ARQULE INC
Form 8-K
June 07, 2007

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

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

Date of Report (Date of earliest event reported): **June 6, 2007**

ARQULE, INC.

(Exact Name of Issuer as Specified in Charter)

Delaware	**000-21429**	**04-3221586**
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)

19 Presidential Way

Woburn, MA

(Address of principal executive offices)

01801

(Zip code)

(781) 994-0300

(Registrant s telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Section 8 Other Events

Item 8.01 Other Events.

On June 6, 2007, we issued a press release regarding our plans to publicly offer 7,000,000 shares of our common stock. The press release issued on June 6, 2007 is attached hereto as Exhibit 99.1. In addition, we have updated certain risk factors in our preliminary prospectus supplement dated June 6, 2007 (File No. 333-143162) in connection with the offering. The risk factors included in the preliminary prospectus supplement are set forth herein. This Current Report on Form 8-K updates certain of our disclosures.

CLINICAL TRIALS

ARQ 197

Phase 2 Clinical Program

We plan to initiate a Phase 2 clinical program with ARQ 197 in mid-2007. We expect this program to encompass both standard proof-of-concept studies and accelerated approval (fast-to-market), Phase 2/3 trial designs. We have preliminarily defined the indications for our proof-of-concept Phase 2 studies as prostate, pancreatic and non-small cell lung cancer (NSCLC). The indications with potential for accelerated approval include MiT tumors (pediatric soft tissue sarcomas), gastric cancer and advanced breast cancer. In addition to the specific indications for these trials, we plan to explore further certain anti-metastatic effects of ARQ 197 that were observed in the Phase 1 trial.

Pending discussions with the FDA, we expect to finalize plans for these trials and to initiate the first of these trials in mid-2007. We also plan to complete a bioequivalence study, in healthy volunteers, related to a revised formulation of ARQ 197 by the end of August 2007, the results of which will be required prior to initiating certain of the fast-to-market studies.

Therefore, we currently expect to conduct our Phase 2 ARQ 197 studies as follows: the pancreatic cancer trial and the MiT tumor study are planned to be initiated in mid-2007; the gastric cancer and advanced breast cancer studies are planned to be initiated in the fourth quarter of 2007; and the prostate and NSCLC studies are planned to be initiated in the first quarter of 2008. If dose modifications are required as a result of the bioequivalence study, then the start of certain of these trials may be delayed.

Phase 1 Results

At the 2007 Annual Meeting of the American Society of Clinical Oncology on June 2, 2007, we announced data from a Phase 1 trial demonstrating that treatment with ARQ 197 was well tolerated over extended dosing periods, with more than 60 percent of patients experiencing partial responses, minor responses or stable disease. As per RECIST criteria (Response Evaluation Criteria in Solid Tumors), a partial response is at least a 30 percent decrease in tumor size, progressive disease is at least a 20 percent increase in tumor size, and stable disease is neither shrinkage sufficient to qualify for partial response nor increase sufficient to qualify for progressive disease. Minor response is not defined by the RECIST criteria, but we define evidence of tumor shrinkage of less than 30 percent as a minor response. The primary objective of the Phase 1 trial was to determine a recommended Phase 2 dose for ARQ 197. Findings from this study resulted in a recommended Phase 2 dose of 240 milligrams (mg) daily. Secondary objectives included determining the pharmacokinetic and pharmacodynamic profiles and assessing the anti-tumor activity of this compound.

Safety

The trial was a standard Phase 1 sequential dose-escalation design, with 10 dose levels evaluated, from 10 mg twice daily through 180 mg twice daily. The 57 patients enrolled had a broad range of solid tumors, and all had confirmed, active metastatic disease. ARQ 197 was dose-escalated orally in two regimens, the first one administered in cycles consisting of two weeks on treatment followed by one week off drug, and the second consisting of three weeks on treatment with no time off drug.

Treatment with ARQ 197 was well tolerated. Most adverse events were mild and transient, and no grade three or four drug-related adverse events (the most severe types of adverse events) were reported. No dose-limiting toxicity was observed on either dosing regimen. Substantial plasma exposure, at levels several times the predicted efficacious concentration, was maintained with oral dosing. Patient compliance with dosing was high (greater than 98 percent), and there were no treatment interruptions due to adverse events.

Anti-Tumor Activity

Thirty-nine patients were recruited into the intermittent, or two weeks out of three, dosing cohort. Tumors were evaluated using standard RECIST criteria. Of the 35 evaluable patients in this cohort, there were three patients with partial responses and 18 with stable disease, with 11 of these 18 showing some evidence of tumor shrinkage and 10 with stable disease lasting six months or more. The partial responses were observed in patients with prostate, neuroendocrine and testicular tumors. Stable disease lasting more than four months was observed in a range of additional tumor types, including pancreatic, renal cell, non-small cell lung and papillary thyroid.

Eighteen patients were recruited into the continuous, or three weeks out of three, dosing cohort. Of the 10 patients in this cohort who had been on study long enough to reach the first tumor evaluation, which took place six weeks following initiation of treatment, seven were evaluated as having stable disease. The remaining patients have not reached the first tumor evaluation but remain on study.

Preliminary data analysis of new lesions among the intermittent dosing cohort showed that only four of these 35 evaluable patients developed new lesions while on ARQ 197, and three of these were treated at low doses. This data shows that all new lesions developed within the first six weeks on therapy, and no new lesions developed after six weeks of therapy. A detailed review of clinical data and disease progression among both cohorts is ongoing to better understand the potential of this compound to affect both metastatic spread and primary disease.

ARQ 501 and ARQ 171

We initiated a Phase 2 proof-of-principle program with ARQ 501 consisting of three separate clinical trials during 2006. These consist of monotherapy trials in leiomyosarcoma and in head and neck cancer, and a combination therapy trial with gemcitabine in pancreatic cancer. A Phase 1 trial was initiated in late 2006 with ARQ 171, a second-generation E2F-1 compound.

We have completed patient recruitment in all three Phase 2 trials with ARQ 501. The Phase 2 dose employed in the leiomyosarcoma and head and neck cancer trials is 450 mg per meter squared (mg/m2), and the Phase 2 ARQ 501 dose in the pancreatic cancer trial is 400 mg/m2.

ARQ 171 is currently in a Phase I dose escalation study. To date, single patient cohorts have been dosed between 24 and 192 mg/m2. Dosing at 384 mg/m2 is ongoing. Based on our current progress in that trial, and pending the outcome of successive future dosing and identification of dose-limiting toxicity levels, we expect to reach a recommended Phase 2 dose for ARQ 171 toward the end of 2007.

