into common stock in connection with the initial public offering in January 2006. We continue to accrue stock dividends and accretion on our outstanding redeemable preferred stock.

2005 as compared to 2004. Preferred stock dividends and accretion increased to $10.9 million from $8.6 million in 2004 due to the issuance of the Series C preferred stock in May 2004.

Liquidity and Capital Resources

Overview

We have financed our operations since inception primarily through the sale of equity securities, payments from our collaborators, borrowings and capital lease financings and, prior to the middle of 2004, revenue from product sales. On January 31, 2006, we completed our initial public offering of 8,050,000 shares of common stock at a price of $15.00 per share, resulting in net proceeds to us of approximately $110 million.

From September 2001 until the time of the initial public offering, we funded our activities primarily with issuances of convertible preferred stock. In May 2004, we received approximately $50.4 million from the issuance of Series C convertible preferred stock. In September and December 2001, we received approximately $46.2 million from the issuance of Series B convertible preferred stock. Prior to September 2001, we received most of our equity and debt financing proceeds from the issuance of notes, common stock and preferred stock to Vertex, including redeemable preferred stock and Series A convertible preferred stock. The Series A, B and C convertible preferred stock were converted into shares of common stock upon the closing of the initial public offering, and accrued but unpaid dividends were satisfied through issuance of shares of our common stock upon the closing of the offering at the offering price. The outstanding redeemable preferred stock, which is not convertible into common stock, is redeemable, at the holder s option, on or after December 31, 2010, or by us at our option at any time. The liquidation preference of the redeemable preferred stock at December 31,

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2006 was $6.3 million and includes accrued but unpaid dividends on the redeemable preferred stock of $1.8 million. Assuming we do not exercise our right to repurchase the redeemable preferred stock before December 31, 2010, the accrued and unpaid dividends at that date will be $2.7 million.

As of December 31, 2006, we had received $18.4 million from our collaborative agreement with CFFTI and $12.9 million from our collaborative agreement with Dr. Falk. We are entitled to receive up to $26.4 million of future milestone payments under these two collaborations if all development milestones are met.

In December 2006, we entered into a collaboration agreement with Genentech for the development, manufacture and commercialization of ALTU-238 in North America. Pursuant to the agreement, Genentech will make a $15 million upfront payment, with the potential for us to receive additional payments of approximately $148 million based upon the successful completion of development and commercialization milestones. In conjunction with this agreement, we have received $15 million from the sale of 794,575 shares of our common stock to Genentech. In addition, if Genentech exercises its global option, we could potentially receive additional payments of more than $110 million, comprised of additional upfront and milestone payments. Upon any commercialization, we will receive royalties on net sales of ALTU-238. The amount of resources we devote to ALTU-238 in the future is subject to Genentech s development plan and whether Genentech exercises its option to extend our agreement globally. The parties may agree to have Altus conduct certain efforts that would be subject to reimbursement by Genentech.

Summary Cash Flow Information

	December 31,			% Increase (Decrease)	
	2006	2005	2004	2005 to 2006	2004 to 2005
	(Dollars in thousands)				
Cash, cash equivalents and marketable securities	$ 85,914	$ 30,061	$ 52,638	186%	(43)%
Working capital	71,307	14,249	41,612	400%	(66%)

	Years Ended December 31,		
	2006	2005	2004
	(Dollars in thousands)		
Cash flows from:			
Operating activities	$ (54,099)	$ (20,331)	$ (18,234)
Investing activities	(9,824)	23,612	(32,181)
Financing activities	112,521	102	53,248

At December 31, 2006, we had $85.9 million in cash, cash equivalents and marketable securities. The composition and mix of cash, cash equivalents and marketable securities may change frequently as a result of our constant evaluation of conditions in the financial markets, the maturity of specific investments, and our near term liquidity needs. Our funds at December 31, 2006 were invested in investment grade securities and money market funds.

Since our inception, we have generated significant losses while we have advanced our product candidates into preclinical and clinical trials. Accordingly, we have historically used cash in our operating activities. During the years

ended December 31, 2006 and 2005, our operating activities used $54.1 million and $20.3 million of cash and cash equivalents. The use of cash in each period was primarily a result of expenditures associated with our research and development activities and amounts incurred to develop and maintain our administrative infrastructure, offset partially in 2005 by milestone payments received from our collaborators.

Net cash used in investing activities was $9.8 million for the year ended December 31, 2006, reflecting $209.0 million used to purchase marketable securities, partially offset by proceeds from the maturity and sale of marketable securities of $201.8 million and $2.6 million for capital expenditures. During 2005, investing activities provided $23.6 million, reflecting $60.1 million of gross proceeds from the maturity or sale of

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marketable securities, partially offset by $34.1 million of purchases of marketable securities and $2.3 million of capital expenditures. We expect capital expenditures to be between $7.0 and $9.0 million in 2007.

For the year ended December 31, 2006, our financing activities provided $112.5 million, primarily reflecting the net proceeds of $110.2 million from our initial public offering in January 2006. In addition, we received $3.4 million in proceeds from the exercise of common stock options and warrants, and an additional $1.3 million from new borrowings under our capital equipment facility, and made repayments of long-term debt principal of $2.3 million. For the year ended December 31, 2005, proceeds from long-term debt of $2.6 million and the exercise of stock options of approximately $0.4 million partially offset repayments of long-term debt principal of $2.3 million and payment of costs associated with the initial public offering of $0.5 million.

We have generally financed a substantial portion of our capital expenditures through equipment loans under which the lender retains a security interest in the equipment. The capital equipment loans are governed by a master loan and security agreement that contains the key terms of the loans. The master loan and security agreement require us to maintain insurance on the collateral. Each loan carries a fixed rate of interest which was established at the time of borrowing and is payable in fixed monthly installments over periods of up to four years. We intend to secure additional equipment loans to continue to finance a substantial portion of our future capital expenditures.

The following table summarizes our contractual obligations at December 31, 2006 and the effects such obligations are expected to have on our liquidity and cash flows in future periods:

Payments Due by Period

	Total	2007	2008 Through 2009	2010 Through 2011	After 2011
	(Dollars in thousands)				
Contractual Obligations(1):					
Short and long-term debt(2)	$ 5,638	$ 2,519	$ 2,915	$ 204	$
Capital lease obligations(2)	25	25			
Operating lease obligations	1,922	1,522	400		
Purchase obligations	16,573	13,826	2,700	47	
Total contractual cash obligations	$ 24,158	$ 17,892	$ 6,015	$ 251	$

(1) Excludes estimated payment of $7.2 million to Vertex in connection with its optional redemption of shares of redeemable preferred stock on or after December 31, 2010, plus dividends accruing after that date, and amounts payable to CFFTI upon FDA approval of ALTU-135 and royalties to CFFTI on product sales of ALTU-135.

(2) Includes interest expense.

Funding Requirements

We anticipate that our current cash, cash equivalents and marketable securities together with our expected cash inflow from collaborative agreements will be sufficient to fund our operations through at least mid-2008. However, our

forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement that involves risks and uncertainties, and actual results could vary materially.

Since our inception, we have generated significant losses while we have advanced our product candidates into preclinical and clinical trials. As we continue to advance our product candidates through development and begin to incur increased sales and marketing costs related to commercialization of our product candidates, we expect to incur additional operating losses until such time, if any, as our efforts result in commercially viable drug products. We do not expect our existing capital resources, together with the milestone payments and

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research and development funding we expect to receive, to be sufficient to fund the completion of the development and commercialization of any of our product candidates, and we expect that we will need to raise additional funds prior to being able to market any products. We may also need additional funds for possible future strategic acquisitions of businesses, products or technologies complementary to our business.

Our funding requirements will depend on numerous factors, including:

- the continued development progress on ALTU-135 and ALTU-237, including the completion of nonclinical and clinical trials and the results of these studies;
- our ability to discover additional clinical product candidates from our preclinical portfolio using our drug discovery technology and advance them into clinical development;
- the timing, receipt and amount of milestone and other payments, if any, from present and future collaborations;
- the timing and cost involved in obtaining regulatory approvals;
- the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims for our drug discovery technology and product candidates and avoiding the infringement of intellectual property rights of others;
- the decision by Genentech as to whether to exercise its option under our collaboration agreement for ALTU-238 to make the collaboration global;
- the potential acquisition and in-licensing of other technologies, products or assets;
- the timing, receipt and amount of sales and royalties, if any, from our product candidates; and
- the cost of manufacturing, marketing and sales activities, if any.

We do not expect to generate significant revenues, other than payments that we receive from our current collaborators or other similar collaborations we may enter into in the future, until we successfully obtain marketing approval for, and begin selling one or more of our product candidates.

We believe the key factors that will affect our internal and external sources of cash are:

- our ability to successfully develop, manufacture, obtain regulatory approval for and commercialize ALTU-135;
- the success of the Genentech collaboration for ALTU-238;
- the success of our development program for ALTU-237 and other preclinical programs;
- our ability to enter into strategic collaborations with corporate collaborators and the success of such collaborations; and
- the receptivity of the capital markets to financings of biotechnology companies.

We may raise funds from time to time through public or private sales of equity or from borrowings. Financing may not be available on acceptable terms, or at all, and our failure to raise capital when needed could materially adversely

impact our growth plans and our financial condition and results of operations. Additional equity financing may be dilutive to the holders of our common stock and debt financing, if available, may involve significant cash payment obligations and covenants that restrict our ability to operate our business. We do not engage in off-balance sheet financing arrangements, other than operating leases.

New Accounting Pronouncements

In June 2006, the Financial Accounting Standards Board (FASB) issued FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes an interpretation of FASB Statement No. 109* (FIN 48), which provides clarification related to the process associated with accounting for uncertain tax positions recognized in consolidated financial statements. FIN 48 prescribes a more-likely-than-not threshold for financial statement

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recognition and measurement of a tax position taken, or expected to be taken, in a tax return. FIN 48 also provides guidance related to, among other things, classification, accounting for interest and penalties associated with tax positions, and disclosure requirements. We are required to adopt FIN 48 on January 1, 2007. We are evaluating the impact of adopting FIN 48 on our consolidated financial statements.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements* (SFAS No. 157). Among other requirements, SFAS No. 157 defines fair value and establishes a framework for measuring fair value and also expands disclosure about the use of fair value to measure assets and liabilities. SFAS No. 157 is effective beginning the first fiscal year that begins after November 15, 2007. We are evaluating the impact of SFAS No. 157 on our financial position, results of operations and cash flows.

In September 2006, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 108, *Considering the Effects of Prior Year Misstatements When Quantifying Misstatements in Current Year Financial Statements* (SAB 108), which provides guidance on quantifying and evaluating the materiality of unrecorded misstatements. SAB 108 was effective for fiscal years ending after November 15, 2006. The adoption of SAB 108 did not have an impact on our results of operations, financial position and cash flows.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities* (SFAS No. 159). SFAS No. 159 expands opportunities to use fair value measurement in financial reporting and permits entities to choose to measure many financial instruments and certain other items at fair value. SFAS No. 159 is effective for fiscal years beginning after November 15, 2007. We have not decided if we will early adopt SFAS No. 159 or if we will choose to measure any eligible financial assets and liabilities at fair value.

ITEM 7A. *QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK*

Our cash, cash equivalents and short-term investments are invested with highly-rated financial institutions in North America with the primary objective of preservation of principal, while maintaining liquidity and generating favorable yields. When purchased, investments have a maturity of less than 18 months. Some of the securities we invest in are subject to interest rate risk and will decline in value if market interest rates increase. To minimize the risk associated with changing interest rates, we invest primarily in bank certificates of deposit, United States government securities and investment-grade commercial paper and corporate notes. Substantially all of our investments at December 31, 2006 met these criteria. At December 31, 2006, we had gross unrealized gains of approximately $25,000 on our investments. If market interest rates were to increase immediately and uniformly by 10% from levels at December 31, 2006, we estimate that the fair value of our investment portfolio would decline by an immaterial amount.

Our total debt at December 31, 2006 was $5.0 million, primarily representing drawdowns under our lease credit facilities and expired capital equipment facilities. All borrowings under these credit facilities carried fixed rates of interest established at the time such drawdowns were made. Accordingly, our future interest costs relating to such drawdowns are not subject to fluctuations in market interest rates.

Our assets are principally located in the United States and substantially all of our historical revenues and operating expenses are denominated in United States dollars. Contract revenue under our collaboration with Dr. Falk and some of our purchases of raw materials are denominated in Euros. Accordingly, we are subject to market risk with respect to foreign currency-denominated revenues and expenses. We had foreign currency exchange losses of $0.3 million in 2005. There were no foreign currency gains or losses in 2006. If the average Euro/ United States dollar exchange rate were to strengthen or weaken by 10% against the average respective exchange rates experienced in 2006 or 2005, we estimate that the impact on our financial position, results of operations and cash flows would not be material. Since ALTU-135 has not reached commercialization in North America or in the territory covered by the Dr. Falk agreement, we do not believe we are subject to significant foreign currency risk at this time. We may engage in additional

collaborations with international partners. When ALTU-135 or any other future drug candidates reach commercialization outside of the United States, if at all, or we enter into additional collaborations with international partners providing for foreign currency-denominated revenues and expenses, we may be subject to significant market risk.

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ITEM 8. ***FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA***

The financial statements required by this Item are attached to this Annual Report beginning on Page F-1.

ITEM 9. ***CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE***

None.

ITEM 9A. ***CONTROLS AND PROCEDURES***

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer, or CEO, and Chief Financial Officer, or CFO, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2006. In designing and evaluating our disclosure controls and procedures, our management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and our management necessarily applied its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation by our management, our CEO and CFO concluded that, as of December 31, 2006, our disclosure controls and procedures were: (1) designed to ensure that material information relating to us is made known to our CEO and CFO by others within the Company, particularly during the period in which this report was being prepared and (2) effective, in that they provide reasonable assurance that information required to be disclosed by us in reports that we file or submit under the Securities Exchange Act of 1934, as amended, or the Exchange Act, is recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission s rules and forms and that such information is accumulated and communicated to management as appropriate to allow timely decisions regarding disclosures.

Changes in Internal Control

No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the fiscal quarter ended December 31, 2006 that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. ***OTHER INFORMATION***

Not applicable.

PART III

ITEM 10. ***DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE***

Directors

Our Restated Certificate of Incorporation and Restated Bylaws provide that our business is to be managed by or under the direction of our Board of Directors. Our Board of Directors is divided into three classes for purposes of election. One class is elected at each annual meeting of stockholders to serve for a three-year term. Our Board of Directors currently consists of nine members, divided into three classes as follows: (1) Stewart Hen, Harry H. Penner, Jr. and

John P. Richard constitute Class I with a term ending at the 2009 annual meeting, (2) Jonathan S. Leff, David D. Pendergast, Ph.D. and Jonathan D. Root, M.D. constitute Class II with a term ending at the 2007 annual meeting, and (3) Sheldon Berkle, Manuel A. Navia, Ph.D. and

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Michael S. Wyzga constitute Class III with a term ending at the 2008 annual meeting. The following table sets forth certain information regarding our directors as of March 1, 2007.

Name	Age	Position with the Company
Sheldon Berkle	61	President and Chief Executive Officer; Director
John P. Richard(1)	49	Chairman of the Board
Stewart Hen(2)(3)	40	Director
Jonathan S. Leff(1)	38	Director
Manuel A. Navia, Ph.D.(2)(3)	60	Director
David D. Pendergast, Ph.D.(1)	58	Director
Harry H. Penner, Jr.(1)	61	Director
Jonathan D. Root, M.D.(1)(2)	47	Director
Michael S. Wyzga(1)	51	Director

(1) Audit Committee. Mr. Richard was a member of the Audit Committee for fiscal year 2006 and ceased serving on the Audit Committee in 2007. Mr. Leff and Dr. Root served as members of the Audit Committee for part of 2006 and no longer serve on the Audit Committee. The Audit Committee is currently comprised of Messrs. Wyzga and Penner and Dr. Pendergast.

(2) Compensation Committee. Mr. Hen was a member of the Compensation Committee for part of 2006 and no longer serves on the Compensation Committee. The Compensation Committee is currently comprised of Drs. Root and Navia.

(3) Nominating and Governance Committee. The Nominating and Governance Committee is currently comprised of Mr. Hen and Dr. Navia.

The following is a brief summary of the background of each of our directors.

Sheldon Berkle joined us as our President and Chief Executive Officer in May 2005 and was elected as a member of our Board of Directors. Prior to joining us, Mr. Berkle served as Executive Vice President of Boehringer Ingelheim Pharmaceuticals Inc. from November 1994 to December 2003. In this position, Mr. Berkle was responsible for United States pharmaceutical operations, including portfolio management, new product launches, commercialization, marketing, sales, business development, mergers and acquisitions, strategic planning and alliance management. Mr. Berkle was also a co-founder of Boehringer Ingelheim Canada, a pharmaceutical company, and served as its Chief Executive Officer from 1989 to 1994. From January 2004 to April 2005, Mr. Berkle was not actively employed. Mr. Berkle holds a B.Sc. in pharmacy from the University of Manitoba and an M.B.A. from the University of Toronto.

John P. Richard has served as chairman of our Board of Directors since October 2004. Mr. Richard has served as an independent strategic and commercial development advisor in the biotech industry since April 1999. Mr. Richard currently serves as Senior Business Advisor to GPC Biotech AG, a biotechnology company, as a partner of Georgia Venture Partners, a biotechnology investing firm, and as a consultant to Nomura Phase4 Ventures. He also serves as a director of Targacept, Inc., Zygogen, LLC, Metastatix, Inc., Axona, Inc., AerovectRx Corporation, and Macroflux Corporation. Mr. Richard was previously Executive Vice President, Business Development at SEQUUS Pharmaceuticals, Inc., where he was responsible for negotiating the acquisition of SEQUUS by ALZA Corporation. Prior to joining SEQUUS, Mr. Richard held the positions of Vice President, Corporate Development for VIVUS, Inc.

and Senior Vice President, Business Development of Genome Therapeutics Corporation, where he was responsible for establishing numerous pharmaceutical alliances. He was also co-founder and original Chief Executive Officer of IMPATH Laboratories, Inc., a leading cancer pathology reference laboratory in the United States. Mr. Richard received his M.B.A. from Harvard Business School and his B.S. from Stanford University.

Stewart Hen has served as a member of our Board of Directors since May 2004. Mr. Hen has been with Warburg Pincus LLC, a venture capital and private equity firm, since May 2000 and is currently a managing director, where he focuses on investments in the life sciences sector, including biotechnology, pharmaceuticals, specialty pharmaceuticals, drug delivery and diagnostics. Prior to joining Warburg Pincus, he was a

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management consultant at McKinsey & Company, where he advised pharmaceutical and biotechnology companies on a range of strategic management issues. Prior to joining McKinsey, he worked at Merck in research and development and manufacturing. Mr. Hen is also a director of Allos Therapeutics, Inc., Neurogen Corporation and a number of private companies. Mr. Hen holds an M.B.A. from The Wharton School at the University of Pennsylvania, an M.S. in chemical engineering from the Massachusetts Institute of Technology and a B.S. in chemical engineering from the University of Delaware.

Jonathan S. Leff has served as a member of our Board of Directors since May 2004. Mr. Leff has been a managing director at Warburg Pincus LLC since January 2000. Mr. Leff is responsible for Warburg Pincus North American investment activities in biotechnology, pharmaceuticals and related industries. Prior to joining Warburg Pincus, Mr. Leff was a consultant at Oliver, Wyman & Co. Mr. Leff is a director of Allos Therapeutics, Inc., Neurogen Corporation, InterMune, Inc., Sunesis Pharmaceuticals, Inc. and ZymoGenetics, Inc. Mr. Leff received an A.B. in government from Harvard College and an M.B.A. from Stanford University.

Manuel A. Navia, Ph.D. is one of our founders and has served as a member of our Board of Directors since 1992. Since March 2004, Dr. Navia has been an Executive-in-Residence at Oxford Bioscience Partners, a venture capital firm. In addition, since March 2003, Dr. Navia has served as a drug discovery and development advisor and consultant to various companies in the biotechnology industry. Prior to that time, from January 2001 to March 2003, Dr. Navia was Executive Vice President for Research at Essential Therapeutics, Inc., a biotechnology company. He was a founder of The Althexis Company, Inc. in 1997, and served as its President and Chief Executive Officer until January 2001, when it merged with Microcide Pharmaceuticals Inc. to form Essential Therapeutics. From 1989 to 1997, Dr. Navia served as Vice President and Senior Scientist at Vertex. Dr. Navia holds a Ph.D. and an M.S. in biophysics from the University of Chicago and a B.A. in physics from New York University.

David D. Pendergast, Ph.D. has served as a member of our Board of Directors since November 2006. Since July 2005, Dr. Pendergast has served as President, Human Genetics Therapies at Shire Pharmaceuticals, plc., a pharmaceutical company. Previously, he was employed at Transkaryotic Therapies, Inc., a biotechnology company, from December 2001 to July 2005 serving as the company s Chief Executive Officer, Chief Operating Officer and Executive Vice President of Technical Operations. From April 1996 to August 2001, Dr. Pendergast was Vice President of Product Development and Quality at Biogen, Inc. He has also held senior positions at Fisons Ltd. Pharmaceutical Division and at The Upjohn Company. Dr. Pendergast received a B.A. from Western Michigan University and an M.S. and Ph.D. from the University of Wisconsin.

Harry H. Penner, Jr. has served as a member of our Board of Directors since April 2006. He has been the Chairman and Chief Executive Officer of Marinus Pharmaceuticals, Inc., a biotechnology company, since he co-founded that company in June 2004. Mr. Penner also has served as Chairman and Chief Executive Officer of Nascent BioScience, LLC, a firm engaged in the creation and development of new biotechnology companies, since September 2001. From 1993 to 2001, he was President, Chief Executive Officer and Vice Chairman of Neurogen Corporation. Previously, he served as Executive Vice President of Novo Nordisk A/S and President of Novo Nordisk of North America, Inc. from 1988 to 1993. From 1985 to 1988, he was Executive Vice President and General Counsel of Novo Nordisk A/S. He has served more recently as BioScience Advisor to the Governor and the State of Connecticut, as Chairman of the Board of Directors for the Connecticut Technology Council, as Co-Chairman of Connecticut United for Research Excellence, and as Director of the Connecticut Business and Industry Associates. He currently serves on the Boards of Avant Immunotherapeutics, Inc. and Ikonisys, Inc. and chairs the Board of Rib-X Pharmaceuticals, Inc. Mr. Penner holds a B.A. from the University of Virginia, a J.D. from Fordham University, and an LL.M. in International Law from New York University.

Jonathan D. Root, M.D. has served as a member of our Board of Directors since September 2001. Having joined U.S. Venture Partners, a venture capital firm, in July 1995, Dr. Root is presently a managing member and focuses on

investments in therapeutic medical devices, diagnostics, drug discovery tools and services, and biopharmaceutical development. Prior to joining U.S. Venture Partners, Dr. Root spent nine years in clinical practice, most recently on the faculty and clinical staff at The New York Hospital-Cornell Medical Center in New York City, where he was an Assistant Professor of Neurology and Director of the Neurology-

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Neurosurgery Special Care Unit. Dr. Root holds an A.B. in economics/government from Dartmouth College, an M.D. from the University of Florida College of Medicine, and an M.B.A. from Columbia University.

