ARROWHEAD RESEARCH CORP
Form 10-K
December 22, 2010
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 10-K

(Mark One)

x **ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended September 30, 2010.

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

Commission file number 000-21898

ARROWHEAD RESEARCH CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	46-0408024
(State of incorporation)	(I.R.S. Employer Identification No.)

201 S. Lake Avenue, Suite 703

Pasadena, California 91101

(626) 304-3400

(Address and telephone number of principal executive offices)

Securities registered under Section 12(b) of the Exchange Act:

Title of each class	Name of each exchange on which registered
Common Stock, $0.001 par value	**The NASDAQ Capital Market**

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

None

Indicate by a check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ¨ No x

Indicate by a check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ¨ No x

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ¨ No ¨

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

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

Large accelerated filer ¨ Accelerated filer ¨ Non-accelerated filer ¨ Smaller Reporting Company x
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ¨ No x

The aggregate market value of issuer s outstanding Common Stock held by non-affiliates was approximately $72 million based upon the bid price of issuer s Common Stock on March 31, 2010.

As of December 22, 2010, 71,806,694 shares of the issuer s Common Stock were outstanding.

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FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, and we intend that such forward-looking statements be subject to the safe harbors created thereby. For this purpose, any statements contained in this Annual Report on Form 10-K except for historical information may be deemed to be forward-looking statements. Without limiting the generality of the foregoing, words such as may, will, expect, believe, anticipate, intend, could, estimate, or continue or the negative or other variations thereof or comparable terminology are intended to identify forward-looking statements. In addition, any statements that refer to projections of our future financial performance, trends in our businesses, or other characterizations of future events or circumstances are forward-looking statements.

The forward-looking statements included herein are based on current expectations of our management based on available information and involve a number of risks and uncertainties, all of which are difficult or impossible to predict accurately and many of which are beyond our control. As such, our actual results may differ significantly from those expressed in any forward-looking statements. Factors that may cause or contribute to such differences include, but are not limited to, those discussed in more detail in Item 1 (Business) and Item 1A (Risk Factors) of Part I and Item 7 (Management s Discussion and Analysis of Financial Condition and Results of Operations) of Part II of this Annual Report on Form 10-K. Readers should carefully review these risks, as well as the additional risks described in other documents we file from time to time with the Securities and Exchange Commission. In light of the significant risks and uncertainties inherent in the forward-looking information included herein, the inclusion of such information should not be regarded as a representation by us or any other person that such results will be achieved, and readers are cautioned not to place undue reliance on such forward-looking information. Except as may be required by law, we undertake no obligation to revise the forward-looking statements contained herein to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

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PART I

ITEM 1. BUSINESS

Description of Business

Unless otherwise noted, (1) the term Arrowhead refers to Arrowhead Research Corporation, a Delaware corporation formerly known as InterActive Group, Inc., (2) the terms the Company, we, us, and our, refer to the ongoing business operations of Arrowhead and its Subsidiaries, whether conducted through Arrowhead or a subsidiary of Arrowhead, (3) the term Subsidiaries refers collectively to Calando Pharmaceuticals, Inc. (Calando), Unidym, Inc. (Unidym), Agonn Systems, Inc. (Agonn ,) and Tego Biosciences Corporation (Tego), (4) the term Minority Investments refers collectively to Nanotope, Inc. (Nanotope) and Leonardo Biosystems, Inc. (Leonardo) in which the company holds a less than majority ownership position, and (5) the term Common Stock refers to Arrowhead s Common Stock and the term stockholder(s) refers to the holders of Common Stock.

Overview

Arrowhead Research Corporation is a development stage nanotechnology holding company that forms, acquires, and operates subsidiaries commercializing innovative nanotechnologies. By working closely with leading scientists and universities, Arrowhead identifies advances in nanotechnology and matches them with product development opportunities in high-growth markets. The Company is focusing on developing and advancing a portfolio of subsidiaries in the field of nanomedicine.

Providing strategic management, financing, and operational services to its subsidiaries and minority investments, Arrowhead takes an active role in their development, keeping the business and development teams at the subsidiary companies focused on operations, technical development and near term revenue opportunities.

Arrowhead s ultimate goal is to realize the value of its investments through:

A public offering of Subsidiary stock;

A sale of Subsidiary to another company;

License of Subsidiary technology; or

Generating positive cash flows through operations.

Arrowhead owns two majority-owned operating subsidiaries, Calando Pharmaceuticals and Unidym, Inc. and has minority investments in two early-stage nanotechnology companies, Nanotope, Inc. and Leonardo Biosystems, Inc. Arrowhead also owns two nonoperating subsidiaries, Agonn Systems, Inc. and Tego Biosciences Corporation. Arrowhead plans to add to this portfolio through selective acquisition and formation of new nanomedicine companies, as capital resources allow.

Arrowhead was originally incorporated in South Dakota in 1989, and was reincorporated in Delaware in 2000. The Company s principal executive offices are located at 201 South Lake Avenue, Suite 703, Pasadena, California 91101, and its telephone number is (626) 304-3400. As of September 30, 2010, Arrowhead had 11 full-time employees at the corporate office and seven full-time employees at its Subsidiaries.

Subsidiaries and Minority Investments

The Company s two majority-owned Subsidiaries, and two minority investments are focused on developing, commercializing and licensing a variety of nanotechnology products and applications, including anti-cancer RNAi therapeutics, regenerative therapeutics, advanced drug delivery technology, and carbon nanotube (CNT)-based transparent conductive films (TCFs). Arrowhead anticipates expanding its portfolio through

selective acquisition and the formation of new companies, as capital resources allow.

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As of September 30, 2010, Arrowhead held a majority of the outstanding voting stock of the following two operating Subsidiaries.