As defined in our Roche collaboration agreement, Roche has an option to license worldwide rights for the development and commercialization of any products resulting from the E2F-1 program. Roche must decide whether to exercise its option within a specified period following delivery of a clinical data package from the initial ARQ 501 Phase 1 trials, the ARQ 501 Phase 2 trials, and the Phase 1 trial with ARQ 171. We plan to submit the data package to Roche shortly after we complete the Phase 1 trial with ARQ 171. Roche will then initiate a defined scientific review period, after which they will make their decision whether to license the program.

Interim Phase 2 Results With ARQ 501

The primary endpoint for each of the ongoing Phase 2 trials with ARQ 501 is an objective response rate of 15 percent. Objective response rate is defined as the sum of complete responses and partial responses, and in the case of the leiomyosarcoma study, stable disease lasting more than 4 months was considered a partial response. Interim data is available from these trials. We expect to announce further data from these trials in the third quarter of 2007.

Interim data from the pancreatic cancer study show a 14.6 percent objective response rate among patients treated with ARQ 501 and with gemcitabine combination therapy. This percentage reflects 11 partial responses among 75 evaluable patients. One additional partial response from the remaining 17 patients awaiting evaluation is needed to achieve the protocol-defined endpoint of 15 percent, and we believe this endpoint is likely to be achieved based on the number of minor responses pending additional evaluation for partial response.

Interim data from the leiomyosarcoma study show a 17.5 percent objective response rate among patients to monotherapy treatment with ARQ 501. This reflects one patient with a partial response and 6 with stable disease. Consequently, the endpoint for this trial has been achieved upon this interim data analysis.

Interim data from the head and neck cancer study show a 2 percent objective response rate among patients to monotherapy treatment with ARQ 501. This reflects one patient with a partial response. Based on these results to date, we do not believe the endpoint for this trial will be achieved.

Regulatory and Clinical Plans For ARQ 501

Our Phase 2 program for ARQ 501 was designed to provide proof-of-principle regarding the risk-benefit profile of the compound in combination and monotherapy

settings. Proof of principle data is intended to provide sufficient evidence to justify our decision to move a program into pivotal registration studies. Such registration studies, if positive, could subsequently form the basis of a New Drug Application to the FDA and equivalent global health authorities.

Based on the data available to date, we have concluded that we have seen positive proof of principle in both monotherapy in leiomyosarcoma and combination therapy in pancreatic cancer in combination with gemcitabine. We therefore are currently of the opinion that one or more compounds from the E2F-1 platform (currently comprising ARQ 501, ARQ 171 and ARQ 761, the newly modified version of ARQ 501) should be eventually progressed into registration studies, the timing of which will depend on the stage of development of the molecule.

A choice of which compound(s) to progress into such registration studies awaits final data and analysis from the ARQ 501 Phase 2 studies, completion of the ARQ 171 Phase 1 dose escalation study and further pre-clinical and required clinical work on ARQ 761, the modified version of ARQ 501. This choice will be made concurrently with the decision by Roche as to whether it will exercise its license rights to the E2F-1 program, currently anticipated in early 2008. If Roche exercises its licensing right, it will make the decisions on which compound(s) to advance, and on the nature and stage of subsequent clinical studies. If Roche declines the option to license the E2F-1 program, we intend to initiate a registration strategy for one or more compounds shortly after Roche s decision.

Risk factors

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described in this prospectus supplement and the accompanying prospectus and the other information in this prospectus supplement and the accompanying prospectus. If any of these risks occur, our business could be materially harmed, and our financial condition and results of operations could be materially and adversely affected. As a result, the price of our common stock could decline, and you could lose all or part of your investment.

RISKS RELATING TO OUR INDUSTRY AND BUSINESS STRATEGY

Development of our products is at an early stage and is based on scientific platforms that are unproven. We may not successfully develop a drug candidate that becomes a commercially viable drug.

We have no commercial products. The discovery and development of drugs is inherently risky and involves a high rate of failure. Discovering and developing commercial drugs are relatively new to us. Our drug candidates and drug research programs are in early stages and require significant, time-consuming and costly research and development, testing and regulatory approvals.

One of our clinical-stage product candidates, ARQ 197, is based on our c-Met/Cancer Survival platform. Two of our other product candidates in clinical trials, ARQ 501 and ARQ 171, are based on our proprietary ACT platform. Although drugs have been approved that inhibit the activity of kinases and other enzymes, to our knowledge no company has received regulatory approval for a drug based on an approach similar to our c-Met/Cancer Survival platform. To our knowledge no company has received regulatory approval for a drug based on an approach similar to our ACT platform. Our approaches may not lead to the development of approvable or marketable drugs.

In addition to our clinical-stage programs, we have a limited number of pre-clinical and research-stage programs in our pipeline. Our viability as a company depends, in part, on our ability to continue to create drug candidates for ourselves and our collaborators. Numerous significant factors will affect the success of our drug research and development efforts, including the biology and chemistry complexity involved, availability of appropriate technologies, the uncertainty of the scientific process and the capabilities and performance of our scientists. Our research and development capabilities may not be adequate to develop additional, viable drug candidates.

We must show the safety and efficacy of our product candidates through expensive, time consuming preclinical and clinical trials, the results of which are uncertain and governed by exacting regulations.

Our product candidates are in clinical or preclinical stages of development and may not prove to be sufficiently safe or effective in more advanced human clinical trials. We will need to conduct extensive further testing of all of our product candidates, expend significant additional resources and possibly partner with another company or companies to realize commercial value from any of our product candidates.

Before obtaining regulatory approvals for the commercial sale of our products, we must demonstrate through preclinical studies (laboratory or animal testing) and clinical trials (human testing) that our proposed products are safe and effective for use in each target indication. This testing is expensive and time-consuming, and failure can occur at any stage. If we terminate a preclinical or clinical program, we will have expended resources in an effort that will not provide a return on our investment and missed the opportunity to have allocated those resources to potentially more productive uses.

Clinical trials must meet FDA and foreign regulatory requirements. We have limited experience in designing, conducting and managing the preclinical studies and clinical trials necessary to obtain regulatory approval for our product candidates in any country. We or our collaborative partners may encounter problems in clinical trials that may cause us or the FDA or foreign regulatory agencies to delay, suspend or terminate our clinical trials at any phase. These problems could include our inability to manufacture or obtain sufficient quantities of materials produced in accordance with current Good Manufacturing Practice, or cGMP, for use in our clinical trials, conduct clinical trials at our preferred sites, enroll a sufficient number of patients for our clinical trials at one or more sites, or begin or successfully complete clinical trials in a timely fashion, if at all. Furthermore, we, the FDA or foreign regulatory agencies may suspend clinical trials of our product candidates at any time if we or they believe the subjects participating in the trials are being exposed to unacceptable health risks as a result of adverse events occurring in our trials or if we or they find deficiencies in the clinical trial process or conduct of the investigation.

