Efficacy

Balance

Safety

Striking a balance

Many approved drugs have serious and life threatening side effects that go undiscovered until the products have been launched and are in widespread use. ARYx's goal is to make these proven therapies safer by engineering out specific metabolic problems that can lead to drug-drug interactions and potentially dangerous side effects. Our drug products are carefully constructed and optimized to balance the need for safe metabolism with retention of therapeutic benefit. We are developing a portfolio of novel, oral product candidates aimed at large, chronic markets.

Proven drug with safety issues:

CYP450 metabolism

Drug-drug interactions

Off-target problems

We have identified numerous drugs on the market with significant safety issues, often related to their metabolism. Approximately 90% of approved drugs are metabolized by cytochrome P450, or CYP450, an enzyme system in the liver, which is used for the clearance of drugs from the body. When multiple drugs are administered together, they may compete for metabolism by the CYP450 pathway, which has limited capacity. This can lead to reduced drug clearance, resulting in dangerous residual levels of the drugs, adverse drug-drug interactions, and, if off-target problems are present, further safety issues.

We select our targets using a well-established internal screening process that includes an evaluation of the scientific feasibility of applying our RetroMetabolic Drug Design technology to an existing drug that has safety problems, the potential for a significant commercial opportunity, the identification of an efficient drug development pathway that can demonstrate we have retained efficacy and eliminated key safety problems, and the likelihood of obtaining patents on our newly created product candidates.

Efficacy

Safety problems

1. SELECT TARGET MOLECULE

"Ideal metabolite" must be:

Non-toxic

Water soluble

Inactive

Not cleared through CYP450 pathway

ARYx's RetroMetabolic Drug Design technology utilizes a series of steps designed to eliminate specific unwanted side effects of proven therapies. Once we have selected a suitable target molecule and thoroughly understand its structure and mechanism, we design a series of theoretical and conceptual "ideal metabolites" as if the product has been metabolized by an esterase system. These ideal metabolites are nontoxic, water-soluble, pharmacologically inactive compounds that are not cleared through the CYP450 pathway. Further, they are novel chemical entities and can be covered in ARYx's patent portfolio. The selected ideal metabolite is then used in the design of our product candidates.

ARYx "ideal metabolite"

2. DESIGN "IDEAL METABOLITE"

ARYx product:

Retains desired efficacy

Safety problems eliminated

Breaks down into "ideal metabolite"

Our scientists apply their unique scientific knowledge to engineer a new chemical entity that combines the selected ideal metabolite with a structure intended to preserve the efficacy of the target molecule. The resulting ARYx product will utilize an alternative non-CYP450 metabolic pathway that should avoid the drug-drug interactions and off-target pharmacology of the original drug. These new chemical entities can now be broken down in the body by esterases to the "theoretical metabolites" on which they were based. ARYx's product candidates are fully patentable new chemical entities.

Product Pipeline

Large commercial opportunities; well-protected by patents

PRODUCT	PHASE	ORIGINAL DRUG	PATENT COVERAGE	INDICATION
ATI-7505	Phase 2	cisapride	2025	Multiple GI indications
ATI-5923	Phase 2	warfarin	2025	Anticoagulation
ATI-2042	Phase 2	amiodarone	2020	Atrial fibrillation
ATI-9242	Phase 1	atypical antipsychotics	Patents pending	Schizophrenia

Making proven therapies safer

Dear Fellow Stockholders,

I am excited and optimistic as I report on ARYx Therapeutics' most recent year of operations. We had a productive 2007, with continued success in the clinic, development of new products, expansion of internal capabilities, and completion of our initial public offering.

Our drug discovery strategy has yielded solid results. We have employed our RetroMetabolic Drug Design technology to re-engineer commercially successful products into promising new drugs with the potential for superior safety profiles. Today, we have three patented, oral product candidates in Phase 2 development, plus another product that just entered the clinic. Each of these products is aimed at large, chronic markets.

A Growing Product Portfolio

ATI-7505 is an oral prokinetic agent for gastrointestinal disorders designed to maintain the efficacy of cisapride while eliminating that drug's cardiovascular liabilities caused in part by CYP450

metabolism. We licensed this product to Procter & Gamble (P&G) in 2006 in a deal worth over $400 million in potential milestones, plus a provision for healthy double digit royalties. We also retained co-promotion rights which we can initiate with appropriate notice at any time following the filing of the New Drug Application. There are three clinical trials underway for ATI-7505 — a definitive cardiac safety (QT) study and Phase 2b trials in both idiopathic chronic constipation and functional dyspepsia. We continue to be impressed with P&G's efforts to advance ATI-7505.

ATI-5923 is our oral anticoagulant modeled on warfarin. We have eliminated CYP450 metabolism to reduce drug-drug interactions and potentially provide a more stable dosing regimen. We have completed a 12-week study in 66 patients with atrial fibrillation who required anticoagulation therapy. Our primary endpoint was the maintenance of a target therapeutic range of the International Normalized Ratio (INR) — a common measurement of the level of anticoagulation achieved by warfarin therapy. Results from this study show that the time spent in the target INR range for

ARYx RETROMETABOLIC DRUG DESIGN

Efficacy

Safety problems eliminated

3. CREATE ARYx PRODUCT

"Transform successful drugs whose utility is limited by serious side effects into useful therapies by eliminating those known and undesirable toxicities. Accomplish this feat again and again by combining innovative technology with a group of extremely talented and passionate people."

····· PAUL GODDARD, PH.D.

patients on ATI-5923 was 71.5% over the treatment period, compared to only 59.3% for these same patients when on warfarin therapy. Moreover, during the last three weeks of treatment on ATI-5923, 80% of patients were in the therapeutic INR range. Improving time in target INR range can have a significant positive effect on morbidity/mortality risk. It was shown in one large study that a 10% decrease in time in range led to an increased mortality risk of 29%, and an increased stroke risk of 10%. Our confidence continues to grow that there is a significant role for an efficacious, safe, and monitorable anticoagulant. We are now preparing to launch a double-blind Phase 2b study in 600 patients comparing ATI-5923 head-to-head with warfarin for a six-month treatment period.

ATI-2042 is an oral treatment based on the gold-standard therapy amiodarone, and is designed to normalize irregular heartbeat and treat the symptoms of atrial fibrillation (AF). We engineered ATI-2042 to preserve the efficacy of amiodarone and eliminate its side effects due to tissue accumulation. We have completed a pilot study showing a significant reduction in the amount of AF in patients with paroxysmal AF. In a similar patient population, we have an ongoing blinded three-month study testing three doses of ATI-2042 versus placebo. Our European and North American trial centers are enrolling sufficient patients to ensure the study is completed and results are available by the end of 2008.

ATI-9242 is designed to be a novel, next-generation atypical antipsychotic for the treatment of schizophrenia and other psychiatric disorders. We believe this product will improve upon the efficacy of the best atypicals, while optimizing safety. The receptor profile of ATI-9242 is designed to treat negative symptoms of schizophrenia and enhance cognitive functions. The drug is not metabolized by CYP450 enzymes and thus avoids metabolic drug-drug interactions. We also hope to eliminate certain other metabolic problems associated with atypicals, including weight gain and Type 2 Diabetes. We entered the clinic with ATI-9242 in April of this year.

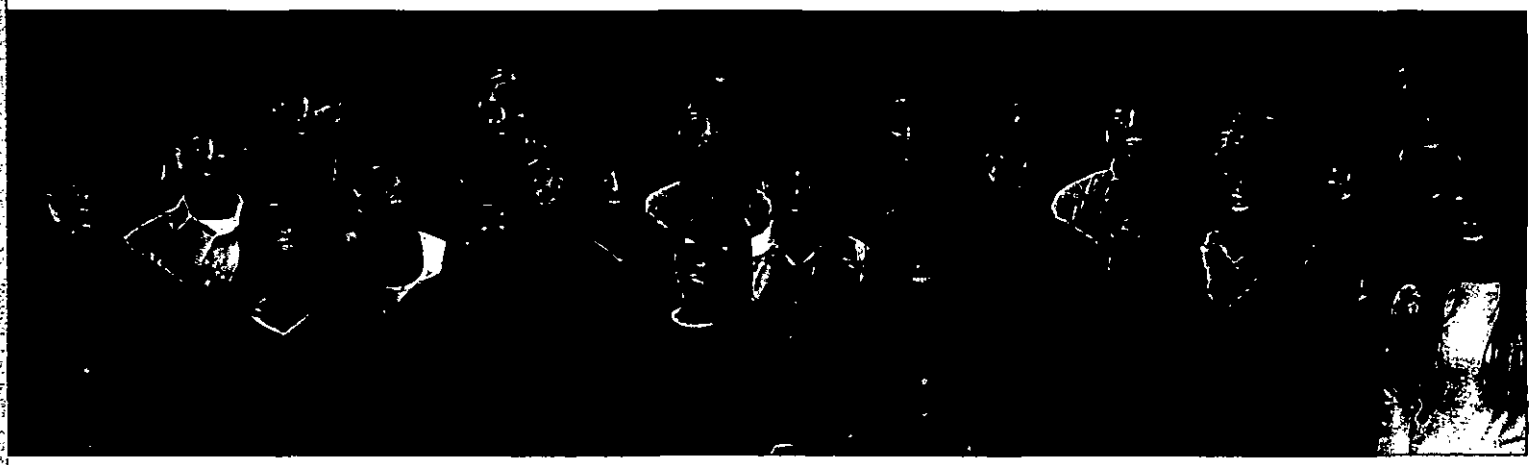
Milestones to Drive Value Creation

With multiple products in the clinic, we anticipate having several value-adding milestones to announce in the coming year. Additionally, we continue to look for new product opportunities that can leverage our future sales capability should we exercise our co-promotion option with P&G.

For ATI-7505, we expect results from the definitive QT study in the first half of this year, completion of the idiopathic chronic constipation trial by the end of this year, and results from the functional dyspepsia trial in the first half of 2009. With ATI-5923, we expect to initiate the 600-patient Phase 2b study by the middle of this year, and complete it by the middle of 2009. With ATI-2042, we plan to complete the ongoing study in paroxysmal AF patients by the end of this year. And with ATI-9242, we have already achieved our goal of filing the Investigational New Drug (IND) application and initiating clinical trials.

From a financial standpoint, we have sufficient capital to fund achievement of the milestones noted above and to support current operations through the third quarter of 2009. Our initial public offering, completed in November 2007, provided us with net proceeds of approximately $44 million, and we finished 2007 with approximately $63 million in cash, cash equivalents and marketable securities.

We have grown to 69 employees, with 31 in discovery and 21 in development. Our discovery group continues to be remarkably productive with new research programs, and our development team has done a first-rate job of moving product candidates into the clinic and toward proof-of-concept.



I would like to thank all of our employees for their hard work and dedication. Without them, we would not have been able to make such significant progress.

On behalf of the entire ARYx team, I thank you for your support.

Paul Goddard, Ph.D.
Chairman & Chief Executive Officer

..... FORM 10-K .....

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

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2007

or

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

For the transition period from **to**

Commission file number: 001-33782

ARYx THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**77-0456039**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
6300 Dumbarton Circle, Fremont, California	**94555**
(Address of principal executive offices)	(Zip Code)

(510) 585-2200

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	**Name of Each Exchange on Which Registered**
COMMON STOCK, $0.001 PAR VALUE	THE NASDAQ STOCK 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 ☐ No ☒

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 ☐ No ☒

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K 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. ☐

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

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒ (Do not check if a smaller reporting company) Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of Act). Yes ☐ No ☒

The initial public offering of the registrant's common stock commenced on November 7, 2007. There was no public market for the registrant's common stock prior to that date. As of February 29, 2008, 17,662,974 shares of the registrant's common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Specified portions of the registrant's Proxy Statement for the 2008 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days of the end of the fiscal year covered by this Form 10-K are incorporated by reference in Part III of this Form 10-K.

ARYX THERAPEUTICS, INC.

2007 Annual Report on Form 10-K

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This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are subject to the "safe harbor" created by those sections. Forward-looking statements are based on our management's beliefs and assumptions and on information currently available to our management. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "would," "expect," "plan," "anticipate," "believe," "estimate," "project," "predict," "potential" and similar expressions intended to identify forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors, which may cause our actual results, performance, time frames or achievements to be materially different from any future results, performance, time frames or achievements expressed or implied by the forward-looking statements. We discuss many of these risks, uncertainties and other factors in this Annual Report on Form 10-K in greater detail under Item 1A "Risk Factors." Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this filing. You should read this Annual Report on Form 10-K completely and with the understanding that our actual future results may be materially different from what we expect. We hereby qualify our forward-looking statements by these cautionary statements. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

PART I

Item 1. Business

Overview

ARYx Therapeutics, Inc., or ARYx, is a biopharmaceutical company focused on developing a portfolio of internally discovered product candidates designed to eliminate known safety issues associated with well-established, commercially successful drugs. We were incorporated in the State of California on February 28, 1997 and reincorporated in the State of Delaware on August 29, 2007. We maintain a wholly-owned subsidiary, ARYx Therapeutics Limited, with registered offices in the United Kingdom, which has had no operations since its inception in September 2004.

We use our RetroMetabolic Drug Design technology to design structurally unique molecules that retain the efficacy of these original drugs but are metabolized through a potentially safer pathway to avoid specific adverse side effects associated with these compounds. Our most advanced product candidate, ATI-7505, is based on cisapride and has successfully completed Phase 2 clinical trials for the treatment of gastroesophageal reflux disease and symptoms associated with functional dyspepsia, a condition resulting in pain or a sense of fullness due to impaired digestion. Our second product candidate, ATI-5923, is based on warfarin and recently completed a Phase 2 proof-of-concept clinical trial for use as an anticoagulant to treat patients at risk for formation of dangerous blood clots. Our third product candidate, ATI-2042, is based on amiodarone and is in Phase 2 clinical trials for the treatment of atrial fibrillation, a form of irregular heartbeat. We have multiple product candidates in preclinical development. Each of our product candidates is an orally available, patentable new chemical entity designed to address similar indications as those of the original drug upon which it is based. Our product candidates target what we believe to be multi-billion dollar markets. We have entered into a worldwide collaboration with Procter & Gamble Pharmaceuticals, Inc., or P&G, for the development and commercialization of ATI-7505 and we hold all worldwide commercial rights to our other product candidates.

Despite their commercial success, many drugs still have significant safety issues, often related to their metabolism. Approximately 90% of approved drugs are metabolized by the cytochrome P450, or CYP450, enzyme system in the liver, a pathway used for the clearance of drugs from the body. When

multiple drugs are administered together, they may compete for metabolism by the CYP450 pathway, which has limited capacity. This can lead to reduced drug clearance, resulting in dangerous residual levels of the drugs and adverse drug-drug interactions. Our RetroMetabolic Drug Design technology utilizes a series of steps designed to eliminate specific unwanted effects of the original drug. Key to this approach is the creation of a pharmacologically inactive, nontoxic, easily excreted end product which we call the "ideal metabolite." The ideal metabolite is a nontoxic, water soluble, pharmacologically inactive compound that is not metabolized by the CYP450 pathway. Our product candidates are not primarily eliminated by the CYP450 pathway but instead by a large capacity and generally non-saturable esterase pathway that exists in most tissues. The esterase pathway is an enzyme system that is a less used pathway for the clearance of drugs from the body. Through this esterase pathway, our product candidates are metabolized into the previously designed "ideal metabolite." In addition, we have eliminated specific off-target pharmacology from some of our product candidates. Off-target pharmacology occurs when a drug interacts directly with a system other than for which it is intended. The off-target pharmacology that we address is the unintended and undesirable action of the drug at receptors other than those targeted, which may cause serious or sometimes fatal side effects.

We are engineering potentially safer oral product candidates that retain the efficacy of commercially successful drugs for well-established chronic markets. Our most advanced product candidates include the following:

- *ATI-7505 for Gastrointestinal Disorders.* Our most advanced product is ATI-7505, an oral prokinetic drug or an agent that speeds up the motion of contents through the gut, that has successfully completed Phase 2 clinical trials for the treatment of multiple gastrointestinal disorders including gastroesophageal reflux disease, or GERD, and functional dyspepsia. ATI-7505 was designed to have the same therapeutic benefits as cisapride, a drug marketed by Johnson & Johnson as Propulsid in the United States. Launched in 1993, cisapride reached sales of over $1.0 billion, according to a 2005 article in the New York Times, before it was withdrawn from the market in 2000 due to serious cardiovascular side effects. These side effects occurred as blood levels of the drug rose significantly when CYP450 clearance was blocked because of the presence of other drugs cleared by the same metabolic pathway. We designed ATI-7505 to be metabolized through the esterase pathway, eliminating metabolism through CYP450 as well as off-target cardiovascular effects. The gastrointestinal disorders for which ATI-7505 can be developed include chronic constipation, functional dyspepsia, GERD, gastroparesis and irritable bowel syndrome, or IBS, with constipation. While some patients may suffer from more than one of these disorders, it is estimated that there are more than 100 million cases of gastrointestinal disorders in the United States based on various sources, primarily the American Journal of Gastroenterology and the Alimentary Pharmacology and Therapeutics journal. We have treated more than 500 patients with ATI-7505 as part of our clinical trial program, including three Phase 2 trials. In these trials, dosing with ATI-7505 showed a reduction in acid reflux, and in some measurements of nighttime heartburn, nighttime acid regurgitation, and multiple functional dyspepsia symptoms, as well as a dose-related increase in GERD erosion healing rates in patients with less severe erosions. In addition, we have shown statistically significant improvement in some measures of both upper and lower gastrointestinal motility in healthy volunteers. Based upon the data generated in these clinical trials, we entered into a collaboration agreement with P&G under which they will develop and commercialize ATI-7505. P&G has initiated two Phase 2 clinical trials with ATI-7505 in chronic constipation and in functional dyspepsia. P&G is also finalizing the results of a thorough Qt study (TQT) testing, an important element of the cardiac safety of ATI-7505.
- *ATI-5923 for Anticoagulation.* ATI-5923 is an oral anticoagulant in Phase 2 clinical trials for the treatment of patients who are at risk for the formation of dangerous blood clots, such as those with atrial fibrillation or those at risk of venous thromboembolism. ATI-5923 was designed to

have the same therapeutic benefits as the drug warfarin, which for over 50 years has been the treatment of choice as an oral anticoagulant. Despite its widespread use, warfarin has several significant limitations. It is metabolized by CYP450 and has many drug-drug interactions that often lead to serious side effects. We designed ATI-5923 to be metabolized through the esterase pathway, eliminating metabolism through CYP450 and avoiding drug-drug interactions. Warfarin also has a very steep dose response curve which means that a small change in dose may lead to a substantial change in the anticoagulation status of the patient. This can put patients at risk for either life-threatening clotting or bleeding. In preclinical testing, it appears that ATI-5923 may have a flatter dose response curve than warfarin, although confirmation of this observation will require substantial additional clinical data. According to a 2006 report by Datamonitor, atrial fibrillation is the most common form of cardiac arrhythmia, or abnormal heart rhythm, with approximately 2.4 million people in the United States currently diagnosed with this condition. According to the 2005 Decision Resource Cardium Thromboembolism (Treatment) Forecast Tool report, there were approximately 510,000 patients being treated for venous thromboembolism in the U.S in 2005. We recently completed a Phase 2 clinical trial with ATI-5923 involving 66 patients. In this study, ATI-5923 achieved a significant improvement in the maintenance of these patients at the targeted level of anticoagulation and also demonstrated a significant reduction in the occurrence of dangerously low levels of anticoagulation compared to these patients' historical levels of anticoagulation when on warfarin. In preliminary discussions, the U.S. Food and Drug Administration, or FDA, indicated that the standardized measurement of anticoagulation status known as the International Normalized Ratio, or INR, will likely be an acceptable surrogate and primary endpoint for ATI-5923's clinical development. Using INR as a surrogate and primary endpoint should reduce both the size of and time to complete our planned clinical trials for ATI-5923 compared to clinical trials based on survival rates or other outcomes.

- *ATI-2042 for Atrial Fibrillation.* ATI-2042 is an oral anti-arrhythmic agent in Phase 2 clinical development for the treatment of patients with atrial fibrillation. ATI-2042 was designed to have the efficacy of amiodarone, a drug that has been used for many years, despite its adverse side effects, because physicians consider it to be the most effective drug for treating patients with atrial fibrillation. Amiodarone accumulates in many different organs and can only be metabolized by CYP450, potentially leading to serious side effects that are not immediately reversible upon withdrawal of the drug. Since ATI-2042 is predominantly metabolized through the esterase pathway, accumulation in the organs and drug-drug interactions are expected to be reduced. We have completed a Phase 2 clinical trial with ATI-2042 involving six atrial fibrillation patients with implanted recordable pacemakers who failed previous drug therapy. ATI-2042 quickly reduced the amount of time these patients were in atrial fibrillation by up to 87%. We are conducting an additional Phase 2 clinical trial to further characterize the dose-response effect of ATI-2042 in patients with atrial fibrillation.

Problems with Toxicity in Existing Drugs

Drugs are eliminated from the body by excretion generally through the urine or the bile. Some drugs may be excreted unchanged while others first undergo metabolism. How drugs are metabolized may have a direct impact on safety. Through a process of biotransformation, drugs are metabolized into other compounds, called metabolites, that are generally water soluble, allowing them to be easily excreted by the kidney or liver.

CYP450 is a family of naturally occurring enzymes, present primarily in the liver but also found in other organs, that are estimated to be responsible for the metabolism of approximately 90% of the drugs available today. The CYP450 system has evolved to break down the small amount of pharmacologically active or potentially toxic materials found in plants. This system has a low capacity

and can process only small quantities of pharmacologically active substance at a time. In addition, certain drugs can inhibit the functioning of these enzymes while other pharmaceuticals induce the activity of the enzymes. When a person takes more than one drug at the same time, a potentially harmful competition results for the limited quantity of CYP450 enzymes. As a result, drug-drug interaction occurs because drugs are not able to be metabolized and instead remain in the body at elevated levels, potentially resulting in either on-target or off-target side effects. These unwanted side-effects are referred to as adverse drug reactions. For this reason, as reported by the FDA, the frequency of adverse drug reactions rises exponentially in patients taking multiple pharmaceuticals. For example, 80% of patients on the oral anticoagulant warfarin take at least one additional drug that interferes with its clearance. This is why warfarin use is the third most common cause of adverse drug reactions.

The increase in adverse drug reactions attributable to a patient taking several medications at the same time results from an increase in the circulating level of the drug in the body and the increased potential for a toxic effect either as a result of "over dosing" or an "off-target" effect. Altered drug level directly impacts the safety and efficacy of that drug. In order to be effective, a drug must circulate in the body in sufficient therapeutic levels to allow it to reach and impact its primary site of action. However, if the blood levels remain higher than required for the desired on-target pharmacological effect to occur, then a toxic side effect can result either due to the drug over-loading the primary site of action (exaggeration of "on-target" pharmacology) or due to the drug affecting another site of action, causing an off-target effect with potentially undesirable outcomes.

According to the FDA, it is estimated that over two million serious adverse drug reactions occur annually in the United States, resulting in more than 100,000 deaths. The FDA also reports that adverse drug reactions are the fourth leading cause of death in the United States, ahead of pulmonary disease, diabetes, AIDS, pneumonia, accidents and automobile deaths. Complications caused by adverse drug reactions are estimated to increase health care costs in the United States by approximately $136.0 billion per year.

Our Strategy

Our goal is to develop and commercialize a portfolio of internally discovered drugs designed to have the same therapeutic benefits of well-established, commercially successful oral drugs in large chronic markets without the associated safety issues that have either limited or prohibited the full commercial potential of these existing drugs. We believe that there are many drugs on the market today with known safety issues that may be amenable to our RetroMetabolic Drug Design technology. The steps we take to implement our strategy are:

- *Select attractive potential product candidates.* We select our potential product candidates using a well-established internal screening process that includes an evaluation of the scientific feasibility of applying our RetroMetabolic Drug Design technology to an existing drug that has safety problems, the potential for a commercial opportunity of at least $1.0 billion, the potential for a drug development pathway that can demonstrate we have retained efficacy and eliminated key safety problems in a reasonable period of time and for a reasonable cost, and the likelihood of obtaining patents on our newly created product candidate. We review each of these criteria with increasing scrutiny during each successive transition of the product candidate into the research, preclinical and clinical stages.
- *Generate proof-of-concept data for our product candidates.* We intend to generate proof-of-concept data for our product candidates by demonstrating that we have addressed the major safety concerns identified with the original drugs while retaining their efficacy. We plan to retain the rights to each of our product candidates at least until we have established its proof-of-concept in clinical trials. We have established proof-of-concept with ATI-7505 and

currently are conducting proof-of-concept Phase 2 clinical trials for our other two leading product candidates: ATI-5923 for the treatment of patients in need of anticoagulation therapy and ATI-2042 for the treatment of patients with atrial fibrillation.

- *Partner with leading pharmaceutical companies to develop and commercialize our products.* Once we have established proof-of-concept, we will consider licensing our product candidates to pharmaceutical companies. Because we are focused on developing oral products for large chronic markets, at some point each of our product candidates currently in development will require involvement from a pharmaceutical company with worldwide development and commercial capabilities in order to fully realize their full potential. The goal of any future collaborations we establish is to provide for the sharing of development costs, provide us with additional development and commercial expertise and increase the likelihood our product candidates achieve clinical and commercial success.
- *Implement our collaboration with P&G to develop and commercialize ATI-7505.* We have partnered ATI-7505 with P&G, a leader in the gastrointestinal therapeutic market. Although P&G is responsible for all of the development costs associated with ATI-7505, we intend to continue to expend significant internal resources managing our alliance with P&G in order to achieve the goals we have for ATI-7505. We retain certain rights related to the commercial potential of ATI-7505 through our co-promotion option with P&G.
- *Forward integrate commercially by building a sales and marketing infrastructure.* Under our agreement with P&G, we obtained the right to co-promote ATI-7505 to endocrinologists and gastroenterologists. Obtaining this right is an important first step in our plan to forward integrate commercially. If ATI-7505 is successfully commercialized, we intend to exercise our co-promotion option with P&G and create a sales force of between 80 and 120 sales representatives in the United States. Once our sales force is established, we intend to internally develop, or possibly in-license, additional products which can be sold to these two physician specialties. We have undisclosed compounds and programs in the discovery stage which could be sold through a sales force focused on these physician specialties.
- *Leverage our technology platform to develop a pipeline of new drugs.* We believe our RetroMetabolic Drug Design technology can be applied to many other drugs. According to a 2002 article in the Journal of the American Medical Association, over 10% of all new chemical entities approved by the FDA between 1975 and 1999 have either received "Black-Box" warnings or been withdrawn from the market after commercial launch. In addition, many drugs currently on the market exhibit safety concerns due to drug-drug interactions or off-target pharmacological effects. We expect that increased public, regulatory and congressional scrutiny of drug safety and adverse event reporting of prescription pharmaceuticals will lead to public awareness of serious safety concerns in additional drugs. We continually evaluate this increasing pool of opportunities from which to select potential product candidates.

Our RetroMetabolic Drug Design

A key element of our process is to determine whether our RetroMetabolic Drug Design technology can be successfully applied to an existing drug that has safety problems. We apply our approach to reengineer drugs that are metabolized by the CYP450 enzyme pathway. In order to apply our technology, our scientists fully analyze the existing drug's pharmacological mechanisms, attributes and potential liabilities. It is our scientists' knowledge of how to design a product candidate that retains the on-target pharmacological effects of the existing drug while primarily eliminating clearance through the CYP450 pathway and eliminating the most important off-target liabilities that allows us to make safer alternatives to existing drugs. Our drug design technology is based upon an understanding of drug metabolism and how it can be modified to potentially enhance drug safety.

Unlike traditional drug discovery, our RetroMetabolic Drug Design is a three-step process that begins with a thorough understanding of the structure of an existing drug and leads to the creation of a new molecule through a series of unique steps.

Design and Synthesis of Ideal Metabolites. The first step in this process is the design and synthesis of a series of theoretical "ideal metabolites." These ideal metabolites are nontoxic, water-soluble, pharmacologically inactive compounds that are not metabolized by the CYP450 pathway. These "ideal metabolites" are novel chemical entities not created through the metabolism of the existing drug with safety problems and are covered in our patent portfolio.

Retrometabolic Engineering. As a second step, our scientists utilize these ideal metabolites to engineer a series of new pharmacologically active molecules that are designed to break down outside of the CYP450 enzyme system into our ideal metabolite. Successful product candidates mirror the pharmacology of the original drug. This is why we call our approach "retrometabolic." We begin with an engineered inactive metabolite and then create a limited number of product candidates rather than screening tens of thousands of active molecules as is done in traditional drug discovery.

Evaluation of Metabolism. As a third step, our scientists test the metabolism of the new product candidates in animal models. Successful product candidates are broken down by the esterase system into their "ideal metabolites." The esterase system, unlike CYP450, is widely available throughout the body. Once converted by the esterase system, our metabolized product candidates should be easily excreted from the body primarily through the liver and kidneys, avoiding competition from other drugs metabolized through the CYP450 pathway.

The product candidates engineered through our RetroMetabolic Drug Design technology are fully patentable new chemical entities. In our clinical trials to date, we have demonstrated that our approach to drug discovery maintains the established pharmacological effect of the therapies we are mirroring and utilizes an alternative non-CYP450 metabolic pathway that should avoid the drug-drug interactions and, with certain candidates, the off-target pharmacology of the original drug.

Our Product Candidates

The following table summarizes our product candidates that are currently in development:

ARYx Product Candidate	Target Indications	Model Compound	Worldwide Commercialization Rights	Development Status
ATI-7505	Gastrointestinal Disorders	Cisapride	P&G	Phase 2
ATI-5923	Anticoagulation	Warfarin	ARYx	Phase 2
ATI-2042	Atrial Fibrillation	Amiodarone	ARYx	Phase 2
ATI-9242	Schizophrenia	Clozapine	ARYx	Preclinical
ATI-20,000	Metabolic Disorders	Not Disclosed	ARYx	Discovery
ATI-24,000	Gastrointestinal Disorders	Not Disclosed	ARYx	Discovery

ATI-7505—A Prokinetic Agent for the Treatment of Gastrointestinal Disorders

Our most advanced product candidate is ATI-7505, which we are developing in partnership with P&G for the treatment of various gastrointestinal disorders. We hold several composition of matter patents on ATI-7505 and have several other patent applications pending in the United States and other jurisdictions.

Cisapride Background

ATI-7505 is a new chemical entity designed to maintain the therapeutic efficacy of cisapride. Cisapride is an oral drug which was approved by the FDA only for the treatment of nocturnal

heartburn associated with GERD. It had a track record of clinical success in alleviating gastrointestinal discomfort or pain that occurs in the upper gastrointestinal tract (esophagus and stomach). Launched in 1993, cisapride reached annual sales of approximately $1.0 billion by the year 2000 when it was withdrawn from the market because of serious safety issues. Serious cardiovascular side effects caused by heart rhythm abnormalities occurred when blood levels of the drug rose significantly because CYP450 clearance was blocked due to the presence of other drugs cleared by the same metabolic pathway. It was discovered that cisapride had an off-target effect on a potassium channel in the heart (hERG or IKr) when blood levels rose as a result of a drug-drug interaction, leading to potentially fatal cardiac side effects.

In spite of its withdrawal, cisapride was and still is considered by many to be the most effective agent for gastric motility. While it was only approved for nighttime heartburn, cisapride was also used extensively for GERD, gastroparesis and other motility disorders. Cisapride is a potent agonist of human serotonin type-4, or 5-HT_4, receptors which exist throughout the gastrointestinal tract and regulate gastric emptying and the motility of food through the intestines.

Since cisapride was withdrawn from the market, no other product has taken its place. Other therapies exist which address certain disorders affecting the gastrointestinal tract, but there is still a need for better motility agents which can be used for long-term relief of upper gastrointestinal problems. An agent that promotes motility in the upper and lower gastrointestinal tracts without the cardiac liability of cisapride continues to be an important unmet need for patients suffering from various gastrointestinal disorders.

Our Prokinetic Agent

ATI-7505 is an orally bioavailable, small organic molecule that is structurally similar to cisapride. Like cisapride, ATI-7505 is a potent 5-HT_4 receptor agonist that has prokinetic effects. However, ATI-7505 is more selective than cisapride, with minimal activity on the hERG channel as well as minimal to no activity at the 5-HT_3 or other serotonergic receptors. This selectivity minimizes the potential for off-target pharmacological effects. The results of preclinical animal and clinical human testing to date suggest that ATI-7505 has similar pharmacologic activity to that described in the literature for cisapride but has a substantially different metabolic and cardiac safety profile.

ATI-7505 is designed to address the deficiencies of cisapride by maintaining its proven therapeutic benefit while eliminating its known cardiac side effects. ATI-7505 is designed to avoid CYP450 metabolism and the associated drug-drug interactions. We engineered ATI-7505 to undergo rapid esterase-mediated metabolism into a single major nontoxic metabolite, ATI-7500. During our preclinical studies neither ATI-7505 nor its metabolite ATI-7500 exhibited any interaction with CYP450. In over 700 patients treated, the most frequently reported side effect considered to be off-target was headache and this was reported no more frequently in the ATI-7505 treated patients than in the placebo group. Data generated to date indicate that ATI-7505 has no significant activity at any potassium channel including the hERG channel or other key cardiac ion channels. As a result, ATI-7505 may avoid prolongation of the Qt interval as measured on an electrocardiogram, or ECG, an indicator of potential cardiac toxicity, as well as avoiding significant 5-HT_4 receptor-mediated increases in heart rate at therapeutically relevant doses. This was a significant cardiac liability of cisapride and its CYP450 metabolite known as norcisapride.

ATI-7505 is designed to provide prokinetic activity in the gastrointestinal tract without cardiac safety problems at anticipated therapeutic doses.

Indications and Market Opportunity

ATI-7505 has the potential for use in various gastrointestinal disorders for which increased motility would be beneficial. There are five potential major indications that our collaborative partner P&G may pursue:

Chronic constipation results from a lack of an adequate number of bowel movements over an extended period of time (usually defined as greater than six months). When suffering from chronic constipation, patients often try laxatives and fiber supplements prior to physician prescribed therapy. Due to limitations in existing treatments, a significant need exists for a safe chronic constipation therapy. Based on a 2004 article in Review of Gastrointestinal Disorders, it is estimated that between 36 and 57 million people in the U.S. have chronic constipation and that approximately 33% of them see a physician for this condition.

Functional dyspepsia is characterized by a number of symptoms associated with upper intestinal discomfort. In 2006, a specialist panel of clinicians issued a report entitled Rome III recommending that certain of these symptoms, including mid-to-upper abdominal discomfort characterized by postprandial fullness, early satiety or upper abdominal bloating, be classified as postprandial distress syndrome, or PDS. These symptoms are believed to be associated with deficiencies in motility of the upper gastrointestinal tract. ATI-7505 is being developed for the treatment of PDS. No currently marketed therapy is considered to be an optimal treatment for this condition. As indicated in a 2004 article in the Alimentary Pharmacology and Therapeutics journal, it is estimated that between 35 and 44 million people suffer from functional dyspepsia in the United States.

GERD is a digestive system disorder characterized by the frequent unwanted passage of stomach contents into the esophagus that result in such symptoms as heartburn and, in some cases, damage to the lining of the esophagus. According to a 2007 report in Med Ad News, approximately $17.0 billion is spent worldwide each year on GERD and heartburn medications. According to a 2006 article in the Digestion International Journal of Gastroenterology, approximately 10 percent of the population experiences GERD symptoms daily. While most patients are treated with drugs that reduce the acid contents of the stomach, approximately 20 to 25 percent of patients (or 6.0 to 7.5 million people in the United States) do not obtain adequate relief from this type of treatment. This is the population that is targeted with ATI-7505.

Gastroparesis is a disorder of the stomach in which contents from the stomach do not move efficiently into the small intestine. The digestive system, including the stomach, uses muscular contractions to move its contents along the gastrointestinal tract. Gastroparesis results when there is some damage or malfunction to this process in the stomach, resulting in symptoms such as nausea and vomiting, severe abdominal pain, bacterial infections and weight loss. Diabetics are particularly susceptible to this condition. According to the Digestive Diseases Interagency Coordinating Committee 2004, it is estimated that approximately five million patients suffer from gastroparesis in the United States. No existing therapies adequately meet this patient need.

IBS is a set of chronic symptoms associated with the lower gastrointestinal tract, particularly the colon, and is usually experienced as abdominal pain, bloating and discomfort. This can include constipation with difficult or painful bowel movements or diarrhea due to excess fluid in the colon. While the causes of IBS are still in question, lack of colonic motility is thought to be a primary cause. As with chronic constipation, patients need an effective motility agent when other remedies, such as change in diet, reduction of stress or consumption of laxatives or fibers, do not relieve the IBS symptoms. ATI-7505 is targeted for use in the segment of IBS patients who also suffer from chronic constipation. According to a 2005 article in the Alimentary Pharmacology and Therapeutics journal, an estimated 5.5 million adults in the United States suffer from IBS with constipation while an estimated 28 million adults suffer from IBS with intermittent constipation.

Clinical Development Status

Under the terms of the P&G agreement, P&G is responsible for the development of ATI-7505. P&G has completed a maximum tolerated dose study during which healthy subjects were treated with doses as high as 250 mg qid. The dose limiting side effect observed was diarrhea. No cardiac safety problems or other significant side effects were observed at any doses. P&G is analyzing the final results of a standard, thorough Qt study involving the investigation of ATI-7505 at both therapeutic doses as well as at four times the expected therapeutic dose to investigate its effect on cardiovascular functions. In addition, P&G is conducting a Phase 2 study in idiopathic chronic constipation involving three doses of ATI-7505 dosed twice daily compared to placebo over a four-week period and has initiated an additional Phase 2 clinical trial in functional dyspepsia to evaluate the potential therapeutic benefits of ATI-7505 in PDS.

We have successfully concluded three Phase 2 trials testing ATI-7505's potential as both a lower (large bowel) and upper (stomach and esophagus) gastrointestinal therapy. The safety and tolerability of the drug was also observed.