Subsidiary	% Ownership*	Technology/Product Focus
Calando Pharmaceuticals, Inc.	70.0%	Clinical stage nano-engineered delivery of RNAi therapeutics for the treatment of cancer
Unidym, Inc.	79.0%	Commercialization of carbon nanotube-based products for the electronics industry

* As of September 30, 2010, on a fully diluted basis, Arrowhead owned approximately 63.6% of Calando and 64.3% of Unidym.

Arrowhead has a minority ownership position in each of the following early-stage nanomedicine companies:

Minority Investment	% Ownership	Technology/Product Focus
Nanotope, Inc.	23.0%	Developing nano-engineered, self-assembling, bioactive scaffolding for the regeneration of spinal cord and other tissues
Leonardo Biosystems, Inc.	4.8%	Developing a multi-stage system to deliver anti-cancer therapeutics

Majority Owned Subsidiaries

Calando Pharmaceuticals, Inc.

Overview

Calando is a clinical stage nano-biotechnology company at the forefront of RNAi therapeutics. Calando has developed a nanoparticle-based drug delivery system for siRNA. Calando s platform technology is currently being tested in an open-label Phase I dose escalating clinical trial to systemically deliver for what is believed to be for the first time a siRNA drug candidate targeting cancer. The trial is progressing toward determining the primary endpoints of tolerability and maximum tolerated dose, while demonstrating preliminary proof-of-concept RNAi activity in some patients.

Calando is based on pioneering technology invented in the Chemical Engineering department of the California Institute of Technology. Developed to reduce the debilitating effects of cancer treatment, Calando s proprietary molecules are designed to improve the safety and efficacy of cancer therapeutics. Currently focused on siRNA and oncology applications, Calando s platform technology has the potential to be applied to a wide range of diseases beyond cancer as well as to therapeutic classes beyond siRNA therapeutics.

Calando is focused on the clinical development of RONDEL™, its siRNA delivery technology, and CALAA-01, the associated drug candidate. Interim clinical results show that CALAA-01 is well tolerated and has demonstrated preliminary proof of RNAi activity in patients treated with the highest doses. These results represent several notable firsts in the field of RNAi, including first to demonstrate definitive RNAi delivery after systemic administration and first to show dose dependent accumulation in target cells. In addition, CALAA-01 has been shown to mediate specific gene inhibition in humans as evidenced by mRNA knockdown and protein knockdown in tumor biopsies.

In addition, in December 2008, Calando concluded a Phase I trial with IT-101 using a drug candidate consisting of its delivery system and a small molecule anti cancer agent. Patients from this clinical trial reported fewer and less serious side effects with several cases of stable disease over many months of treatment. One patient with pancreatic cancer had stabilized disease for 17 months. The further development of the small molecule delivery platform and IT-101, the associated drug candidate, was licensed to Cerulean Pharma, Inc., (Cerulean) a private biotech company in Boston, Massachusetts in June 2009.

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Platform Technology

Based on a novel polymeric sugar (linear cyclodextrin) molecule, Calando s drug delivery system has been applied thus far to the delivery of two classes of therapeutics: siRNA and other oligonucleotides and small molecule drugs. The polymer is combined with the drug molecule to form a drug containing nanoparticles sized larger than 10 nanometers and smaller than 100 nanometers. The Company believes that this particle size is important; drug molecules are typically sized below 10 nanometers and are quickly cleared from the body in the urine. Nanoparticles sized larger than 10 nanometers circulate longer and thus can allow administration of lower doses to patients. Nanoparticles sized smaller than 100 nanometers can escape the circulatory system through the abnormally leaky blood vessels that feed tumors and are retained in the tumor tissue due to a lack of effective tumor lymphatic drainage. Preferential accumulation in tumor tissue, where the drug can take effect, leaves other tissues relatively unaffected. The drug delivery system has the added benefits of increasing solubility, allowing targeting of the nanoparticles, and being non-immunogenic.

Calando s RONDEL™ Technology

RNA interference or RNAi is a naturally occurring mechanism for the regulation of gene expression that selectively inhibits the activity of, or silences, target genes. Discovered by scientists in 2002 who were subsequently awarded the Nobel Prize in Physiology or Medicine in 2006, RNAi has been hailed as having potential to be a tremendous breakthrough in treating diseases. Because many diseases are caused by the inappropriate activity of genes, RNAi has potential application to many serious or fatal diseases including cancer, AIDS, hepatitis C, Huntington s disease and others. The mechanism is mediated by small interfering RNA known as siRNA.

One of the key challenges to using RNAi therapy has been the inability to systemically deliver siRNA in humans. Naked siRNA is degraded and destroyed by nucleases in the bloodstream and is not taken up by cells. Calando s RONDEL™ system is providing new hope that effective siRNA delivery can be achieved safely and economically. Calando s polymers form the foundation for its three-part RNAi/Oligonucleotide Nanoparticle Delivery (RONDEL) technology. The first component is the positively charged polymer that, when mixed with siRNA, binds to the negatively charged backbone of the siRNA. The polymer and siRNA self-assemble into nanoparticles less than 100 nm diameter that fully protect the siRNA from nuclease degradation in serum. The cyclodextrin in the polymer enables the surface of the particles to be decorated by stabilizing agents and targeting ligands. These surface modifications are formed by proprietary methods involving the cyclodextrins.

The surface-modifying agents have terminal adamantane groups that form inclusion complexes with the cyclodextrin and contain poly ethylene glycol (PEG) to endow the particles with properties that prevent aggregation, enhance stability and enable systemic administration. Targeting molecules can be covalently attached to the adamantane-PEG modifier, enabling the siRNA-containing particles to be targeted to tissues of interest.

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RONDEL technology offers the following advantages:

Generalized delivery system Binds to and self-assembles with the siRNA to form uniform colloidal-sized particles. Analysis has shown that these particles are spherical and between 10 nm and 100 nm in diameter.

Ease of Administration The RONDEL system has been designed for use as part of a two-vial system: one vial contains the delivery components, and the second vial contains the therapeutic siRNA payload. When mixed pursuant to a simple protocol, the particles self-assemble into siRNA containing nanoparticles.

