

ARROWHEAD RESEARCH CORP
Form 424B5
August 19, 2008
Table of Contents

Filed Pursuant to Rule 424(b)(5) of the Securities Act of 1933

Registration No. 333-148218

Prospectus Supplement

(To Prospectus dated January 30, 2008)

2,777,777 Units

Consisting of Common Stock and Warrants

\$1.80 per Unit

We are offering for sale 2,777,777 units, 2,600,181 units are offered to parties unaffiliated with us at a purchase price of \$1.80 per unit and 177,596 units are offered to one or more directors and officers at a purchase price of \$1.83 per unit, with each unit consisting of one share of common stock and a warrant to buy one share of common stock. Each warrant has an exercise price of \$2.00 per share, has a term of five years and is exercisable beginning six months and one day after the date of issue. The shares of common stock and warrants comprising the units are immediately separable and will be issued separately.

Our common stock is traded on the NASDAQ Global Market under the symbol ARWR. On August 15, 2008, the last reported sale price for our common stock on the NASDAQ Global Market was \$1.70 per share.

This is a best efforts offering. Accordingly, we may not sell all of the units offered. Additionally, based on the level of interest and subscriptions received, we may sell up to an additional 2,777,777 units. This offering is being made directly by us without an underwriter or placement agent. However, we may pay commissions to one or more finders, including registered broker-dealers. The following table reflects the gross and net proceeds that we expect to receive if we sell \$5.0 million in this offering.

Investing in our securities involves a high degree of risk. See Risk factors on page S-4 of this prospectus supplement.

	Per Unit	Total
Public offering price (1)	\$ 1.80	\$ 5,000,000
Commissions and finders' fees	\$ 0.135	\$ 375,000
Proceeds, before expenses, to Arrowhead Research Corporation (2)	\$ 0.167	\$ 4,625,000

- (1) Weighted average unit price taking into account the fact that 2,600,181 units are offered at a price per unit of \$1.80 and 177,596 units are offered at a price per unit of \$1.83.
- (2) We may sell up to an additional 2,777,777 units in additional offerings pursuant to one or more prospectus supplement. If all such units are purchased, the total public offering price, commissions and finders' fees and proceeds, before expenses, to us will be \$10.0 million, \$750,000 and \$9,250,000, respectively.

The above summary of offering proceeds is the weighted average to be received from the sale of Units to parties unaffiliated with us and our director(s) and officer(s) participating in this offering. The summary of offering proceeds to us does not give effect to any exercise of the warrants being issued in this offering. We expect the total offering expenses, may be up to \$550,000 if we sell the full amount being offered by this prospectus, which includes the finders' fees of 7.5% of the gross proceeds.

Edgar Filing: ARROWHEAD RESEARCH CORP - Form 424B5

Because there is no minimum offering amount required as a condition to the closing of this offering, the actual offering amount, finders' fees and proceeds to us are not presently determinable and may be substantially less than the maximum amounts set forth above. Additionally, based on the level of interest and subscriptions received, we may sell up to an additional 2,777,777 units. We may deliver shares in one or more closings through September 15, 2008. If we extend the duration of the offering, or enlarge the maximum size of the offering, we will further supplement this prospectus and prospectus supplement to provide notice of these changes. Investor funds will not be deposited into an escrow account and instead will be paid directly to us at each closing.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

August 15, 2008

Table of Contents

Table of contents

Prospectus supplement

	Page
<u>About this prospectus</u>	S-1
<u>Summary</u>	S-2
<u>Risk factors</u>	S-4
<u>Special note regarding forward-looking statements</u>	S-16
<u>Use of proceeds</u>	S-17
<u>Dilution</u>	S-18
<u>Plan of distribution</u>	S-19
<u>Description of warrants</u>	S-19
<u>Legal matters</u>	S-20
<u>Where you can find more information</u>	S-20
<u>Incorporation by reference</u>	S-21

Accompanying prospectus

<u>About this prospectus</u>	1
<u>Special note regarding forward-looking statements</u>	1
<u>About the company</u>	2
<u>Risk factors</u>	3
<u>Use of proceeds</u>	12
<u>The securities we may offer</u>	12
<u>Description of common stock</u>	13
<u>Description of warrants</u>	14
<u>Plan of distribution</u>	15
<u>Experts</u>	17
<u>Legal matters</u>	17
<u>Where you can find more information</u>	18
<u>Incorporation of certain information by reference</u>	18

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with different information. We are not making an offer to sell these securities in any jurisdiction where the offer is not permitted. You should not assume that the information contained in this prospectus supplement or the accompanying prospectus is accurate as of any date other than the respective dates thereof.

Table of Contents

About this prospectus

This prospectus supplement and the accompanying prospectus dated January 30, 2008 are part of a shelf registration statement on Form S-3 that we initially filed with the Securities and Exchange Commission on December 20, 2007. By using a shelf registration statement, we may sell shares of common stock and warrants to purchase common stock as described in the accompanying prospectus from time to time in one or more offerings for an aggregate dollar amount of up to \$50.0 million.

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of the securities we are offering and certain other matters relating to us and our financial condition. The second part, the accompanying prospectus, gives more general information about securities we may offer from time to time, some of which may not apply to the securities we are offering. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. You should read this prospectus supplement along with the accompanying prospectus. If the description of the offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

In this prospectus, Arrowhead, we, us and our refer to Arrowhead Research Corporation.

Table of Contents

Summary

The following summary contains basic information about the offering. It may not contain all of the information that is important to you. This prospectus supplement includes or incorporates by reference information about this offering, our business and our financial and operating data. You should carefully read the entire prospectus supplement, including the risk factors, the accompanying prospectus, and the documents incorporated by reference.

Our company

Overview

Arrowhead Research Corporation is a development stage nanotechnology company commercializing new technologies in the areas of life sciences, electronics and energy. Our mission is to build value through the identification, development and commercialization of nanotechnology-related products and applications. We work closely with universities to source early stage deals and to generate rights to intellectual property covering promising new nanotechnologies. We take a portfolio approach by operating multiple subsidiaries which allows the pursuit of multiple opportunities and, we believe, diversifies risk. We have five majority-owned subsidiaries: Calando Pharmaceuticals, Inc., or Calando, Unidym, Inc., or Unidym, Tego Biosciences Corporation, or Tego, Agonn Systems Corporation, or Agonn, and Masa Energy LLC, or Masa. We have minority investments in two subsidiaries: Nanotope, Inc., or Nanotope, and Leonardo Biosystems, Inc., or Leonardo. Our subsidiaries are focused on the development and commercialization nanotechnology products and applications, including anti-cancer drugs, RNAi therapeutics, fullerene anti-oxidants, carbon-based electronics and compound semiconductor materials.

Table of Contents

The offering

Common stock offered by Arrowhead 2,777,777 shares, plus 2,777,777 shares of common stock underlying the warrants offered hereby

Common stock to be outstanding after this offering 41,719,150 shares, or 44,496,927 shares if the warrants sold in this offering are exercised in full (1) (2)

Best Efforts; Excess Subscriptions This is a best efforts offering and there is no minimum offering amount required as a condition to the closing of this offering; we may not sell all of the units offered. Additionally, based on the level of interest and subscriptions received, we may sell up to an additional 2,777,777 units. Accordingly, the actual offering amount and common stock outstanding after this offering are not presently determinable.

NASDAQ Global Market Symbol ARWR

Use of proceeds See Use of proceeds on page S-17 of this prospectus supplement.

Risk Factors See Risk factors on page S-4 of this prospectus supplement and other information included or incorporated by reference in this prospectus supplement and the accompanying prospectus for a discussion of factors you should carefully consider before deciding to invest in our securities.

(1) The number of shares of common stock to be outstanding after this offering is based on 38,941,373 shares outstanding as of June 30, 2008.

(2) The number of shares of common stock to be outstanding after this offering excludes, as of June 30, 2008:

7,991,680 shares issuable upon the exercise of stock options outstanding at a weighted average exercise price of \$3.26;

1,397,500 shares issuable upon exercise of warrants outstanding at an exercise price of \$5.04, and;

712,362 shares issuable upon exercise of warrants outstanding at an exercise price of \$7.06

Unless otherwise indicated, this prospectus supplement assumes the sale of the maximum number of units offered hereunder and does not assume that any of the warrants issued hereunder will be exercised.

Table of Contents

Risk factors

An investment in our securities offered through this prospectus supplement and the accompanying prospectus involves a high degree of risk. You should carefully consider the specific risks relating to this offering set forth below and relating to our business set forth under the caption Risk Factors in our filings with the Securities and Exchange Commission pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, incorporated by reference herein, before making an investment decision. The risks and uncertainties we have described are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also affect our business operations.

The following risk factors should be read carefully in connection with evaluating our business and the forward-looking statements that we make in this prospectus and elsewhere (including oral statements) from time to time. Any of the following risks could materially adversely affect our business, our operating results, our financial condition and the actual outcome of matters as to which forward-looking statements are made in this prospectus.

Risks Related to Our Focus on Nanotechnology

There are substantial inherent risks in attempting to commercialize new technological applications, and, as a result, we may not be able to successfully develop nanotechnology for commercial use.

Our company finances research and development of nanotechnology, which is a new and unproven field. Our research scientists are working on developing technology in various stages. However, such technology's commercial feasibility and acceptance is unknown. Scientific research and development requires significant amounts of capital and takes an extremely long time to reach commercial viability, if at all. To date, our research and development projects have not produced commercially viable applications, and may never do so. During the research and development process, we may experience technological barriers that we may be unable to overcome. For example, our scientists must determine how to design and develop nanotechnology applications for potential products designed by third parties for use in cost-effective manufacturing processes. Because of these uncertainties, it is possible that none of our potential applications will be successfully developed. If we are unable to successfully develop nanotechnology applications for commercial use, we will be unable to generate revenue or build a sustainable or profitable business.

We will need to achieve commercial acceptance of our applications to generate revenues and achieve profitability.

Even if our research and development yields technologically feasible applications, we may not successfully develop commercial products, and even if we do, we may not do so on a timely basis. If our research efforts are successful on the technology side, it could take at least several years before this technology will be commercially viable. During this period, superior competitive technologies may be introduced or customer needs may change, which will diminish or extinguish the commercial uses for our applications. Because nanotechnology is an emerging field, the degree to which potential consumers will adopt nanotechnology-enabled products is uncertain. We cannot predict when significant commercial market acceptance for nanotechnology-enabled products will develop, if at all, and we cannot reliably estimate the projected size of any such potential market. If markets fail to accept nanotechnology-enabled products, we may not be able to generate revenues from the commercial application of our technologies. Our revenue growth and achievement of profitability will depend substantially on our ability to introduce

Table of Contents

new technological applications to manufacturers for products accepted by customers. If we are unable to cost-effectively achieve acceptance of our technology among original equipment manufacturers and customers, or if the associated products do not achieve wide market acceptance, our business will be materially and adversely affected.

We may not be able to effectively secure necessary financing or first-tier research and development projects when competing against existing or new ventures.

Management believes that our success to date in raising capital to finance nanotechnology research and commercialization projects can be largely attributed to the fact that the plan of operations we have adopted is relatively novel. If we continue to be successful in attracting funding for research and commercialization projects, it is possible that additional competitors could emerge and compete for such funding. Should that occur, we could encounter difficulty in raising funds to finance our future operations and further research and commercialization projects.

Additionally, a substantial number of companies fund early-stage, scientific research at universities, and many venture capital firms and other institutional investors invest in companies seeking to commercialize various types of emerging technologies. It is possible that these companies, which may be more established and have greater resources than we do, and venture funds and institutional investors, as well as possible additional competitors, have financed or will begin to finance nanotechnology research. Should that occur, we may not be able to secure the opportunity to finance first-tier research and commercialization projects. Furthermore, should any commercial undertaking by us prove to be successful, there can be no assurance competitors with greater financial resources will not offer competitive products and/or technologies.

We will need to establish additional relationships with strategic and development partners to fully develop and market our products.