Phase 2 Symptomatic GERD Safety and Efficacy Trial (CLN-709). This randomized double-blind, placebo controlled, multi-center Phase 2 trial was successfully completed, enrolling 404 patients diagnosed with symptomatic GERD, the majority of whom completed the full treatment period of four weeks. The severity of patients' symptoms in this trial was measured during a two-week run in period prior to randomization into either placebo or treatment drug groups of either 12 mg qid or 40 mg qid. We measured five symptoms associated with symptomatic GERD as well as seven symptoms associated with functional dyspepsia as secondary endpoints.

The primary endpoint measuring adequate symptomatic relief of GERD did not achieve statistical significance when the effect of active drug was compared to placebo. However, in the 40 mg qid group, the combined measurement of the improvement in the proportion of symptom-free days for the five GERD symptoms approached significance when compared to placebo ($p=0.066$). Statistical significance was achieved in two of these five symptoms, namely, nighttime acid regurgitation ($p=0.0027$) and nighttime heartburn ($p=0.0037$). A p-value of 0.05 or less generally represents a statistically significant difference in treatments, or between treatment and baseline. A lower p-value indicates greater confidence in the results. No significant treatment effect was seen in the other secondary endpoints of GERD.

ATI-7505 at 40 mg qid also achieved statistical significance in the improvement of the proportion of symptom-free days in three out of seven individual dyspeptic symptoms compared to placebo, namely, pain in the upper abdomen ($p=0.0288$), discomfort in the upper abdomen ($p=0.0241$) and upper abdominal fullness ($p=0.0099$). A trend towards statistical significance was seen in a fourth dyspeptic symptom, bloating in the upper abdomen. While the overall effect of 40 mg qid on all dyspeptic symptoms was not significant, the exclusion of nausea and vomiting resulted in statistically significant effect for all other symptoms combined ($p=0.01$). There was no effect on nausea and vomiting symptoms, thought to be mediated in the central nervous system. We believe that ATI-7505 does not enter the brain and acts only outside the central nervous system. These effects on dyspeptic symptoms are further evidence that the drug's treatment effects are very similar to cisapride and that ATI-7505 behaves as one would expect of a prokinetic agent.

Safety data obtained in CLN-709 continued to support our belief that ATI-7505 is safe and generally well-tolerated. No serious effects were reported, and the only dose-related adverse effects were generally mild-to-moderate cases of diarrhea and loose stools observed consistently throughout the Phase 1 and Phase 2 clinical trials of ATI-7505. This would be expected of a prokinetic agent intended to enhance motility in both the upper and lower gastrointestinal tracts.

The cardiac safety data were similarly supportive of earlier results and the intended design of the drug. These cardiac safety data contained no clinically relevant changes in heart function nor were any patients outliers from the norm. These data contribute to our belief that we have avoided the most serious side effect of cisapride while conserving its efficacy.

Phase 2 Erosive Esophagitis Safety and Efficacy Trial (CLN-708). This randomized, double-blind, placebo-controlled, multi-center Phase 2 trial was successfully completed enrolling 202 patients diagnosed with erosive esophagitis, or EE. This condition is evidenced by lesions on the esophageal lining which results from excess acid in the esophagus over an extended period of time. This excess acid is due to the reflux of the stomach's contents into the esophagus possibly because the circular band of muscle between the stomach and esophagus, called the lower esophageal sphincter, relaxes abnormally. In extreme cases, prolonged EE can lead to cancer of the esophagus. The primary endpoint of this trial was to determine the treatment effect of ATI-7505 versus placebo in reducing the severity of EE by at least one grade on a generally accepted four-point scale of measuring esophageal lesions. This scale is known as the Los Angeles Classification Scale, or the LA Scale. The doses of active drug used in the trial were 12 mg qid and 40 mg qid. The extent of a patient's lesion was measured by an endoscopic evaluation at the beginning and end of the treatment period of four weeks (28 days).

The primary endpoint in this trial was not met when ATI-7505 was compared to placebo. However, a dose related treatment effect was seen with both active doses although the effect was not significantly better than that seen with placebo. Patients in the 40 mg qid and 12 mg qid treatment groups achieved response rates of 38.9% and 33.3%, respectively, in the measurement of improvement by at least one grade on the LA Scale compared to a placebo response rate of 31.5%. In four weeks of treatment ATI-7505 achieved approximately the same degree of healing that cisapride was able to achieve only after 12 weeks of treatment as documented by published clinical studies. However, of note, patients treated with ATI-7505 with the least severe EE, or Grade A patients, displayed the highest percent complete healing rate of 57.1% at 40 mg qid and 41% at 12 mg qid as compared to a placebo rate of 33.3%. This suggests that the drug may be responsible for the improvement in EE score.

The adverse events during this trial were similar to prior trials, and were generally mild or moderate. The drug appeared to be safe and well tolerated. The side effect seen most often was mild diarrhea. Cardiac safety was also closely monitored and no clinically relevant changes in heart activity were observed.

Overall, the results of this Phase 2 trial confirmed earlier evidence that ATI-7505 acts in a similar way to cisapride without the cardiac safety concerns of that therapy.

Phase 2 Gastro Esophageal Reflux Disorder Trial (CLN-706). This double-blind, randomized, placebo-controlled, cross-over designed trial in 30 GERD patients was successfully completed using two doses of ATI-7505, 12 mg qid and 40 mg qid versus placebo. The purpose of the study was to evaluate ATI-7505's safety and its effectiveness in reducing acid exposure in the esophagus of patients with GERD. The study measured the length of time within 24-hour periods that the patient had a certain level of acid (pH<4) in the esophagus while on placebo, and compared that to the periods of time over 24 hours that a patient had that acid level (pH<4) while on the two doses of ATI-7505. The lower the pH level in the esophagus, the higher the acid exposure. It is known that the relationship between acid exposure in the esophagus and heartburn symptoms or even esophageal erosions represent one of the strongest correlations between the mechanism of an upper gastrointestinal therapy and clinical outcomes. We believe that if ATI-7505 can show effectiveness in reducing the amount of acid traveling from the stomach into the esophagus and/or the amount of time acid remains in the esophagus, it would clarify its potential as a therapy for upper gastrointestinal disorders. The study design also included the use of cardiovascular Holter monitors to further measure the cardiac safety of ATI-7505.

The study objective to demonstrate dose-related reduction in acid exposure in the esophagus was achieved. In terms of acid exposure, the results were approaching significance (p= 0.0625 versus

placebo) at 40 mg qid in measuring the time within a 24-hour period that the patients' esophageal acid level was pH<4. Statistical significance was achieved in a post hoc analysis when we evaluated whether the effect of ATI-7505 on acid reduction improved as the dose increased. This analysis compared ATI-7505 12 mg qid to 40 mg qid. The resulting p-value of 0.0014 indicates that the treatment effect improves as the dose increases.

The trial provided evidence of a statistically significant effect at 40 mg qid versus placebo in reducing the number of acid reflux episodes lasting more than five minutes (p=0.0007). It is believed that acid reflux episodes lasting longer than five minutes directly relate to esophageal erosions and severe symptoms of GERD. A statistically significant dose response relationship was also established with this endpoint (p=0.0049) when comparing 40 mg qid and 12 mg qid doses. A number of the other secondary endpoints in the trial did not demonstrate a consistent effect or reach statistical significance.

Taken together, these results provided important data suggesting that ATI-7505 acts similarly to cisapride in having an effect in the upper gastrointestinal tract. In addition, no drug-related serious adverse events occurred, with diarrhea and loose stools as the most commonly reported adverse effect. They were all mild or moderate in severity.

Holter monitoring provided further evidence about the cardiac safety profile of ATI-7505. There were no clinically relevant changes in the heart rate or prolongation of the Qt interval of the patients and there were no individual outliers in these findings. No clinically important or consistent effects on heart functions were observed.

Phase 1 Clinical Trials. We have successfully completed four Phase 1 clinical trials testing the safety, tolerability, pharmacokinetics and effect on motility of ATI-7505 in healthy volunteers. The drug candidate has been found to be generally well tolerated and similar to cisapride in its prokinetic effects. Most importantly, no clinically significant effects on cardiac safety were observed, providing initial clinical evidence that ATI-7505 avoids the cardiac liabilities inherent in cisapride. Our Phase 1 trials were distinguished by the fact that intensive cardiovascular monitoring was conducted on all individuals, including one trial in which the subjects were fitted with 24-hour Holter monitors.

Our Phase 1 clinical trial program included a multi-dose study of ATI-7505, as compared to placebo, that measured the rate of gastric emptying. The results suggest that ATI-7505 accelerates gastric emptying and therefore may improve motility in the upper gastrointestinal tract, while also accelerating overall colonic, or lower gastrointestinal tract, transit. In addition, there appeared to be a dose relationship in the loosening of stools.

ATI-5923—An Oral Anticoagulant Agent

ATI-5923 is an orally bioavailable new chemical entity being developed as an oral anticoagulant. It is intended to prevent the formation of blood clots associated with medical conditions such as atrial fibrillation, valvular heart disease and venous thromboembolism. Patents have been issued or allowed covering a broad range of intellectual property rights, including composition of matter, pharmaceutical formulations, and methods of use. ATI-5923 is currently in Phase 2 clinical development.

Warfarin Background

ATI-5923 is structurally similar to the anticoagulant warfarin. Warfarin is a well-established and effective anticoagulant agent that is metabolized by CYP450 enzymes. For patients on warfarin therapy, the level of their anticoagulation is monitored using the standardized measurement of anticoagulation status known as the International Normalized Ratio, or INR. The goal of warfarin therapy for most patients is to provide effective anticoagulation by maintaining INR within established therapeutic ranges of 2.0 to 3.0. Outside of this range, patients are at risk of bleeding (INR too high) or formation of blood clots (INR too low), both of which can have serious consequences. In order to maintain

warfarin's therapeutic effect, INR must be kept in the target range. However, as reported in the published studies, warfarin treated patients are typically only maintained in the target INR range 50-68% of the time. Patients' level of warfarin in the blood can be highly impacted by drug-drug interactions, or by the concomitant consumption of certain foods, due to warfarin's dependence on CYP450 enzymes as its only metabolic pathway. In turn, varying levels of warfarin in the blood can lead to undesirable and potentially dangerous INR levels. Therefore, patients on warfarin require regular monitoring of INR and dose adjustments.

Our Anticoagulant Agent

ATI-5923 is designed using our RetroMetabolic Drug Design technology to retain the proven therapeutically effective mechanism of action of warfarin and to produce a more predictable and stable pattern of anticoagulation when taken with other medications or coincidentally with food. ATI-5923 is cleared by a non-saturable esterase pathway, eliminating warfarin's CYP450-mediated drug-drug interactions and related instabilities in INR. We anticipate that patients utilizing ATI-5923 may require monitoring of INR at less frequent intervals than patients on warfarin.

ATI-5923 is a selective inhibitor of the vitamin K epoxide reductase enzyme, or a VKOR inhibitor. The blood clotting process in the body is a complex and well-controlled cascade of events that involves multiple clotting factors. Four of these factors are known to be controlled by the VKOR enzyme. Our product candidate, like warfarin, is a VKOR inhibitor and by inhibiting this enzyme acts as an anticoagulant. By this mode of action, ATI-5923 should prevent the formation of blood clots in susceptible patients.

Potential Market and Commercialization Strategy

Like warfarin, ATI-5923 has the potential for use in patients with atrial fibrillation, valvular heart disease or venous thromboembolism who are treated with anticoagulants to reduce their risk of clotting that can cause stroke. Because ATI-5923 is a VKOR inhibitor with a long half-life, the onset and offset of its therapeutic activity is slow and therefore the dose will need to be titrated to obtain the appropriate anticoagulation levels as measured by INR. However, once a target dose is achieved, we expect patients should have a stable level of anticoagulation. Given the need for titration, we expect that the commercial focus for ATI-5923 will be the chronic segment of the oral anticoagulation market. We estimate that approximately 80% of the overall anticoagulant market would be considered to be for chronic use. There are three major indications where ATI-5923 has the potential for use.

Atrial fibrillation is the most common form of cardiac arrhythmia, with approximately 2.4 million people in the United States diagnosed with this condition in 2006. Approximately 1.5 million of these patients are chronic users of oral anticoagulants. Atrial fibrillation is caused when the atria quiver instead of beat, causing the heart to beat erratically. Because the pumping function of the upper chambers of the heart are not working properly in atrial fibrillation patients, blood is not completely emptied from the heart's chambers, causing it to pool and sometimes clot. In patients with atrial fibrillation, clotted blood can dislodge from the atria and flow to the brain, causing a stroke. According to a 2005 article in the American Journal of Geriatric Cardiology, it is estimated that atrial fibrillation is responsible for more than 75,000 strokes per year in the United States alone.

Valvular heart disease is any disease that involves one or more of the heart's four valves. For more advanced disease, the diseased valves may be replaced with either tissue or mechanical valves. It is estimated that 72,000 patients in the United States had either a tissue or mechanical valve replacement in 2005. Patients with mechanical heart valves are at great risk of clotting and must have their level of anticoagulation managed with particular diligence for the remainder of their lives. According to the 2005 National Hospital Discharge Survey, there are an estimated 340,000 patients with mechanical heart valves in the United States and an estimated 34,000 mechanical valve replacements in 2005.

Chronic oral anticoagulant therapy is almost always prescribed for patients with mechanical valves and is frequently prescribed for patients after tissue valve replacement surgery to reduce the risk of thromboembolic complications caused by the presence of the valve.

Venous thromboembolism is the formation of a blood clot, or thrombus, in the veins, that may travel to other parts of the body and block blood flow. This condition includes both deep vein thrombosis and pulmonary embolism. According to the 2005 Decision Resource Cardium Thromboembolism (Treatment) Forecast Tool report, there were approximately 510,000 patients being treated for venous thromboembolism in the United States in 2005, with approximately 130,000 estimated to be receiving chronic treatment. Chronic oral anticoagulant therapy, frequently with warfarin, is prescribed to both prevent and treat the formation of blood clots that cause venous thromboembolism.

Anticoagulants interfere either directly or indirectly with the clotting cascade and include warfarin, unfractionated heparin and injectable low molecular weight heparins. Of all the currently approved anticoagulants, only warfarin can be administered orally and thus remains positioned as the mainstay of routine chronic anticoagulation used for the prevention or treatment of thromboembolic events. According to the IMS Health Database, it is estimated that 33.6 million prescriptions were written in the United States for warfarin in 2006 alone, translating into estimated warfarin sales of approximately $376 million in the United States during 2006.

We expect that new classes of oral anticoagulants (direct thrombin inhibitors and factor Xa inhibitors) may enter the market from 2009 to 2012. These new classes of agents will be formidable competitors and positioned as easy to use anticoagulants that do not require INR monitoring and are not inferior to warfarin in terms of efficacy. We anticipate the new entry of these agents will expand the oral anticoagulation market with a significant increase in promotional spend, higher pricing and particular appeal in the acute market due to their rapid on and off set of action and limited dose titration. According to the 2005 Decision Resource Cardium Thromboembolism (Treatment) Forecast Tool report, the market for oral anticoagulants is estimated to be approximately $6.5 billion by 2015.

There are two other classes of antithrombotic drugs that are not anticoagulants: antiplatelet agents and thrombolytics. Antiplatelet agents block the aggregation or clumping of platelets and include aspirin, ADP receptor blockers, such as Plavix, and glycoprotein IIb/IIIa blockers. Antiplatelet agents, which are generally used for the prevention of heart attacks and strokes that would result from atherosclerosis, or a build-up of fatty deposits in the arteries, are not indicated for prevention of clotting in atrial fibrillation and venous thromboembolism patients. Thrombolytics comprise agents that degrade fibrin clots and include tPA, streptokinase and urokinase. Although thrombolytics are used to treat thrombosis, their use is limited to short-term administration for treatment of acute myocardial infarction or acute ischemic stroke. ATI-5923 would not be used for these indications.

ATI-5923 is intended to be positioned as offering superior and therefore safer anticoagulation control compared to warfarin as well as easier administration and with fewer drug-drug interactions. Assuming that the results from our Phase 2 clinical trials are positive and confirmed in further clinical trials, ATI-5923 will provide more dependable initial titration to target INR, fewer dose adjustments once the appropriate INR is attained and less need for monitoring in the long-term. Potential targeted patient segments include patients with mechanical valves, patients with a prior history of bleeding or thrombotic events, patients with metabolic impairment (renal and hepatic), patients taking multiple drugs, patients with poor compliance in taking anticoagulant therapies and patients with extreme bodyweight. In addition, we have demonstrated that unlike warfarin, ATI-5923 does not have teratogenic effects which may be a key advantage in patients who are pregnant but where anticoagulant therapy is mandatory. In sum, we believe ATI-5923 has an opportunity to effectively compete in the future oral anticoagulant market.

Clinical Development Status

We have recently successfully completed a Phase 2 clinical trial that assessed ATI-5923's safety and efficacy. This was the first Phase 2 trial in a development strategy intended to not only evaluate safety and efficacy but also to assess the potential for therapeutic superiority of ATI-5923 over warfarin. If successful, we believe the clinical development of ATI-5923 will establish its safety, ease of use and superior efficacy, making it preferable to warfarin as an anticoagulant. We intend to use these proof-of-concept Phase 2 clinical trials to enable collaboration with a pharmaceutical partner for the further development and commercialization of ATI-5923. Based upon the results of the initial Phase 2 clinical trial, we plan to initiate a second Phase 2 clinical trial involving approximately 600 patients in the first half of 2008.

In preliminary discussions, the FDA indicated that INR will likely be an acceptable surrogate and primary endpoint for ATI-5923's clinical development. Using INR as a surrogate and primary endpoint should reduce both the size of and time to complete our planned clinical trials for ATI-5923 compared to clinical trials based on survival rates or other outcomes.

The results of this first Phase 2 trial in patients requiring anticoagulation shows an initial acceptable safety and tolerability profile for ATI-5923, and the ability to maintain patients within a target therapeutic range as measured by INR. The goal of warfarin therapy is to maintain a patient's INR within a target therapeutic range between 2.0 and 3.0. There exists a group of patients in whom maintaining a therapeutic range of INR between 2.0 and 3.0 is particularly difficult. These difficult to control patients are defined as patients on warfarin therapy with an INR in the target range less than 45% of the time. It is estimated that this difficult to control population is generally 25% of the overall anticoagulated patient population. It has been shown that increasing the time this patient population spends within the target range can substantially improve health outcomes. For every 10% increase in patients' time out of the target INR range of 2.0 to 3.0, the risk of mortality due to significant thrombotic or hemorrhagic events increases by 29%.

Phase 2 Anticoagulation Trial (CLN-504). This open-label single-arm Phase 2 trial enrolled 66 patients in twelve centers in the United States to test ATI-5923 in patients with atrial fibrillation and who require anticoagulation. The key objective of this trial was to establish the optimal dosing regimen and an INR monitoring schedule to maintain stable anticoagulation in patients, and to assess the safety and tolerability of ATI-5923. The time to reach stable dosing was also evaluated as measured by the time needed for the patient to have three consecutive INR readings in therapeutic range without the need for dose adjustment.

The treatment period for patients in this trial was 12 weeks. Patients were closely monitored for the first three weeks to adjust the ATI-5923 dose to achieve an INR of between 2.0 and 3.0. Upon reaching target INR, patients continued to be monitored weekly with dose adjustments as necessary. Historical data detailing the patient's INR values on warfarin for approximately one year prior to enrollment were collected. Patients were also titrated to a stable dose, defined as three consecutive weeks on the same dose with the weekly measured INR in the therapeutic range of 2.0 to 3.0.

The results from this trial showed that patients in CLN-504 achieved the target INR range 71.5% of the time after completing their initial three weeks of dose titration, as compared to these patients' historical experience on warfarin when they were within target INR only 59.3% of the time. This result represents the primary endpoint when applying a statistical analysis plan adopted while the open-label trial was underway. Statistical significance was achieved ($p=0.0009$) when applying this analysis. These results are illustrated in the table below. In calculating the time within the INR therapeutic range, we utilized the Rosendaal INR interpolated method, the most commonly applied method to determine the amount of time an individual patient spends within the therapeutic INR range. After one week of treatment with ATI-5923, 77% of the patients reached a therapeutic INR, and after two weeks of treatment, 95% of the patients had attained a therapeutic INR. Also, a stable maintenance dose on

ATI-5923 was achieved in approximately 81% of the patients within 12 weeks of treatment, as compared with historical published data indicating that only 50% of warfarin patients reach a stable dose within 12 weeks of starting therapy. The average maintenance dose of ATI-5923 was 16 mg per day, with a range of 6 mg to 29 mg per day. The most commonly reported drug related adverse effects were mild bleeding complications consistent with anticoagulation, such as bruising and nose bleeds. One patient suffered a severe hematoma on his elbow caused by the trauma from a fall.

When comparing ATI-5923 INR interim results to patients' historical INR data on warfarin using the Rosendaal interpolated method, the percent of patients maintaining INR values between 2.0 and 3.0 less than 45% of the time following the initial three weeks of dose titration dropped from 22.6% when historically on warfarin to 10.9% when on ATI-5923, a more than 50% reduction ($p=0.1435$). Patients with INR in range less than 45% of the time are considered to have poor control of anticoagulation and they have a higher stroke and severe hemorrhage rate compared to patients with good control of anticoagulation. Even more importantly, patients on ATI-5923 were significantly out of range less than on warfarin. Patients treated with ATI-5923 were below an INR of 1.5 only 1.2% of the time as compared to 3.9% of the time historically on warfarin ($p=0.0022$, interpolated method), and were above an INR of 4 only 1.2% of the time compared to 3.3% when they were on warfarin ($p=0.0727$, interpolated method). These data appear to demonstrate the potential of ATI-5923 to significantly reduce the amount of time that patients are out of INR range. Literature reports suggest that if this observation is confirmed in future trials, there would also be a reduction in the risk of mortality due to significant thrombotic or hemorrhagic events compared to warfarin treatment.

These results in CLN-504 begin to demonstrate the ability of ATI-5923 to reach a stable dose and to improve patients' ability to maintain a stable INR within the target therapeutic range. We believe these results indicate the potential for the drug's safety and efficacy superiority to warfarin. However, there can be no assurance that these results will be replicated in a planned head-to-head comparison against warfarin, to be done in the Phase 2 trial beginning in the first half of 2008.

Phase 1 Clinical Trials. We have completed five Phase 1 clinical trials on 156 individuals testing the safety and tolerability of ATI-5923 in healthy volunteers. In trials completed to date, ATI-5923 has been well tolerated at all doses with no unexpected safety signals as measured by adverse events, vital signs, ECG and laboratory testing. There have been no frequent or consistent adverse events suggestive of off-target toxicity. Mild adverse events reported included headache and gastrointestinal effects. Adverse events related to ATI-5923 were also mild and included nose bleeds and bruising. These studies have also demonstrated that coagulation factors II, VII and X were reduced as predicted in proportion to increases in INR consistent with the mode of action of warfarin. In addition, we demonstrated that we could reverse the effect of ATI-5923 with vitamin K or fresh plasma. One drug-drug interaction clinical trial has been completed to assess whether blood levels of ATI-5923 are affected by fluconazole, a known inhibitor of CYP450 that can decrease the metabolism of warfarin, potentially resulting in dangerous over anticoagulation. This study compared the effect on blood levels of ATI-5923 as compared to warfarin when fluconazole was administered. Fluconazole did not affect the blood levels of ATI-5923 while warfarin levels increased substantially when fluconazole was administered. As expected, we believe this is due to ATI-5923's clearance through the non-CYP metabolic pathway.

Preclinical Results. ATI-5923 is an orally active VKOR inhibitor with no known off-target pharmacological activity. *In vivo* anticoagulant effects of ATI-5923 are associated with selective reductions in VKOR-dependent coagulation factors (II, VII, IX and X) whereas VKOR-independent coagulation factors are unaffected. Anticoagulant and antithrombotic effects of ATI-5923 have been demonstrated by *in vivo* studies in multiple animal models. ATI-5923 undergoes non-oxidative metabolism to yield a single primary metabolite, ATI-5900. An *in vivo* preclinical study demonstrated ATI-5923 anticoagulation was unaffected by treatment with the CYP450 inhibitor, amiodarone. In contrast, amiodarone treatment resulted in markedly elevated coagulation times in warfarin treated animals. Also, preclinical *in vivo* assays indicated that ATI-5923 may provide a safety advantage over warfarin when needed during pregnancy since the well-known teratogenic effects of warfarin were not seen in reproductive toxicity studies on ATI-5923.

ATI-2042—Anti-Arrhythmic Agent for the Treatment of Atrial Fibrillation

Our third product candidate, ATI-2042, is currently in development for the treatment of atrial fibrillation. We engineered ATI-2042 with the goal of developing a therapy equally effective as, but safer than, amiodarone. We hold a composition of matter patent on ATI-2042 and have filed for other use and manufacturing patent applications in the United States and other jurisdictions. ATI-2042 is currently in Phase 2 clinical development.

Amiodarone Background

Atrial fibrillation is the most common form of cardiac arrhythmia, or abnormal heart rhythm, affecting greater than 6.4 million people in the United States, Europe and Japan. Atrial fibrillation is caused when the atria quiver instead of beat. During atrial fibrillation, the atria contract and relax erratically between 350 and 600 times per minute versus normal heart rhythm of 60 to 80 beats per minute. Patients with atrial fibrillation experience debilitating symptoms and suffer a compromised quality of life. Because the pumping function of the atria does not work properly in atrial fibrillation patients, blood is not completely emptied from the heart's chambers, causing it to pool and sometimes clot. In patients with atrial fibrillation, clotted blood can dislodge from the atria and flow to the brain, causing stroke. Atrial fibrillation also compromises the pumping function of the heart often leading often to intolerable symptoms that need therapy.

Atrial fibrillation treatments focus on a reduction of symptoms and returning the heart to normal rhythm. Concerns surrounding available atrial fibrillation treatments include both safety and efficacy issues. The most common treatment for atrial fibrillation is drug therapy. Current pharmacological treatments for atrial fibrillation are limited in their use due to safety and efficacy issues, while non-pharmacological approaches such as implantable devices and surgery are currently less favored because of their costs and invasive nature.

Amiodarone is the current "gold standard" for the pharmacological treatment of atrial fibrillation. Amiodarone possesses a unique, balanced pharmacological effect on sodium, potassium and calcium channel inhibition as well as certain receptors in the heart that are responsible for its effectiveness. Clinical studies have shown that amiodarone is uniquely superior to other anti-arrhythmic drug treatments. While amiodarone is not approved by the FDA for the treatment of atrial fibrillation, it is a commonly prescribed off-label treatment due to the lack of equally efficacious treatments. However, amiodarone has a slow onset of action and its use has been severely limited by life-threatening and toxic side effects that result from the accumulation of the drug in the liver, lungs, nerves, thyroid and other tissues.

Many of the adverse effects of amiodarone are believed to derive from its very slow elimination from the body due to its dependence on the CYP450 system for metabolism. In patients taking daily oral doses of amiodarone, the drug slowly accumulates in the body where it remains, avoiding metabolism by liver enzymes. This leads to the gradual development of organ specific toxicities. Similarly, when amiodarone is discontinued many weeks or months are required for the drug to be totally eliminated from the body. Due to this slow elimination, toxicity and side effects due to accumulation usually take months or weeks to reverse, if ever. Since these side effects can be progressive, they can be fatal before all the drug is eliminated from the body.

Our Anti-Arrhythmic Agent

We are developing ATI-2042 for the reduction of atrial fibrillation burden in patients who suffer from repeated episodes of atrial fibrillation, or paroxysmal atrial fibrillation, and prevention of recurrence of symptomatic atrial fibrillation in patients with or without structural heart disease who experience on-going, or persistent, atrial fibrillation. Paroxysmal atrial fibrillation is generally defined as

episodes of atrial fibrillation that can terminate spontaneously and last no longer than one week and generally no less than 24 hours.

ATI-2042 is designed using our RetroMetabolic Drug Design technology with the goal of retaining the efficacy of amiodarone but with better safety. ATI-2042's affinity for the major calcium, potassium and sodium ion channels, as well as certain receptors in the heart, very closely matches that of amiodarone. ATI-2042, like amiodarone, contains iodine which we intentionally retained since we believe it contributes to amiodarone's efficacy. We have engineered ATI-2042 not to be primarily dependent on CYP450 for its metabolism while matching amiodarone's balanced receptor profile. A variety of preclinical studies with ATI-2042 provide evidence that the drug preserves the efficacy of amiodarone but with more rapid metabolism and no tendency towards accumulation.

Potential Market and Commercialization Strategy

According to the 2007 Atrial Fibrillation Decision Resources Patientbase, approximately 2.4 million people in the United States have been diagnosed with atrial fibrillation. It is estimated that atrial fibrillation is responsible for more than 75,000 strokes per year in the United States alone. According to a 2005 article in The American Journal of Geriatric Cardiology, it is estimated that approximately two million patients in the United States were treated for their atrial fibrillation with a prescription drug in 2006. According to a 2005 Datamonitor Stakeholder Insight Atrial Fibrillation report, it is estimated that 45% of atrial fibrillation patients in the United States receive a therapeutic which is considered primarily to be arrhythmic therapy while the remainder is treated with a therapeutic primarily considered to be "rate therapy." Based on our own primary market research in 2007, we believe an estimated one-third, or approximately 600,000, of atrial fibrillation patients treated in the United States for their arrhythmia receive amiodarone. In addition, although a generic drug, and in spite of its serious safety issues, amiodarone achieved annual sales in the six largest global markets, outside the United States, of approximately $147 million.

Based on our own market research, we believe amiodarone is considered to be the "gold standard" antiarrhythmia medication for the prevention of atrial fibrillation recurrence. ATI-2042 was designed to retain the efficacy of amiodarone, but a better side effect profile. Amiodarone is believed to provide both rhythm and rate therapy, and ATI-2042 is intended to retain this effect.

Clinical Development Status

We have completed one pilot Phase 2 clinical trial in patients who suffer from repeated episodes of atrial fibrillation, or paroxysmal atrial fibrillation. This is a patient population that is particularly difficult to treat.

We have a larger ongoing Phase 2 trial in patients who suffer from paroxysmal atrial fibrillation designed to characterize the safety, tolerability and efficacy of ATI-2042. Based upon these data, if positive, we intend to seek a large pharmaceutical company partner to continue to develop the product candidate through Phase 3 clinical trials and commercialization. We anticipate that the partner will be responsible for these late-stage development and commercialization costs. We believe that the Phase 2 trial underway will provide the safety and efficacy data necessary to establish the proof-of-concept for ATI-2042, with results expected around the end of 2008.

Phase 2 Trial in Paroxysmal Atrial Fibrillation (CLN-208). We successfully completed this open-label dose-escalation design Phase 2 trial testing the safety and efficacy of ATI-2042 in the treatment of paroxysmal atrial fibrillation in six patients for an eight week period. This type of atrial fibrillation occurs intermittently with the frequency and duration of the paroxysmal atrial fibrillation episodes defining its severity. The endpoint was to establish that the percent of time the patient spent in atrial fibrillation, called their atrial fibrillation burden, would be significantly reduced compared to baseline. Atrial fibrillation burden is an accepted method by which cardiologists and electrophysiologists

monitor the effectiveness of treatment in patients with paroxysmal atrial fibrillation. The patients in this trial had an implanted pacemaker with the capability of monitoring the duration and severity of the episodes of atrial fibrillation and logging the results. The patients' atrial fibrillation burden was measured at weekly intervals. The first two weeks served as the untreated baseline period. Following the baseline period, ATI-2042 was then administered twice a day (bid) in ascending doses over the next eight weeks; 200 mg bid for two weeks, 400 mg bid for two weeks, 600 mg bid for two weeks, and 800 mg bid for two weeks. Treatment with ATI-2042 was then stopped and the final two weeks served as a washout period to measure the level of atrial fibrillation burden.

The results provide evidence of the efficacy of ATI-2042 in reducing the atrial fibrillation burden in all six patients, with a statistically significant reduction in atrial fibrillation burden apparent even at the lowest dose of 200 mg bid. The results are illustrated in the following table. At baseline, the patients had a mean atrial fibrillation burden of 20%. This was reduced to a mean of 1.5% of time spent in atrial fibrillation over a two-week period at the highest dose of 800 mg bid. As dosing increased, average atrial fibrillation burden was reduced by 71% at 200 mg bid compared to baseline ($p=0.03$), by 72% at 400 mg bid compared to baseline ($p=0.03$), by 80% at 600 mg bid compared to baseline ($p=0.06$) and by 87% at 800 mg bid compared to baseline ($p=0.06$). At the two highest doses, one patient decided to not complete the study due to gastrointestinal discomfort and statistical significance was not achieved. After the cessation of treatment, the atrial fibrillation burden gradually increased to pretreatment values by the second week.

The rapid onset and offset of antiarrhythmic activity of ATI-2042 are mirrored by the blood levels of the candidate drug that were measured at intervals throughout the trial. Plasma levels of ATI-2042 increased in proportion to the increase in dose, and after cessation of dosing, the concentration of ATI-2042 and its metabolites all decreased to almost zero within one week. This is an important advantage for ATI-2042 compared to amiodarone, which can take months to be completely eliminated from the body, giving rise to the serious side effects that ATI-2042 is designed to address. ATI-2042 was generally well tolerated, with transient and expected changes in measures of thyroid function, as well as gastrointestinal complaints such as dyspepsia, lower abdominal pain, loose stools and nausea being reported, especially at the highest dose. The more prevalent side effects coupled with considerations for the incremental improvement in response at the highest dose led us to not include the 800 mg bid dose in further clinical trials. These mild side effects are similar to those seen with amiodarone. There were no drug related serious adverse events.

Phase 2 Trial in Paroxysmal Atrial Fibrillation (CLN-205). This Phase 2 trial is currently enrolling patients in North America and Europe. Targeted to test the safety and efficacy of ATI-2042 in paroxysmal atrial fibrillation patients who have an implanted dual-chamber pacemaker with recording capabilities, this randomized, double-blind, placebo-controlled study builds off of the results of CLN-208. Doses of 200 mg bid, 400 mg bid and 600 mg bid, or placebo, are being administered for a twelve week treatment period. Administration of ATI-2042 or placebo follows a four week baseline period during which each patient's untreated atrial fibrillation burden is established so that only appropriately highly burdened patients are enrolled and the drug's effect can be properly established. The safety of the drug will also be assessed. If the results of CLN-205 mirror the results of the completed CLN-208, we believe we will have established the proof-of-concept on this product candidate and determined the appropriate dosing regimen to be used in Phase 3.

Phase 1 Clinical Trials. We have successfully completed three Phase 1 clinical trials testing ATI-2042 in 83 healthy volunteers. The results of these Phase 1 clinical trials in healthy volunteers indicated that single doses up to 800 mg and repeat oral dose safety studies at doses up to 1600 mg/day in healthy volunteers did not show any clinically significant adverse events. Moreover, pharmacokinetic analysis in these subjects showed that ATI-2042 had a shorter half-life than amiodarone and did not display the tendency towards the accumulation associated with amiodarone. The results of a drug-drug interaction study indicated that at doses expected to be used in Phase 3 trials ATI-2042 was well

tolerated when administered with the anticoagulant warfarin. Also at expected therapeutic doses, no cardiovascular adverse events were noted, and there was no effect on the surface electrocardiogram. An additional Phase 1 clinical trial was discontinued due to the inability to identify suitable subjects.

ATI-9242—An Agent for the Treatment of Schizophrenia

We currently plan to move our fourth drug candidate based on the most effective atypical antipsychotics into clinical development in the first half of 2008. ATI-9242 is a next generation atypical antipsychotic therapy whose receptor selectivity has been modeled to replicate the efficacy of clozapine for the treatment of schizophrenia and other psychiatric disorders. In addition, ATI-9242 has been engineered to have an improved effect on the negative symptoms associated with schizophrenia and enhance cognition. Designed to avoid drug-drug interactions by not depending upon cytochrome P450 enzymes for metabolism, ATI-9242 has also been engineered to minimize the metabolic consequences of weight gain often resulting from the use of atypical antipsychotics.

Our Preclinical Development Programs

We are currently pursuing two late stage discovery programs, ATI-20,000 and ATI-24,000, which focus on metabolic and gastrointestinal disorders, respectively. We have identified potent pharmacologically active compounds in each of these programs. In addition to these two active discovery programs, we have a number of additional feasibility programs which we believe will continue to provide future research and development programs for us.

Our Collaboration with Procter & Gamble Pharmaceuticals

On June 30, 2006, we entered into a collaboration agreement with P&G for the development and commercialization of our product candidate ATI-7505. Under the agreement, we granted P&G a worldwide, royalty-bearing, exclusive license to exploit ATI-7505 and a number of structurally related back-up compounds for all therapeutic or preventative uses. P&G will be primarily responsible for the clinical development of ATI-7505 and the other licensed compounds, including all related regulatory filings, and P&G will bear the cost of such activities. P&G will also undertake the manufacturing and commercialization of the licensed compounds at its expense. The parties will share oversight of development and commercialization through a joint committee, but P&G has ultimate decision-making authority over most issues.

Under the agreement, we agreed to perform, at our expense, certain limited transition activities relating to preclinical and clinical work on ATI-7505 that was ongoing at the time we entered into the agreement. At our option, we may fund a portion of the future development of some or all of the licensed compounds, including ATI-7505, in return for a share of the profit generated by the commercial sale of such compounds, under terms to be negotiated at the time of such election. In addition, we have the right to co-promote some or all of the licensed compounds, including ATI-7505, to gastroenterologists and endocrinologists in the United States.

In connection with the agreement, P&G paid us a $25.0 million nonrefundable upfront license fee and may owe up to an aggregate of approximately $391.0 million in development, product approval and sales-based milestone payments over the remaining life of the agreement, of which approximately $216.0 million could be earned prior to commercialization. We are also entitled to receive royalties on sales and a share of certain payments received by P&G from its sublicensees. The agreement provides for certain reductions in royalty rates and milestone payments for products that fail to meet specific criteria relating to safety and approved dosing.