Any siRNA sequence can be easily substituted Because RONDEL binds to the siRNA backbone, theoretically, any siRNA therapeutic could be in the second vial.

Stealthy delivery to the immune system The sugar-based delivery vehicle allows for repeat dosing with reduced risk of immune reactions. Unlike lipid delivery vehicles, the cyclodextrin-based RONDEL delivery system has a low immune-stimulatory potential.

Safety The RONDEL technology has been shown to be non-toxic in *in vitro* testing with human cell cultures, and the fully formulated polymer/siRNA particles exhibit a significant therapeutic window of safety in animals, even when repeated doses (up to eight doses over a four week period) are used. RONDEL has been well tolerated by patients in Calando s clinical trials.

Stable under physiological conditions Particles have been shown to be stable under physiological conditions.

Effective targeted delivery Calando and its partners have demonstrated successful delivery of functional siRNA therapeutics to tumor cells and to hepatocytes by systemic administration and confirmed sequence-specific gene inhibition in humans.

CALAA-01

CALAA-01 is a combination of RONDEL and a patented siRNA targeting the M2 subunit of ribonucleotide reductase, a clinically-validated cancer target. Ribonucleotide reductase catalyzes the conversion of ribonucleosides to deoxyribonucleosides and is necessary for DNA synthesis and replication, and thus tumor growth. The siRNA, developed at Calando, demonstrates potent anti-proliferative activity across multiple types of cancer cells. We believe the use of CALAA-01 in Calando s Phase I trial, initiated in June 2008, was the first siRNA therapeutic candidate to target cancer in a human clinical study and also the first systemic delivery of an siRNA therapeutic candidate. The trial is utilizing a dose escalation protocol which appears to be nearing the highest dose in the protocol and yielding promising preliminary results. Through September 30, 2010, 18 patients were enrolled in the Phase I clinical trial out of a planned protocol of up to 36 patients.

Interim clinical results were recently presented at the 2010 American Society of Clinical Oncology meeting (ASCO). Data from a total of 15 patients accrued to 5 dose levels (3, 9, 18, 24, 30 mg/m^2) showed that CALAA-01 was well tolerated. Treatment-related adverse events were mostly mild to moderate with fatigue, fever/chills, allergic, or gastrointestinal-related adverse events most frequently observed. Importantly, no changes in coagulation, liver function tests, or kidney function were observed.

Analysis of tumor biopsies from three melanoma patients showed the presence of intracellular nanoparticles in amounts that correlated with dose. Additionally, a reduction was found in both the RRM2 messenger RNA and protein levels when compared to pre-dosing tissue. Furthermore, the presence of siRNA-mediated mRNA cleavage products was confirmed by 5 -RACE, demonstrating that siRNA-mediated mRNA cleavage occurs specifically at the site predicted for an RNAi mechanism. These preliminary results were published in March 2010 in the scientific journal *Nature*, citing these interim data from our Phase I trial as the first evidence of systemic delivery of siRNA, and the successful silencing of a widely recognized cancer gene via RNA interference in humans. Patient accrual is ongoing at the University of California, Los Angeles, California and the START clinic, San Antonio, Texas and additional safety and pharmacodynamic data will be forthcoming.

Calando plans to further develop CALAA-01 in the clinic as capital resources may allow. This may include a Phase Ib / Phase II clinical trial in combination with traditional chemotherapeutics in cancer indications with high unmet medical need. Combination therapy is especially promising for CALAA-01, because overexpression of its cellular target, RRM2, has been associated with resistance to certain types of chemotherapeutics. In pre-clinical studies, CALAA-01 has shown significant synergistic activity in these cases.

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Calando s Cyclosert™ Technology & IT-101

The other polymeric drug delivery technology, Cyclosert, was designed by Calando s scientists for the delivery of small molecule drugs. Cyclosert provides many of the same benefits as the RONDEL system. In December 2008, Calando completed a Phase I trial with IT-101, comprised of Calando s polymer and Camptothecin, a potent anti-cancer drug, with a positive safety profile and indications of efficacy. On June 23, 2009, Calando entered into agreements to license Cyclosert and IT-101 to Cerulean. Under the terms of the agreements, Calando granted Cerulean an exclusive royalty-bearing worldwide license to certain patent rights and know-how and transferred to Cerulean certain intellectual property related to the linear-cyclodextrin drug delivery platform and IT-101 in exchange for an initial payment of $2.4 million. Under the agreements, Calando retained the rights to use the linear-cyclodextrin drug delivery platform to deliver any kind of nucleic acid including siRNA. As such, Calando retains the rights to its RONDEL platform, as well as the CALAA-01 and CALAA-02 lead drugs.

Outsourced Clinical Trial Management, R&D, Manufacturing and Supply

Calando used contract manufacturers to manufacture each of its product candidates and has on hand sufficient material to complete the CALAA-01 Phase I study. These materials were manufactured in accordance with a quality control and quality assurance program, including a set of standard operating procedures and specifications, designed to ensure that its products are manufactured in accordance with current Good Manufacturing Procedures, or cGMPs, and other applicable domestic and foreign regulations. Currently, Calando has no laboratory facilities and is reliant on contract R&D facilities to support its clinical trial. Along with its internal resources, Calando uses consultants to manage and monitor its clinical trial. Calando plans to continue to rely on third parties to meet these needs.

The development of CALAA-01, IT-101 and other pipeline candidates are preliminary, and there is no assurance that they will be successful. There are numerous technical, regulatory and marketing challenges that must be overcome to successfully commercialize Calando s products, including, but not limited to the following:

- Advancing pipeline candidates requires extensive preclinical testing and approval by the U.S. Food and Drug Administration (FDA) before clinical testing can commence.
- Advancing therapeutic candidates through preclinical and clinical testing is expensive, resource intensive and time consuming.
- Complications may arise that would cause the clinical testing to be interrupted or stopped. FDA approval is required before products can be sold.
- Even if FDA approval is eventually obtained, there is no assurance that it will be accepted by the medical community.