We do not possess all of the resources necessary to develop and commercialize products that may result from our technologies on a mass scale. Unless we expand our product development capacity and enhance our internal marketing, we will need to make appropriate arrangements with strategic partners to develop and commercialize current and future products. If we do not find appropriate partners, or if our existing arrangements or future agreements are not successful, our ability to develop and commercialize products could be adversely affected. Even if we are able to find collaborative partners, the overall success of the development and commercialization of product candidates in those programs will depend largely on the efforts of other parties and is beyond our control. In addition, in the event we pursue our commercialization strategy through collaboration, there are a variety of attendant technical, business and legal risks, including:

a development partner would likely gain access to our proprietary information, potentially enabling the partner to develop products without us or design around our intellectual property;

we may not be able to control the amount and timing of resources that our collaborators may be willing or able to devote to the development or commercialization of our product candidates or to their marketing and distribution; and

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 our management's resources.

Table of Contents

The occurrence of any of the above risks could impair our ability to generate revenues and harm our business and financial condition.

Nanotechnology-enabled products are new and may be viewed as being harmful to human health or the environment.

There is public concern regarding the environmental and ethical implications of nanotechnology that could impede market acceptance of products developed through these means. Nanotechnology-enabled products could be composed of materials such as carbon, silicon, silicon carbide, germanium, gallium arsenide, gallium nitride, cadmium selenide or indium phosphide, which may prove to be unsafe or harmful to the environment because of the size, shape or composition of the nanostructures. For this reason, these nanostructures may prove to present risks to human health or the environment that are different from and greater than the better understood risks that may be presented by the constituent materials in non-nanoscale forms. Government authorities in the United States or individual states, and foreign government authorities could, for social or other purposes, prohibit or regulate the use of some or all nanotechnologies. The regulation and limitation of the kinds of materials used in or used to develop nanotechnology-enabled products, or the regulation of the products themselves, could halt or delay the commercialization of nanotechnology-enabled products or substantially increase the cost, which will impair our ability to achieve revenue from the license of nanotechnology applications.

We have entered into technology license agreements with third parties that require us to satisfy obligations to keep them effective, and if these agreements are terminated, our technology and our business would be seriously and adversely affected.

Through our subsidiaries, we have entered into exclusive, long-term license agreements with Rice University, California Institute of Technology, or Caltech, Alnylam Pharmaceuticals, Inc. and other entities to incorporate their proprietary technologies into our proposed products. These license agreements require us to pay royalties and satisfy other conditions, including conditions related to the commercialization of the licensed technology. We cannot give any assurance that we will successfully incorporate these technologies into marketable products or, if we do, whether sales will be sufficient to recover the amounts that we are obligated to pay to the licensors. Failure by us to satisfy our obligations under these agreements may result in the modification of the terms of the licenses, such as by rendering them non-exclusive, or may give our licensors the right to terminate their respective agreement with us, which would limit our ability to implement our current business plan and harm our business and financial condition.

We rely on outside sources for various components and processes for our products.

We rely on third parties for various components and processes for our products, including the manufacture of Calando's product candidates. While we try to have at least two sources for each component and process, we may not be able to achieve multiple sourcing because there may be no acceptable second source, other companies may choose not to work with us, or the component or process sought may be so new that a second source does not exist, or does not exist on acceptable terms. Therefore, it is possible that our business plans will have to be slowed down or stopped completely at times due to our inability to obtain required raw materials, components and outsourced processes at an acceptable cost, if at all, or to get a timely response from vendors.

Table of Contents

We may be unable to scale up our manufacturing processes in a cost effective way.

In some cases, nanotechnology will require new technological and manufacturing processes that, at this time, are very expensive and subject to error. There is no assurance that technology and manufacturing processes will expand and improve quickly enough to enable our targeted products to be made within rigorous tolerances cost effectively. If manufacturing and mass production are not available at a favorable cost, our technology may not be adopted by the applicable industry. Under such scenario, we may not achieve our business plan for one or more process or product, which could adversely impact the value of our common stock.

We will need approval from governmental authorities in the United States and other countries to successfully realize commercial value from our activities.

In order to clinically test, manufacture and market products for commercial use, two of our current subsidiaries and both of our investments must satisfy mandatory procedures and safety and effectiveness standards established by various regulatory bodies, including the U.S. Food and Drug Administration, or FDA. Technology and product development and approval within this regulatory framework takes a number of years and involves the expenditure of substantial resources. The time and expense required to perform the necessary testing can vary and is substantial. In addition, no action can be taken to market any biologic, drug or device in the United States until the FDA approves an appropriate marketing application. Furthermore, even after initial FDA approval has been obtained, further trials may be required to obtain additional data on safety and effectiveness. Adverse events that are reported during regulatory trials or after marketing approval can result in additional limitations being placed on a product's use and, potentially, withdrawal of the product from the market. Any adverse event, either before or after approval, can result in product liability claims against us, which could significantly and adversely impact the value of our common stock.

If export controls affecting our products are expanded, our business will be adversely affected.

The U.S. government regulates the sale and shipment of numerous technologies by U.S. companies to foreign countries. Our subsidiaries may develop products that might be useful for military and antiterrorism activities. Accordingly, U.S. government export regulations could restrict sales of these products in other countries. If the U.S. government places burdensome export controls on our technology or products, our business would be materially and adversely affected. If the U.S. government determines that we have not complied with the applicable export regulations, we may face penalties in the form of fines or other punishment.

Our research and product development efforts pertaining to the pharmaceutical industry are subject to additional risks.

Our subsidiary, Calando, is focused on research and development projects related to new and improved pharmaceutical conjugates. Drug development is time-consuming, expensive and risky. Even product candidates that appear promising in the early phases of development, such as in early animal and human clinical trials, often fail to reach the market for a number of reasons, such as:

clinical trial results are not acceptable, even though preclinical trial results were promising;

inefficacy and/or harmful side effects in humans or animals;

the necessary regulatory bodies, such as the FDA, did not approve our potential product for the intended use; and

manufacturing and distribution is uneconomical.

Table of Contents

Clinical trial results are frequently susceptible to varying interpretations by scientists, medical personnel, regulatory personnel, statisticians and others, which often delays, limits, or prevents further clinical development or regulatory approvals of potential products. If Calando is unable to cost-effectively achieve acceptance of their respective biopharmaceutical technology, or if the associated drug products do not achieve wide market acceptance, the business of Calando will be materially and adversely affected, and the value of our interest in this subsidiary will diminish.

Any drugs developed by our Subsidiaries may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives, thereby harming our business.

Increasing expenditures for healthcare have been the subject of considerable public attention in the United States. Both private and government entities are seeking ways to reduce or contain healthcare costs. Numerous proposals that would effect changes in the United States healthcare system have been introduced or proposed in Congress and in some state legislatures, including reductions in the cost of prescription products and changes in the levels at which consumers and healthcare providers are reimbursed for purchases of pharmaceutical products.

The ability of Calando and Tego to market products successfully will depend in part on the extent to which third-party payers are willing to reimburse patients for the costs of their products and related treatments. These third-party payers include government authorities, private health insurers and other organizations, such as health maintenance organizations. Third party payers are increasingly challenging the prices charged for medical products and services. In addition, the trend toward managed healthcare and government insurance programs could result in lower prices and reduced demand for Calando's and Tego's products. Cost containment measures instituted by healthcare providers and any general healthcare reform could affect Calando's and Tego's ability to sell products and may have a material adverse effect on them, thereby diminishing the value of the Company's interest in these Subsidiaries. We cannot predict the effect of future legislation or regulation concerning the healthcare industry and third party coverage and reimbursement on our business.

Our corporate compliance program cannot guarantee that we are in compliance with all applicable federal and state regulations.

Our operations, including our research and development and our commercialization efforts, such as clinical trials, manufacturing and distribution, are subject to extensive federal and state regulation. While we have developed and instituted a corporate compliance program based on current best practices, we cannot assure you that our company or our employees are or will be in compliance with all potentially applicable federal and state regulations or laws. If we fail to comply with any of these regulations or laws, a range of actions could result, including, but not limited to, the termination of clinical trials, the failure to approve a commercialized product, significant fines, sanctions, or litigation, any of which could harm our business and financial condition.

The technology licensed by our subsidiaries from various third parties may be subject to government rights and retained rights of the originating research institutions.

We license technology from Caltech, Rice University, and other universities and companies. Our licensors may have obligations to government agencies or universities. Under their agreements, a government agency or university may obtain certain rights over the technology that we have developed

Table of Contents

and licensed, including the right to require that a compulsory license be granted to one or more third parties selected by the government agency.

In addition, our collaborators often retain certain rights under their agreements with us, including the right to use the underlying technology for noncommercial academic and research use, to publish general scientific findings from research related to the technology, and to make customary scientific and scholarly disclosures of information relating to the technology. It is difficult to monitor whether our collaborators limit their use of the technology to these uses, and we could incur substantial expenses to enforce our rights to our licensed technology in the event of misuse.

Our ability to protect our patents and other proprietary rights is uncertain, exposing us to the possible loss of competitive advantage.

Our subsidiaries have licensed rights to pending patents and have filed and will continue to file patent applications. The researchers sponsored by us may also file patent applications that we choose to license. If a particular patent is not granted, the value of the invention described in the patent would be diminished. Further, even if these patents are granted, they may be difficult to enforce. Even if successful, efforts to enforce our patent rights could be expensive, distracting for management, cause our patents to be invalidated, and frustrate commercialization of products. Additionally, even if patents are issued and are enforceable, others may independently develop similar, superior or parallel technologies to any technology developed by us, or our technology may prove to infringe upon patents or rights owned by others. Thus, the patents held by or licensed to us may not afford us any meaningful competitive advantage. If we are unable to derive value from our licensed or owned intellectual property, the value of your investment may decline.

Our ability to develop and commercialize products will depend on our ability to enforce our intellectual property rights and operate without infringing the proprietary rights of third parties.

Our ability and the ability of our subsidiaries to develop and commercialize products based on their respective patent portfolios, will depend, in part, on our ability and the ability of our subsidiaries to enforce those patents and operate without infringing the proprietary rights of third parties. There can be no assurance that any patents that may issue from patent applications owned or licensed by us or any of our subsidiaries will provide sufficient protection to conduct our respective businesses as presently conducted or as proposed to be conducted, or that we or our subsidiaries will remain free from infringement claims by third parties.

We may be subject to patent infringement claims, which could result in substantial costs and liability and prevent us from commercializing our potential products.

Because the nanotechnology intellectual property landscape is rapidly evolving and interdisciplinary, it is difficult to conclusively assess our freedom to operate without infringing on third party rights, and we have undertaken no formal freedom to operate assessment to date. However, we are currently aware of certain patent rights held by third parties that, if found to be valid and enforceable, could be alleged to render one or more of our business lines infringing. If a claim should be brought and is successful, we may be required to pay substantial damages, be forced to abandon any affected business lines and/or seek a license from the patent holder. In addition, any patent infringement claims brought against us or our subsidiaries, whether or not successful, may cause us to incur significant expenses and divert the attention of our management and key personnel from other business concerns. These could negatively affect our results of operations and prospects. There can also be no assurance that patents owned or licensed by us or our subsidiaries will not be challenged by others.

In addition, if our potential products infringe the intellectual property rights of third parties, these third parties may assert infringement claims against our customers, and we may be required to indemnify

Table of Contents

our customers for any damages they suffer as a result of these claims. The claims may require us to initiate or defend protracted and costly litigation on behalf of customers, regardless of the merits of these claims. If any of these claims succeed, we may be forced to pay damages on behalf of our customers or may be required to obtain licenses for the products they use. If we cannot obtain all necessary licenses on commercially reasonable terms, we may be unable to continue selling such products.

We may not be successful integrating Unidym's operations at various locations.

Our subsidiary Unidym, through its wholly-owned subsidiary Unidym Acquisition LLC, merged with Texas-based Carbon Nanotechnologies, Inc., or CNI, through a reverse triangular merger on April 20, 2007. Management may fail to successfully integrate CNI or realize the expected benefits from that merger. Additionally, it is possible that the CNI merger will have a negative impact on Unidym's ability to sell carbon nanotubes, commercialize electronic products incorporating carbon nanotubes and generate revenue. Unidym may be unable to obtain access to carbon nanotubes from other suppliers that may be better suited for Unidym's electronic products. Similarly, Unidym may lose existing customers or fail to secure prospective customers if those customers believe that Unidym's plan to manufacture electronic products incorporating carbon nanotubes represents a competitive threat. It is also possible that the costs required to integrate the operations of Unidym at various locations will be greater than expected. In connection with the acquisition of CNI, it is anticipated that, in the immediate future, both the Houston, Texas and Menlo Park, California facilities will continue to operate. In addition, in August 2008, Unidym acquired Nanoconduction, Inc., a company originally formed to develop carbon nanotube-based thermal management solutions for the microprocessor industry. With the acquisition of Nanoconduction, Unidym will lease a new facility and, as a result, management will be required to supervise and coordinate activities at facilities in different states. There may be unanticipated redundancies in the capital equipment and research efforts at each facility. Researchers and product managers at different facilities may not effectively communicate, and the cultures and work environments may differ between facilities. Any of these factors could harm Unidym's and our business and results of operations.