Michael S. Wyzga has served as a member of our Board of Directors since May 2004. Mr. Wyzga is Executive Vice President and Chief Financial Officer of Genzyme Corporation, a biotechnology company. Mr. Wyzga joined Genzyme as Vice President and Corporate Controller in March 1998, was promoted to Senior Vice President and Corporate Controller in December 1998, and to Chief Financial Officer in June 1999. Mr. Wyzga became an Executive Vice President of Genzyme in June 2003 and is responsible for its global financial reporting. Prior to joining Genzyme, Mr. Wyzga was Chief Financial Officer for Sovereign Hill Software, Inc. Prior to his role at Sovereign Hill Software, Mr. Wyzga was the Chief Financial Officer for CacheLink Corporation, and prior to that, Mr. Wyzga held various management positions at Lotus Development Corporation, including Vice President of Finance and Director of Plans and Controls. Prior to joining Lotus, Mr. Wyzga held management positions at Digital Equipment Corporation. Mr. Wyzga received an M.B.A. from Providence College and a B.S. in business administration from Suffolk University.

Executive Officers

The following table sets forth certain information regarding our executive officers as of March 1, 2007. We have an employment agreement with Sheldon Berkle, our President and Chief Executive Officer. All other executive officers are at-will employees.

Name	Age	Position
Sheldon Berkle	61	President and Chief Executive Officer
Burkhard Blank, M.D.	52	Senior Vice President, Medicine, Regulatory Affairs, and Project Management
Renato Fuchs, Ph.D.	64	Senior Vice President, Manufacturing and Technical Operations
Bruce A. Leicher	51	Senior Vice President, General Counsel and Secretary
Alexey L. Margolin, Ph.D.	54	Senior Vice President, Research and Pre-clinical Development, Chief Scientific Officer
Robert Gallotto	41	Vice President, Strategic Planning and Alliance Management
Jonathan I. Lieber	37	Vice President, Chief Financial Officer and Treasurer
Lauren M. Sabella	46	Vice President, Commercial Development
John M. Sorvillo, Ph.D.	52	Vice President, Business Development

Sheldon Berkle. See biography above.

Burkhard Blank, M.D. has served as our Senior Vice President, Medicine, Regulatory Affairs, and Project Management since June 2006. Prior to joining us, from October 2001 to June 2006, Dr. Blank served as Senior Vice President for Medicine and Drug Regulatory Affairs at Boehringer Ingelheim USA. Prior to this, Dr. Blank established the International Project Management Department at Boehringer Ingelheim GmbH, which had worldwide responsibility for the planning and monitoring of all Phase I-IV development projects and for drug regulatory affairs with international submissions. Dr. Blank was also a member of Boehringer s International Development Committee,

which was responsible for steering Boehringer s global drug development portfolio. Dr. Blank holds a medical degree in internal medicine from Universitaet Marburg, Germany.

Renato Fuchs, Ph.D. has served as our Senior Vice President, Manufacturing and Technical Operations since August of 2006. Prior to joining us, from March 2002 to August 2006, Dr. Fuchs served as Senior Vice President, Manufacturing and Operations at Shire HGT (previously Transkaryotic Therapies, Inc.), where he

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was responsible for manufacturing, materials management, process development and engineering operations. Previous to his tenure at Shire HGT, Dr. Fuchs spent nine years at Chiron Corporation, most recently as Senior Vice President of BioPharmaceuticals, with responsibility for overseeing and coordinating critical domestic and international projects, including the management of external collaborations. From 1988 to 1993, Dr. Fuchs held advancing Vice President-level positions at Centocor, Inc. where he was instrumental in developing the antibody manufacturing technology. Previous to this, he spent 15 years at Schering-Plough Corporation developing antibiotic manufacturing processes and pioneering the development and manufacturing of recombinant proteins. Dr. Fuchs received a B.S. in Chemical Engineering from the Universidad del Valle, Cali, Colombia, and an M.S. and Ph.D. in Biochemical Engineering from the Massachusetts Institute of Technology.

Bruce A. Leicher has served as our Senior Vice President, General Counsel since December 2006. Prior to joining us, Mr. Leicher was Vice President and General Counsel at Antigenics Inc., a biotechnology company, from November 2005 to December 2006. From January 2003 to November 2005, Mr. Leicher served as Vice President and Chief Pharmaceutical Counsel for Millennium Pharmaceuticals, Inc. From January 2002 to December 2002, Mr. Leicher formed and co-chaired the Lifesciences Practice group at the law firm of Hill & Barlow after re-entering private practice on his own representing and counseling biotechnologies companies on a variety of matters. From 1990 to 1999, Mr. Leicher served in several legal positions at Genetics Institute, Inc., becoming Vice President, Legal in 1996. Mr. Leicher received his J.D. from Georgetown University Law Center and his B.A. from the University of Rochester.

Alexey L. Margolin, Ph.D. has served as our Chief Scientific Officer since August 2004 and as our Senior Vice President, Research and Pre-clinical Development since June 2006. He served as our Vice President of Science from 1996 to 2004 and as our Director of Research from 1993 to 1996. Prior to joining us, Dr. Margolin was responsible for biocatalysis activities on a global basis at Merrell Dow Research Institute. From 1986 to 1988, he worked at the Massachusetts Institute of Technology on enzyme-catalyzed processes. In 2003, Dr. Margolin was elected a fellow of the American Institute of Medicine and Biological Engineering. Dr. Margolin received his M.S. in chemistry and Ph.D. in bio-organic chemistry from Moscow University.

Robert Gallotto currently serves as our Vice President, Strategic Planning and Alliance Management. From January 2003 through December 2005, Mr. Gallotto served as our Vice President, Commercial Development and Alliance Management. Mr. Gallotto joined us in July 2001 as Director of Commercial Development where he was responsible for marketing, product planning and business development. Before joining us, Mr. Gallotto served as Vice President of Marketing and Business Development at Sage BioPharma, Inc., a pharmaceutical company, from August 1999 to June 2001. From January 1996 to July 1999, Mr. Gallotto served in various positions at Serono, Inc. and Biogen, Inc., where he was responsible for overall brand positioning, product launch planning, strategic planning and key alliance management for a portfolio of drugs including Gonal-F and Avonex. From 1987 to 1995, Mr. Gallotto served in various positions in sales, marketing and managed healthcare with The Upjohn Company. Mr. Gallotto received a B.S. in biology from Stonehill College.

Jonathan I. Lieber currently serves as our Vice President, Chief Financial Officer and Treasurer. Mr. Lieber joined us in July 2002 as our Vice President, Finance. From 1998 to June 2002, Mr. Lieber was a member of SG Cowen s Health Care Investment Banking Group, most recently as a vice president focused on the biotechnology and specialty pharmaceuticals sectors. Prior to joining SG Cowen, Mr. Lieber was a member of the Health Care and High Yield Groups at Salomon Brothers Inc. Mr. Lieber currently serves as a member of the Harvard Vanguard Medical Associates audit committee. Mr. Lieber received an M.B.A. in finance from the Stern School of Business of New York University and a B.Sc. in business administration from Boston University.

Lauren M. Sabella has served as our Vice President, Commercial Development since May 2006. Prior to joining us, Ms. Sabella was employed by Boehringer Ingelheim Pharmaceuticals Inc. for 18 years in positions of increasing responsibility. Most recently, Ms. Sabella served as Vice President Sales, Eastern Zone from October 2002 to April

2006. Previously, she was Executive Director, Marketing in Boehringer s Respiratory Medicine area, a key therapeutic franchise with several products including Atrovent, Combivent, and Spiriva indicated for the treatment of COPD. Ms. Sabella holds a B.B.A from Hofstra University.

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John M. Sorvillo, *Ph.D.* has served as our Vice President, Business Development since August 2006. Before joining us, Dr. Sorvillo served as Chief Executive Officer of Bionaut Pharmaceuticals from June 2005 to August 2006. From 1995 to 2005, Dr. Sorvillo acted as Vice President of Business Development at ArQule, where he was responsible for establishing corporate collaborations with pharmaceutical companies. Prior to that, Dr. Sorvillo held a variety of positions at OSI Pharmaceuticals (formerly Oncogene Science) leading up to his last position as Vice President and General Manager, Research Products Division. Dr. Sorvillo was a postdoctoral fellow at Memorial Sloan Kettering Cancer Center and received his Ph.D. in Immunology from the New York University Medical Center, Sackler Institute of Biomedical Sciences. He holds a B.A. in Biology from the City University of New York, Hunter College.

Information Regarding the Audit Committee

The Audit Committee of the Board of Directors currently has three members, Messrs. Penner and Wyzga and Dr. Pendergast. During 2006, Mr. Richard also served on our Audit Committee, but in January 2007 he ceased service on our Audit Committee. Our Audit Committee s role and responsibilities are set forth in the Audit Committee s written charter and include the authority to retain and terminate the services of our independent auditors, review annual financial statements, consider matters relating to accounting policy and internal controls and review the scope of annual audits. Nasdaq rules require that all members of the audit committee be independent directors, as defined by the rules of the Nasdaq and the SEC, as such standards apply specifically to members of audit committees. Our Board of Directors has determined that all current members of the Audit Committee satisfy the current independence standards promulgated by the SEC and by Nasdaq, as such standards apply specifically to members of audit committees. The Board has determined that Mr. Wyzga is an audit committee financial expert, as the SEC has defined that term in Item 407 of Regulation S-K.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors and executive officers, and persons who own more than ten percent of a registered class of our equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of our common stock and other equity securities. Officers, directors and greater than ten percent stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file.

Our records reflect that all reports required to be filed pursuant to Section 16(a) of the Exchange Act by our executive officers and directors have been filed on a timely basis.

Code of Conduct and Ethics

We have adopted a code of conduct and ethics that applies to all of our employees, including our principal executive officer and principal financial and accounting officer, and our directors. The text of the code of conduct and ethics is posted on our website at *www.altus.com* and will be made available to stockholders without charge, upon request, in writing to the Corporate Secretary at 125 Sidney Street, Cambridge, MA 02139. Disclosure regarding any amendments to, or waivers from, provisions of the code of conduct and ethics that apply to our directors, principal executive and financial and accounting officers will be included in a Current Report on Form 8-K within four business days following the date of the amendment or waiver, unless website posting of such amendments or waivers is then permitted by the rules of The Nasdaq Stock Market, LLC.

ITEM 11. ***EXECUTIVE COMPENSATION***

Compensation Discussion and Analysis

The primary objectives of the Compensation Committee of our Board of Directors with respect to executive compensation are to attract and retain the best possible executive talent, to motivate them to achieve corporate objectives, and reward them for superior performance. The focus is to tie short and long-term cash and equity incentives, in the form of stock options, to the achievement of measurable corporate and individual

performance objectives, and to align executives incentives with stockholder value creation. To achieve these objectives, the Compensation Committee has maintained a compensation plan that ties a substantial portion of executives overall compensation to our research, clinical, regulatory, commercial, and operational performance. Because we believe the performance of every employee is important to our success, we are mindful of the effect our executive compensation and incentive programs have on all of our employees. In 2006, we began working on a revised compensation structure that is more reflective of our needs as a public company. We anticipate completing this work and implementing a new structure in 2007. Compensation decisions for fiscal year 2006 were determined by using the policies and processes in place prior to our initial public offering and are detailed below.

Through fiscal year 2006, management has developed our compensation plans by utilizing publicly available compensation data and subscription compensation survey data for national and regional companies in the biotechnology industry, in particular data obtained from Radford Biotechnology Surveys, prepared by AON Consulting, Inc. We believe these data provide us with appropriate compensation benchmarks, because these companies have similar organizational structures and tend to compete with us for executives and other employees. For benchmarking executive compensation, we typically review the compensation data we have collected from the surveys, as well as various subsets of these data, to compare elements of compensation based on certain characteristics of the company, such as number of employees and number of shares of stock outstanding. Examples of companies we have used in evaluating our compensation components are Coley Pharmaceutical Group, Inc., CombinatoRx, Incorporated, and XenoPort, Inc.

Based on management s analyses and recommendations, the Compensation Committee has approved a pay-for-performance compensation philosophy, which is intended to bring base salaries and total executive compensation in line with approximately the 50th percentile of the companies with a similar number of employees represented in the compensation data we review.

We have worked within the framework of this pay-for-performance philosophy to determine each component of an executive s initial compensation package based on numerous factors, including:

- the individual s particular background and circumstances, including training and prior relevant work experience;
- the individual s role with us and the compensation paid to similar persons in the companies represented in the compensation data that we review;
- the demand for people with the individual s specific expertise and experience at the time of hire;
- performance goals and other expectations for the position;
- comparison to other executives within our company having similar levels of expertise and experience; and
- uniqueness of industry skills.

Each of our employees, including our executive officers, are assigned to a pay grade, determined by comparing position-specific duties and responsibilities with the market pay data and the internal structure. Each pay grade has a salary range with corresponding annual and long-term incentive award opportunities. We believe this is the most transparent and flexible approach to achieve the objectives of the executive compensation program.

Management has also implemented an annual performance management program. During the first quarter of each year, our President and Chief Executive Officer submits his proposal for the company s goals for that year to our

Board of Directors. The Board of Directors reviews the proposed goals, makes any adjustments they believe are necessary or warranted, and approves a set of company goals for the year. Once the company s goals are established, each employee develops a written individual set of goals to support the goals of their respective department and the company as a whole. Our President and Chief Executive Officer reviews and approves the goals of each of our vice presidents, who themselves approve the goals of the employees within their department. At year end, all employees are reviewed and their performance evaluated relative to the established goals. The review results in a rating based on the achievement of their individual goals as well

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as an evaluation of their behavior as it impacts their performance and the performance of the company as a whole. Salary increases, bonuses, special recognition awards, stock option awards and promotions, to the extent granted, are tied to the achievement of these corporate, department, and individual performance goals. In addition to rating performance, during the annual review process, department managers also determine if any employee should be promoted and, if there are significant differences in how a person is compensated as compared to industry benchmarks, propose any additional adjustments to be made.

This collaborative annual review process begins in December of each year with each employee completing a written self-evaluation which is reviewed by the appropriate department manager who submits their team merit recommendations to the department vice president. The vice president reviews and meets with human resources to finalize department recommendations which are then reviewed by an internal group at the company comprised of our President and Chief and Executive Officer, Chief Financial Officer, and Director of Human Resources. That group reviews the submissions by each department and prepares a final set of recommendations for submission to our Compensation Committee. The annual reviews of our executive officers are conducted by our President and Chief Executive Officer. Following his review of our executive officers, our President and Chief Executive Officer prepares compensation recommendations for our executive officers which are reviewed and finalized with our Director of Human Resources and submitted together with the recommendations for all our employees to the Compensation Committee, along with a detailed analysis supporting the recommendations. The Compensation Committee may accept or adjust the recommendations. After the Compensation Committee approves the recommendations, managers then meet with employees to deliver their performance review and any compensation adjustments. For all employees, including our executive officers, compensation adjustments are implemented during the first calendar quarter of the year and are effective as of January 1 of that year.

Our Compensation Committee, with contributions from the other members of our Board of Directors, evaluates our President and Chief Executive Officer s performance and decides in its discretion on any compensation adjustments to be made.

In evaluating compensation for fiscal year 2006, we considered, among others, the following factors and events that occurred during 2006:

- the successful completion of our initial public offering and the ability to meet the necessary financial and legal requirements of a public company;
- the close monitoring of our financial position to allow timely completion of our corporate priorities within the approved budget;
- the execution of a collaboration and license agreement with Genentech for ALTU-238;
- the advancement of the preclinical development of ALTU-237 to allow for an IND filing in the first half of 2007;
- the efficient resolution of manufacturing challenges we faced during the second half of 2006 with respect to ALTU-135;
- improvement of the budgeting process allowing smooth passage of the 2007 budget; and
- completion of the hiring of a management team with experienced senior professionals.

Compensation Components

The components of our compensation package are as follows:

Base Salary

Base salaries for our executives are established based on the scope of their responsibilities and their prior relevant background, training, and experience, taking into account competitive market compensation paid by the companies represented in the compensation data we review for similar positions and the overall market demand for such executives at the time of hire. As with total executive compensation, we believe that

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executive base salaries should generally target the 50th percentile of the range of salaries for executives in similar positions and with similar responsibilities in the companies of similar size to us represented in the compensation data we review. An executive s base salary is also evaluated together with other components of the executive s other compensation to ensure that the executive s total compensation is in line with our overall compensation philosophy.

Base salaries are reviewed annually as part of our performance management program and increased for merit reasons, based on the executive s success in meeting or exceeding individual performance objectives and an assessment of whether significant corporate goals were achieved. We also assess whether there are any significant differences in how a person is compensated compared to industry benchmarks by utilizing survey data from Radford to benchmark the biotechnology industry. If through this assessment we determine that an employee s compensation is below the benchmarks, a market adjustment is recommended. We also utilize Radford data for determining our merit and adjustment budgets, which are validated through informal networking with other biotechnology companies. Additionally, we review base salaries and make adjustments as warranted for changes in the scope or breadth of an executive s role or responsibilities and any internal inequities identified through the use of the Radford benchmarks.

Base salary increases are based on a merit rating resulting from the annual review process. The level of merit increase is based on benchmarking data from Radford. The Radford Survey provides an average performance increase for comparable companies. We use that data to establish our own higher or lower percentage increases based on an individual s level of performance with the goal of the aggregate increases resulting in that average. For example, the average performance increase for 2006 for comparable companies based on the Radford data was 4%. Using that average, we established a distribution in which, depending on the level of performance, employees received a lower or higher percentage merit salary increase for fiscal year 2007. These merit increase values are designed to delineate the various levels of performance in order to recognize and reward the high performing employees. To achieve this goal, certain ratings are assigned absolute values while others are assigned ranges to allow for varying degrees of performance within these categories.

Annual Cash Bonus

Our practice has been to provide employees in senior management level positions with the opportunity to earn an annual cash bonus up to a certain percentage of their annual base salary. The target percentages for these bonuses range from 10% for senior managers below the vice president level, 20% to 35% for vice presidents, 40% for senior vice presidents, and 50% for the president and chief executive officer. These target percentages are generally set forth in the employee s offer letter and are subject to adjustment in the discretion of the Compensation Committee. This practice is designed to enable us to attract senior level employees and add an additional compensation opportunity in the form of variable pay. As part of the annual review process, performance of each eligible employee is evaluated against the objectives that were mutually established by the employees and their managers. A determination is made as to the percent of the bonus to be awarded. Bonus awards for these employees are determined by the Compensation Committee based on overall corporate performance together with a subjective assessment by their manager of each employee s achievement of the previously established performance goals which relate to the employee s area of responsibility. Bonus awards are generally prorated for individuals who joined the company during the applicable year.

In 2006, we hired five additional management level team members who have brought significant experience and expertise to the company, including two of our executive officers named in the Summary Compensation Table. In order to attract these individuals, management sought approval from the Compensation Committee to vary the existing compensation structure for management level team members. While we were successful with hiring these individuals, we created some inequities within the existing population of the management level team. To address the inequities, management recommended, and the Compensation Committee approved in March 2007, additional incentive bonus awards in addition to their 2006 target percentage bonuses for several executive officers in order to align their 2006

bonus awards with that of our recently hired executive officers. For performance during fiscal year 2006, our President and Chief Executive Officer was eligible to receive an annual bonus of up to 50% of his base salary, Dr. Blank was eligible to

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receive up to 40% of his base salary, and Ms. Sabella was eligible to receive up to 35% of her base salary. Mr. Lieber and Dr. Margolin were eligible to receive 20% of their base salary and based on their performance and their contributions in relation to their peer executives, they received additional incentive awards bringing their aggregate bonuses in line with executives with target bonuses of 35% and 40% of base salary, respectively. See the Summary Compensation Table below.

In addition to their annual cash bonus, management recommended, and the Compensation Committee approved in March 2007, special cash recognition awards for two of our executive officers, who are not named in the Summary Compensation Table, for their work in achieving the execution of a collaboration and license agreement with Genentech for ALTU-238.

Long-Term Incentives

We believe that long-term performance is achieved through an ownership culture that encourages long-term participation by our executive officers in equity-based awards, in the form of stock options. Our Amended and Restated 2002 Employee, Director and Consultant Stock Plan, as amended, or our 2002 Stock Plan, allows the grant to executive officers of stock options, restricted stock, and other equity-based awards. To date, we have only granted stock options but we may consider the possibility of granting other types of equity awards as our business strategy evolves. We typically make an initial stock option award to new employees and performance-based awards as part of our overall compensation program as well as option grants to reflect promotions, as necessary. We have not adopted stock ownership guidelines. As we mature as a company and our risk profile is reduced, the Compensation Committee has implemented a policy of ensuring that management limits equity awards to reflect the greater value represented by each share of an equity award.

Initial Stock Option Awards

Executives who join us are awarded initial stock option grants. These grants have an exercise price equal to the closing price of our common stock on the date of grant, which is generally the first day of the officer s employment, and a four-year vesting schedule with 1/16th of the shares vesting on the last day of each successive three-month period following the date of grant. The amount of the initial stock option award is determined based on the executive s position with us and analysis of the competitive practices of the companies similar in size to us represented in the compensation data that we review with the goal of creating a total compensation package for new employees that is competitive with other biotechnology companies and that will enable us to attract high quality people. Our President and Chief Executive Officer is currently authorized by the Compensation Committee to make initial stock option grants within certain parameters, beyond which Compensation Committee approval is required.

To determine the proposed option recommendations for new hires in 2006, we followed the methodology outlined in the 2004 Radford Biotechnology Survey Stock Options as a Percent of Outstanding Shares Report. Specifically, we used the recommendation for New Hire guidelines for placement at the 50th percentile for companies with less than 30 million shares outstanding. Based on these findings, we then proposed a range below and above the guidelines to allow for flexibility and competitiveness when determining new hire options as part of the hiring process and the compensation that we can offer a potential employee.

In connection with a review of our stock option award policies following the completion of our initial public offering, in 2006, we began to consider a new methodology for awarding stock options to new employees which is reflective of the reduced risk of joining a public company and consistent with other publicly traded biotechnology companies of a similar size. We anticipate completing this work and implementing a new policy in 2007.

Annual Stock Option Awards

Our practice is to make annual stock option awards as part of our overall performance management program to those employees who earn a certain threshold performance rating or above. The Compensation

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Committee believes that stock options provide management with a strong link to long-term corporate performance and the creation of stockholder value. We intend that the annual aggregate value of these awards will be set near competitive median levels for companies represented in the compensation data we review. The size of the pool of options or equity awards is also intended to be limited to the actual number of shares added to the option plan each year under a pre-defined, stockholder approved formula. The formula adds a number of shares to the option plan equal to 3% of our fully diluted outstanding shares and establishes a budget for option awards that the Compensation Committee uses to help assure that employee ownership is balanced with the interests of our stockholders. As is the case when the amounts of base salary and initial option awards are determined, a review of all components of the executive s compensation is conducted when determining annual option awards to ensure that an executive s total compensation conforms to our overall philosophy and objectives. A pool of options is reserved for executives and non-executives based on setting a target grant level for each employee category, with the higher ranked employees being eligible for a higher target grant. Annual performance option grants are prorated for employees who were employed for only part of the fiscal year.

The timing of these grants is consistent each year with a regularly scheduled meeting of the Compensation Committee and is not coordinated with the public release of nonpublic material information.