It is not possible at this time to accurately determine the final cost of the development projects, the completion dates or when or if revenue will be generated. For additional information relating to the risks of developing new therapies, please see Item 1A Risk Factors.

Intellectual Property

Calando controls an intellectual property portfolio of patents covering certain linear cyclodextrin polymers and related technology (the linear cyclodextrin system). The portfolio covers both RONDEL and Cyclosert. In June 2009, Calando sold and assigned to Cerulean certain Calando owned-patents for linear cyclodextrin polymers conjugated to drugs. Additionally, Calando granted Cerulean an exclusive license under its rights to the linear cyclodextrin system to develop certain drug products. Calando retained rights to use the linear cyclodextrin system to develop drugs in which the therapeutic agent is a nucleic acid (e.g., siRNA), a second generation epothilone, tubulysin or cytolysin.

Calando also owns an issued patent covering the siRNA active ingredient in CALAA-01 and has filed a patent application to cover the siRNA active ingredient of CALAA-02. Calando has licensed patents from Alnylam relevant to siRNA therapeutics for CALAA-01 and CALAA-02. Calando has in-licensed from R&D Biopharmaceuticals exclusive rights to second generation synthetic epothilones. Calando has out licensed to R&D Biopharmaceuticals the use of the linear cyclodextrin system for delivering tubulysin and cytolysin drugs. The RNAi and nanoparticle drug delivery patent landscape is complex and rapidly evolving. As such, Calando may need to obtain additional patent licenses prior to commercialization of its lead drug candidates.

The Drug Delivery and Oncology Markets

Despite advances in drug discovery, pharmaceutical firms remain challenged by getting the right compound to the right place in the human body, where it can maximize its effect. Additionally, over the next decade, multiple blockbuster pharmaceuticals will go off patent, resulting in a significant loss to the pharmaceutical industry as generic versions of these drugs enter the market. Patent expiration coupled with a challenging drug discovery environment, and continued problems with late stage trial failures has left pharmaceutical pipelines thin. In response, the industry has pursued reformulation of existing or previously failed compounds using new drug delivery technology to expand pipelines and prolong patent life. According to the American Cancer Society, cancer is the

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second leading cause of death in the United States and accounts for approximately one in every four deaths. The National Institutes of Health has estimated the direct medical cost of cancer to be in excess of $74 billion per year. Dose limiting toxicity, poor tissue specificity, and large effective distribution are major restrictive factors in effective cancer chemotherapy. Consequently, complete tumor response is not often achieved in patients receiving chemotherapy alone. We believe that this offers a potentially significant opportunity for firms developing technologies to more effectively deliver anti-cancer agents to malignant cells.

Competition

Calando is engaged in the rapidly changing business of developing treatments for human disease through the regulation of gene expression and delivery of proprietary novel cancer therapies. Competition in these fields is intense as other companies are developing therapies similar to our nanoparticle drug delivery systems, and targeting patient populations that are similar to the patient populations that are targeted by Calando. A number of companies are pursuing research and development programs relating to the emerging area of cancer therapies using nanoparticle conjugates and RNA interference. A number of these companies have filed patent applications in these areas. It is difficult to predict whether any of these companies will be successful in obtaining patent protection, whether the patent protection sought will address important aspects of the technology and to what extent these companies will be successful in their RNA interference efforts. New competitors may arise and we may not be aware of all competitors in this space. A number of Calando s competitors are more established and have greater resources than Calando. Furthermore, even if Calando is successful in developing commercial products, it is possible that competitors will achieve greater market acceptance.

Systemic delivery of siRNA and other oligonucleotide therapeutics has proven critical for the success of all nucleic acid therapeutics. Naturally, multiple firms have recognized the problem of systemic siRNA delivery as a significant opportunity and other firms are developing products in this space. Companies developing siRNA delivery products include but are not limited to Alnylam, Merck, Novartis, Tekmira, RXi Pharmaceuticals, Benitec, Quark Pharmaceuticals, Marina Biotech, Isis Pharmaceuticals and Silence Therapeutics. Additionally, many academic groups are developing and may seek to commercialize siRNA delivery technologies.

Key Personnel

Christopher Anzalone, Ph.D., is the CEO of Calando. Dr. Anzalone is also the CEO of Arrowhead, Nanotope and Leonardo. Thomas Schluep, Sc.D., is the Chief Scientific Officer (CSO) of Calando.

Calando s Board of Directors consists of R. Bruce Stewart, Executive Chairman of Arrowhead, Christopher Anzalone, CEO and director of Arrowhead, Nanotope and Leonardo, and Edward W. Frykman, a member of the Arrowhead Board. Dr. Bruce Given and Dr. Mostafa Analoui are independent Board members.

As of September 30, 2010, there were no full time employees at Calando. Two former employees of Calando have been hired by Arrowhead and focus on managing Calando s ongoing clinical trial.

Unidym, Inc.

Overview

Unidym is a leader in carbon nanotube-based transparent, conductive films (TCFs) for the electronics industry. TCFs are a critical component in devices such as touch panels, displays, and thin-film solar cells. For example, both touch panels and LCDs typically employ two TCF layers per device. Unidym s TCFs offer substantial advantages over the incumbent technology, indium-based metal oxides, including: improved durability, lower processing costs, and lower overall cost structure.