We may be liable for damages, or events giving rise to damages, that took place prior to the merger of Unidym and CNI.

Plaintiffs may succeed in holding Unidym liable for damages, or events giving rise to damages, that took place prior to the merger. This risk will be heightened if and to the extent that Unidym continues to operate CNI's business in the same manner as that business was operated by CNI prior to the merger. If plaintiffs are successful in holding Unidym liable for damages relating to pre-merger operations of CNI's business or other events giving rise to claims for damages, Arrowhead's and Unidym's business could be adversely and materially affected.

We may incur costs and expenses if Unidym's lease for its Houston premise is terminated.

As of June 30, 2008 the facility lease for Unidym's Houston location had expired and Unidym is now occupying the Houston facility on a month to month basis. Unidym employs, on a contract basis, certain technicians from the landlord to assist in Unidym's manufacturing and research and development activities. Unidym's management is actively evaluating alternative sites to which to relocate, which distracts management's attention from operations. If the lease is not renewed, Unidym will have only as long as 30 days to find a new facility, upon terms that may not be favorable to Unidym, and relocate operations. If Unidym is required to relocate its Texas operations, Unidym will need to move operations, and will incur costs and expenses that may be significant. In addition, Unidym will need to hire and train new technicians to perform the work currently done by the landlord's technicians.

Table of Contents

There may be a difference in the investment valuations that we used when making initial and subsequent investments in our Subsidiaries and actual market values.

Our investments in our Subsidiaries were the result of negotiation with Subsidiary management and equity holders, and the investment valuations were not independently verified. Traditional methods used by independent valuation analysts include a discounted cash flow analysis and a comparable company analysis. We have not generated a positive cash flow to date and do not expect to generate significant cash flow in the near future. Additionally, we believe that there exist comparable public companies to provide a meaningful valuation comparison. Accordingly, we have not sought independent valuation analysis in connection with our investments and may have invested in our various holdings at higher or lower valuations than an independent source would have recommended. There may be no correlation between the investment valuations that we used over the years for our investments and the actual market values. If we should eventually sell all or a part of any of our consolidated business or that of a Subsidiary, the ultimate sale price may be for a value substantially lower or higher than previously determined by us, which could materially and adversely impair the value of our common stock.

Risks Related to the Early Stage of Our Business

We will need to raise additional capital in the near future, and, if we are unable to secure adequate funds on acceptable terms, we may be unable to support our business plan.

Our plan of operations is to provide substantial amounts of research project funding and financial support for majority-owned Subsidiaries over an extended period of time. We anticipate that we will need to raise additional capital in the near term to support all of these projects, and we may seek to do so by conducting one or more private placements of equity securities, selling additional securities in a registered public offering, or through a combination of one or more of such financing alternatives. Specifically, as stated elsewhere in this prospectus, we may sell up to 2,777,777 units, consisting of common stock and warrants, immediately after this offering. There can be no assurance that any additional capital resources that we need will be available when needed or on terms acceptable to us. If we are unable to obtain additional capital on acceptable terms when needed, we may be required to take actions that harm our business and our ability to achieve cash flow in the future, including possibly delaying or reducing implementation of certain aspects of our plan of operations, deferring or abandoning one or more of our research programs, or curtailing or ceasing operations of one or more of our Subsidiaries.

We are a development stage company and our success is subject to the substantial risks inherent in the establishment of a new business venture.

The implementation of our business strategy is still in the development stage. We have currently own majority interests in four subsidiary companies, investments in two early stage biotech companies and, through Unidym, one university research project at each of Duke University and the University of Florida. Our business and operations should be considered to be in the development stage and subject to all of the risks inherent in the establishment of a new business venture. Accordingly, our intended business and operations may not prove to be successful in the near future, if at all. Any future success that we might enjoy will depend upon many factors, several of which may be beyond our control, or which cannot be predicted at this time, and which could have a material adverse effect upon our financial condition, business prospects and operations and the value of an investment in our company.

We have not generated significant revenues and our business model does not predict significant revenues in the foreseeable future.

To date, we have only generated a small amount of revenue as a result of our current plan of operations. Moreover, given our strategy of financing new and unproven technology research, we do not expect to realize significant revenue from operations in the foreseeable future, if at all.

Table of Contents

The costs to fund the operations of our Subsidiaries are difficult to predict, and our anticipated expenditures in support of our Subsidiaries may increase for a variety of reasons.

It is possible that the completion of studies could be delayed for a variety of reasons, including difficulties in enrolling patients, delays in manufacturing, incomplete or inconsistent data from the pre-clinical or clinical trials, and difficulties evaluating the trial results. Any delay in completion of a trial would increase the cost of that trial, which would harm the Company's results of operations. Due to these uncertainties, the Company cannot reasonably estimate the size, nature or timing of the costs to complete or the amount or timing of the net cash inflows from Calando's or Tego's current activities. Until the Company obtains further relevant pre-clinical and clinical data, it will not be able to estimate its future expenses related to the Subsidiaries' programs or when, if ever, and to what extent, the Company will receive cash inflows from resulting products.

Development, manufacturing and sale of cost effective electronic products incorporating carbon nanotubes may require significant additional investment and take a long time. It is possible that the development and scale up of Unidym's carbon nanotube manufacturing effort and its development and scale up of its transparent conductive film products could be delayed for a number of reasons, including unforeseen difficulties with the technology development and delays in adoption of the technology by customers. Any delay would result in additional unforeseen costs, which would harm the Company's results of operations. Due to these uncertainties, the Company cannot reasonably estimate the size, nature or timing of the costs to complete the development of Unidym's products or net cash inflows from Unidym's current activities.

Failure to effectively manage our growth could place strains on our managerial, operational and financial resources and could adversely affect our business and operating results.

Our growth has placed, and is expected to continue to place, a strain on our managerial, operational and financial resources. Further, as our subsidiaries' businesses grow, we will be required to manage multiple relationships. Any further growth by us or our subsidiaries, or an increase in the number of our strategic relationships will increase this strain on our managerial, operational and financial resources. This strain may inhibit our ability to achieve the rapid execution necessary to implement our business plan, and could have a material adverse effect upon our financial condition, business prospects and operations and the value of an investment in our company.

Our future success depends on our ability to expand our organization to match the growth of our subsidiaries.

As our subsidiaries grow, the administrative demands upon us will grow, and our success will depend on our ability to meet these demands. These demands include increased accounting, management, legal services, staff support and general office services. We may need to hire additional qualified personnel to meet these demands, the cost and quality of which is dependent in part on market factors beyond our control. Further, we will need to effectively manage the training and growth of our staff to maintain an efficient and effective workforce, and our failure to do so could adversely affect our business and operating results.

We must overcome the many obstacles associated with integrating and operating varying business ventures to succeed.

Our model to integrate and oversee the strategic direction of various subsidiaries and research and development projects presents many risks, including:

Table of Contents

the difficulty of integrating operations and personnel; and

the diversion of our management's attention as a result of evaluating, negotiating and integrating acquisitions or new business ventures.

If we are unable to timely and efficiently design and integrate administrative and operational support for our subsidiaries, we may be unable to manage projects effectively, which could adversely affect our ability to meet our business objectives and the value of an investment in our company could decline.

In addition, consummating acquisitions and taking advantage of strategic relationships could adversely impact our cash position, and dilute stockholder interests, for many reasons, including:

changes to our income to reflect the amortization of acquired intangible assets, including goodwill;

interest costs and debt service requirements for any debt incurred to fund our growth strategy; and

any issuance of securities to fund our operations or growth, which dilutes or lessens the rights of current stockholders.

Stockholder equity interest may be substantially diluted in additional financings.

Our certificate of incorporation authorizes the issuance of 70,000,000 shares of common stock and 5,000,000 shares of preferred stock, on such terms and at such prices as our board of directors may determine. As of June 30, 2008, 38,941,373 shares of common stock and no shares of preferred stock were issued and outstanding. As of June 30, 2008, 1,559,000 shares and 4,738,310 shares were reserved for issuance upon exercise of options granted under our 2000 Stock Option Plan, or 2000 Plan, and 2004 Equity Incentive Plan, or 2004 Plan, respectively. As of June 30, 2008, options to purchase 1,559,000 shares were outstanding under our 2000 Plan and options to purchase 4,432,680 shares were outstanding under our 2004 Plan. As of June 30, 2008, we had warrants outstanding to purchase 2,109,892 shares of common stock that are callable by us under certain market conditions. We are a development stage company currently exploring other capital financing opportunities. As stated elsewhere in this prospectus, we may sell up to 2,777,777 units, consisting of common stock and warrants, immediately after this offering. The issuance of additional securities in financing transactions by us or through the exercise of options or warrants would dilute the equity interests of our existing stockholders, perhaps substantially, and might result in dilution in the tangible net book value of a share of our common stock, depending upon the price and other terms on which the additional shares are issued.

Our success depends on the attraction and retention of senior management and scientists with relevant expertise.

Our future success will depend to a significant extent on the continued services of our key employees. In addition, we rely on several key executives to manage each of our subsidiaries. We do not maintain key man life insurance for any of our executives. Our ability to execute our strategy also will depend on our ability to continue to attract and retain qualified scientists, sales, marketing and additional managerial personnel. If we are unable to find, hire and retain qualified individuals, we could have difficulty implementing our business plan in a timely manner, or at all.

Table of Contents

There may be a difference in the investment valuations used by us when making initial and subsequent investments in our subsidiaries and actual market values.

Our investments in our subsidiaries were the result of negotiations with subsidiary management and equity holders, and the investment valuations were not independently verified. Traditional methods used by independent valuation analysts include a discounted cash flow analysis and a comparable company analysis. We have not generated a positive cash flow to date and do not expect to generate significant cash flow in the near future. Additionally, we believe there exist comparable public companies to provide a meaningful valuation comparison. Accordingly, we have not sought independent valuation analysis in connection with our investments and may have invested in our various holdings at higher or lower valuations than an independent source would have recommended. There may be no correlation between the investment valuations used by us over the years for our investments and the actual market values. If we should eventually sell all or a part of any of our consolidated business or that of a subsidiary, the ultimate sale price may be for a value substantially lower or higher than previously determined by us, which could materially and adversely impair the value of our common stock.

Risks Related to our Stock

Our common stock price has fluctuated significantly during fiscal 2005, 2006 and 2007 and may continue to do so in the future.

Because we are a development stage company, there are few objective metrics by which our progress may be measured. Consequently, we expect that the market price of our common stock will likely continue to fluctuate significantly. We do not expect to generate substantial revenue from the license or sale of our nanotechnology for several years, if at all. In the absence of product revenue as a measure of our operating performance, we anticipate that investors and market analysts will assess our performance by considering factors such as:

announcements of developments related to our business;

developments in our strategic relationships with scientists within the nanotechnology field;

our ability to enter into or extend investigation phase, development phase, commercialization phase and other agreements with new and/or existing partners;

announcements regarding the status of any or all of our collaborations or products;

market perception and/or investor sentiment regarding nanotechnology as the next technological wave;

announcements regarding developments in the nanotechnology field in general;

the issuance of competitive patents or disallowance or loss of our patent rights; and

quarterly variations in our operating results.

We will not have control over many of these factors but expect that they may influence our stock price. As a result, our stock price may be volatile and any extreme fluctuations in the market price of our common stock could result in the loss of all or part of your investment.

Table of Contents

The market for purchases and sales of our common stock may be very limited, and the sale of a limited number of shares could cause the price to fall sharply.

Although our common stock is listed for trading on the NASDAQ Global Market, our securities are currently relatively thinly traded. Accordingly, it may be difficult to sell shares of common stock quickly without significantly depressing the value of the stock. Unless we are successful in developing continued investor interest in our stock, sales of our stock could continue to result in major fluctuations in the price of the stock.