The license granted to P&G includes a license under certain patents owned or controlled by us. P&G shall have the first right, but not the obligation, to enforce such patents against infringement where the infringing activities relate to human and animal prophylactic and therapeutic uses. Where the

infringing activities relate to other uses, we shall have the sole right to enforce such patents against infringement. Each party shall have an obligation to provide assistance to the other party in prosecuting an action against a third party infringer and an obligation to join the suit as a co-plaintiff if necessary.

The agreement will expire when neither party has any remaining payment obligations. We are unable to predict the duration of these payment obligations because these payment obligations will depend on a number of future events, including the types of products ultimately commercialized by P&G, the date of first commercial sale of these products, the achievement of certain levels of product sales and the expiration of our United States and foreign patents. In addition, either party may terminate the agreement for the bankruptcy or the uncured breach of the other party, and P&G has the right to terminate the agreement in its entirety at any time with advance written notice to us. In the event that P&G terminates the agreement for our uncured, material breach, P&G may continue to develop and commercialize the licensed compounds, in which case its royalty, milestone, and other payment obligations will also continue. Our co-development and co-promotion rights will cease upon any termination of the agreement.

In the event of termination, we will not owe P&G any predetermined payment obligations. However, in the event of a termination other than for our material breach, P&G is obligated under the agreement to grant us a license of certain of P&G's technology, subject to certain contingent payment obligations we will have under such license.

On February 29, 2008, we entered into an Amendment to License, Development and Commercialization Agreement with P&G (the "Amendment"). The Amendment amends our existing License, Development and Commercialization Agreement between the parties, dated June 30, 2006 (the "Original Agreement"). Pursuant to the Original Agreement, P&G is obligated to deliver the final results of the thorough QT study (the "Study") to us within a defined time period following the locking of the database. The Amendment sets a new milestone date to extend the period of time for an analysis of the data and results from the Study. The large size of the Study produced at least 20,000 electrocardiogram ("ECG") data points that require analysis. We have mutually agreed to use a third-party firm to perform a manual analysis of the ECGs which cannot be completed in the time period originally anticipated. To allow for sufficient time to complete this analysis, the Original Agreement between us and P&G has been amended to extend the timeline for final results. The original target set by us to receive the Study results in the first half of 2008 remains unchanged.

Competition

The pharmaceutical industry is highly competitive, with a number of established, large pharmaceutical companies, as well as smaller companies. Many of these companies have greater financial resources, marketing capabilities and experience in obtaining regulatory approvals for product candidates. There are many pharmaceutical companies, biotechnology companies, public and private universities, government agencies and research organizations actively engaged in research and development of products which may target the same markets as our product candidates. We expect any future products we develop to compete on the basis of, among other things, product efficacy and safety, time to market, price, extent of adverse side effects experienced and convenience of administration and drug delivery. One or more of our competitors may develop products based upon the principles underlying our proprietary technologies earlier than us, obtain approvals for such products from the FDA more rapidly than us or develop alternative products or therapies that are safer, more effective and/or more cost effective than any future products developed by us. We also expect to face competition in our efforts to identity appropriate collaborators or partners to help commercialize our product candidates in our target commercial areas.

ATI-7505 has potential use in five indications: chronic constipation, functional dyspepsia, GERD, gastroparesis and IBS with constipation. ATI-7505 is a prokinetic which has been shown to increase

motility in the upper and lower gastrointestinal tract, including the ability to improve gastric emptying and colonic motility. Products which affect the gastrointestinal system's motility could be useful in the treatment of each of these disorders. Other prokinetics are on the market or in development which will be competitive to ATI-7505, including tegaserod, marketed by Novartis Pharmaceuticals Corporation as Zelnorm, which was withdrawn from the market and recently re-introduced with restrictive use labeling, renzapride, being developed by Alizyme plc, and erythromycin. Many additional prokinetics are in development targeting these indications. We believe the most significant competition to ATI-7505 for the treatment of GERD are proton pump inhibitors and H2 blockers, which are currently on the market in both prescription formulations and strengths as well as in over-the-counter forms. Many major pharmaceutical companies currently market proton pump inhibitors and H2 blockers generating worldwide sales of over $17.0 billion in 2006. ATI-7505 is targeted at the approximately 20-25% of GERD patients who, according to a 2006 article in the Digestion International Journal of Gastroenterology do not receive adequate relief from proton pump inhibitors, which reduce the creation of acid in the stomach. ATI-7505 will face competition from the prokinetics as well as many inexpensive over-the-counter indications for the treatment of these gastrointestinal disorders.

Competition for ATI-5923 for use as an oral anticoagulant will continue to come from generic coumadin due to its pricing and the years of experience physicians and patients have with the drug. Other oral anticoagulants are in development throughout the pharmaceutical and biotechnology industry. Most of these development programs fall into either the factor Xa or direct thrombin inhibitor categories. We are aware that Johnson & Johnson in collaboration with Bayer AG, Bristol-Myers Squibb Company in collaboration with Pfizer, Inc., Eli Lilly and Company, and Portola Pharmaceuticals, Inc., each have factor Xa programs in Phase 2 or Phase 3 testing. We are aware of a direct thrombin inhibitor program at Boehringer-Ingelheim GmbH. The first direct thrombin inhibitor presented to the FDA for approval, ximelagatran, previously marketed outside the United States as Exanta by AstraZeneca plc, has not been recommended for approval due to idiosyncratic liver toxicity problems. Although we believe ATI-5923's mechanism of action (VKOR inhibition as with warfarin) and broadly available inexpensive monitoring methodology (INR) provide an advantage, these factor Xa and direct thrombin inhibitor programs will likely provide major competition in this market. In addition, there may be other compounds of which we are not aware that are at an earlier stage of development and may compete with our product candidate. If any of those compounds are successfully developed and approved, they could compete directly with our product candidate.

We believe generic amiodarone will continue to provide competition to ATI-2042 for the treatment of atrial fibrillation even though it is not labeled for use in atrial fibrillation. Amiodarone will continue to be used off-label in spite of its safety problems due to its generic pricing. Other treatments for the treatment of atrial fibrillation, such as sotalol, marketed by Bayer HealthCare Pharmaceuticals, Inc., flecainide, marketed by 3M Company, and propafenone, marketed by Reliant, do not have equivalent efficacy to amiodarone, but will continue to compete in the atrial fibrillation marketplace. Cardiome Pharma Corp. is in Phase 2 testing with an oral product, vernakalant, for the treatment atrial fibrillation which they hope will have efficacy equal to or better than flecainide or sotalol, but with reduced pro-arrhythmic effects. There are other companies developing devices or procedures to treat atrial fibrillation through ablation, including CryoCor, Inc. and CryoCath Technologies, Inc.

Patents and Intellectual Property

Our success will depend in large part on our ability to maintain a proprietary position for our products and product candidates through patents, trade secrets and FDA exclusivity. We rely upon patents, trade secrets, know-how and continuing technological innovation to develop and maintain our competitive position. We will continue to aggressively protect, defend and extend our proprietary position. We will maintain sole ownership of our patents as a critical element of any development and commercialization partnership we may enter into.

As of December 31, 2007, we held 82 patents and 131 pending patent applications worldwide. 40 of the 82 patents have issued or been allowed in the United States, and 16 of the 131 pending patent applications were pending in the United States. The United States and foreign patent applications related to the composition of matter of our lead compound for the treatment of gastrointestinal disorders, ATI-7505, were filed in January 2005 and first published in Europe in July 2005. We hold four issued patents and four pending patent applications in the United States as well as one issued patent and 39 patent applications in certain foreign jurisdictions related to the ATI-7505 program. Composition of matter patent protection in the United States for ATI-7505 will expire in 2025. Our composition of matter patent for ATI-5923, our product candidate for anticoagulation, was filed in April 2005, first published in Europe in October 2005, and issued in the United States in August 2007. Composition of matter protection for ATI-5923 in the United States will expire in 2025. We also hold 15 foreign patent applications related to the ATI-5923 composition of matter. The broader patent family related to the ATI-5923 program also includes two issued patents and one pending application in the United States and four pending foreign applications. Our composition of matter patent for ATI-2042, our compound for the treatment of atrial fibrillation, issued in 2002 and expires in 2020. The patent family related to ATI-2042 includes an additional 43 patents and 37 pending patent applications issued in the United States and certain foreign jurisdictions.

Additionally, for each of our product candidates, we may be entitled to an additional period of exclusivity in the United States for up to five years pursuant to the United States Drug Price Competition and Patent Term Restoration Act of 1984, more commonly known as the Hatch-Waxman Act. The Hatch-Waxman Act provides for up to five years to be added to a patent term in order to compensate the patentee for delays associated with seeking regulatory approval. If we gain such a five-year extension, we could have certain patent rights in the United States for ATI-7505 until 2030, for ATI-5923 until 2030 and for ATI-2042 until 2025. The five year extension, however, is not guaranteed and may be subject to a reduction if we fail to act diligently in the regulatory lenient period or if the term restoration extends the commercial life of a product covered by the patent beyond 14 years. In Europe, similar legislative enactments may allow us to obtain five-year extensions of certain of the European patents (once obtained) covering our product candidates through the granting of Supplementary Protection Certificates.

We seek United States and international patent protection for a variety of products and technologies, including compositions of matter, formulations, methods of use, and processes for synthesis. Our commercial success will depend in part on obtaining this patent protection. In addition to patents, we rely upon unpatented trade secrets and know-how and continuing technological innovation to develop and maintain our competitive position. We seek to protect our proprietary information, in part, using confidentiality agreements with our commercial partners, collaborators, employees and consultants and invention assignment agreements with our employees. We also have confidentiality agreements or invention assignment agreements with 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 technologies that are developed in-house or through a relationship with a third party.

Manufacturing

We do not have, and do not intend to establish in the near term, any of our own manufacturing capability for our product candidates, or their active pharmaceutical ingredients, or the capability to package any products we may sell in the future. With the exception of ATI-7505, we rely on a number of third-party manufacturers and suppliers to produce and supply the active pharmaceutical ingredients and drug products we require to meet the preclinical and clinical requirements of our product candidates. P&G is responsible for all manufacturing requirements of ATI-7505 for preclinical and clinical development and for commercial supply under our agreement with them.

We currently do not have long-term supply contracts with any of our third-party manufacturers and suppliers, and they are not required to supply us with products for any specified periods, in any specified quantities or at any set price, except as may be specified in a particular purchase order. Our third-party manufacturers are subject to the FDA's current Good Manufacturing Practices, or cGMP, requirements and other rules and regulations prescribed by domestic and foreign regulatory authorities. We depend on our third-party suppliers and manufacturers for continued compliance with cGMP requirements and applicable foreign standards.

We believe that qualified suppliers and manufacturers for our marketed products will continue to be available in the future, at a reasonable cost to us, although there can be no assurance that this will be the case.

Government Regulation

FDA approval process

In the United States, pharmaceutical products are subject to extensive regulation by the FDA. The Federal Food, Drug, and Cosmetic Act, or the FDC Act, and other federal and state statutes and regulations, govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling, and import and export of pharmaceutical products. Failure to comply with applicable U.S. requirements may subject a company to a variety of administrative or judicial sanctions, such as FDA refusal to approve pending new drug applications or NDAs, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties, and criminal prosecution.

Pharmaceutical product development in the United States typically involves preclinical laboratory and animal tests, the submission to the FDA of a notice of claimed investigational exemption or an investigational new drug application or IND, which must become effective before clinical testing may commence, and adequate and well-controlled clinical trials to establish the safety and effectiveness of the drug for each indication for which FDA approval is sought. Satisfaction of FDA pre-market approval requirements typically takes many years and the actual time required may vary substantially based upon the type, complexity and novelty of the product or disease.

Preclinical tests include laboratory evaluation of product chemistry, formulation and toxicity, as well as animal trials to assess the characteristics and potential safety and efficacy of the product. The conduct of the preclinical tests must comply with federal regulations and requirements including good laboratory practices. The results of preclinical testing are submitted to the FDA as part of an IND along with other information including information about product chemistry, manufacturing and controls and a proposed clinical trial protocol. Long term preclinical tests, such as animal tests of reproductive toxicity and carcinogenicity, may continue after the IND is submitted.

A 30-day waiting period after the submission of each IND is required prior to the commencement of clinical testing in humans. If the FDA has not commented on or questioned the IND within this 30-day period, the clinical trial proposed in the IND may begin.

Clinical trials involve the administration of the investigational new drug to healthy volunteers or patients under the supervision of a qualified investigator. Clinical trials must be conducted in compliance with federal regulations, good clinical practices or GCP, as well as under protocols detailing the objectives of the trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. Each protocol involving testing on U.S. patients and subsequent protocol amendments must be submitted to the FDA as part of the IND.

The FDA may order the temporary or permanent discontinuation of a clinical trial at any time or impose other sanctions if it believes that the clinical trial is not being conducted in accordance with

FDA requirements or presents an unacceptable risk to the clinical trial patients. The study protocol and informed consent information for patients in clinical trials must also be submitted to an institutional review board, or IRB, for approval. An IRB may also require the clinical trial at the site to be halted, either temporarily or permanently, for failure to comply with the IRB's requirements, or may impose other conditions.

Clinical trials to support NDAs for marketing approval are typically conducted in three sequential phases, but the phases may overlap. In Phase 1, the initial introduction of the drug into healthy human subjects or patients, the drug is tested to assess metabolism, pharmacokinetics, pharmacological actions, side effects associated with increasing doses and, if possible, early evidence on effectiveness. Phase 2 usually involves trials in a limited patient population, to determine the effectiveness of the drug for a particular indication or indications, dosage tolerance and optimum dosage, and identify common adverse effects and safety risks. If a compound demonstrates evidence of effectiveness and an acceptable safety profile in Phase 2 evaluations, Phase 3 trials are undertaken to obtain the additional information about clinical efficacy and safety in a larger number of patients, typically at geographically dispersed clinical trial sites, to permit FDA to evaluate the overall benefit-risk relationship of the drug and to provide adequate information for the labeling of the drug.

After completion of the required clinical testing, an NDA is prepared and submitted to the FDA. FDA approval of the NDA is required before marketing of the product may begin in the United States. The NDA must include the results of all preclinical, clinical and other testing and a compilation of data relating to the product's pharmacology, chemistry, manufacture, and controls. The cost of preparing and submitting an NDA is substantial. Under federal law, the submission of most NDAs is additionally subject to a substantial application user fee, currently $1,178,000, and the manufacturer and/or sponsor under an approved new drug application are also subject to annual product and establishment user fees, currently $65,030 per product and $392,700 per establishment. These fees are typically increased annually.

The FDA has 60 days from its receipt of a NDA to determine whether the application will be accepted for filing based on the agency's threshold determination that it is sufficiently complete to permit substantive review. Once the submission is accepted for filing, the FDA begins an in-depth review. The FDA has agreed to certain performance goals in the review of new drug applications. Most such applications for non-priority drug products are reviewed within ten months. The review process may be extended by FDA for three additional months to consider certain information or clarification regarding information already provided in the submission. The FDA may also refer applications for novel drug products or drug products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations. Before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. Additionally, the FDA will inspect the facility or the facilities at which the drug is manufactured. FDA will not approve the product unless compliance with current good manufacturing practices is satisfactory and the NDA contains data that provide substantial evidence that the drug is safe and effective in the indication studied.

After FDA evaluates the NDA and the manufacturing facilities, it issues an approval letter, an approvable letter or a not-approvable letter. Both approvable and not-approvable letters generally outline the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. If and when those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. FDA has committed to reviewing such resubmissions in two or six months depending on the type of information included.

An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. As a condition of NDA approval, the FDA may require substantial post-approval testing and surveillance to monitor the drug's safety or efficacy and may impose other conditions, including labeling restrictions which can materially affect the potential market and profitability of the drug. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing.

Pediatric Information

Under the Pediatric Research Equity Act, or PREA, NDAs or supplements to NDAs must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the drug is safe and effective. The FDA may grant deferrals for submission of data or full or partial waivers. Unless otherwise required by regulation, PREA does not apply to any drug for an indication for which orphan designation has been granted.

The Hatch-Waxman Act

In seeking approval for a drug through an NDA, applicants are required to list with the FDA each patent with claims that cover the applicant's product. Upon approval of a drug, each of the patents listed in the application for the drug is then published in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Drugs listed in the Orange Book can, in turn, be cited by potential competitors in support of approval of an abbreviated new drug application, or ANDA. An ANDA provides for marketing of a drug product that has the same active ingredients in the same strengths and dosage form as the listed drug and has been shown through bioequivalence testing to be therapeutically equivalent to the listed drug. ANDA applicants are not required to conduct or submit results of pre-clinical or clinical tests to prove the safety or effectiveness of their drug product, other than the requirement for bioequivalence testing. Drugs approved in this way are commonly referred to as "generic equivalents" to the listed drug, and can often be substituted by pharmacists under prescriptions written for the original listed drug.

The ANDA applicant is required to certify to the FDA concerning any patents listed for the approved product in the FDA's Orange Book. Specifically, the applicant must certify that: (i) the required patent information has not been filed; (ii) the listed patent has expired; (iii) the listed patent has not expired, but will expire on a particular date and approval is sought after patent expiration; or (iv) the listed patent is invalid or will not be infringed by the new product. A certification that the new product will not infringe the already approved product's listed patents or that such patents are invalid is called a Paragraph IV certification. If the applicant does not challenge the listed patents, the ANDA application will not be approved until all the listed patents claiming the referenced product have expired.

If the ANDA applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the NDA and patent holders once the ANDA has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days of the receipt of a Paragraph IV certification automatically prevents the FDA from approving the ANDA until the earlier of 30 months, expiration of the patent, settlement of the lawsuit or a decision in the infringement case that is favorable to the ANDA applicant.

The ANDA application also will not be approved until any non-patent exclusivity, such as exclusivity for obtaining approval of a new chemical entity, listed in the Orange Book for the referenced product has expired. Federal law provides a period of five years following approval of a drug containing no previously approved active ingredients, during which ANDAs for generic versions of

those drugs cannot be submitted unless the submission contains a Paragraph IV challenge to a listed patent, in which case the submission may be made four years following the original product approval. Federal law provides for a period of three years of exclusivity following approval of a listed drug that contains previously approved active ingredients but is approved in a new dosage form, route of administration or combination, or for a new use, the approval of which was required to be supported by new clinical trials conducted by or for the sponsor, during which FDA cannot grant effective approval of an ANDA based on that listed drug.

Other Regulatory Requirements

Once an NDA is approved, a product will be subject to certain post-approval requirements. For instance, FDA closely regulates the post-approval marketing and promotion of drugs, including standards and regulations for direct-to-consumer advertising, off-label promotion, industry-sponsored scientific and educational activities and promotional activities involving the internet.

Drugs may be marketed only for the approved indications and in accordance with the provisions of the approved labeling. Changes to some of the conditions established in an approved application, including changes in indications, labeling, or manufacturing processes or facilities, require submission and FDA approval of a new NDA or NDA supplement before the change can be implemented. An NDA supplement for a new indication typically requires clinical data similar to that in the original application, and the FDA uses the same procedures and actions in reviewing NDA supplements as it does in reviewing NDAs.

Adverse event reporting and submission of periodic reports is required following FDA approval of an NDA. The FDA also may require post-marketing testing, known as Phase 4 testing, risk minimization action plans, and surveillance to monitor the effects of an approved product or place conditions on an approval that could restrict the distribution or use of the product. In addition, quality control as well as drug manufacture, packaging, and labeling procedures must continue to conform to current good manufacturing practices, or cGMPs, after approval. Drug manufacturers and certain of their subcontractors are required to register their establishments with FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA during which the agency inspects manufacturing facilities to access compliance with cGMPs. Accordingly, manufacturers must continue to expend time, money and effort in the areas of production and quality control to maintain compliance with cGMPs. Regulatory authorities may withdraw product approvals or request product recalls if a company fails to comply with regulatory standards, if it encounters problems following initial marketing, or if previously unrecognized problems are subsequently discovered.

Anti-Kickback, False Claims Laws & The Prescription Drug Marketing Act

In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal laws have been applied to restrict certain marketing practices in the pharmaceutical industry in recent years. These laws include anti-kickback statutes and false claims statutes. The federal healthcare program anti-kickback statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce or in return for purchasing, leasing, ordering or arranging for the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid or other federally financed healthcare programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers on the other. Violations of the anti-kickback statute are punishable by imprisonment, criminal fines, civil monetary penalties and exclusion from participation in federal healthcare programs. Although there are a number of statutory exemptions and regulatory safe harbors protecting certain common activities from prosecution or other regulatory sanctions, the exemptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce

prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exemption or safe harbor.

Federal false claims laws prohibit any person from knowingly presenting, or causing to be presented, a false claim for payment to the federal government, or knowingly making, or causing to be made, a false statement to have a false claim paid. Recently, several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly inflating drug prices they report to pricing services, which in turn were used by the government to set Medicare and Medicaid reimbursement rates, and for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. In addition, certain marketing practices, including off-label promotion, may also violate false claims laws. The majority of states also have statutes or regulations similar to the federal anti-kickback law and false claims laws, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

Physician Drug Samples

As part of the sales and marketing process, pharmaceutical companies frequently provide samples of approved drugs to physicians. The Prescription Drug Marketing Act, or the PDMA, imposes requirements and limitations upon the provision of drug samples to physicians, as well as prohibits states from licensing distributors of prescription drugs unless the state licensing program meets certain federal guidelines that include minimum standards for storage, handling and record keeping. In addition, the PDMA sets forth civil and criminal penalties for violations.

Employees

As of December 31, 2007, we had 68 employees, 53 of whom were engaged in research and product development activities. Of these, three hold medical degrees and 20 hold Ph.D.s. Our employees are not represented by a collective bargaining agreement. None of our employees are represented by a labor union and we believe our relations with our employees are good.

Available Information

We file electronically with the U.S. Securities and Exchange Commission our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934. We make available on our website at *http://www.aryx.com*, free of charge, copies of these reports as soon as reasonably practicable after we electronically file such material with, or furnish it to the SEC. Further copies of these reports are located at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Information on the operation of the Public Reference Room can be obtained by calling the SEC at 1800-SEC-0330. The SEC maintains a website that contains reports, proxy and information statements, and other information regarding our filings, at *http://www.sec.gov.*

Item 1A. Risk Factors

We have identified the following risks and uncertainties that may have a material adverse effect on our business, financial condition or results of operations. Investors should carefully consider the risks described below before making an investment decision. The risks described below are not the only ones we face. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations. Our business could be harmed by any of these risks. The trading price of our common stock could decline due to any of these risks, and investors may lose all or part of their investment.

Risks Related to Our Business and Industry

We have incurred significant operating losses since inception and expect to continue to incur substantial and increasing losses for the foreseeable future. We may never achieve or sustain profitability.

We have a limited operating history and have incurred significant losses since our inception. As of December 31, 2007, we had an accumulated deficit of approximately $122.7 million. We expect our research and development expenses to continue to increase as we continue to expand our development programs, and, subject to regulatory approval for any of our product candidates, we expect to incur significant expenses associated with the potential establishment of a North American specialty sales force and increased manufacturing expenses. Although it is not expected to occur in the next several years, we estimate our cost of establishing a 100-person specialty sales force to co-promote ATI-7505 to amount to approximately $20.0 million. As a result, we expect to continue to incur substantial and increasing losses for the foreseeable future. These losses have had and will continue to have an adverse effect on our stockholders' equity (deficit) and working capital.

Because of the numerous risks and uncertainties associated with drug development, we are unable to predict the timing or amount of increased expenses or when or if we will be able to achieve or sustain profitability. Currently, we have no products approved for commercial sale, and, to date, we have not generated any product revenue. We have financed our operations primarily through the sale of equity securities, capital lease and equipment financings, debt financings and a single corporate partnership with Procter & Gamble Pharmaceuticals, Inc., or P&G. We have devoted substantially all of our efforts to research and development, including clinical trials. If we are unable to develop and commercialize any of our product candidates, if development is delayed or if sales revenue from any product candidate that receives marketing approval is insufficient, we may never become profitable. Even if we do become profitable, we may not be able to sustain or increase our profitability on a quarterly or annual basis.

Our success depends substantially on our most advanced product candidates, which are still under development. If we are unable to bring any or all of these product candidates to market, or experience significant delays in doing so, our ability to generate product revenue and our likelihood of success will be harmed.

Our three most advanced product candidates are in Phase 2 clinical trials. Our ability to generate product revenue in the future will depend heavily on the successful development and commercialization of these product candidates. Our other product candidates are in the discovery stage. Any of our product candidates could be unsuccessful for a variety of reasons, including that they:

- do not demonstrate acceptable safety and efficacy in preclinical studies or clinical trials or otherwise do not meet applicable regulatory standards for approval;
- do not offer therapeutic, safety or other improvements over existing or future drugs used to treat the same conditions;
- are not capable of being produced in commercial quantities at acceptable costs; or

- are not accepted in the medical community and by third-party payors.

We do not expect any of our current product candidates to be commercially available before 2012, if at all. If we are unable to make our product candidates commercially available, we will not generate product revenues and we will not be successful. The results of our clinical trials to date do not provide assurance that acceptable efficacy or safety will be shown upon completion of Phase 3 clinical trials.

We expect to depend on collaborative arrangements to complete the development and commercialization of each of our product candidates. The existing and potential collaborative arrangements will likely place the development of our product candidates outside of our control and will likely require us to relinquish important rights or may otherwise be on terms unfavorable to us.

We plan to enter into collaborative arrangements with third parties to develop and commercialize each of our lead product candidates. Dependence on collaborative arrangements for development and commercialization of our product candidates will subject us to a number of risks, including:

- we may not complete a collaborative arrangement in time to avoid delays in clinical development, if at all, and if no collaborative arrangement is achieved, product development may be halted altogether;
- we may not be able to control the amount and timing of resources that our collaborators may devote to the development or commercialization of product candidates or to their marketing and distribution;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- we may have limited control over our clinical trial design;
- disputes may arise between us and our collaborators that result in the delay or termination of the research, development or commercialization of our product candidates or that result in costly litigation or arbitration that diverts management's attention and resources;
- our collaborators may experience financial difficulties;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our proprietary information or expose us to potential litigation;
- business combinations or significant changes in a collaborator's business strategy may adversely affect a collaborator's willingness or ability to fulfill its obligations under any arrangement;
- a collaborator could independently move forward with a competing product candidate developed either independently or in collaboration with others, including our competitors; and
- any collaborative arrangement may be terminated or allowed to expire, which would delay the development and may increase the cost of developing our product candidates.

We have established the first such collaboration arrangement with P&G relating to ATI-7505. The terms of this arrangement give P&G ultimate control over the development and commercialization of ATI-7505 and subject us to many of the risks described above. If there is a disagreement between the parties, P&G has the right to make the final decision. Therefore, we are dependent on P&G to undertake the clinical and regulatory requirements as well as to generate product sales of ATI-7505 that are required in order for us to receive milestone and royalty revenue under the agreement. This revenue may not materialize due to the occurrence of one or more of the conditions described above and, as a result, our results of operations will be adversely affected.

To date, we have established a single corporate partnership with P&G to develop and commercialize ATI-7505. Collaborative arrangements do not currently exist for our other product candidates. If we do not establish collaborations for each of our ATI-5923 and ATI-2042 product candidates or future product candidates, we may have to alter our development and commercialization plans.

Our strategy includes selectively collaborating with leading pharmaceutical and biotechnology companies to assist us in furthering the development and potential commercialization of some of our product candidates, including ATI-7505 (in place with P&G), ATI-5923 and ATI-2042. We intend to seek partners because the commercialization of each of our three lead product candidates involves a large, primary care market that must be served by large sales and marketing organizations and because we do not currently have the capabilities to perform Phase 3 clinical trials. We face significant competition in seeking appropriate collaborators, and these collaborations are complex and time-consuming to negotiate and document. We may not be able to negotiate collaborations on acceptable terms, if at all. We are unable to predict when, if ever, we will enter into any collaborations because of the numerous risks and uncertainties associated with establishing collaborations. If we are unable to negotiate an acceptable collaboration, we may have to curtail the development of a particular product candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of our sales or marketing activities or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms, if at all. If we do not have sufficient funds, we will not be able to bring our product candidates to market and generate product revenues.

The commercial success of our collaboration with P&G depends in part on the development and marketing efforts of P&G, over which we have limited control. If our collaboration with P&G is unsuccessful, our ability to develop and commercialize and to generate future revenue from the sale of ATI-7505 would be significantly reduced.

Our dependence on our collaboration arrangement with P&G subjects our company to a number of risks. Our ability to develop and commercialize ATI-7505 with our collaboration partner depends on our and P&G's ability to establish the safety and efficacy of ATI-7505, obtain and maintain regulatory approvals and achieve market acceptance of ATI-7505 once commercialized. Our collaboration partner may elect to delay or terminate development of ATI-7505, independently develop products that compete with ATI-7505, or fail to commit sufficient resources to the marketing and distribution of ATI-7505. Competing products, either developed by P&G or to which they have rights or acquire such rights in the future, may result in their withdrawal of support for ATI-7505.

In the event that P&G fails to use commercially reasonable efforts to diligently develop or commercialize ATI-7505 under our collaboration agreement, we have the right to terminate their rights to ATI-7505, but we will not receive any future revenue from that product candidate unless we are able either to find another partner or to commercialize the product candidate on our own, which is likely to result in significant additional expense. Business combinations, significant changes in business strategy, litigation and/or financial difficulties may also adversely affect the willingness or ability of P&G to fulfill their obligations under our collaboration agreement. If P&G fails to perform in the manner we expect, our potential to develop and commercialize ATI-7505 through other collaborations and to generate future revenue from the sale of ATI-7505 would be significantly reduced. If a conflict of interest arises between us and P&G, they may act in their own self-interest and not in the interest of our company or our stockholders. P&G may terminate our collaboration agreement at any time pursuant to its terms. If P&G breaches or terminates their collaboration agreement with us or otherwise fails to perform their obligations thereunder in a timely manner, the clinical development or commercialization of ATI-7505 could be delayed or terminated.

If we are not able to obtain required regulatory approvals, we will not be able to commercialize our product candidates, our ability to generate revenue will be materially impaired and our business will not be successful.

Our product candidates and the activities associated with their development and commercialization are subject to comprehensive regulation by the Food and Drug Administration, or FDA, and other federal and state regulatory agencies in the United States and by comparable authorities in other countries. The inability to obtain FDA approval or approval from comparable authorities in other countries would prevent us and our collaborative partners from commercializing our product candidates in the United States or other countries. Under our collaborative partnership with P&G, they are responsible for all regulatory interactions regarding ATI-7505 and future collaborative agreements will also likely force us to give up control of these interactions. We or our partners may never receive regulatory approval for the commercial sale of any of our product candidates. We have only limited experience in preparing and filing the applications necessary to gain regulatory approvals and have not received regulatory approval to market any of our product candidates in any jurisdiction. The process of applying for regulatory approval is expensive, often takes many years and can vary substantially based upon the type, complexity and novelty of the product candidates involved.

Because our product candidates are modeled after drugs which are known to have safety problems, the FDA and other regulatory agencies may require additional safety testing which may delay our clinical progress, increase our expected costs or make further development unfeasible. For instance, because of known problems with the drug after which it was modeled, we were required to conduct significant monitoring for cardiac toxicity in our clinical studies of ATI-7505.

Changes in regulatory approval policies during the development period, changes in, or the enactment of, additional regulations or statutes or changes in the regulatory review team for each submitted product application may cause delays in the approval or rejection of an application. Even if the FDA or a foreign regulatory agency approves a product candidate, the approval may impose significant restrictions on the indicated uses, conditions for use, labeling, advertising, promotion, marketing and/or production of such product and may impose requirements for post-approval studies, including additional research and development and clinical trials. The FDA and other agencies also may impose various civil or criminal sanctions for failure to comply with regulatory requirements, including substantial monetary penalties and withdrawal of product approval.

The FDA has substantial discretion in the approval process and may refuse to accept any application or decide that our data are insufficient for approval and require additional preclinical, clinical or other studies. For example, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent regulatory approval of a product candidate. Moreover, the FDA may not agree that certain target indications are approvable. For instance, the FDA has never approved a drug for postprandial distress syndrome, or PDS, and we cannot be certain that the FDA will recognize PDS as an indication for which ATI-7505 or other drugs can be approved. As another example, while we believe we have clear direction from the FDA as to the development path for ATI-5923 based on our initial discussions, the FDA may change their judgment on the appropriate development pathway for ATI-5923 at any time.

We will need to obtain regulatory approval from authorities in foreign countries to market our product candidates in those countries. We have not yet initiated the regulatory process in any foreign jurisdictions. Approval by one regulatory authority does not ensure approval by regulatory authorities in other jurisdictions. If we fail to obtain approvals from foreign jurisdictions, the geographic market for our product candidates would be limited.

Safety issues relating to our product candidates or the original drugs upon which our product candidates have been modeled, or relating to approved products of third parties that are similar to our product candidates, could give rise to delays in the regulatory approval process.

Discovery of previously unknown problems with an approved product may result in restrictions on its permissible uses, including withdrawal of the medicine from the market. Each of the opportunities upon which we have chosen to focus is based upon our belief that our RetroMetabolic Drug Design technology can be used to create a new product based upon an existing product which is efficacious in treating a specific condition, but which has a known safety problem. Each of our three lead product candidates is modeled on drugs which have significant safety problems. ATI-7505 is modeled on cisapride which was withdrawn from the market owing to fatal cardiac problems. ATI-5923 is modeled on warfarin which is known to have safety risks because of its potential for bleeding and for drug-drug interactions with numerous other drugs as listed on the package insert for the product. ATI-2042 is modeled on amiodarone which is used, but not approved, for atrial fibrillation in spite of known safety problems due to its accumulation in the body and interaction with other drugs. Both amiodarone and ATI-2042 contain iodine which can accumulate in the thyroid and must be monitored for safety purposes. As will be required with each of our product candidates, P&G is performing the standard regulatory study designed to more definitively determine what effect, if any, ATI-7505 has on Qt interval, or a measure of the relaxation phase of the heart which occurs after each beat. In addition, ATI-2042 is partially metabolized by CYP450 and, at high dose levels has caused drug-drug interactions with warfarin which increased INR and could increase the risk of hemorrhage complications. Although we have designed our drugs to largely address each of the original drugs' key safety problems, we will need to continue to demonstrate this through continued clinical testing. It is possible that the FDA may impose additional requirements on the development or approval of our products because of its concern about the original drug's safety problems. These potential additional barriers could delay, increase the cost of, or prevent the commercialization of our product candidates.

Our product candidates are engineered to be broken down by the body's natural metabolic processes in a manner we believe to be safer than that of the original drug. There can be no assurance that the products we develop will actually be metabolized as we expect. While we have designed the breakdown products to be safe, it is possible that there will be unexpected toxicity associated with these breakdown products that could cause our products to be poorly tolerated by, or toxic to, humans. Additionally, while we believe we have addressed the key safety problem of each of the original drugs, it is possible that our change to the chemical structure may result in new unforeseen safety issues. Any unexpected toxicity or suboptimal tolerance of our products would delay or prevent commercialization of these product candidates.

Additionally, problems with approved products marketed by third parties that utilize the same therapeutic target as our product candidates could adversely affect the development of our product candidates. For example, the recent product withdrawals of Vioxx by Merck & Co., Inc. and Bextra by Pfizer because of safety issues caused other drugs that have the same therapeutic target, such as Celebrex from Pfizer, to receive additional scrutiny from regulatory authorities. Another prokinetic, tegaserod marketed by Novartis Pharmaceuticals Corporation as Zelnorm, was temporarily withdrawn from the market due to certain cardiac effects which we believe were related to its off-target effects. It is possible we may be required by regulatory agencies to perform tests, in addition to those we have planned, in order to demonstrate that ATI-7505 does not have the safety problems associated with Zelnorm. Any failure or delay in commencing or completing clinical trials or obtaining regulatory approvals for our product candidates would delay commercialization of our product candidates and severely harm our business and financial condition.

We will need substantial additional funding and may be unable to raise capital when needed, which would force us to delay, reduce or eliminate our product development programs or commercialization efforts.

Our operations have consumed substantial amounts of cash since inception. We expect to continue to spend substantial amounts of cash to fund our operations, including research and development expenses and costs associated with the conduct of clinical trials for our product candidates. Net cash used in operating activities was $27.7 million, $4.2 million and $22.4 million in the years ended December 31, 2007, 2006 and 2005, respectively. Our net cash used in operating activities for 2006 includes the receipt of a $25.0 million nonrefundable upfront license fee payment and other revenue from P&G, without which our net cash used would have been significantly higher in 2006. We expect that our net cash used in operations will increase significantly in each of the next several years in order to support our operations and complete the development and commercialization of our product candidates. We will need to raise additional capital to fund our operations and complete the development of our product candidates. It is our intention to enter into collaborations to commercialize our products, but we retained the commercial right to co-promote ATI-7505 to selected physicians through a specialty sales force. If ATI-7505 or any other product candidates receive regulatory approval for commercial sale, we will need to raise additional capital to fund our portion of the commercialization efforts. Our future funding requirements will depend on many factors, including:

- the scope, rate of progress, results and cost of our preclinical testing, clinical trials and other research and development activities;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish;
- the cost, timing and outcomes of regulatory approvals;
- the number and characteristics of product candidates that we pursue;
- the cost and timing of establishing sales, marketing and distribution capabilities for our specialty sales force;
- the cost of establishing clinical and commercial supplies of our product candidates and any products that we may develop;
- the timing, receipt and amount of sales or royalties, if any, from our potential products;
- the cost of preparing, filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights; and
- the extent to which we acquire or invest in businesses, products or technologies, although we currently have no commitments or agreements relating to any of these types of transactions.

Until we can generate a sufficient amount of product revenue, if we ever do, we expect to finance future cash needs through public or private equity offerings, debt financings or corporate collaboration and licensing arrangements, as well as through interest income earned on cash balances.

If we raise additional funds by issuing equity securities, our stockholders will experience dilution. Any debt financing or additional equity that we raise may contain terms that are not favorable to our stockholders or us. If we raise additional funds through collaboration and licensing arrangements with third parties, we may be required to relinquish some rights to our technologies or our product candidates or grant licenses on terms that are not favorable to us.