In determining stock option grants for 2006 performance, which were approved by our Compensation Committee in March 2007, we used the 2006 Radford Biotechnology Survey Stock Options as a Percent of Outstanding Shares Report as our starting point. This report contains data on option grants for each position at small publicly traded biotechnology companies, defined as those with less than 30 million shares outstanding; medium publicly traded biotechnology companies, defined as those with 30 to 99 million shares outstanding; and large publicly traded biotechnology companies, defined as those with 100 million or more shares outstanding. Performance grants are based on the median grant levels given for each position by the companies surveyed which are based on a percentage of shares outstanding. This report however, includes companies that vary in size, have different number of employees, have different organizational structures, have a more established option philosophy, and multiple incumbents in a particular job code or position which can impact the weights assigned to each position. Because such variances can have an impact on the weight assigned to the roles within these companies, as additional analysis, we developed a customized report from the Radford report where we identified a subset of companies most similar to ours. In this customized report, we included companies with less than 500 employees and that had less than 30 million shares outstanding. We believe the results of the customized report were a better benchmark for determining performance option grants for 2006 because it enabled us to base our recommendations to the Compensation Committee on companies that most closely resemble us.

Promotion Grants

If an employee receives a promotion during the year, at the time the Compensation Committee reviews our annual recommendations for compensation adjustments, we also recommend that the Compensation Committee approve stock option grants to reflect the promotion. Generally, these promotion grants begin to vest on the date the Compensation Committee approves the stock option grant. The method for determining each promotion grant is based on the numbers used for determining an initial stock option grant for the position and determining the difference in the midpoint of the new job code from the existing job code.

Other Compensation

We maintain broad-based benefits and perquisites that are provided to all employees, including health insurance, life and disability insurance, dental insurance, and a 401(k) plan. In particular circumstances, we also utilize cash signing bonuses when certain executives and senior non-executives join us. Such cash signing bonuses are typically repayable in full to the company if the recipient voluntarily terminates employment with us prior to the first anniversary of the

date of hire and are repayable in part if the recipient voluntarily terminates employment with us between the first anniversary and the second anniversary of the date of hire. Whether a signing bonus is paid and the amount thereof is determined on a case-by-case basis under the specific hiring circumstances. For example, we have paid and will consider paying cash bonuses to compensate

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for amounts forfeited by an executive upon terminating prior employment. In addition, we may assist with certain expenses associated with an executive joining and maintaining their employment with us. For example, we reimburse our President and Chief Executive Officer for commuting costs, which we believe facilitates his ability to conduct business activities on behalf of the company. Also, in 2006, we hired our Vice President of Commercial Development and have agreed to reimburse her for her housing costs, and in connection with the hiring of our Senior Vice President, Medicine, Regulatory Affairs and Project Management, we reimbursed him for his relocation expenses. We have also provided tax reimbursement compensation associated with these taxable benefits.

We believe these forms of compensation create additional incentives for an executive to join our company in a position where there is high market demand. These forms of compensation are, however, recommended by our President and Chief Executive Officer and approved by the Compensation Committee in its discretion, and are typically structured to not exceed certain monetary amounts and/or time periods. These forms of compensation are generally subject to repayment on a pro-rata basis if the executive terminates his or her employment within one or two years of their date of hire.

Executive Officer Compensation Policies to be Applied in 2007 and Subsequent Years

In 2006, we began working on a revised compensation structure that is more reflective of our needs as a public company. Management has engaged a compensation consultant to assist us in this process and we anticipate completing this work and implementing a new structure in 2007.

Termination Based Compensation

Severance

Sheldon Berkle, President and Chief Executive Officer

As of December 31, 2006

At the end of fiscal year 2006, only our President and Chief Executive Officer had a severance arrangement with us, pursuant to which he is entitled to 12 months severance at a rate equal to his then-current base salary in the event that his employment is terminated under the circumstances discussed below under Potential Payments Upon Termination or Change in Control . We have also agreed, in these circumstances, to assume payments under Mr. Berkle s house and automobile leases in the Boston, Massachusetts area for the 12-month severance period, or, if shorter, until the expiration of the respective terms of the leases, up to an aggregate of $25,000. The Compensation Committee agreed to this severance package as part of the negotiations with Mr. Berkle to secure his services as our chief executive officer. The Compensation Committee approved the severance package based on their experience serving on boards of directors and compensation committees of life science companies of a similar size and stage of development to us and their familiarity with severance packages offered to chief executive officers of such companies. The Compensation Committee also relied upon information provided by certain advisors to the company with experience and familiarity regarding severance arrangements. Based on this knowledge, experience and information, we believe that a 12-month severance period and reimbursement for the remaining terms of house and automobile leases are both reasonable and generally in line with severance packages negotiated with chief executive officers of similarly situated companies. See Severance and Change in Control Arrangements Approved in Fiscal Year 2007 below.

Our Other Named Executive Officers

As of December 31, 2006

As of the end of fiscal year 2006, none of our other executive officers had any severance arrangements with us. See Severance and Change in Control Arrangements Approved in Fiscal Year 2007 below.

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Acceleration of Vesting of Stock Option Awards

Pursuant to our stock option agreements with our executive officers, in the event of a change in control, as defined in our 2002 Stock Plan, the vesting of outstanding stock option awards held by these executive officers will accelerate if the executive officer is terminated for certain reasons after a change in control, which we refer to as double trigger acceleration. See Potential Payments Upon Termination or Change in Control Termination of Employment and Change in Control Arrangements Change in Control Arrangements Under Our 2002 Stock Plan below for a detailed discussion of these provisions. We believe a double trigger requirement maximizes stockholder value because it prevents an unintended windfall to management in the event of a friendly, or non-hostile, change in control. Under this structure, unvested option awards under our 2002 Stock Plan would continue to provide our executives with the incentive to remain with the company after a friendly change in control. If, by contrast, our 2002 Stock Plan had only a single trigger, and if a friendly change in control occurred, management s option awards would all vest immediately, creating a windfall, and the buyer would then likely find it necessary to replace the compensation with new unvested equity awards in order to retain management. This rationale is why we believe a double-trigger equity vesting acceleration mechanism is more stockholder-friendly, and thus more appropriate for our company, than a single trigger acceleration mechanism.

Severance and Change in Control Arrangements Approved in Fiscal Year 2007

The Compensation Committee recognizes that executives, especially highly ranked executives, often face challenges securing new employment following termination. In March 2007, the Compensation Committee approved severance and change in control arrangements with each of our executive officers and authorized us to enter into agreements with our executive officers reflecting the approved terms. The Compensation Committee approved placing the executive officers into three categories, based on level of responsibility and seniority, and approved a corresponding set of severance and change in control arrangements for each category, which are detailed below under Potential Payments Upon Termination or Change in Control Severance and Change in Control Arrangements Approved in Fiscal Year 2007 . One category is comprised solely of our President and Chief Executive Officer, Mr. Berkle, a second category includes Mr. Lieber and Drs. Blank and Margolin, and the third category includes Ms. Sabella. As a public company, we have continued to review the practices of companies similar to us in the compensation data we obtained and we believe that the approved terms of Mr. Berkle s severance and change in control arrangement, and those of our other executive officers, are generally in line with severance packages offered to chief executive officers and other executive officers of the public companies of similar size to us represented in the compensation data we reviewed.

Conclusion

Our compensation policies are designed and are continually being developed to retain and motivate our senior executive officers and to ultimately reward them for outstanding individual and corporate performance.

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Summary Compensation Table

The following table shows the compensation paid or accrued during the fiscal year ended December 31, 2006 to (1) our President and Chief Executive Officer, (2) our Chief Financial Officer and (3) our three most highly compensated executive officers, other than our President and Chief Executive Officer and our Chief Financial Officer.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Option Awards ($)(1)	All Other Compensation ($)	Total ($)
Sheldon Berkle President and Chief Executive Officer	2006	412,000	164,800(2)	283,318(3)	35,766(4)	895,884
Jonathan I. Lieber Vice President, Chief Financial Officer and Treasurer	2006	250,000	70,000(2)	96,419(5)	11,196(6)	427,615
Burkhard Blank, M.D.(7) Senior Vice President, Medicine, Regulatory Affairs, and Project Management	2006	206,365	215,408(8)	379,911(9)	77,718(10)	879,402
Alexey L. Margolin, Ph.D. Senior Vice President, Research and Pre-clinical Development, Chief Scientific Officer	2006	294,567	96,164(2)	100,370(11)	11,262(12)	502,363
Lauren M. Sabella(13) Vice President, Commercial Development	2006	178,362	224,200(14)	415,315(15)	62,589(16)	880,466

(1) See Notes 2 and 14 to our audited consolidated financial statements for the year ended December 31, 2006 included in this Annual Report on Form 10-K for details as to the assumptions used to determine the fair value of the option awards and Note 14 to our audited consolidated financial statements for the year ended December 31, 2006 included in this Annual Report on Form 10-K describing all forfeitures during the year ended December 31, 2006. Our executive officers will not realize the value of these awards in cash until these awards are exercised and the underlying shares are subsequently sold. See also our discussion of stock-based compensation under Management s Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Significant Judgments and Estimates.

(2) Represents a cash bonus for performance during the fiscal year ended December 31, 2006, which was paid in 2007.

(3) Consists of $218,278 and $65,040, representing the compensation expense incurred by us in fiscal year 2006 in connection with option grants to Mr. Berkle to purchase 566,943 shares of common stock on May 9, 2005 and 26,166 shares of common stock on January 9, 2006, respectively, calculated in accordance with SFAS 123(R).

(4) Consists of $9,900 in matching contributions made under our 401(k) plan, $1,362 in life insurance premiums, $16,724 for the reimbursement of commuting costs incurred by Mr. Berkle and $7,780 as a tax reimbursement in connection with the commuting costs.

(5) Consists of $8,637, $568, $9,836, $5,578, $5,960, and $65,840, representing the compensation expense incurred by us in fiscal year 2006 in connection with option grants to Mr. Lieber to purchase 130,833 shares of common stock on July 15, 2002, 4,361 shares of common stock on November 6, 2003, 17,444 shares of common stock on June 17, 2004, 10,903 shares of common stock on December 13, 2004, 21,805 shares of common stock on January 27, 2005, and 26,488 shares of common stock on January 9, 2006, respectively, calculated in accordance with SFAS 123(R).

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(6) Consists of $9,900 in matching contributions made under our 401(k) plan and $1,296 in life insurance premiums.

(7) Dr. Blank joined us on June 8, 2006.

(8) Consists of a $65,408 prorated cash bonus for performance during the fiscal year ended December 31, 2006, which was paid in 2007, to reflect that Dr. Blank joined us in June 2006, and a $150,000 sign-on bonus.

(9) Represents the compensation expense incurred by us in fiscal year 2006 in connection with an option grant to Dr. Blank to purchase 200,000 shares of common stock on June 8, 2006, calculated in accordance with SFAS 123(R).

(10) Consists of $9,900 in matching contributions made under our 401(k) plan, $681 in life insurance premiums, $45,821 for the reimbursement of relocation costs incurred by Dr. Blank and $21,316 as a tax reimbursement in connection with the relocation costs.

(11) Consists of $2,273, $15,984, $5,578, $9,536, and $66,999, representing the compensation expense incurred by us in fiscal year 2006 in connection with option grants to Dr. Margolin to purchase 17,444 shares of common stock on November 6, 2003, 28,347 shares of common stock on June 17, 2004, 10,903 shares of common stock on December 13, 2004, 34,889 shares of common stock on January 27, 2005, and 26,954 shares of common stock on January 9, 2006, respectively, calculated in accordance with SFAS 123(R).

(12) Consists of $9,900 in matching contributions made under our 401(k) plan and $1,362 in life insurance premiums.

(13) Ms. Sabella joined us on May 1, 2006.

(14) Consists of $74,200 as a cash bonus for performance during the fiscal year ended December 31, 2006, which was paid in 2007, a $100,000 sign-on bonus and a $50,000 special incentive bonus paid to Ms. Sabella for foregoing the opportunity to receive a bonus from her prior employer in order to commence employment with us.

(15) Represents the compensation expense incurred by us in fiscal year 2006 in connection with an option grant to Ms. Sabella to purchase 160,000 shares of common stock on May 1, 2006, calculated in accordance with SFAS 123(R).

(16) Consists of $9,900 in matching contributions made under our 401(k) plan, $795 in life insurance premiums, $32,200 for the reimbursement of housing costs incurred by Ms. Sabella and $19,694 as a tax reimbursement in connection with the housing costs.

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2006 Grants of Plan-Based Awards

The following table shows information regarding grants of equity awards during the fiscal year ended December 31, 2006 to the executive officers named in the Summary Compensation Table above.

Name	Grant Date	Board of Directors Approval Date (if Different than Grant Date)	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards ($/Sh)	Grant Date Fair Value of Stock and Option Awards(1)
Sheldon Berkle President and Chief Executive Officer	1/09/06		26,166(2)	11.47(2)	$ 266,919
Jonathan I. Lieber Vice President, Chief Financial Officer and Treasurer	1/09/06		26,488(2)	11.47(2)	$ 270,204
Burkhard Blank, M.D. Senior Vice President, Medicine, Regulatory Affairs, and Project Management	6/08/06	3/30/06	200,000(3)	19.15(4)	$ 2,694,420
Alexey L. Margolin, Ph.D. Senior Vice President, Research and Pre-clinical Development and Chief Scientific Officer	1/09/06		26,954(2)	11.47(2)	$ 274,958
Lauren M. Sabella Vice President, Commercial Development	5/01/06	3/29/06	160,000(5)	22.11(4)	$ 2,486,784

(1) See Notes 2 and 14 to our audited consolidated financial statements for the year ended December 31, 2006 included in this Annual Report on Form 10-K for details as to the assumptions used to determine the fair value of the options awards and Note 14 to our audited consolidated financial statements for the year ended December 31, 2006 included in this Annual Report on Form 10-K describing all forfeitures during the year ended December 31, 2006. Our executive officers will not realize the value of these awards in cash until these awards are exercised and the underlying shares are subsequently sold. See also our discussion of stock-based compensation under Management s Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Significant Judgments and Estimates.

(2)

Represents annual stock option awards granted for performance during the fiscal year ended December 31, 2005. These options were granted prior to the completion of our initial public offering on January 31, 2006 and were granted under our 2002 Employee, Director and Consultant Stock Plan, prior to its amendment and restatement in connection with our initial public offering, with an exercise price equal to the fair market value of our common stock on the date of grant, as determined by our Board of Directors.

(3) Represents an initial stock option grant to Dr. Blank who joined us on June 8, 2006.

(4) This stock option was granted under our Amended and Restated 2002 Employee, Director and Consultant Stock Plan with an exercise price equal to the closing price of our common stock on the date of grant as reported by The Nasdaq Global Market.

(5) Represents an initial stock option grant to Ms. Sabella who joined us on May 1, 2006.

The terms of Mr. Berkle s compensation are derived from our employment agreement with him and from annual performance reviews conducted by the Compensation Committee. The terms of each of our other executive officers compensation are derived from our letter agreements entered into between us and the executive officers, and annual performance reviews conducted by our management and the Compensation Committee. Annual base salary increases, annual stock option awards and cash bonuses, if any, for Mr. Berkle are determined by the Compensation Committee. Mr. Berkle recommends annual base salary increases, annual stock option awards and cash bonuses, if any, for the other executive officers, which are reviewed and approved by the Compensation Committee.

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Employment Agreement with Mr. Sheldon Berkle

We entered into an employment agreement with Sheldon Berkle, our President and Chief Executive Officer, in May 2005. Mr. Berkle s annual base salary is currently $434,660. Pursuant to the agreement, Mr. Berkle has the opportunity to earn an annual performance bonus of up to 50% of his salary, based on achievement of a series of personal and corporate objectives that our Board of Directors and Mr. Berkle define annually, and is also eligible to receive annual stock option grants based on our corporate performance. Mr. Berkle also received a signing bonus of $153,500. Such bonus replaced a loan from us to Mr. Berkle in the amount of $150,000 at the commencement of his employment, which loan was repaid prior to the filing of the registration statement relating to our initial public offering. He will be required to repay $75,000 of the bonus amount in the event that he voluntarily terminates his employment or is terminated for cause before May 9, 2007, less the amount of taxes he incurred in connection with his receipt of such portion of the bonus. Upon appointment as our President and Chief Executive Officer and as provided in the employment agreement, Mr. Berkle received options to purchase 566,943 shares of our common stock at an exercise price of $3.92 per share. One quarter of the options vested on the first anniversary of his employment, with the balance vesting monthly for three additional years. Of the 566,943 options, 490,434 were immediately exercisable for shares of restricted stock, subject to a repurchase right by us that lapses based on the same vesting schedule as the options. As a condition of employment, Mr. Berkle has entered into a non-competition/non-solicitation agreement pursuant to which he has agreed not to compete with us for a period of 12 months after the termination of his employment. Mr. Berkle s employment agreement does not have a defined term.

The Compensation Committee has also approved reimbursing Mr. Berkle for his commuting costs and reimbursement of taxes in connection with these benefits.

Mr. Berkle is entitled to certain benefits in connection with a termination of his employment or a change in control discussed below under Potential Payments Upon Termination or Change in Control .

Offer Letters

We do not have formal employment agreements with any of our executive officers other than Mr. Berkle and each of these executive officers is employed with us on an at-will basis. However, certain elements of the executive officers compensation and other employment arrangements are set forth in letter agreements that we executed with each of them at the time their employment with us commenced. The letter agreements provide, among other things, the executive officer s initial annual base salary and initial stock option grant. These letter agreements are further described below. Since the date of the letter agreements entered into with our executive officers, the compensation paid to each has been increased and additional stock options have been granted.

Jonathan I. Lieber. Pursuant to a letter agreement dated May 30, 2002 between us and Mr. Lieber, we agreed to employ Mr. Lieber as Vice President of Finance beginning in July 2002. Under the terms of the letter agreement and our bonus program, Mr. Lieber is eligible to receive an annual cash bonus of up to 20% of his base salary based on the achievement of certain mutually established objectives. In 2006, Mr. Lieber began serving as our Vice President, Chief Financial Officer and Treasurer. In connection with the hiring of five new members of our management team during 2006, including two vice presidents, each of whom is eligible to receive an annual cash bonus up to a certain percentage of their base salary, we recommended, and the Compensation Committee approved in March 2007, a special incentive award for Mr. Lieber in addition to his bonus of up to 20% of his base salary, in order to bring his aggregate bonus in line with executives with target bonuses of 35%. Mr. Lieber s annual base salary is currently $268,500.

Burkhard Blank, M.D. Pursuant to a letter agreement dated June 2, 2006 between us and Dr. Blank, we agreed to employ Dr. Blank as Senior Vice President, Medicine, Regulatory Affairs, and Project Management beginning on June 8, 2006. Dr. Blank s annual base salary is currently $376,242. Under the terms of the letter agreement and our bonus program, Dr. Blank is eligible to receive an annual cash bonus of up to 40% of his base salary based on achieving mutually established performance objectives. In connection with the execution of the letter agreement, we paid Dr. Blank a $150,000 sign-on bonus, which is repayable in full in the event Dr. Blank voluntarily terminates his employment prior to the first anniversary of his employment with us. In the event Dr. Blank voluntarily terminates his employment with us on or after the first anniversary of his

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employment, but prior to the second anniversary of his employment, half of the bonus is repayable to us. In addition, we agreed to reimburse Dr. Blank up to $70,000 for his relocation expenses, a prorated amount of which is repayable in the event Dr. Blank terminates his employment before his first anniversary of employment. We have also agreed to pay Dr. Blank a tax reimbursement in connection with these benefits.

Alexey L. Margolin, Ph.D. Pursuant to a letter agreement dated May 3, 1993 between us and Dr. Margolin, we agreed to employ Dr. Margolin as Director of Research. Since August 2004, Dr. Margolin has served as our Chief Scientific Officer and, since June 2006, he has also served as our Senior Vice President of Research and Pre-clinical Development. Although Dr. Margolin s offer letter does not provide for an annual bonus, pursuant to our bonus program, Dr. Margolin is eligible to receive an annual cash bonus of up to 20% of his base salary based on the achievement of certain mutually established objectives. In connection with the hiring of five new members of our management team during 2006, including three senior vice presidents, each of whom is eligible to receive an annual cash bonus up to a certain percentage of their base salary, we recommended, and the Compensation Committee approved in March 2007, a special incentive award for Dr. Margolin in addition to his bonus of up to 20% of his base salary, in order to bring his aggregate bonus in line with executives with target bonuses of 40%. Dr. Margolin s annual base salary is currently $322,041.

Lauren M. Sabella. Pursuant to a letter agreement dated April 4, 2006 between us and Ms. Sabella, we agreed to employ Ms. Sabella as Vice President, Commercial Development beginning on May 1, 2006. Ms. Sabella s annual base salary is currently $273,878. Under the terms of the letter agreement and our bonus program, Ms. Sabella is eligible to receive an annual cash bonus of up to 35% of her base salary based on achieving mutually established performance objectives. In connection with the execution of the letter agreement, we paid Ms. Sabella a $100,000 sign-on bonus and a $50,000 special incentive bonus for forgoing the opportunity to receive a bonus from her prior employer in order to commence employment with us. Both the sign-on bonus and the special incentive bonus are repayable in full in the event Ms. Sabella voluntarily terminates her employment prior to the first anniversary of her employment. In the event Ms. Sabella voluntarily terminates her employment with us on or after the first anniversary of her employment but prior to the second anniversary, half of the bonuses are repayable to us. In addition, we agreed to provide Ms. Sabella with corporate housing, all of which is repayable in the event Ms. Sabella terminates her employment before the first anniversary of her employment with us. We have also agreed to pay Ms. Sabella a tax reimbursement in connection with these benefits. We have agreed to reevaluate the ongoing provision of corporate housing for Ms. Sabella after the completion of her first year of employment.

Fiscal Year 2006 Stock Option Awards

Annual Stock Option Grants

On January 9, 2006, prior to the completion of our initial public offering on January 31, 2006, the Compensation Committee granted our executive officers option awards as of part of the Compensation Committee s annual stock option grants to all of our officers and employees. These awards represented compensation for performance in 2005. These option grants were awarded under our 2002 Employee, Director and Consultant Stock Plan, prior to its amendment and restatement in connection with our initial public offering, and vest as to 1/16th of the shares on the last day of each successive three-month period following the date of grant and, in addition, are immediately exercisable for shares of restricted stock, which are subject to our repurchase right that lapses based on the vesting schedule of the option. These options were granted with an exercise price equal to the fair market value of our common stock on the date of grant, as determined by our Board of Directors.

The option grants to Mr. Berkle and all other employees who were not employed with us for the full 2005 fiscal year were prorated based on length of service.

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Initial Stock Option Grants

On May 1, 2006 and June 8, 2006, we granted Ms. Sabella and Dr. Blank, respectively, stock options in connection with their commencement of employment with us. These initial hire stock option grants were granted under our Amended and Restated 2002 Employee, Director and Consultant Stock Plan with an exercise price equal to the fair market value of our common stock on the grant, which, in accordance with the 2002 Stock Plan, is the closing price of our common stock on the date of grant as reported by The Nasdaq Global Market. Subject to the terms of the 2002 Stock Plan and the option agreements issued in connection with these grants, all of the options vest as to 1/16th of the shares on the last day of each successive three-month period following the date of grant.

In the event of a termination in connection with a change in control, the vesting of all outstanding stock options held by our executive officers will be accelerated in full, as further discussed below under Potential Payments Upon Termination or Change in Control .

Compensation Actions in 2007

On March 4, 2007, the Compensation Committee approved annual cash bonus awards for performance during 2006, which are reflected above in the Summary Compensation Table. At that time, the Compensation Committee also approved annual base salary increases for 2007 and stock option awards for 2006 performance. A summary of these compensation actions as they compare to 2006 for the executive officers named in the Summary Compensation Table is set forth below.