If securities or industry analysts do not publish research reports about our business, or if they make adverse recommendations regarding an investment in our stock, our stock price and trading volume may decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about our business. We do not currently have and may never obtain research coverage by industry or securities analysts. Investors have many investment opportunities and may limit their investments to companies that receive coverage from analysts. If no industry or securities analysts commence coverage of our company, the trading price of our stock could be negatively impacted. In the event we obtain industry or security analyst coverage, if one or more of the analysts downgrade our stock or comment negatively on our prospects, our stock price would likely decline. If one or more of these analysts cease to cover our industry or us or fails to publish reports about our company regularly, our common stock could lose visibility in the financial markets, which could also cause our stock price or trading volume to decline.

The market price of our common stock may be adversely affected by the sale of shares by our management or founding stockholders.

Sales of our common stock by our officers, directors and founding stockholders could adversely and unpredictably affect the price of those securities. Additionally, the price of our common stock could be affected even by the potential for sales by these persons. We cannot predict the effect that any future sales of our common stock or the potential for those sales, will have on our share price. Furthermore, due to relatively low trading volume of our stock, should one or more large stockholders seek to sell a significant portion of its stock in a short period of time, the price of our stock may decline.

We may be the target of securities class action litigation due to future stock price volatility.

In the past, when the market price of a stock has been volatile, holders of that stock have often initiated securities class action litigation against the company that issued the stock. If any of our stockholders brought a lawsuit against us, we could incur substantial costs defending the lawsuit. The lawsuit could also divert the time and attention of our management.

We do not intend to declare cash dividends on our common stock.

We will not distribute cash to our stockholders until and unless we can develop sufficient funds from operations to meet our ongoing needs and implement our business plan. The time frame for that is inherently unpredictable, and you should not plan on it occurring in the near future, if at all.

Table of Contents

Our board of directors has the authority to issue shares of blank check preferred stock, which may make an acquisition of our company by another company more difficult.

We have adopted and may in the future adopt certain measures that may have the effect of delaying, deferring or preventing a takeover or other change in control of our company that a holder of our common stock might consider in its best interest. Specifically, our board of directors, without further action by our stockholders, currently has the authority to issue up to 5,000,000 shares of preferred stock and to fix the rights (including voting rights), preferences and privileges of these shares (blank check preferred). Such preferred stock may have rights, including economic rights, senior to our common stock. As a result, the issuance of the preferred stock could have a material adverse effect on the price of our common stock and could make it more difficult for a third party to acquire a majority of our outstanding common stock.

Risks Related to the Offering

Investors in this offering will pay a higher price than the book value of our common stock.

If you purchase units in this offering, you will incur immediate dilution of \$1.245 per share (based on a weighted average of sale prices to parties unaffiliated with us and the director and officer participating in the offering) of common stock, representing the difference between our pro forma as adjusted net tangible book value per share of common stock after giving effect to this offering at a weighted average price of \$1.80 per unit and deducting the estimated placement agency fee and estimated offering expenses payable by us. In the past, we issued options to acquire common stock and warrants at prices below the offering price. To the extent these outstanding options and warrants are ultimately exercised, you will incur further dilution.

Management will have discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively.

We have not designated the amount of net proceeds we will use for any particular purpose. Accordingly, our management will have discretion as to the application of the net proceeds and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not increase our profitability or market value.

Special note regarding forward-looking statements

This prospectus supplement and the accompanying prospectus (including any document incorporated by reference herein or therein) include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, or the Exchange Act, that are subject to the safe harbor created by those sections. This forward-looking information is subject to risks and uncertainties including the factors listed under Risk factors, as well as elsewhere in this prospectus supplement and the accompanying prospectus. In some cases, you can identify forward-looking statements by terminology such as may, will, should, expects, intends, plans, anticipates, believes, estimates, predicts, potential or continue or the negative of these terms or terminology. These statements are only predictions and may be inaccurate. Actual events or results may differ materially. In evaluating these statements, you should specifically consider various factors, including the risks outlined under Risk factors. These factors may cause our actual results to differ materially from any forward-looking statement. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements.

Table of Contents

Use of proceeds

We estimate that the net proceeds to us from the sale of the full 2,777,777 units we are offering will be approximately \$4.6 million. Because there is no minimum offering amount required as a condition to the closing of this offering, the actual net proceeds to us is not presently determinable and may be substantially less than the maximum amounts set forth above. Additionally, based on the level of interest and subscriptions received, we may sell up to an additional 2,777,777 units, significantly increasing our net proceeds. Net proceeds is what we expect to receive after we pay estimated finders fees and other estimated expenses for this offering, assuming the sale of all of the units offered hereby.

We intend to use the net proceeds from this offering primarily to fund the ongoing operations of our majority- and minority-owned subsidiaries. If we raise the full amount being sought in this offering, we expect to use approximately and \$1.0 million that we plan to invest in the Series B Preferred Stock of Nanotope, Inc., a company in which we currently have an aggregate direct and indirect equity interest of approximately 14% on a fully-diluted basis. We will use any remaining net proceeds for general corporate purposes, capital expenditures and to meet working capital needs.

The amounts and timing of the expenditures may vary significantly depending on numerous factors, such as the progress of the research and development efforts of our subsidiaries, their ability to obtain funding for their operations from third parties, technological advances and the competitive environment in the various nanotechnology fields in which our subsidiaries operate. We may also use a portion of the net proceeds to acquire or invest in complementary businesses, products and technologies. Although we currently have no specific agreements, commitments or understandings with respect to any cash acquisitions, we evaluate acquisition opportunities and engage in related discussions with other companies from time to time.

Pending the uses described above, we intend to invest the net proceeds of this offering in short-term interest-bearing securities. We cannot predict whether the proceeds will be invested to yield a favorable return.

Table of Contents**Dilution**

Our pro forma net tangible book value as of June 30, 2008 was approximately \$12.58 million, or \$0.323 per share of common stock. Pro forma net tangible book value per share is calculated by subtracting our total liabilities from our total tangible assets, which is total assets less intangible assets, and dividing this amount by the number of shares of common stock outstanding. After giving effect to the sale by us of 2,777,777 shares of common stock underlying the units offered by this prospectus supplement at a weighted average price of \$1.80 per unit, and after deducting estimated offering expenses and sales commissions payable by us, our pro forma, as-adjusted net tangible book value as of June 30, 2008 would have been approximately \$17.18 million, or \$0.412 per share of common stock. This represents an immediate increase in the pro forma net tangible book value of \$0.412 per share to our existing stockholders and an immediate and substantial dilution in pro forma net tangible book value of approximately \$1.245 per share to new investors. The following table illustrates this hypothetical per share dilution:

Public offering price per unit	\$ 1.80
Pro forma net tangible book value per share before the offering	\$ 0.323
Increase per share attributable to new investors	\$ 0.089
Pro forma net tangible book value per share after this offering	\$ 0.412
Pro forma net tangible book value per share after the offering to Arrowhead	\$ 0.412
Pro forma net tangible book value dilution per share to new investors.	\$ 1.245

This discussion of dilution, and the table quantifying it, assume no exercise of any outstanding stock options or other potentially dilutive securities. The exercise of potentially dilutive securities having an exercise price less than the offering price would increase the dilutive effect to new investors.

The table above excludes the following potentially dilutive securities as of June 30, 2008:

7,991,680 shares issuable upon the exercise of stock options outstanding at a weighted average exercise price of \$3.26;

1,397,500 shares issuable upon exercise of warrants outstanding at an exercise price of \$5.04, and;

712,362 shares issuable upon exercise of warrants outstanding at an exercise price of \$7.06

The foregoing dilution information does not give effect to the exercise of the warrants that are being offered with the units. We may sell up to an additional 2,777,777 shares of common stock in follow-on offerings, which will have a significant affect on the dilution of our common stock.

Table of Contents

Plan of distribution

We are directly selling to one or more purchasers 2,777,777 units, with each unit consisting of one share of common stock and a warrant to purchase one share of common stock. This is a best efforts offering and there is no minimum offering amount required as a condition to the closing of this offering. Accordingly, we may not sell all of the units offered. Additionally, based on the level of interest and subscriptions received, we may sell up to an additional 2,777,777 units.

Assuming that we sell all of the units being offered hereunder, gross proceeds from the offering would be \$5.0 million and net proceeds from the offering would be expected to be approximately \$4.6 million after deducting estimated finders' fees and estimated costs payable by us associated with the offering. We will make sales directly to any purchasers and not through an underwriter or placement agent and we expect that we will effect the sale of the units will be made in one or more closings that may take place from time to time through August 31, 2008. If we extend the duration of the offering, we will further supplement this prospectus and prospectus supplement.

We may pay finders' fees of up to 7.5% of the gross proceeds. None of the finders will be affiliated with us and finders' fees will not be paid with respect to any units purchased by our directors or officers.

None of the purchaser funds will be deposited an escrow account before closing and there will be no minimum financing closing condition.

The transfer agent for our common stock is Computershare Investor Services.

Our common stock is traded on the NASDAQ Global Market under the symbol ARWR.

Description of warrants

The material terms and provisions of the warrants being offered pursuant to this prospectus supplement and the accompanying prospectus are summarized below. This summary is subject to, and qualified in its entirety by, the form of warrant, which will be provided to each purchaser in this offering and will be filed on a Current Report on Form 8-K in connection with this offering.

The warrants will be exercisable at any time and from time to time beginning six months and one day after issuance and ending five years from issuance. The warrants will be exercisable, at the option of each holder, upon the surrender of the warrants to us and at an assumed exercise price equal to \$2.00, which, except as described below, must be paid in cash at the time of exercise. The exercise price is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock. The warrant holders must surrender payment in cash of the exercise price of the shares being acquired upon exercise of the warrants; provided, however, that if we are unable to offer and sell the shares underlying these warrants pursuant to this prospectus supplement solely due to the ineffectiveness of the registration statements of which this prospectus supplement is a part, then the warrants may only be exercised on a net or cashless basis. In no event is the warrant holder entitled to a cash settlement from us upon exercise.

In the event that the trading price of our common stock closes above 200% of the exercise price of the warrant for 20 days in any 60-day period during the warrant term, we can then send a redemption notice to the warrant holders. This redemption notice will provide the warrant holders with at least 30 days to

Table of Contents

exercise outstanding warrants, after which time we may redeem and cancel any unexercised warrants for nominal consideration.

The warrants contain a limitation on exercise, pursuant to which a warrant holder will not be entitled to exercise any portion of the warrant if, after giving effect to the exercise, the holder, together with its affiliates, would beneficially own more than 19.99% of the shares of our outstanding common stock after giving effect to the exercise.

Legal matters

Certain legal matters with respect to the securities will be passed on for us by Goodwin Procter LLP, Los Angeles, California.

Where you can find more information

We file reports with the Securities and Exchange Commission on a regular basis that contain financial information and results of operations. You may read or copy any document that we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 or the Northeast Regional Office, 3 World Financial Center, Room 4300, New York, NY 10281. You may obtain information about the Public Reference Room by calling the SEC for more information at 1-800-SEC-0330. Our SEC filings are also available at the SEC's website at www.sec.gov and at our website at www.arrowheadresearch.com. This website address is not an active link to the registration statement of which this prospectus is a part, and any documents, links or other materials of any kind contained or referred to on such website are not part of the registration statement of which this prospectus is a part.

Table of Contents

Incorporation by reference

The SEC allows companies to incorporate by reference information filed with the SEC, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings that we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 and under our Commission File Number 1-10615.

1. Our Annual Report on Form 10-K for the fiscal year ended September 30, 2007 as filed on December 14, 2007.
2. Our Quarterly Reports on Form 10-Q for the fiscal quarters ended December 31, 2007, March 31, 2008 and June 30, 2008 as filed on February 11, 2008, May 12, 2008 and August 11, 2008, respectively.
3. Our Current Reports on Form 8-K and Form 8-K/A dated October 30, 2007, November 2, 2007, November 6, 2007, November 8, 2007, December 4, 2007, January 18, 2008, February 28, 2008, March 13, 2008, March 21, 2008, April 23, 2008, May 9, 2008, June 13, 2008, June 18, 2008, June 23, 2008, July 14, 2008 and July 25, 2008.
4. Our Definitive Proxy Statement dated January 18, 2008, filed with the SEC on January 18, 2008 in connection with our 2008 Annual Meeting of Stockholders.