Acceptable results from initial preclinical studies and clinical trials of products under development are not necessarily indicative of results that will be obtained from subsequent or more extensive preclinical studies and clinical testing in humans. Clinical trials may not demonstrate sufficient safety and efficacy to obtain the required regulatory approvals or result in marketable products. The failure to adequately demonstrate the safety and efficacy of a product under development will delay and could prevent its regulatory approval.

A number of companies in the pharmaceutical industry, including biotechnology companies, have suffered significant setbacks in advanced clinical trials, even after generating promising results in earlier trials.

Though it is part of our strategy to pursue clinical development to take advantage of available accelerated regulatory approval processes, there is no guarantee that our product candidates will show the evidence predictive of clinical benefit necessary to qualify for such regulatory treatment.

Delays in clinical testing could result in increased costs to us and delay our ability to obtain regulatory approval and commercialize our product candidates.

Clinical trials typically take several years to complete. The duration and cost of clinical trials will vary greatly depending on the nature, complexity, and intended use of the drug being tested. We may not complete clinical testing within the time frame we have planned, or at all. At any time, a clinical trial can be placed on clinical hold , or temporarily or permanently stopped for a variety of reasons, principally for safety concerns. We may experience numerous unforeseen events during, or as a result of, the clinical trial process that could delay or prevent us from receiving regulatory approval or commercializing our product candidates, including the following:

- our clinical trials may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical and/or pre-clinical testing or to abandon programs;
- trial results may not meet the level of statistical significance required by the FDA or other regulatory agencies;
- enrollment in our clinical trials for our product candidates may be slower than we anticipate, resulting in significant delays;
- we, or regulators, may suspend or terminate our clinical trials if the participating patients are being exposed to unacceptable health risks;

- the effects of our product candidates on patients may not be the desired effects or may include undesirable side effects or other characteristics that may delay or preclude regulatory approval or limit their commercial use, if approved; and
- the FDA or other regulatory agencies may lack experience in evaluating the safety and efficacy of drugs based on our c-Met or ACT platforms, which could lengthen the regulatory review process.

Completion and duration of clinical trials depends on, among other things, our ability to enroll a sufficient number of patients, which is a function of many factors, including:

- the incidence among the general population of diseases which contain therapeutic endpoints chosen for evaluation;
- the eligibility criteria defined in the protocol;
- the size of the patient population required for analysis of the trial s therapeutic endpoints;
- our ability to recruit clinical trial investigators and sites with the appropriate competencies and experience;
- our ability to obtain and maintain patient consents; and
- competition for patients by clinical trial programs for other treatments.

We have limited clinical development and commercialization experience.

We have limited experience conducting clinical trials and have never obtained regulatory approvals for any drug. To date, we have filed 3 IND applications and initiated 5 Phase 1 clinical trials, and 3 Phase 2 clinical trials. We have not conducted a Phase 3, or pivotal, clinical trial, filed an NDA or commercialized a drug. We have no experience as a company in the sale, marketing or distribution of pharmaceutical products and do not currently have a sales and marketing organization. Developing commercialization capabilities will be expensive and time-consuming, could delay any product launch, and we may not be able to develop a successful commercial organization. To the extent we are unable or determine not to acquire these resources internally, we would be forced to rely on third-party clinical investigators, clinical research or marketing organizations. If we were unable to establish adequate capabilities independently or with others, our drug development and commercialization efforts could fail and we may be unable to generate product revenues.

If our drug discovery and development programs do not progress as anticipated, our revenue and stock price could be negatively impacted.

We estimate the timing of a variety of preclinical, clinical, regulatory and other milestones for planning purposes, including when a drug candidate is expected to enter clinical trials, when a clinical trial will be completed or when an application for regulatory approval will be filed. We base our estimates on facts that are currently known to us and on a variety of assumptions, many of which are beyond our control. If we or our collaborators do not achieve milestones when anticipated, we will not receive the corresponding revenue, and our stock price could decline. In addition, our research and clinical testing may be delayed or abandoned if we or our competitors subsequently discover other compounds that we believe show significantly improved safety or efficacy compared to our product candidates, which could limit our ability to generate revenues, cause us to incur additional expense and cause the market price of our common stock to decline significantly.

RISKS RELATED TO OUR FINANCIAL CONDITION

We have incurred significant losses since our inception and anticipate that we will incur significant continued losses for the next several years, and our future profitability is uncertain.

From our inception in 1993 through March 31, 2007, we have incurred cumulative losses of approximately $243 million. These losses have resulted principally from the costs of our research activities, acquisitions, enhancements to our technology and early-stage clinical trials. In the past we derived our revenue primarily from license and technology transfer fees and payments for compound deliveries associated with our discontinued chemistry services operations; research and development funding paid under our agreements with collaboration partners; and to a limited extent, milestone payments.

We expect our expenses to increase significantly as we spend additional amounts to fund research, development, clinical testing and commercialization of our drug candidates. We currently have three product candidates in various stages of clinical development, and we anticipate filing an IND application for an additional product candidate within the next 24 months. As a result, we will need significant capital resources to achieve profitability.

To attain profitability, we will need to develop clinical products successfully and market and sell them effectively, either by ourselves or with collaborators. We have never generated revenue from the commercialization of our product candidates, and there is no guarantee that we will be able to do so. Even if were to generate product revenues and achieve profitability, we may not be able to maintain or increase profitability. Because of the numerous risks and uncertainties associated with developing drugs, we are unable to predict the extent of any future losses or when we will become profitable, if at all. If we fail to become profitable, or if we are unable to fund our continuing losses, we may be unable to continue our business.

We may need substantial additional funding and may be unable to raise capital when needed, or on terms favorable to us, which could force us to delay, reduce or eliminate our drug discovery, product development and commercialization activities.

Developing drugs, conducting clinical trials, and commercializing products is expensive. Our future funding requirements will depend on many factors, including:

- the progress and cost of our ongoing and future collaborative and independent clinical trials and other research and development activities and our ability to share such costs of our clinical development efforts with third parties;
- the costs and timing of obtaining regulatory approvals;
- the costs of filing, prosecuting, maintaining, defending and enforcing any patent applications, claims, patents and other intellectual property rights;
- the cost and timing of securing manufacturing capabilities for our clinical product candidates and commercial products, if any;
- the costs and timing of commercializing our product candidates including establishing or contracting for sales, marketing and distribution capabilities, if any such candidates receive regulatory approval for commercial sale; and
- the costs of any acquisitions of or investments in businesses, products and technologies.

We may seek the capital necessary to fund our operations through public or private equity offerings, debt financings, and collaboration and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, our stockholders ownership interests will be diluted and the terms of such securities may include liquidation or other preferences that adversely affect our stockholders rights. Other debt-financing arrangements may require us to pledge certain assets and enter into covenants that would restrict certain business activities or our ability to incur further indebtedness. If we raise additional funds through collaboration and licensing arrangements with third parties, we may have to relinquish rights to certain product candidates that we might otherwise seek to develop or commercialize independently, or grant licenses on terms that are not favorable to us. There can be no assurance that sufficient funds will be available to us when required, on satisfactory terms, or at all. If we are unable to obtain additional funds when needed, we may have to delay, reduce the scope of or eliminate some of our development and commercialization programs, or obtain funds through other arrangements on unattractive terms, which could prevent us from successfully executing our business strategy.