Unidym s products are based on electronics-grade carbon nanotubes (CNTs), a class of molecules with multiple unique properties. For instance, some varieties conduct electricity better than copper, are stronger than steel, and may be synthesized in bulk quantities. In 2005, the CNT field was highly fragmented, and Arrowhead sought to consolidate the intellectual property for the technology in an effort to create a dominant position in high value CNTs. As a result of licensing from universities and acquisitions of three CNT-related companies, Unidym owns or has exclusive license to a large portfolio of over 100 key CNT-related patents and patent applications. The Company believes Unidym holds foundational intellectual property surrounding high value electronics-grade CNT manufacturing and processing. With this strong patent portfolio and significant experience applying this technology to electronics markets, Unidym is beginning to make modest sales of its TCF film to device manufacturers and believes that it is well-positioned to increase sales in 2011. Unidym s management team is focused on customer interaction to optimize its products to meet customer specifications with a goal of generating product sales for touch screens in the near term.

Collaborations and Partnerships

Unidym has several ongoing programs with various partners to incorporate its transparent conductive films into touch panels and displays. In 2010, a leading Japanese touch panel maker demonstrated three dimensional touch panels, based on Unidym s films, at the premier displays conference in North America, the Society of Informational Display. Unidym also announced new joint development agreements with Tokyo Electron to develop and commercialize manufacturing equipment for printable CNT-based displays and solar cells as well as Guardian Industries to develop and commercialize CNT coated glass products. Unidym also continued to collaborate with Samsung Electronics in CNT-based displays and Nippon Kayaku in CNT-based solar cells.

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In addition to these efforts in Unidym s core focus of electronics, Unidym is seeking to leverage its broad intellectual property portfolio in other areas through its licensing and other collaborative programs. To date, Unidym has out-licensed its intellectual property to a number of different companies, including Samsung, Ensysce Biosciences, Nexeon Medsystems, DuPont, Nano-C, Nano-Lab, Torrey Pines, Continental Carbon, and several other companies.

Production

Production of Carbon Nanotube-Based Transparent Conductive Films

Unidym s film production model involves in-house pilot production and outsourced supply of larger volumes of a proprietary grade of CNTs, formulation of those CNTs into a coating ink, and then shipment of that ink to an outsourced coating partner or customer for deposition. To conserve cash and pursue a strategy designed to yield revenues in the short term, Unidym is exploring partnerships or outsourcing within this supply chain.

Unidym has in-house deposition or coating equipment which is used for the deposition of CNTs onto plastic or glass substrates in sample quantities. Unidym has also tested production samples from several coating subcontractors. The use of outsourced coating partners for its touch panel films would take advantage of the substantial excess capacity left in the coating industry by the decrease in demand for photographic film. Unidym expects that, given the abundance of these subcontractors and the availability of cost effective subcontract capacity, there will be no need to bring production capacity in-house in the near term.

Production of Carbon Nanotubes

Unidym has historically produced carbon nanotubes in-house. In line with its strategy to reduce costs and work with manufacturing partners, in May 2009, Unidym transferred a portion of its assets for CNT production to CCNI, a manufacturer of CNTs and carbon black, has been working with CCNI and other vendors for the production of Unidym s CNT supply needs. Unidym anticipates retaining some limited in-house CNT production capability for product improvements and as a second source of supply. Unidym plans to manufacture CNT inks and is negotiating with potential partners to manufacture and sell films to customers.

Marketing and Sales

Unidym generated revenue from sales of thin films, sales of CNTs and sales of CNT-based ink in fiscal 2010. Future revenue is expected to be generated through direct product sales and license deals into relatively consolidated industries. In addition, Unidym has taken advantage of its extensive metrology equipment and excess space to create a small incubator for start-ups to defray a portion of the costs for its Sunnyvale facility. In the near term, Unidym does not expect to generate enough revenue to self-fund its operations. Unidym expects to continue to generate revenues through direct sales of its HIPCO-grade CNTs.

Competition

Unidym faces competition from a number of start-ups and established companies in its target markets. In the electronics industry, there are a number of start-up or private companies that are focused on the application or production of nanotubes including Automate, C-Nano, Eikos, Nantero and Southwest Nanotechnologies. More established companies with announced CNT programs include Brewer Sciences, DuPont, Honeywell, Samsung, Sumitomo and Toray. There are also potential competitors who are pursuing alternative nanotech-based approaches to the markets served by Unidym, including the start-up Cambrios and large Japanese companies such as Fujitsu.

Intellectual Property

Unidym controls an intellectual property portfolio containing over 100 foreign and domestic patents and patent applications. The portfolio contains patent claims directed to fundamental carbon nanotube compositions of matter, as well as carbon nanotube synthesis, purification, dispersion and functionalization. Furthermore, the portfolio contains claims to the use of carbon nanotubes in many different application areas including fibers, electronics, composite materials, energy storage/generation, medical devices and drug delivery. Some patents and patent applications are owned by Unidym (or co-owned with partners such as Continental Carbon and Tokyo Electron), but most are exclusively licensed from institutions such as Rice University, Georgia Tech, Clemson, SUNY, and California Institute of Technology (Caltech). Under its agreement with Clemson, Unidym has an exclusive license to U.S. Patents 7,265,174 and 7,750,071, which we believe have the earliest priority date of any patent claiming transparent, conductive films comprised of carbon nanotubes. Under its agreement with Caltech, Unidym has the right to sublicense U.S. Patent 5,424,054, which is the basic patent claiming small diameter nanotube composition of matter. Unidym also has the right to license an IP portfolio related to modified fullerene for non-therapeutic fields of use. A material portion of Unidym s intellectual

property portfolio is exclusively licensed from Rice University. If the sum of Unidym s debts, liabilities and other obligations is greater than all of Unidym s assets at fair valuation or if Unidym is generally not paying its debts, liabilities and other obligations as they come due; the Rice license will terminate and Unidym may lose rights to critical intellectual property.