We do not expect our existing capital resources and the net proceeds from our initial public offering to be sufficient to enable us to fund the completion of the development of any of our product candidates. We expect that our existing capital resources and the net proceeds from our initial public offering will enable us to maintain currently planned operations into the fourth quarter of 2009.

However, our operating plan may change, and we may need additional funds sooner than planned to meet operational needs and capital requirements for product development and commercialization.

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 on a timely basis, we may:

- terminate or delay clinical trials for one or more of our product candidates;
- delay our establishment of sales and marketing capabilities or other activities that may be necessary to commercialize our product candidates; or
- curtail significant drug development programs that are designed to identify new product candidates.

Any failure or delay in commencing or completing clinical trials for our product candidates could severely harm our business.

To date, we have not completed the clinical trial program of any product candidate. The commencement and completion of clinical trials for our product candidates may be delayed or terminated as a result of many factors, including:

- our inability or the inability of our collaborators or licensees to manufacture or obtain from third parties materials sufficient for use in preclinical studies and clinical trials;
- delays in patient enrollment, which we have experienced in the past specifically in the enrollment of atrial fibrillation patients with implanted recordable pacemakers as part of our Phase 2 clinical trials for ATI-2042, and variability in the number and types of patients available for clinical trials;
- difficulty in maintaining contact with patients after treatment, resulting in incomplete data;
- poor effectiveness of product candidates during clinical trials;
- unforeseen safety issues or side effects; and
- governmental or regulatory delays and changes in regulatory requirements, policies and guidelines.

Any delay in commencing or completing clinical trials for our product candidates would delay commercialization of our product candidates and severely harm our business and financial condition. It is also possible that none of our product candidates will complete clinical trials in any of the markets in which our collaborators or we intend to sell those product candidates. Accordingly, our collaborators or we would not receive the regulatory approvals needed to market our product candidates, which would severely harm our business and financial condition.

We rely on third parties to conduct our clinical trials. If these third parties do not perform as contractually required or expected, we may not be able to obtain regulatory approval for or commercialize our product candidates.

We do not have the ability to independently conduct clinical trials for our product candidates, and we must rely on our existing corporate partner for ATI-7505, and for each of our other product candidates we must rely on third parties such as contract research organizations, medical institutions, clinical investigators and contract laboratories, to conduct our clinical trials. We have, in the ordinary course of business, entered into agreements with these third parties. To date, we have utilized 14 vendors to provide clinical trial management, data collection and analysis, laboratory and safety analysis services to us in the conduct of our clinical trials. In addition, to date we have conducted our clinical trials at more than 105 sites in North America and Europe. Our corporate partner for ATI-7505, P&G, also engages third parties to conduct clinical trials. Nonetheless, we or our corporate partner are

responsible for confirming that each of our clinical trials is conducted in accordance with its general investigational plan and protocol. Moreover, the FDA requires us to comply with regulations and standards, commonly referred to as good clinical practices, for conducting and recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the trial participants are adequately protected. Our reliance on third parties that we do not control does not relieve us of these responsibilities and requirements. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, if the third parties need to be replaced or if the quality or accuracy of the data they obtain is compromised owing to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our clinical trials may be extended, delayed, suspended or terminated, and we may not be able to obtain regulatory approval for, or successfully commercialize, our product candidates.

If some or all of our patents expire, are invalidated or are unenforceable, or if some or all of our patent applications do not yield issued patents or yield patents with narrow claims, competitors may develop competing products using our intellectual property and our business will suffer.

Our success will depend in part on our ability to obtain and maintain patent and trade secret protection for our technologies and product candidates both in the United States and other countries. We rely on composition of matter patents for the compounds we develop. We cannot guarantee that any patents will issue from any of our pending or future patent applications. Alternatively, a third party may successfully circumvent our patents. Our rights under any issued patents may not provide us with sufficient protection against competitive products or otherwise cover commercially valuable products or processes.

The degree of future protection for our proprietary technologies and product candidates is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- we might not have been the first to make the inventions covered by each of our pending patent applications and issued patents;
- we might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies;
- it is possible that none of our pending patent applications will result in issued patents;
- any patents issued to us or our collaborators may not provide a basis for commercially viable products or may be challenged by third parties;
- the patents of others may have an adverse effect on our ability to do business; or
- regulators or courts may retroactively diminish the value of our intellectual property.

Even if valid and enforceable patents cover our product candidates and technologies, the patents will provide protection only for a limited amount of time. As our patents are based on a parent drug where much research has been conducted, we may encounter many competitive patents from covered analogs of the parent drug. Our know-how and trade secrets may only provide a competitive advantage for a short amount of time.

Our ability and our collaborators' ability to obtain patents is highly uncertain because, to date, some legal principles remain unresolved, there has not been a consistent policy regarding the breadth or interpretation of claims allowed in patents in the United States and the specific content of patents and patent applications that are necessary to support and interpret patent claims is highly uncertain due to the complex nature of the relevant legal, scientific and factual issues. Recent changes to patent law in the United States may make protection of patents in our industry even more difficult. In addition, these changes or future changes to either patent laws or interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property or narrow the scope of our patent protection. Furthermore, the policies governing biotechnology patents outside the United States are even more uncertain.

Even if patents are issued regarding our product candidates or methods of using them, those patents can be challenged by our competitors who can argue such patents are invalid and/or unenforceable. Patents also may not protect our product candidates if competitors devise ways of making these or similar product candidates without legally infringing our patents. The Federal Food, Drug and Cosmetic Act and FDA regulations and policies provide incentives to manufacturers to challenge patent validity or create modified, noninfringing versions of a drug in order to facilitate the approval of generic substitutes. These same types of incentives encourage manufacturers to submit new drug applications that rely on literature and clinical data not prepared for or by the drug sponsor.

As of December 31, 2007, we held 39 issued or allowed U.S. patents and had 18 patent applications pending before the U.S. Patent and Trademark Office, or USPTO. For some of our inventions, corresponding foreign patent protection is pending. Of the 39 U.S. patents that we hold, 36 patents are compound- and composition-related, having expiration dates from 2013 to 2025. The composition of matter patent for our lead compound ATI-7505 for the treatment of gastrointestinal disorders issued in February 2007, and has an expiration date in 2025. Our composition of matter patent for ATI-5923, our compound for anticoagulation, issued in August 2007 and has an expiration date in 2025. Our composition of matter patent for ATI-2042, our compound for the treatment of atrial fibrillation, issued in April 2002 and has an expiration date in 2020. Although third parties may challenge our rights to, or the scope or validity of, our patents, to date we have not received any communications from third parties challenging our patents or patent applications covering our clinical candidates.

While ATI-7505, ATI-5923 and ATI-2042 are all covered in the United States by issued composition of matter patents, additional patent applications would be required to extend patent protection beyond 2025, 2025 and 2020, respectively (assuming the validity and enforceability of the current composition of matter patents). We cannot guarantee that any patents will be issued from our pending or future patent applications, and any patents that issue from such pending or future patent applications would be subject to the same risks described herein for currently issued patents.

Our research and development collaborators may have rights to publish data and other information in which we have rights. In addition, we sometimes engage individuals or entities to conduct research that may be relevant to our business. The ability of these individuals or entities to publish or otherwise publicly disclose data and other information generated during the course of their research is subject to certain contractual limitations. In most cases, these individuals or entities are, at the least, precluded from publicly disclosing our confidential information and are only allowed to disclose other data or information generated during the course of the research after we have been afforded an opportunity to consider whether patent and/or other proprietary protection should be sought. If we do not apply for patent protection prior to such publication or if we cannot otherwise maintain the confidentiality of our technology and other confidential information, then our ability to receive patent protection or protect our proprietary information may be jeopardized.

Failure to adequately protect our trade secrets and other intellectual property could substantially harm our business and results of operations.

We also rely on trade secrets to protect our technology, especially where we do not believe that patent protection is appropriate or obtainable. This is particularly true for our RetroMetabolic Drug Design technology. However, trade secrets are difficult to protect. Our employees, consultants, contractors, outside scientific collaborators and other advisors are required to sign confidential disclosure agreements but they may unintentionally or willfully disclose our confidential information to competitors. Enforcing a claim that a third party illegally obtained and is using our trade secrets is expensive and time-consuming, and the outcome is unpredictable. Failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

Third-party claims of intellectual property infringement would require us to spend significant time and money and could prevent us from developing or commercializing our products.

Our commercial success depends in part on not infringing the patents and proprietary rights of other parties and not breaching any licenses that we have entered into with regard to our technologies and products. Because others may have filed, and in the future are likely to file, patent applications covering products or other technologies of interest to us that are similar or identical to ours, patent applications or issued patents of others may have priority over our patent applications or issued patents. There are numerous issued and applied for patents related to the original molecules and analogs of such from which our products are engineered. If the patents are determined to be valid and construed to cover our products, the development and commercialization of any or all could be affected. We do not believe that our activities infringe the patents of others or that the patents of others inhibit our freedom to operate. However, it is possible that others may choose to challenge this position and that a judge or jury will disagree with our conclusions, and we could incur substantial costs in litigation if we are required to defend against patent suits brought by third parties. Similarly, if we initiate suits to defend our patents, such litigation could be costly and there is no assurance we would be successful in such processes. Any legal action against our collaborators or us claiming damages and seeking to enjoin commercial activities relating to the affected products and processes could, in addition to subjecting us to potential liability for damages, require our collaborators or us to obtain a license to continue to manufacture or market the affected products and processes. Licenses required under any of these patents may not be available on commercially acceptable terms, if at all. Failure to obtain such licenses could materially and adversely affect our ability to develop, commercialize and sell our product candidates. We believe that there may continue to be significant litigation in the biotechnology and pharmaceutical industry regarding patent and other intellectual property rights. If we become involved in litigation, it could consume a substantial portion of our management and financial resources and we may not prevail in any such litigation.

Furthermore, our commercial success will depend, in part, on our ability to continue to conduct research to identify additional product candidates in current indications of interest or opportunities in other indications. Some of these activities may involve the use of genes, gene products, screening technologies and other research tools that are covered by third-party patents. Court decisions have indicated that the exemption from patent infringement afforded by Title 35, Section 271(e)(1) of the United States Code does not encompass all research and development activities associated with product development. In some instances, we may be required to obtain licenses to such third-party patents to conduct our research and development activities, including activities that may have already occurred. It is not known whether any license required under any of these patents would be made available on commercially acceptable terms, if at all. Failure to obtain such licenses could materially and adversely affect our ability to maintain a pipeline of potential product candidates and to bring new products to market. If we are required to defend against patent suits brought by third parties relating to third-party patents that may be relevant to our research activities, or if we initiate such suits, we could incur substantial costs in litigation. Moreover, an adverse result from any legal action in which we are

involved could subject us to damages and/or prevent us from conducting some of our research and development activities.

If third parties do not manufacture our product candidates in sufficient quantities or at an acceptable cost, clinical development and commercialization of our product candidates would be delayed.

We presently do not have sufficient quantities of our product candidates to complete clinical trials of any of our lead product candidates. We do not currently own or operate manufacturing facilities, and we rely and expect to continue to rely on a small number of third-party manufacturers and active pharmaceutical ingredient formulators for the production of clinical and commercial quantities of our product candidates. We do not have long-term agreements with any of these third parties, and our agreements with these parties are generally terminable at will by either party at any time. If for any reason, these third parties are unable or unwilling to perform under our agreements or enter into new agreements, we may not be able to locate alternative manufacturers or formulators or enter into favorable agreements with them. Any inability to acquire sufficient quantities of our product candidates in a timely manner from these third parties could delay clinical trials and prevent us from developing and commercializing our product candidates in a cost-effective manner or on a timely basis.

Under our collaborative agreement, P&G is responsible for the production of ATI-7505 for both clinical and commercial purposes. They presently do not have sufficient quantities of ATI-7505 to complete clinical trials of the product candidate. They do not currently produce ATI-7505 in their manufacturing facilities, and they rely and expect to continue to rely on a small number of third-party manufacturers and active pharmaceutical ingredient formulators for the production of clinical and commercial quantities of ATI-7505. P&G currently uses three vendors, SCI Pharmtech, Inc., Corum, Inc. and Lanza, for the production of clinical and commercial quantities of ATI-7505. If, for any reason, these third parties are unable or unwilling to perform under their agreements or enter into new agreements, P&G may not be able to locate alternative manufacturers or formulators or enter into favorable agreements with them. Any inability to acquire sufficient quantities of ATI-7505 in a timely manner from these third parties could delay clinical trials and prevent us and P&G from developing and commercializing ATI-7505 in a cost-effective manner or on a timely basis. P&G is also attempting to develop a commercially viable manufacturing process for ATI-7505. There is no assurance they will be able to do so.

The starting materials for the production of ATI-5923 are provided by Synquest Labs, Inc. To date, the active pharmaceutical ingredient for ATI-5923 has been produced by ChemShop BV of the Netherlands and Corum Inc. of Taiwan on an ongoing purchase order basis. We have also transferred the ATI-5923 manufacturing processes to an additional vendor, Ampac Fine Chemicals, or Ampac, and are currently qualifying this vendor. Should ChemShop BV or Corum Inc. cease to serve as the supplier of ATI-5923 and our current vendor qualification efforts fail, a delay in the development of ATI-5923 could occur, impairing our ability to commercialize ATI-5923 on our existing timeline. ATI-5923's active pharmaceutical ingredient is processed into 1 milligram, 5 milligram or 10 milligram tablets by QS Pharma.

The starting materials for the production of ATI-2042 are provided by the following vendors: SCI Pharmtech, Inc., Lexen Inc., Panchim, Julich GmbH and Weylchem Inc. To date, Ricerca, Biosciences, LLC, ScinoPharm Ltd. and SCI Pharmtech have produced all of ATI-2042's active pharmaceutical ingredient. Historically, we have relied on Ricerca and ScinoPharm as single-source suppliers for ATI-2042's active pharmaceutical ingredients. In the event that Ricerca, Biosciences, LLC, ScinoPharm Ltd. or SCI Pharmtech could not produce ATI-2042, we would not be able to manufacture ATI-2042's active pharmaceutical ingredients unless SCI Pharmtech is able to produce ATI-2042. This could delay the development of, and impair our ability to, commercialize ATI-2042. To produce ATI-2042 drug product, drug substance is processed into 50 milligram or 200 milligram capsule forms by Patheon Inc.

The starting materials for the production of ATI-9242 are provided by the following vendors: Corum Inc., Alfa Aesar, Apollo Scientific Ltd., and SKECHEM. To date, the active pharmaceutical ingredient for ATI-9242 has been produced exclusively by Corum Inc. in Taiwan. In the event that Corum Inc. could not produce ATI-9242, we would not be able to manufacture ATI-9242's active pharmaceutical ingredients. This could delay the development of, and impair our ability to, commercialize ATI-9242. To produce ATI-9242 drug product, drug substances is processed into 20 milligram capsules form for Xcelience LLC.

All of our current arrangements with third-party manufacturers and suppliers for the production of our product candidates are on a purchase order basis. P&G's arrangements with the third-party manufacturers and suppliers for ATI-7505 are also on a purchase order basis. We, and P&G with respect to ATI-7505, currently do not have long-term supply contracts with any of the third-party manufacturers and suppliers for our product candidates, and they are not required to supply us, or P&G in the case of ATI-7505, with products for any specified periods, in any specified quantities or at any set price, except as may be specified in a particular purchase order. We have no reason to believe any of the current manufacturers and suppliers for our product candidates is the sole source for the materials they supply us. However, if we or P&G were to lose one of these vendors and were unable to obtain an alternative source on a timely basis or on terms acceptable to us, our clinical and production schedules could be delayed. In addition, to the extent that any of these vendors uses technology or manufacturing processes that are proprietary, we may be unable to obtain comparable materials from alternative sources.

If we are required to obtain alternate third-party manufacturers, it could delay or prevent the clinical development and commercialization of our product candidates.

We may not be able to maintain or renew our existing or any other third-party manufacturing arrangements on acceptable terms, if at all. If we are unable to continue relationships with our current suppliers, or to do so at acceptable costs, or if these suppliers fail to meet our requirements for these product candidates for any reason, we would be required to obtain alternative suppliers. Any inability to obtain qualified alternative suppliers, including an inability to obtain or delay in obtaining approval of an alternative supplier from the FDA, would delay or prevent the clinical development and commercialization of these product candidates.

Changes in manufacturing site, process or scale can trigger additional regulatory requirements that could delay our or P&G's ability to perform certain clinical trials or obtain approval.

The manufacturing and formulation of each of our lead product candidates that have been tested in humans to date has been performed by entities other than those that will likely manufacture the products for future clinical trials or commercial use. There is a possibility that analysis of future clinical trials will show that the results from our earlier clinical trials have not been replicated. The failure to replicate these earlier clinical trials would delay our clinical development timelines. New impurity profiles that occur as a result of changing manufacturers may lead to delays in clinical trial testing and approvals.

Use of third-party manufacturers may increase the risk that we will not have adequate supplies of our product candidates.

Our current and anticipated future reliance on third-party manufacturers will expose us and our collaborative partner, P&G, to risks that could delay or prevent the initiation or completion of our clinical trials, the submission of applications for regulatory approvals, the approval of our product by the FDA or the commercialization of our products or result in higher costs or lost product revenues. In particular, our contract manufacturers could:

- encounter difficulties in achieving volume production, quality control and quality assurance or suffer shortages of qualified personnel, which could result in their inability to manufacture

sufficient quantities of drugs to meet our clinical schedules or to commercialize our product candidates;

- terminate or choose not to renew manufacturing agreements, based on their own business priorities, at a time that is costly or inconvenient for us;
- fail to establish and follow FDA-mandated current good manufacturing practices, or cGMPs, which are required for FDA approval of our product candidates, or fail to document their adherence to cGMPs, either of which could lead to significant delays in the availability of material for clinical studies and delay or prevent marketing approval for our product candidates; and
- breach or fail to perform as agreed under manufacturing agreements.

If we are not able to obtain adequate supplies of our product candidates, it will be more difficult for us to develop our product candidates and compete effectively. Our product candidates and any products that we may develop may compete with other product candidates and products for access to manufacturing facilities.

In addition, Lexen, SCI Pharmtech, Scinopharm, Corum Inc. and ChemShop BV are located outside of the United States. This may give rise to difficulties in importing our product candidates or their components into the United States as a result of, among other things, FDA import inspections, incomplete or inaccurate import documentation, or defective packaging.

If our preclinical studies do not produce successful results or our clinical trials do not demonstrate safety and efficacy in humans, we will not be able to commercialize our product candidates.

To obtain the requisite regulatory approvals to market and sell any of our product candidates, we must demonstrate, through extensive preclinical studies and clinical trials, that the product candidate is safe and effective in humans. To date, we have not completed the clinical trials of any product candidate. Preclinical and clinical testing is expensive, can take many years and has an uncertain outcome. A failure of one or more of our clinical trials could occur at any stage of testing. In addition, success in preclinical testing and early clinical trials does not ensure that later clinical trials will be successful, and interim results of a clinical trial do not necessarily predict final results. We may experience numerous unforeseen events during, or as a result of, preclinical testing and the clinical trial process, which could delay or prevent our ability to commercialize our product candidates, including:

- regulators or institutional review boards may not authorize us to commence a clinical trial at a prospective trial site;
- our preclinical studies or clinical trials may produce negative or inconclusive results, which may require us to conduct additional preclinical or clinical testing or to abandon development projects;
- we may suspend or terminate our clinical trials if the participating patients are being exposed to unacceptable health risks;
- regulators or institutional review boards may suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements;
- the effects of our product candidates may not be the desired effects or may include undesirable side effects; and
- our preclinical studies or clinical trials may show that our product candidates are not superior to the original drugs on which our product candidates are modeled.

For instance, our preclinical studies and clinical trials may indicate that our product candidates cause unexpected drug-drug interactions and result in adverse events. As another example, more

extensive and robust clinical trials of ATI-5923 will be necessary in order to demonstrate clinical superiority to warfarin. Even if we adequately demonstrate that ATI-5923 is safe and effective and obtain FDA approval, we may not be permitted to market it as superior to warfarin. In addition, ATI-2042's preclinical studies contain results that are currently being monitored in the clinic. Inhibition of testicular function was observed in one animal species as part of these studies. No such effect has been observed to date in the clinic and monitoring continues. In published studies, a similar effect is thought to be correlated with the accumulation of amiodarone in tissues. A possible renal effect was also observed at high doses in our rat and dog toxicology studies for ATI-2042. While we will continue to monitor patients for these effects, there is no assurance these effects will not occur in patients as part of our ongoing and planned clinical trials for ATI-2042, and have a resulting adverse effect on our ability to obtain requisite regulatory approval to market and sell ATI-2042. In a canine toxicology study of ATI-7505 performed by P&G, six deaths occurred at doses that were 10 and 20 times greater than doses currently being used in clinical trials. Our clinical trials to date have indicated only mild to moderate side effects in humans. However, further observation is warranted.

Even when our product candidates do not cause any adverse effects, clinical studies of efficacy may show that our product candidates do not have significant effects on target symptoms or may be inconclusive. For example, ATI-7505 was tested in two Phase 2 clinical trials in which the primary endpoints were not met in comparison to placebo. Although these studies did support ATI-7505's efficacy against certain symptoms as secondary endpoints, if future studies show that ATI-7505 is not sufficiently efficacious to justify its use as a therapy, our business and prospects will be materially adversely affected.

Unforeseen events could cause us to experience significant delays in, or the termination of, clinical trials. Any such events would increase our costs and could delay or prevent our ability to commercialize our product candidates, which would adversely impact our financial results.

We may not be successful in our efforts to identify or discover additional candidates using our RetroMetabolic Drug Design Technology.

An important element of our strategy is to continue to identify existing molecules which have demonstrated efficacy, but have safety problems that are amenable to our RetroMetabolic Drug Design technology. Other than ATI-7505, ATI-2042 and ATI-5923, all of our programs are in the preclinical or discovery stage. Research programs to identify new product candidates require substantial technical, financial and human resources. These programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development for a number of reasons, including:

- the research methodology used may not be successful in identifying potential product candidates; or
- potential product candidates may, on further study, be found not to retain the efficacy profile of the original molecule or be shown to retain harmful side effects or other characteristics suggesting that they are unlikely to be effective products. For instance, at high doses our ATI-2042 product candidate interacts with warfarin and causes prolonged INR which could increase the risk of hemorrhage complications.

If we are unable to develop suitable product candidates through internal research programs or otherwise, we may not be able to increase our revenues in future periods, which could result in significant harm to our financial position and adversely impact our stock price.

Our product candidates will remain subject to ongoing regulatory review even if they receive marketing approval. If we fail to comply with continuing regulations, we could lose these approvals and the sale of our products could be suspended.

Even if we receive regulatory approval to market a particular product candidate, the approval could be conditioned on our conducting additional costly post-approval studies or could limit the indicated uses included in our labeling. Moreover, the product may later cause adverse effects that limit or prevent its widespread use, force us to withdraw it from the market or impede or delay our ability to obtain regulatory approvals in additional countries. In addition, the manufacturer of the product and its facilities will continue to be subject to FDA review and periodic inspections to ensure adherence to applicable GMPA regulations. After receiving marketing approval, the manufacturing, labeling, packaging, adverse event reporting, storage, advertising, promotion and record keeping related to the product will remain subject to extensive regulatory requirements.

If we fail to comply with the regulatory requirements of the FDA and other applicable U.S. and foreign regulatory authorities or previously unknown problems with our products, manufacturers or manufacturing processes are discovered, we could be subject to administrative or judicially imposed sanctions, including:

- restrictions on the products, manufacturers or manufacturing processes;
- warning letters;
- civil or criminal penalties or fines;
- injunctions;
- product seizures, detentions or import bans;
- voluntary or mandatory product recalls and 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 drugs or supplements to approved applications.

Because we have a number of product candidates and are considering a variety of target indications, we may expend our limited resources to pursue a particular candidate or indication and fail to capitalize on candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we must focus on research programs and product candidates for the specific opportunities that we believe are the most amenable to our RetroMetabolic Drug Design and are the most commercially promising. As a result, we may forego or delay pursuit of opportunities with other product candidates or other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. In addition, we may spend valuable time and managerial and financial resources on research programs and product candidates for specific indications that ultimately do not yield any commercially viable products. If we do not accurately evaluate the technical feasibility and the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in situations where it would have been more advantageous for us to retain sole rights to development and commercialization.

The commercial success of any products that we may develop will depend upon the degree of market acceptance among physicians, patients, healthcare payors and the medical community.

Any products that we may develop may not gain market acceptance among physicians, patients, healthcare payors and the medical community. If these products do not achieve an adequate level of acceptance, we may not generate material product revenues and we may not become profitable. The degree of market acceptance of any of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- demonstration of efficacy and safety in clinical trials;
- demonstration that we have adequately addressed the specific safety problem of the original molecule;
- the prevalence and severity of any side effects;
- potential or perceived advantages over alternative treatments;
- perceptions about the relationship or similarity between our product candidates and the original drug upon which each RetroMetabolic Drug Design candidate was based;
- advantage over other drugs may not be sufficiently great enough to obtain premium pricing;
- the timing of market entry relative to competitive treatments;
- the ability to offer our product candidates for sale at competitive prices;
- relative convenience and ease of administration;
- the strength of marketing and distribution support;
- sufficient third-party coverage or reimbursement; and
- the product labeling or product insert required by the FDA or regulatory authorities in other countries.

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 do not have a sales and marketing organization and have no experience in the sales, marketing and distribution of pharmaceutical products. It is our intention to use collaborative arrangements to gain access to large sales and marketing organizations in order to commercialize our product candidates. By exercising our co-promotion rights under our agreement with P&G, we intend to eventually build a small specialty sales force to market our product candidates to specific physician groups. There are risks involved with establishing our own sales and marketing capabilities and entering into arrangements with third parties to perform these services. Developing an internal sales force is expensive and time-consuming and could delay any product launch. Importantly, our co-promotion agreement with P&G only provides for a partial reimbursement of the cost of our sales force and only for the cost of sales actually made. The cost to establish the sales force will not be reimbursed by P&G. The sales force only has the potential to become a profitable effort if additional products are obtained that could be marketed by this specialty sales force. However, there is no assurance that future products will be obtained through internal or external efforts. On the other hand, if we enter into arrangements with third parties to perform sales, marketing and distribution services, our product revenues are likely to be lower than if we market and sell any products that we develop ourselves.

We plan to establish our own specialty sales force and engage pharmaceutical or other healthcare companies with an existing sales and marketing organization and distribution system to sell, market and distribute our products. We may not be able to establish these sales and distribution relationships on

acceptable terms, or at all. Factors that may inhibit our efforts to commercialize our products without collaborators or licensees include:

- our inability to convince future corporate partners to allow us to retain commercialization rights for specific physician groups;
- our inability to obtain financing to establish the specialty sales force;
- our inability to recruit and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to or persuade adequate numbers of physicians to prescribe our products;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

Because the establishment of sales and marketing capabilities depends on the progress toward commercialization of our product candidates and because of the numerous risks and uncertainties involved with establishing our own sales and marketing capabilities, we are unable to predict when we will establish our own sales and marketing capabilities. If we are not able to partner with a third party and are not successful in recruiting sales and marketing personnel or in building a sales and marketing infrastructure, we will have difficulty commercializing our product candidates, which would adversely affect our business and financial condition.

Our ability to generate revenue from any products that we may develop will depend on reimbursement and drug pricing policies and regulations.

Many patients may be unable to pay for any products that we may develop. In the United States, many patients will rely on Medicare, Medicaid, private health insurers and other third-party payors to pay for their medical needs. Our ability to achieve acceptable levels of reimbursement for drug treatments by governmental authorities, private health insurers and other organizations will have an effect on our ability to successfully commercialize, and attract collaborative partners to invest in the development of, our product candidates. We cannot be sure that reimbursement in the United States, Europe or elsewhere will be available for any products that we may develop, and any reimbursement that may become available may be decreased or eliminated in the future. Third-party payors increasingly are challenging prices charged for medical products and services, and many third-party payors may refuse to provide reimbursement for particular drugs when an equivalent generic drug is available. Although we believe that the safety profile of any products that we may develop will be sufficiently different from the original drugs from which they are modeled to be considered unique and not subject to substitution by a generic of the original drug in the case of ATI-2042 and ATI-5923, it is possible that a third-party payor may consider our product candidate and the generic original drug as equivalents and only offer to reimburse patients for the generic drug. Even if we show improved safety with our product candidates, pricing of the existing original drug may limit the amount we will be able to charge for each of our product candidates. In the case of ATI-7505, the original molecule, cisapride, was withdrawn from the market and no generic version exists, but there are many competitive products which may limit the amount we can charge for this product candidate. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize our product candidates, and may not be able to obtain a satisfactory financial return on products that we may develop.

The trend toward managed healthcare in the United States and the changes in health insurance programs, as well as legislative proposals to reform healthcare or reduce government insurance programs, may result in lower prices for pharmaceutical products, including any products that may be offered by us. In addition, any future regulatory changes regarding the healthcare industry or third-party coverage and reimbursement may affect demand for any products that we may develop and could harm our sales and profitability.

If our competitors are able to develop and market products that are more effective, safer or less costly than any products that we may develop, our commercial opportunity will be reduced or eliminated.

We face competition from established pharmaceutical and biotechnology companies, as well as from academic institutions, government agencies and private and public research institutions. Our commercial opportunity will be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer side effects or are less expensive than any products that we may develop. In addition, significant delays in the development of our product candidates could allow our competitors to bring products to market before us and impair our ability to commercialize our product candidates.

ATI-7505 has potential use in five indications: chronic constipation, functional dyspepsia, GERD, gastroparesis and IBS with constipation. Some of these indications may not be recognized by the FDA as sufficiently defined to enable regulatory approval of a drug for treatment. ATI-7505 is a prokinetic which has been shown to increase motility in the upper and lower gastrointestinal tract, including the ability to improve gastric emptying and colonic motility. Products which affect the gastrointestinal system's motility could be useful in the treatment of each of these disorders. Other prokinetics are on the market or in development which will also be competitive to ATI-7505, including tegaserod, marketed by Novartis Pharmaceuticals Corporation as Zelnorm, which was temporarily withdrawn from the market and recently re-introduced with restrictive use labeling, renzapride, being developed by Alizyme plc, TD-5108 being developed by Theravance, and erythromycin. Many additional prokinetics are in development targeting these indications. We believe the most significant competition to ATI-7505 for the treatment of GERD are proton pump inhibitors and H2 blockers, which are currently on the market in both prescription formulations and strengths as well as in over-the-counter forms. Many major pharmaceutical companies currently market proton pump inhibitors and H2 blockers generating worldwide sales of over $17.0 billion in 2006. ATI-7505 is targeted at the approximately 20-25% of GERD patients who do not receive adequate relief from proton pump inhibitors, which reduce the creation of acid in the stomach. ATI-7505 will face competition from the prokinetics as well as many inexpensive over-the-counter indications for the treatment of these gastrointestinal disorders.

Competition for ATI-5923 for use as an oral anticoagulant will continue to come from generic coumadin owing to its pricing and the years of experience physicians and patients have with the drug. Other oral anticoagulants are in development throughout the pharmaceutical and biotechnology industry. Most of these development programs fall into either the factor Xa or direct thrombin inhibitor categories. We are aware that Johnson & Johnson in collaboration with Bayer AG, Bristol-Myers Squibb Company in collaboration with Pfizer, Inc., Eli Lilly and Company and Portola Pharmaceuticals, Inc. each have factor Xa programs in Phase 2 or Phase 3 testing. We are aware of a direct thrombin inhibitor program at Boehringer-Ingelheim GmbH. The first direct thrombin inhibitor presented to the FDA for approval, ximelagatran, previously marketed as Exanta by AstraZeneca plc, has not been recommended for approval due to idiosyncratic liver toxicity problems. Although we believe ATI-5923's mechanism of action (VKOR inhibition as with warfarin) and broadly available inexpensive monitoring methodology (INR) provide an advantage, these factor Xa and direct thrombin inhibitor programs will likely provide major competition in this market. In addition, there may be other compounds of which we are not aware that are at an earlier stage of development and may compete with our product candidates. If any of those compounds are successfully developed and approved, they could compete directly with our product candidates.

We believe generic amiodarone will continue to provide competition to ATI-2042 for the treatment of atrial fibrillation, even though it is not labeled for use in atrial fibrillation. Amiodarone will continue to be used off-label in spite of its safety problems because of its generic pricing. Other treatments for atrial fibrillation, such as sotalol, marketed by Bayer HealthCare Pharmaceuticals, Inc., flecainide marketed by 3M Company and propafenone, marketed by Reliant Pharmaceuticals, Inc., do not have equivalent efficacy to amiodarone, but will continue to compete in the atrial fibrillation marketplace. Cardiome Pharma Corp. is in Phase 2 testing with an oral product, vernakalant, for the treatment of atrial fibrillation which they hope will have efficacy equal to or better than flecainide or sotalol, but with reduced pro-arrhythmic effects. There are other companies developing devices or procedures to treat atrial fibrillation through ablation, including CryoCor, Inc. and CryoCath Technologies, Inc.

Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Established pharmaceutical companies may invest heavily to quickly discover and develop novel compounds that could make our product candidates obsolete. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. In addition, these third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies and technology licenses complementary to our programs or advantageous to our business. Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA approval or discovering, developing and commercializing medicines before we do. We are also aware of other companies that may currently be engaged in the discovery of medicines that will compete with the product candidates that we are developing. In addition, in the markets that we are targeting, we expect to compete against current market-leading medicines. If we are not able to compete effectively against our current and future competitors, our business will not grow and our financial condition will suffer.

If we fail to attract and keep senior management and key scientific personnel, we may be unable to successfully develop or commercialize our product candidates.

Our success depends on our continued ability to attract, retain and motivate highly qualified management, clinical and scientific personnel and on our ability to develop and maintain important relationships with leading clinicians. If we are not able to retain Dr. Goddard, our Chairman and Chief Executive Officer, Dr. Milner, our President, Research and Development, Dr. Canafax, our Vice President and Chief Development Officer, and Dr. Druzgala, our Vice President and Chief Scientific Officer, we may not be able to successfully develop or commercialize our product candidates. Competition for experienced scientists may limit our ability to hire and retain highly qualified personnel on acceptable terms. In addition, none of our employees have employment commitments for any fixed period of time and could leave our employment at will. We carry "key person" insurance in the amount of $1 million for each of Drs. Milner and Druzgala, but do not carry "key person" insurance covering any other members of senior management or key scientific personnel. If we fail to identify, attract and retain qualified personnel, we may be unable to continue our development and commercialization activities.

We will need to hire additional employees in order to commercialize our product candidates. Any inability to manage future growth could harm our ability to commercialize our product candidates, increase our costs and adversely impact our ability to compete effectively.

In order to commercialize our product candidates, we will need to expand the number of our managerial, operational, financial and other employees. We currently anticipate that we will need between 164 and 204 additional employees by the time that ATI-7505 is initially commercialized, which includes 80 to 120 sales representatives in the United States. Because the projected time frame for hiring these additional employees depends on the development status of our product candidates and

because of the numerous risks and uncertainties associated with drug development, we are unable to project when we will hire these additional employees. While to date we have not experienced difficulties in recruiting, hiring and retaining qualified individuals, the competition for qualified personnel in the pharmaceutical and biotechnology field is intense.

Future growth will impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate additional employees. Our future financial performance and our ability to commercialize our product candidates and compete effectively will depend, in part, on our ability to manage any future growth effectively.

If product liability lawsuits are brought against us, we will incur substantial liabilities and may be required to limit commercialization of any products that we may develop.

We face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face an even greater risk if we commercially sell any products that we may develop. If we cannot successfully defend ourselves against claims that our product candidates or products that we may develop caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we may develop;
- injury to our reputation;
- withdrawal of clinical trial participants;
- costs to defend the related litigation;
- substantial monetary awards to clinical trial participants or patients;
- loss of revenue; and
- the inability to commercialize any products that we may develop.

We have product liability insurance that covers our clinical trials up to an aggregate $5.0 million annual limit. We intend to expand our insurance coverage to include the sale of commercial products if marketing approval is obtained for any products that we may develop. Insurance coverage is increasingly expensive, and we may not be able to maintain insurance coverage at a reasonable cost and we may not be able to obtain insurance coverage that will be adequate to satisfy any liability that may arise.

If we use biological and hazardous materials in a manner that causes contamination, injury or violates laws, we may be liable for damages.

Our research and development activities involve the use of potentially harmful biological materials as well as hazardous materials, chemicals and various radioactive compounds. We cannot completely eliminate the risk of accidental contamination or injury from the use, storage, handling or disposal of these materials. In the event of contamination or injury, we could be held liable for damages that result, and any liability could exceed our resources. We, the third parties that conduct clinical trials on our behalf and the third parties that manufacture our product candidates are subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and waste products. The cost of compliance with these laws and regulations could be significant. The failure to comply with these laws and regulations could result in significant fines and work stoppages and may harm our business.

Our principal facility is located in California's Silicon Valley, in an area with a long history of industrial activity and use of hazardous substances, including chlorinated solvents. Certain environmental laws, including the U.S. Comprehensive, Environmental Response, Compensation and Liability Act of 1980, impose strict, joint and several liabilities on current operators of real property for

the cost of removal or remediation of hazardous substances. These laws often impose liability even if the owner or operator did not know of, or was not responsible for, the release of such hazardous substances. As a result, while we have not been notified of any claim against us, we are not aware of any such release, nor have we been held liable for costs to address contamination at the property beneath our facility in the past, we cannot rule out the possibility that this may occur in the future. We do not carry specific insurance against such a claim.

We will need to implement additional finance and accounting systems, procedures and controls in the future as we grow our business and organization and to satisfy new reporting requirements.

As a public reporting company, we need to comply with the Sarbanes-Oxley Act of 2002 and the related rules and regulations of the Securities and Exchange Commission, including expanded disclosures and accelerated reporting requirements and more complex accounting rules. Compliance with Section 404 of the Sarbanes-Oxley Act of 2002 and other requirements will increase our costs and require additional management resources. We are continuing to upgrade our finance and accounting systems, procedures and controls and will need to continue to implement additional finance and accounting systems, procedures and controls as we grow our business and organization and to satisfy new reporting requirements. Compliance with Section 404 will first apply to our annual report on Form 10-K for our fiscal year ending December 31, 2008. If we are unable to complete the required assessment as to the adequacy of our internal control over financial reporting or if our independent registered public accounting firm is unable to provide us with an unqualified report as to the effectiveness of our internal controls over financial reporting as of December 31, 2008, investors could lose confidence in the reliability of our internal controls over financial reporting, which could adversely affect our stock price and our ability to raise capital.