RISKS RELATED TO REGULATORY APPROVAL

Our product candidates are subject to a lengthy and uncertain regulatory process that may not result in the necessary regulatory approvals, which would adversely affect our ability to commercialize products. We have only limited experience in regulatory affairs.

Our product candidates, as well as the activities associated with their research, development and commercialization, are subject to extensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries. Failure to obtain regulatory approval for a product candidate would prevent us from commercializing that product candidate. We have not received regulatory approval to market any of our product candidates in any jurisdiction and have only limited experience in preparing and filing the applications necessary to gain regulatory approvals. The process of obtaining regulatory approvals is expensive, often takes many years, if approval is obtained at all, and can vary substantially based upon the type, complexity and novelty of the product candidates involved.

Before a new drug application can be filed with the FDA, the product candidate must undergo extensive clinical trials. Any clinical trial may fail to produce results satisfactory to the FDA, typically for lack of safety or efficacy. For example, the FDA could determine that the design of a clinical trial is inadequate to produce reliable results. The regulatory approval process also requires preclinical testing. Data obtained from preclinical and clinical activities are susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. Delays or rejections may be encountered based upon changes in regulatory policy for product approval during the period of product development and regulatory agency review. Changes in regulatory approval policy, regulations or statutes or the process for regulatory review during the development or approval periods of our product candidates may cause delays in the approval or rejection of an application. We are currently in Phase 2 clinical testing of ARQ 501 and Phase 1 clinical testing of ARQ 197 and ARQ 171. We have never conducted a Phase 3, or pivotal, clinical trial, nor have we filed or prosecuted the applications necessary to gain regulatory approvals.

Even if our drug candidates obtain regulatory approval, we and our collaborators will be subject to ongoing government regulation.

Even if regulatory authorities approve any of our drug candidates, the manufacture, marketing and sale of these drugs will be subject to strict and ongoing regulation. Compliance with such regulations

may consume substantial financial and management resources and expose us and our collaborators to the potential for other adverse circumstances. For example, approval for a drug may be conditioned on costly post-marketing follow-up studies. Based on these studies, if a regulatory authority does not believe that the drug demonstrates a clinical benefit to patients, it could limit the indications for which a drug may be sold or revoke the drug s marketing approval. In addition, identification of certain side effects after a drug is on the market may result in the subsequent withdrawal of approval, reformulation of a drug, additional preclinical and clinical trials and changes in labeling. Any of these events could delay or prevent us from generating revenue from the commercialization of these drugs and cause us to incur significant additional costs.

Even if we or our collaborators bring products to market, we may be unable to effectively price our products or obtain adequate reimbursement for sales of our products, which would have an adverse effect on our revenues.

Third party payors, such as government and private insurance plans, frequently require companies to provide rebates and predetermined discounts from list prices and are increasingly challenging the prices charged for pharmaceuticals and other medical products. Our products may not be considered cost-effective, and reimbursement to the patient may not be available or be sufficient to allow the sale of our products on a competitive basis. We, or our collaborators, may not be able to negotiate favorable reimbursement rates for our products. If we, or our collaborators, fail to obtain an adequate level of reimbursement for our products by third-party payors, sales of the drugs would be adversely affected or there may be no commercially viable market for the products.

We face potential liability related to the privacy of health information we obtain from research institutions.

Most health care providers, including research institutions from which we or our collaborators obtain patient information, are subject to privacy regulations promulgated under the Health Insurance Portability and Accountability Act of 1996, or HIPAA. Although we are not directly regulated by HIPAA, we could face substantial criminal penalties if we knowingly receive individually identifiable health information from a health care provider or research institution that has not satisfied HIPPA s disclosure standards. In addition, certain state privacy laws may apply directly to our operations and/or those of our collaborators and may impose restrictions on our use and dissemination of individuals health information. Moreover, patients about whom we or our collaborators obtain information, as well as the providers who share this information with us, may have contractual rights that limit our ability to use and disclose the information. Claims that we have violated individuals privacy rights or breached our contractual obligations, even if we are not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm our business.

RISKS RELATED TO COLLABORATIONS

Part of our business strategy involves collaborative out-licensing of our drug candidates while retaining commercialization or co-promotional rights in parts of the world. We may not be able to find collaborators or successfully form suitable collaborations to further our drug development and commercialization efforts.

We may seek collaborators for our drug development and commercialization efforts. We may enter into these collaborations to obtain external financing for drug development and to obtain access to drug development and commercialization expertise. The availability of partners depends on the willingness of pharmaceutical and biotechnology companies to collaborate in drug discovery activities.

Only a limited number of pharmaceutical and biotechnology companies would fit our requirements. The number could decline further through consolidation, or the number of collaborators with interest in our drugs could decline. If the number of our potential collaborators were to decline, the remaining collaborators may be able to negotiate terms less favorable to us.

We face significant competition in seeking drug development collaborations, both from other biotechnology companies and from the internal capabilities and compound pipelines of the pharmaceutical and biotechnology companies themselves. This competition is particularly intense in the oncology field. Our ability to interest such companies in forming co-development and commercialization arrangements with us will be influenced by, among other things:

- the compatibility of technologies;
- the potential partner s acceptance of our approach to drug discovery;
- the novelty, quality and commercial potential of any drug candidate we may succeed in developing; and
- our ability, and collaborators perceptions of our ability, to achieve intended results in a timely fashion, with acceptable quality and cost.

Even if we are able to gain the interest of potential drug development partners, the negotiation, documentation and implementation of collaborative arrangements are complex and time-consuming. Collaborations may not be available on commercially acceptable terms and, if formed, may not be commercially successful or, if successful, may not realize sufficient return for us. If we are unable to form collaborations, we may not gain access to the financial resources and industry expertise necessary to develop and commercialize drug products or successfully market any products we develop on our own and, therefore, be unable to generate revenue from our products.

In fiscal year 2006, our collaboration with Roche accounted for all of our research and development revenue (approximately $6.6 million). If Roche were to terminate its collaboration with us, our revenue would significantly decrease.

Our success depends in part on the efforts of our current and possible future collaborators, who will likely have substantial control and discretion over the continued development and commercialization of drug candidates which are the subjects of our collaborations.