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Key Personnel

Mark Tilley, Ph.D is the CEO of Unidym. Dr. Tilley joined the Company after a nine-year tenure at DSM N.V., a $12 billion Netherlands-based specialty performance materials and life sciences company. During his tenure, he worked in DSM s venturing arm, led marketing and technical teams, and built a nano-enabled flat panel displays materials business that was acquired by Japan Synthetic Rubber in 2005. Dr. Tilley also co-founded Kriya Materials BV, a venture capital backed nano-materials and coatings company based in the Netherlands. Dr. Tilley has held marketing and R&D positions at SDC Coatings, a joint venture founded by Dow Corning and Pilkington Glass, Valspar and GE Plastics where he started his career at their Corporate R&D center as a Senior Scientist. He holds a BS degree in Chemistry from the University of Manchester Institute of Science and Technology in Manchester, UK, a Ph.D. from North Dakota State University in Fargo, and a M.B.A from Pepperdine University.

Unidym s Board of Directors is comprised of Mark Tilley, Christopher Anzalone, CEO and director of each Arrowhead, Calando, Nanotope and Leonardo, Edward W. Frykman and Charles McKenney, both Arrowhead directors. Independent directors are Dr. Bob Gower, former CEO of CNI, Ray McLaughlin, former CFO of CNI, and Malcolm Gillis, former President of Rice University.

At September 30, 2010, Unidym had 9 full-time employees.

Minority Investments

Nanotope, Inc.

Overview

Nanotope is a regenerative medicine company developing a suite of nanotechnology-based products customized to regenerate specific tissues: including neuronal, cartilaginous and vascular soft tissues. Its lead clinical candidates are focused on regenerating neurons and inhibiting scar tissue formation following traumatic spinal cord injury (SCI); restoring cartilage in joints damaged due to injury or osteoarthritis; and accelerating wound healing in poorly vascularized, ischemic tissue associated with diabetes and peripheral artery disease (PAD). Nanotope and its partners have demonstrated the efficacy of these lead compounds in multiple animal models. Importantly, the company s therapeutic platform consists of synthetic, fully degradable, customizable gel scaffolds that do not involve the use of embryonic stem cells. Instead, the products work with surviving cells in the patient s body to spur tissue regeneration. In October 2010, Nanotope entered into an agreement with Smith & Nephew, plc group to further develop its cartilage regeneration product for human healthcare markets. Smith & Nephew is a global medical technology company with leadership positions in Orthopedics; including Reconstruction, Trauma and Clinical therapies; Endoscopy; including Sports Medicine; and Advanced Wound Management. This represents Nanotope s first commercial transaction and demonstrates the company s commitment to bring technological innovations in regenerative medicine to the clinical market.

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Related Party Interests

Nanotope was co-founded by Arrowhead s CEO, Dr. Christopher Anzalone, through the Benet Group, now dissolved, a private investment entity solely owned and managed by Dr. Anzalone. Dr. Anzalone owns approximately 14.2% of Nanotope s outstanding voting securities. Dr. Anzalone does not hold options, warrants or any other rights to acquire securities of Nanotope. Dr. Anzalone has the right to appoint a representative to the Board of Directors of Nanotope. Dr. Anzalone currently serves on the Nanotope Board in a seat reserved for Nanotope s CEO and another individual holds the seat designated by Dr. Anzalone. Dr. Anzalone has served as President and Chief Executive Officer of Nanotope since its formation and continues to serve in these capacities. Dr. Anzalone has not received any compensation for his work on behalf of Nanotope since joining the Company on December 1, 2007. Dr. Anzalone has also waived his right to any unpaid compensation accrued for work done on behalf of Nanotope before he joined the Company.

Leonardo Biosystems, Inc.

Overview

Leonardo is a drug delivery company that employs a novel multi-stage drug delivery mechanism aimed at dramatically increasing targeting efficiency of pharmaceuticals. Arrowhead has an approximately 5% ownership interest in Leonardo. Leonardo s silicon microparticulate technology involves transporting a therapeutic agent past multiple biological barriers using multiple carriers, each optimized for a specific barrier. Leonardo s proprietary primary vehicles are designed to preferentially accumulate at tumor vasculature. Secondary carriers are then released from the primary carriers that are designed to accumulate around tumor cells and release their therapeutic payloads. Animal testing suggests that Leonardo s platform enables significantly increased targeting and also provides sustained release. During 2010, Leonardo received an initial tranche of $1.25 million of an overall $2.5 million award from the State of Texas Emerging Technology Fund. Leonardo is currently focused on scaling up a commercializable manufacturing process and broadening the demonstrated areas where the technology delivers value. Arrowhead is interested in increasing its stake in Leonardo if the opportunity arises, Arrowhead has the capital resources and Leonardo s technology development continues to move forward.

Related Party Interests

Like Nanotope, Leonardo was co-founded by the Company s Chief Executive Officer, Dr. Christopher Anzalone. Dr. Anzalone owns approximately 16% of the outstanding stock of Leonardo. Dr. Anzalone does not hold options, warrants or any other rights to acquire securities of Leonardo. Dr. Anzalone has the right to appoint a representative to the Board of Directors of Leonardo and Dr. Anzalone currently serves on the Leonardo Board. Dr. Anzalone has served as President and Chief Executive Officer of Leonardo since its formation until February 2010 when a new CEO was hired. Dr. Anzalone has not received any compensation for his work on behalf of Leonardo since joining the Company on December 1, 2007. Dr. Anzalone has also waived his right to any unpaid compensation accrued for work done on behalf of Leonardo before he joined the Company.

Academic Partnerships

Since inception, Arrowhead has worked with some of the most outstanding academic institutions in the country, including the Caltech, Stanford University, Duke University and the University of Florida, in critical areas such as stem cell research, carbon electronics and molecular diagnostics. This has provided the Company with a deep network in the academic community, insight into cutting edge technologies and a world class scientific advisory board. Through these partnerships, Arrowhead has gained access to exclusive rights that have formed the basis for the Company s subsidiaries and minority investments and has leveraged university resources to further develop and test technology in a highly cost effective way. The collaborations with academic scientists have included technology licenses and options to license technology, sponsored research, donations to the labs of individual scientists and use of university facilities that are made available to development stage companies. In prior years, Arrowhead devoted significant capital resources to sponsored research. As the Subsidiaries have matured, the Company has decreased its reliance on sponsored research for technology development and sponsored research expense has decreased. As of September 30, 2010, Arrowhead had one active sponsored research agreement at Duke University through Unidym. Depending on capital resources, Arrowhead is likely to continue to invest in nanoscience research and development through sponsored research agreements at universities.