Our principal facility is located near known earthquake fault zones, and the occurrence of an earthquake, extremist attack or other catastrophic disaster could cause damage to our facilities and equipment, which could require us to cease or curtail operations.

Our principal facility is located in California's Silicon Valley near known earthquake fault zones and, therefore, is vulnerable to damage from earthquakes. In October 1989, a major earthquake struck this area and caused significant property damage and a number of fatalities. We are also vulnerable to damage from other types of disasters, including power loss, attacks from extremist organizations, fire, floods and similar events. If any disaster were to occur, our ability to operate our business could be seriously impaired. In addition, the unique nature of our research activities and of much of our equipment could make it difficult for us to recover from this type of disaster. We currently may not have adequate insurance to cover our losses resulting from disasters or other similar significant business interruptions, and we do not currently plan to purchase additional insurance to cover such losses because of the cost of obtaining such coverage. Any significant losses that are not recoverable under our insurance policies could seriously impair our business and financial condition. Our current insurance does not specifically cover property loss or business interruption due to earthquake damage.

Risks Relating to Ownership of Our Common Stock

Our stock price may be extremely volatile, and your investment in our common stock could suffer a decline in value.

You should consider an investment in our common stock risky and invest only if you can withstand a significant loss and wide fluctuations in the market value of your investment. Investors who purchase our common stock may not be able to sell their shares at or above the purchase price. Security market prices for securities of biopharmaceutical companies have been highly volatile. In addition, the volatility of biopharmaceutical company stocks often does not correlate to the operating performance of the

companies represented by such stocks. Some of the factors that may cause the market price of our common stock to fluctuate include:

- adverse results or delays in our clinical trials;
- the timing of achievement of our clinical, regulatory, partnering and other milestones, such as the commencement of clinical development, the completion of a clinical trial, the receipt of regulatory approval or the establishment of a commercial partnership for one or more of our product candidates;
- announcement of FDA approval or nonapproval of our product candidates or delays in the FDA review process;
- actions taken by regulatory agencies with respect to our product candidates, our clinical trials or our sales and marketing activities;
- the commercial success of any product approved by the FDA or its foreign counterparts;
- regulatory developments in the United States and foreign countries;
- changes in the structure of healthcare payment systems;
- any intellectual property infringement lawsuit involving us;
- announcements of technological innovations or new products by us or our competitors;
- market conditions for the biotechnology or pharmaceutical industries in general;
- changes in financial estimates or recommendations by securities analysts;
- sales of large blocks of our common stock;
- sales of our common stock by our executive officers, directors and significant stockholders;
- restatements of our financial results and/or material weaknesses in our internal controls; and
- the loss of any of our key scientific or management personnel.

The stock markets in general, and the markets for biotechnology stocks in particular, have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the trading price of our common stock. In the past, class action litigation has often been instituted against companies whose securities have experienced periods of volatility in market price. Any such litigation brought against us could result in substantial costs, which would hurt our financial condition and results of operations, divert management's attention and resources, and possibly delay our clinical trials or commercialization efforts.

Fluctuations in our operating results could cause our stock price to decline.

The following factors are likely to result in fluctuations of our operating results from quarter to quarter and year to year:

- adverse results or delays in our clinical trials;
- the timing and achievement of our clinical, regulatory, partnering and other milestones, such as the commencement of clinical development, the completion of a clinical trial, the receipt of regulatory approval or the establishment of a commercial partnership for one or more of our product candidates;
- announcement of FDA approval or nonapproval of our product candidates or delays in the FDA review process;

- actions taken by regulatory agencies with respect to our product candidates, our clinical trials or our sales and marketing activities;
- the commercial success of any product approved by the FDA or its foreign counterparts;
- regulatory developments in the United States and foreign countries;
- changes in the structure of healthcare payment systems;
- any intellectual property infringement lawsuit involving us; and
- announcements of technological innovations or new products by us or our competitors.

Because of these potential fluctuations in our operating results, a period-to-period comparison of our results of operations may not be a good indication of our future performance. In any particular financial period the actual or anticipated fluctuations could be below the expectations of securities analysts or investors and our stock price could decline.

Because a small number of existing stockholders own a large percentage of our voting stock, they may be able to control our management and operations, acting in their best interests and not necessarily those of other stockholders.

Based on our outstanding shares as of December 31, 2007, our executive officers, directors and holders of 5.0% or more of our outstanding common stock beneficially own approximately 46.3% of our common stock. As a result, these stockholders, acting together, will be able to control all matters requiring approval by our stockholders, including the election of directors and the approval of mergers or other business combination transactions. The interests of this group of stockholders may not always coincide with our interests or the interests of other stockholders.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our certificate of incorporation and our bylaws may delay or prevent an acquisition of us, a change in our management or other changes that stockholders may consider favorable. These provisions include:

- a classified board of directors;
- a prohibition on actions by our stockholders by written consent;
- the ability of our board of directors to issue preferred stock without stockholder approval, which could be used to adopt a stockholders' rights plan that would make it difficult for a third party to acquire us;
- notice requirements for nominations for election to the board of directors; and
- limitations on the removal of directors.

Moreover, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Future sales of our common stock in the public market could cause our stock price to drop substantially.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities.

As of December 31, 2007, we had 17,653,648 shares of common stock outstanding. The five million shares of common stock sold in our initial public offering are freely tradable without restriction in the public market unless held by an affiliate of ours. Any common stock purchased by affiliates in the initial public offering are subject to the lock-up agreements relating to our initial public offering. Morgan Stanley & Co. Incorporated, as representative of the underwriters for our initial public offering, may, in its sole discretion, permit our officers, directors, employees and current stockholders who are subject to the 180-day contractual lock-up to sell shares prior to the expiration of the lock-up agreements. The 180-day restricted period under the lock-up agreements may be extended under specified circumstances. In addition, the shares that are either subject to outstanding options or warrants or reserved for future issuance under our 2001 Equity Incentive Plan, 2007 Equity Incentive Plan, 2007 Non-Employee Directors' Stock Option Plan and 2007 Employee Stock Purchase Plan could become eligible for sale in the public market to the extent permitted by the provisions of various vesting agreements, the lock-up agreements and Rules 144 and 701 under the Securities Act. If these additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

As of December 31, 2007, the holders of approximately 11,415,130 shares of common stock based on shares outstanding, including 147,981 shares underlying outstanding warrants, will be entitled to rights with respect to registration of such shares under the Securities Act of 1933, as amended. If such holders, by exercising their registration rights, cause a large number of securities to be registered and sold in the public market, these sales could have an adverse effect on the market price for our common stock. If we were to initiate a registration and include shares held by these holders pursuant to the exercise of their registration rights, these sales may impair our ability to raise capital. In addition, we filed a registration statement on Form S-8 under the Securities Act of 1933, as amended, to register up to 2,638,845 shares of our common stock for issuance under our stock option and employee stock purchase plans, and intend to file additional registration statements on Form S-8 to register the shares automatically added each year to the share reserves under these plans.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We lease approximately 44,000 square feet of office and laboratory space in one building in Fremont, California, where we conduct our operations. The lease expires in March 2013. We have the option to extend the lease for an additional term of five years. The 2007 annual base rental amount under this lease was $867,000, subject to periodic increases over the remaining lease term. While we believe that our Fremont facilities will be adequate for the foreseeable future, we may require additional space as our business expands.

Item 3. Legal Proceedings

From time to time we are involved in legal proceedings arising in the ordinary course of our business. We believe there is no litigation pending that could have, individually or in the aggregate, a material adverse effect on our results of operations or financial condition.

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

In October 2007, we submitted the following matters to our stockholders for their approval by written consent in connection with our initial public offering. On October 22, 2007, our stockholders approved each of these matters, as set forth below. We did not receive written consents from every stockholder. As of the record date for taking such action, we had 12,649,780 shares of our common

stock outstanding (on an as-if-converted to common stock basis and after giving effect to the one-for-six reverse split of our common stock and preferred stock effected on October 22, 2007). Based on the results of the voting, the following actions were approved:

1. The approval of the amendment and restatement of our certificate of incorporation to effect a 1-for-6 reverse stock split of our capital stock (including all outstanding warrants and options exercisable for shares of our capital stock);
2. The consent to the conversion of all shares of our preferred stock into shares of our common stock immediately upon the closing of our initial public offering;
3. The approval of the amendment and restatement of our certificate of incorporation that became effective upon the completion of our initial public offering to, among other things, provide for certain stockholder protection measures and other provisions that are appropriate for a public company;
4. The approval and adoption of our 2007 Equity Incentive Plan, 2007 Employee Stock Purchase Plan and 2007 Non-Employee Directors Stock Option Plan; and
5. The approval of the credit financing arrangement with Lighthouse Capital Partners V, L.P.

The results of the voting from stockholders that returned written consents for the actions listed above were 9,204,416 shares for and none against.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market For Our Common Stock

Our common stock has been traded on the NASDAQ Global Market under the symbol "ARYX" since November 7, 2007. The following table sets forth, for the periods indicated, the range of high and low closing sales prices of our common stock as quoted on the NASDAQ Global Market for the period since our initial public offering on November 7, 2007.

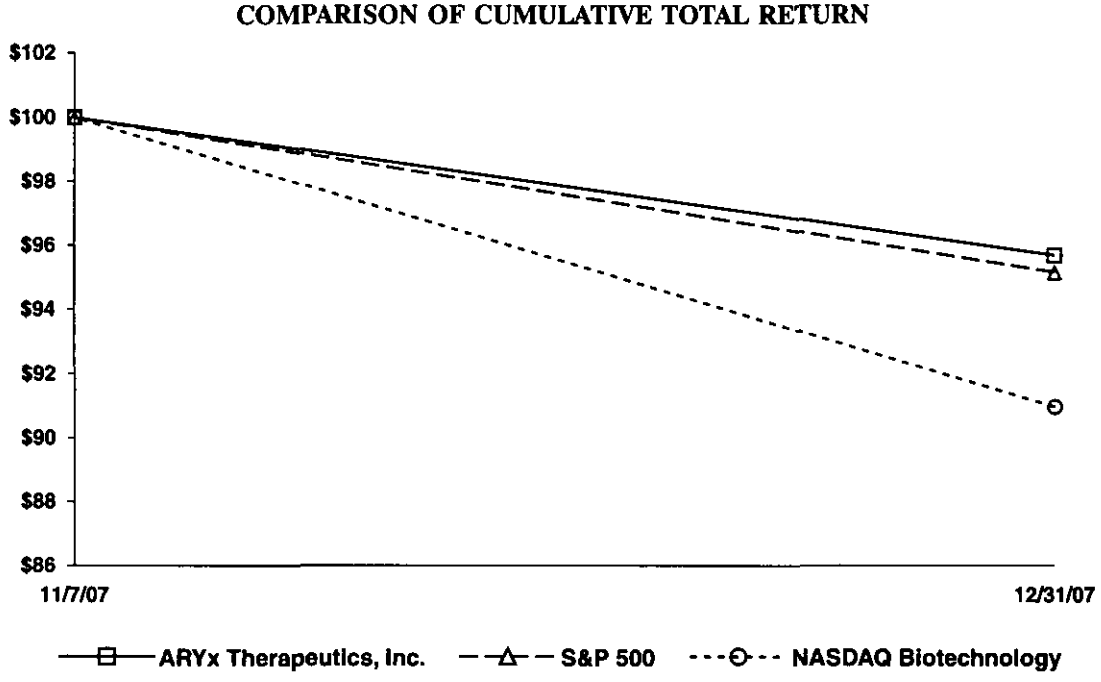
	High	Low
Calendar Quarter—2007		
First Quarter	N/A	N/A
Second Quarter	N/A	N/A
Third Quarter	N/A	N/A
Fourth Quarter (from November 7, 2007)	$9.00	$7.50

There were approximately 143 holders of record of our common stock as of February 29, 2008. In addition, we believe that a significant number of beneficial owners of our common stock hold their shares in street name.

The closing price for our common stock as reported by the NASDAQ Global Market on February 29, 2008 was $8.41 per share.

Performance Graph

Below is a graph showing the cumulative total return to our stockholders during the period from November 7, 2007 (date of our initial public offering) through December 31, 2007 in comparison to the cumulative return on the Standard & Poor's 500 Index and the NASDAQ Biotechnology Index. The results assume that $100 was invested on November 7, 2007.



Company / Index	Based Period November 7, 2007	Year Ended December 31, 2007
ARYx Therapeutics, Inc.	$100	$95.68
S&P 500 Index	100	95.15
NASDAQ Biotechnology Index	100	90.96

(1) The total return on investment assumes $100 invested on November 7, 2007 in our Common Stock, the Standard & Poor's 500 Index and the NASDAQ Biotechnology Index.

The information under "Performance Graph" is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference in any filing of ARYx Therapeutics, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this 10-K and irrespective of any general incorporation language in those filings.

Dividend Policy

We have never declared or paid cash dividends on any of our shares of capital stock. We currently intend to retain future earnings, if any, to finance the expansion and growth of our business, and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements and other factors that our board of directors deems relevant. In addition, we are prohibited from paying dividends, other than dividends payable solely in common stock, by covenants contained in our loan agreements with Lighthouse Capital Partners V, L.P. and General Electric Commercial Finance.

Recent Sales of Unregistered Securities

The following sets forth information regarding all unregistered securities sold by us during 2007 (with share amounts adjusted to give effect to a one-for-six reverse stock split effected in connection with our initial public offering):

1. We granted options to our employees for the purchase of an aggregate of 464,150 shares of our common stock at an average exercise price of $3.36 per share, pursuant to our 2001 Equity Incentive Plan. During this period, stock options to purchase an aggregate of 55,811 shares of our common stock were cancelled without being exercised and 136,830 shares of our common stock were issued upon exercise of outstanding stock options at an average exercise price of $1.54 per share. The stock options granted during this period pursuant to our 2001 Equity Incentive Plan generally vest over four years from the date of grant, subject to the optionee's continuous service with us.
2. In February 2007, we granted a stock award pursuant to our 2001 Equity Incentive Plan for 18,333 shares of common stock to one of our executive officers for aggregate deemed consideration of $60,500.
3. In June 2007, we issued 1,055 shares of our common stock to one accredited investor pursuant to the cashless exercise of an outstanding warrant.
4. In October 2007, we issued a warrant to purchase up to 41,666 shares of our common stock to one accredited investor with an exercise price of $10.80 per share.
5. In October 2007, we issued 1,927 shares of our common stock to one accredited investor pursuant to the cashless exercise of an outstanding warrant.

The offers, sales and issuances of the securities described in Items 5(1) and 5(2) were deemed to be exempt from registration under the Securities Act in reliance on either (i) Rule 701 promulgated under the Securities Act as offers and sale of securities pursuant to certain compensatory benefit plans and contracts relating to compensation in compliance with Rule 701 or (ii) Section 4(2) of the Securities Act as transactions by an issuer not involving any public offering. The recipients of securities in each of these transactions represented their intention to acquire the securities for investment only and not with view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the share certificates and instruments issued in such transactions. All recipients had adequate access, through their employment, business or other relationships, to information about us.

The offers, sales, and issuances of the securities described in Items 5(3) through 5(5) were deemed to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act and/or Regulation D promulgated thereunder as transactions by an issuer not involving a public offering. The recipients of securities in each of these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions was an accredited or sophisticated person and had adequate access, through their employment, business or other relationships, to information about us.

Use of Proceeds from the Sale of Registered Securities

On November 7, 2007, our registration statement on Form S-1/A (File No. 333-145813) was declared effective by the U.S. Securities and Exchange Commission for our initial public offering. We registered 5,000,000 shares of our common stock for an aggregate offering price of $50.0 million, all of which were sold at $10.00 per share. Of this amount, $3.5 million was paid in underwriters' discounts and an additional $2.7 million of other expenses were incurred, all of which was incurred during the year ended December 31, 2007. Entities affiliated with MPM Capital and OrbiMed Advisors, LLC, two of our principal stockholders, purchased an aggregate of 600,000 shares of common stock in our initial public offering at the offering price of $10.00 per share. The underwriters of the offering were Morgan Stanley & Co. Incorporated, CIBC World Markets Corp., Jefferies and Company, Inc. and Leerink Swann LLC. No offering expenses were paid directly or indirectly to our directors, officers or their associates, or to persons owning 10% or more of any of our equity securities.

As of December 31, 2007, we have used none of the net proceeds from our initial public offering. We intend to use the net proceeds to fund our (i) research and development activities other than external clinical trial expenses; (ii) external clinical trial activities, including funding manufacturing expenses related to the clinical development of our product candidates; and (iii) general and administrative expenses, working capital needs and other general corporate purposes. We may also use a portion of the proceeds for the potential acquisition of, or investment in, technologies, products or companies that complement our business, although we have no current understandings, commitments or agreements to do so. The amounts and timing of our actual expenditures will depend upon numerous factors, including the status of our development and commercialization efforts, the amount of cash generated through our existing strategic collaborations and any additional strategic collaboration into which we may enter. Accordingly, our management will have significant flexibility in applying the net proceeds of our initial public offering and continually assess the specific uses and allocations for these funds. However, we do not expect our existing capital resources and the net proceeds from our initial public offering to be sufficient to enable us to fund the completion of the development of any of our product candidates without a future raise of additional capital. Until the net proceeds of our initial public offering are used, we have invested the funds in interest-bearing, investment grade, short-term marketable securities.

Item 6. Selected Financial Data

The following selected financial data should be read together with our audited financial statements and accompanying notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" section and other financial information included in this Annual Report on Form 10-K. The selected financial data in this section is not intended to replace our audited financial statements and the accompanying notes. Our historical results are not necessarily indicative of our future results.

	Year Ended December 31,				
	2007	2006	2005	2004	2003
	(in thousands, except per share amounts)				
Consolidated Statement of Operations Data:					
Revenue:					
Collaboration services	$ 262	$ 2,116	$ —	$ —	$ —
Technology license fees	3,896	1,623	—	—	—
Contractual milestone payments	—	1,000	—	—	—
Total revenue	4,158	4,739	—	—	—
Costs and expenses:					
Cost of collaboration service revenue	262	2,116	—	—	—
Research and development	24,994	23,973	22,498	16,725	10,684
Selling, general and administrative	7,702	6,938	5671	4,608	3,379
Total costs and expenses	32,958	33,027	28,169	21,333	14,063
Loss from operations	(28,800)	(28,288)	(28,169)	(21,333)	(14,063)
Interest and other income	2,591	2,294	876	542	155
Interest expense	(1,352)	(1,324)	(671)	(36)	(58)
Loss before cumulative effect of change in accounting principle	(27,561)	(27,318)	(27,964)	(20,827)	(13,966)
Cumulative effect of change in accounting principle	—	(10)	—	—	—
Net loss	(27,561)	(27,328)	(27,964)	(20,827)	(13,966)
Basic and diluted net loss per share(1)	$ (8.24)	$ (26.84)	$ (30.73)	$ (24.28)	$ (16.67)
Weighted average shares used to compute basic and diluted net loss per share	3,346	1,018	910	858	838

(1) See Note 1 to the notes to our consolidated financial statements for an explanation of the method used to calculate basic and diluted net loss per share.

	As of December 31,				
	2007	2006	2005	2004	2003
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash, cash equivalents and marketable securities	$ 63,116	$ 50,308	$ 26,341	$ 41,395	$ 7,644
Total assets	69,625	56,764	33,312	44,195	8,847
Working capital	51,442	39,884	19,970	39,992	6,541
Deferred revenue	19,497	23,377	—	—	—
Notes payable, net of current portion	3,444	6,679	8,921	—	—
Preferred stock warrants liability	—	853	—	—	—
Convertible preferred stock	—	110,665	81,355	80,617	25,952
Total stockholders' equity (deficit)	35,347	(93,712)	(67,088)	(39,695)	(18,874)

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

The following discussion of our financial condition and the results of operations should be read in conjunction with the consolidated financial statements and notes to consolidated financial statements included elsewhere in this Annual Report on Form 10-K. This discussion contains forward looking statements that involve risks and uncertainties. When reviewing the discussion below, you should keep in mind the substantial risks and uncertainties that characterize our business. In particular, we encourage you to review the risks and uncertainties described in Part I—Item 1A. "Risk Factors" included elsewhere in this report. These risks and uncertainties could cause actual results to differ materially from those projected in forward-looking statements contained in this report or implied by past results and trends. Forward-looking statements are statements that attempt to forecast or anticipate future developments in our business; you can identify forward-looking statements by the following words: "may," "will," "could," "would," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "predict," "project," "potential," "continue," "ongoing" or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. These statements, like all statements in this report, speak only as of their date (unless another date is indicated), and we undertake no obligation to update or revise these statements in light of future developments.

Overview

ARYx is a biopharmaceutical company focused on developing a portfolio of internally discovered product candidates designed to eliminate known safety issues associated with well-established, commercially successful drugs. We use our RetroMetabolic Drug Design technology to design structurally unique molecules that retain the efficacy of these original drugs but are metabolized through a potentially safer pathway to avoid specific adverse side effects associated with these compounds. Our most advanced product candidate, ATI-7505, is based on cisapride and has successfully completed Phase 2 clinical trials for the treatment of gastroesophageal reflux disease and symptoms associated with functional dyspepsia, a condition resulting in pain or a sense of fullness due to impaired digestion. Our second product candidate, ATI-5923, is based on warfarin and recently completed a Phase 2 proof-of-concept clinical trial for use as an anticoagulant to treat patients at risk for formation of dangerous blood clots. Our third product candidate, ATI-2042, is based on amiodarone and is in Phase 2 clinical trials for the treatment of atrial fibrillation, a form of irregular heartbeat. We have multiple product candidates in preclinical development. Each of our product candidates is an orally available, patentable new chemical entity designed to address similar indications as those of the original drug upon which it is based. Our product candidates target what we believe to be multi-billion dollar markets. We have entered into a worldwide collaboration with Procter & Gamble Pharmaceuticals, Inc. ("P&G"), for the development and commercialization of ATI-7505 and we hold all worldwide commercial rights to our other product candidates.

Since our inception, we have incurred significant net losses, and we expect to continue to incur net losses for the next several years as we develop, acquire or in-license additional products or product candidates, conduct clinical trials, manufacture materials for use in nonclinical studies and clinical trials, expand our research and development activities, seek regulatory approvals and engage in commercialization preparation activities. It is very expensive to gain approval of and launch a pharmaceutical product, and many expenses are incurred before revenue is received. We are unable to predict the extent of any future losses or when we will become profitable, if at all.

Revenue

In connection with our collaboration agreement with P&G, we received a $25.0 million nonrefundable upfront license fee in August 2006. The $25.0 million payment was recorded in our balance sheet as deferred revenue upon receipt and recognized in our consolidated statement of operations as revenue on a straight-line basis over the performance and service period. We estimate on

an on-going basis the expected duration of the performance and service period and adjust our recognition of deferred revenue accordingly. At present, we estimate that our performance period under the agreement will continue through December 2012. As of December 31, 2007, we have recognized $5.5 million of the $25.0 million nonrefundable upfront license fee.

Under the terms of the agreement, we are obligated to provide certain transitional services to P&G. These transitional services represent the pass through of actual costs billed to ARYx by third party vendors, are standard support services for the biopharmaceutical industry and are readily available from multiple vendors. We are also entitled to compensation from P&G for specified development services provided by us. These services include product formulation and manufacturing, patent filing and maintenance, and other development services related to the ATI-7505 program. Reimbursements we receive for these services are recorded as collaboration service revenue. Pursuant to the agreement, we are under no obligation to perform any such services. As of December 31, 2007, we have recognized a cumulative total of $2.4 million as collaboration service revenue. We anticipate that revenue related to these services in the future will be minimal and will decline as we transition to P&G direct responsibility for all development costs related to our ATI-7505 product candidate.

Revenue generated from the P&G agreement is currently our only source of revenue. We are at risk of loss of anticipated future revenue if P&G terminates the agreement or is unable or unwilling to remit to us amounts that will be owed in accordance with the terms of the agreement. P&G may terminate the agreement at any time pursuant to its terms.

Cost of Collaboration Service Revenue

Related to the service revenue we generate in connection with our collaboration agreement with P&G, we incur costs for certain services provided including costs for pharmaceutical development, patent filing and maintenance and other activities related to the ATI-7505 program. These expenses are reported separately in our income statement as cost of collaboration service revenue. As of December 31, 2007, we have recorded a cumulative total of $2.4 million of expense related to these activities.

Research and Development

Our research and development expense consists of expenses incurred in identifying, testing and developing our product candidates. These expenses consist primarily of fees paid to contract research organizations and other third parties to assist us in managing, monitoring and analyzing our clinical trials, clinical trial costs paid to sites and investigators' fees, costs of nonclinical studies including toxicity studies in animals, costs of contract manufacturing services, costs of materials used in clinical trials and nonclinical studies, laboratory related expenses, research and development support costs including certain regulatory, quality assurance, project management and administration, allocated expenses such as facilities and information technology that are used to support our research and development activities and related personnel expenses, including stock-based compensation. Research and development costs are expensed as incurred.

Clinical trial costs are a significant component of our research and development expense. Currently, we conduct our clinical trials primarily through coordination with contract research organizations and other third-party service providers. We recognize research and development expense for these activities based upon a variety of factors, including actual and estimated patient enrollment, clinical site initiation activities, direct pass-through costs and other activity-based factors.

The following table summarizes our research and development expense for the years ended December 31, 2007, 2006 and 2005:

	Year Ended December 31,		
	2007	2006	2005
		(in thousands)	
Direct research and development expense by program:			
ATI-7505	$ 154	$ 7,667	$ 7,532
ATI-5923	5,439	4,216	3,687
ATI-2042	3,575	2,405	1,289
ATI-9242	2,715	671	280
Other research programs	590	447	129
Total direct research and development program expense	12,473	15,406	12,917
Personnel, administrative and other expense	12,714	10,639	9,581
Less: Research and development portion of the cost of collaboration service revenue	(193)	(2,072)	—
Total research and development expense	$24,994	$23,973	$22,498

From our inception through December 31, 2004, we incurred total research and development expense of approximately $30.9 million. During the period from our inception through December 31, 2004, we estimate that approximately $6.8 million was incurred for our ATI-7505 program, approximately $1.4 million was incurred for our ATI-5923 program and approximately $22.7 million was incurred (including internal and external activities) for our ATI-2042 and other programs that include research and development program expense, personnel, administrative and other expense.

We designate development programs to which we have allocated significant research and development resources with the term "ATI" and a unique number. All of the product candidates designated with "ATI" are currently in development. The expenditures summarized in the above table reflect costs directly attributable to each development candidate and to our other research programs. We do not allocate salaries, employee benefits, or other indirect costs to our development candidates or other research programs and have included those expenses in "Personnel, administrative and other expense" in the above table. The portion of our research and development expense that is identified as cost of collaboration service revenue is included within a separate category of expense in our consolidated financial statements and is subtracted from total expenses in the above table to derive total research and development expense as reported in our consolidated financial statements.

At this time, due to the risks inherent in the clinical trial process and given the various stages of development of our product candidates, we are unable to estimate with any certainty the costs we will incur in the continued development of our product candidates, except for ATI-7505 for which costs will be negligible due to the provisions of our collaboration agreement with P&G. Clinical development timelines, the probability of success and development costs can differ materially from expectations. While we are currently focused on advancing each of our product development programs, our future research and development expense will depend on the clinical success of each product candidate, as well as ongoing assessments as to each product candidate's commercial potential. In addition, we cannot forecast with any degree of certainty which product candidates will be subject to future collaborations, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our development plans and capital requirements.

The process of developing and obtaining FDA approval of products is costly and time consuming. Development activities and clinical trials can take years to complete, and failure can occur at any time during the development and clinical trial process. In addition, the results from early clinical trials may not be predictive of results obtained in subsequent and larger clinical trials, and product candidates in later stages of clinical trials may fail to show the desired safety and efficacy despite having progressed successfully through initial clinical testing. Although our program for identifying and developing new product candidates is designed to mitigate risk, the successful development of our product candidates is highly uncertain. Further, even if our product candidates are approved for sale, they may not be successfully commercialized and therefore the future revenue we anticipate may not materialize.

If we fail to complete the development of any of our product candidates in a timely manner, it could have a material effect on our operations, financial position and liquidity. In addition, any failure by us or our partners to obtain, or any delay in obtaining, regulatory approvals for our product candidates could have a material effect on our results of operations. A further discussion of the risks and uncertainties associated with completing our programs on schedule, or at all, and certain consequences of failing to do so are discussed further in the "Risk Factors" section of this report.

General and Administrative

Our general and administrative expense consists primarily of salaries and related costs for personnel in executive, finance, accounting, human resources, business development and other internal support functions. In addition, administrative expenses include professional fees for legal, consulting, tax, accounting and other services. We anticipate increases in our general and administrative expense as we add personnel, comply with the reporting obligations applicable to publicly-held companies, and continue to build our corporate infrastructure in support of our continued research, development and potential commercialization of our product candidates.

Interest and Other Income, Net

Interest and other income, net of other expenses, consists of interest income from our investments in marketable securities and benefits related to the reassessment of the fair value of our preferred stock warrant liability.

Interest Expense

Interest expense consists primarily of cash and non-cash interest costs related to our outstanding debt.

Income Taxes

As of December 31, 2007, we had net operating loss carryforwards for federal income tax purposes of approximately $100.4 million which expire between 2021 and 2027 if not utilized, and federal research and development tax credit carryforwards of approximately $2.6 million which expire beginning in 2018 if not utilized. The difference between our accumulated deficits of approximately $122.7 million and the net operating loss carryforwards of approximately $100.4 million for federal income tax purposes was primarily due to the $25.0 million P&G upfront license fee being recognized for tax purposes in 2006 but deferred for financial reporting purposes. In addition, we have net operating loss carryforwards for state income tax purposes of approximately $92.6 million which expire between 2013 and 2017 if not utilized, and state research and development tax credit carryforwards of approximately $2.3 million which do not expire. Section 382 of the Internal Revenue Code of 1986, as amended, provides for a limitation on the utilization of net operating losses and tax credit carryforwards in the event that there is a change in ownership as defined in this section. We concluded that we experienced such a change in ownership in June of 2002. As a result of this change in ownership, our ability to use

the net operating losses and tax credits incurred prior to the ownership change will likely be limited in future periods.

Critical Accounting Policies and Significant Judgments and Estimates

We have prepared our consolidated financial statements in accordance with U.S. generally accepted accounting principles. Accordingly, we have had to make estimates, assumptions and judgments that affect the amounts reported in our consolidated financial statements. These estimates, assumptions and judgments about future events and their effects on our results cannot be determined with certainty, and are made based upon our historical experience and on other assumptions that are believed to be reasonable under the circumstances. These estimates may change as new events occur or additional information is obtained, and we may periodically be faced with uncertainties, the outcomes of which are not within our control and may not be known for a prolonged period of time.

We have identified the policies below as critical to our business operations and the understanding of our financial condition and results of operations. A critical accounting policy is one that is both material to the presentation of our consolidated financial statements and requires us to make difficult, subjective or complex judgments and assumptions that could have a material impact on our consolidated financial statements. Different estimates that we could have used, or changes in the estimates that are reasonably likely to occur, may have a material impact on our financial condition or results of operations. We also refer you to our "Organization and Summary of Significant Accounting Policies" discussed in the accompanying notes to our consolidated financial statements included elsewhere in this report.

Revenue Recognition

We follow the revenue recognition criteria outlined in the SEC Staff Accounting Bulletin ("SAB") No. 104, *Revenue Recognition in Financial Statements*, and Emerging Issues Task Force ("EITF") Issue 00-21, *Revenue Arrangements with Multiple Deliverables*. Revenue arrangements with multiple components are divided into separate units of accounting if certain criteria are met, including whether the delivered component has stand-alone value to the customer, and whether there is objective and reliable evidence of the fair value of the undelivered items. Consideration received is allocated among the separate units of accounting based on their respective fair values. Applicable revenue recognition criteria, such as persuasive evidence an arrangement exists, transfer of technology has been completed or services have been rendered, the fee is fixed or determinable, and collectibility is reasonably assured, are then applied to each of the units. Determination of whether persuasive evidence of an arrangement exists, what the period of involvement is, whether transfer of technology has been completed or services have been rendered during the period of involvement, and the ultimate collectibility of payments is based on management's judgments. Should changes in conditions cause management to determine these criteria are not met for certain future transactions, revenue recognized for any reporting period could be adversely affected.

For each source of revenue, we comply with the above revenue recognition criteria in the following manner:

- Nonrefundable upfront license fees received with separable stand-alone values are recognized when intangible property rights are transferred, provided that the transfer of rights is not dependent upon continued efforts by us with respect to the agreement. If the transferred rights do not have stand-alone value, or if objective and reliable evidence of the fair value of the undelivered elements does not exist, the amount of revenue allocable to the transferred rights and the undelivered elements is deferred and amortized over the related involvement period in which the remaining undelivered elements are provided to our partner. With respect to our collaboration agreement with P&G, the $25.0 million nonrefundable upfront license fee was

deferred upon receipt, as objective evidence of the fair value of the undelivered elements under the agreement cannot be established, and is recognized as revenue on a straight-line basis over the estimated period of our obligatory performance under the terms of the agreement. We revisit our estimate of the expected duration of the performance period on an on-going basis and adjust our recognition of deferred revenue accordingly.

- Service revenue consists of reimbursement of services performed or costs incurred under contractual arrangements. Revenue from such services is based upon 1) negotiated rates for full time equivalent employees that are intended to approximate our anticipated costs, or 2) direct costs incurred. Certain of our costs incurred under the collaboration agreement with P&G are reimbursable, and such reimbursement of costs is recognized as revenue on a gross basis as costs are incurred in accordance with the provisions of EITF 99-19, *Reporting Revenue Gross Versus Net as an Agent*.

- Payments associated with milestones, which are contingent upon future events for which there is reasonable uncertainty as to their achievement at the time the agreement was entered into, are recognized as revenue when these milestones, as defined in the contract, are achieved and provided that no further performance obligations are required of us. Milestone payments are typically triggered either by the progress or results of clinical trials or by external events, such as regulatory approval to market a product or the achievement of specified sales levels, all of which are substantially at risk at the inception of the respective collaboration agreement. In applying this policy, we ascertain certain factors that include: 1) whether or not each milestone is individually substantive, 2) the degree of risk associated with the likelihood of achieving each milestone, 3) whether or not the payment associated with each milestone is reasonably proportional to the substantive nature of the milestone, 4) the level of effort, if any, that is anticipated or actually involved in achieving each milestone and 5) the anticipated timing of the achievement of each milestone in relation to other milestones or revenue elements. Amounts received in advance, if any, are recorded as deferred revenue until the associated milestone is reached. A $1.0 million milestone payment earned for the delivery to P&G of the final trial data related to one of our Phase 2 clinical trials for our ATI-7505 product candidate was recognized as revenue in our statement of operations for the year ended December 31, 2006.

- Royalty revenue from sales of our licensed products will be recognized when earned and collectible.

Expenses Accrued Under Contractual Arrangements with Third Parties

A substantial portion of our ongoing research and development activities are performed under contractual arrangements we enter into with external service providers, including contract research organizations and contract manufacturers. We accrue for costs incurred under these arrangements based on our estimates of services performed and costs incurred as of a particular balance sheet date. Our estimation of expenses incurred is based on facts and circumstances known to us and includes the consideration of factors such as the level of services performed, patient enrollment, administrative costs incurred, and other indicators of services completed. The majority of our service providers invoice us in arrears, and to the extent that amounts invoiced are less than our estimates of expenses incurred, we accrue for those additional costs. Further, based on amounts invoiced to us by our service providers, we may also record certain payments made to those providers as prepaid expenses that will be recognized as expense in future periods as services are rendered. We make these estimates as of each balance sheet date in our consolidated financial statements.

Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status

and timing of services performed may vary and may result in us reporting expenses that are too high or too low. Any such differences may result in adjustments in future periods.

Stock-Based Compensation

On January 1, 2006 (the "effective date"), we began accounting for stock-based compensation in accordance with Statement of Financial Accounting Standards ("SFAS") No. 123(R), *Share-Based Payment* ("SFAS 123R"). Under the provisions of SFAS 123R, compensation expense related to stock-based transactions, including employee and director stock-based awards, is estimated at the date of grant based on the stock award's fair value and is recognized as expense over the requisite service period. We adopted SFAS 123R using the modified prospective transition method which requires that compensation expense be recorded for new awards and awards modified, repurchased, or cancelled after the effective date, as well as for all unvested stock-based awards as of the effective date. Prior to the adoption of SFAS 123R and in accordance with the provisions of SFAS 123, we elected to follow Accounting Principle Board (APB) Opinion No. 25 and FASB Interpretation No. 44, *Accounting for Certain Transactions Involving Stock Compensation—an Interpretation of APB Opinion No. 25*, in accounting for our employee and director stock-based transactions. Under the intrinsic value method permitted under APB 25, if the exercise price of our employee and director stock-based awards was equal to or greater than the fair value of the underlying stock on the date of grant, no compensation expense was recognized. As required by SFAS 123, the pro forma impact of expensing the fair value of our stock-based awards was disclosed in the notes to our consolidated financial statements. In accordance with the modified prospective transition method, our consolidated financial statements for periods prior to 2006 have not been restated to reflect, and do not include, the impact of SFAS 123R.