If Roche exercises its option to acquire rights to ARQ 501 and ARQ 171 or if we were successful in establishing additional collaborations, our collaborators would have significant discretion in determining the efforts and amount of resources that they dedicate to our collaborations. Our collaborators may determine not to proceed with clinical development or commercialization of a particular drug candidate for a number of reasons that are beyond our control, even under circumstances where we might have continued such a program. In addition, our rights to receive milestone payments and royalties from our collaborators will depend on our collaborators abilities to establish the safety and efficacy of our drug candidates, obtain regulatory approvals and achieve market acceptance of products developed from our drug candidates. We may also depend on our collaborators to manufacture clinical scale quantities of some of our drug candidates and would depend on them in the future for commercial scale manufacture, distribution and direct sales. Our collaborators may not be successful in manufacturing our drug candidates on a commercial scale or in successfully commercializing them.

We face additional risks in connection with our existing and future collaborations, including the following:

- our collaborators may develop and commercialize, either alone or with others, products that are similar to or competitive with the products that are the subject of the collaboration with us;
- our collaborators may underfund or not commit sufficient resources to the testing, marketing, distribution or other development of our drug candidates;
- our collaborators may not properly maintain or defend our intellectual property rights or they may utilize our proprietary information in such a way as to invite litigation that could jeopardize or potentially invalidate our intellectual property or proprietary information or expose us to potential liability;
- our collaborators may encounter conflicts of interest, changes in business strategy or other business issues which could adversely affect their willingness or ability to fulfill their obligations to us (for example, pharmaceutical and biotechnology companies historically have re-evaluated their priorities following mergers and consolidations, which have been common in recent years in these industries); and
- disputes may arise between us and our collaborators delaying or terminating the research, development or commercialization of our drug candidates, resulting in significant litigation or arbitration that could be time-consuming and expensive, or causing collaborators to act in their own self-interest and not in the interest of our stockholders.

We may not receive any further milestone, royalty or license payments under our current collaboration.

Although we have received license fees, milestone fees and other payments to date under our current drug development collaboration with Roche, we may not receive any royalty payments or additional license and milestone fees under such agreement. Our receipt of any future milestone, royalty or license payments depends on many factors, including whether our collaborator wants or is able to continue to pursue a potential drug candidate, intellectual property issues, unforeseen complications in the development or commercialization process, and the ultimate commercial success of the drug.

RISKS RELATED TO RELATIONSHIPS WITH THIRD PARTY VENDORS

We rely heavily on third parties such as contract research organizations, to conduct clinical trials and perform research and analysis services for us. If third parties upon which we rely do not perform as contractually required or expected, we may not be able to develop further, obtain regulatory approval for or commercialize our product candidates.

We do not have the ability to perform all of the testing or conduct all of the clinical trials that are necessary in connection with the development of our product candidates. We are using third-party clinical research organizations to oversee many of our ongoing clinical trials and expect to use the same or similar organizations for certain of our future clinical trials. We may face delays outside of our control if these parties do not perform their obligations in a timely or competent fashion or if we are forced to change service providers or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons. These risks are heightened if we conduct clinical trials outside of the United States, where it may be more difficult to ensure that studies are conducted in compliance with FDA requirements. Any third party that we hire to conduct clinical trials may also provide services to our

competitors, which could compromise the performance of their obligations to us. If we experience significant delays in the progress of our clinical trials and in our plans to file NDAs, the commercial prospects for product candidates could be harmed and our ability to generate product revenue would be delayed or prevented.

We have limited manufacturing experience. We primarily rely on third parties to provide sufficient quantities of our product candidates to conduct pre-clinical and clinical studies. We have no control over our manufacturers and suppliers compliance with manufacturing regulations, and their failure to comply could result in an interruption in the supply of our product candidates.

To date, our product candidates have been manufactured in relatively small quantities for preclinical and clinical trials. We have no experience in manufacturing any of our product candidates on a large scale and have contracted with third party manufacturers to provide material for clinical trials and to assist in the development and optimization of our manufacturing processes and methods. Our ability to conduct clinical trials and commercialize our product candidates will depend on the ability of such third parties to manufacture our products on a large scale at a competitive cost and in accordance with cGMP and other regulatory requirements. Significant scale-up of manufacturing may require additional validation studies, which the FDA must review and approve. If we are not able to obtain contract cGMP manufacturing on commercially reasonable terms, obtain or develop the necessary materials and technologies for manufacturing, or obtain intellectual property rights necessary for manufacturing, we may not be able to conduct or complete clinical trials or commercialize our product candidates. There can be no assurance that we will be able to obtain such requisite terms, materials, technologies and intellectual property necessary to successfully manufacture our product candidates for clinical trials or commercialization. Our product candidates require precise, high-quality manufacturing. The failure to achieve and maintain these high manufacturing standards, including the incidence of manufacturing errors, could result in patient injury or death, product recalls or withdrawals, delays or failures in product testing or delivery, cost overruns or other problems that could seriously hurt our business.

The facilities used by our contract manufacturers must undergo inspections by the FDA for compliance with cGMP regulations before our product candidates produced there can receive marketing approval. If these facilities do not receive a satisfactory cGMP inspection result in connection with the manufacture of our product candidates, we may need to conduct additional validation studies, or find alternative manufacturing facilities, either of which would result in significant cost to us as well as a delay of up to several years in obtaining approval for any affected product candidate. In addition, after approval of a product candidate for commercial use our contract manufacturers, and any alternative contract manufacturer we may utilize, will be subject to ongoing periodic inspection by the FDA and corresponding state and foreign agencies for compliance with cGMP regulations, similar foreign regulations and other regulatory standards. We do not have control over our contract manufacturers compliance with these regulations and standards. Any failure by our third-party manufacturers or suppliers to comply with applicable regulations could result in sanctions being imposed on them (including fines, injunctions and civil penalties), failure of regulatory authorities to grant marketing approval of our product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecution.

Materials necessary to manufacture our product candidates currently under development may not be available on commercially reasonable terms, or at all, which may delay our development and commercialization of these drugs.

Some of the materials necessary for the manufacture of our product candidates currently under development may, from time to time, be available either in limited quantities, or from a limited number of manufacturers, or both. We and/or our collaborators need to obtain these materials for our clinical trials and, potentially, for commercial distribution when and if we obtain marketing approval for these compounds. Suppliers may not sell us these materials at the time we need them or on commercially reasonable terms. If we are unable to obtain the materials needed for the conduct of our clinical trials, product testing and potential regulatory approval could be delayed, adversely impacting our ability to develop the product candidates. If it becomes necessary to change suppliers for any of these materials or if any of our suppliers experience a shutdown or disruption in the facilities used to produce these materials, due to technical, regulatory or other problems, it could significantly hinder or prevent manufacture of our drug candidates and any resulting products.

RISKS RELATING TO COMPETITION

The drug research and development industry is highly competitive, and we compete with some companies that offer a broader range of capabilities and have better access to resources than we do.