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ITEM 1A. 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 similar stages 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 refer to the other information contained or incorporated by reference in our other filings with the Securities and Exchange Commission.

Risks Related to Our Financial Condition

We have limited cash resources.

Our plan of operations is to provide substantial amounts of development funding and financial support to our subsidiaries over an extended period of time. The Company adopted a cash conservation strategy that reduced corporate expenses and scaled back our financial support for our two major subsidiaries, Unidym and Calando. This has influenced Unidym s decision to engage partners for its capital-intensive bulk CNT manufacturing and concentrate its resources on the development of CNT inks and CNT-based film products, and Calando s decision to curtail internal R&D efforts for its drug delivery platforms and clinical candidates and seek partners for future development of its drug candidates. Management continues operate under a plan to conserve cash resources while selectively investing in near-term opportunities. The Company s management anticipates that the Company will be able to satisfy the cash requirements of its operations through at least the next twelve months with current cash resources.

However, we may need to obtain additional capital to further our development efforts, and we intend to seek additional capital by out-licensing technology, selling one or more of our subsidiaries, securing funded partnerships, conducting one or more private placements of equity securities of the Company or our subsidiaries, selling additional securities in a registered public offering, or through a combination of one or more of such financing alternatives. However, there can be no assurance that we will be successful in any of these endeavors or, if we are successful, that such transactions will be accomplished on favorable terms. If we are unable to obtain additional capital, we will implement additional cash saving measures, which could materially harm our business and our ability to achieve cash flow in the future, including delaying or reducing implementation of certain aspects of our plan of operations. Even if we are successful in obtaining additional capital, because we and each subsidiary are separate entities, it could be difficult or impossible to allocate funds in a way that meets the needs of all entities.

The current financial market conditions may exacerbate certain risks affecting our business.

Neither the Company nor our subsidiaries generate substantial revenue, and our operations and research and development activities have been primarily funded through the sale of Company securities and securities of our subsidiaries. Current market conditions may impair our ability to raise the capital we need. If we are unable to secure additional cash resources from the sale of securities or other sources, it could become necessary to further slow, interrupt or close down development efforts. In addition, we may have to make additional reductions in expenses at the Company, which could impair our ability to manage our business and our subsidiaries. Even if investment capital is available to us, the terms may be onerous. If investment capital is needed and available to Unidym and/or Calando and the Company does not have the funds to make a pro rata investment, our ownership interest could be diluted. The sale of additional Company stock to fund operations could result in significant dilution to stockholders.

The strategy for eventual monetization of our subsidiaries will likely depend on our ability to exit our ownership position in each subsidiary in an orderly manner. Exit opportunities could include an initial public offering (IPO) for the subsidiary or acquisition of the subsidiary by another company. During the recent economic recession, companies have been adopting conservative acquisition strategies and, even if there is interest, they may not be able to acquire our subsidiaries on terms that are attractive to us. These factors could reduce the realizable return on our investment if we are able to sell a subsidiary. Additionally, the market for IPOs continues to be very limited, which limits public exit opportunities for our subsidiaries.

We may not be able to maintain our listing on the NASDAQ Capital Market.

Our Common Stock trades on the NASDAQ Capital Market, which has certain compliance requirements for continued listing of common stock. In the past, we have been subject to delisting procedures due to a drop in the price of our Common Stock. If our minimum closing bid price per

share falls below $1.00 for a period of 30 consecutive trading days in the future, we may again be subject to delisting procedures. We must also meet additional continued listing requirements contained in NASDAQ Marketplace Rule 5550(b), which requires that we have (1) a minimum of $2,500,000 in stockholders equity, (2) $35,000,000 market value of listed securities held by non-affiliates or (3) $500,000 of net income from continuing operations for the most recently completed fiscal year (or two of the three most recently completed fiscal years). As of December 20, 2010, based on our closing price as of that day, the market value of our securities held by non-affiliates was approximately $65,000,000.

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As of the close of business on December 8, 2010, our Common Stock had a closing bid price of $0.90 per share, and has had a bid price of less than $1.00 for 30 consecutive days. Accordingly, on December 8, 2010, we received a deficiency letter from the NASDAQ Stock Market indicating that, based on the Company s closing bid price for the last 30 consecutive business days, the Company does not comply with the minimum bid price of $1.00 per as set forth in NASDAQ Marketplace Rule 5550(a)(2).

In accordance with NASDAQ Marketplace Rule 5810(c)(3)(A), the Company has a grace period of 180 calendar days, or until June 6, 2011 to regain compliance with the minimum closing bid price requirement for continued listing. In order to regain compliance, the minimum closing price per share of the Company s common stock must be at least $1.00 for a minimum of ten consecutive business days. In the event the Company does not regain compliance by June 6, 2011, the Company may be afforded an additional 180 day compliance period, provided it demonstrates that it meets all other applicable standards for initial listing on the NASDAQ Capital Market (except the bid price requirement). If the Company fails to regain compliance after the second grace period, the Company s stock will be subject to delisting by NASDAQ.

Delisting could reduce the ability of our shareholders to purchase or sell shares as quickly and as easily as they have done historically. For instance, failure to obtain listing on another market or exchange may make it more difficult for traders to sell our securities. Broker-dealers may be less willing or able to sell or make a market in our Common Stock. Not maintaining our NASDAQ Capital Market listing may (among other effects):

result in a decrease in the trading price of our Common Stock;

lessen interest by institutions and individuals in investing in our Common Stock;

make it more difficult to obtain analyst coverage; and

make it more difficult for us to raise capital in the future.