You may request a copy of these filings, at no cost, by writing or telephoning our Secretary at our principal executive offices at the following address:

Arrowhead Research Corporation

201 South Lake Avenue, Suite 703

Pasadena, California 91101

(626) 304-3400

You may also request information through our website at www.arrowheadresearch.com. The reference to our website does not constitute incorporation by reference of the information contained at the site and you should not consider it part of this prospectus.

Current Reports on Form 8-K containing only Regulation FD or Regulation G disclosure furnished under Item 9 or 12 of Form 8-K, other than as referenced herein, are not incorporated herein by reference.

All documents and reports filed by us with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than Current Reports on Form 8-K containing only Regulation FD or Regulation G disclosure furnished under Item 9 or 12 of Form 8-K, unless otherwise indicated therein) after the date of this prospectus supplement and prior to the termination of the offering made hereby shall be deemed to be incorporated by reference into this prospectus supplement and to be a part hereof from the date of filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein or in any prospectus supplement modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

Table of Contents

Prospectus

\$50,000,000

Arrowhead Research Corporation

Common Stock

Warrants

This prospectus will allow us to issue, from time to time in one or more offerings,

shares of our common stock, and

warrants to purchase shares of our common stock.

The common stock and warrants may be offered and sold separately or together in one or more series of issuances, for an aggregate dollar amount of up to \$50,000,000. We will provide specific terms of the securities in supplements to this prospectus.

In this prospectus, we refer to the common stock and the warrants collectively as the securities.

This prospectus provides a general description of the securities we may offer. We may sell the securities to or through underwriters, directly to investors or through agents, or through a combination of these methods. Each time we sell securities we will provide a prospectus supplement that will contain specific information about the terms of that sale, including the names of any underwriters or agents, and may add, update or change the information contained in this prospectus. You should read this prospectus and any prospectus supplement carefully before you invest in our securities. This prospectus may not be used to offer and/or sell securities unless accompanied by a prospectus supplement for those securities.

Our common stock is listed on the Nasdaq Global Market under the symbol ARWR. On December 17, 2007, the last reported sale price of our common stock on the Nasdaq Global Market was \$3.40.

Investing in our securities involves a high degree of risk. You should carefully consider the Risk Factors beginning on page 3 before you invest in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is January 30, 2008

Table of Contents

Table of Contents

	Page
<u>About This Prospectus</u>	1
<u>Special Note Regarding Forward-Looking Statements</u>	1
<u>About the Company</u>	2
<u>Risk Factors</u>	3
<u>Use of Proceeds</u>	12
<u>Description of Common Stock</u>	13
<u>Description of Warrants</u>	14
<u>Plan of Distribution</u>	15
<u>Experts</u>	17
<u>Legal Matters</u>	17
<u>Where You Can Find More Information</u>	18
<u>Incorporation of Certain Information by Reference</u>	18

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, utilizing a shelf registration process. Under this shelf registration process, we may offer from time to time any combination of the securities described in this prospectus up to a total dollar amount of \$50,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with additional information described under the heading **Where You Can Find More Information**.

We have not authorized any dealer, salesperson or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and any accompanying prospectus supplement. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or any accompanying prospectus supplement as if we had authorized it. This prospectus and any accompanying prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor does this prospectus and any accompanying prospectus supplement constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus and any accompanying prospectus supplement is correct on any date after their respective dates, even though this prospectus or any prospectus supplement is delivered or securities are sold on a later date.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of the federal securities laws. You can identify forward-looking statements by the use of the words believe, expect, anticipate, intend, estimate, project, will, should, may, plan, intend, as well as other expressions which predict or indicate future events and trends to and which do not relate to historical matters. You should not rely on forward-looking statements, because they involve known and unknown risks, uncertainties and other factors, some of which are beyond the control of the Company. These risks, uncertainties and other factors may cause the actual results, performance or achievements of the Company to be materially different from the anticipated future results, performance or achievements expressed or implied by the forward-looking statements.

Factors that might cause these differences include the following:

the integration of multiple technologies and programs;

the ability to successfully complete development and commercialization of products and the Company's expectations regarding market growth;

the cost, timing, scope and results of ongoing safety and efficacy trials of preclinical and clinical testing;

the ability to successfully complete product research and further development;

the volume and profitability of product sales of future products;

changes in existing and potential relationships with corporate collaborators and partners;

the availability, cost, delivery and quality of materials supplied by contract manufacturers;

the timing, cost and uncertainty of obtaining regulatory approvals of our products;

the ability to obtain substantial additional funding;

the ability to develop and commercialize products before competitors that are superior to the alternatives developed by competitors;

the ability to retain certain members of management;

Table of Contents

the Company's expectations regarding research and development expenses and general and administrative expenses;

the Company's expectations regarding cash balances, capital requirements, anticipated revenue and expenses, including infrastructure expenses;

our belief regarding the validity of our patents and potential litigation; and

other factors detailed from time to time in filings with the Securities and Exchange Commission.

In addition, the factors described under the section captioned "Risk Factors" in this prospectus, as may be updated from time to time by our future filings under the Securities Exchange Act, and elsewhere in the documents incorporated by reference in this prospectus, may result in these differences. You should carefully review all of these factors. These forward-looking statements were based on information, plans and estimates at the date of this prospectus, and we do not promise to update any forward-looking statements to reflect changes in underlying assumptions or factors, new information, future events or other changes.

ABOUT THE COMPANY

Unless otherwise noted, (1) the term "Arrowhead Research" refers to Arrowhead Research Corporation, a Delaware corporation and formerly known as InterActive Group, Inc., (2) the terms "Arrowhead," "the Company," "we," "us," and "our," refer to the ongoing business operations of Arrowhead and its subsidiaries, whether conducted through Arrowhead Research or a subsidiary of the Company, (3) the term "ARC" refers to Arrowhead Research Corporation, a privately-held California corporation with which Arrowhead Research consummated a stock exchange transaction in January 2004, and (4) the term "Common Stock" refers to Arrowhead Research's common stock and the term "stockholder(s)" refers to the holders of Common Stock or securities exercisable for Common Stock.

Arrowhead Research Corporation is a development stage nanotechnology company commercializing new technologies in the areas of life sciences, electronics, and energy. Arrowhead's mission is to build value through the identification, development and commercialization of nanotechnology-related products and applications. The Company works closely with universities to source early stage deals and to generate rights to intellectual property covering promising new nanotechnologies. Arrowhead takes a portfolio approach by operating multiple subsidiaries which allows the pursuit of multiple opportunities and, we believe, diversifies risk. Currently, Arrowhead has five subsidiaries: Insert Therapeutics, Inc. ("Insert"), Calando Pharmaceuticals Inc. ("Calando"), Unidym, Inc. (formerly NanoPolaris) ("Unidym"), Tego Biosciences Corporation and Aonex Technologies, Inc. (collectively the "Subsidiaries" and each a "Subsidiary"). The Subsidiaries are developing and commercializing nanotech products and applications, including anti-cancer drugs, RNAi therapeutics, fullerene anti-oxidants, carbon-based electronics and compound semiconductor materials.

Our common stock is currently quoted on the Nasdaq Global Market under the symbol "ARWR".

Our executive offices are located at 201 South Lake Avenue, Suite 703, Pasadena CA 91101 and our telephone number is (626) 304-3400. Additional information regarding our company, including our audited financial statements and descriptions of our business, is contained in the documents incorporated by reference in this prospectus. See "Where You Can Find More Information" on page 18 and "Incorporation of Certain Information by Reference" on page 18.

Table of Contents

RISK FACTORS

We are a development-stage company and we have limited historical operations. We urge you to consider our likelihood of success and prospects in light of the risks, expenses and difficulties frequently encountered by entities at our current stage of development.

The following is a summary of certain risks we face. They are not the only risks we face. Additional risks of which we are not presently aware or that we currently believe are immaterial may also harm our business and results of operations. The trading price of our common stock could decline due to the occurrence of any of these risks, and investors could lose all or part of their investment. In assessing these risks, investors should also carefully consider the information provided elsewhere in this prospectus, the accompanying prospectus supplement and incorporated by reference from our other filings with the Securities and Exchange Commission.

CERTAIN RISK FACTORS RELATING TO THE COMPANY'S FOCUS ON NANOTECHNOLOGY

There are substantial inherent risks in attempting to commercialize new technological applications, and, as a result, we may not be able to successfully develop nanotechnology for commercial use.

The Company finances research and development of nanotechnology, which is a new and unproven field. The Company's research scientists are working on developing technology in various stages. However, such technology's commercial feasibility and acceptance is unknown. Scientific research and development requires significant amounts of capital and takes an extremely long time to reach commercial viability, if at all. To date, the Company's research and development projects have not produced commercially viable applications, and may never do so. During the research and development process, the Company may experience technological barriers that it may be unable to overcome. For example, our scientists must determine how to design and develop nanotechnology applications for potential products designed by third parties for use in cost-effective manufacturing processes. Because of these uncertainties, it is possible that none of our potential applications will be successfully developed. If the Company is unable to successfully develop nanotechnology applications for commercial use, we will be unable to generate revenue or build a sustainable or profitable business.

We will need to achieve commercial acceptance of our applications to generate revenues and achieve profitability.

Even if our research and development yields technologically feasible applications, the Company may not successfully develop commercial products, and even if it does, it may not be on a timely basis. If the Company's research efforts are successful on the technology side, it could take at least several years before this technology will be commercially viable. During this period, superior competitive technologies may be introduced or customer needs may change, which will diminish or extinguish the commercial uses for our applications. Because nanotechnology is an emerging field, the degree to which potential consumers will adopt nanotechnology-enabled products is uncertain. The Company cannot predict when significant commercial market acceptance for nanotechnology-enabled products will develop, if at all, and we cannot reliably estimate the projected size of any such potential market. If markets fail to accept nanotechnology-enabled products, we may not be able to generate revenues from the commercial application of our technologies. Our revenue growth and achievement of profitability will depend substantially on our ability to introduce new technological applications to manufacturers for products accepted by customers. If we are unable to cost-effectively achieve acceptance of our technology among original equipment manufacturers and customers, or if the associated products do not achieve wide market acceptance, our business will be materially and adversely affected.

The Company may not be able to effectively secure first-tier research and development projects when competing against existing or new ventures.

Management believes that the Company's success to date in raising capital to finance nanotechnology research and commercialization projects can be largely attributed to the fact that the plan of operations adopted by the Company is relatively novel. If the Company continues to be successful in attracting funding for research and commercialization projects, it is possible that additional competitors

Table of Contents

could emerge and compete for such funding. Should that occur, the Company could encounter difficulty in raising funds to finance its future operations and further research and commercialization projects.

Additionally, a substantial number of companies fund early-stage, scientific research at universities, and many venture capital firms and other institutional investors invest in companies seeking to commercialize various types of emerging technologies. It is possible that these companies, which may be more established and have greater resources than we do, and venture funds and institutional investors, as well as possible additional competitors, have financed or will begin to finance nanotechnology research. Should that occur, the Company may not be able to secure the opportunity to finance first-tier research and commercialization projects. Furthermore, should any commercial undertaking by the Company prove to be successful, there can be no assurance competitors with greater financial resources will not offer competitive products and/or technologies.

We will need to establish additional relationships with strategic and development partners to fully develop and market our products.

The Company does not possess all of the resources necessary to develop and commercialize products that may result from its technologies on a mass scale. Unless the Company expands its product development capacity and enhances its internal marketing, the Company will need to make appropriate arrangements with strategic partners to develop and commercialize current and future products. If the Company does not find appropriate partners, or if its existing arrangements or future agreements are not successful, the Company's ability to develop and commercialize products could be adversely affected. Even if the Company is able to find collaborative partners, the overall success of the development and commercialization of product candidates in those programs will depend largely on the efforts of other parties and is beyond our control. In addition, in the event the Company pursues its commercialization strategy through collaboration, there are a variety of attendant technical, business and legal risks, including:

a development partner would likely gain access to Company proprietary information, potentially enabling the partner to develop products without the Company or design around the Company's intellectual property;

the Company may not be able to control the amount and timing of resources that our collaborators may be willing or able to devote to the development or commercialization of our product candidates or to their marketing and distribution; and

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 our management's resources. The occurrence of any of the above risks could impair our ability to generate revenues and harm our business and financial condition.