The pharmaceutical and biotechnology industries are characterized by rapid and continuous technological innovation. We compete with companies worldwide that are engaged in the research and discovery, licensing, development and commercialization of drug candidates, including, in the area of small molecule anti-cancer therapeutics, Ariad Pharmaceuticals, Inc.; Array BioPharma Inc.; Cell Therapeutics, Inc.; Curis, Inc.; Exelixis, Inc.; Onyx Pharmaceuticals, Inc.; OSI Pharmaceuticals, Inc.; Oxigene, Inc.; Pharmacopeia; SGX Pharmaceuticals; Telik, Inc.; Kosan Biosciences, Inc.; and Vion Pharmaceuticals, Inc. With respect to ARQ 197, we are aware of a number of companies that are pursuing approaches to c-Met inhibition, including Exelixis, Amgen Inc., Pfizer Inc. and Methylgene Inc.

Even if we are successful in bringing products to market, we face substantial competitive challenges in effectively marketing and distributing our products. Companies and research institutions, including large pharmaceutical companies with much greater financial resources, and more experience in developing products, conducting clinical trials, obtaining FDA and foreign regulatory approvals and bringing new drugs to market are developing products within the field of oncology. Some of these entities already have competitive products on the market or product candidates in clinical trials or in more advanced preclinical studies than we do. By virtue of having or introducing competitive products on the market before us, these entities may gain a competitive advantage. In addition, there may be product candidates of which we are not aware at an earlier stage of development that may compete with our product candidates. Some of our competitors have entered into collaborations with leading companies within our target markets.

We are in a rapidly evolving field of research. Consequently, our technology may be rendered non-competitive or obsolete by approaches and methodologies discovered by others, both before and after we have gone to market with our products. We also face competition from existing therapies that are currently accepted in the marketplace, and the impact of adverse events in our field that may affect regulatory approval or public perception.

We anticipate that we will face increased competition in the future as new companies enter the market and advanced technologies become available. If we are unable to successfully compete in our chosen field, we will not become profitable.

We may not be able to recruit and retain the scientists and management we need to compete.

Our success depends on our ability to attract, retain and motivate highly skilled scientific personnel and management, and our ability to develop and maintain important relationships with leading academic institutions, clinicians and scientists. We are highly dependent on our senior management and scientific staff, and the loss of the services of one or more of our other key employees could delay or have an impact on the successful completion of our clinical trials or the commercialization of our product candidates.

We compete intensely with pharmaceutical and biotechnology companies, including our collaborators, medicinal chemistry outsourcing companies, contract research companies, and academic and research institutions to recruit scientists and management. The shortage of personnel with experience in drug development could lead to increased recruiting, relocation and compensation costs, which may exceed our expectations and resources. If we cannot hire additional qualified personnel, the workload may increase for both existing and new personnel. If we are unsuccessful in our recruitment efforts, we may be unable to execute our strategy.

RISKS RELATED TO INTELLECTUAL PROPERTY

Our patents and other proprietary rights may fail to protect our business. If we are unable to adequately protect our intellectual property, third parties may be able to use our technology, which could adversely affect our ability to compete in the market.

To be successful and compete, we must obtain and protect patents on our products and technology and protect our trade secrets. Where appropriate, we seek patent protection for certain aspects of the technology we are developing, but patent protection may not be available for some of our product candidates, or their use, synthesis, formulations and technologies. The patent position of biotechnology firms is highly uncertain, involves complex legal and factual questions, and has recently been the subject of much litigation. No consistent policy has emerged from the U.S. Patent and Trademark Office or the courts regarding the breadth of claims allowed or the degree of protection afforded under many biotechnology patents. In addition, there is a substantial backlog of biotechnology patent applications at the U.S. Patent and Trademark Office, and the approval or rejection of patent applications may take several years.

We do not know whether our patent applications will result in issued patents. In addition, the receipt of a patent might not provide much practical protection. If we receive a patent with a narrow scope, then it will be easier for competitors to design products that do not infringe our patent. We cannot be certain that we will receive any additional patents, that the claims of our patents will offer significant protection for our technology, or that our patents will not be challenged, narrowed, invalidated or circumvented.

Competitors may interfere with our patent protection in a variety of ways. Competitors may claim that they invented the claimed invention prior to us. Competitors may also claim that we are infringing on their patents and that, therefore, we cannot practice our technology as claimed under our patents. Competitors may also contest our patents by showing the patent examiner that the invention was not original, was not novel or was obvious. In litigation, a competitor could claim that our issued patents are not valid for a number of reasons. If a court agrees, our patents could be narrowed, invalidated or rendered unenforceable, or we may be forced to stop using the technology covered by these patents or to license the technology from third parties. As a company, we have no meaningful experience with competitors interfering with our patents or patent applications and therefore may not have the experience we would need to aggressively protect our patents should such action become necessary.

The laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. Many countries, including certain countries in Europe, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of the patent. Compulsory licensing of life-saving drugs is also becoming increasingly popular in developing countries either through direct legislation or international initiatives. Such compulsory licenses could be extended to include some of our product candidates, which could limit our potential revenue opportunities. Moreover, the legal systems of certain countries, particularly certain developing countries, do not favor the aggressive enforcement of patent and other intellectual property protection, which makes it difficult to stop infringement.

Drug candidates we develop that are approved for commercial marketing by the FDA would be subject to the provisions of the Drug Price Competition and Patent Term Restoration Act of 1984, known as the Hatch-Waxman Act. The Hatch-Waxman Act provides companies with marketing exclusivity for varying time periods during which generic versions of a drug may not be marketed and allows companies to apply to extend patent protection for up to five additional years. It also provides a means for approving generic versions of a drug once the marketing exclusivity period has ended and all relevant patents have expired. The period of exclusive marketing, however, may be shortened if a patent is successfully challenged and defeated, which could reduce the amount of revenue we receive for such product.

Agreements we have with our employees, consultants and collaborators may not afford adequate protection for our trade secrets, confidential information and other proprietary information.

In addition to patent protection, we also rely on copyright and trademark protection, trade secrets, and know-how. It is unclear whether our trade secrets and know-how will prove to be adequately protected. To protect our trade secrets and know-how, we require our employees, consultants and advisors to execute agreements regarding the confidentiality and ownership of such proprietary information. We cannot guarantee, however, that these agreements will provide us with adequate protection against improper use or disclosure of confidential information and there may not be adequate remedies in the event of unauthorized use or disclosure. Our employees, consultants or advisors may unintentionally or willfully disclose our information to competitors. In addition, in some situations, these agreements may conflict with, or be subject to, the rights of third parties with whom our employees, consultants or advisors had or have previous employment or consulting relationships. Like patent litigation, 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. In addition, courts outside the United States are sometimes less willing than our federal and state courts to protect trade secrets. Furthermore, others may independently develop substantially equivalent knowledge, methods and know-how. Our failure or inability to protect our proprietary information and techniques may inhibit or limit our ability to compete effectively, or exclude certain competitors from the market.

Our success will depend partly on our ability to operate without infringing on or misappropriating the proprietary rights of others.