Name	2006 Base Salary ($)	2007 Base Salary ($)	2006 Performance Stock Option Grant (# of Shares)	2007 Performance Stock Option Grant (# of Shares)
Sheldon Berkle President and Chief Executive Officer	412,000	434,660(1)	26,166(2)	126,250
Jonathan I. Lieber Vice President, Chief Financial Officer and Treasurer	250,000	268,500(3)	26,488	42,500
Burkhard Blank, M.D. Senior Vice President, Medicine, Regulatory Affairs, and Project Management	365,000	376,242(4)		20,230(5)
Alexey L. Margolin, Ph.D. Senior Vice President, Research and Pre-clinical Development, Chief Scientific Officer	300,513	322,041(6)	26,954	36,125
Lauren M. Sabella Vice President, Commercial Development	265,000	273,878(7)		24,204(8)

(1) Represents an increase of $22,660 based on a 5.5% merit increase.

(2) Mr. Berkle s performance stock option grant for 2005 performance was prorated because he joined us in May 2005.

(3) Represents an increase of $17,500 based on a 7% merit increase and $1,000 market adjustment.

(4) Represents an increase of $11,242 based on a prorated 5.5% merit increase. Dr. Blank s salary increase was prorated because he joined us in June 2006.

(5) Dr. Blank s performance stock option grant was prorated because he joined us in June 2006.

(6) Represents an increase of $16,528 based on a 5.5% merit increase and $5,000 market adjustment.

(7) Represents an increase of $8,878 based on a prorated 5% merit increase. Ms. Sabella s salary increase was prorated because she joined us in May 2006.

(8) Ms. Sabella s performance stock option grant was prorated because she joined us in May 2006.

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On March 4, 2007, the Compensation Committee also approved a promotion stock option grant for Mr. Lieber to purchase 11,000 shares of common stock in connection with his promotion to Chief Financial Officer at the end of 2005, at which time he was not awarded a promotion stock option grant. This option grant will commence vesting as of January 1, 2006.

Outstanding Equity Awards at Fiscal 2006 Year-End

The following table shows grants of stock options outstanding on December 31, 2006, the last day of the fiscal year, held by each of the executive officers named in the Summary Compensation Table above.

	Option Awards			
Name	**Number of Securities Underlying Unexercised Options (#) Exercisable**	**Number of Securities Underlying Unexercised Options (#) Unexercisable**	**Option Exercise Price ($)**	**Option Expiration Date**
Sheldon Berkle President and Chief Executive Officer	190,416	342,527(1)	3.92	5/08/15
	4,905	21,261(2)	11.47	1/08/16
Jonathan I. Lieber Vice President, Chief Financial Officer and Treasurer	126,833(3)		3.92	7/14/12
	4,361(4)		3.92	11/07/13
	13,083	4,361(5)	3.92	6/16/14
	10,903(6)		3.92	12/12/14
	9,539	12,266(7)	3.92	1/26/15
	4,966	21,522(2)	11.47	1/08/16
Burkhard Blank, M.D. Senior Vice President, Medicine, Regulatory Affairs, and Project Management	25,000	175,000(8)	19.15	6/08/16
Alexey L. Margolin, Ph.D. Senior Vice President, Research and Pre-clinical Development, Chief Scientific Officer	16,354(9)		7.25	12/19/10
	65,416(10)		3.92	12/20/11
	21,805(11)		3.92	7/30/12
	17,444(4)		3.92	11/05/13
	21,260	7,087(5)	3.92	6/16/14
	10,903(6)		3.92	12/12/14
	15,263	19,626(7)	3.92	1/26/15
	5,053	21,901(2)	11.47	1/08/16
Lauren M. Sabella	20,000	140,000(12)	22.11	5/01/16

Vice President,
Commercial Development

(1) Represents the unexercised portion of an option to purchase 566,943 shares of common stock, which vested as to 25% of the shares on May 9, 2006 and vests as to an additional 1/48th of the shares on a monthly basis thereafter. The option is immediately exercisable for 481,936 shares of restricted stock, which are subject to our repurchase right that lapses in accordance with the vesting schedule cited in the previous sentence.

(2) The option vests as to 1/16th of the shares on the last day of each successive three-month period following January 9, 2006. The option is immediately exercisable for shares of restricted stock, which are

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subject to our repurchase right that lapses in accordance with the vesting schedule cited in the previous sentence.

(3) Represents the unexercised portion of an option to purchase 130,833 shares of common stock, which vested as to 1/16th of the shares on the last day of each successive three-month period following July 15, 2002.

(4) The option vested as to 1/16th of the shares on the last day of each successive three-month period following December 20, 2002.

(5) The option vests as to 1/16th of the shares on the last day of each successive three-month period following December 19, 2003. The option is immediately exercisable for shares of restricted stock, which are subject to our repurchase right that lapses in accordance with the vesting schedule cited in the previous sentence.

(6) The option vested as to 1/8th of the shares on the last day of each successive three-month period following December 13, 2004. The option is immediately exercisable for shares of restricted stock, which are subject to our repurchase right that lapses in accordance with the vesting schedule cited in the previous sentence.

(7) The option vests as to 1/16th of the shares on the last day of each successive three-month period following January 27, 2005. The option is immediately exercisable for shares of restricted stock, which are subject to our repurchase right that lapses in accordance with the vesting schedule cited in the previous sentence.

(8) The option vests as to 1/16th of the shares on the last day of each successive three-month period following June 8, 2006.

(9) The option vested as to 1/16th of the shares on the last day of each successive three-month period following December 20, 2000.

(10) The option vested as to 1/16th of the shares on the last day of each successive three-month period following December 21, 2001.

(11) The option vested as to 1/16th of the shares on the last day of each successive three-month period following December 31, 2001.

(12) The option vests as to 1/16th of the shares on the last day of each successive three-month period following May 1, 2006.

2006 Option Exercises and Stock Vested

The following table shows information regarding exercises of options to purchase our common stock by the executive officers named in the Summary Compensation Table above during the fiscal year ended December 31, 2006.

	Option Awards	
Name	**Number of Shares Acquired on**	**Value Realized on Exercise ($)(1)**

	Exercise (#)	
Sheldon Berkle President and Chief Executive Officer	34,000	486,170
Jonathan I. Lieber Vice President, Chief Financial Officer and Treasurer	4,000	61,020
Burkhard Blank, M.D. Senior Vice President, Medicine, Regulatory Affairs, Project Management		
Alexey L. Margolin, Ph.D. Senior Vice President, Research and Pre-clinical Development, Chief Scientific Officer		
Lauren M. Sabella Vice President, Commercial Development		

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(1) Amounts shown in this column do not necessarily represent actual value realized from the sale of the shares acquired upon exercise of options because in many cases the shares are not sold on exercise but continue to be held by the executive officer exercising the option. The amounts shown represent the difference between the option exercise price and the market price on the date of exercise, which is the amount that would have been realized if the shares had been sold immediately upon exercise.

Pension Benefits

We do not have any qualified or non-qualified defined benefit plans.

Nonqualified Deferred Compensation

We do not have any non-qualified defined contribution plans or other deferred compensation plans.

Potential Payments Upon Termination or Change in Control

The terms of our employment agreement with our President and Chief Executive Officer obligate us to make certain payments and provide certain benefits to our President and Chief Executive Officer in the event of a termination of employment. In addition, in the event of a termination of employment in connection with a change in control, all outstanding stock options held by our executive officers will vest in full. The following information summarizes the potential payments to each of the executive officers named in the Summary Compensation Table assuming that either of these events occurs. The information presented assumes that the event occurred on December 29, 2006, the last business day of our most recently completed fiscal year. The closing price of our common stock as listed on The Nasdaq Global Market was $18.85 per share on December 29, 2006, the last trading day prior to the end of our most recently completed fiscal year.

Termination of Employment and Change in Control Arrangements

Mr. Sheldon Berkle, President and Chief Executive Officer

Pursuant to our employment agreement with Mr. Berkle, our President and Chief Executive Officer, in effect on December 31, 2006, he is entitled to 12 months severance at a rate equal to his then-current base salary in the event that we terminate his employment without cause or he resigns for good reason, or if he resigns for good reason within six months following a change in control. We have agreed, in these circumstances, to assume payments under Mr. Berkle s house and automobile leases in the Boston, Massachusetts area for the 12-month severance period, or, if shorter, until the expiration of the respective terms of the leases, up to an aggregate of $25,000. If Mr. Berkle had been terminated under the above referenced circumstances on December 29, 2006, he would have been entitled to $437,000, which assumes and includes the maximum $25,000 in house and automobile lease payments.

As defined in Mr. Berkle s employment agreement:

> *Cause* includes, and is not limited to, dishonesty with respect to us or any affiliate, insubordination, substantial malfeasance or nonfeasance of duty, unauthorized disclosure of confidential information, breach of any material provision of any employment, consulting, advisory, nondisclosure, non-competition or similar material agreement with us, which breach is not cured to the satisfaction of the Board of Directors within ten days after notice to Mr. Berkle by us of such breach, and conduct substantially prejudicial to our business or that of any affiliate. The determination of the Board of Directors, unless it has delegated power to act on its behalf to a committee, in which case the determination of the committee, as to the existence of cause will be

conclusive on Mr. Berkle and us.

Good Reason means Mr. Berkle terminates his employment after there has occurred a material adverse change in his duties, authority or responsibilities which causes his position with us to become of significantly less responsibility or authority than it was immediately prior to such change, or a reduction in his base salary or a material diminution in the overall package of employee benefits as

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described in the employment agreement, which change does not also apply to our other executive employees.

Change in Control has the definition contained in our 2002 Stock Plan and is set forth below.

In addition, in the event of a termination within one year following a change in control, all of Mr. Berkle s outstanding unvested stock options will vest in full, as further discussed below.

Change in Control Arrangements Under Our 2002 Stock Plan

Pursuant to the stock option agreements with our executive officers, in the event that within one year following the date of a change in control, as defined in our 2002 Stock Plan and set forth below,

the executive officer is terminated for any reason other than cause, as defined in our 2002 Stock Plan; or

the executive officer, as a condition to his or her remaining an employee, is required to relocate at least 50 miles from his or her current location of employment; or

there occurs a material adverse change in the executive officer s duties, authority or responsibilities which causes his or her position with us to become of significantly less responsibility or authority than his or her position was immediately prior to the change in control; or

there occurs a material reduction in the executive officer s base salary from the base salary received immediately prior to the change in control,

the executive officer s options will be fully vested and immediately exercisable as of the date of his or her last day of employment, unless the options have otherwise expired or been terminated pursuant to their terms or the terms of our 2002 Stock Plan.

As defined in the 2002 Stock Plan:

A *Change in Control* means:

our stockholders approve (a) any consolidation or merger (x) in which our stockholders, immediately prior to the consolidation or merger, would not, immediately after the consolidation or merger, beneficially own, directly or indirectly, shares representing in the aggregate more than 50% of the combined voting power of all the outstanding securities of the corporation issuing cash or securities in the consolidation or merger (or of its ultimate parent corporation, if any) or (y) where the members of our Board of Directors, immediately prior to the consolidation or merger, would not, immediately after the consolidation or merger, constitute more than 50% of the board of directors of the corporation issuing cash or securities in the consolidation or merger (or of its ultimate parent corporation, if any), (b) any sale, lease, exchange or other transfer (in one transaction or a series of transactions contemplated or arranged by any party as a single plan) of all or substantially all of our assets or (c) any plan or proposal for our liquidation or dissolution; or

individuals who, as of the date of the applicable agreement, constitute our entire Board of Directors, referred to as the Incumbent Directors, cease for any reason to constitute at least 50% of the Board, provided that any individual becoming a director subsequent to the date of the agreement whose election, or nomination for election by our stockholders, was approved by a vote of at least a majority of the then Incumbent Directors shall be considered as though the individual were an Incumbent Director; or

any person other than us, any of our employee benefit plans or any entity organized, appointed or established by us for or pursuant to the terms of such plan, together with all affiliates and associates of that person, shall become the beneficial owner or beneficial owners, directly or indirectly, of our securities representing in the aggregate 25% or more of either (a) the then outstanding shares of our common stock or (b) the combined voting power of all of our then outstanding securities having the right under ordinary circumstances to vote in an election of our Board of Directors, in either case, other than as a result of acquisitions of such securities directly from us. A change in control shall not

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be deemed to have occurred solely as the result of an acquisition of securities by us which, by reducing the number of shares of common stock or other voting securities outstanding, increases (a) the proportionate number of shares of common stock beneficially owned by any person to 25% or more of the common stock then outstanding or (b) the proportionate voting power represented by the voting securities beneficially owned by any person to 25% or more of the combined voting power of all then outstanding voting securities; provided, however, that if any person referred to in clause (a) or (b) of this sentence shall thereafter become the beneficial owner of any additional shares of common stock or other voting securities (other than pursuant to a stock split, stock dividend or similar transaction), then a change in control shall be deemed to have occurred.

Cause includes dishonesty with respect to us or any affiliate, insubordination, substantial malfeasance or non-feasance of duty, unauthorized disclosure of confidential information, breach by the option holder of any provision of any employment, consulting, advisory, nondisclosure, non-competition or similar agreement between the option holder and us, and conduct substantially prejudicial to our business or that of any affiliate.

The executive officers named in the Summary Compensation Table would have received the following in the event of a termination in connection with a change of control, as defined above, on December 29, 2006, the last business day of our fiscal year, based on the difference between $18.85, the closing price of our common stock on that date, and the exercise price of the accelerated stock options:

Name	Acceleration of Vesting of Stock Options	Shares Underlying Unvested Stock Options (#)	Unrealized Value of Unvested Stock Options ($)
Sheldon Berkle President and Chief Executive Officer	100%	363,788	5,270,834
Jonathan I. Lieber Vice President, Chief Financial Officer and Treasurer	100%	38,149	407,073
Burkhard Blank, M.D. Senior Vice President, Medicine, Regulatory Affairs, and Project Management	100%	175,000	
Alexey L. Margolin, Ph.D. Senior Vice President, Research and Pre-clinical Development, Chief Scientific Officer	100%	48,614	560,454
Lauren M. Sabella Vice President, Commercial Development	100%	140,000	

Severance and Change in Control Arrangements Approved in Fiscal Year 2007

As discussed above in our Compensation Discussion and Analysis, in March 2007, the Compensation Committee approved severance and change in control arrangements with our executive officers, and authorized us to enter into severance and change in control agreements with our executive officers reflecting the approved terms. The execution of each severance and change in control agreement is contingent on the executive officer executing a non-competition,

non-solicitation, non-disclosure and assignment of inventions agreement pursuant to which he or she will agree not to compete with us for the applicable severance period following termination. Receipt of any benefits at the time of termination will be further conditioned on the executive officer executing a written release of us from any and all claims arising in connection with his or her employment.

The approved terms of the severance and change in control arrangements are discussed below.

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Severance and Change in Control Arrangement with Mr. Sheldon Berkle, President and Chief Executive Officer

Pursuant to the arrangements approved by the Compensation Committee, in the event Mr. Berkle s employment is terminated within one year following a change in control or he resigns with good reason, he is entitled to receive the following:

- salary continuation of his then-current base salary for a period of 18 months;
- payment of an amount equal to one and one half times Mr. Berkle s target bonus for the applicable year;
- outplacement assistance up to a maximum of $15,000;
- assumption by us of payments under Mr. Berkle s house and automobile leases in the Boston, Massachusetts area for 12-months, or, if shorter, until the expiration of the respective terms of the leases, up to an aggregate of $25,000; and
- continuation of health benefits for up to 18 months.

In the event Mr. Berkle s employment is terminated without cause, he is entitled to receive the following:

- salary continuation of his then-current base salary for a period of 12 months;
- payment, in the discretion of the Compensation Committee, of an amount up to Mr. Berkle s target bonus for the applicable year, prorated according to length of service during the applicable year;
- assumption by us of payments under Mr. Berkle s house and automobile leases in the Boston, Massachusetts area for 12-months, or, if shorter, until the expiration of the respective terms of the leases, up to an aggregate of $25,000; and
- continuation of health benefits for up to 18 months.

Severance and Change in Control Arrangements with Mr. Lieber and Drs. Blank and Margolin

Pursuant to the terms approved by the Compensation Committee applicable to Mr. Lieber and Drs. Blank and Margolin, in the event of a termination of employment within one year following a change in control or resignation with good reason, Mr. Lieber and Drs. Blank and Margolin are entitled to receive the following:

- salary continuation of the executive officer s then-current base salary for a period of 12 months;
- payment of an amount equal to the executive officer s target bonus for the applicable year;
- outplacement assistance up to a maximum of $15,000; and
- continuation of health benefits for up to 18 months.

In the event of a termination without cause, Mr. Lieber and Drs. Blank and Margolin are entitled to receive the following:

salary continuation of the executive officer s then-current base salary for a period of nine months;

payment, in the discretion of the Compensation Committee, of an amount up to 75% of the executive officer s target bonus for the applicable year, prorated according to length of service during the applicable year; and

continuation of health benefits for up to 18 months, provided that, if the executive officer becomes eligible to receive substantially similar benefits under another health plan, our obligations to continue such payments will cease.

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Severance and Change in Control Arrangement with Ms. Sabella

Pursuant to the terms approved by the Compensation Committee applicable to Ms. Sabella, in the event of a termination of employment within one year following a change in control or resignation with good reason, Ms. Sabella is entitled to receive the following:

- salary continuation of her then-current base salary for a period of 12 months;
- payment of an amount equal to Ms. Sabella s target bonus for the applicable year;
- outplacement assistance up to a maximum of $15,000; and
- continuation of health benefits for up to 18 months.

In the event of a termination without cause, Ms. Sabella is entitled to receive the following:

- salary continuation of her then-current base salary for a period of six months;
- payment, in the discretion of the Compensation Committee, of an amount up to 50% of Ms. Sabella s target bonus for the applicable year, prorated according to length of service during the applicable year; and
- continuation of health benefits for up to 18 months, provided that, if Ms. Sabella becomes eligible to receive substantially similar benefits under another health plan, our obligations to continue such payments will cease.

In addition to the arrangements approved in March 2007, the stock option agreements with our executive officers provide, and will continue to provide, for the full acceleration of vesting of all outstanding stock options in the event of a termination following a change in control, as discussed above under Change in Control Arrangements Under Our 2002 Stock Plan .

2006 Director Compensation

The following table sets forth a summary of the compensation earned by our non-employee directors in 2006:

Name	Fees Earned or Paid in Cash ($)	Option Awards ($)(1)	Total ($)
John P. Richard(2)	45,000	38,176(3)	83,176
Richard H. Aldrich(4)	12,500	22,092(5)	34,592
Lynne H. Brum(6)	12,500		12,500
Stewart Hen(7)	32,500	4,537(8)	37,037
Peter L. Lanciano(9)	10,000		10,000
Jonathan S. Leff(10)	21,250	4,537(11)	25,787
Manuel A. Navia, Ph.D.(12)	30,000	26,629(13)	56,629
David D. Pendergast, Ph.D.(14)	3,125	8,096(15)	11,221

Harry H. Penner, Jr.(16)	18,750	60,852(17)	79,602
Jonathan D. Root, M.D.(18)	31,250	4,537(19)	35,787
Michael S. Wyzga(20)	32,500	29,661(21)	62,161

(1) See Notes 2 and 14 to our audited consolidated financial statements for the year ended December 31, 2006 included in this Annual Report on Form 10-K for details as to the assumptions used to determine the fair value of the options awards and Note 14 to our audited consolidated financial statements for the year ended December 31, 2006 included in this Annual Report on Form 10-K describing all forfeitures during the year ended December 31, 2006. Our directors will not realize the value of these awards in cash until these awards are exercised and the underlying shares are subsequently sold. See also our discussion

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of stock-based compensation under Management s Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Significant Judgments and Estimates.

(2) As of December 31, 2006, the last day of our fiscal year, Mr. Richard held options to purchase 120,151 shares of common stock, of which 88,463 are vested and 24,601 are unvested but are immediately exercisable for shares of restricted stock which are subject to our repurchase right that lapses in accordance with the vesting schedule of the applicable option grant.

(3) Consists of $19,708, $5,653, $8,278, and $4,537, representing the compensation expense incurred by us in fiscal year 2006, calculated in accordance with SFAS 123(R), in connection with option grants to Mr. Richard to purchase 34,889 shares of common stock on July 27, 2004, 19,625 shares of common stock on January 1, 2005, 5,451 shares of common stock on October 7, 2005, and 8,722 shares of common stock on November 15, 2006, the grant date fair value of which was $112,741, calculated in accordance with SFAS 123(R).

(4) Mr. Aldrich s term expired at our 2006 annual meeting held on July 27, 2006 and he did not stand for re-election. As of December 31, 2006, the last day of our fiscal year, Mr. Aldrich held no outstanding options to purchase shares of common stock.

(5) Consists of $19,708 and $2,384, representing the compensation expense incurred by us in fiscal year 2006, calculated in accordance with SFAS 123(R), in connection with option grants to Mr. Aldrich to purchase 34,889 shares of common stock on July 27, 2004 and 8,722 shares of common stock on January 1, 2005.

(6) Ms. Brum resigned as a member of the board of directors effective June 9, 2006. Ms. Brum had not been granted any stock options.

(7) As of December 31, 2006, the last day of our fiscal year, Mr. Hen held options to purchase 8,722 shares of common stock, of which 1,635 are vested.

(8) Represents the compensation expense incurred by us in fiscal year 2006, calculated in accordance with SFAS 123(R), in connection with an option grant to Mr. Hen to purchase 8,722 shares of common stock on November 15, 2006, the grant date fair value of which was $112,741, calculated in accordance with SFAS 123(R).

(9) Mr. Lanciano s term expired at our 2006 annual meeting held on July 27, 2006 and he did not stand for re-election. As of December 31, 2006, the last day of our fiscal year, Mr. Lanciano held no outstanding options to purchase shares of common stock.

(10) As of December 31, 2006, the last day of our fiscal year, Mr. Leff held options to purchase 8,722 shares of common stock, of which 1,635 are vested.

(11) Represents the compensation expense incurred by us in fiscal year 2006, calculated in accordance with SFAS 123(R), in connection with an option grant to Mr. Leff to purchase 8,722 shares of common stock on November 15, 2006, the grant date fair value of which was $112,741, calculated in accordance with SFAS 123(R).

(12) As of December 31, 2006, the last day of our fiscal year, Dr. Navia held options to purchase 56,694 shares of common stock, of which 33,797 are vested and 15,810 are unvested but are immediately exercisable for shares of restricted stock which are subject to our repurchase right that lapses in accordance with the vesting schedule of the applicable option grant.

(13) Consists of $19,708, $2,384, and $4,537, representing the compensation expense incurred by us in fiscal year 2006, calculated in accordance with SFAS 123(R), in connection with option grants to Dr. Navia to purchase 34,889 shares of common stock on July 27, 2004, 8,722 shares of common stock on January 1, 2005, and 8,722 shares of common stock on November 15, 2006, the grant date fair value of which was $112,741, calculated in accordance with SFAS 123(R).

(14) As of December 31, 2006, the last day of our fiscal year, Dr. Pendergast held options to purchase 19,625 shares of common stock, of which none are vested.

(15) Represents the compensation expense incurred by us in fiscal year 2006, calculated in accordance with SFAS 123(R), in connection with an option grant to Dr. Pendergast to purchase 19,625 shares of common

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stock on November 16, 2006, the grant date fair value of which was $262,863, calculated in accordance with SFAS 123(R).

(16) As of December 31, 2006, the last day of our fiscal year, Mr. Penner held options to purchase 28,347 shares of common stock, of which 3,543 are vested.