Nanotechnology-enabled products are new and may be viewed as being harmful to human health or the environment.

There is public concern regarding the environmental and ethical implications of nanotechnology that could impede market acceptance of products developed through these means. Nanotechnology-enabled products could be composed of materials such as carbon, silicon, silicon carbide, germanium, gallium arsenide, gallium nitride, cadmium selenide or indium phosphide, which may prove to be unsafe or harmful to the environment because of the size, shape or composition of the nanostructures. For this reason, these nanostructures may prove to present risks to human health or the environment that are different from and greater than the better understood risks that may be presented by the constituent materials in non-nanoscale forms. Government authorities in the United States or individual states, and foreign government authorities could, for social or other purposes, prohibit or regulate the use of some or all nanotechnologies. The regulation and limitation of the kinds of materials used in or used to develop nanotechnology-enabled products, or the regulation of the products themselves, could halt or delay the commercialization of nanotechnology-enabled products or substantially increase the cost, which will impair our ability to achieve revenue from the license of nanotechnology applications.

Table of Contents

We have entered into technology license agreements with third parties which that require us to satisfy obligations to keep them effective, and if these agreements are terminated, our technology and our business would be seriously and adversely affected.

Through our Subsidiaries, we have entered into exclusive, long-term license agreements with Rice University, California Institute of Technology (Caltech), Alnylam Pharmaceuticals, Inc., and other entities to incorporate their proprietary technologies into our proposed products. These license agreements require us to pay royalties and satisfy other conditions, including conditions related to the commercialization of the licensed technology. We cannot give any assurance that sales of products incorporating these technologies will be sufficient to recover the amounts that we are obligated to pay to the licensors. Failure by us to satisfy our obligations under these agreements may result in the modification of the terms of the licenses, such as by rendering them non-exclusive, or may give our licensors the right to terminate their respective agreement with us, which would limit our ability to implement our current business plan and harm our business and financial condition.

We rely on outside sources for various components and processes for our products.

We rely on third parties for various components and processes for our products, including the manufacture of Calando and Insert s product candidates. While we try to have at least two sources for each component and process, we may not be able to achieve multiple sourcing because there may be no acceptable second source, other companies may choose not to work with us, or the component or process sought may be so new that a second source does not exist, or does not exist on acceptable terms. Therefore, it is possible that the business plans of the Company will have to be slowed down or stopped completely at times due to our inability to obtain required raw materials, components and outsourced processes at an acceptable cost, if at all, or to get a timely response from vendors.

We may be unable to scale up our manufacturing processes in a cost effective way.

In some cases, nanotechnology will require new technological and manufacturing processes that, at this time, are very expensive and subject to error. There is no assurance that technology and manufacturing processes will expand and improve quickly enough to enable the Company s targeted products to be made within rigorous tolerances cost effectively. If manufacturing and mass production are not available at a favorable cost, the Company s technology may not be adopted by the applicable industry. Under such scenario, the Company may not achieve its business plan for one or more process or product, which could adversely impact the value of our Common Stock.

The Company will need approval from governmental authorities in the United States and other countries to successfully realize commercial value from the Company s activities.

In order to clinically test, manufacture and market products for commercial use, two of the Company s current Subsidiaries must satisfy mandatory procedures and safety and effectiveness standards established by various regulatory bodies, including the U.S. Food and Drug Administration (FDA). Technology and product development and approval within this regulatory framework takes a number of years and involves the expenditure of substantial resources. The time and expense required to perform the necessary testing can vary and is substantial. In addition, no action can be taken to market any biologic, drug or device in the United States until the FDA approves an appropriate marketing application. Furthermore, even after initial FDA approval has been obtained, further trials may be required to obtain additional data on safety and effectiveness. Adverse events that are reported during regulatory trials or after marketing approval can result in additional limitations being placed on a product s use and, potentially, withdrawal of the product from the market. Any adverse event, either before or after approval, can result in product liability claims against the Company, which could significantly and adversely impact the value of our Common Stock.

If export controls affecting our products are expanded, our business will be adversely affected.

The U.S. government regulates the sale and shipment of numerous technologies by U.S. companies to foreign countries. Arrowhead s Subsidiaries may develop products that might be useful for military and antiterrorism activities. Accordingly, U.S. government export regulations could restrict sales of these products in other countries. If the U.S. government places burdensome export controls on our

Table of Contents

technology or products, our business would be materially and adversely affected. If the U.S. government determines that we have not complied with the applicable export regulations, we may face penalties in the form of fines or other punishment.

Our research and product development efforts pertaining to the pharmaceutical industry are subject to additional risks.

Two of our Subsidiaries, Insert and Calando, are focused on research and development projects related to new and improved pharmaceutical conjugates. Drug development is time-consuming, expensive and risky. Even product candidates that appear promising in the early phases of development, such as in early animal and human clinical trials, often fail to reach the market for a number of reasons, such as:

clinical trial results are not acceptable, even though preclinical trial results were promising;

inefficacy and/or harmful side effects in humans or animals;

the necessary regulatory bodies, such as the FDA, did not approve our potential product for the intended use; and

manufacturing and distribution is uneconomical.

Clinical trial results are frequently susceptible to varying interpretations by scientists, medical personnel, regulatory personnel, statisticians and others, which often delays, limits, or prevents further clinical development or regulatory approvals of potential products. If Insert and Calando are unable to cost-effectively achieve acceptance of their respective biopharmaceutical technology, or if the associated drug products do not achieve wide market acceptance, the businesses of Insert and Calando will be materially and adversely affected, and the value of the Company's interest in these Subsidiaries will diminish.

Any drugs developed by our Subsidiaries may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives, thereby harming our business.

Increasing expenditures for healthcare have been the subject of considerable public attention in the United States. Both private and government entities are seeking ways to reduce or contain healthcare costs. Numerous proposals that would effect changes in the United States healthcare system have been introduced or proposed in Congress and in some state legislatures, including reductions in the cost of prescription products and changes in the levels at which consumers and healthcare providers are reimbursed for purchases of pharmaceutical products.

The ability of Insert and Calando to market products successfully will depend in part on the extent to which third-party payors are willing to reimburse patients for the costs of their products and related treatments. These third-party payors include government authorities, private health insurers and other organizations, such as health maintenance organizations. Third party payors are increasingly challenging the prices charged for medical products and services. In addition, the trend toward managed healthcare and government insurance programs could result in lower prices and reduced demand for Insert and Calando's products. Cost containment measures instituted by healthcare providers and any general healthcare reform could affect Insert and Calando's ability to sell products and may have a material adverse effect on them, thereby diminishing the value of the Company's interest in these Subsidiaries. We cannot predict the effect of future legislation or regulation concerning the healthcare industry and third party coverage and reimbursement on our business.

Our corporate compliance program cannot guarantee that we are in compliance with all applicable federal and state regulations.

The Company's operations, including its research and development and its commercialization efforts, such as clinical trials, manufacturing and distribution, are subject to extensive federal and state regulation. While we have developed and instituted a corporate compliance program based on current best practices, we cannot assure you that the Company or its employees are or will be in compliance with all

Table of Contents

potentially applicable federal and state regulations or laws. If we fail to comply with any of these regulations or laws, a range of actions could result, including, but not limited to, the termination of clinical trials, the failure to approve a commercialized product, significant fines, sanctions, or litigation, any of which could harm our business and financial condition.

The technology licensed by the Company's Subsidiaries from various third parties may be subject to government rights and retained rights of the originating research institutions.

We license technology from Caltech, Rice University, and other universities and companies. Our licensors may have obligations to government agencies or universities. Under their agreements, a government agency or university may obtain certain rights over the technology that we have developed and licensed, including the right to require that a compulsory license be granted to one or more third parties selected by the government agency.

In addition, our collaborators often retain certain rights under their agreements with us, including the right to use the underlying technology for noncommercial academic and research use, to publish general scientific findings from research related to the technology, and to make customary scientific and scholarly disclosures of information relating to the technology. It is difficult to monitor whether our collaborators limit their use of the technology to these uses, and we could incur substantial expenses to enforce our rights to our licensed technology in the event of misuse.

The Company's ability to protect its patents and other proprietary rights is uncertain, exposing it to the possible loss of competitive advantage.

The Company's Subsidiaries have licensed rights to pending patents and have filed and will continue to file patent applications. The researchers sponsored by the Company may also file patent applications that Arrowhead chooses to license. If a particular patent is not granted, the value of the invention described in the patent would be diminished. Further, even if these patents are granted, they may be difficult to enforce. Even if successful, efforts to enforce our patent rights could be expensive, distracting for management, cause our patents to be invalidated, and frustrate commercialization of products. Additionally, even if patents are issued, and are enforceable, others may independently develop similar, superior, or parallel technologies to any technology developed by us, or the Company's technology may prove to infringe upon patents or rights owned by others. Thus, the patents held by or licensed to us may not afford us any meaningful competitive advantage. If we are unable to derive value from our licensed or owned intellectual property, the value of your investment in the Company may decline.

We may be subject to patent infringement claims, which could result in substantial costs and liability and prevent us from commercializing our potential products.

Third parties may claim that our potential products or related technologies infringe their patents. Any patent infringement claims brought against us may cause us to incur significant expenses, divert the attention of our management and key personnel from other business concerns and, if successfully asserted against us, require us to pay substantial damages. In addition, as a result of a patent infringement suit, we may be forced to stop or delay developing, manufacturing or selling potential products that are claimed to infringe a patent covering a third party's intellectual property unless that party grants us rights to use its intellectual property. We may be unable to obtain these rights on terms acceptable to us, if at all. Even if we are able to obtain rights to a third party's patented intellectual property, these rights may be non-exclusive, and therefore our competitors may obtain access to the same intellectual property. Ultimately, we may be unable to commercialize our potential products or may have to cease some of our business operations as a result of patent infringement claims, which could severely harm our business.

In addition, if our potential products infringe the intellectual property rights of third parties, these third parties may assert infringement claims against our customers, and we may be required to indemnify our customers for any damages they suffer as a result of these claims. The claims may require us to initiate or defend protracted and costly litigation on behalf of customers, regardless of the merits of these claims. If any of these claims succeed, we may be forced to pay damages on behalf of our customers or may be required to obtain licenses for the products they use. If we cannot obtain all necessary licenses on commercially reasonable terms, we may be unable to continue selling such products.

Table of Contents

We may not be successful integrating operations of Unidym's California and Texas locations.

Our Subsidiary, Unidym, through its wholly-owned subsidiary, Unidym Acquisition LLC, merged with Texas-based Carbon Nanotechnologies, Inc. (CNI) through a reverse triangular merger on April 20, 2007. Management may fail to successfully integrate the two companies or realize the expected benefits from the merger. Additionally, it is possible that the merger will have a negative impact on Unidym's ability to sell carbon nanotubes, commercialize electronic products incorporating carbon nanotubes, and generate revenue. Unidym may be unable to obtain access to carbon nanotubes from other suppliers that may be better suited for Unidym's electronic products. Similarly, Unidym may lose existing customers or fail to secure prospective customers if those customers believe that Unidym's plan to manufacture electronic products incorporating carbon nanotubes represents a competitive threat. It is also possible that the costs required to integrate the two companies will be greater than expected. It is anticipated that, in the immediate future, both the Houston, Texas and Menlo Park, California facilities will continue to operate. Management will be required to supervise and coordinate activities at two facilities in different states. There may be unanticipated redundancies in the capital equipment and research efforts at each facility. Researchers and product managers at different facilities may not effectively communicate, and the cultures and work environments may differ between facilities.

CERTAIN RISK FACTORS RELATING TO THE EARLY STAGE OF THE COMPANY'S BUSINESS

We are a development stage company and the Company's success is subject to the substantial risks inherent in the establishment of a new business venture.

The implementation of the Company's business strategy is still in the development stage. We have acquired majority interests in five Subsidiary companies and, through Unidym, one university research project at Duke University and one university research project at the University of Florida. The Company's business and operations should be considered to be in the development stage and subject to all of the risks inherent in the establishment of a new business venture. Accordingly, the intended business and operations of the Company may not prove to be successful in the near future, if at all. Any future success that the Company might enjoy will depend upon many factors, several of which may be beyond the control of the Company, or which cannot be predicted at this time, and which could have a material adverse effect upon the financial condition, business prospects and operations of the Company and the value of an investment in the Company.