There are many patents in our field of technology and we cannot guarantee that we do not infringe on those patents or that we will not infringe on patents granted in the future. If a patent holder believes a product of ours infringes on its patent, the patent holder may sue us even if we have received patent protection for our technology.

We have been contacted by third parties who purport to be joint owners of patents and patent applications relating to a combination therapy of a tyrosine kinase inhibitor and a DNA-damaging agent (e.g., a chemotherapy drug). These parties offered to license us these patent rights in connection with ARQ-197, a molecule that inhibits c-Met, a type of tyrosine kinase. We believe that the patent could potentially apply to any company that develops a tyrosine kinase inhibitor that is used in combination with a chemotherapy drug. If the patent is not invalidated, and we successfully develop ARQ-197 as a combination therapy in addition to a monotherapy, we may need to acquire a license if it potentially infringes on a valid claim of an issued patent. We may not be able to acquire a license on commercially reasonable terms.

If we do not prevail in litigation or if other parties have filed or in the future should file, patent applications covering products and technologies that we have developed or intend to develop, we may have to obtain licenses from third parties, which may not be available on commercially reasonable terms, or at all, and may require us to pay substantial royalties, grant a cross-license to some of our patents to another patent holder or change the formulation of a product candidate so that we do not infringe third-party patents, which reformulation may be impossible to achieve or which may require substantial time and expense. If we are unable to cost-effectively redesign our products so they do not infringe a patent, we may be unable to sell some of our products. Any of these occurrences will result in lost revenues and profits for us.

The drug research and development industry has a history of patent and other intellectual property litigation, and we may be involved in costly intellectual property lawsuits.

The drug research and development industry has a history of patent and other intellectual property litigation, and we believe these lawsuits are likely to continue. Legal proceedings relating to intellectual property would be expensive, take significant time and divert management s attention from other business concerns. We face potential patent infringement suits by companies that control patents for drugs or potential drugs similar to our product candidates or other suits alleging infringement of their intellectual property rights. There could be issued patents of which we are not aware that our products infringe or patents that we believe we do not infringe that we are ultimately found to infringe. The publication of discoveries in the scientific or patent literature frequently occurs substantially later than the date on which the underlying discoveries were made and patent applications were filed. Because patent applications can take many years to issue, there may be currently pending applications of which we are unaware that may later result in issued patents that we infringe with our drug candidates or resulting products. In addition, technology created under our research and development collaborations may infringe the intellectual property rights of third parties, in which case we may not receive milestone or royalty revenue from those collaborations.

If we do not prevail in an infringement lawsuit brought against us, we might have to pay substantial damages, including triple damages, and we could be required to stop the infringing activity or obtain a license to use the patented technology or redesign our products so as not to infringe the patent. We may not be able to enter into licensing arrangements at a reasonable cost or effectively redesign our products. Any inability to secure licenses or alternative technology could delay the introduction of our products or prevent us from manufacturing or selling products.

RISKS RELATED TO EMPLOYEES AND FACILITIES

Our operations could be interrupted by damage to our laboratory facilities.

Our operations are dependent upon the continued use of our specialized laboratories and equipment in Woburn, Massachusetts. Catastrophic events, including fires or explosions, could damage our

laboratories, equipment, scientific data, work in progress or inventories of chemical compounds and biological materials and may materially interrupt our business. We employ safety precautions in our laboratory activities in order to reduce the likelihood of the occurrence of these catastrophic events; however, we cannot eliminate the chance that such an event will occur. Rebuilding our facilities could be time consuming and result in substantial delays in fulfilling our agreements with our collaborators.

Security breaches may disrupt our operations and harm our operating results.

Our network security and data recovery measures may not be adequate to protect against computer viruses, break-ins, and similar disruptions from unauthorized tampering with our computer systems. The misappropriation, theft, sabotage or any other type of security breach with respect to any of our proprietary and confidential information that is electronically stored, including research or clinical data, could have a material adverse impact on our business, operating results and financial condition. Additionally, any break-in or trespass of our facilities that results in the misappropriation, theft, sabotage or any other type of security breach with respect to our proprietary and confidential information, including research or clinical data, or that results in damage to our research and development equipment and assets could have a material adverse impact on our business, operating results, and financial condition.

RISKS RELATED TO PRODUCT LIABILITY

If our use of chemical and biological materials and hazardous materials violates applicable laws or causes personal injury, we may be liable for damages.

Our drug discovery activities, including the analysis and synthesis of chemical compounds, involve the controlled use of chemicals, including flammable, combustible, toxic and radioactive materials that are potentially hazardous if misused. Federal, state and local laws and regulations govern our use, storage, handling and disposal of these materials. These laws and regulations include the Resource Conservation and Recovery Act, the Occupational Safety and Health Act and local fire and building codes, and regulations promulgated by the Department of Transportation, the Drug Enforcement Agency, the Department of Energy, the Department of Health and Human Services, and the laws of Massachusetts, where we conduct our operations. We may incur significant costs to comply with these laws and regulations in the future and current or future environmental laws and regulations may impair our research, development and production efforts. Notwithstanding our extensive safety procedures for handling and disposing of such materials, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of an accident, our business could be disrupted and we could be liable for damages and our liability may exceed our insurance coverage and our total assets, and have a negative impact on our financial condition and results of operations.

We may be exposed to potential liability related to the development, testing or manufacturing of compounds we develop.

We are developing, clinically testing and manufacturing therapeutic products for use in humans. In connection with these activities, we could be liable if persons are injured or die while using these drugs. We may have to pay substantial damages and/or incur legal costs to defend claims resulting from injury or death, and we may not receive expected royalty or milestone payments if commercialization of a drug is limited or ended as a result of such claims. We have product liability and clinical trial insurance that contains customary exclusions and provides coverage per occurrence at levels, in the aggregate, which we believe are customary and commercially reasonable in our industry given our current stage of drug development. Our product liability insurance does not cover every type of product liability claim that we may face or loss we may incur and may not adequately compensate us for the entire amount of covered claims or losses or for the harm to our business reputation. Also,

we may be unable to maintain our current insurance policies or obtain and maintain necessary additional coverage at acceptable costs, or at all.

RISKS RELATED TO OUR COMMON STOCK AND THE OFFERING

Because our stock price may be extremely volatile, our stock price could experience substantial decline.

The trading price of our common stock has been highly volatile. We believe the trading price of our common stock will remain highly volatile and may fluctuate substantially due to factors such as:

- adverse results or delays in clinical trials;
- announcement of FDA approval or non-approval, or delays in the FDA review process, of our or our collaborators product candidates or those of our competitors or actions taken by regulatory agencies with respect to our, our collaborators or our competitors clinical trials;
- announcement of new products by us or our competitors;
- quarterly variations in our or our competitors results of operations, including as a result of recognition of upfront licensing or other fees, the timing and amount of expenses incurred for clinical development, regulatory approval and commercialization of our product candidates;
- litigation, including intellectual property infringement lawsuits, involving us;
- financing transactions;
- developments in the biotechnology and pharmaceutical industries;
- departures of key personnel or board members;
- developments concerning current or future collaborations;
- FDA or international regulatory actions affecting our industry generally; and
- third-party reimbursement policies.