(17) Consists of $56,653 and $4,199, representing the compensation expense incurred by us in fiscal year 2006, calculated in accordance with SFAS 123(R), in connection with option grants to Mr. Penner to purchase 19,625 shares of common stock on April 3, 2006, the grant date fair value of which was $304,301, calculated in accordance with SFAS 123(R), and 8,722 shares of common stock on November 15, 2006, the grant date fair value of which was $112,741, calculated in accordance with SFAS 123(R).

(18) As of December 31, 2006, the last day of our fiscal year, Dr. Root held options to purchase 17,444 shares of common stock, of which 10,357 are vested.

(19) Represents the compensation expense incurred by us in fiscal year 2006, calculated in accordance with SFAS 123(R), in connection an option grant to Dr. Root to purchase 8,722 shares of common stock on November 15, 2006, the grant date fair value of which was $112,741, calculated in accordance with SFAS 123(R).

(20) As of December 31, 2006, the last day of our fiscal year, Mr. Wyzga held options to purchase 63,236 shares of common stock, of which 33,661 are vested and 22,488 are unvested but are immediately exercisable for shares of restricted stock which are subject to our repurchase right that lapses in accordance with the vesting schedule of the applicable option grant.

(21) Consists of $22,144, $2,980, and $4,537, representing the compensation expense incurred by us in fiscal year 2006, calculated in accordance with SFAS 123(R), in connection with option grants to Mr. Wyzga to purchase 43,611 shares of common stock on July 27, 2004, 10,903 shares of common stock on January 1, 2005, and 8,722 shares of common stock on November 15, 2006, the grant date fair value of which was $112,741, calculated in accordance with SFAS 123(R).

Director Compensation Policy

Our Board of Directors has adopted the following policy with respect to compensation of directors, effective as of January 26, 2006 in connection with our initial public offering, and as amended and restated on February 2, 2007. Non-employee directors receive options to purchase 17,444 shares of common stock, vesting quarterly over a four-year period upon initial election to the Board, and options to purchase 8,722 shares, vesting quarterly over a four-year period, each year thereafter. They also receive an annual cash retainer of $20,000 paid quarterly. Non-employee directors serving as chairs of the Nominating and Governance Committee and the Compensation Committee also receive an option to purchase 4,361 shares of common stock upon initially being named chairman and an option to purchase 2,181 shares each year thereafter, each vesting quarterly over a four-year period, as well as an annual cash retainer of $10,000. The non-employee director serving as the chair of the Audit Committee also receives an option to purchase 4,361 shares of common stock upon being named chairman and an option to purchase 2,181 shares each year thereafter, each vesting quarterly over a four-year period, as well as an annual cash retainer of $12,500. Non-employee directors serving as members of committees of the Board, other than the chairs of those committees, also receive an option to purchase 2,181 shares of common stock upon appointment to the committee and an option to purchase 1,090 shares each year thereafter, each vesting quarterly over a four-year period, as well as an annual cash retainer of $5,000, for each committee on which such person serves. Continued vesting of the options granted under the policy is subject to continued service on the Board. In addition, each non-employee director is

entitled to be reimbursed for his or her reasonable out-of-pocket business expenses incurred in connection with attending meetings of the Board of Directors, committees thereof or in connection with other Board related business.

Option grants for 2006 committee service were granted on February 2, 2007. In accordance with the director compensation policy, as amended and restated, option grants for both Board and committee service in 2007 and subsequent years will be automatically granted at each annual meeting of the Board of Directors following the annual meeting of stockholders; provided that if there has been no annual meeting of

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stockholders held by the first day of the third fiscal quarter of any year, each non-employee director will still automatically receive their annual Board and committee service option grants on the first day of the third fiscal quarter of the applicable year. If an annual meeting of stockholders is subsequently held during the same fiscal year, no additional annual Board or committee service option grants will be made.

In addition to the compensation provided for under our director compensation policy, the Compensation Committee has agreed that, so long as Mr. Richard serves as chairman of our Board of Directors, he will receive additional annual compensation of $20,000 and a non-qualified stock option to purchase 4,361 shares of common stock, subject to the same terms and conditions as the option grants awarded under our director compensation policy. Mr. Richard will receive his option grant for 2006 service as chairman in March 2007. Mr. Richard s option grant for 2007 service and subsequent years will be awarded in accordance with the schedule for the annual option grants awarded for Board and committee service under our director compensation policy and discussed above.

Pursuant to our 2002 Stock Plan, in the event of a merger or other reorganization event involving us that also constitutes a change in control, as defined in the 2002 Stock Plan, all options issued to directors, whether or not employees, will become exercisable in full immediately prior to such event.

Compensation Committee Interlocks and Insider Participation

The members of our Compensation Committee during 2006 were Mr. Hen and Drs. Navia and Root. Mr. Hen ceased to be a member of the Compensation Committee on July 27, 2006. No member of our Compensation Committee has at any time been an employee of ours. None of our executive officers serves or served as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our Board of Directors or Compensation Committee.

Mr. Hen and Drs. Root and Navia and their affiliates have participated in transactions with us. For a detailed description of these transactions, see the Certain Relationships and Related Transactions section of this Annual Report on Form 10-K.

COMPENSATION COMMITTEE REPORT

The Compensation Committee of our Board of Directors has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K, which appears elsewhere in this Annual Report on Form 10-K, with our management. Based on this review and discussion, the Compensation Committee has recommended to the Board of Directors that the Compensation Discussion and Analysis be included in our Annual Report on Form 10-K.

Members of the Altus Pharmaceuticals Inc.
Compensation Committee:

Jonathan D. Root, M.D.
Manuel A. Navia, Ph.D.

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ITEM 12. *SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS*

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of February 28, 2007 for (a) the executive officers named in the Summary Compensation Table on page 94 of this Annual Report on Form 10-K, (b) each of our directors, (c) all of our current directors and executive officers as a group and (d) each stockholder known by us to beneficially own more than 5% of our common stock. Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to the securities. We deem shares of common stock that may be acquired by an individual or group within 60 days of February 28, 2007 pursuant to the exercise of options or warrants to be outstanding for the purpose of computing the percentage ownership of such individual or group, but are not deemed to be outstanding for the purpose of computing the percentage ownership of any other person shown in the table. Except as indicated in footnotes to this table, we believe that the stockholders named in this table have sole voting and investment power with respect to all shares of common stock shown to be beneficially owned by them based on information provided to us by these stockholders. Percentage of ownership is based on 23,995,477 shares of common stock outstanding on February 28, 2007.

	Shares Beneficially Owned	
Name and Address **	**Number**	**Percent**
Named Executive Officers		
Sheldon Berkle(1)	522,105	2.1%
Jonathan I. Lieber(2)	203,834	*
Burkhard Blank, M.D.(3)	37,499	*
Alexey L. Margolin, Ph.D.(4)	380,716	1.6%
Lauren M. Sabella(5)	29,999	*
Directors		
John P. Richard(6)	114,496	*
Stewart Hen(7)	4,310,707	17.4%
Jonathan S. Leff(8)	4,309,957	17.4%
Manuel A. Navia, Ph.D.(9)	123,337	*
David D. Pendergast, Ph.D.(10)	1,294	*
Harry H. Penner, Jr.(11)	7,360	*
Jonathan D. Root, M.D.(12)	3,383,619	13.9%
Michael S. Wyzga(13)	57,922	*
All current directors and executive officers as a group (17 persons)(14)	9,344,368	35.3%
5% or More Stockholders		
Warburg Pincus Private Equity VIII, L.P.(15) 466 Lexington Avenue, New York, NY 10017	4,307,163	17.4%
Entities affiliated with U.S. Venture Partners(16) 2735 Sand Hill Road, Menlo Park, CA 94025	3,371,421	13.8%
Adage Capital Partners, L.P.(17) 200 Clarendon Street, 52nd Floor, Boston, MA 02116	2,050,000	7.9%
Entities affiliated with Nomura International plc(18) Nomura House, 1 St. Martin s-le-Grand	1,956,962	8.1%

London EC1A 4NP, United Kingdom		
FMR Corp.(19)	1,532,549	6.4%
82 Devonshire Street, Boston, MA 02109		

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* Represents beneficial ownership of less than 1% of the outstanding shares of our common stock.

** Unless otherwise indicated, the address of each beneficial owner listed is c/o Altus Pharmaceuticals Inc., 125 Sidney Street, Cambridge, Massachusetts 02139.

(1) Consists of 8,000 shares of common stock owned of record and options to purchase 514,105 shares of common stock held by Mr. Berkle.

(2) Represents options to purchase shares of common stock held by Mr. Lieber.

(3) Represents options to purchase shares of common stock held by Dr. Blank.

(4) Consists of 158,604 shares of common stock owned of record and options to purchase 222,112 shares of common stock held by Dr. Margolin.

(5) Represents options to purchase shares of common stock held by Ms. Sabella.

(6) Represents options to purchase shares of common stock held by Mr. Richard.

(7) Consists of the shares owned by Warburg Pincus Private Equity VIII, L.P., and two affiliated partnerships, or collectively, WP VIII, as described in footnote 15 below, and options to purchase 3,544 shares of common stock held by Mr. Hen. Mr. Hen is a partner of Warburg Pincus & Co., or WP, and a managing director and member of Warburg Pincus LLC, or WP LLC. Mr. Hen disclaims beneficial ownership of the shares owned by WP VIII except to the extent of his pecuniary interest therein.

(8) Consists of the shares owned by WP VIII as described in footnote 15 below, and options to purchase 2,794 shares of common stock held by Mr. Leff. Mr. Leff is a partner of WP and a managing director and member of WP LLC. Mr. Leff disclaims beneficial ownership of the shares owned by WP VIII except to the extent of his pecuniary interest therein.

(9) Consists of 71,958 shares of common stock owned of record and options to purchase 51,379 shares of common stock held by Dr. Navia.

(10) Represents options to purchase shares of common stock held by Dr. Pendergast.

(11) Represents options to purchase shares of common stock held by Mr. Penner.

(12) Consists of the shares owned by U.S. Venture Partners and affiliated entities as described in footnote 16 below, and options to purchase 12,198 shares of common stock held by Dr. Root. Dr. Root disclaims beneficial ownership of the shares owned by the funds described in footnote 16 except to the extent of his pecuniary interest therein.

(13) Represents options to purchase shares of common stock held by Mr. Wyzga.

(14) Consists of the shares of common stock set forth in footnotes 1 through 13 and options to purchase 168,686 shares of common stock held by four executive officers not named in the table.

(15)

Consists of 3,589,246 shares of common stock owned of record by and warrants to purchase 717,917 shares of common stock held by Warburg Pincus Private Equity VIII, L.P. and two affiliated partnerships, or collectively, WP VIII. Warburg Pincus Partners LLC, or WP Partners LLC, a subsidiary of Warburg Pincus & Co., or WP, is the sole general partner of WP VIII. WP VIII is managed by Warburg Pincus LLC, or WP LLC. Charles R. Kaye and Joseph P. Landy are each Managing General Partners of WP and Co-Presidents and Managing Members of WP LLC. Messrs. Hen and Leff are general partners of WP and Managing Directors and Members of WP LLC. Each of these individuals disclaims beneficial ownership of the shares held by WP VIII except to the extent of any pecuniary interest therein.

(16) Consists of 2,947,459 shares of common stock owned of record by and warrants to purchase 352,163 shares of common stock held by U.S. Venture Partners VIII, L.P.; 21,696 shares of common stock owned of record by and warrants to purchase 2,592 shares of common stock held by USVP VIII Affiliates Fund, L.P.; 27,665 shares of common stock owned of record by and warrants to purchase 3,303 shares of common stock held by USVP Entrepreneur Partners VIII-A, L.P.; and 14,778 shares of common stock owned of record by and warrants to purchase 1,765 shares of common stock held by USVP Entrepreneur Partners VIII-B, L.P., together the USVP Funds. Presidio Management Group VIII, L.L.C., or PMG VIII, is the general partner of each of the USVP Funds. PMG VIII and its managing

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members may be deemed to share voting and/or dispositive control over the shares held by the USVP Funds and each disclaims beneficial ownership of these shares except to the extent of any pecuniary interest therein. The managing members of PMG VIII are Dr. Root, Timothy Connors, Irwin Federman, Winston Fu, Steven Krausz, David Liddle, Christopher Rust, and Philip Young. This information is based in part on a Schedule 13G filed by PMG VIII and related entities and persons with the SEC on February 9, 2007.

(17) Consists of 87,506 shares of common stock beneficially owned by and warrants to purchase 1,962,494 shares of common stock held by Adage Capital Partners, L.P., or ACP. Adage Capital Partners GP, L.L.C., or ACPGP, is the general partner of ACP and Adage Capital Advisors, L.L.C., or ACA, is the managing member of ACPGP. Phillip Gross and Robert Atchinson are the managing members of ACA. ACP has the power to dispose of and the power to vote the shares beneficially owned by it, which power may be exercised by ACPGP. ACA directs ACPGP s operations. Phillip Gross and Robert Atchinson, as managing members of ACA, have shared power to vote the shares beneficially owned by ACP. This information is based on a Schedule 13G filed by Adage Capital Partners, L.P. and related entities and persons with the SEC on October 18, 2006 and amended on January 18, 2007.

(18) Consists of 1,516,449 shares of common stock owned of record by and warrants to purchase 210,449 shares of common stock held by Nomura International plc, or NI, Nomura Phase4 Ventures LP, or NLP, Nomura Phase4 Ventures GP Limited, or NGP, and Nomura Phase4 Ventures Limited, NVL. NI owns directly all of the stock of NVL, which owns directly all of the stock of NGP. NGP is the general partner of NLP. NI and NGP, as general partner of NLP, have each delegated their investment and voting powers in relation the these securities to NVL. NI, NGP and NLP each disclaim beneficial ownership of these securities. This information is based solely on a Schedule 13G filed by NI on behalf of itself and NLP, NGP and NVL with the SEC on February 14, 2007.

(19) Consists of 1,018,049 shares of common stock beneficially owned by Fidelity Management & Research Company, or Fidelity, a wholly-owned subsidiary of FMR Corp., and 32,700 shares of common stock beneficially owned by Pyramis Global Advisors Trust Company, or PGATC, an indirect wholly-owned subsidiary of FMR Corp. FMR Corp. and its chairman, Edward C. Johnson 3d, through their control of Fidelity, each have dispositive power over the shares held by Fidelity, and through their control of PGATC, each have voting and/or dispositive control over the shares held by PGATC. Also includes 481,800 shares of common stock beneficially owned by Fidelity International Limited. This information is based solely on a Schedule 13G filed by FMR Corp. and related entities and persons with the SEC on February 14, 2007.

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Equity Compensation Plan Information

The following table provides certain aggregate information with respect to all of our equity plans under which options to purchase shares of our common stock were outstanding as of December 31, 2006:

Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	(b) Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by security holders(1)	3,544,138	$ 9.34	309,598
Equity compensation plans not approved by security holders			
Total	3,544,138	$ 9.34	309,598

(1) These plans consist of our 1993 Stock Option Plan and our Amended and Restated 2002 Employee, Director and Consultant Stock Plan.

Summary Description of the Company s Stockholder Approved Equity Compensation Plans

1993 Stock Option Plan

We have terminated our 1993 Stock Option Plan, under which options to purchase 150,584 shares of common stock remained outstanding as of December 31, 2006. Although no more options may be granted under the plan, the terms of the plan continue to apply to all outstanding options under such plan. Our Board of Directors or any committee to which the Board of Directors delegates authority may, with the consent of the affected plan participants, amend outstanding awards consistent with the terms of the plan.

Amended and Restated 2002 Employee, Director and Consultant Stock Plan

Our 2002 Employee, Director and Consultant Stock Plan, or the 2002 Stock Plan, initially was adopted by our Board of Directors in February 2002 and approved by our stockholders in January 2003. In January 2006, our Board of

Directors adopted and our stockholders approved an amended and restated form of our 2002 Stock Plan. Our 2002 Stock Plan, as amended and restated, became effective upon the completion of our initial public offering and will expire on January 5, 2016. Under this plan, we may grant incentive stock options, nonqualified stock options, restricted and unrestricted stock awards and other stock-based awards. The number of shares of common stock authorized for issuance under this plan equals the sum of (1) 4,199,651 shares of our common stock plus (2) any shares of our common stock that are represented by awards granted under our 1993 Stock Option Plan that are forfeited, expire or are cancelled without delivery of shares or which result in the forfeiture of shares of our common stock back to us on or after December 31, 2005; provided, however, that no more than 354,186 shares shall be added to the plan pursuant to clause (2) above.

In addition, our plan contains an evergreen provision, which allows for an annual increase in the number of shares available for issuance under the plan on the first day of each fiscal year during the period beginning on the first day of fiscal year 2007, and ending on the second day of fiscal year 2015. The annual increase in the number of shares shall be equal to the lowest of:

1,500,000 shares;

3% of the number of shares of our common stock outstanding on a fully diluted basis as of the close of business on the immediately preceding day, which is calculated by adding to the number of shares of

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common stock outstanding, the number of shares of common stock issuable upon conversion or exercise of any convertible securities; and

an amount determined by our Board of Directors.

As a result, on January 1, 2007, the number of shares available for issuance under the plan was increased by 908,051 shares. The Board of Directors has authorized our Compensation Committee to administer the plan. In accordance with the provisions of the plan, the Compensation Committee will determine the terms of options and other awards, including:

the determination of which employees, directors and consultants shall be granted options and other awards;

the number of shares subject to options and other awards;

the exercise price of each option which generally shall not be less than fair market value on the date of grant;

the schedule upon which options become exercisable;

the termination or cancellation provisions applicable to options;

the terms and conditions of other awards, including conditions for repurchase, termination or cancellation, issue price and repurchase price; and

all other terms and conditions upon which each award may be granted in accordance with the plan.

No participant may receive awards for more than 560,000 shares of common stock in any fiscal year.

In addition, our Board of Directors or any committee to which the Board of Directors delegates authority may, with the consent of the affected plan participants, reprice or otherwise amend outstanding awards consistent with the terms of the plan.

Upon a merger or other reorganization event, our Board of Directors, or the board of directors of any corporation assuming our obligations, may, in its sole discretion, take any one or more of the following actions pursuant to the plan, as to some or all outstanding awards:

provide that outstanding options shall be assumed or substituted by the successor corporation;

terminate unexercised outstanding options immediately prior to the consummation of such transaction unless exercised by the optionee;

make or provide for a cash payment to the participants equal to the difference between the merger price times the number of shares of our common stock subject to such outstanding options, to the extent then exercisable at prices not in excess of the merger price, and the aggregate exercise price of all such outstanding options, in exchange for the termination of such options;

provide that all or any outstanding options shall become exercisable in full immediately prior to such event; and

provide that outstanding awards shall be assumed or substituted by the successor corporation, become realizable or deliverable, or restrictions applicable to an award will lapse, in whole or in part, prior to or upon the merger or reorganization event.

Pursuant to the stock plan, in the event a merger or other reorganization event also constitutes a change of control, all options issued to directors, whether or not employees, shall become exercisable in full immediately prior to such event.

401(k) Plan

We have a 401(k) defined contribution retirement plan in which all full-time employees are eligible to participate. Our 401(k) plan is intended to qualify under Section 401 of the Internal Revenue Code so that

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contributions by employees and by us to our 401(k) plan and income earned on plan contributions are not taxable to employees until withdrawn or distributed from the plan, and so that contributions, including employee salary deferral contributions, will be deductible by us when made. We provide matching contributions under our 401(k) plan for all participants.

ITEM 13. *CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE*

Certain Relationships and Related Transactions

The following is a description of transactions that we entered into with our executive officers, directors or 5% stockholders since January 1, 2006. We believe that all of the transactions described below were made on terms no less favorable to us than could have been obtained from unaffiliated third parties. All of our related person transactions are approved by our Audit Committee.

Conversion of Preferred Stock, Warrants and Accrued Dividends

On May 21, 2004, Warburg Pincus, one of our principal stockholders, and affiliated entities, purchased 7,413,222 shares of our Series C convertible preferred stock at a price of $4.3147358 per share and warrants to purchase 1,630,914 shares of our Series C convertible preferred stock at an exercise price of $4.3147358 per share, for an aggregate purchase price of $31,986,094. These shares and warrants to purchase Series C convertible preferred stock were converted into 3,263,251 shares of our common stock and warrants to purchase 717,917 shares of common stock at the time of our initial public offering in January 2006. In addition, in connection with that conversion, accrued dividends on the shares of Series C convertible preferred stock of $4,889,929 were converted into 325,995 shares of our common stock. Warburg Pincus and its affiliated entities are entitled to designate up to two individuals to our board of directors and we have agreed to nominate and use our reasonable efforts to cause Warburg Pincus designees to be elected. Messrs. Hen and Leff are managing directors of Warburg Pincus and are the current members of our board of directors designated by Warburg Pincus.

On May 21, 2004, U.S. Venture Partners VIII, L.P., one of our principal stockholders, and affiliated entities, purchased 1,907,741 shares of our Series C convertible preferred stock at a price of $4.3147358 per share and warrants to purchase 419,704 shares of our Series C convertible preferred stock at an exercise price of $4.3147358 per share, for an aggregate purchase price of $8,231,398. These shares and warrants to purchase Series C convertible preferred stock were converted into 839,773 shares of our common stock and warrants to purchase 184,749 shares of common stock at the time of our initial public offering in January 2006. In connection with that conversion, accrued dividends on the shares of Series C convertible preferred stock of $1,258,389 were converted into 83,891 shares of our common stock. Dr. Root is a general partner of U.S. Venture Partners and is the current member of our board of directors designated by U.S. Venture Partners.

On May 21, 2004, Nomura International plc, one of our principal stockholders, and affiliated entities, purchased 1,140,570 shares of our Series C convertible preferred stock at a price of $4.3147358 per share and warrants to purchase 250,926 shares of our Series C convertible preferred stock at an exercise price of $4.3147358 per share, for an aggregate purchase price of $4,921,258. These shares and warrants to purchase Series C convertible preferred stock were converted into 502,071 shares of our common stock and warrants to purchase 110,455 shares of common stock at the time of our initial public offering in January 2006. In connection with that conversion, accrued dividends on the shares of Series C convertible preferred stock of $752,346 were converted into 50,156 shares of our common stock.

We have an investor rights agreement, dated as of May 21, 2004, under which some of our stockholders are entitled to registration rights with respect to the shares of our common stock that they hold. Those stockholders include Warburg

Pincus and affiliated entities; U.S. Venture Partners VIII, L.P. and affiliated entities; Nomura International plc; and Adage Capital Partners, L.P. See Description of Capital Stock Registration Rights, incorporated herein by reference to our Registration Statement on Form S-1, Registration No. 333-129037.

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Dr. Pendergast, one of our directors, is President, Human Genetics Therapies, at Shire Pharmaceuticals plc. We have a sublease with Shire, dated July 23, 2004, under which we sublease approximately 16,000 square feet of office space located in Cambridge, Massachusetts in exchange for a sublease payment of $400,000 per year.

Policy for Approval of Related Person Transactions

Pursuant to the written charter of our Audit Committee, the Audit Committee is responsible for reviewing and approving, prior to our entry into any such transaction, all transactions in which we are a participant and in which any of the following persons has or will have a direct or indirect material interest:

our executive officers;

our directors;

the beneficial owners of more than 5% of our securities;

the immediate family members of any of the foregoing persons; and

any other persons whom the Board determines may be considered related persons.

For purposes of these procedures, immediate family members means any child, stepchild, parent, stepparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, and any person (other than a tenant or employee) sharing the household with the executive officer, director or 5% beneficial owner.