We estimate the fair value of our share-based award to employees and directors using the Black-Scholes option valuation model. The Black-Scholes option valuation model requires the use of certain subjective assumptions. The most significant of these assumptions are our estimates of the expected volatility of the market price of our stock and the expected term of the award. Due to the fact that we are a newly public company, there is limited historical information available to support our estimate of expected volatility required to value our stock-based awards. We, therefore, follow guidance discussed in SAB No. 107 basing our estimate of expected volatility on the expected volatility of a group of similar entities whose stock prices are publicly available. We will continue to consistently apply this process using the same similar entities until a sufficient amount of historical information regarding the volatility of our own stock price becomes available. The expected term represents the period of time that stock-based awards granted are expected to be outstanding. As we have a history of exercise experience for use in the calculation of expected term, we believe our historical experience, adjusting for the exercise patterns of a group of similar entities in our industry, is the best estimate of our future exercise patterns. Other assumptions used in the Black-Scholes option valuation model include the risk-free interest rate and expected dividend yield. The risk-free interest rate for periods pertaining to the contractual life of each option is based on the U.S. Treasury strip yield of a similar duration in effect at the time of grant. We have never paid, and do not expect to pay, dividends in the foreseeable future. The fair value of our stock-based awards was estimated at the date of grant using the following assumptions:

	Year Ended December 31,		
	2007	2006	2005
Expected volatility	73%	73%	73%
Expected term (in years)	4.0	4.1	4.7
Weighted-average risk-free interest rate	4.4%	4.8%	4.3%
Expected dividends	—%	—%	—%
Weighted-average grant date fair value per share	2.41	$1.80	$1.62

SFAS 123R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from estimates. Forfeitures are estimated based on our historical experience and separate groups of employees that have similar historical forfeiture behavior are separately considered for expense recognition. Prior to the adoption of SFAS 123R, we accounted for forfeitures as they occurred.

In the absence of a public trading market for our common stock, the fair value of our common stock for the years ended December 31, 2006 and 2005 was determined by our board of directors in good faith based upon consideration of a number of objective and subjective factors. In February 2006, we performed an in-depth valuation analysis to determine the fair value of our common stock contemporaneous to February 2006, and retrospective to April 2005 and August 2005. Those dates were specifically chosen as certain corporate events occurred approximate to those dates that, in retrospect, our management determined would possibly have had bearing upon the fair value of our common stock, for accounting purposes, at the time the events occurred. The approach we used was consistent with the methods outlined in the AICPA Practice Aid *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. Based on our assessment, we concluded that the fair value of our common stock was $3.00 per share as of February 2006. We also concluded retrospectively that the fair value of our common stock, for accounting purposes, was $2.88 per share as of April 2005 and $2.88 per share as of August 2005.

During 2005, we recorded a $300,000 deferred stock-based compensation in stockholders' equity in accordance with APB 25 due to the granting of stock options during the year with exercise prices below the reassessed fair values of our common stock which had been reassessed for accounting purposes, and recognized $52,000 of stock based compensation expense during 2005 related to the amortization the deferred stock-based compensation. In accordance with the requirements of SFAS 123R and upon adoption in January 2006, the remainder of the $300,000 deferred stock based compensation balance was reversed.

In July 2006, we performed a contemporaneous valuation analysis which resulted in an estimated fair market value per share at that date of $3.30, reflecting an increase in fair value due primarily to our signing of the collaboration agreement with P&G. In October 2006, our board of directors reaffirmed the fair value of our common stock at $3.30 per share. We performed a subsequent contemporaneous valuation analysis to determine the fair market value of our common stock as of July 2007, which resulted in an estimated fair market value per share at that date of $6.00. All equity awards to our employees, including executive officers, and to our directors were granted at no less than the fair market value of our common stock as determined in good faith by our board of directors on the date of grant.

SFAS 123R provides for a choice between two attribution methods for allocating stock-based compensation costs: the "straight-line method" which allocates expense on a straight-line basis over the requisite service period of the last separately vesting portion of an award, or the "graded vesting attribution method" which allocates expense on a straight-line basis over the requisite service period for each separately vesting portion of the award as if the award was, in substance, multiple awards. We selected the latter method and amortize the fair value of each award on a straight-line basis over the requisite service period for each separately vesting portion of each award.

We continue to account for stock options issued to non-employees in accordance with the recognition provisions of SFAS 123 and EITF Issue 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*, using a fair value approach. The compensation costs of these arrangements are subject to re-measurement over the vesting terms as earned. The fair value of non-employee options in the years ended December 31, 2007, 2006 and 2005 was estimated using the Black-Scholes option-pricing model with the following weighted-average assumptions: a dividend yield of zero, volatility of 73%, maximum contractual life of

ten years and a risk-free interest rate of 4.4%, 4.8% and 4.3%, respectively. Compensation expense related to non-employee option grants of $13,000, $20,000 and $364,000 was recorded for the years ended December 31, 2007, 2006 and 2005, respectively. As of December 31, 2007, options to purchase 2,031 shares of our common stock remain subject to re-measurement accounting under EITF Issue 96-18.

Total compensation cost that has been recorded in the statement of operations, which includes stock-based compensation expense under SFAS 123R, the amortization of deferred stock-based compensation recorded in 2005, and the value of options issued to non-employees for services rendered, is allocated as follows:

	Year Ended December 31,		
	2007	2006	2005
	(in thousands)		
Research and development:			
Officer compensation	$ 115	$ 54	$ 26
Employee and consultant compensation	355	102	41
Selling, general and administrative:			
Director and officer compensation	669	431	342
Employee and consultant compensation	66	41	7
	$1,205	$628	$416

The total compensation cost related to unvested stock option grants not yet recognized as of December 31, 2007 was $1.3 million, and the weighted-average period over which these grants are expected to vest is 1.23 years.

Results of Operations

Comparison of Years Ended December 31, 2007, 2006 and 2005

Revenue

	Year Ended December 31,			2006 to 2007 Change		2005 to 2006 Change	
	2007	2006	2005	$	%	$	%
	(in thousands, except percentages)						
Collaboration services	$ 262	$2,116	$ —	(1,854)	(88)%	$2,116	N/A
Technology license fees	3,896	1,623	—	2,273	140%	1,623	N/A
Contractual milestone payments	—	1,000	—	(1,000)	(100)%	1,000	N/A
Total revenue	$4,158	$4,739	$ —	$ (581)	(12)%	$4,739	N/A

For the year ended December 31, 2007, we generated $4.2 million in revenue related to our collaboration agreement with P&G. Of the $4.2 million revenue recognized, $262,000 was related to reimbursements for certain pharmaceutical development costs and patent maintenance costs incurred on behalf of P&G and $3.9 million was related to the recognition of the deferred upfront license fee received in 2006. The $581,000 decrease in revenue for 2007 as compared to 2006 was primarily due to the absence of milestone revenue in 2007 and the substantive completion of transitional services provided by us to P&G during 2006 resulting in a decrease in revenues related to those services in 2007, partially offset by the recognition of additional deferred license fee revenue in 2007.

For the year ended December 31, 2006, we generated $4.7 million in revenue related to our collaboration agreement with P&G. Our revenue consisted of $2.1 million in service revenue primarily related to reimbursements from P&G for third party pass-through costs in connection with the transitional services provided by us, $1.6 million in deferred license fee revenue recognized and

$1.0 million in milestone revenue earned upon the delivery of data related to one of the Phase 2 clinical trials for our ATI-7505 product candidate. We generated no revenue in the year ended December 31, 2005.

Cost of Collaboration Services

	Year Ended December 31,			2006 to 2007 Change		2005 to 2006 Change	
	2007	2006	2005	$	%	$	%
	(in thousands, except percentages)						
Cost of collaboration services	$262	$2,116	$ —	$(1,854)	(88)%	$2,116	N/A

Cost of revenue in 2007 and 2006 was associated with our collaboration agreement with P&G. For the year ended December 31, 2007, costs associated with our collaboration service revenue consisted of $163,000 of third party pass-through costs related to pharmaceutical development, $22,000 related to costs of transitional services provided by us, and $77,000 of legal expense incurred for patent filings and maintenance. The decrease in cost of revenue for 2007 as compared to 2006 was primarily due to the completion of a majority of the transitional services pursuant to the terms of the P&G collaboration agreement.

For the year ended December 31, 2006, the $2.1 million of costs associated with our collaboration service revenue consist of $1.8 million related to pharmaceutical development, $200,000 related to toxicology studies and $100,000 of legal expense incurred for patent filings and maintenance. We did not generate collaboration service revenue nor any associated costs in the year ended December 31, 2005.

Research and Development Expense

	Year Ended December 31,			2006 to 2007 Change		2005 to 2006 Change	
	2007	2006	2005	$	%	$	%
	(in thousands, except percentages)						
Research and development expense	$24,994	$23,973	$22,498	$1,021	4%	$1,475	7%

The $1.0 million increase in research and development expense for 2007 as compared to 2006 was principally due to:

- an increase in research and pre-clinical development expense of approximately $2.2 million primarily due to higher non-clinical development costs related to our ATI-9242 program, and
- an increase in research and development administrative and other expense of approximately $2.0 million primarily due to headcount additions and higher personnel related expenses, partially offset by
- a decrease in clinical development expense of approximately $3.4 million primarily due to the completion in 2006 of ARYx funded clinical trial activities related to our ATI-7505 product candidate partially offset by higher clinical development costs related to our ATI-5923 and ATI-2042 programs.

The $1.5 million increase in research and development expense for 2006 as compared to 2005 was principally due to:

- an increase of approximately $3.0 million in clinical trial activities related to our ATI-7505, ATI-5923 and ATI-2042 development programs, partially offset by lower non-clinical development costs of approximately $300,000,

- a decrease in pharmaceutical manufacturing cost of approximately $900,000 primarily due to the classification of certain costs related to our ATI-7505 program as cost of collaboration services revenue partially offset by higher expenses related to our ATI-2042 program, and
- lower research and development administrative costs of approximately $300,000.

Selling, General and Administrative Expense

	Year Ended December 31,			2006 to 2007 Change		2005 to 2006 Change	
	2007	2006	2005	$	%	$	%
	(in thousands, except percentages)						
Selling, general and administrative expense	$7,702	$6,938	$5,671	$764	11%	$1,267	22%

The increase in selling, general and administrative expense of $764,000 in 2007 as compared to 2006 was primarily due to increases in personnel and personnel related costs, including stock compensation expense, in support of our expanded research and development and public company administration operations. The increase in selling, general and administrative expense of $1.3 million in 2006 as compared to 2005 was primarily due to additions to our administrative personnel, additional stock-based compensation expense resulting from the adoption of FAS 123R in 2006, increased patent filing costs and fees related to the protection of our intellectual property rights, and higher general administration costs.

Interest and Other Income, Net

	Year Ended December 31,			2006 to 2007 Change		2005 to 2006 Change	
	2007	2006	2005	$	%	$	%
	(in thousands, except percentages)						
Interest and other income, net	$2,591	$2,294	$876	$297	13%	$1,418	162%

Interest and other income, net of other expenses, consists of interest income from our investments in marketable securities, benefits related to the reassessment of the fair value of our preferred stock warrant liability. The increase in interest income and other income, net, in 2007 as compared to 2006 was primarily due to the benefit of $440,000 resulting from the reassessment of the estimated fair value of our preferred stock warrant liability, partially offset by lower interest income resulting from lower average cash, cash equivalent and marketable securities on-hand. The increase in interest income in 2006 as compared to 2005 was due to higher average cash, cash equivalent and marketable securities on-hand and a generally increasing short-term interest rate environment.

Interest Expense

	Year Ended December 31,			2006 to 2007 Change		2005 to 2006 Change	
	2007	2006	2005	$	%	$	%
	(in thousands, except percentages)						
Interest expense	$1,352	$1,324	$671	$28	2%	$653	97%

The 2% increase in interest expense in 2007 as compared to 2006 was due to the amortization of warrant issuance costs for warrants issued to Lighthouse Capital Partners V, L.P. ("Lighthouse") offset partially by reduced interest costs on lower outstanding loan principal balances. The increase in interest expense in 2006 as compared to 2005 was due to financing costs related to our debt financing with Lighthouse and equipment financing provided by General Electric Commercial Finance ("GE").

Impairment of Long-Lived Assets

We conducted annual physical inventory counts of our fixed assets to validate the existence and functional use of our property and equipment during 2007 and 2006. As a result, we recorded an impairment charge of $14,000 and $105,000 for the years ended December 31, 2007 and 2006, respectively, related to the write-down of assets that we determined to have no remaining useful life.

Cumulative Effect of Change in Accounting Principle

We adopted the Financial Accounting Standards Board Staff Position No. 150-5 (FSP 150-5), *Issuer's Accounting under Statement No. 150 for Freestanding Warrants and Other Similar Instruments on Shares that are Redeemable*, and accounted for the cumulative effect of the change in accounting principle as of January 1, 2006, the first reporting period following June 30, 2005 as prescribed under the transition provision of FSP 150-5. As a result of the adoption, $848,000 was reclassified from additional paid-in capital to preferred stock warrant liability on the balance sheet in 2006. For the year ended December 31, 2006, the total impact of the change in accounting principle was an increase to net loss of $5,000, consisting of $10,000 in expense for the cumulative effect upon adoption of FSP 150-5 as of January 1, 2006 reflecting the fair value of the warrants as of that date, partially offset by $5,000 in interest and other income, net, to reflect the decrease in fair value between January 1, 2006 and December 31, 2006. There was no change in accounting principle in 2007.

Liquidity and Capital Resources

	Year Ended December 31,		
	2007	2006	2005
		(in thousands)	
Cash provided by (used in):			
Operating activities	$(27,705)	$ (4,213)	$(22,431)
Investing activities	23,368	(18,512)	9,525
Financing activities	41,153	28,930	11,181
Total cash provided (used)	$ 36,816	$ 6,205	$ (1,725)

In November 2007, we completed our initial public offering of our common stock and received aggregate net proceeds of approximately $43.8 million. Prior to our initial public offering, we financed our operations primarily through private placements of equity securities, receiving aggregate net proceeds from such sales totaling $110.7 million. In August 2006, we received a $25.0 million nonrefundable upfront license fee in connection with our collaboration agreement with P&G. As of December 31, 2007, we had $63.1 million in cash, cash equivalents and marketable securities and a $7,000 receivable from P&G. Since inception, we have incurred significant net operating losses and, as of December 31, 2007, we had an accumulated deficit of $122.7 million. We have not achieved profitability and anticipate that we will continue to incur significant net losses for the next several years. We believe that our current capital resources will be sufficient to fund our planned operations for at least the next twelve months.

Net cash used in operating activities was $27.7 million, $4.2 million and $22.4 million in the years ended December 31, 2007, 2006 and 2005, respectively. Net cash used in each of these periods was primarily due to the funding of our operating costs and expenses in connection with the conduct of our research, development and administrative activities, partially offset by the receipt of a $25.0 million nonrefundable upfront license fee payment and other revenue from P&G in the year ended December 31, 2006. We expect that our net cash use will increase significantly in each of the next several years in order to support our operations and to complete the development and commercialization of our product candidates.

Net cash provided by investing activities was $23.4 million and $9.5 million in the years ended December 31, 2007 and 2005, respectively, and net cash used in investing activities was $18.5 million in 2006. Investing activities consist primarily of purchases and sales of marketable securities and capital asset purchases. Purchases of property, equipment and leasehold improvements were $500,000, $1.0 million and $3.8 million in the years ended December 31, 2007, 2006 and 2005, respectively. We expect that we will continue to make investments in property, equipment and leasehold improvements as we expand our operations in the future.

Net cash provided by financing activities was $41.2 million, $28.9 million and $11.2 million in the years ended December 31, 2007, 2006 and 2005, respectively. Proceeds from financing activities consist primarily of the net proceeds from the sale of our common and preferred stock as well as long-term debt financing arrangements. In 2007, we completed our initial public offering of equity securities and received aggregate net proceeds of approximately $43.8 million. In 2006, we received net proceeds from the issuance of preferred stock of $30.2 million. In 2005, we received proceeds from long-term debt financing arrangements, net of principal payments, of $11.2 million, which was comprised of a $10 million loan facility from Lighthouse and a secured equipment financing arrangement with GE of up to $2.5 million.

On March 28, 2005, we entered into a loan agreement with Lighthouse that was amended on October 19, 2007. The original agreement provided for up to $10.0 million in debt financing. The agreement was amended in October 2007 to provide for up to $9.0 million of additional financing. The original loan agreement provided for a 42 month repayment term which began on April 1, 2006. As of December 31, 2007, the total principal amount cumulatively borrowed under the agreement was $10.0 million and the total unpaid principal balance outstanding was $5.4 million. The original outstanding promissory note provides for monthly cash payments of principal and interest at a stated interest rate of 9.75% per annum through September 2009 and a balloon interest payment of $1.2 million in September 2009. The agreement also allows for prepayment of principal with respect to the original promissory note whereupon the $1.2 million terminal interest payment is accelerated and due at the time of prepayment of the outstanding loan balance. The amended agreement provides that additional amounts borrowed under a new promissory note will be subject to an interest-only period expiring in September 2008 followed by 36 equal monthly payments of principal and interest at a fixed rate of the prime rate plus 2.0%, to be fixed as of September 2008. In addition, we will be obligated to make a final interest payment of 7.5% of the amount borrowed at loan maturity. The agreement contains no financial covenants. Default terms under the agreement are standard terms including borrower default upon nonpayment of amounts due, noncompliance with loan covenants, misrepresentations under the agreement, bankruptcy and other standard provisions. Under the terms of the original and amended agreement, Lighthouse has a first priority security interest in all of our tangible and intangible assets except for the following: (i) assets specifically identified and used as security for GE equipment loans, (ii) any first priority interest Comerica Bank may have in our operating bank accounts at Comerica Bank, (iii) any certificates of deposit that are used as security for letters of credit issued to third parties, (iv) any interest or claims our landlord may have in certain leasehold improvements and (v) our intellectual property assets. The agreement precludes us from incurring additional material debt amounts with the exception of up to an aggregate of $3.0 million in equipment financing and up to $500,000 in other indebtedness. In February 2008, we fully utilized the additional $9.0 million pursuant to the amended agreement and provided a second promissory note to Lighthouse under the same amended terms as described above.

As of December 31, 2007, the total unpaid principal balance outstanding under our existing GE equipment loans was $924,000. Our debt financing with GE provides for a 42 month repayment term from each date of funding, a stated interest rate that is based on an average of the Federal Reserve's three-year and five-year Treasury Constant Maturities rate plus a spread of 766 basis points and standard default provisions. We currently have three promissory notes outstanding under the agreement

with stated interest rates ranging from 11.73% to 12.89%. Under the agreement, events of default include non-payment of amounts owed, a non-permitted sale or transfer of collateral, misrepresentations under the agreement, bankruptcy and other standard provisions. Funds borrowed under the agreement are secured by specific equipment assets and GE has a first priority security interest in those assets. The agreement contains no financial covenants and no warrants to purchase shares of our capital stock were issued to GE in connection with the debt financing. The arrangement provides for monthly payments of principal and interest through July 2010.

Our future funding requirements will depend upon many factors, including:

- the scope, rate of progress, results and cost of our preclinical testing, clinical trials and other research and development activities;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish;
- the cost, timing and outcomes of regulatory approvals;
- the number and characteristics of product candidates that we pursue;
- the cost and timing of establishing sales, marketing and distribution capabilities;
- the cost of establishing clinical and commercial supplies of our product candidates and any products that we may develop;
- the timing, receipt and amount of sales or royalties generated, if any, from our product candidates; and
- the cost of preparing, filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights.

We will need to raise additional funds to support our operations, and such funding may not be available to us on acceptable terms, or at all. If we are unable to raise additional funds when needed, we may not be able to continue development of our product candidates or we could be required to delay, scale back or eliminate some or all of our research and development programs. We may seek to raise any necessary additional funds through public or private equity, debt financings, collaborative arrangements with corporate partners or other sources. If we raise additional funds through the issuance of debt securities, these securities could have rights that are senior to the holders of our common stock and could contain covenants that restrict our operations. If we raise additional funds by issuing equity securities, dilution to our existing stockholders may result. In addition, if we raise additional funds through the sale of equity securities, new investors could have rights superior to our existing stockholders. To the extent that we raise additional capital through licensing arrangements or arrangements with collaborative partners, we may be required to relinquish, on terms that are not favorable to us, rights to some of our technologies or product candidates that we would otherwise seek to develop or commercialize ourselves for higher profit margin. The terms of future financings may restrict our ability to raise additional capital, which could delay or prevent the further development of our product candidates or commercialization of our products. Our failure to raise capital when needed may harm our business and operating results. See risk factors included in Part I Item 1A for a discussion of the factors that will influence our future capital requirements.

Contractual Obligations

Our contractual obligations at December 31, 2007 were as follows:

Contractual Obligations	Payments Due by Period				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	After 5 Years
			(in thousands)		
Short and long-term debt (including interest)	$ 8,104	$4,010	$4,094	$ —	$ —
Operating lease obligations	4,984	947	1,899	1,971	167
Other obligations	143	143	—	—	—
Total contractual obligations	$13,231	$5,100	$5,993	$1,971	$167

The table above reflects only payment obligations that are fixed and determinable. Our contractual obligations as of December 31, 2007 include short and long-term debt obligations to Lighthouse and GE, operating lease obligations for our facility in Fremont, California, obligations for certain leased equipment, and other obligations including minimum contractual obligations for research and development agreements containing specific cancellation terms.

Recent Accounting Pronouncements

In September 2006, the Financial Accounting Standards Board ("FASB") issued Statements of Financial Accounting Standards No. 157 ("SFAS 157"), *Fair Value Measurements*. SFAS 157 defines fair value, establishes a framework for measuring fair value in accordance with U.S. generally accepted accounting principles and expands disclosures about fair value measurements. SFAS 157 is effective for financial assets and liabilities in financial statements issued for fiscal years beginning after November 15, 2007. We are currently evaluating the impact, if any, of the provisions of SFAS 157 on our consolidated financial position, results of operations and cash flows.

In February 2007, the FASB issued Statements of Financial Accounting Standards No. 159 ("SFAS 159"), *The Fair Value Option for Financial Assets and Financial Liabilities- Including an amendment of FASB Statement No. 115*. SFAS 159 provides companies with an option to report selected financial assets and liabilities at fair value. The objective of SFAS 159 is to reduce both the complexity in accounting for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently. Most of the provisions in SFAS 159 are elective; however, the amendment to FASB Statement No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, applies to all entities with available-for-sale and trading securities. SFAS 159 is effective as of the beginning of an entity's fiscal year beginning after November 15, 2007. We are currently evaluating the impact, if any, of the provisions of SFAS 159 on our consolidated financial position, results of operations and cash flows.

In June 2007, the FASB ratified Emerging Issues Task Force Issue ("EITF") No. 07-3, *"Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities"* ("EITF 07-3"). EITF 07-3 requires that nonrefundable advance payments for goods and services that will be used or rendered in future R&D activities pursuant to executory contractual arrangements be deferred and recognized as an expense in the period that the related goods are delivered or services are performed. We will adopt EITF 07-3 as of January 1, 2008, and the adoption is not expected to have a material impact on our consolidated results of operations or financial position.

In December 2007, the FASB ratified EITF 07-1, *"Accounting for Collaborative Arrangements"* ("EITF 07-1"). EITF 07-1 defines collaborative arrangements and establishes reporting requirements for transactions between participants in a collaborative arrangement and between participants in the arrangement and third parties. EITF 07-1 also establishes the appropriate income statement presentation and classification for joint operating activities and payments between participants, as well

as the sufficiency of the disclosures related to these arrangements. EITF 07-1 is effective for fiscal years beginning after December 15, 2008. We are currently evaluating the impact of EITF 07-1 on our consolidated financial position, results of operations and cash flows.

Off-Balance Sheet Arrangements

Since inception, except for standard operating leases, we have not engaged in any off-balance sheet arrangements, including the use of structured finance, special purpose entities or variable interest entities.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Interest Rate and Market Risk

Our exposure to interest rate risk is related to our cash, cash equivalents and marketable securities portfolio. As of December 31, 2007, we had cash, cash equivalents and marketable securities of $63.1 million individually having maturities or interest rate reset periods of less than one year. A decline in short-term interest rates over time would reduce our interest income from our short-term investments. A decrease in interest rates of 100 basis points would cause a corresponding decrease in our annual interest income of approximately $400,000. Due to the composition and expected duration of our short-term investment portfolio, we do not expect a 100 basis point change in short-term interest rates to have a material impact on the fair value of our short-term investments. Since our inception, unrealized and realized losses in our marketable securities portfolio arising from interest rate fluctuations have not been material. We actively monitor changes in the interest rate environment to assess its potential impact on our investment portfolio.

At December 31, 2007, we held $4.7 million of auction rate securities in our marketable securities portfolio. Subsequent to at least one successful auction with respect to each of these securities following December 31, 2007, as of February 29, 2008, we experienced failed auctions for $3.4 million of the auction rate securities held in our portfolio. There are no assurances that future auction dates will result in successfully completed auctions for those securities and as a consequence our ability to liquidate our investment in those securities may be limited or may not exist. All of our auction rate securities are currently rated AAA by a reputable rating agency. If the issuers are unable to successfully close future auctions and their credit ratings deteriorate, we may in the future be required to record an impairment charge on these investments. We believe we will be able to liquidate our investment without significant loss within the months ahead, and we currently believe that these securities are not materially impaired, primarily due to the credit quality of the underlying issuers. However, it could take until the final maturity of the underlying notes to realize our investments' recorded value. Based on our current cash and investments on hand, we do not anticipate the potential lack of liquidity on these investments to affect our ability to execute our business plan through the remainder of 2008.

The primary objective of our marketable securities investment activity is to preserve our capital to fund operations. We also seek to maximize income from such investments without assuming material risks.

Foreign Currency Risk

In conducting our business, we occasionally enter into contractual arrangements with third-party research and development service providers having operations in locations outside of the United States. To the extent that payments for those services are contractually required to be made in currencies other than the U.S. dollar, we may be subject to exposure to fluctuations in foreign exchange rates. To date, the effect of our exposure to these fluctuations in foreign exchange rates has not been material, and we do not expect it to become material in the foreseeable future. We do not hedge our foreign currency exposures and have not used derivative financial instruments for speculation or trading purposes.

Item 8. Financial Statements and Supplementary Data

The financial statements required by this item are set forth beginning at page F-1 of this report and are incorporated herein by reference.

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

None.

Item 9A(T). Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

As of December 31, 2007, an evaluation was performed by management, with the participation of our Chief Executive Officer ("CEO") and our Chief Financial Officer ("CFO"), of the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15-d and 15(e) under the Securities Exchange Act of 1934, as amended). Disclosure controls and procedures are controls and procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. Based on that evaluation, our CEO and CFO have concluded that, subject to the limitations described below, our disclosure controls and procedures were effective as of December 31, 2007.

Limitations on the Effectiveness of Controls

Our management, including our CEO and CFO, does not expect that our disclosure controls and procedures or our internal controls will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, control may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Changes in Internal Control over Financial Reporting

No change was made in our internal control over financial reporting during the quarter ended December 31, 2007 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting for 2007

This annual report does not include a report of management's assessment regarding internal control over financial reporting or an attestation report of our registered public accounting firm due to a transition period established by rules of the Securities and Exchange Commission for newly-public companies.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item with respect to our executive officers may be found under the section entitled "Executive Officers" appearing in our proxy statement for our 2008 annual meeting of stockholders and is incorporated herein by reference (the "2008 Proxy Statement"). The 2008 Proxy Statement will be filed with the Securities and Exchange Commission within 120 days of the end of our year ended December 31, 2007. The information required by this Item relating to our directors and nominees, including information with respect to audit committee financial experts, may be found under the section entitled "Proposal 1—Election of Directors" appearing in the 2008 Proxy Statement and is incorporated herein by reference. Information regarding compliance with Section 16(a) of the Securities Exchange Act may be found under the section entitled "Section 16(a) Beneficial Ownership Reporting Compliance" appearing in the 2008 Proxy Statement and is incorporated herein by reference.

In 2007, we adopted a code of conduct that applies to all employees, executive officers, directors and consultants, and incorporates guidelines designed to deter wrongdoing and to promote the honest and ethical conduct and compliance with applicable laws and regulations. In addition, the code of conduct incorporates our guidelines pertaining to topics such as conflicts of interest and workplace behavior. We have posted the text of our code of conduct on our website at *http://www.aryx.com* under the section entitled "Investor Relations/Corporate Governance". In addition, we intend to promptly disclose (1) the nature of any amendment to our code of conduct that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (2) the nature of any waiver, including an implicit waiver, from a provision of our code of conduct that is granted to one of these specified officers, the name of such person who is granted the waiver and the date of the waiver on our website in the future.

Item 11. Executive Compensation

The information required by this Item is included in the 2008 Proxy Statement under the section entitled "Executive Compensation" and is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item is included in the 2008 Proxy Statement under the section entitled "Security Ownership of Certain Beneficial Owners and Management" and "Securities Authorized for Issuance under Equity Compensation Plans."

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this Item is incorporated by reference to the section of the 2008 Proxy Statement under the headings "Proposal 1—Election of Directors" and "Certain Relationships and Related Transactions."

Item 14. Principal Accountant Fees and Services

The information required by this Item is incorporated by reference to the section of the 2008 Proxy Statement under the heading "Proposal 2—Ratification of Selection of Independent Auditors."

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) The following documents are filed as part of this Form 10-K:

1. Financial Statements

2. Financial Statement Schedules

All other financial statement schedules are not required under the related instructions or are inapplicable or presented in the notes to the consolidated financial statements and therefore have been omitted.

3. Exhibits

Exhibit Number	Description of Document
3.1	Amended and Restated Certificate of Incorporation of the Registrant, as currently in effect.
3.2(1)	Bylaws of the Registrant.
4.1	Reference is made to Exhibits 3.1 and 3.2 above.
4.2(2)	Specimen Common Stock Certificate.
4.3(3)	Form of Warrant to purchase shares of Series C preferred stock, issued September 3, 2003.
4.4(3)	Form of Warrant to purchase shares of Series C preferred stock, issued December 23, 2002.
4.5(3)	Form of Warrant to purchase shares of Series D preferred stock, issued March 28, 2005 to Lighthouse Capital Partners V, L.P. ("Lighthouse").
4.6(2)	Amended and Restated Investor Rights Agreement by and between Registrant and certain of its securityholders, dated October 22, 2007.
4.7(4)	Form of Warrant to purchase shares of Series E preferred stock, issued October 19, 2007 to Lighthouse.
10.1(3)+	Form of Indemnity Agreement between the Registrant and its executive officers and directors.
10.2(3)	Lease Agreement by and between the Registrant and Trinet Essential Facilities X, Inc., dated November 16, 2004, as amended on June 17, 2005.
10.3(3)+	2001 Equity Incentive Plan.
10.4(3)+	Form of Option Agreement, Form of Option Grant Notice and Form of Exercise Notice under 2001 Equity Incentive Plan.
10.5(4)+	2007 Equity Incentive Plan.

Exhibit Number	Description of Document
10.6(4)+	Form of Option Agreement, Form of Option Grant Notice and Form of Exercise Notice under 2007 Equity Incentive Plan.
10.7(4)+	2007 Non-Employee Directors' Stock Option Plan.
10.8(4)+	Form of Option Agreement, Form of Option Grant Notice and Form of Exercise Notice under the 2007 Non-Employee Directors' Stock Option Plan.
10.9(4)+	2007 Employee Stock Purchase Plan.
10.10(3)+	Employment Agreement between the Registrant and Paul Goddard, dated September 1, 2005.
10.11(3)+	Employment Agreement between the Registrant and Peter G. Milner, dated September 30, 2005.
10.12(3)+	Employment Agreement between the Registrant and John Varian, dated November 17, 2003.
10.13(3)+	Employment Agreement between the Registrant and Pascal Druzgala, dated July 23, 2002.
10.14(3)+	Employment Agreement between the Registrant and Daniel Canafax, dated January 31, 2007.
10.15(3)+	Employment Agreement between the Registrant and David Nagler, dated July 15, 2003.
10.16(4)+	Non-Employee Director Compensation Arrangements.
10.17(2)#	License, Development and Commercialization Agreement between the Registrant and Procter & Gamble Pharmaceuticals, Inc. ("P&G"), dated June 30, 2006 (the "P&G Agreement").
10.18(3)	Master Security Agreement by and between General Electric Capital Corporation and the Registrant, dated August 24, 2005, as amended on August 31, 2005.
10.19(4)	Loan and Security Agreement No. 4521 by and between Lighthouse and the Registrant, dated March 28, 2005, as amended on April 22, 2005, July 25, 2005, June 27, 2006, August 30, 2007 and October 19, 2007 (the "Lighthouse Agreement").
10.20(5)+	Compensation Information for Named Executive Officers.
10.21	Amendment No. 6 to the Lighthouse Agreement by and between Lighthouse and the Registrant, dated February 22, 2008.
21.1(3)	Subsidiaries of the Registrant.
23.1	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney. Reference is made to the signature page.
31.1	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act, as amended.
31.2	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act, as amended.
32.1	Certification of the Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

+ Indicates management contract or compensatory plan.

Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission (the "SEC").

(1) Previously filed as Exhibit 3.3 to our Registration Statement on Form S-1, as amended (File No. 333-145813), filed with the SEC on August 30, 2007 and incorporated herein by reference.

(2) Previously filed as the like-numbered exhibit to our Registration Statement on Form S-1/A, as amended (File No. 333-145813), filed with the SEC on November 5, 2007 and incorporated herein by reference.

(3) Previously filed as the like-numbered exhibit to our Registration Statement on Form S-1, as amended (File No. 333-145813), filed with the SEC on August 30, 2007 and incorporated herein by reference.

(4) Previously filed as the like-numbered exhibit to our Registration Statement on Form S-1/A, as amended (File No. 333-145813), filed with the SEC on October 23, 2007 and incorporated herein by reference.

(5) Previously filed as Exhibit 10.20 to our Current Report on Form 8-K (File No. 001-33782), filed with the SEC on February 20, 2008 and incorporated herein by reference.

SIGNATURES

Pursuant to the requirements 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.

ARYx Therapeutics, Inc.

By: /s/ PAUL GODDARD, PH.D.
Paul Goddard, Ph.D.
Chairman of the Board and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Paul Goddard and John Varian, and each of them, as his or her true and lawful attorneys-in-fact and agents, each with the full power of substitution for him or her, and in his or her name and in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact and agents, and any of them or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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:

Signatures	Title	Date
/s/ PAUL GODDARD, PH.D. Paul Goddard, Ph.D.	Chief Executive Officer, Chairman and Director *(Principal Executive Officer)*	March 14, 2008
/s/ JOHN VARIAN John Varian	Chief Operating Officer and Chief Financial Officer *(Principal Financial Officer)*	March 14, 2008
/s/ JASON BARKER Jason Barker	Senior Director of Finance *(Principal Accounting Officer)*	March 14, 2008
/s/ PETER G. MILNER, M.D. Peter G. Milner, M.D.	Director	March 14, 2008
/s/ ROBERT ADELMAN, M.D. Robert Adelman, M.D.	Director	March 14, 2008

Signatures	Title	Date
/s/ LARS EKMAN, M.D., PH.D. Lars Ekman, M.D., Ph.D.	Director	March 14, 2008
/s/ KEITH LEONARD Keith Leonard	Director	March 14, 2008
/s/ HERM ROSENMAN Herm Rosenman	Director	March 14, 2008
/s/ PAUL SEKHRI Paul Sekhri	Director	March 14, 2008
/s/ NICHOLAS SIMON Nicholas Simon	Director	March 14, 2008

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders
ARYx Therapeutics, Inc.

We have audited the accompanying consolidated balance sheets of ARYx Therapeutics, Inc. as of December 31, 2007 and 2006, and the related consolidated statements of operations, convertible preferred stock and stockholders' equity (deficit), and cash flows for each of the three years in the period ended December 31, 2007. 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. We were not engaged to perform an audit of the Company's 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, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of ARYx Therapeutics, Inc. at December 31, 2007 and 2006, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2007, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 1 and 10 to the consolidated financial statements, in 2006, ARYx Therapeutics, Inc. changed its method of accounting for stock-based compensation in accordance with guidance provided in Statement of Financial Accounting Standards No. 123(R), "Share-Based Payment," and changed its method of accounting for preferred stock warrant liabilities in accordance with guidance provided in Financial Accounting Standards Board Staff Position (FSP) No. 150-5, "Issuer's Accounting under Statement No. 150 for Freestanding Warrants and Other Similar Instruments on Shares that are Redeemable," an interpretation of SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity." As discussed in Note 12 to the consolidated financial statements, ARYx Therapeutics, Inc. changed its method of accounting for uncertain tax positions as of January 1, 2007.

/s/ Ernst & Young LLP

Palo Alto, California
March 12, 2008

ARYX THERAPEUTICS, INC.

CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share amounts)

	December 31, 2007	December 31, 2006
ASSETS		
Current assets:		
Cash and cash equivalents	$ 55,476	$ 18,660
Marketable securities	7,640	31,648
Restricted cash—current	150	—
Prepaid research and development expenses	582	242
Other prepaid and current assets	1,051	861
Total current assets	64,899	51,411
Restricted cash	903	903
Property and equipment, net	3,655	4,169
Other assets	168	281
Total assets	$ 69,625	$ 56,764
LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Accounts payable	$ 1,369	$ 691
Accrued compensation	1,055	761
Accrued research and development expenses	2,510	1,349
Preferred stock warrants	—	853
Current portion of notes payable	3,536	3,197
Current portion of deferred lease credit	333	333
Current portion of deferred revenue	3,913	3,896
Other accrued liabilities	741	447
Total current liabilities	13,457	11,527
Deferred lease credit	1,793	2,124
Notes payable	3,444	6,679
Deferred revenue	15,584	19,481
Commitments and contingencies		
Convertible preferred stock, $0.001 par value, issued in series; 10,000,000 and 69,049,025 shares authorized at December 31, 2007 and 2006, respectively; 0 and 11,375,222 shares issued and outstanding at December 31, 2007 and 2006, respectively; at amount paid-in	—	110,665
Stockholders' equity (deficit):		
Common stock, $0.001 par value; 150,000,000 and 95,950,975 shares authorized at December 31, 2007 and 2006, respectively; 17,653,648 and 1,056,411 shares issued and outstanding at December 31, 2007 and 2006, respectively	18	1
Additional paid-in capital	158,053	1,451
Accumulated other comprehensive loss	—	(1)
Accumulated deficit	(122,724)	(95,163)
Total stockholders' equity (deficit)	35,347	(93,712)
Total liabilities, convertible preferred stock and stockholders' equity (deficit)	$ 69,625	$ 56,764

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

ARYX THERAPEUTICS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share amounts)

	Year Ended December 31,		
	2007	2006	2005
Revenues:			
Collaboration services	$ 262	$ 2,116	$ —
Technology license fees	3,896	1,623	—
Contractual milestone payments	—	1,000	—
Total revenues	4,158	4,739	—
Costs and expenses:			
Cost of collaboration service revenue	262	2,116	—
Research and development	24,994	23,973	22,498
Selling, general and administrative	7,702	6,938	5,671
Total costs and expenses	32,958	33,027	28,169
Loss from operations	(28,800)	(28,288)	(28,169)
Interest and other income, net	2,591	2,294	876
Interest expense	(1,352)	(1,324)	(671)
Loss before cumulative effect of change in accounting principle	(27,561)	(27,318)	(27,964)
Cumulative effect of change in accounting principle	—	(10)	—
Net loss	(27,561)	(27,328)	(27,964)
Basic and diluted net loss per share	$ (8.24)	$ (26.84)	$ (30.73)
Weighted average shares used to compute basic and diluted net loss per share	3,346	1,018	910

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

ARYX THERAPEUTICS, INC.

CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)

(in thousands, except share and per share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amounts	Shares	Amounts					
Balances at December 31, 2004	**8,556,775**	**$ 80,617**	**886,749**	**$ 1**	**$ 256**	**$ —**	**$(81)**	**$(39,871)**	**$(39,695)**
Issuance of common stock to consultants upon exercise of stock options for cash at $0.90 to $1.80 per share	—	—	8,486	—	8	—	—	—	8
Issuance of common stock to employees upon exercise of stock options for cash at $0.90 to $1.80 per share	—	—	99,948	—	84	—	—	—	84
Compensation associated with stock options granted to consultants	—	—	—	—	364	—	—	—	364
Deferred stock-based compensation	—	—	—	—	332	(332)	—	—	—
Amortization of deferred stock-based compensation	—	—	—	—	—	52	—	—	52
Issuance of warrants in connection with debt financing	—	738	—	—	—	—	—	—	—
Comprehensive loss:									
Unrealized gain on marketable securities	—	—	—	—	—	—	63	—	63
Net loss	—	—	—	—	—	—	—	(27,964)	(27,964)
Comprehensive loss	—	—	—	—	—	—	—	—	(27,901)
Balances at December 31, 2005	**8,556,775**	**81,355**	**995,183**	**1**	**1,044**	**(280)**	**(18)**	**(67,835)**	**(67,088)**
Reclassification of Series C and D preferred stock warrants upon adoption of FASB Staff Position No. FAS 150-5	—	(848)	—	—	—	—	—	—	—
Issuance of Series E convertible preferred stock for cash at $10.80 per share in January 2006, net of issuance costs of $281	2,818,447	30,158	—	—	—	—	—	—	—
Issuance of common stock to consultants upon exercise of stock options for cash at $0.90 to $1.80 per share	—	—	11,532	—	13	—	—	—	13
Issuance of common stock to employees upon exercise of stock options for cash at $0.90 to $1.80 per share	—	—	24,696	—	46	—	—	—	46
Issuance of restricted common stock to an officer in exchange for services	—	—	25,000	—	72	—	—	—	72
Reversal of deferred stock-based compensation upon adoption of Statement of Financial Accounting Standards (SFAS) No.123(R)	—	—	—	—	(280)	280	—	—	—
Stock-based compensation	—	—	—	—	556	—	—	—	556
Comprehensive loss:									
Unrealized gain on marketable securities	—	—	—	—	—	—	17	—	17
Net loss	—	—	—	—	—	—	—	(27,328)	(27,328)
Comprehensive loss	—	—	—	—	—	—	—	—	(27,311)
Balances at December 31, 2006	**11,375,222**	**$110,665**	**1,056,411**	**$ 1**	**$1,451**	**$ —**	**$ (1)**	**$(95,163)**	**$(93,712)**

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

ARYX THERAPEUTICS, INC.

CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT) (Continued)

(in thousands, except share and per share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amounts	Shares	Amounts					
Balances at December 31, 2006	**11,375,222**	**$ 110,665**	**1,056,411**	**$ 1**	**$ 1,451**	**$—**	**$(1)**	**$ (95,163)**	**$(93,712)**
Net exercise of preferred stock warrants into Series C convertible preferred stock in July and October, 2007	2,982	33	—	—	—	—	—	—	—
Issuance of common stock for cash at $10.00 per share in connection with the initial public offering in November 2007, net of issuance costs of $6,162			5,000,000	5	43,833	—	—	—	43,838
Conversion of prefered stock to common stock in connection with the initial public offering	(11,378,204)	(110,698)	11,417,057	12	110,686	—	—	—	110,698
Conversion of preferred stock warrants to common stock warrants	—	—	—	—	667	—	—	—	667
Issuance of common stock to employees upon exercise of stock options for cash at $0.90 to $3.30 per share	—	—	136,847	—	211	—	—	—	211
Issuance of restricted common stock to an officer in exchange for services	—	—	43,333	—	75	—	—	—	75
Stock-based compensation	—	—	—	—	*1,130*	—	—	—	*1,130*
Comprehensive loss:									
Unrealized gain on marketable securities	—	—	—	—	—	—	1	—	1
Net loss	—	—	—	—	—	—	—	(27,561)	(27,561)
Comprehensive loss	—	—	—	—	—	—	—	—	(27,560)
Balances at December 31, 2007	**—**	**$ —**	**17,653,648**	**$18**	**$158,053**	**$—**	**$—**	**$(122,724)**	**$ 35,347**

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

ARYX THERAPEUTICS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

	Year Ended December 31,		
	2007	2006	2005
Cash flows from operating activities:			
Net loss	$(27,561)	$(27,328)	$(27,964)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	1,007	832	564
Amortization of (discount) premium on marketable securities	(8)	(6)	18
Amortization of preferred stock warrants	239	94	400
Revaluation of warrants to fair value and warrant net exercise	(445)	5	—
Impairment and disposition of long-lived assets	14	105	5
Stock-based compensation	1,205	628	416
Change in assets and liabilities:			
Prepaid research and development expenses	(340)	306	(332)
Other prepaid and assets	(24)	(49)	(221)
Accounts payable and other accrued liabilities	964	93	(1,204)
Accrued compensation	294	238	250
Accrued research and development expenses	1,161	(2,233)	2,905
Deferred lease credit	(331)	(275)	2,732
Deferred revenue	(3,880)	23,377	—
Net cash used in operating activities	(27,705)	(4,213)	(22,431)
Cash flows from investing activities:			
Purchases of marketable securities	(21,207)	(69,385)	(23,151)
Proceeds from sales of marketable securities	13,090	17,975	6,825
Proceeds from maturities of marketable securities	32,134	33,670	29,700
(Increase) decrease in restricted cash	(150)	190	—
Purchases of fixed assets	(499)	(962)	(3,849)
Net cash provided by (used in) investing activities	23,368	(18,512)	9,525
Cash flows from financing activities:			
Net proceeds from issuance of convertible preferred stock	—	30,158	—
Proceeds from issuance of common stock in connection with initial public offering, net of offering cost	43,838	—	—
Proceeds from exercise of stock options and issuance of common stock	211	59	92
Proceeds from issuance of notes payable	—	681	11,182
Principal payments on notes payable	(2,896)	(1,968)	(93)
Net cash provided by financing activities	41,153	28,930	11,181
Net increase (decrease) in cash and cash equivalents	36,816	6,205	(1,725)
Cash and cash equivalents at beginning of year	18,660	12,455	14,180
Cash and cash equivalents at end of year	$ 55,476	$ 18,660	$ 12,455
Supplemental disclosure of cash flow information:			
Interest paid	$ 813	$ 941	$ 185
Supplemental schedule of noncash transactions:			
Issuance and remeasurement of preferred stock warrants	$ (154)	$ 5	$ 738
Deferred compensation related to stock options granted below re-assessed fair value and its reversal upon adoption of FAS 123(R)	$ —	$ (280)	$ 332
Issuance of preferred stock upon net exercise of warrants for other than cash	$ (33)	$ —	$ —

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

In this report, "ARYx," "we," "us" and "our" refer to ARYx Therapeutics, Inc. "Common Stock" refers to ARYx's common stock, par value $0.001 per share. "Preferred Stock" refers to ARYx's convertible preferred stock, $0.001 par value.

1. Organization and Summary of Significant Accounting Policies

The Company

ARYx is a biopharmaceutical company focused on developing a portfolio of internally discovered product candidates designed to eliminate known safety issues associated with well-established, commercially successful drugs. We use our RetroMetabolic Drug Design technology to design structurally unique molecules that retain the efficacy of these original drugs but are metabolized through a potentially safer pathway to avoid specific adverse side effects associated with these compounds. Our most advanced product candidate, ATI-7505, is based on cisapride and has successfully completed Phase 2 clinical trials for the treatment of gastroesophageal reflux disease and symptoms associated with functional dyspepsia. Our second product candidate, ATI-5923, is based on warfarin and is currently in Phase 2 clinical trials for use as an anticoagulant to treat patients at risk for the formation of dangerous blood clots. Our third product candidate, ATI-2042, is based on amiodarone and is in Phase 2 clinical trials for the treatment of atrial fibrillation, a form of irregular heartbeat. We have multiple product candidates in preclinical development. Each of our product candidates is an orally available, patentable new chemical entity designed to address similar indications as those of the original drug upon which it is based. Our product candidates target multi-billion dollar markets.

We were incorporated in the State of California on February 28, 1997 and reincorporated in the State of Delaware on August 29, 2007. We maintain a wholly-owned subsidiary, ARYx Therapeutics Limited, with registered offices in the United Kingdom, which has had no operations since its inception in September 2004. We currently are focused on the human drug development business and operate in a single business segment with regard to the development of human pharmaceutical products.

Basis of Presentation

Our consolidated financial statements include the accounts of our wholly-owned subsidiary, ARYx Therapeutics, Ltd. All intercompany accounts and transactions have been eliminated.

Reverse Stock Split

On October 22, 2007, we effected a six-for-one reverse stock split of our convertible preferred stock and common stock. All share and per share amounts have been retroactively restated for the effect of this split for all periods presented.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts in the consolidated financial statements and accompanying notes. Management bases its estimates on historical experience and on assumptions believed to be reasonable under the circumstances. Actual results could differ from those estimates.

1. Organization and Summary of Significant Accounting Policies (Continued)

Significant Risks and Uncertainties

We have experienced significant operating losses since our inception. At December 31, 2007, we had an accumulated deficit of approximately $122.7 million. We have generated no revenue from product sales to date. We have funded our operations principally from the sale of our convertible preferred and common stock and collaboration agreements. We expect to incur substantial additional operating losses for the next several years and may need to obtain additional financing in order to complete the clinical trials of our product candidates, launch and commercialize product candidates for which we receive regulatory approval, continue research and development programs and license or acquire additional product candidates. There can be no assurance that such financing will be available or will be at terms acceptable to us. We may seek additional funds through financings, collaborations or public or private debt or equity financings, and may also seek to reduce expenses related to our operations.

We have no products that have received regulatory approval. Any products developed by us will require approval from the U.S. Food and Drug Administration or foreign regulatory agencies prior to commercial sales. There can be no assurance that our products will receive the necessary approvals. If we are denied such approvals or such approvals are delayed, it could have a material adverse effect to our operations. To achieve profitable operations, we must successfully develop, test, manufacture and market products. There can be no assurance that any such products can be developed successfully or manufactured at an acceptable cost and with appropriate performance characteristics, or that such products will be successfully marketed. These factors could have a material adverse effect on our future financial results.

We generate revenue through a collaboration agreement with Procter & Gamble Pharmaceuticls, Inc. ("P&G"). The collaboration agreement with P&G is currently our only source of revenue. Consequently, we are at risk of loss of future revenues in the event that P&G terminates the collaboration agreement or is unable to remit to us amounts owed in accordance with the terms of the agreement.

Financial instruments that potentially subject us to a concentration of credit risk consist of cash, cash equivalents and marketable securities. We deposit excess cash and cash equivalents with high credit quality financial institutions in the United States. Deposits in these financial institutions may exceed the amount of insurance provided on such deposits. We have not experienced any losses on our deposits of cash, cash equivalents and marketable securities.

Cash and Cash Equivalents

Cash and cash equivalents are stated at cost, which approximates market values. We consider all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents.

Marketable Securities

Marketable securities are classified as available-for-sale in accordance with Statement of Financial Accounting Standards ("SFAS") No. 115, *Accounting for Certain Investments in Debt and Equity Securities,* and are carried at their fair value at the balance sheet date. Realized gains and losses on sales of all such securities are reported in earnings and computed using the specific identification

1. Organization and Summary of Significant Accounting Policies (Continued)

method. Unrealized gains and losses are reported as a separate component of stockholders' equity until realized. The amortized cost of securities is adjusted for amortization of premiums and accretion of discounts from the date of purchase to maturity and is included in interest income. Accrued interest and dividends are included in interest income.

Marketable securities include corporate bonds, Eurobonds, certificates of deposit, commercial paper and auction rate securities with original maturities beyond three months. Auction rate securities are typically structured as short-term, liquid investments that can be readily converted into cash every 28 to 90 days provided that a scheduled auction does not fail to complete; however, since the stated or contractual maturities of these securities is greater than 90 days, these securities were classified as short-term investments.

Restricted Cash

Under a facilities operating lease agreement, $903,000 was restricted as of December 31, 2007 and 2006 for use as security for a standby letter of credit issued to our landlord. In May 2007, we entered into a pledge and security agreement with Comerica Bank whereby $150,000 was restricted for use as security for our corporate purchasing cards and was classified as a current asset as of December 31, 2007 as it was used to secure a revolving line of credit.

Fair Value of Financial Instruments

We believe that the reported amounts of our financial instruments including cash and cash equivalents, marketable securities, accounts payable, accrued liabilities and short term notes payable approximate fair value due to their expected short maturities. Estimated fair values for marketable securities are based on par value or quoted market prices for the same or similar instruments. Based on the borrowing rates available to us for loans with similar terms and average maturities, the fair value of our long-term debt is estimated to be $2.8 million and $6.7 million as of December 31, 2007 and 2006, respectively.

Related Party Receivable

In May 2006, we provided a loan to an officer in the amount of $96,000 primarily to assist with the purchase of a primary residence. The loan is evidenced by a full recourse promissory note payable to ARYx. We accrued interest on the note at an effective rate of 7.625%. In accordance with the terms of the promissory note and commencing in June 2006, $4,000 of the outstanding principal balance of the loan was forgiven on a monthly basis at the end of each full month provided that the officer remained as a full-time employee as of the date of such forgiveness. Principal and interest of $30,000 and $31,000 was forgiven and charged to selling, general and administrative expense within the normal course of business in 2007 and 2006, respectively. Additionally in August 2007, our board of directors authorized the forgiveness of the remaining portion of the loan in the amount of $43,000, which included principal and imputed interest.

Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation is computed using the straight-line method over the estimated useful lives of the

1. Organization and Summary of Significant Accounting Policies (Continued)

respective assets, generally four to seven years. Leasehold improvements are amortized over their estimated useful lives or the remaining facility lease term, whichever is shorter.

Change in Accounting Estimates

In connection with our annual review of property and equipment for the assessment of impairment, we changed in 2006 the estimated useful life of our information technology related assets from five to four years. The change in estimated useful life is based upon a change in the estimated future benefits we expect to receive from those assets, the pattern of consumption of those benefits, and the information available regarding those benefits. We account for this change in accounting estimate in accordance with SFAS No. 154, *Accounting Changes and Error Corrections,* which was adopted at the beginning of our fiscal year 2006. We do not expect the impact of this change to have a material effect on our future periods.

Impairment of Long-Lived Assets

We evaluate our long-lived assets, including property and equipment, for impairment whenever events or changes in business circumstances indicate that the carrying amount of our assets may not be fully recoverable. If indicators of impairment exist, impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of each asset and its eventual disposition is less than its carrying amount. The impairment charge is determined based upon the excess of the carrying value of the asset over its fair value, with fair value determined based upon an estimate of discounted future cash flows or on other appropriate measures of fair value. Impairment and disposition losses on property and equipment of $14,000, $105,000, and $5,000 were recorded as operating expense for the years ended December, 31, 2007, 2006 and 2005, respectively.

Stock-Based Compensation

On January 1, 2006 (the "effective date"), we began accounting for stock-based compensation in accordance with SFAS No. 123(R), *Share-Based Payment* ("SFAS 123R"). Under the provisions of SFAS 123R, compensation expense related to stock-based transactions, including employee and director stock-based awards, is estimated at the date of grant based on the stock award's fair value and is recognized as expense over the requisite service period. We adopted SFAS 123R using the modified prospective transition method which requires that compensation expense be recorded for new awards and awards modified, repurchased, or cancelled after the effective date, as well as for all unvested stock-based awards as of the effective date. SFAS 123R provides for a choice between two attribution methods for allocating stock-based compensation costs: the "straight-line method" which allocates expense on a straight-line basis over the requisite service period of the last separately vesting portion of an award, or the "graded vesting attribution method" which allocates expense on a straight-line basis over the requisite service period for each separately vesting portion of the award as if the award was, in substance, multiple awards. We selected the latter method and amortize the fair value of each award on a straight-line basis over the requisite service period for each separately vesting portion of each award. In accordance with the modified prospective transition method, our consolidated financial statements for periods prior to 2006 have not been restated to reflect, and do not include, the impact of SFAS 123R.

1. Organization and Summary of Significant Accounting Policies (Continued)

Prior to the adoption of SFAS 123R and in accordance with the provisions of SFAS 123, we elected to follow Accounting Principle Board ("APB") Opinion No. 25 and Financial Accounting Standards Board ("FASB") Interpretation No. 44, *Accounting for Certain Transactions Involving Stock Compensation—an Interpretation of APB Opinion No. 25*, in accounting for our employee and director stock-based transactions. Under the intrinsic value method permitted under APB 25, if the exercise price of our employee and director stock-based awards was equal to or greater than the fair value of the underlying stock on the date of grant, no compensation expense was recognized. As required by SFAS No. 148, *Accounting for Stock-Based Compensation—Transition and Disclosure, an amendment of SFAS Statement No. 123*, the pro forma impact of expensing the fair value of our stock-based awards for the year ended December 31, 2005 was:

	2005 (in thousands, except per share amounts)
Net loss, as reported	$(27,964)
Add: Stock-based employee compensation expense included in reported net loss	52
Deduct: Stock-based employee compensation determined under the fair value method	(307)
Pro forma net loss	$(28,219)
Basic and diluted net loss per share, as reported	$ (30.73)
Pro forma basic and diluted net loss per share	$ (31.01)

We continue to account for stock options issued to non-employees in accordance with the recognition provisions of SFAS No. 123 and Emerging Issues Task Force ("EITF") Issue 96-18 ("EITF 96-18"), *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*, using a fair value approach. The value of stock options issued for consideration other than employee services is determined on the earlier of (i) the date on which there first exists a firm commitment for performance by the provider of goods or services or (ii) on the date performance is complete, using the Black-Scholes option valuation model. The compensation costs of these arrangements are subject to re-measurement over the vesting terms as earned.

Revenue Recognition

We recognize revenue in accordance with SAB No. 104 ("SAB 104"), *Revenue Recognition in Financial Statements*, and EITF Issue 00-21 ("EITF 00-21"), *Revenue Arrangements with Multiple Deliverables*. We have entered into a collaboration agreement with P&G. Revenues from this collaboration agreement include a nonrefundable upfront license fee, reimbursement of services performed in connection with certain development efforts, milestone payments and royalties. When evaluating multiple element arrangements, we consider whether the components of each arrangement represent separate units of accounting as defined in EITF 00-21. Application of this standard requires subjective determinations and requires management to make judgments about the fair value of the individual elements and whether it is separable from the other aspects of the contractual relationship. Revenue arrangements with multiple components are divided into separate units of accounting if certain criteria are met, including whether the delivered component has stand-alone value to the

1. Organization and Summary of Significant Accounting Policies (Continued)

customer, and whether there is objective and reliable evidence of the fair value of the undelivered items. Consideration received is allocated amongst the separate units of accounting based on their respective fair values. Applicable revenue recognition criteria are then applied to each of the units.

Revenue is recognized when the four basic criteria of revenue recognition are met: (1) persuasive evidence of an arrangement exists; (2) transfer of technology has been completed or services have been rendered; (3) the fee is fixed or determinable and (4) collectibility is reasonably assured. For each source of revenue, we comply with the above revenue recognition criteria in the following manner:

- Nonrefundable upfront license fees received with separable stand-alone values are recognized when intangible property rights are transferred, provided that the transfer of rights is not dependent upon continued efforts by ARYx with respect to the agreement. If the transferred rights do not have stand-alone value, or if objective and reliable evidence of the fair value of the undelivered elements does not exist, the amount of revenue allocable to the transferred rights and the undelivered elements is deferred and amortized over the related involvement period in which the remaining undelivered elements are provided to our partner.
- Service revenue consists of reimbursement of services performed or costs incurred under contractual arrangements with third parties. Revenue from such services is based upon 1) negotiated rates for full time equivalent employees that are intended to approximate our anticipated costs or 2) other direct costs incurred. Service revenues are recognized when the services are performed. Costs associated with these services are included in cost of collaboration service revenue.
- Payments associated with milestones, which are contingent upon future events for which there is reasonable uncertainty as to their achievement at the time the agreement was entered into, are recognized as revenue when these milestones, as defined in the contract, are achieved and provided that no further performance obligations are required of us. Milestone payments are typically triggered either by the progress or results of clinical trials or by external events, such as regulatory approval to market a product or the achievement of specified sales levels, all of which are substantially at risk at the inception of the respective collaboration agreement. In applying this policy, we ascertain certain factors that include: 1) whether or not each milestone is individually substantive, 2) the degree of risk associated with the likelihood of achieving each milestone, 3) whether or not the payment associated with each milestone is reasonably proportional to the substantive nature of the milestone, 4) the level of effort, if any, that is anticipated or actually involved in achieving each milestone, and 5) the anticipated timing of the achievement of each milestone in relation to other milestones or revenue elements. Amounts received in advance, if any, are recorded as deferred revenue until the associated milestone is reached.
- Royalty revenue from sales of our licensed products will be recognized when earned and collectible.

Research and Development Costs

Research and development ("R&D") expenditures are expensed as incurred. Major components of R&D expenses consist of personnel costs, preclinical studies, clinical trials, materials and supplies and allocations of R&D and facilities related costs, as well as fees paid to consultants and other entities

1. Organization and Summary of Significant Accounting Policies (Continued)

that conduct certain research and development activities on our behalf. Payments made to other entities are typically under agreements that are generally cancelable by us.

R&D activities are categorized as follows: research and nonclinical studies, clinical development and pharmaceutical manufacturing. Research and nonclinical expenditures consist primarily of research personnel and laboratory related costs as well as third party contract research. Clinical development costs consist primarily of costs associated with Phase 1 and Phase 2 clinical trials. Pharmaceutical manufacturing costs include drug formulation, stability testing, contract manufacturing of drug substance and products and clinical trial material packaging.

Clinical trial costs are a significant component of our R&D expenses. Currently, we manage our clinical trials primarily through the use of contract research organizations. We recognize expenses for these contracted activities based upon a variety of factors, including actual and estimated patient enrollment rates, clinical site initiation activities, labor hours and other activity-based factors. We match the recording of expenses in our financial statements to the actual services received and efforts expended. Subject to the timing of payments to the service providers, we record prepaid expenses and accruals relating to clinical trials based on estimates of the degree of completion of the contracted work as specified in each clinical study agreement. We monitor each of these factors to the extent possible and adjust our estimates accordingly.

Costs to acquire technologies to be used in research and development that have not reached technological feasibility and have no alternative future use are expensed when incurred.

Net Loss per Share

Basic net loss per share is computed by dividing net loss by the weighted average number of fully vested common shares outstanding during the period. Diluted net loss per share is computed by giving effect to all potential dilutive common shares, including stock options, warrants and convertible preferred stock.

The following table presents the calculation of historical basic and diluted net loss per share:

	Year Ended December 31,		
	2007	2006	2005
	(in thousands, except per share amounts)		
Numerator:			
Net loss applicable to common stockholders	$(27,561)	$(27,328)	$(27,964)
Denominator:			
Weighted average common shares outstanding	3,376	1,028	913
Less: Weighted average unvested restricted common shares	(30)	(10)	(3)
Weighted average shares used in computing basic and diluted net loss per share	3,346	1,018	910
Basic and diluted net loss per share	$ (8.24)	$ (26.84)	$ (30.73)

For the year ended December 31, 2007, shares and per share amounts reflect the conversion of all of our outstanding convertible preferred stock into common stock upon the closing of our initial public offering on November 13, 2007.

1. Organization and Summary of Significant Accounting Policies (Continued)

The following common stock equivalent shares related to our convertible preferred stock, warrants and stock options were excluded from the computation of diluted net loss per common share for the periods presented because including them would have had an antidilutive effect:

	As of December 31,	
	2007	2006
Series A convertible preferred stock (as if converted)	—	126,260
Series B convertible preferred stock (as if converted)	—	105,257
Series C convertible preferred stock (as if converted)	—	2,825,354
Series D convertible preferred stock (as if converted)	—	5,538,757
Series E convertible preferred stock (as if converted)	—	2,818,447
Warrants to purchase Series C convertible preferred stock (as if exercised and converted)	—	17,310
Warrants to purchase Series D convertible preferred stock (as if exercised and converted)	—	100,704
Warrants to purchase common stock (as if exercised)	147,981	—
Outstanding common stock options (as if exercised)	1,777,577	1,390,822
	1,925,558	12,922,911

Comprehensive Loss

Comprehensive income (loss) generally represents all changes in stockholders' equity (deficit) except those resulting from investments or contributions by stockholders. Our unrealized gains (losses) on marketable securities represent the component of comprehensive loss that is excluded from the net loss. Comprehensive loss for the years ended December 31, 2007, 2006 and 2005 was $27.6 million, $27.3 million and $27.9 million, respectively. Comprehensive loss has been disclosed in the statements of convertible preferred stock and stockholders' equity (deficit) for all periods presented per the provisions of SFAS No. 130, *Reporting Comprehensive Income*.

Income Taxes

We use the asset and liability method of accounting for income taxes in accordance with SFAS No. 109, *Accounting for Income Taxes*. Deferred tax assets and liabilities are determined based on differences between financial reporting and the tax basis of assets and liabilities and are measured using enacted tax rates and laws that will be in effect when the differences are expected to reverse. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized. Effective January 1, 2007, we adopted FASB Interpretation No. 48 ("FIN 48"), *Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109.* (See Note 12.)

Freestanding Warrants and Cumulative Effect of Change in Accounting Principle

We adopted the FASB Staff Position No. 150-5 ("FSP 150-5"), *Issuer's Accounting under Statement No. 150 for Freestanding Warrants and Other Similar Instruments on Shares that are Redeemable*, and accounted for the cumulative effect of the change in accounting principle as of January 1, 2006, the first reporting period following June 30, 2005 as prescribed under the transition provision of FSP 150-5.

1. Organization and Summary of Significant Accounting Policies (Continued)

Under SFAS No. 150, freestanding warrants that are related to the purchase of convertible preferred stock are considered derivative instruments and recorded at fair value. The warrant liability is subject to re-measurement at each balance sheet date and any change in fair value is recognized as a component of other income or expense. As a result of the adoption, $848,000 was reclassified from additional paid-in capital to preferred stock warrant liability on the balance sheet as of January 1, 2006. For the year ended December 31, 2006, the total impact of the change in accounting principle was an increase to net loss of $5,000, consisting of $10,000 in expense for the cumulative effect upon adoption of FSP 150-5 as of January 1, 2006 reflecting the fair value of the warrants as of that date, and $5,000 in interest and other income, net, to reflect the decrease in fair value between January 1, 2006 and December 31, 2006. The pro forma effect of the adoption on our results of operations for 2005, if applied retroactively, assuming SFAS No. 150 had been adopted in that year, has not been disclosed, as these amounts would not be materially different from the reported amounts.

In November 2007, the freestanding warrants to purchase our series convertible preferred stock were automatically converted into warrants to purchase common stock upon the closing of our initial public offering. As a result of the conversion of the warrants' underlying securities and pursuant to EITF 00-19, our warrant liability was reclassified to stockholders' equity (deficit).

The impact of the cumulative effect of change in accounting principle on net loss per share was as follows:

	Year Ended December 31,		
	2007	2006	2005
	(in thousands, except per share amounts)		
Net loss per share, basic and diluted:			
Loss before cumulative effect of change in accounting principle	$(8.24)	$(26.83)	$(30.73)
Cumulative effect of change in accounting principle	—	(0.01)	—
Net loss	$(8.24)	$(26.84)	$(30.73)
Weighted average shares used to compute basic and diluted net loss per share	3,346	1,018	910

Recent Accounting Pronouncements

In September 2006, the FASB issued SFAS No. 157 ("SFAS 157"), *Fair Value Measurements*. SFAS 157 defines fair value, establishes a framework for measuring fair value in accordance with U.S. generally accepted accounting principles and expands disclosures about fair value measurements. SFAS 157 is effective for financial assets and liabilities in financial statements issued for fiscal years beginning after November 15, 2007. We are currently evaluating the impact, if any, of the provisions of SFAS 157 on our consolidated financial position, results of operations and cash flows.

In February 2007, the FASB issued SFAS No. 159 ("SFAS 159"), *The Fair Value Option for Financial Assets and Financial Liabilities- Including an amendment of FASB Statement No. 115*. SFAS 159 provides companies with an option to report selected financial assets and liabilities at fair value. The objective of SFAS 159 is to reduce both the complexity in accounting for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently. Most of the provisions in SFAS 159 are elective; however, the amendment to FASB Statement No. 115, *Accounting*

1. Organization and Summary of Significant Accounting Policies (Continued)

for Certain Investments in Debt and Equity Securities, applies to all entities with available-for-sale and trading securities. SFAS 159 is effective as of the beginning of an entity's fiscal year beginning after November 15, 2007. We are currently evaluating the impact, if any, of the provisions of SFAS 159 on our consolidated financial position, results of operations and cash flows.

In June 2007, the FASB ratified EITF No. 07-3 ("EITF 07-3"), "*Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities*". EITF 07-3 requires that nonrefundable advance payments for goods and services that will be used or rendered in future R&D activities pursuant to executory contractual arrangements be deferred and recognized as an expense in the period that the related goods are delivered or services are performed. We will adopt EITF 07-3 as of January 1, 2008, and the adoption is not expected to have a material impact on our consolidated results of operations or financial position.

In December 2007, the FASB ratified EITF 07-1 ("EITF 07-1"), "*Accounting for Collaborative Arrangements*". EITF 07-1 defines collaborative arrangements and establishes reporting requirements for transactions between participants in a collaborative arrangement and between participants in the arrangement and third parties. EITF 07-1 also establishes the appropriate income statement presentation and classification for joint operating activities and payments between participants, as well as the sufficiency of the disclosures related to these arrangements. EITF 07-1 is effective for fiscal years beginning after December 15, 2008. We are currently evaluating the impact of EITF 07-1 on our consolidated financial position, results of operations and cash flows.

2. Marketable Securities

Marketable securities held at December 31, 2007 and 2006 are summarized below:

	December 31, 2007			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
		(in thousands)		
Classified as:				
Marketable securities:				
Certificates of deposit	$1,600	$ —	$ —	$1,600
Commercial paper	—	—	—	—
Corporate notes and bonds	1,300	—	—	1,300
Auction rate securities	4,740	—	—	4,740
Total marketable securities	$7,640	$ —	$ —	$7,640
Available-for-sale securities maturing:				
Within 1 year	$2,900			$2,900
Auction rate securities maturing beyond 1 year	4,740			4,740
	$7,640			$7,640

2. Marketable Securities (Continued)

	December 31, 2006			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
		(in thousands)		
Marketable securities:				
Auction rate securities	$18,925	$—	$—	$18,925
Certificates of deposit	3,604	1	—	3,605
Commercial paper	500	—	—	500
Corporate notes and bonds	7,420	—	(1)	7,419
Euro bonds	1,200	—	(1)	1,199
Total marketable securities	$31,649	$ 1	$(2)	$31,648
Available-for-sale securities maturing:				
Within 1 year	$23,474			$23,473
Auction rate securities maturing beyond 1 year	5,525			5,525
Auction rate securities with no maturity date	2,650			2,650
	$31,649			$31,648

We reviewed our investment portfolio to identify and evaluate investments that had indications of possible impairment. Factors considered in determining whether a loss is other than temporary include the length of time and extent to which fair value has been less than the cost basis, the financial condition and near-term prospects of the investee, credit quality and our ability to hold the securities for a period of time sufficient to allow for any anticipated recovery in market value. As of December 31, 2007 and 2006, no instruments in our portfolio have been in an unrealized loss position for more than 12 months.

There have been no realized gains or losses from the sale of marketable securities for the years ended December 31, 2007, 2006 and 2005, respectively.

3. Property and Equipment

Property and equipment consists of the following:

	December 31,		
	2007	2006	2005
		(in thousands)	
Office and computer equipment	$ 754	$ 602	$ 438
Furniture and fixtures	156	151	135
Laboratory equipment	2,194	1,986	1,479
Leasehold improvements	2,896	2,811	2,747
	6,000	5,550	4,799
Less: Accumulated depreciation and amortization	(2,345)	(1,381)	(656)
Property and equipment, net	$ 3,655	$ 4,169	$4,143

3. Property and Equipment (Continued)

Depreciation and leasehold improvement amortization expenses were $1.0 million, $832,000 and $564,000 for the years ended December 31, 2007, 2006 and 2005, respectively.

4. Collaboration with Procter & Gamble Pharmaceuticals

On June 30, 2006, we entered into a collaboration agreement with P&G pursuant to which P&G will develop and commercialize ATI-7505, our product candidate for the treatment of gastrointestinal disorders such as chronic constipation, functional dyspepsia, gastroesophageal reflux disease, gastroparesis and irritable bowel syndrome with constipation. In connection with this agreement, P&G paid us a $25.0 million nonrefundable upfront license fee and has agreed to pay us additional potential milestone payments and royalties on product sales. Additional license fee revenue could reach approximately $391.0 million over the life of the collaboration, of which approximately $216.0 million could be earned prior to commercialization. Under our agreement with P&G, we have the option, but not the obligation, to co-promote and/or co-develop ATI-7505.

In accordance with our revenue recognition policy, we have concluded that we have three units of accounting: (i) the up front license fee and our joint steering committee obligation; (ii) our commitment to provide transitional services; and (iii) our rights to royalty payments on sales, if any, of ATI-7505. The $25.0 million nonrefundable upfront license fee was deferred upon receipt, as objective evidence of the fair value of the undelivered elements under the agreement could not be established. This fee is being recognized as revenue on a straight-line basis over our estimated obligatory performance period under the terms of the agreement. We estimate on an on-going basis the expected duration of the obligatory performance period and adjust our recognition of deferred revenue accordingly. As of December 31, 2007 and at present, we estimate that our obligatory performance period under the agreement will continue through December 2012. For the year ended December 31, 2007 and 2006, $3.9 million and $1.6 million, respectively, of the $25.0 million upfront payment was recognized as license fee revenue. Further, we earned $1.0 million in milestone revenue upon the delivery of data related to one of the Phase 2 clinical trials for our ATI-7505 product candidate in 2006.

Under the terms of the agreement, we are obligated to provide certain transitional services to P&G. These transitional services represent the pass through of actual costs billed to the Company by third party vendors, are standard support services for the biopharmaceutical industry and are readily available from multiple vendors. We are also entitled to compensation from P&G for certain pre-determined development services, such as formulation, development and manufacturing of drug substance and products, as well as other activities related to the licensed technology. Under the agreement, we have no obligation to perform any development activities nor do we have any manufacturing obligations. For the year ended December 31, 2007 and 2006, we recognized $262,000 and $2.1 million, respectively, as collaboration services revenue related to these activities and costs associated with these services are included in the cost of collaboration service revenue. P&G has the right to terminate our collaboration agreement at any time upon written notice pursuant to its terms.

5. Exclusive Patent License Agreement with the University of Toledo

On February 21, 2005, we entered into an exclusive royalty-bearing license agreement with the University of Toledo for certain patents, patent applications and technology rights. The agreement granted us the right to use the technology rights and to make, have made, offer for sale and sell the

5. Exclusive Patent License Agreement with the University of Toledo (Continued)

licensed products, to practice the licensed processes, and to sublicense the technology and products. In consideration for the licensing agreement, we paid a one-time up-front licensing fee of $125,000 in 2005. The entire license fee was expensed in accordance with SFAS No. 2, *Accounting for Research and Development Costs*, as the acquired patents were related to research technology and, as of the acquisition date, no future alternative uses were identified. On August 21, 2007, we provided the University of Toledo with notice of our termination of this license agreement.

6. Debt Financing

Lighthouse Capital Partners V, L.P.

On March 28, 2005, we entered into a loan agreement with Lighthouse Capital Partners V, L.P. ("Lighthouse") that was amended on October 19, 2007. The original agreement provided for up to $10.0 million in debt financing. The amended agreement in October 2007 provides for up to $9.0 million in additional financing for a total of $19.0 million made available over the life of the facility. The original loan agreement provided for a 42 month repayment term which began on April 1, 2006. As of December 31, 2007, the total principal amount borrowed under the agreement was $10.0 million and the total unpaid principal balance outstanding was $5.4 million. The original outstanding promissory note provides for monthly cash payments of principal and interest at a stated interest rate of 9.75% per annum through September 2009 and a balloon interest payment of $1.2 million in September 2009. The agreement also allows for prepayment of principal with respect to the promissory note whereupon the $1.2 million terminal interest payment is accelerated and due at the time of prepayment of the loan balance. We recorded interest expense related to the loan agreement, including the amortization of expense related to the terminal payment and the warrant issued under the agreement, of $1.2 million, $1.2 million and $600,000 for the years ended December 31, 2007, 2006 and 2005, respectively.