This volatility coupled with market declines in our industry over the past several years have affected the market prices of securities issued by many companies, often for reasons unrelated to their operating performance, and may adversely affect the price of our common stock. In the past, securities class action litigation has often been instituted following periods of volatility in the market price of a company s securities. A securities class action suit against us could result in potential liabilities, substantial costs and the diversion of management s attention and resources, regardless of the outcome of the action.

Some of our existing stockholders can exert control over us, and their interests could conflict with the best interests of our other stockholders.

Due to their combined stock holdings, our officers, directors and principal stockholders (stockholders holding more than 5% of our common stock), acting together, may be able to exert significant influence over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. In addition, this concentration of ownership may delay or prevent a change in control of our company, even when a change may be in the best interests of our stockholders. Furthermore, the interests of these stockholders may not always coincide with our interests as a company or the interests of other stockholders. Accordingly, these stockholders could cause us to enter into transactions or agreements that would not be widely viewed as beneficial.

If our officers, directors or principal stockholders sell substantial amounts of our common stock (including shares issued upon the exercise of options and warrants) in the public market, the market

price of our common stock could fall. These sales also might make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deemed appropriate.

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 or deter attempts by our stockholders to replace or remove our current management.

Provisions in our corporate charter and bylaws and Delaware law may discourage, delay or prevent an acquisition of our company, a change in control, or attempts by our stockholders to replace or remove members of our current Board of Directors. Because our Board of Directors is responsible for appointing the members of our management team, these provisions could in turn affect any attempt by our stockholders to replace current members of our management team. These provisions include:

- a Board of Directors having three classes of directors with a three-year term of office that expires as to one class each year, commonly referred to as a staggered board ;
- a prohibition on actions by our stockholders by written consent;
- the inability of our stockholders to call special meetings of stockholders;
- the ability of our Board of Directors to issue preferred stock without stockholder approval, which could be used to institute a poison pill that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our Board of Directors;
- limitations on the removal of directors; and
- advance notice requirements for director nominations and stockholder proposals.

Moreover, because we are incorporated in Delaware, 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. As a result, it is difficult for a third party to acquire control of us without the approval of our Board of Directors and, therefore, mergers and acquisitions of us that our stockholders may consider in their best interests may not occur.

Because we do not intend to pay dividends, stockholders will benefit from an investment in our common stock only if it appreciates in value.

We have never declared or paid any cash dividends on our common stock. We currently intend to retain our future earnings, if any, to finance the expansion of our business and do not expect to pay any cash dividends in the foreseeable future. As a result, the success of an investment in our common stock will depend entirely upon any future appreciation. There is no guarantee that our common stock will appreciate in value or even maintain the price at which stockholders have purchased their shares.

Future sales of our common stock may depress our stock price.

The market price of our common stock could decline as a result of sales of substantial amounts of our common stock in the public market after the closing of this offering, or the perception that these sales could occur. In addition, these factors could make it more difficult for us to raise funds through future offerings of common stock. There are 35,831,456 shares of common stock outstanding as of

March 31, 2007. All of the shares sold in this offering and not held by our affiliates will be freely transferable without restriction or further registration under the Securities Act of 1933, as amended.

We have an aggregate of 2,488,106 shares of common stock remaining as of March 31, 2007 that have been registered or are freely tradable under an exemption from registration and are reserved for issuance upon exercise of options granted or reserved for grant under our stock option plan and our employee stock purchase plan. Stockholders can sell these shares in the public market upon issuance, subject to restrictions under securities laws. The number of shares we have reserved for issuance under our stock option plan may increase based on our issued and outstanding shares of common stock and we may increase the number of shares reserved for issuance under our employee stock purchase plan. We may register such additional shares in the future. In addition, some of our existing stockholders will be entitled to register their shares of common stock after this offering.

We have broad discretion in the use of the net proceeds from this offering, and we may not use these proceeds effectively.

We have not determined the specific allocation of the net proceeds of this offering. Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not necessarily improve our results of operations or enhance the value of our common stock. The failure by our management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business or financial condition, cause the price of our common stock to decline and delay product development.

You will experience immediate dilution in the book value per share of the common stock you purchase.

Since the price per share of our common stock being offered is substantially higher than the book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. Based on an assumed offering price to the public of $8.38 per share, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of $5.54 per share in the net tangible book value of the common stock. See the section entitled Dilution below for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

A substantial number of shares of our outstanding common stock may be sold in this offering, which could cause the price of our common stock to decline.

In this offering, assuming the underwriter s option to purchase up to 1,050,000 additional shares from us is exercised in full, we will sell 8,050,000 shares, or approximately 22.5% of our outstanding common stock as of March 31, 2007. This sale and any future sales of a substantial number of shares of our common stock in the public market, or the perception that such sales may occur, could adversely affect the price of our common stock. We cannot predict the effect, if any, that market sales of those shares of common stock or the availability of those shares of common stock for sale will have on the market price of our common stock.

FORWARD-LOOKING STATEMENTS

This current report includes 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. We have based these forward-looking statements on our current expectations and projections about future events. Our actual results could differ materially from those discussed in, or implied by, these forward-looking statements. These forward-looking statements are generally identified by words such as "believe," "anticipate," "estimate," "expect," "intend," "plan," "will," "may" and other similar expressions. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements. Forward-looking statements include, but are not necessarily limited to, those relating to:

- statements regarding interim Phase 2 results for ARQ 501 and our ability to meet the study's primary endpoints;
- future product research and development activities, including the timing and success of clinical trials, and status of product development;
- technical feasibility of our research and product candidates;
- scope of coverage and validity of our issued patents and the likelihood of issuances of our pending patent applications;
- plans for regulatory filings and receipt of future regulatory approvals including those relating to our future clinical protocols;
- implementation of our corporate strategy; and
- future financial condition.

Factors that could cause actual results or conditions to differ from those anticipated by these and other forward-looking statements include those more fully described in the "Risk factors" section of our preliminary prospectus supplement dated June 6, 2007 (File No. 333-143162) and in the reports we file with the SEC. We undertake no obligation to update or revise these forward-looking statements to reflect events or circumstances after the date of this prospectus supplement except as required by law.

SECTION 9 FINANCIAL STATEMENTS AND EXHIBITS

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

99.1	Text of press release announcing offering of common stock.

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 hereunto duly authorized.

ARQULE, INC.
(Registrant)

/s/ Richard H. Woodrich
Richard H. Woodrich
Acting Chief Financial Officer

June 6, 2007