In reviewing and approving such transactions, the Audit Committee shall obtain, or shall direct our management to obtain on its behalf, all information that the committee believes to be relevant and important to a review of the transaction prior to its approval. Following receipt of the necessary information, a discussion shall be held of the relevant factors if deemed to be necessary by the committee prior to approval. If a discussion is not deemed to be necessary, approval may be given by written consent of the committee. This approval authority may also be delegated to the chairman of the Audit Committee in some circumstances. No related person transaction shall be entered into prior to the completion of these procedures.

The Audit Committee or its chairman, as the case may be, shall approve only those related person transactions that are determined to be in, or not inconsistent with, the best interests of us and our stockholders, taking into account all available facts and circumstances as the committee or the chairman determines in good faith to be necessary. These facts and circumstances will typically include, but not be limited to, the benefits of the transaction to us; the impact on a director s independence in the event the related person is a director, an immediate family member of a director or an entity in which a director is a partner, shareholder or executive officer; the availability of other sources for comparable products or services; the terms of the transaction; and the terms of comparable transactions that would be available to unrelated third parties or to employees generally. No member of the Audit Committee shall participate in any review, consideration or approval of any related person transaction with respect to which the member or any of his or her immediate family members is the related person.

Director Independence

Our Board of Directors has reviewed the materiality of any relationship that each of our directors has with Altus, either directly or indirectly. Based on this review, the Board has determined that the following directors are independent directors as defined by The Nasdaq Stock Market: Messrs. Hen, Leff, Penner, and Wyzga, and Drs. Root,

Pendergast and Navia. In addition, Messrs. Aldrich and Ms. Brum, each of whom served on the Board in 2006, but are no longer Board members, were also determined to be independent directors as defined by The Nasdaq Stock Market.

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ITEM 14. *PRINCIPAL ACCOUNTING FEES AND SERVICES*

The following table presents fees for professional audit services rendered by Deloitte & Touche LLP for the audit of our annual financial statements for the years ended December 31, 2006, and December 31, 2005, and fees billed for other services rendered by Deloitte & Touche LLP during those periods. All of such fees were approved by the Audit Committee.

	2006	2005
Audit Fees:(1)	$ 298,500	$ 788,873
Audit Related Fees:		
Tax Fees:(2)	11,000	13,500
All Other Fees:(3)	3,550	2,400
Total	$ 313,050	$ 804,873

(1) Audit fees consisted of audit work performed as well as work generally only the independent auditor can reasonably be expected to provide, including $632,213 of costs incurred in 2005 associated with the preparation and review of our Registration Statement on Form S-1 relating to our initial public offering.

(2) Tax fees consisted principally of assistance with matters related to tax compliance and reporting.

(3) All other fees in 2006 and 2005 consisted principally of various accounting and tax consulting work.

Policy on Audit Committee Pre-Approval of Audit and Permissible Non-audit Services of Independent Auditors

Consistent with SEC policies regarding auditor independence, the Audit Committee has responsibility for appointing, setting compensation and overseeing the work of the independent auditor. In recognition of this responsibility, the Audit Committee has established a policy to pre-approve all audit and permissible non-audit services provided by the independent auditor.

Prior to engagement of the independent auditor for the next year s audit, management will submit an aggregate estimate of services expected to be rendered during that year for each of four categories of services to the Audit Committee for approval.

1. *Audit* services include audit work performed in the preparation of financial statements, as well as work that generally only the independent auditor can reasonably be expected to provide, including comfort letters, statutory audits, and attest services and consultation regarding financial accounting and/or reporting standards.

2. *Audit-Related* services are for assurance and related services that are traditionally performed by the independent auditor, including due diligence related to mergers and acquisitions, employee benefit plan audits, and special procedures required to meet certain regulatory requirements.

3. *Tax* services include all services performed by the independent auditor s tax personnel except those services specifically related to the audit of the financial statements, and includes fees in the areas of tax compliance, tax planning, and tax advice.

4. *Other Fees* are those associated with services not captured in the other categories. We generally do not request such services from the independent auditor.

Prior to engagement, the Audit Committee pre-approves these services by category of service. The fees are budgeted and the Audit Committee requires the independent auditor and management to report actual fees versus the budget periodically throughout the year by category of service. During the year, circumstances may arise when it may become necessary to engage the independent auditor for additional services not contemplated in the original pre-approval. In those instances, the Audit Committee requires specific pre-approval before engaging the independent auditor.

The Audit Committee may delegate pre-approval authority to one or more of its members. The member to whom such authority is delegated must report, for informational purposes only, any pre-approval decisions to the Audit Committee at its next scheduled meeting.

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PART IV

ITEM 15. *EXHIBITS AND FINANCIAL STATEMENT SCHEDULES*

(a) 1. *Consolidated Financial Statements*

The Consolidated Financial Statements are filed as part of this report.

2. *Consolidated Financial Statement Schedules*

All schedules are omitted because they are not required or because the required information is included in the Consolidated Financial Statements or notes thereto.

3. *Exhibits*

Exhibit		Incorporated by Reference to SEC Filing			Filed with this
No.	Filed Exhibit Description	Form	Date	Exhibit No.	Form 10-K
	Articles of Incorporation and By-Laws				
3.1	Restated Certificate of Incorporation of the Registrant.				X
3.2	Restated By-laws of the Registrant.	S-1/A (333-129037)	1/11/06	3.4	
	Instruments Defining the Rights of Security Holders				
4.1	Form of Common Stock Certificate.	S-1/A (333-129037)	1/11/06	4.1	
4.2	Amended and Restated Investor Rights Agreement, dated as of May 21, 2004.	S-1 (333-129037)	10/17/05	4.3	
4.3	Form of Common Stock Warrant originally issued to Vertex Pharmaceuticals Incorporated.	S-1 (333-129037)	10/17/05	4.6	
4.4	Form of Common Stock Warrant to General Electric Capital Corporation.	S-1 (333-129037)	10/17/05	4.7	
4.5	Form of Common Stock Warrant to Oxford Finance Corporation.	S-1 (333-129037)	10/17/05	4.8	
4.6	Form of Common Stock Warrant to Cystic Fibrosis Foundation Therapeutics, Inc.	S-1 (333-129037)	10/17/05	4.9	
4.7	Form of Common Stock Warrant to Transamerica Business Credit Corporation.	S-1 (333-129037)	10/17/05	4.10	
4.8		S-1 (333-129037)	10/17/05	4.11	

	Form of Common Stock Warrant to Cowen and Company, LLC				
4.9	Form of Series B Preferred Stock Warrant, as amended, together with a schedule of warrant holders.	S-1 (333-129037)	10/17/05	4.12	
4.10	Form of Series C Preferred Stock Warrant, together with a schedule of warrant holders.	S-1 (333-129037)	10/17/05	4.13	
	Material Contracts Management Contracts and Compensatory Plans				
10.1	1993 Stock Option Plan, as amended.	S-1 (333-129037)	10/17/05	10.1	
10.2	Form of Incentive Stock Option Agreement under the 1993 Stock Option Plan.	S-1 (333-129037)	10/17/05	10.2	
10.3	Form of Non-Qualified Stock Option Agreement under the 1993 Stock Option Plan, as amended.	S-1 (333-129037)	10/17/05	10.3	
10.4	Amended and Restated 2002 Employee, Director and Consultant Stock Plan, as amended.				X

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Exhibit No.	Filed Exhibit Description	Incorporated by Reference to SEC Filing			Filed with this Form 10-K
		Form	Date	Exhibit No.	
10.5	Pre-IPO Form of Incentive Stock Option Agreement under the Amended and Restated 2002 Employee, Director and Consultant Stock Plan applicable to Executive Officers.	S-1 (333-129037)	10/17/05	10.5	
10.6	Post-IPO Form of Incentive Stock Option Agreement under the Amended and Restated 2002 Employee, Director and Consultant Stock Plan applicable to Executive Officers.	S-1/A (333-129037)	1/11/06	10.5.1	
10.7	Post-IPO Form of Director Non-Qualified Stock Option Agreement under the Amended and Restated 2002 Employee, Director and Consultant Stock Plan.	S-1/A (333-129037)	1/11/06	10.6.1	
10.8	Pre-IPO Form of Non-Qualified Stock Option Agreement under the Amended and Restated 2002 Employee, Director and Consultant Stock Plan applicable to Executive Officers.	S-1 (333-129037)	10/17/05	10.6	
10.9	Amended and Restated Director Compensation Policy dated February 2, 2007.				X
10.10	Consulting Agreement between the Registrant and Manuel A. Navia, dated as of March 1, 2003.	S-1 (333-129037)	10/17/05	10.19	
10.11	Description of Arrangement between the Registrant and John P. Richard, effective as of October 28, 2004.	S-1 (333-129037)	10/17/05	10.20	
10.12	Letter Agreement between the Registrant and Sheldon Berkle, dated as of May 6, 2005, as amended.	S-1/A (333-129037)	12/27/05	10.17	
10.13	Letter Agreement between the Registrant and Lauren Sabella, dated as of April 4, 2006.				X
10.14	Letter Agreement between the Registrant and Burkhard Blank, dated as of June 2, 2006.				X

10.15	Letter Agreement between the Registrant and John Sorvillo, dated as of July 31, 2006.				X
10.16	Letter Agreement between the Registrant and Renato Fuchs, dated as of August 14, 2006.				X
10.17	Letter Agreement between the Registrant and Bruce Leicher, dated as of October 31, 2006.				X
10.18	Form of Indemnification Agreement.	S-1/A (333-129037)	11/30/05	10.7	
	Material Contracts Leases				

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Exhibit No.	Filed Exhibit Description	Incorporated by Reference to SEC Filing			Filed with this Form 10-K
		Form	Date	Exhibit No.	
10.19	Lease Agreement between the Registrant and Rizika Realty Trust for 125 Sidney Street, Cambridge, MA, dated as of April 4, 2002, as amended.	S-1 (333-129037)	10/17/05	10.21	
10.20	Lease Agreement between the Registrant and Fort Washington Realty Trust for 625 Putnam Ave, Cambridge, MA, dated as of March 1, 1993, as amended.	S-1 (333-129037)	10/17/05	10.22	
10.21	Sublease Agreement between the Registrant and Transkaryotic Therapies, Inc., dated as of July 23, 2004.	S-1 (333-129037)	10/17/05	10.25	
10.22	Third Amendment to Lease Agreement between the Registrant and Rizika Realty Trust for 125 Sidney Street, Cambridge, MA, dated as of February 13, 2006.	8-K	2/15/06	99.1	
	Material Contracts Financing Agreements				
10.23	Master Lease Agreement between the Registrant and General Electric Capital Corporation, dated as of May 21, 2002, as amended.	S-1 (333-129037)	10/17/05	10.8	
10.24	Master Loan and Security Agreement between Oxford Finance Corporation and the Registrant, dated as of December 17, 1999, as amended.	S-1 (333-129037)	10/17/05	10.9	
10.25	Form of Promissory Note issued to Oxford Finance Corporation.	S-1 (333-129037)	10/17/05	10.10	
10.26	Master Security Agreement between Oxford Finance Corporation and the Registrant, dated August 19, 2004.	S-1 (333-129037)	10/17/05	10.11	
10.27	Form of Promissory Note issued to Oxford Finance Corporation.	S-1 (333-129037)	10/17/05	10.12	
10.28	Form of Promissory Note Schedule No. 08 issued to Oxford Finance Corporation, dated December 29, 2006.	8-K	1/3/07	10.1	
10.29	Form of Promissory Note Schedule No. 09 issued to	8-K	1/3/07	10.2	

	Oxford Finance Corporation, dated December 29, 2006.			
	Material Contracts License and Collaboration Agreements			
10.30+	Technology License Agreement by and between the Registrant and Vertex Pharmaceuticals Incorporated, dated as of February 1, 1999, as amended.	S-1/A (333-129037)	1/11/06	10.13
10.31+	Strategic Alliance Agreement between the Registrant and Cystic Fibrosis Foundation Therapeutics, Inc., dated as of February 22, 2001, as amended.	S-1/A (333-129037)	1/11/06	10.15

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Exhibit No.	Filed Exhibit Description	Incorporated by Reference to SEC Filing Form	Date	Exhibit No.	Filed with this Form 10-K
10.32+	Development, Commercialization and Marketing Agreement between the Registrant and Dr. Falk Pharma GmbH, dated as of December 23, 2002.	S-1/A (333-129037)	10/17/05	10.16	
10.33++	Collaboration and License Agreement by and between the Registrant and Genentech, Inc., dated as of December 19, 2006.	8-K	2/1/07	10.1	
10.34	Common Stock Purchase Agreement, dated as of December 19, 2006, between the Registrant and Genentech, Inc.	8-K	3/1/07	10.1	
10.35	Registration Rights Agreement, dated as of February 27, 2007, between the Registrant and Genentech, Inc.	8-K	3/1/07	10.2	
	Material Contracts Manufacturing and Supply Agreements				
10.36+	Cooperative Development Agreement between Amano Enzyme, Inc. and the Registrant, dated as of November 8, 2002, as amended.	S-1/A (333-129037)	1/11/06	10.14	
10.37++	Drug Product Production and Clinical Supply Agreement by and between the Registrant and Althea Technologies, Inc., dated as of August 15, 2006.	10-Q	11/14/06	10.1	
10.38++	Manufacturing and Supply Agreement by and between the Registrant and Lonza Ltd., dated as of November 16, 2006.	8-K	2/6/07	10.1	
	Other Exhibits				
21.1	Subsidiaries of the Registrant.	10-K	3/30/2006	21.1	
23.1	Consent of Independent Registered Public Accounting Firm.				X
31.1	Certification of Principal Executive Officer Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934.				X
31.2					X

	Certification of Principal Financial Officer Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934.	
32.1	Certificate of Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350 and Section 906 of the Sarbanes-Oxley Act of 2002.	X

+ Confidential treatment has been granted as to certain portions of the document, which portions have been omitted and filed separately with the Securities and Exchange Commission.

++ Confidential treatment has been requested as to certain portions of the document, which portions have been omitted and filed separately with the Securities and Exchange Commission.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on March 9, 2007.

ALTUS PHARMACEUTICALS INC.

By /s/ SHELDON BERKLE
Sheldon Berkle
President and Chief Executive Officer

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

Signature	Title	Date
/s/ SHELDON BERKLE Sheldon Berkle	President, Chief Executive Officer and Director (principal executive officer)	March 9, 2007
/s/ JONATHAN I. LIEBER Jonathan I. Lieber	Vice President, Chief Financial Officer and Treasurer (principal financial and accounting officer)	March 9, 2007
/s/ JOHN P. RICHARD John P. Richard	Chairman of the Board	March 9, 2007
/s/ STEWART HEN Stewart Hen	Director	March 9, 2007
/s/ JONATHAN S. LEFF Jonathan S. Leff	Director	March 9, 2007
/s/ MANUEL A. NAVIA Manuel A. Navia, Ph.D.	Director	March 9, 2007
/s/ DAVID D. PENDERGAST David D. Pendergast, Ph.D.	Director	March 9, 2007
/s/ HARRY H. PENNER, JR.	Director	March 9, 2007

Harry H. Penner, Jr.		
/s/ JONATHAN D. ROOT	Director	March 9, 2007
Jonathan D. Root, M.D.		
/s/ MICHAEL S. WYZGA	Director	March 9, 2007
Michael S. Wyzga		

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ALTUS PHARMACEUTICALS INC. AND SUBSIDIARY

Index to Consolidated Financial Statements

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Altus Pharmaceuticals Inc.
Cambridge, Massachusetts

We have audited the accompanying consolidated balance sheets of Altus Pharmaceuticals Inc. and subsidiary (the Company) as of December 31, 2006 and 2005, and the related consolidated statements of operations, redeemable preferred stock and stockholders equity (deficit), and cash flows for each of the three years in the period ended December 31, 2006. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company s internal control over financial reporting. Accordingly, we express no such opinion. An audit also 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, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Altus Pharmaceuticals Inc. and subsidiary as of December 31, 2006 and 2005, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2006, in conformity with accounting principles generally accepted in the United States of America.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
March 9, 2007

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ALTUS PHARMACEUTICALS INC. AND SUBSIDIARY

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2006	2005
	(In thousands, except share and per share amounts)	
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 61,470	$ 12,872
Marketable securities available-for-sale	3,059	
Marketable securities held-to-maturity	21,385	17,189
Prepaid expenses and other current assets	2,576	2,406
Total current assets	88,490	32,467
PROPERTY AND EQUIPMENT, Net	6,717	6,763
OTHER ASSETS, Net	1,254	1,354
TOTAL ASSETS	$ 96,461	$ 40,584
LIABILITIES, REDEEMABLE PREFERRED STOCK AND STOCKHOLDERS EQUITY (DEFICIT)		
CURRENT LIABILITIES:		
Accounts payable and accrued expenses	$ 6,710	$ 6,535
Current portion of long-term debt	2,106	2,271
Current portion of deferred revenue	8,367	9,412
Total current liabilities	17,183	18,218
Long-term debt, net of current portion	2,874	3,708
Deferred revenue, net of current portion		4,232
Other long-term liabilities	701	
TOTAL LIABILITIES	20,758	26,158
COMMITMENTS AND CONTINGENCIES (Note 10)		
REDEEMABLE PREFERRED STOCK:		
Redeemable Preferred Stock, par value $0.01 per share; 450,000 shares authorized, issued and outstanding in 2006 and 2005 (liquidation value of $6,281 at December 31, 2006 and $6,056 at December 31, 2005) at accreted redemption value	6,281	5,879
Series B Convertible Preferred Stock, par value $0.01 per share; no shares authorized, issued or outstanding at December 31, 2006; 12,928,155 shares authorized, 11,773,609 shares issued and outstanding at December 31, 2005 (liquidation value of $63,614 at December 31, 2005) at accreted redemption value		62,159
		51,335

Series C Convertible Preferred Stock, par value $0.01 per share; no shares authorized, issued or outstanding at December 31, 2006; 14,420,359 shares authorized, 11,819,959 shares issued and outstanding at December 31, 2005 (liquidation value of $58,407 at December 31, 2005) at accreted redemption value		
STOCKHOLDERS EQUITY (DEFICIT):		
Series A Convertible Preferred Stock, par value $0.01 per share; no shares authorized, issued or outstanding at December 31, 2006; 87,500 shares authorized, issued and outstanding at December 31, 2005 (liquidation value of $4)		897
Common stock, par value $0.01 per share; 100,000,000 shares authorized; 23,121,477 shares issued and outstanding at December 31, 2006; 47,113,986 shares authorized, 1,842,809 shares issued and outstanding at December 31, 2005	231	18
Additional paid-in capital	244,985	14,272
Accumulated deficit	(175,814)	(120,134)
Accumulated other comprehensive income	20	
Total stockholders equity (deficit)	69,422	(104,947)
TOTAL LIABILITIES, REDEEMABLE PREFERRED STOCK AND STOCKHOLDERS EQUITY (DEFICIT)	$ 96,461	$ 40,584

See notes to consolidated financial statements.

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ALTUS PHARMACEUTICALS INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2006	2005	2004
	(In thousands, except per share amounts)		
REVENUE:			
Contract revenue	$ 5,107	$ 8,288	$ 4,045
Product sales			185
Total revenue	5,107	8,288	4,230
COSTS AND EXPENSES:			
Cost of product sales			87
Research and development	50,316	26,742	19,095
General, sales, and administrative	14,799	8,611	6,320
Total costs and expenses	65,115	35,353	25,502
LOSS FROM OPERATIONS	(60,008)	(27,065)	(21,272)
OTHER INCOME (EXPENSE):			
Interest income	5,022	1,018	646
Interest expense	(697)	(825)	(469)
Foreign currency (loss) gain and other	3	(252)	138
Other income (expense) net	4,328	(59)	315
NET LOSS	(55,680)	(27,124)	(20,957)
PREFERRED STOCK DIVIDENDS AND ACCRETION	(1,286)	(10,908)	(8,588)
NET LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS	$ (56,966)	$ (38,032)	$ (29,545)
NET LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS PER SHARE BASIC AND DILUTED	$ (2.75)	$ (22.13)	$ (17.33)
WEIGHTED AVERAGE SHARES OUTSTANDING BASIC AND DILUTED	20,739	1,719	1,704

See notes to consolidated financial statements.

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ALTUS PHARMACEUTICALS INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF REDEEMABLE PREFERRED STOCK AND STOCKHOLDERS EQUITY (DEFICIT)

ble tock mount	Redeemable Preferred Stock						Stockholders Equity (Deficit)				Ac
	Series B Convertible Preferred Stock		Series C Convertible Preferred Stock		Series A Convertible Preferred Stock		Common Stock		Additional Paid-In		Co
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Capital		
	(In thousands, except share amounts)										
5,076	11,773,609	$ 53,154		$	87,500	$ 897	1,688,831	$ 17	$ 23,512		
402		4,502		3,684					(8,588)		
							29,745		82		
			11,819,959	51,000							
				(8,717)					8,717		
				(636)							
									253		
									1		
									7		
5,478	11,773,609	57,656	11,819,959	45,331	87,500	897	1,718,576	17	23,984		
401		4,503		6,004					(10,908)		

							124,989	1	350
							(756)		
									840
									6
5,879	11,773,609	62,159	11,819,959	51,335	87,500	897	1,842,809	18	14,272
402		374		510					(1,286)
							700,101	7	2,990
							369,433	4	355
									3,417
							8,050,000	80	110,084
	(11,773,609)	(49,453)	(11,819,959)	(44,048)	(87,500)	(897)	10,767,306	108	94,290
		(13,080)		(7,797)			1,391,828	14	20,863
6,281		$		$		$	23,121,477	$ 231	$ 244,985

See notes to consolidated financial statements.

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ALTUS PHARMACEUTICALS INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2006	2005	2004
	(In thousands)		
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$ (55,680)	$ (27,124)	$ (20,957)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	3,059	2,836	1,736
Stock-based compensation expense	3,417	840	254
Noncash interest expense	225	231	225
Loss on disposal of equipment	35		
Changes in assets and liabilities:			
Accounts receivable			109
Prepaid expenses and other current assets	(170)	(952)	416
Other noncurrent assets	(71)		(162)
Accounts payable and accrued expenses	(338)	811	2,393
Other long-term liabilities	701		
Milestones received as deferred revenue		11,298	1,500
Deferred revenue recognized	(5,277)	(8,271)	(3,748)
Net cash used in operating activities	(54,099)	(20,331)	(18,234)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of marketable securities	(209,044)	(34,100)	(51,206)
Maturities of marketable securities	201,809	60,059	24,036
Purchases of property and equipment	(2,589)	(2,347)	(5,011)
Net cash (used in) provided by investing activities	(9,824)	23,612	(32,181)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Net proceeds from initial public offering of common stock	110,164		
Net proceeds from issuance of preferred stock and related warrants			50,372
Proceeds from exercise of stock options and warrants	3,356	351	82
Proceeds from issuance of long-term debt	1,272	2,572	3,792
Repayment of long-term debt	(2,271)	(2,321)	(998)
Deferred initial public offering issuance costs		(500)	
Net cash provided by financing activities	112,521	102	53,248
NET INCREASE IN CASH AND CASH EQUIVALENTS	48,598	3,383	2,833
CASH AND CASH EQUIVALENTS Beginning of year	12,872	9,489	6,656
CASH AND CASH EQUIVALENTS End of year	$ 61,470	$ 12,872	$ 9,489

SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid for interest	$ 472	$ 600	$ 243
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES:			
First months payments withheld from long-term debt proceeds	$ 38	$ 70	$ 107
Series A Convertible Preferred Stock, Series B Redeemable Convertible Preferred Stock and Series C Redeemable Convertible Preferred Stock, and accrued dividends, converted to common stock	$ 115,275	$	$

See notes to consolidated financial statements.