As of December 31, 2007, we were under no obligation to utilize any of the $9.0 million of additional funding available to us under the amended agreement. The amended agreement provides that amounts borrowed, if any, under a new promissory note will be subject to an interest-only period expiring in September 2008 followed by 36 equal monthly payments of principal and interest at a fixed rate of the prime rate plus 2.0%, to be fixed as of September 2008. In addition, we will be obligated to make a final interest payment of 7.5% of the amount borrowed at loan maturity. The agreement contains no financial covenants. Default terms under the agreement are standard terms including borrower default upon nonpayment of amounts due, noncompliance with loan covenants, misrepresentations under the agreement, bankruptcy and other standard provisions. The agreement precludes us from incurring additional material debt amounts with the exception of up to an aggregate of $3.0 million in equipment financing and up to $500,000 in other indebtedness. (See Note 14—Subsequent Events for further discussion.)

Pursuant to the original loan agreement and the utilization of such, Lighthouse was granted a warrant to purchase 100,704 shares, as adjusted for the draw down, of our Series D convertible preferred stock at an exercise price of $9.93 per share. Pursuant to the amended loan agreement, Lighthouse was granted a warrant to purchase 41,666 shares of our Series E convertible preferred stock at an exercise price of $10.80 per share. The number of shares exercisable under the second warrant automatically increases by an amount equal to 5% of the aggregate amount borrowed divided by the exercise price of the warrant. (See Note 9—Warrants for further discussion.)

6. Debt Financing (Continued)

General Electric Commercial Finance

On September 1, 2005, we entered into a loan agreement with General Electric Commercial Finance ("GE") for a secured equipment line of credit of up to $2.5 million. The loan agreement provides for a 42 month repayment term from each date of funding, a stated interest rate that is based on an average of the Federal Reserve's three-year and five-year Treasury Constant Maturities rate plus a spread of 766 basis points and standard default provisions. We currently have three promissory notes outstanding under the agreement with stated interest rates ranging from 11.73% to 12.89%. Under the agreement, events of default include non-payment of amounts owed, a non-permitted sale or transfer of collateral, misrepresentations under the agreement, bankruptcy and other standard provisions. Funds borrowed under the agreement are secured by specific equipment assets and GE has a first priority security interest in those assets. The agreement contains no financial covenants and no warrants to purchase shares of our capital stock were issued to GE in connection with the debt financing. The arrangement provides for monthly payments of principal and interest through July 2010. We recorded interest expense of $144,000, $132,000 and $64,000 for the years ended December 31, 2007, 2006, and 2005, respectively.

Security Priority

Lighthouse has a first priority security interest in all of our tangible and intangible assets except for the following: (i) assets specifically identified and used as security for GE equipment loans, (ii) any first priority interest Comerica Bank may have in our operating bank accounts at Comerica Bank, (iii) any certificates of deposit that are used as security for letters of credit issued to third parties, (iv) any interest or claims our landlord may have in certain leasehold improvements and (v) our intellectual property assets. Lighthouse has a first priority security interest in all of our tangible and intangible assets except for the following: (i) assets specifically identified and secured by the GE equipment loan, (ii) any first priority interest Comerica Bank ("Comerica") may have in our bank accounts at Comerica, (iii) any certificates of deposit that are used as security for a letter of credit and (iv) intellectual property assets.

As of December 31, 2007, future payments under the Lighthouse and GE loan agreements were as follows:

	Lighthouse	GE	Total
2008	$ 2,962	$ 574	$ 3,536
2009	2,418	286	2,704
2010	—	65	65
Total principal payments	5,380	925	6,305
Less: Current portion of notes payable	(2,962)	(574)	(3,536)
Add: Accrued interest on terminal payment	675	—	675
Notes payable	$ 3,093	$ 351	$ 3,444

7. Commitments and Contingencies

Operating Leases

In November 2004, we entered into a new lease agreement for a facility in Fremont, California. The term of the 96 month lease commenced in March 2005 upon occupying the facility. The master lease agreement includes scheduled rent increases over the lease term. Rent increases, net of the impact of a rent holiday from the landlord, are recognized as accrued liabilities and amortized on a straight-line basis over the term of the lease. In addition, our landlord contributed approximately $2.6 million towards facility improvements. The leasehold improvement allowance is recognized as a reduction of rent expense on a straight-line basis over the term of the lease. Both amounts are included in deferred lease credit on our balance sheets. In addition, we provided the landlord with a letter of credit for $903,000 which is collateralized by a certificate of deposit and the collateralized deposit is recorded as restricted cash on the balance sheet.

In December 2002, we entered into a sale-leaseback agreement with ATEL Ventures, Inc. ("ATEL") for the purpose of financing our capital equipment needs. In conjunction with this arrangement, we issued to ATEL a warrant to purchase 5,611 shares of Series C convertible preferred stock at $8.91 per share. (See Note 9—Warrants for further discussion.) We subsequently purchased certain capital equipment by drawing on this lease line in 2004 and at the end of the lease term in May 2006, we exercised the option to purchase the equipment at the then fair value but not less than 5% of the original equipment cost for an aggregate purchase price of $83,000.

Rent expense under our operating leases was $732,000, $721,000 and $848,000 for the years ended December 31, 2007, 2006 and 2005, respectively. Future minimum cash payments under all non-cancelable operating leases at December 31, 2007 are as follows:

2008	$ 947
2009	944
2010	954
2011	973
2012	999
2013 and thereafter	167
	$4,984

Indemnifications

FASB FIN No. 45, *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others,* requires that upon issuance of a guarantee, the guarantor must recognize a liability for the fair value of the obligations it assumes under that guarantee.

As permitted under Delaware law and in accordance with our bylaws, we indemnify our officers and directors for certain events or occurrences, subject to certain limits, while the officer or director is or was serving at our request in such capacity. In August 2007, we entered into indemnification agreements with our officers and directors. The maximum amount of potential future indemnification is unlimited; however, we intend to obtain director and officer insurance that limits our exposure and may enable us to recover a portion of any future amounts paid. We believe the fair value for these indemnification obligations is minimal. Accordingly, we have not recognized any liabilities relating to these obligations as of December 31, 2007.

7. Commitments and Contingencies (Continued)

We have certain agreements with licensors, licensees and collaborators that contain indemnification provisions. In such provisions, we typically agree to indemnify the licensor, licensee and collaborator against certain types of third-party claims. We accrue for known indemnification issues when a loss is probable and can be reasonably estimated. There were no accruals for expenses related to indemnification issues for any period presented.

8. Stockholders' Equity (Deficit)

On October 22, 2007, we effected a six-for-one reverse stock split of our convertible preferred stock and common stock. All share and per share amounts have been retroactively restated for the effect of this split for all periods presented.

Preferred Stock

Upon closing of the initial public offering in November 2007, all of the outstanding shares of our convertible preferred stock were automatically converted into 11,415,130 shares of common stock and all of our warrants to purchase preferred stock then outstanding were converted into warrants to purchase common stock. ARYx's Certificate Of Incorporation, as amended and restated, filed in October 2007, designates and authorizes 10,000,000 shares of $0.001 par value preferred stock, of which no shares are issued and outstanding as of December 31, 2007. The rights, preferences and privileges of any preferred stock to be issued pursuant to our current Certificate of Incorporation, as amended and restated, have yet to be established. No dividends on preferred stock have been declared since inception through December 31, 2007.

As of December 31, 2006, the authorized, issued and outstanding shares of convertible preferred stock and aggregate liquidation preferences were as follows:

	Shares Authorized	Shares Issued and Outstanding	Aggregate Liquidation Preference
			(in thousands)
Series A	757,576	126,260	$ 250
Series B	398,493	66,404	1,195
Series C	17,056,099	2,825,354	25,174
Series D	33,836,857	5,538,757	55,000
Series E	17,000,000	2,818,447	30,439
Balance as of December 31, 2006	69,049,025	11,375,222	$112,058

Common Stock

As of December 31, 2007 and 2006, we were authorized to issue 150,000,000 and 95,950,975 shares of common stock. As of December 31, 2007 and 2006, respectively, we had 17,653,648 and 1,056,411 shares of common stock outstanding.

8. Stockholders' Equity (Deficit) (Continued)

In November 2007, we completed our initial public offering in which we sold and issued 5,000,000 shares of common stock at an issue price of $10.00 per share. We raised a total of $50.0 million in gross proceeds from our initial public offering, or approximately $43.8 million in net proceeds after deducting underwriting discounts and commissions of $3.5 million and other offering costs of approximately $2.7 million. Entities affiliated with two of our principal stockholders purchased an aggregate of 600,000 shares of common stock in our initial public offering at the offering price of $10.00 per share.

We have never declared or paid cash dividends on any of our shares of capital stock. We are prohibited from paying dividends, other than dividends payable solely in common stock, by covenants contained in our loan agreements with Lighthouse and GE.

Shares Reserved for Future Issuance

As of December 31, 2007, the following shares of our common stock were reserved for future issuances:

Warrants outstanding to purchase common stock	147,981
Stock options and awards available for grant	701,420
Stock options and awards outstanding	1,777,577
	2,626,978

9. Warrants

We issue freestanding warrants from time to time pursuant to various contractual arrangements. As of December 31, 2007, the following warrants to purchase our common stock were issued and outstanding:

Warrant Holder	Issue Date	In Connection With	Warrant to Purchase	Shares	Exercise Price (per share)	Expire Date
ATEL[1]	12/23/2002	Leasing arrangement	Common stock	5,611	$ 8.91	12/23/2012
Lighthouse—Warrant 1[2]	3/28/2005	Debt financing	Common stock	100,704	$ 9.93	3/28/2012
Lighthouse—Warrant 2[3]	10/19/2007	Debt financing	Common stock	41,666	$10.80	10/19/2014
				147,981		

(1) Exercisable, in whole or in part, until the earlier of the 10th anniversary of the issue date or the 5th anniversary of the closing of an initial public offering.

(2) Exercisable, in whole or in part, prior to or upon the closing of an initial public offering, a merger, change in control, or sale of substantially all of our assets; expires at the earlier of (i) the close of business on March 12, 2012, (ii) two years following the effective date of an initial public offering, or (iii) the effective date of a merger, as defined in the agreement.

(3) Exercisable, in whole or in part, at anytime at the option of the holder or deemed to have been automatically exercised in full immediately prior to the expiration of the warrant; expires at the earlier of (i) the close of business on October 19, 2014, (ii) the effective date of a merger, as defined in the agreement.

We follow guidance under SFAS 150, and EITF 96-18 prior, to measure the fair value of these warrants on date of issuance. The fair value of the warrant issued to ATEL was recorded as a prepayment on a lease and was amortized to interest expense over the 36 month lease term. The fair

9. Warrants (Continued)

value of the first warrant issued to Lighthouse was recorded in three separate tranches as debt issuance cost with the first tranche amortized to interest expense over the funding commitment period ended December 31, 2005, and the remainder amortized to interest expense over the duration of the interest-only period plus the term of the loan over 42 months. The fair value of the second warrant issued to Lighthouse was recorded as debt issuance cost and amortized to interest expense over the funding commitment period ending March 1, 2008. We also issued warrants to Life Science Group in 2002 and 2003 and recorded the fair value of the warrants as Series C convertible preferred stock issuance costs. Amortization of the fair value of the warrants issued to ATEL and Lighthouse was charged to interest expense as follows:

	Year Ended December 31,		
	2007	2006	2005
	(in thousands)		
ATEL	$ —	$ —	$ 14
Lighthouse—Warrant 1	94	94	386
Lighthouse—Warrant 2	145	—	—
	$239	$ 94	$400

All warrants may be exercised using the net exercise method. Under this method, the number of shares issued upon exercise is reduced by an amount equal to the product of the number of shares subject to the exercise and the exercise price per share, divided by the fair value of the underlying securities on the date of the exercise. The number of shares issued upon exercise of the warrants, and the exercise price per share, are adjustable in the event of stock splits, dividends and similar fundamental changes.

In June 2007, Life Science Group, Inc. exercised their first warrant on a net exercise basis and resulted in the issuance of 1,055 shares of Series C convertible preferred stock. In October 2007, Life Science Group, Inc. exercised their second warrant on a net exercise basis and resulted in the issuance of 1,927 shares of Series C convertible preferred stock. Upon closing of the initial public offering in November 2007, all shares of our convertible preferred stock were automatically converted into shares of common stock and accordingly, an aggregate 2,982 shares of Series C convertible preferred shares issued in connection with warrants exercised in 2007 were converted into equal shares of common stock.

Before conversion of the convertible preferred stock warrants into common stock warrants, we followed guidance under SFAS 150 and re-measured the fair value of these warrants on January 1, 2006 (upon adoption of FSP 150-5) and on each subsequent balance sheet date until the date of conversion using the Black-Scholes option valuation model with the following assumptions: risk-free interest rate between 3.78% and 4.96%, contractual life according to the remaining terms of the arrangements, no dividend yield and volatility of 73%. Accordingly, we recorded interest and other income of $445,000 and $5,000 to reflect the decrease in fair value of the then preferred stock warrant liability for the year ended December 31, 2007 and 2006, respectively.

10. Stock-Based Compensation

2007 Equity Incentive Plan

Our board of directors adopted the 2007 Equity Incentive Plan (the "2007 Plan") in July 2007 and our stockholders approved the 2007 Plan in October 2007. The 2007 Plan became effective immediately upon the signing of the underwriting agreement for our initial public offering. The 2007 Plan will terminate on July 17, 2017, unless terminated earlier by our board of directors. The 2007 Plan provides for the grant of incentive stock options, nonstatutory stock options, restricted stock awards, restricted stock unit awards, stock appreciation rights, performance stock awards, and other forms of equity compensation (collectively, "stock awards"), which may be granted to employees, including officers, non-employee directors, and consultants.

As of December 31, 2007, an aggregate of 650,000 shares of common stock have been reserved for issuance under the 2007 Plan. The number of shares of common stock reserved for issuance will automatically increase each year on January 1st, from January 1, 2008 through and including January 1, 2017, by the lesser of (a) 4.0% of the total number of shares of common stock outstanding on December 31st of the preceding calendar year or (b) a lesser number of shares of common stock determined by our board of directors prior to the start of a calendar year for which an increase applies. The maximum number of shares that may be issued pursuant to the exercise of incentive stock options over the term of the 2007 Plan is 6,666,666 shares. As of December 31, 2007, options to purchase 15,250 shares of common stock at a weighted average exercise price per share of $8.03 were outstanding under the 2007 Plan.

Generally, the plan administrator, as designated by our board of directors, determines the exercise price for a stock option provided that the exercise price of an incentive stock option and nonstatutory stock option cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2007 Plan vest at the rate specified by the plan administrator. The plan administrator also determines the term of stock options granted under the 2007 Plan, up to a maximum of ten years (except in the case of certain incentive stock options, as described below). Unless the terms of an optionee's stock option agreement provide otherwise, if an optionee's relationship with us, or any of our affiliates, ceases for any reason other than disability or death, the optionee may exercise any vested options for a period of three months following the cessation of service. If an optionee's service relationship with us, or any of our affiliates, ceases due to disability or death (or an optionee dies within a certain period following cessation of service), the optionee or a beneficiary may exercise any vested options for a period of 12 months in the event of disability, and 18 months in the event of death.

No incentive stock option may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (a) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant and (b) the term of the incentive stock option does not exceed five years from the date of grant.

2007 Non-Employee Director's Stock Option Plan

Our board of directors adopted the 2007 Non-Employee Directors' Stock Option Plan (the "2007 Directors' Plan") in July 2007 and our stockholders approved the 2007 Directors' Plan in October 2007. The 2007 Directors' Plan became effective immediately upon the signing of the underwriting agreement for our initial public offering. The 2007 Directors' Plan provides for the automatic grant of

10. Stock-Based Compensation (Continued)

nonstatutory stock options to purchase shares of common stock to our non-employee directors over their period of service on our board.

As of December 31, 2007, an aggregate of 166,666 shares of common stock have been reserved for issuance under the 2007 Directors' Plan. The number of shares of common stock reserved for issuance will automatically increase each year on January 1st, from January 1, 2008 through and including January 1, 2017, by the excess of (a) the number of shares of common stock subject to options granted during the preceding calendar year, over (b) the number of shares added back to the share reserve during the preceding calendar year. As of December 31, 2007, options to purchase 99,996 shares of common stock at a weighted average exercise price per share of $8.10 were outstanding under the 2007 Directors' Plan.

Pursuant to the terms of the 2007 Directors' Plan, each individual who becomes a non-employee director will automatically be granted an option to purchase 16,666 shares of common stock ("Initial Option") on the date of appointment to the board. The shares subject to each such Initial Option vest in a series of 36 successive equal monthly installments measured from the date of grant. Each individual who is serving as a non-employee director on the first trading day occurring on or after April 30th of each year, beginning in 2009, will automatically be granted an option to purchase 6,666 shares of common stock ("Annual Option") on that date. The shares subject to each such Annual Option vest in a series of 12 successive equal monthly installments measured from the date of grant. The exercise price of each option granted under the 2007 Directors' Plan will be equal to 100% of the fair market value of our common stock on the date of grant. The maximum term of options granted under the 2007 Directors' Plan is ten years.

2001 Equity Incentive Plan

Our 2001 Equity Incentive Plan (the "2001 Plan"), adopted by our board of directors in May 2001, provides for the granting of incentive and nonstatutory stock options, stock bonuses and restricted stock to our employees, directors and consultants at the discretion of the board of directors. As of December 31, 2007, options to purchase 1,662,331 shares of common stock at a weighted average exercise price per share of $2.11 remained outstanding under the 2001 Plan. In addition, 68,333 shares subject to stock bonus awards and restricted stock awards have been granted under the 2001 Plan. Subsequent to the initial public offering of our common stock in November 2007, no further options will be granted under the 2001 Plan. At the closing of the initial public offering, 110,154 shares remaining and available for future grant were cancelled.

The 2001 Plan allows for early exercise of certain stock options prior to vesting subject to the terms of the stock option agreement approved by the board of directors. As of December 31, 2007 and 2006, none and 20,833 unvested stock options were exercisable subject to the original early exercise provision contained in certain of our stock option agreements. In September 2005, one of our officers acquired 83,333 shares of common stock through a partial early exercise of options under a previously approved stock option agreement. As of December 31, 2007 and 2006, all early exercised shares were vested and none were subject to repurchase by us.

10. Stock-Based Compensation (Continued)

A summary of activities under all of our stock plans through December 31, 2007 is as follows:

	Number of Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value (000's)
Outstanding at December 31, 2004	520,220	$1.00		
Granted	1,000,839	1.80		
Exercised	(108,434)	0.93		
Forfeited	(28,167)	1.16		
Outstanding at December 31, 2005	1,384,458	1.58		
Granted	81,663	2.19		
Exercised/released	(61,228)	0.82		
Forfeited	(14,071)	1.72		
Outstanding at December 31, 2006	1,390,822	$1.65	7.79	$2,296
Vested and expected to vest at December 31, 2006	1,382,934	$1.65	7.79	$2,285
Exercisable at December 31, 2006	729,158	$1.47	7.38	$1,330
Granted	622,729			
Exercised/released	(180,163)			
Forfeited	(55,811)			
Outstanding at December 31, 2007	1,777,577	$2.50	7.57	$9,375
Vested and expected to vest at December 31, 2007	1,766,459	$2.49	7.56	$9,326
Exercisable at December 31, 2007	1,063,125	$1.77	6.88	$6,358

A summary of total outstanding stock options as of December 31, 2007 is as follows:

	Options Outstanding			Options Exercisable	
Range of Exercise Price	Number Outstanding	Weighted-Average Remaining Contractual Life (in years)	Weighted-Average Exercise Price	Number Exercisable	Weighted-Average Exercise Price
$0.90 - $0.90	271,323	5.43	$0.90	270,552	$0.90
$0.91 - $1.80	896,175	7.14	1.80	657,367	1.80
$1.81 - $3.30	485,084	8.98	3.28	132,434	3.27
$3.31 - $8.10	124,995	9.84	7.93	2,772	8.10
$0.90 - $8.10	1,777,577	7.57	2.50	1,063,125	1.77

Stock-Based Compensation

We estimate the fair value of our share-based award to employees and directors using the Black-Scholes option valuation model. The Black-Scholes option valuation model requires the use of certain subjective assumptions. The most significant of these assumptions are our estimates of the expected volatility of the market price of our stock and the expected term of the award. Due to the fact that we

10. Stock-Based Compensation (Continued)

are a newly public company, there is limited historical information available to support our estimate of expected volatility required to value our stock-based awards. We, therefore, follow guidance discussed in SAB No. 107 basing our estimate of expected volatility on the expected volatility of a group of similar entities whose stock prices are publicly available. We will continue to consistently apply this process using the same similar entities until a sufficient amount of historical information regarding the volatility of our own stock price becomes available. The expected term represents the period of time that stock-based awards granted are expected to be outstanding. As we have a history of exercise experience for use in the calculation of expected term, we believe our historical experience, adjusting for the exercise patterns of a group of similar entities in our industry, is the best estimate of our future exercise patterns. Other assumptions used in the Black-Scholes option valuation model include risk-free interest rate and expected dividend yield. The risk-free interest rate for periods pertaining to the contractual life of each option is based on the U.S. Treasury strip yield of a similar duration in effect at the time of grant. We have never paid, and do not expect to pay, dividends in the foreseeable future. The fair value of our stock-based awards was estimated at the date of grant using the following assumptions:

	Year Ended December 31,		
	2007	2006	2005
Expected volatility	73%	73%	73%
Expected term (in years)	4.0	4.1	4.7
Weighted-average risk-free interest rate	4.4%	4.8%	4.3%
Expected dividends	—%	—%	—%
Weighted-average grant date fair value per share	2.41	$1.80	$1.62

SFAS 123R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from estimates. Forfeitures are estimated based on our historical experience and separate groups of employees that have similar historical forfeiture behavior are separately considered for expense recognition. Prior to the adoption of SFAS 123R, we accounted for forfeitures as they occurred.

Total compensation cost that has been recorded in the statement of operations, which includes stock-based compensation expense under SFAS 123R, the amortization of deferred stock-based compensation recorded in 2005, and the value of options issued to non-employees for services rendered, is allocated as follows:

	Year Ended December 31,		
	2007	2006	2005
	(in thousands)		
Research and development:			
Officer compensation	$ 115	$ 54	$ 26
Employee and consultant compensation	355	102	41
Selling, general and administrative:			
Director and officer compensation	669	431	342
Employee and consultant compensation	66	41	7
	$1,205	$628	$416

10. Stock-Based Compensation (Continued)

In February 2007 and in connection with our annual employee performance reviews, employees received stock option grants with a service and performance condition that provides for partial acceleration of vesting upon the completion of ARYx's initial public offering. Upon the closing of our initial public offering in November 2007, vesting of 25% of the shares subject to the options granted was accelerated to the date of our initial public offering. The remaining 75% of the shares subject to the options granted was accelerated to vest in equal monthly installments over 36 months measured from the date of our initial public offering. In addition, an option granted to an officer in connection with an employment agreement was also accelerated pursuant to the terms of the option agreement. In accordance with provisions of SFAS 123R, we accounted for the effect of the vesting acceleration as a cumulative catch-up adjustment in the period when the performance condition was met and recognized related compensation cost in the 4th quarter of 2007.

In August 2006, we entered into a separation agreement with an employee whereby the vesting of certain stock options was accelerated. Acceleration of vesting represents a change to the terms of the original service vesting condition and is therefore subject to modification accounting under SFAS 123R. Accordingly, the originally measured and recognized compensation cost is reversed, and the fair value of the modified award on the modification date is recognized. As a result of this modification, we recognized additional compensation expense of $13,000 for the year ended December 31, 2006.

During 2005, certain stock options were granted with exercise prices below the estimated fair value, for financial reporting purposes, of the common stock at the date of grant. Deferred stock-based compensation of $332,000 was recorded during the year ended December 31, 2005, in accordance with APB 25, and was amortized on a straight-line basis over the related vesting period of the options. We recorded employee stock-based compensation expense associated with the amortization of deferred stock-based compensation of $52,000 for the year ended December 31, 2005. The remaining deferred stock compensation balance of $280,000 as of December 31, 2005 was reversed on January 1, 2006 upon adoption of SFAS 123R.

A summary of the status of our unvested stock options as of the respective balance sheet dates, and changes during years, is presented below:

	Number of Shares	Weighted-Average Grant-Date Fair Value (per share)
Unvested shares at January 1, 2006	600,893	$1.44
Granted	56,666	1.80
Vested	(259,633)	1.26
Forfeited	(12,850)	1.50
Unvested shares at December 31, 2006	385,076	1.56
Granted	579,396	2.41
Vested	(296,870)	1.61
Forfeited	(54,485)	1.89
Unvested shares at December 31, 2007	613,117	2.31

10. Stock-Based Compensation (Continued)

As of December 31, 2007 and 2006, there was $1.3 million and $748,000, respectively, of unrecognized compensation cost related to these unvested stock options and these costs are expected to be recognized over a weighted-average period of 1.23 years and 2.09 years, respectively. The total fair value of the shares vested during the years ended December 31, 2007, 2006 and 2005, was $474,000, $327,000 and $144,000, respectively. The total intrinsic value of options exercised during the years ended December 31, 2007, 2006 and 2005, was $326,000, $60,000 and $210,000, respectively.

In February 2007, the compensation committee of our board of directors granted an officer a fully vested restricted stock award for 18,333 shares of our common stock and in April 2007, the compensation committee granted the same officer a restricted stock award for an additional 25,000 shares of our common stock. The April 2007 award shares are held in escrow and will be released to the holder upon satisfaction of the vesting provision over a period of four years, provided that the officer remains our chief executive officer. In January 2006, the compensation committee granted an officer a restricted stock award for 25,000 shares of our common stock. In September 2006, we signed and executed a stock bonus award agreement which clarified and modified certain terms of that award. In accordance with the provisions of SFAS 123R, we accounted for the modification as an exchange of the original award for a new award and accordingly, $72,000 of compensation cost was recognized during the year ended December 31, 2006 related to this award. The 2006 award shares are currently held in escrow and will be released to the holder upon satisfaction of the vesting provision over a period of three years. A summary of the status of our unvested restricted stock awards as of December 31, 2007, and changes during 2007, is presented below:

	Number of Shares	Weighted-Average Grant-Date Fair Value (per share)
Unvested shares at January 1, 2006	—	$ —
Granted	25,000	2.88
Vested	—	—
Forfeited	—	—
Unvested shares at December 31, 2006	25,000	2.88
Granted	43,333	3.30
Vested	(38,480)	3.13
Forfeited	—	—
Unvested shares at December 31, 2007	29,853	3.17

Our employee stock options are structured to qualify as incentive stock options ("ISOs"). Under current tax regulations, we do not receive a tax deduction for the issuance, exercise or disposition of ISOs if the employee meets certain holding requirements. If the employee does not meet the holding requirements, a disqualifying disposition occurs, at which time we will receive a tax deduction. We do not record tax benefits related to ISOs unless and until a disqualifying disposition occurs. In the event of a disqualifying disposition, the entire tax benefit is recorded as a reduction of income tax expense. We have not recognized any income tax benefit for the stock-based compensation arrangement due to the fact that we do not believe it is more likely than not that we will recognize any deferred tax assets from such compensation cost recognized in the current period. Total cash received from the exercise of

10. Stock-Based Compensation (Continued)

stock options in 2007 and 2006 was $211,000 and $59,000, respectively. The implementation of SFAS 123R did not have an impact on cash flows from financing activities for the years ended December 31, 2007 and 2006.

Stock Options Granted to Non-Employees

We continue to account for stock options issued to non-employees in accordance with the recognition provisions of SFAS 123R, and EITF Issue 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*, using a fair value approach. The compensation costs of these arrangements are subject to re-measurement over the vesting terms as earned. As of December 31, 2007, options to purchase 2,031 shares of our common stock remained subject to re-measurement under EITF Issue 96-18.

We did not grant any stock options to non-employees in 2007 and 2006. During the years ended December 31, 2005, we granted to non-employees options to purchase 465,833 shares of common stock at the weighted-average exercise price of $1.80 per share. Compensation expense related to non-employee option grants of $13,000, $20,000 and $364,000 was recorded for the year ended December 31, 2007, 2006 and 2005, respectively.

The fair value of non-employee options in 2007, 2006 and 2005 was estimated using the Black-Scholes model with the following weighted-average assumptions: a dividend yield of zero, volatility of 73%, maximum contractual life of ten years, and a risk-free interest rate of 4.4%, 4.8% and 4.3%, respectively.

11. 401(k) Plan

Our employees, upon meeting certain requirements, are eligible to participate in our 401(k) plan. Our 401(k) plan provides that each participant may contribute a portion of his or her pre-tax compensation, up to a statutory limit, which for most employees is $15,500 in 2007. Participants that are 50 years or older can also make "catch-up" contributions, which in 2007 may be up to an additional $5,000 above the statutory limit. Employee contributions are held and invested by the plan's trustee. Our 401(k) plan also permits us to make discretionary matching contributions, and beginning in 2007, we have elected to match participant contributions up to 3.5% of a participant's annual compensation, subject to statutory limits. For the year ended December 31, 2007, we contributed a total of $199,000 to the matching provision under our 401(k) Plan.

12. Income Taxes

There is no provision for income taxes because we have incurred operating losses since inception. A reconciliation between the U.S. statutory tax rate and our effective tax rate follows:

	2007	2006	2005
Tax benefits at federal statutory tax rate	(34.0)%	(34.0)%	(34.0)%
State income tax benefits, net of federal tax benefits	—	—	—
Research tax credits	(1.7)	(2.6)	—
Stock-based compensation	0.8	0.3	—
Effect of valuation allowance	35.5	36.6	34.0
Other	(0.6)	(0.3)	—
Effective tax rate	0.0%	0.0%	0.0%

Deferred tax assets and liabilities reflect the net tax effects of net operating loss and tax credit carryovers and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of our deferred tax assets are as follows:

	December 31,	
	2007	2006
	(in thousands)	
Deferred tax assets (liabilities):		
Net operating loss carryforwards	$ 39,400	$ 27,100
Deferred revenue	7,800	9,300
Research tax credits	3,700	2,900
Deferred lease credit	1,000	1,000
Stock-based compensation	500	300
Depreciation related	(700)	(800)
Other, net	—	200
Total deferred tax assets	51,700	40,000
Valuation allowance	(51,700)	(40,000)
Net deferred tax assets	$ —	$ —

Realization of deferred tax assets is dependent upon future earnings, if any, the timing and amount of which are uncertain. Based on known factors, our management cannot currently conclude that it will be more likely than not that the deferred tax assets will be realized. Accordingly, the deferred tax assets have been fully offset by a valuation allowance. For 2007, 2006 and 2005, the valuation allowance increased by $11.7 million, $11.8 million and $11.6 million, respectively.

As of December 31, 2007, we had net operating loss carryforwards for federal income tax purposes of approximately $100.4 million which expire between 2021 and 2027 if not utilized, and federal research and development tax credit carryforwards of approximately $2.6 million which expire beginning in 2018 if not utilized. The difference between our accumulated deficits of approximately $122.7 million and the net operating loss carryforwards of approximately $100.4 million for federal income tax purposes was primarily due to the $25.0 million P&G upfront license fee being recognized for tax purposes in 2006 but deferred for financial reporting purposes. In addition, we have net operating loss

12. Income Taxes (Continued)

carryforwards for state income tax purposes of approximately $92.6 million which expire between 2013 and 2017 if not utilized, and state research and development tax credit carryforwards of approximately $2.3 million which do not expire. Section 382 of the Internal Revenue Code of 1986, as amended, provides for a limitation on the utilization of net operating losses and tax credit carryforwards in the event that there is a change in ownership as defined in this section. We concluded that we experienced such a change in ownership in June of 2002. As a result of this change in ownership, our ability to use the net operating losses and tax credits incurred prior to the ownership change will likely be limited in future periods.

We adopted FIN 48 effective January 1, 2007. FIN 48 requires us to recognize the financial statement effects of a tax position when it is more likely than not, based on the technical merits, that the position will be sustained upon examination. No cumulative adjustment to our accumulated deficit was required upon our adoption of FIN 48. As permitted under the provisions of FIN 48, we will classify interest and penalties related to unrecognized tax benefits as part of our income tax provision, although there have been no such interest or penalties recognized to-date.

Upon adoption of FIN 48, we had approximately $400,000 of unrecognized tax benefits. A reconciliation of the unrecognized tax benefits recorded for 2007 follows:

	(in thousands)
Balance as of January 1, 2007	$400
Additions based on tax positions related to the current year	100
Reduction resulting from lapse of applicable statue of limitations	—
Settlements	—
Balance as of December 31, 2007	$500

As of December 31, 2007, there were no unrecognized tax benefits that, if recognized, would impact our effective tax rate. We currently have a full valuation allowance against our net deferred tax asset which would impact the timing of the effective tax rate benefit should any of these uncertain tax positions be favorably settled in the future. We do not anticipate that the amount of existing unrecognized tax benefits will significantly increase or decrease within the next 12 months. Because of our net operating loss carryforwards, substantially all of our tax years remain open to federal tax examination. We file income tax returns in the United States and in California, which typically have three and four tax years open, respectively, at any point in time.

13. Quarterly Financial Data (unaudited)

The following tables summarize the unaudited quarterly financial data for the last two fiscal years.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(in thousands, except per share amount)			
2007				
Total revenue	$ 1,138	$ 996	$ 1,040	$ 984
Operating costs and expenses	6,571	8,255	8,554	9,578
Net loss	(5,136)	(7,020)	(7,301)	(8,104)
Basic and diluted net loss per share	(4.89)	(6.50)	(6.30)	(0.80)
2006				
Total revenue	$ —	$ —	$ 1,728	$ 3,011
Operating costs and expenses	8,170	10,191	7,012	7,654
Net loss	(8,014)	(10,007)	(4,956)	(4,351)
Basic and diluted net loss per share	(8.02)	(9.86)	(4.83)	(4.22)

14. Subsequent Events

In February 2008, we fully utilized the additional $9.0 million loan facility extended to us by Lighthouse pursuant to the terms of the amended loan agreement dated October 19, 2007. In accordance with the amended loan agreement, the number of shares exercisable under the second warrant was automatically increased by 41,666 shares, an amount equal to 5% of the aggregate amount borrowed divided by the exercise price of the warrant. (See Note 6—Debt Financing for a detailed discussion.)

At December 31, 2007, we held $4.7 million of auction rate securities in our marketable securities portfolio. Subsequent to at least one successful auction with respect to each of these securities following December 31, 2007, as of February 29, 2008, we experienced failed auctions for $3.4 million of the auction rate securities held in our portfolio. Additionally, we have liquidated approximately $2.1 million of our auction rate securities since December 31, 2007. We believe that the failed auctions we experienced in early 2008 resulted from temporary market conditions. In 2007, we experienced no failed auctions for securities held in our portfolio.

EXECUTIVE MANAGEMENT

Paul Goddard, Ph.D.
Chairman & Chief Executive Officer

Peter G. Milner, M.D.
President Research & Development

John Varian
Chief Operating Officer*

Pascal Druzgala, Ph.D.
Vice President & Chief Scientific Officer

Daniel M. Canafax, Pharm.D.
Vice President & Chief Development Officer

David Nagler
Vice President Corporate Affairs

*Mr. Varian serves as Chief Financial Officer

BOARD OF DIRECTORS

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Peter G. Milner, M.D.
President Research & Development
ARYx Therapeutics, Inc.

Rob Adelman, M.D.
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OrbiMed Advisors, LLC

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Executive Vice President &
President Global R&D and Corporate Strategy
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Kythera Biopharmaceuticals

Nick Simon, M.B.A.
Managing Director
Clarus Ventures

Paul J. Sekhri
President & Chief Executive Officer
Cerimon Pharmaceuticals, Inc.

Herm Rosenman
Senior Vice President Finance &
Chief Financial Officer
Gen-Probe Incorporated

CORPORATE INFORMATION

Corporate Headquarters
ARYx Therapeutics, Inc.
6300 Dumbarton Circle
Fremont, CA 94555
570.585.2200

Investor Relations
News and information about ARYx Therapeutics is available at www.aryx.com. Interested parties may also contact:

David Nagler
Vice President Corporate Affairs
510.585.2200 x211

SEC Form 10-K
The company's Form 10-K as filed with the U.S. Securities and Exchange Commission is available without charge upon request.

Common Stock Listing
The common stock of ARYx Therapeutics is traded on the NASDAQ National Market System under the symbol ARYX.

Transfer Agent
Computershare Investor Services LLC
PO Box 43078
Providence, RI 02940-3078
shareholder@computershare.com
800.662.7232

Annual Meeting
ARYx Therapeutics stockholders are invited to attend our annual meeting, which is scheduled to be held at 9:00 am on May 28, 2008, at the company's corporate headquarters.

Independent Auditors
Ernst and Young LLP
1001 Page Mill Road
Palo Alto, CA 94304

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This Annual Report contains "forward-looking" statements about ARYx's business prospects, the potential safety, efficacy and commercialization of ARYx's product candidates, initiations of clinical trials and other research and development activities and presentation of clinical data. Any statements contained in this Annual Report that are not statements of historical fact may be deemed to be forward-looking statements. Risks and uncertainties may cause ARYx's actual results to differ materially from those suggested by the forward-looking statements. These include, but are not limited to, risks and uncertainties relating to the development of ARYx's product candidates, including the risk that studies may not demonstrate safety and efficacy sufficient to initiate clinical trials, continue clinical development, obtain the requisite regulatory approvals or to result in a marketable product; ARYx's dependence on its partnering with Procter & Gamble for the development of certain of its product candidates; ARYx's ability to maintain or establish partnering arrangements for the development of its product candidates; and other risks and uncertainties described from time to time in ARYx's Securities and Exchange Commission reports, including its Annual Report on Form 10-K for the year ended December 31, 2007 and other periodic filings with the SEC. ARYx does not undertake any obligation to update forward-looking statements.


ARYX
THERAPEUTICS
Making Proven Therapies Safer
END
6300 DUMBARTON CIRCLE ····· FREMONT, CA 94555
T 510.585.2200 ····· F 510.585.2202 ····· ARYX.COM