The Company has not generated significant revenues and its business model does not predict significant revenues in the foreseeable future.

To date, the Company has only generated a small amount of revenue as a result of its current plan of operations. Moreover, given its strategy of financing new and unproven technology research, we do not expect to realize significant revenue from operations in the foreseeable future, if at all.

Failure to effectively manage our growth could place strains on our managerial, operational and financial resources and could adversely affect our business and operating results.

Our growth has placed, and is expected to continue to place, a strain on our managerial, operational and financial resources. Further, as our Subsidiaries' businesses grow, we will be required to manage multiple relationships. Any further growth by us or our Subsidiaries, or an increase in the number of our strategic relationships will increase this strain on our managerial, operational and financial resources. This strain may inhibit our ability to achieve the rapid execution necessary to implement our business plan, and could have a material adverse effect upon the financial condition, business prospects and operations of the Company and the value of an investment in the Company.

Our future success depends on our ability to expand our organization to match the growth of our Subsidiaries.

As our Subsidiaries grow, the administrative demands upon the Company will grow, and our success will depend on our ability to meet these demands. These demands include increased accounting, management, legal services, staff support and general office services. We may need to hire additional

Table of Contents

qualified personnel to meet these demands, the cost and quality of which is dependent in part on market factors beyond our control. Further, we will need to effectively manage the training and growth of our staff to maintain an efficient and effective workforce, and our failure to do so could adversely affect our business and operating results.

We must overcome the many obstacles associated with integrating and operating varying business ventures to succeed.

Arrowhead's model to integrate and oversee the strategic direction of various Subsidiaries and research and development projects presents many risks, including:

the difficulty of integrating operations and personnel; and

the diversion of our management's attention as a result of evaluating, negotiating and integrating acquisitions or new business ventures.

If we are unable to timely and efficiently design and integrate administrative and operational support for our Subsidiaries, we may be unable to manage projects effectively, which could adversely affect our ability to meet our business objectives and the value of an investment in the Company could decline.

In addition, consummating acquisitions and taking advantage of strategic relationships could adversely impact our cash position, and dilute stockholder interests, for many reasons, including:

changes to our income to reflect the amortization of acquired intangible assets, including goodwill;

interest costs and debt service requirements for any debt incurred to fund our growth strategy; and

any issuance of securities to fund our operations or growth, which dilutes or lessens the rights of current stockholders.

The Company may need to raise additional capital in the near future, and, if we are unable to secure adequate funds on acceptable terms, the Company may be unable to support its business plan.

The Company's plan of operations is to provide substantial amounts of research project funding and financial support for majority-owned Subsidiaries over an extended period of time. Accordingly, the Company may need to raise additional capital in the near term, and may seek to do so by conducting one or more private placements of equity securities, selling additional securities in a registered public offering, or through a combination of one or more of such financing alternatives. There can be no assurance that any additional capital resources needed by the Company will be available to the Company as and when required, or on favorable terms that will be acceptable to the Company. If the Company is unable to raise the capital required on a timely basis, it may not be able to fund its research projects or the development of the businesses of its Subsidiaries. In such event, the Company may be required to delay or reduce implementation of certain aspects of its plan of operations.

Stockholder interest in the Company may be substantially diluted in additional financings by the Company.

Our Certificate of Incorporation authorizes the issuance of an aggregate of 75,000,000 shares of Common Stock, on such terms and at such prices as the Board of Directors of the Company may determine. As of December 10, 2007, 38,610,420 shares of common stock were issued and outstanding. As of December 10, 2007, 1,615,875 shares and 4,843,667 shares were reserved for issuance upon exercise of options granted under Arrowhead's 2000 Stock Option Plan and 2004 Equity Incentive Plan, respectively. As of December 10, 2007, options to purchase 1,615,875 shares were outstanding under the 2000 Stock Option Plan and options to purchase 3,554,048 shares were outstanding under the 2004 Incentive Plan. As of December 10, 2007, the Company had warrants outstanding to purchase 2,109,862 shares of Common Stock that are callable by the Company under certain market conditions. The issuance of additional securities in financing transactions by the Company or through the exercise of options or warrants would dilute the equity interests of the Company's existing stockholders, perhaps substantially, and might result in dilution in the tangible net book value of a share of our Common Stock, depending upon the price and other terms on which the

additional shares are issued.

Table of Contents

The Company's success depends on the attraction and retention of senior management and scientists with relevant expertise.

The Company's future success will depend to a significant extent on the continued services of its key employees. In addition, the Company relies on several key executives to manage each of our Subsidiaries. The Company does not maintain key man life insurance for any executive of the Company. The Company's ability to execute its strategy also will depend on its ability to continue to attract and retain qualified scientists, sales, marketing and additional managerial personnel. If we are unable to find, hire and retain qualified individuals, we could have difficulty implementing our business plan in a timely manner, or at all.

There may be a difference in the investment valuations used by Arrowhead when making initial and subsequent investments in the Subsidiaries and actual market values.

Arrowhead investments in its Subsidiaries were the result of negotiation with Subsidiary management and equity holders, and the investment valuations were not independently verified. Traditional methods used by independent valuation analysts include a discounted cash flow analysis and a comparable company analysis. The Company has not generated a positive cash flow to date and does not expect to generate significant cash flow in the near future. Additionally, the Company does believe that there exist comparable public companies to provide a meaningful valuation comparison. Accordingly, Arrowhead Research has not sought independent valuation analysis in connection with its investments and may have invested in its various holdings at higher or lower valuations than an independent source would have recommended. There may be no correlation between the investment valuations used by Arrowhead over the years for its investments and the actual market values. If Arrowhead should eventually sell all or a part of any of its consolidated business or that of a Subsidiary the ultimate sale price may be for a value substantially lower or higher than previously determined by Arrowhead, which could materially and adversely impair the value of our Common Stock.

CERTAIN RISK FACTORS RELATING TO OUR STOCK

Arrowhead's Common Stock price has fluctuated significantly during fiscal 2005, 2006 and 2007 and may continue to do so in the future.

Because we are a development stage company, there are few objective metrics by which our progress may be measured. Consequently, we expect that the market price of our Common Stock will likely continue to fluctuate significantly. We do not expect to generate substantial revenue from the license or sale of our nanotechnology for several years, if at all. In the absence of product revenue as a measure of our operating performance, we anticipate that investors and market analysts will assess our performance by considering factors such as:

announcements of developments related to our business;

developments in our strategic relationships with scientists within the nanotechnology field;

our ability to enter into or extend investigation phase, development phase, commercialization phase and other agreements with new and/or existing partners;

announcements regarding the status of any or all of our collaborations or products;

market perception and/or investor sentiment regarding nanotechnology as the next technological wave;

announcements regarding developments in the nanotechnology field in general;

the issuance of competitive patents or disallowance or loss of our patent rights; and

quarterly variations in our operating results.

We will not have control over many of these factors but expect that they may influence our stock price. As a result, our stock price may be volatile and any extreme fluctuations in the market price of our Common Stock could result in the loss of all or part of your investment.

Table of Contents

The market for purchases and sales of the Company's Common Stock may be very limited, and the sale of a limited number of shares could cause the price to fall sharply.

Although the Company's Common Stock is listed for trading on The NASDAQ Global Market, currently, our securities are relatively thinly traded. Accordingly, it may be difficult to sell shares of Common Stock quickly without significantly depressing the value of the stock. Unless we are successful in developing continued investor interest in our stock, sales of our stock could continue to result in major fluctuations in the price of the stock.

If securities or industry analysts do not publish research reports about our business, or if they make adverse recommendations regarding an investment in our stock, our stock price and trading volume may decline.

The trading market for our Common Stock will be influenced by the research and reports that industry or securities analysts publish about our business. We do not currently have and may never obtain research coverage by industry or securities analysts. Investors have many investment opportunities and may limit their investments to companies that receive coverage from analysts. If no industry or securities analysts commence coverage of our Company, the trading price of our stock could be negatively impacted. In the event we obtain industry or security analyst coverage, if one or more of the analysts downgrade our stock or comment negatively on our prospects, our stock price would likely decline. If one or more of these analysts cease to cover our industry or us or fails to publish reports about our Company regularly, our Common Stock could lose visibility in the financial markets, which could also cause our stock price or trading volume to decline.

The market price of our Common Stock may be adversely affected by the sale of shares by the Company's management or founding stockholders.

Sales of our Common Stock by our officers, directors and founding stockholders could adversely and unpredictably affect the price of those securities. Additionally, the price of Arrowhead's Common Stock could be affected even by the potential for sales by these persons. We cannot predict the effect that any future sales of our Common Stock or the potential for those sales, will have on our share price. Furthermore, due to relatively low trading volume of our stock, should one or more large stockholders seek to sell a significant portion of its stock in a short period of time, the price of our stock may decline.

We may be the target of securities class action litigation due to future stock price volatility.

In the past, when the market price of a stock has been volatile, holders of that stock have often initiated securities class action litigation against the company that issued the stock. If any of our Stockholders brought a lawsuit against us, we could incur substantial costs defending the lawsuit. The lawsuit could also divert the time and attention of our management.

We do not intend to declare cash dividends on our Common Stock.

We will not distribute cash to our stockholders until and unless we can develop sufficient funds from operations to meet our ongoing needs and implement our business plan. The time frame for that is inherently unpredictable, and you should not plan on it occurring in the near future, if at all.

Our Board of Directors has the authority to issue shares of blank check Preferred Stock, which may make an acquisition of our company by another company more difficult.

We have adopted and may in the future adopt certain measures that may have the effect of delaying, deferring or preventing a takeover or other change in control of the Company that a holder of our Common Stock might consider in its best interest. Specifically, the Company's Board of Directors, without further action by the Company's stockholders, currently has the authority to issue up to 5,000,000 shares of preferred stock and to fix the rights (including voting rights), preferences and privileges of these shares (blank check preferred). Such preferred stock may have rights, including economic rights, senior to our Common Stock. As a result, the issuance of the preferred stock could have a material adverse effect on the price of our Common Stock and could make it more difficult for a third party to acquire a majority of our outstanding Common Stock.

Table of Contents

USE OF PROCEEDS

Unless we provide otherwise in a supplement to this prospectus, we intend to use the net proceeds from the sale of our securities, and, upon exercise of the warrants issued pursuant hereto, for general corporate purposes, which may include one or more of the following:

working capital;

research and clinical development activities;

potential future acquisitions of companies and/or technologies; and

capital expenditures.

Our management will have broad discretion in the allocation of the net proceeds of any offering. Pending such uses, we intend to invest the net proceeds in short-term, investment grade, interest-bearing securities.

THE SECURITIES WE MAY OFFER

The descriptions of the securities contained in this prospectus, together with the applicable prospectus supplements, summarize the material terms and provisions of the various types of securities that we may offer. We will describe in the applicable prospectus supplement relating to any securities the particular terms of the securities offered by that prospectus supplement. If we indicate in the applicable prospectus supplement, the terms of the securities may differ from the terms we have summarized below. We will also include in the prospectus supplement information, where applicable, about material United States federal income tax considerations relating to the securities, and the securities exchange, if any, on which the securities will be listed.

We may sell from time to time, in one or more offerings:

common stock; and

warrants to purchase common stock.

The total dollar amount of all securities that we may issue under this prospectus will not exceed \$50,000,000.

Table of Contents

DESCRIPTION OF COMMON STOCK

*The following summary of the material provisions of our common stock is subject to and qualified in its entirety by reference to the General Corporation Law of the state of Delaware, or DGCL, and our charter and bylaws. Copies of our charter and bylaws are on file with the SEC. We recommend that you review these documents. See *Where You Can Find More Information*.*

Authorized Capital Stock

As of the date of the prospectus, we are authorized to issue up to 70,000,000 shares of common stock, \$0.001 par value per share and 5,000,000 shares of preferred stock, \$0.001 par value per share. As of December 10, 2007, 38,610,420 shares of common stock were outstanding and no shares of preferred stock were outstanding. Selected provisions of the organizational documents are summarized below.

Dividends

The Board of Directors may, out of funds legally available, at any regular or special meeting, declare dividends to the holders of shares of our common stock as and when they deem expedient, subject to the rights of holders of the preferred stock, if any.