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ALTUS PHARMACEUTICALS INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2006, 2005 AND 2004
(IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)

1. BACKGROUND

Altus Pharmaceuticals Inc. and subsidiary, (Altus or the Company), was incorporated in Massachusetts in October 1992 as a wholly owned subsidiary of Vertex Pharmaceuticals Incorporated, or Vertex, a Massachusetts corporation. In February 1999, the Company was reorganized as an independent company, and in August 2001 it was reincorporated as a Delaware corporation. Prior to May 2004, the Company was named Altus Biologics Inc.

During January 2006, the Company completed an initial public offering of 8,050,000 shares of its common stock at a public offering price of $15.00 per share. Net proceeds to the Company were $110,164, after deducting underwriting discounts and commissions and offering expenses totaling $10,586.

In connection with the initial public offering, all shares of Series B Convertible Preferred Stock (Series B Preferred Stock) were converted into 5,182,651 shares of common stock, all shares of Series C Convertible Preferred Stock (Series C Preferred Stock) were converted into 5,203,059 shares of common stock and all shares of Series A Convertible Preferred Stock (Series A Preferred Stock) were converted into 381,596 shares of common stock. As a result, the Company no longer recognizes dividend and accretion expense for these classes of preferred stock. Furthermore, the Company issued an additional 872,054 shares of common stock in satisfaction of $13,080 of accrued but unpaid dividends on the Series B Preferred Stock, and 519,774 shares of common stock were issued in satisfaction of $7,797 of accrued but unpaid dividends on the Series C Preferred Stock. All warrants to purchase Series B Preferred Stock were automatically converted into warrants to purchase 508,214 shares of the Company s common stock at an exercise price of $9.80 per share, and all warrants to purchase Series C Preferred Stock were automatically converted into warrants to purchase 1,144,670 shares of the Company s common stock at an exercise price of $9.80 per share. All of these converted warrants became exercisable immediately upon conversion.

Altus is a biopharmaceutical company focused on the development and commercialization of oral and injectable protein therapeutics for gastrointestinal and metabolic disorders. The Company is subject to risks common to companies in the biotechnology industry including, but not limited to, product development risks, new technological innovations, protection of proprietary technology, compliance with government regulations, dependence on key personnel, the need to obtain additional financing, uncertainty of market acceptance of products, and product liability.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reverse Stock Split On January 24, 2006, the Company effected a 1-for-2.293 reverse stock split. All share and per share amounts in the consolidated financial statements have been retroactively adjusted for all periods presented to give effect to the reverse stock split.

Principles of Consolidation The consolidated financial statements include the accounts of Altus Pharmaceuticals Inc. and its wholly owned subsidiary, Altus Pharmaceuticals Securities Corporation. All intercompany transactions and balances have been eliminated.

Use of Estimates The preparation of the Company s consolidated financial statements in conformity with accounting principles generally accepted in the United States of America necessarily requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities

at the date of the consolidated financial statements, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

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ALTUS PHARMACEUTICALS INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Cash and Cash Equivalents Cash and cash equivalents represent cash and highly liquid investments purchased within three months of the maturity date and consist of money market funds and government securities.

Marketable Securities The Company invests available cash primarily in bank certificates of deposit and investment-grade commercial paper, corporate notes and government securities. The Company classifies its marketable securities as available-for-sale or held-to-maturity. Available-for sale marketable securities are carried at estimated fair value (see Note 5 Marketable Securities) with unrealized gains and losses included in stockholders equity (deficit). All available-for-sale marketable securities are classified as current assets as the funds are highly liquid and are available to meet working capital needs and to fund current operations. Held-to-maturity marketable securities are carried at amortized cost. At December 31, 2006 and 2005, all held-to-maturity marketable securities are classified as current assets because these investments have maturities of less than one year.

Property and Equipment Property and equipment are recorded at cost. Depreciation is provided using the straight-line method over the following estimated useful lives of the assets:

computer equipment three years;

software five years;

laboratory equipment four years;

office equipment seven years; and

leasehold improvements over the lesser of the estimated life of the asset or the lease term.

Beginning in 2006, property and equipment which is fully depreciated for accounting purposes is written off. During 2006, fully depreciated assets with gross value of $3,236 were written off in accordance with this policy.

Other Assets Other assets are primarily composed of the deferral of costs related to the fair value of a warrant issued in 2001 to induce Cystic Fibrosis Foundation Therapeutics, Inc., or CFFTI, to provide the Company with future research and development funding (revenue). This cost deferral is being amortized against research and development revenue over the period of performance.

Impairment of Long-Lived Assets The Company continually evaluates whether events or circumstances have occurred that indicate that the estimated remaining useful lives of long-lived assets may require revision or that the carrying value of these assets may be impaired. To determine whether assets have been impaired, the estimated undiscounted future cash flows for the estimated remaining useful life of the respective assets are compared to the carrying value. To the extent that the undiscounted future cash flows are less than the carrying value, a new fair value of the asset is required to be determined. If such fair value is less than the current carrying value, the asset is written down to its estimated fair value. There were no impairments of the Company s assets during the periods presented.

Fair Value of Financial Instruments The carrying amounts of cash and cash equivalents, accounts payable, and accrued expenses approximate fair value because of their short-term nature. Available-for-sale marketable securities

are carried at fair value based on quoted market prices. Held-to-maturity marketable securities at December 31, 2006 and December 31, 2005, carried at an amortized cost of approximately $21,385 and $17,189, respectively, had a fair value of approximately $21,390 and $17,145, respectively, based on quoted market prices. The carrying amounts of the Company s long-term debt instruments approximate fair value.

Concentrations of Credit Risk and Financial Instruments The Company s financial instruments that potentially subject it to concentrations of credit risk are cash and cash equivalents, and marketable securities.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company invests cash that is not currently being used for operational purposes in accordance with its investment policy. The policy allows for the purchase of low-risk debt securities issued by the U.S. government and very highly-rated banks and corporations, subject to certain concentration limits. The policy allows for maturities that are no longer than 13 months. The Company believes its established guidelines for investment of excess cash maintain preservation of capital and liquidity through its policy on diversification and investment maturity.

During 2006, 2005 and 2004, the Company derived 100%, 96% and 86% of its revenue from CFFTI and Dr. Falk Pharma GmbH (Dr. Falk) (see Note 4).

Revenue Recognition Substantially all the revenue the Company recognizes is contract revenue from collaborative agreements. The Company follows the provisions of the Securities and Exchange Commission s Staff Accounting Bulletin (SAB) No. 104*, Revenue Recognition* (SAB No. 104), Emerging Issues Task Force (EITF) Issue No. 00-21, *Accounting for Revenue Arrangements with Multiple Deliverables* (EITF 00-21), and EITF Issue No. 99-19, *Reporting Revenue Gross as a Principal Versus Net as an Agent* (EITF 99-19).

Contract revenue includes revenue from collaborative license and development agreements with biotechnology and pharmaceutical companies for the development and commercialization of the Company s product candidates. The terms of the agreements typically include non-refundable license fees, funding of research and development, payments based upon achievement of clinical development and commercial milestones and royalties on product sales. Contract revenue also includes non-refundable research and development funding under collaborative agreements with corporate partners and grants from various non-government institutions. Research and development funding generally reimburses the Company for a portion or all of the costs of development and testing related to the collaborative research programs or grants.

Collaborative agreements are often multiple element arrangements, providing for a license as well as research and development services. The Company analyzes agreements with multiple element arrangements to determine whether the deliverables under the agreement, including research and development services, can be separated or whether all of the deliverables must be accounted for as a single unit of accounting in accordance with EITF 00-21. The Company recognizes upfront license payments as revenue upon delivery of the license only if the license has standalone value and the fair value of the undelivered performance obligations can be determined. If the fair value of the undelivered performance obligations under the collaborative agreement can be determined, such obligations would then be accounted for separately. If the license is considered to either (i) not have standalone value or (ii) have standalone value but the fair value of any of the undelivered performance obligations cannot be determined, the arrangement would then be accounted for as a single unit of accounting.

When the Company determines that an arrangement should be accounted for as a single unit of accounting, the Company must determine the period during which the performance obligations will be performed and the revenue related to payments will be recognized. Revenue is limited to the lesser of the cumulative amount of payments received or the cumulative amount of revenue earned as of the period ending date.

The Company recognizes revenue using the proportional performance method provided that it can reasonably estimate the level of effort required to complete its performance obligations under an arrangement and such performance obligations are provided on a best-efforts basis. The Company uses an input based measure, specifically direct costs, to determine proportional performance, because, for the Company s current agreements, the Company believes the use of an input based measure most closely reflects the level of effort related to its research and development

collaborations rather than an output based measure, such as milestones. The impact of fluctuation in exchange rates under collaborative agreements that are denominated in a foreign currency is reflected in deferred revenue at the time cash is received and in revenue at each reporting period.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Under the proportional performance method, periodic revenue related to upfront license payments is recognized as the percentage of actual effort expended in that period to total effort budgeted for all of the Company s performance obligations under the arrangement. Significant management judgment is required in determining the level of effort required under an arrangement and the period over which the Company expects to complete the related performance obligations. Estimates may change in the future, resulting in a change in the amount of cumulative revenue recognized as of the date of the change in estimate. Since the inception of the Company s collaboration agreements with CFFTI and Dr. Falk, the Company has adjusted its estimated costs to complete the development program for ALTU-135 on four occasions, including during the third quarters of 2005 and 2006, resulting in cumulative changes in its revenue at each time of the change in the estimate. During the third quarter of 2005, the Company reduced its estimated development costs for ALTU-135, which resulted in a $3,313 increase in its cumulative revenue in the third quarter of 2005. During the third quarter of 2006, the Company increased its estimated development costs for ALTU-135, which resulted in a $3,684 decrease in its cumulative revenue in the third quarter of 2006. The possibility exists that revenue may increase or decrease in future periods as estimated costs of the underlying program increase or decrease or as exchange rates impact the value of foreign currency denominated collaborations, without additional cash inflows from the collaborative partner or non-government institution.

Reimbursement of research and development costs is recognized as revenue provided the provisions of EITF No. 99-19 are met, the amounts are determinable and collection of the related receivable is reasonably assured.

Contract amounts which are not due until the customer accepts or verifies the research results are not recognized as revenue until the customer s acceptance or verification of the results is evidenced and collection is probable. In the event warrants are issued in connection with a collaborative agreement, contract revenue is recorded net of amortization of the related warrants.

Deferred revenue consists of payments received in advance of revenue recognized under collaborative agreements. Since the payments received under the collaborative agreements are non-refundable, the termination of a collaborative agreement prior to its completion could result in an immediate recognition of deferred revenue relating to payments already received from the collaborative partner but not previously recognized as revenue.

Research and development funding under grants from the United States government and its agencies is recognized as revenue as development costs are incurred and billed in accordance with the terms of the grant.

Research and Development Expenses Research and development expenses are charged to operations as incurred.

Stock-Based Compensation On January 1, 2006, the Company adopted Statement of Financial Accounting Standards (SFAS) No. 123(R), *Share-Based Payment* (SFAS 123(R)), as required, using the modified prospective application method. The Company continues to estimate the fair value of the equity instruments using the Black-Scholes option-pricing model and to recognize compensation cost ratably over the appropriate vesting period. Prior to January 1, 2006, the Company had accounted for stock-based compensation in accordance with the fair value recognition provisions of SFAS 123, *Accounting for Stock-Based Compensation* (SFAS 123), which are similar to those in SFAS 123(R). As a result, the impact of the adoption of SFAS 123(R) did not have a material impact on the Company s comparative results.

The Company accounts for transactions in which goods and services are received in exchange for equity instruments based on the fair value of such goods and services received or of the equity instruments issued, whichever is more reliably measured. When equity instruments are granted or sold in exchange for the receipt of goods or services and the value of those goods or services can not be readily estimated, as is true in connection with most stock options and warrants granted to employees, directors, consultants and other non-

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

employees, the Company determines the fair value of the equity instruments using all relevant information, including application of the Black-Scholes option-pricing model.

Upon the Company s initial filing of its S-1 Registration Statement on October 17, 2005, the Company began utilizing a volatility factor in valuing options granted to employees. Prior to such date, the Company had excluded a volatility factor, as permitted for private companies under the provisions of SFAS No. 123.

Income Taxes The Company records deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the Company s financial statement carrying amounts and the tax bases of assets and liabilities using enacted tax rates expected to be in effect in the years in which the differences are expected to reverse. A valuation allowance is provided to reduce the deferred tax assets to the amount that will more likely than not be realized.

Net Loss per Share Basic and diluted net loss per common share is calculated by dividing net loss attributable to common stockholders by the weighted average number of common shares outstanding during the period. Diluted net loss per common share is the same as basic net loss per common share, since the effects of potentially dilutive securities are antidilutive for all periods presented.

Outstanding dilutive securities not included in the calculation of diluted net loss attributable to common stockholders per share were as follows for the years ended December 31:

	2006	2005	2004
		(In thousands)	
Series A, B and C convertible preferred stock:			
Preferred shares		10,767	10,767
Preferred stock warrants		1,653	1,653
Options to purchase common stock	3,544	3,057	2,118
Warrants to purchase common stock	3,603	2,468	2,468
Total	7,147	17,945	17,006

Comprehensive Loss Comprehensive loss includes net loss and other comprehensive income (loss). Other comprehensive income (loss) refers to revenues, expenses, gains and losses that under accounting principles generally accepted in the United States of America are included in comprehensive income (loss) but excluded from net income (loss) as these amounts are recorded directly as an adjustment to stockholders equity (deficit), net of tax. Other comprehensive income was $20 in 2006 and is composed of unrealized gains on available-for-sale marketable securities. There were no other comprehensive gains or losses in 2005 or 2004.

Segment Reporting Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief decision-maker, or decision-making group, in making decisions regarding resource allocation and assessing performance. The Company s chief decision maker uses

consolidated financial information in determining how to allocate resources and assess performance and has determined that the Company operates in one segment, focusing on developing and commercializing novel protein therapeutics for patients with gastrointestinal and metabolic diseases.

Recent Accounting Pronouncements In June 2006, the Financial Accounting Standards Board (FASB) issued FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109* (FIN 48). FIN 48 clarifies the accounting for uncertainties in income taxes recognized in an enterprise s financial statements. FIN 48 requires that the Company determine whether it is more likely than not that a tax position will be sustained upon examination by the appropriate taxing authority. If a tax position meets the more likely than not recognition criteria, FIN 48 requires the tax position be measured at the largest amount of benefit greater than 50 percent likely of being realized upon ultimate

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

settlement. This accounting standard is effective for fiscal years beginning after December 15, 2006. The Company is evaluating the impact of adopting FIN 48 on our financial position, results of operations and cash flows.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements* (SFAS 157), which establishes a framework for measuring fair value and expands disclosures about the use of fair value measurements and liabilities in interim and annual reporting periods subsequent to initial recognition. Prior to the issuance of SFAS 157, which emphasizes that fair value is a market-based measurement and not an entity-specific measurement, there were different definitions of fair value and limited definitions for applying those definitions under generally accepted accounting principles. SFAS 157 is effective for the Company on a prospective basis for the reporting period beginning January 1, 2008. The Company is evaluating the impact of SFAS 157 on its financial position, results of operations and cash flows.

In September 2006, the Securities and Exchange Commission (SEC) issued Staff Accounting Bulletin No. 108, *Considering the Effects of Prior Year Misstatements When Quantifying Misstatements in Current Year Financial Statements* (SAB 108) which provides guidance on quantifying and evaluating the materiality of unrecorded misstatements. SAB 108 was effective for fiscal years ending after November 15, 2006. The adoption of SAB 108 did not have an impact on the Company s results of operations, financial position and cash flows.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities* (SFAS 159). SFAS 159 expands opportunities to use fair value measurement in financial reporting and permits entities to choose to measure many financial instruments and certain other items at fair value. SFAS 159 is effective for fiscal years beginning after November 15, 2007. The Company has not decided if it will early adopt SFAS 159 or if it will choose to measure any eligible financial assets and liabilities at fair value.

3. RELATED-PARTY TRANSACTIONS

Vertex During the three years ended December 31, 2006, the Company leased a small laboratory from Vertex, which was also a stockholder during that period of time. Vertex s ownership interest in the Company on a fully converted basis at December 31, 2005 was approximately 14%, consisting of redeemable preferred stock, Series A convertible preferred stock, common stock and warrants to purchase common stock. With the exception of the redeemable preferred stock, Vertex divested itself of any ownership interest in the Company in 2006. The total amounts paid to Vertex for the laboratory during the years ended December 31, 2006, 2005 and 2004 were approximately $62, $91 and $91, respectively, which were included in research and development expense in those years. At December 31, 2006 and 2005, the Company had no amounts payable to Vertex. Vertex granted the Company an exclusive royalty-free, fully-paid license to patents relating to cross-linked enzyme crystals, and retained non-exclusive right to use the licensed patents and know-how for specified uses. These licenses expire on a patent-by-patent basis.

Consulting Agreements In March 2003, the Company entered into a consulting agreement with a member of the Board of Directors, who also is a stockholder. During the year ended December 31, 2004, the Company paid approximately $21 to this individual. There were no payments made under this consulting agreement during 2006 or 2005. In October 2004, the Company entered into a consulting agreement with another member of the Board of Directors, who is also a stockholder. Under the latter agreement, the Company recognized consulting expense of $0, $283 and $57 during the years ended December 31, 2006, 2005 and 2004, respectively. No amounts were payable to these individuals at December 31, 2006 or 2005.

Sublease Payments The Company subleases certain laboratory and office space from Shire Pharmaceuticals plc (Shire) under a lease agreement which expires on December 31, 2008. In November 2006, an employee of Shire became a member of the Company s Board of Directors. Rental payments made by the

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Company to Shire during 2006 after this individual became a member of the Company s Board of Directors were $33. At December 31, 2006, the amount payable to Shire was $58.

4. COLLABORATIONS

Cystic Fibrosis Foundation Therapeutics, Inc. In February 2001, Altus entered into a strategic alliance agreement with CFFTI to collaborate on the development of ALTU-135 and specified derivatives of ALTU-135 in North America for the treatment of malabsorption due to exocrine pancreatic insufficiency in patients with cystic fibrosis and other indications. The agreement, in general terms, provides the Company with funding from CFFTI for a portion of the development costs of ALTU-135 upon the achievement of specified development milestones, up to a total of $25,000, in return for specified payment obligations and our obligation to use good faith reasonable efforts to develop and bring ALTU-135 to market in North America. As of December 31, 2006, the Company had received a total of $18,400 of the $25,000 available under the CFFTI agreement and recognized cumulative revenue of $11,801. Under the terms of the agreement, the Company may receive an additional milestone payment of $6,600, less an amount determined by when the Company achieves the milestone. Revenue from CFFTI accounted for 45%, 49% and 43% of Altus total revenue in 2006, 2005 and 2004, respectively.

If Altus is successful in obtaining FDA approval of ALTU-135, it will be required to pay CFFTI a license fee equal to the aggregate amount of milestone payments it has received from CFFTI, plus interest, up to a maximum of $40,000, less the fair market value of the shares of stock underlying the warrants Altus issued to CFFTI. This fee, plus interest on the unpaid balance, will be due in four annual installments, commencing 30 days after the approval date. In addition, Altus is obligated to pay royalties to CFFTI consisting of a percentage of worldwide net sales by it or its sublicenses of ALTU-135 for any and all indications until the expiration of specified United States patents covering ALTU-135. Altus has the option to terminate its ongoing royalty obligation by making a one-time payment to CFFTI, but it does not expect to do so. Under the agreement, CFFTI has also agreed to provide the Company with reasonable access to its network of medical providers, patients, researchers and others involved in the care and treatment of cystic fibrosis patients, and to use reasonable efforts to promote the involvement of these parties in the development of ALTU-135.

In connection with the execution of this agreement and the first amendment of the agreement, Altus issued to CFFTI warrants to purchase a total of 261,664 shares of its common stock at an exercise price of $0.02 per share, including 174,443 warrants with a fair value of $1,748 issued upon execution of the agreement in February 2001. The fair value of the 174,443 warrants is being recognized as a discount to contract revenue and amortized against the gross revenue earned under the contract. The remaining 87,221 warrants were issued in connection with the Series B Redeemable Convertible Preferred Stock financing.

In December 2003, the Company and CFFTI amended the agreement again to provide the Company with an interest-bearing advance against a future milestone. This $1,500 advance was paid to the Company in January 2004 and is included in long-term deferred revenue on the Consolidated Balance Sheets. The advance, including interest at an annual rate of 15%, will be deducted from the milestone at the time the milestone is earned. In addition to the amounts deducted from the future milestone, and in the event ALTU-135 is approved, the Company will pay to CFFTI an amount equal to the advance in addition to the amounts otherwise owed to CFFTI. If the milestone is not achieved or ALTU-135 is not approved, the Company has no obligation to CFFTI as a result of this amendment.

Dr. Falk Pharma GmbH In December 2002, Altus entered into a development, commercialization and marketing agreement with Dr. Falk for the development by the Company of ALTU-135 and the commercialization by Dr. Falk of ALTU-135, if approved, in Europe, the countries of the former Soviet Union, Israel and Egypt. Under the agreement, the Company granted Dr. Falk an exclusive, sublicensable license under specified patents that cover ALTU-135 to commercialize ALTU-135 for the treatment of symptoms caused by exocrine pancreatic insufficiency. As of December 31, 2006, Altus had received upfront and milestone payments from

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ALTUS PHARMACEUTICALS INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Dr. Falk under the agreement totaling 11,000, which equated to $12,879 based on exchange rates in effect at the times it received the milestone payments, and recognized cumulative revenue of $10,224. Revenue from Dr. Falk accounted for 55%, 47% and 43% of Altus total revenue in 2006, 2005 and 2004, respectively.

In addition to the upfront and milestone payments, Dr. Falk has agreed to pay a portion of the development expenses the Company incurs in connection with the conduct of an international Phase III clinical trial, including costs relating to the process of obtaining regulatory approval, project management costs, statistical design and studies, and preparation of reports. Dr. Falk holds all commercialization and marketing rights in the licensed territory, and Altus is entitled to receive royalties based on the net sales of ALTU-135 in the licensed territory and revenue for the ALTU-135 capsules supplied by the Company to Dr. Falk. Under the terms of the agreement, the license to Dr. Falk will continue in each country in the licensed territory until the later of the expiration of the last-to-expire of specified patents that cover ALTU-135 in that country or 12 years from the date of first commercial sale of ALTU-135 in that country.

Genentech, Inc. In December 2006, Altus entered into a Collaboration and License Agreement with Genentech, Inc. (Genentech) for the development, manufacture and commercialization of ALTU-238. The effective date of the agreement was February 21, 2007, following expiration of the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended. Under the terms of the agreement, Altus granted Genentech exclusive rights and license to make (and have made), use and import ALTU-238, and to sell ALTU-238 in North America if approved by the FDA. Genentech was also given the option to expand the agreement to a global agreement. The agreement, in general terms, provides that Genentech will assume full responsibility for the development, manufacture and commercialization of ALTU-238.

Pursuant to the agreement, Genentech agreed to make specific cash payments, including an up-front payment of $30,000, which consists of $15,000 in non-refundable license fee payments and $15,000 in exchange for 794,575 shares of Altus common stock. Genentech also agreed to make cash payments based on the achievement of various performance milestones during the clinical development, regulatory approval and commercialization process of approximately $148,000, and to reimburse the Company for various development activities performed by Altus on Genentech s behalf. If Genentech exercises its global option, it may be required to pay an additional $110,000 in upfront payments and milestones. In addition, Genentech will pay royalties on any future net sales of ALTU-238. No payments were received from Genentech as of December 31, 2006.

Under the agreement, Altus has the option to elect to co-promote ALTU-238 in North America.

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ALTUS PHARMACEUTICALS INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5. MARKETABLE SECURITIES

At December 31, 2006, the Company s portfolio of marketable securities consists of the following:

	Amortized Cost	Gross Unrealized Gains	Aggregate Fair Value
Available-for-sale			
Corporate fixed income	$ 832	$ 6	$ 838
Government securities	2,207	14	2,221
Total available-for-sale	3,039	20	3,059
Held-to-maturity			
Corporate fixed income	786		786
Government securities	17,850	5	17,855
Certificates of deposit	2,749		2,749
Total held-to-maturity	21,385	5	21,390
Total marketable securities	$ 24,424	$ 25	$ 24,449

At December 31, 2005, all marketable securities were classified as held-to-maturity and consisted of the following:

	Amortized Cost	Gross Unrealized Losses	Aggregate Fair Value
Corporate fixed income	$ 10,904	$ (38)	$ 10,866
Government securities	5,985	(5)	5,980
Certificates of deposit	300	(1)	299
Total marketable securities	$ 17,189	$ (44)	$ 17,145

In the Consolidated Balance Sheets, available-for-sale marketable securities are carried at fair value while held-to-maturity marketable securities are carried at amortized cost.

6. PROPERTY AND EQUIPMENT

Property and equipment are summarized as follows:

	December 31, 2006	2005
Laboratory equipment	$ 8,560	$ 9,392
Computer equipment	574	1,090
Office equipment	477	568
Leasehold improvements	2,208	2,261
Software	605	395
Total Property and equipment, at cost	12,424	13,706
Less: Accumulated depreciation	(5,707)	(6,943)
Property and equipment, net	$ 6,717	$ 6,763

Depreciation expense related to property and equipment totaled $2,888, $2,544, and $1,601 for the years ended December 31, 2006, 2005 and 2004, respectively. Included in property and equipment is equipment held

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

under capital leases with a cost of $429 and $1,092 at December 31, 2006 and 2005, respectively, and accumulated depreciation of $375 and $848 at December 31, 2006 and 2005, respectively.

7. OTHER ASSETS

In connection with the execution of the Company s strategic alliance with CFFTI in 2001 (see Note 4), the Company issued CFFTI fully vested warrants to purchase 174,443 shares of common stock at an exercise price of $0.02 per share. The fair value of the warrants on the date of grant was $1,748. The Company determined the value of the warrants with the assistance of valuation specialists. The warrants are being accounted for as a discount to contract revenue and amortized against the gross revenue earned under the contract. The net carrying amount of the warrants was approximately $861 and $1,032 as of December 31, 2006 and 2005, respectively. Warrant amortization totaled $171, $292, and $135 during the years ended December 31, 2006, 2005 and 2004, respectively.

8. ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expenses consisted of the following:

	December 31, 2006	2005
Accounts payable trade	$ 2,623	$ 3,201
Accrued compensation	1,479	704
Accrued professional fees	544	892
Accrued clinical costs	950	656
Other accrued expenses	1,114	1,082
Total	$ 6,710	$ 6,535

9. INDEBTEDNESS

Indebtedness consisted of the following:

	December 31, 2006	2005
Equipment loans, due January 2007 to December 2010, bearing interest rates between 9.22% and 11.22%, with a weighted average interest rate of 9.81% at December 31, 2006	$ 4,955	$ 5,730
Capital lease obligations	25	249
Total indebtedness	4,980	5,979
Less: current portion	(2,106)	(2,271)

Long-term portion	$ 2,874	$ 3,708

Equipment Loans During 2003, the Company borrowed approximately $1,128 from a lender through equipment loan expansion agreements under an existing 1999 master loan and security agreement. In May 2004, the Company entered into a new master loan and security agreement with this lender and entered into a new equipment loan providing up to $6,901 of additional funding. The Company borrowed $2,642 and $3,899, under this equipment loan in 2005 and 2004, respectively. During 2006, the Company entered into two additional equipment loans under the 2004 master loan and security agreement providing $1,310 of additional funding. At December 31, 2006, outstanding borrowings under these equipment loans were $4,955.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

These borrowings, with repayment terms ranging between 36 and 48 months, are collateralized by the underlying equipment.

Capital Leases In April 2002, the Company entered into a capital lease agreement to lease up to $3,837 of general equipment for a period of four years. The total amount of borrowings under this agreement was $993, which represented the fair market value of the equipment (and the book value) at the time of borrowings. The unused portion of the capital lease agreement expired in March 2003. At December 31, 2006, outstanding borrowings under this capital lease agreement were $25.

Future maturities with respect to indebtedness at December 31, 2006 are as follows:

Year Ending December 31	Capital Leases	Equipment Loans	Total Long-Term Debt
2007	$ 25	$ 2,081	$ 2,106
2008		2,137	2,137
2009		544	544
2010		193	193
Total minimum payments	25	4,955	4,980
Less: amount representing interest			
Total principal	25	4,955	4,980
Less: current portion	25	2,081	2,106
Total long-term debt portion	$	$ 2,874	$ 2,874

10. COMMITMENTS AND CONTINGENCIES

Leases The Company leases its office and laboratory space and certain equipment under noncancelable operating leases. Future minimum payments under the Company s operating leases, are as follows at December 31, 2006:

Year Ending December 31:	Operating Leases
2007	$ 1,522
2008	400
Total	$ 1,922

Total rent expense under the Company s operating lease agreements during the years ended December 31, 2006, 2005 and 2004, was $1,704, $1,575 and $1,120, respectively.

CFFTI The Company has a number of potential payments due to CFFTI in the event the Company obtains approval for ALTU-135 from the U.S. Food and Drug Administration (See Note 4).

Purchase Commitments Contractual purchase obligations to third parties are as follows at December 31, 2006:

	Purchase Commitment
2007	$ 13,826
2008	2,700
2009	47
Total	$ 16,573

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ALTUS PHARMACEUTICALS INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Dr. Falk Dr. Falk has asserted that there is a third-party foreign patent with claims that may be relevant to ALTU-135 and, therefore, that the Company breached a representation in its agreement with Dr. Falk and may be liable for damages under the agreement. The Company does not believe that it breached its agreement and is in discussions with Dr. Falk to resolve this matter. The Company also believes that if this patent were asserted against it, it is likely that the Company would not be found to infringe any valid claim of the patent relevant to its development and commercialization of ALTU-135. The Company cannot predict the outcome of this matter with certainty.

11. REDEEMABLE PREFERRED STOCK

Redeemable Preferred Stock In connection with the 1999 reorganization of the Company, 450,000 shares of redeemable preferred stock, par value $0.01 per share (the Redeemable Preferred Stock), were issued to Vertex with a value of $3,100. Vertex has no stockholder voting rights and is entitled to receive dividends at an annual rate of $0.50 per share. Dividends are cumulative whether or not declared by the Board of Directors and have been accrued in the amount of approximately $1,781 and $1,556, at December 31, 2006 and 2005, respectively.

The Redeemable Preferred Stock is redeemable on or after December 31, 2010 at the option of Vertex, or at the option of the Company at any time, at a price of $10.00 per share plus accrued and unpaid dividends. Upon liquidation, Vertex is entitled to receive, prior to any payment with respect to the common stock, $10.00 per share plus accrued but unpaid dividends. The Company is prohibited from declaring or paying dividends on shares of common stock until it has paid all accrued but unpaid dividends on Redeemable Preferred Stock.

Series B Preferred Stock In December 2001, the Company completed a private placement of 11,773,609 shares of its Series B Preferred Stock and warrants to purchase an additional 1,154,546 shares of the Series B Preferred Stock at approximately $4.31 per share. The Series B Preferred Stock accrued dividends at a rate of 6% of the purchase price per annum. Net proceeds to the Company were approximately $46,180 (net of issuance costs of $4,620). The warrants were exercisable immediately and expired no later than December 7, 2008. The fair value of the warrants on the date of issuance was approximately $2,730. Accordingly, approximately $2,730 of the net proceeds received from the sale of the Series B Preferred Stock was allocated to the warrants and recorded as an increase to additional paid-in capital.

The Series B Preferred Stock converted into common stock, the related warrants were converted into common stock warrants and accrued but unpaid dividends on the Series B Preferred Stock were satisfied through the issuance of shares of common stock upon the completion of the Company s initial public offering (see Note 1).

Series C Preferred Stock In May 2004, the Company completed a private placement of 11,819,959 shares of Series C Preferred Stock and warrants to purchase an additional 2,600,400 shares of Series C Preferred Stock at approximately $4.31 per share. The Series C Preferred Stock accrued dividends at a rate of 9% of the purchase price per annum. Net proceeds to the Company were approximately $50,372 (net of issuance costs of $636). The warrants were exercisable immediately and expired no later than May 21, 2011. The fair value of the warrants on the date of issuance was approximately $8,717. Accordingly, approximately $8,717 of the net proceeds received from the sale of the Series C Preferred Stock was allocated to the warrants and recorded as an increase to additional paid-in capital

The Series C Preferred Stock converted into common stock, the related warrants were converted into common stock warrants and accrued but unpaid dividends on the Series C Preferred Stock were satisfied through the issuance of shares of common stock upon the completion of the Company s initial public offering (see Note 1).

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ALTUS PHARMACEUTICALS INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

12. STOCKHOLDERS EQUITY (DEFICIT)

Series A Convertible Preferred Stock In connection with the 1999 reorganization of the Company, the Company issued 87,500 shares of its Series A Convertible Preferred Stock to Vertex for a total value of $897. The Series A Convertible Preferred Stock converted into common stock and the related warrants were converted into common stock warrants upon the completion of the initial public offering (see Note 1).

Common Stock Warrants The Company has issued common stock warrants in connection with certain debt and equity financings and the execution of a research and development collaboration.

Debt Financings During 2006, warrants to purchase 73,562 shares of common stock at exercise prices between $6.88 and $9.88 per share, previously issued in connection with debt financings were exercised by the holders of such warrants, using the net issue exercise provision allowed under the terms of the warrant agreements, resulting in a total of 45,370 shares of common stock issued to the holders of the warrants. As of December 31, 2006, the Company had no common stock warrants outstanding relating to debt financings.

Equity Financings In 2001, the Company issued warrants for the purchase of 170,855 shares of common stock at $9.79 per share to an investment banking firm in connection with the issuance of the Series B Preferred Stock. The fair value of the warrants on the date of issuance was approximately $220, which was recorded as an increase to additional paid-in capital and as part of the issuance costs of the related preferred stock. These warrants were exercised in 2006 using the net issue exercise provision allowed under the terms of the warrant agreement, resulting in 81,186 shares of common stock issued to the investment banking firm.

In connection with the 1999 reorganization, the Company issued warrants to Vertex for the purchase of 1,962,494 shares of common stock at an exercise price, as amended in 2001, of $5.64 per share. The warrants are exercisable at any time prior to their expiration date of February 1, 2009. During 2006, Vertex sold these warrants to an institutional investor, and they remain outstanding at December 31, 2006.

Collaboration with CFFTI The 174,443 warrants issued in connection with the strategic alliance agreement with CFFTI (see Notes 4 and 7) expire on February 22, 2013. Of the total, 100,479 became exercisable immediately upon the Company completing an initial public offering and were exercised by CFFTI during 2006 using the net issue exercise provision allowed under the terms of the agreement, resulting in 100,333 shares of common stock issued to CFFTI. The remaining 73,964 warrants are exercisable after February 21, 2011, or earlier upon certain triggering events related to product development progress.

Certain terms of the agreement were amended in connection with the sale of the Series B Preferred Stock. As consideration for entering into the amendments, the Company issued a warrant to CFFTI for the purchase of an additional 87,221 shares of its common stock at $0.02 per share. The new warrant vested immediately and was exercised in 2006 using the net issue exercise provision allowed under the terms of the warrant agreement, resulting in 87,094 shares of common stock issued to CFFTI.

A summary of common stock warrants outstanding as of December 31, 2006 are as follows:

Outstanding Warrants	Exercise Price	Expiration Date
1,133,112	$ 9.80	December 7, 2008
433,183	9.80	May 21, 2011
1,962,494	5.64	February 1, 2009
73,964	0.02	February 22, 2013

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ALTUS PHARMACEUTICALS INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. INCOME TAXES

A reconciliation of the expected income tax (benefit) computed using the federal statutory income tax rate to the Company s effective income tax rate is as follows for the years ended December 31:

	2006	2005
Income tax computed at federal statutory tax rate	35.00%	35.00%
State taxes, net of federal benefit	3.15%	3.05%
Change in valuation allowance	(37.51)%	(35.44)%
Permanent differences	0.82%	(1.21)%
Other	(1.46)%	(1.40)%
Total	(0.00)%	(0.00)%

The income tax expense (benefit) consists of the following at December 31:

	2006	2005
Current federal	$	$
Current state		
Total current		
Deferred federal	17,552	9,312
Deferred state	2,675	1,275
Valuation allowance	(20,227)	(10,587)
Total deferred		
Total income tax expense (benefit)	$	$

The significant components of deferred taxes were as follows at December 31:

	2006	2005
Net operating loss carryforwards	$ 49,339	$ 27,096
Tax credit carryforwards	1,571	1,291
Deferred revenue	3,347	5,458

Capitalized research and development	760	946
Other	693	693
Net deferred tax assets	55,710	35,484
Valuation allowance	(55,710)	(35,484)
Net deferred tax balance	$	$

The Company has established a full valuation reserve against the net deferred tax assets due to uncertainty surrounding the future recognition of these tax assets. The increase in the valuation allowance during the years ended December 31, 2006 and 2005 were $20,226 and $10,580, respectively. At December 31, 2006, the Company has federal net operating loss (NOL) carryforwards of approximately $129,871 and tax credits of $788 and state NOLs of $131,484 and state tax credits of $783. The tax loss carryforwards of the Company and its subsidiary may be subject to limitation by Section 382 of the Internal Revenue Code with respect to the amount utilizable each year. The amount of the limitation, if any, has not been quantified by the Company. The net operating loss carryforwards began to expire in 2006 for state purposes and begin to expire starting in 2020 for federal purposes.

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ALTUS PHARMACEUTICALS INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

14. STOCK-BASED COMPENSATION

On January 1, 2006, the Company adopted SFAS No. 123(R) as required, using the modified prospective transition method. The Company determines the fair value of equity instruments using the Black-Scholes option-pricing model and recognizes compensation cost ratably over the appropriate vesting period.

Prior to January 1, 2006, the Company had accounted for stock-based compensation in accordance with the fair value recognition provisions of SFAS 123, which are similar to those in SFAS 123(R), except that SFAS 123 allowed forfeitures to be accounted for as they occur. Under the modified prospective transition method of SFAS 123(R), the compensation expense relating to the unvested portion of previously granted awards at the adoption date is adjusted for estimated forfeitures, and the adjusted compensation expense is recognized ratably over the remaining vesting period. Pre-vesting forfeitures for all grants awarded after January 1, 2006 and for the unvested portion of previously granted awards that were outstanding at the date of adoption of SFAS 123(R) were estimated to be approximately 2.5% per annum based on historical experience.

The following table represents stock-based compensation expense included in the Company s Consolidated Statements of Operations for the years ended December 31:

	2006	2005	2004
Research and development	$ 1,922	$ 415	$ 96
General, sales and administrative	1,495	425	158
Total	$ 3,417	$ 840	$ 254

Because the Company had utilized the fair value method prescribed by SFAS 123 prior to January 1, 2006, the impact of the adoption of SFAS 123(R) did not have a material impact on the Company s comparative results.

The fair value of the stock options granted was estimated on the date of grant using all relevant information, including application of the Black-Scholes option-pricing model. When applying the Black-Scholes option-pricing model to compute stock-based compensation, the Company assumed the following:

	2006	2005	2004
Risk-free interest rate	4.4% to 5.15%	3.7% to 4.5%	2.4% to 3.9%
Expected average option life	6.25 years	5 years	5 years
Dividends	None	None	None
Volatility:			
January 1 to October 16	75%	None	None
October 17 to December 31	75%	85%	None

The expected average option life assumption is based upon the simplified or plain-vanilla method, provided under SAB 107 which averages the contractual term of the Company s options (10 years) with the vesting term (4 years) taking into consideration multiple vesting tranches. The Company is allowed to use the plain-vanilla method for all options granted prior to or on December 31, 2007. Upon the Company s initial filing of its Form S-1 Registration Statement on October 17, 2005, the Company began utilizing a volatility factor in valuing options granted to employees. To determine an appropriate volatility factor, the Company reviewed volatility factors being used by a group of peer companies, and selected a volatility factor consistent with those used by this group of peers. The Company has continued to utilize this methodology for the year ended December 31, 2006 due to the short length of time the Company s common stock has been publicly traded. Prior to October 17, 2005, the Company had excluded a volatility factor, as permitted for private companies under the provisions of SFAS 123.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company operates the 2002 Employee, Director, and Consultant Stock Option Plan (the 2002 Plan), which replaced the 1993 Stock Option Plan (the 1993 Plan) on February 7, 2002. In January 2007, under the evergreen provision the Plan, an additional 908,051 shares were made available future grant under the 2002 Plan. Under the 1993 and 2002 Plans, the total number of shares issuable upon exercise of outstanding stock options or available for future grant to employees, directors and consultants at December 31, 2006 was 3,853,736 shares.

All option grants are nonstatutory (nonqualified) stock options except option grants to employees (including officers and directors) intended to qualify as incentive stock options under the Internal Revenue Code. Incentive stock options may not be granted at less than the fair market value of the Company s common stock on the date of grant. Nonqualified stock options may be granted at an exercise price established by the Board of Directors at its sole discretion. Vesting periods are generally over a four year period and are determined by the Board of Directors or a delegated subcommittee or officer. Options and awards granted prior to January 25, 2006 are generally exercisable immediately, but the shares purchased are subject to restriction on transfer until vested. At December 31, 2006, the Company had no such shares outstanding. In the event of termination of an employee or the business relationship with a non-employee, the Company may repurchase all unvested shares from the optionee at the original issue price. Options granted under the 1993 and 2002 Plans expire no more than 10 years from the date of grant.

A summary of the stock option activity under the 1993 Plan and 2002 Plan is as follows:

	Shares	Weighted-Average Exercise Price	Weighed-Average Remaining Contractual Term (In years)	Aggregate Intrinsic Value (In thousands)
Balance January 1, 2004 (599,985 options vested)	1,598,530	$ 4.10		
Granted	1,047,626	3.92		
Exercised	(29,745)	2.82		
Canceled	(498,811)	4.15		
Balance December 31, 2004 (826,570 options vested)	2,117,600	4.01		
Granted	1,512,428	4.41		
Exercised	(124,989)	2.81		
Canceled	(448,244)	3.93		
Balance December 31, 2005 (1,247,805 options vested)	3,056,795	4.27		
Granted	1,518,213	16.75		

Exercised		(700,101)		4.28		
Canceled		(330,769)		7.24		
Options outstanding	December 31, 2006	3,544,138	$	9.34	8.3	$ 34,744*
Options exercisable	December 31, 2006	2,442,266	$	5.54	7.8	$ 32,652*
Options vested and expected to vest December 31, 2006		3,364,632	$	9.16	8.2	$ 33,559*

* The intrinsic value of a stock option is the amount by which the market value of the underlying stock exceeds the exercise price of the option. The closing price of the Company s common stock was $18.85 at December 31, 2006.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

During the years ended December 31, 2006, 2005 and 2004, a total of 700,101, 124,989 and 29,745 options were exercised, respectively. The intrinsic value of these options was $8,191, $303 and $33, respectively. Cash received upon the exercise of stock options during these periods was $2,997, $351 and $84, respectively, and no tax benefit was recognized from the exercises due to the Company s net operating losses. The Company issues shares for the exercise of stock options from unissued reserved shares.

The weighted-average fair value of options granted at exercise prices equal to fair market value during 2006, 2005 and 2004 was $12.03, $1.31 and $0.28, respectively.

As of December 31, 2006, total unrecognized stock-based compensation expense relating to unvested employee stock awards, adjusted for estimated forfeitures, was $17,410. This amount is expected to be recognized over a weighted-average period of 2.8 years. If actual forfeitures differ from current estimates, total unrecognized stock-based compensation expense will be adjusted for future changes in estimated forfeitures.

In November 2005, the FASB issued FASB Staff Position (FSP) No. FAS 123(R)-3, *Transition Election Related to Accounting for Tax Effects of Share-Based Payment Awards.* The Company has elected to adopt the alternative transition method provided in the FSP for calculating the tax effects of stock-based compensation pursuant to SFAS 123(R). The alternative transition method includes simplified methods to establish the beginning balance of the additional paid-in-capital pool related to the excess tax benefits available to absorb tax deficiencies recognized subsequent to the adoption of SFAS 123(R).

The following table summarizes information about stock options outstanding:

	December 31, 2006						
	Range of Exercise Prices	Number Outstanding	Weighted-Average Remaining Contractual Life (Years)	Weighted-Average Exercise Price	Number Vested and Exercisable	Weighted-Average Exercise Price Vested and Exercisable	
	$ 3.92	1,942,547	7.5	$ 3.92	1,127,468	$ 3.92	
	4.36 11.47	400,480	8.5	9.96	113,935	9.06	
	12.82 16.36	389,232	8.6	13.65	17,215	13.89	
	16.77 19.15	366,104	9.6	18.61	40,809	18.97	
	19.17 22.03	230,750	9.7	19.91	13,825	21.67	
	22.08 22.09	44,625	9.3	22.09	5,578	22.09	
	22.11	162,200	9.4	22.11	20,275	22.11	
	24.20 24.36	8,200	9.2	24.28	1,537	24.28	
Total	$ 3.92 $24.36	3,544,138	8.3	$ 9.34	1,340,642	$ 5.50	

15. EMPLOYEE BENEFIT PLANS

401(k) Retirement Plan Employees of the Company are eligible to participate in the Company s 401(k) retirement plan. Participants may contribute up to 60% of their annual compensation to the plan, subject to statutory limitations. The Company may declare discretionary matching contributions to the plan. Matching contributions were approximately $516, $319 and $241 for the years ended December 31, 2006, 2005 and 2004, respectively.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

16. SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

	Revenue	Net Loss	Net Loss Attributable to Common Stockholders	Basic and Diluted Net Loss Attributable to Common Stockholders per Share(1)
Year Ended December 31, 2006:				
First Quarter	$ 1,512	$ (10,530)	$ (11,516)	$ (0.76)
Second Quarter	4,410	(14,916)	(15,016)	(0.68)
Third Quarter(2)	(1,955)	(15,852)	(15,952)	(0.71)
Fourth Quarter	1,140	(14,382)	(14,482)	(0.63)
Year Ended December 31, 2005:				
First Quarter	$ 1,484	$ (7,099)	(9,805)	$ (5.71)
Second Quarter	1,118	(7,817)	(10,540)	(6.12)
Third Quarter(3)	4,125	(4,193)	(6,933)	(4.01)
Fourth Quarter	1,561	(8,015)	(10,754)	(5.88)

(1) Basic and diluted net loss per common share are identical since common stock equivalents are excluded from the calculation as their effect is antidilutive.

(2) In the third quarter of 2006, the Company recorded a negative cumulative revenue adjustment of $3,684 based on an increase in the Company s total estimated cost to develop ALTU-135.

(3) In the third quarter of 2005, the Company recorded a positive cumulative revenue adjustment of $3,313 based on a decrease in the Company s total estimated cost to develop ALTU-135.

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