Voting

Each share of common stock entitles the holders to one vote per share on all matters requiring a vote of the stockholders, including the election of directors. No holders of shares of common stock have the right to vote such shares cumulatively in any election for the Board of Directors.

Rights Upon Liquidation

In the event of our voluntary or involuntary liquidation, dissolution, or winding up, the holders of our common stock will be entitled to share equally in our assets available for distribution after payment in full of all debts and after the holders of preferred stock, if any, have received their liquidation preferences in full.

Other Rights

No holders of shares of our common stock have preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Miscellaneous

Our common stock is listed on the Nasdaq Global Market under the symbol ARWR. On December 17, 2007, the last reported sale price for our common stock was \$3.40 per share. As of December 11, 2007, we had approximately 567 stockholders of record.

The transfer agent and registrar for our common stock is Computershare Investor Services, P.O. Box 43078, Providence, RI 02940-3078.

Effects of Authorized but Unissued Stock

We have shares of common stock and preferred stock available for future issuance without stockholder approval, subject to any limitations imposed by the listing standards of The Nasdaq Global Market. We may utilize these additional shares for a variety of corporate purposes, including for future public offerings to raise additional capital or facilitate corporate acquisitions or for payment as a dividend on our capital stock. The existence of unissued and unreserved common stock and preferred stock may enable our board of directors to issue shares to persons friendly to current management or to issue preferred stock with terms that could render more difficult or discourage a third-party attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise, thereby protecting the continuity of our management. In addition, if we issue preferred stock, the issuance could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation.

Table of Contents

Delaware Law and Charter and Bylaw Provisions

Anti-Takeover Provisions

We are subject to the provisions of Section 203 of the DGCL. Subject to certain exceptions, Section 203 prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years after the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A business combination includes mergers, asset sales and other transactions resulting in a financial benefit to the interested stockholder. Subject to exceptions, an interested stockholder is a person who, together with affiliates and associates, owns, or within the prior three years did own, 15% or more of the corporation's voting stock.

Limitation of Liability and Indemnification of Officers and Directors

Our certificate of incorporation contains provisions permitted under the DGCL relating to the liability of directors and officers. The provisions eliminate a director's liability for monetary damages for a breach of fiduciary duty as a director, except in some circumstances involving wrongful acts, such as the breach of a director's duty of loyalty or acts or omissions that involve intentional misconduct or a knowing violation of law. Further, our bylaws contain provisions to indemnify our directors and officers to the fullest extent permitted by the General Corporation Law of the State of Delaware. We believe that these provisions will assist us in attracting and retaining qualified individuals to serve as directors and officers.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of our common stock. Warrants may be issued independently or together with our common stock and may be attached to or separate from any offered securities. We will issue warrants under one or more warrant agreements between the Company and the holder(s) of the warrant(s). This summary of some provisions of the warrants is not complete and may differ from the terms of any warrants we may issue. You should refer to the applicable prospectus supplement(s) covering our issuance of any warrants, together with the applicable warrant agreement, including the forms of warrant certificate representing the warrants, relating to the specific warrants being offered for the complete terms of the warrant agreement and the warrants. Such warrant agreement, together with the terms of warrant certificate and warrants, will be filed with the SEC in connection with the offering of the specific warrants.

The prospectus supplement relating to a particular issue of warrants to issue common stock will describe the terms of the warrants, including the following:

the title of the warrants;

the offering price for the warrants, if any;

the aggregate number of the warrants;

the designation, number and terms of the common stock purchasable upon exercise of the warrants and procedures by which the number of securities purchasable may be adjusted;

if applicable, the designation and terms of the securities that the warrants are issued with and the number of warrants issued with each security;

if applicable, the date from and after which the warrants and any securities issued with the warrants will be separately transferable;

the exercise price of the warrants;

the dates on which the right to exercise the warrants commence and expire;

if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;

the currency or currency units in which the offering price, if any, and the exercise price are payable;

if applicable, a discussion of material U. S. federal income tax considerations;

Table of Contents

anti-dilution provisions of the warrants, if any;

redemption or call provisions, if any, applicable to the warrants;

any additional terms of the warrants, including terms, procedures and limitations relating to the transferability, exchange and/or exercise of the warrants; and

any other information we think is important about the warrants.

Each warrant will entitle the holder of the warrant to purchase the number of shares of common stock at the exercise price as shall in each case be set forth in, or be determinable as set forth in, the prospectus supplement relating to the warrants offered. Warrants may be exercised at any time up to the close of business on the expiration date set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void. Prior to the exercise of any warrants to purchase common stock, holders of the warrants will not have any of the rights of holders of common stock purchasable upon exercise of the warrants, including the right to vote on the common stock.

PLAN OF DISTRIBUTION

We may sell our securities from time to time in any manner permitted by the Securities Act, including any one or more of the following ways:

directly to investors;

to investors through agents;

to dealers; and/or

through one or more underwriters.

Any underwritten offering may be on a best efforts or a firm commitment basis. We may also make direct sales through subscription rights distributed to our stockholders on a pro rata basis, which may or may not be transferable. In any distribution of subscription rights to stockholders, if all of the underlying securities are not subscribed for, we may then sell the unsubscribed securities directly to third parties or may engage the services of one or more underwriters, dealers or agents, including standby underwriters, to sell the unsubscribed securities to third parties. Under agreements into which we may enter, underwriters, dealers and agents who participate in the distribution of the securities may be entitled to indemnification by us against some liabilities, including liabilities under the Securities Act, or contribution from us to payments which the underwriters, dealers or agents may be required to make. Underwriters, dealers and agents may engage in transactions with us or perform services for us from time to time in the ordinary course of business.

The distribution of the securities may be effected from time to time in one or more transactions:

at a fixed price or prices, which may be changed;

at market prices prevailing at the time of sale;

at prices related to such prevailing market prices; or

at negotiated prices.

Any of the prices may represent a discount from prevailing market prices.

Shares of common stock and warrants sold pursuant to the registration statement of which this prospectus is a part will be authorized for quotation and trading on the Nasdaq Global Market. In the sale of the securities, underwriters or agents may receive compensation from us or from purchasers of the securities, for whom they may act as agents, in the form of discounts, concessions or commissions. Underwriters may sell the securities to or through dealers, and such dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agents. Underwriters, dealers and agents that participate in the distribution of the securities may be deemed to be underwriters under the Securities Act of 1933, and any discounts or commissions they receive from us and any profit on the resale of securities they realize may be deemed to be underwriting discounts and commissions under the Securities Act.

Table of Contents

Each time we sell securities, we will describe the method of distribution of the securities in the prospectus supplement relating to such transaction. The applicable prospectus supplement will, where applicable:

identify any such underwriter or agent;

describe any compensation in the form of discounts, concessions, commissions or otherwise received from us by each such underwriter or agent and in the aggregate to all underwriters and agents;

identify the amounts underwritten; and

identify the nature of the underwriter's obligation to take the securities.

If underwriters are utilized in the sale of the securities, the securities may be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including negotiated transactions, at fixed public offering prices or at varying prices determined by the underwriters at the time of the sale. We may offer the securities to the public either through underwriting syndicates represented by managing underwriters or directly by the managing underwriters. If any underwriters are utilized in the sale of the securities, unless otherwise stated in the applicable prospectus supplement, the underwriting agreement will provide that the obligations of the underwriters are subject to specified conditions precedent and that the underwriters with respect to a sale of the securities will be obligated to purchase all of the securities offered if any are purchased.

Until the distribution of the securities is completed, rules of the Securities and Exchange Commission may limit the ability of any underwriters and selling group members to bid for and purchase the securities. As an exception to these rules, underwriters are permitted to engage in some transactions that stabilize the price of the securities, such as over allotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934. Over allotment involves sales in excess of the offering size which create a short position. Stabilizing transactions consist of bids or purchases for the purpose of pegging, fixing or maintaining the price of the securities. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. The underwriters may also impose a penalty bid, under which selling concessions allowed to syndicate members or other broker-dealers for securities sold in the offering for their account may be reclaimed by the syndicate if the securities are repurchased by the syndicate in stabilizing or covering transactions. In general, purchases of a security for the purpose of stabilization or to reduce a short position could cause the price of the security to be higher than it might be in the absence of such purchases. The imposition of a penalty bid might also have an effect on the price of a security to the extent that it were to discourage resales of the security before the distribution is completed.

We do not make any representation or prediction as to the direction or magnitude of any effect that the transactions described above might have on the price of the securities. In addition, we do not make any representation that underwriters will engage in such transactions or that such transactions, once commenced, will not be discontinued without notice.

Underwriters, dealers and agents may engage in transactions with us or perform services for us in the ordinary course of business.

If indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by particular institutions to purchase securities from us at the public offering price set forth in such prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on the date or dates stated in such prospectus supplement. Each delayed delivery contract will be for an amount no less than, and the aggregate principal amounts of securities sold under delayed delivery contracts shall be not less nor more than, the respective amounts stated in the applicable prospectus supplement. Institutions with which such contracts, when authorized, may include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and others, but will in all cases be subject to our approval. The obligations of any purchaser under any such contract will be subject to the conditions that (a) the purchase of the securities shall not at the time of delivery be prohibited under the laws of any jurisdiction in the United States to which the purchaser is subject, and (b) if the securities are being sold to underwriters, we

Table of Contents

shall have sold to the underwriters the total principal amount of the securities less the principal amount thereof covered by the contracts. The underwriters and such other agents will not have any responsibility in respect of the validity or performance of such contracts.

To comply with applicable state securities laws, the securities offered by this prospectus will be sold, if necessary, in such jurisdictions only through registered or licensed brokers or dealers. In addition, securities may not be sold in some states unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

EXPERTS

The financial statements of the Company incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K for the year ended September 30, 2007, have been audited by Rose, Snyder & Jacobs, a corporation of Certified Public Accountants, as stated in their report incorporated by reference, and given upon the authority of said firm as experts in auditing and accounting.

LEGAL MATTERS

Certain legal matters, including the validity of the securities offered pursuant to this registration statement, will be passed upon for us by Goodwin Procter LLP, Los Angeles, California. Certain legal matters may be passed upon for any agents or underwriters by counsel for such agents or underwriters identified in the applicable prospectus supplement.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We must comply with the informational requirements of the Securities Exchange Act of 1934, as amended, and we are required to file reports and proxy statements and other information with the Securities and Exchange Commission. You may read and copy these reports, proxy statements and other information at the Public Reference Room maintained by the Securities and Exchange Commission at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies at the prescribed rates from the Public Reference Section of the Securities and Exchange Commission at its principal office in Washington, D.C. You may call the Securities and Exchange Commission at 1-800-SEC-0330 for further information about the public reference room. The Securities and Exchange Commission also maintains a website that contains reports, proxy and information statements and other information regarding issuers like us that file electronically with the Securities and Exchange Commission. You may access the Securities and Exchange Commission's web site at <http://www.sec.gov>.

Statements contained in this prospectus as to the contents of any contract or other document are not necessarily complete, and in each instance we refer you to the copy of the contract or document filed as an exhibit to the registration statement, each such statement being qualified in all respects by such reference.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The Securities and Exchange Commission allows us to incorporate by reference in this prospectus the information that we file with them. Incorporation by reference means that we can disclose important information to you by referring you to other documents that are legally considered to be part of this prospectus. Later information that we file with the Securities and Exchange Commission will automatically update and supersede the information in this prospectus, any supplement and the documents listed below. Our SEC file number is 0-15006. We incorporate by reference the specific documents listed below and any future filings made with the Securities and Exchange Commission under Section 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934, as amended, until all of the shares of common stock and warrant shares covered by this prospectus are sold:

The Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2007, filed on December 14, 2007;

The Company's Proxy Statement on Form DEF 14-A, filed on January 3, 2007;

The description of the Common Stock contained in the Company's Information Statement on Schedule 14-C, filed on December 22, 2000; and

All documents filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, after the date of the original Registration Statement and prior to effectiveness of the registration statement of which this prospectus is a part, provided that all documents furnished by the Company to the SEC and not filed are not deemed incorporated by reference herein.

We will furnish without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request, a copy of any document incorporated by reference. Requests should be addressed to Corporate Secretary, 201 South Lake Street, Suite 703, Pasadena, CA 91101.

You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone to provide you with different information. You should not assume that the information in this prospectus or the documents incorporated by reference is accurate as of any date other than the date on the front of this prospectus or those documents.