We have debt on our consolidated balance sheet, which could have consequences if we were unable to repay the principal or interest due

Calando has a $500,000 unsecured convertible promissory note outstanding. The note bears 10% interest accrued annually, matured in November 2010 and is payable upon demand. The note is payable at two times face value in certain events, including, among other things, the license of Calando s siRNA delivery system. An amendment to extend the note is currently being negotiated, however if the note is not extended, the Company has the ability and intent to repay this note. However, if Calando is unable to meet its obligations to the bearer of the note, Arrowhead may also not be in a position to lend Calando sufficient cash to pay such demand note. Unless other sources of financing become available, this could result in Calando s insolvency.

Our subsidiaries 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, 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, including the solvency requirements set forth in our license agreement with Rice university, 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.

Risks Related to Our Business Model and Company

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

The implementation of our business strategy is still in the development stage. We currently own majority interests in two subsidiary companies, investments in two early-stage biotech companies and, through Unidym, one university research project at Duke University. 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 the Company.

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Calando may be unable to find additional partners to license its technologies.

As part of our cash conservation strategy that scales back our financial support for Calando at this time, Calando has closed its laboratory facilities, eliminated its technical employees and has shifted its focus to licensing its technologies to partners. Currently, Calando has one licensing partner, but there can be no assurance that Calando will be able to find additional partners to license its technologies upon terms favorable to Calando.

If Calando licenses its technologies, it will lose a considerable amount of control over its intellectual property and may not receive adequate licensing revenues in exchange.

The business model of our subsidiaries has historically been to develop new nanotechnologies and to exploit the intellectual property created through the research and development process to develop commercially successful products. Calando has licensed a portion of its technology to Cerulean Pharma, Inc. and intends to pursue further licensing arrangements with other companies. A significant portion of the potential value from these licenses is tied to the achievement of the development and sales milestones, which we cannot control. As Calando licenses its technology to other companies, it will lose control over certain of the technologies it licenses and will be unable to control the development and commercialization of its technologies, which could result in the failure to achieve performance milestones that would represent a significant portion of the total value of any license transaction. In addition, Calando s licensees may not be successful in the further commercialization of Calando s technologies and anticipated revenues from such license agreements may be less than expected or may not be paid at all.

There are substantial risks inherent 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. Our scientists and engineers 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 a 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.

Because we have not generated significant revenues to cover our operating expenses, we are dependent on raising additional capital from investors or lenders.

To date, we have only generated a small amount of revenue as a result of our current plan of operations. Given our strategy of financing new and unproven technology research, there is no assurance we would ever generate significant revenues. Our revenue-producing opportunities depend on liquidity events within our subsidiaries, such as a sale of the subsidiary, licensing transaction or initial public offering. We cannot be certain that we will be able to create a liquidity event for any of our subsidiaries and, even if we are able to, we cannot be certain of the timing or the potential proceeds to Arrowhead as a stockholder. Accordingly, our revenue prospects are uncertain and we must plan to finance our operations through the sales of equity securities or debt financing. If we are unable to continue raising operating capital from these sources, we may be forced to curtail or cease our operations.

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. Even if our research efforts are technologically successful, it could take several years before this technology will be commercially viable. During this period, superior competitive technologies may be introduced or customer needs may change, which could 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 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.

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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 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.

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

We need to retain a controlling interest, by ownership, contract or otherwise, in Unidym and Calando in order to avoid potentially being deemed an investment company under the Investment Company Act of 1940.

Companies that have more than 100 U.S. stockholders or are publicly traded in the U.S. or are, or hold themselves out as being, engaged primarily in the business of investing, reinvesting or trading in securities are subject to regulation under the Investment Company Act of 1940. Unless a substantial part of our assets consists of, and a substantial part of our income is derived from, interests in majority-owned subsidiaries and companies that we primarily control, whether by contract or otherwise, we may be required to register and become subject to regulation under the Investment Company Act. Because Investment Company Act regulation is, for the most part, inconsistent with our strategy of actively managing and operating our portfolio companies, a requirement to operate our business as a registered investment company would restrict our operations and require additional resources for compliance.

If we are deemed to be, and are required to register as, an investment company, we will be forced to comply with substantive requirements under the Investment Company Act, including:

- limitations on our ability to borrow;
- limitations on our capital structure;
- restrictions on acquisitions of interests in associated companies;
- prohibitions on transactions with our affiliates;
- restrictions on specific investments; and

compliance with reporting, record keeping, voting, proxy disclosure and other rules and regulations.

In order to avoid regulation under the Investment Company Act, we may choose to make additional pro rata investments in Unidym and Calando to maintain a controlling interest.

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

There is public concern regarding the human health, 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 human health or 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. Because of the potential, but at this point unknown, risks associated with certain nanomaterials, government authorities in the U.S. or individual states, and foreign government authorities could, for social or other purposes, prohibit or regulate the use of some or all nanotechnologies. The U.S. Environmental Protection Agency has in that regard recently taken steps towards regulation of the manufacture and use of certain nanotechnology-enabled materials, including those containing carbon nanotubes or nanosilver. Further, the U.S. National Academy of Sciences/National Research Council concluded that the U.S. government needs to develop a more robust and coordinated plan for addressing the potential environmental, health, and safety risks of nanomaterials. The regulation and

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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 may not be able to effectively secure first-tier research and development projects when competing against other ventures.

Our business plan requires that we identify and successfully acquire promising technologies. However, we compete with a substantial number of other companies that fund early-stage, scientific research at universities to secure rights to promising technologies. In addition, many venture capital firms and other institutional investors invest in companies seeking to commercialize various types of emerging technologies. Many of these companies have greater financial, scientific and commercial resources than us. Therefore, 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 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. 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. In addition, due to the continued tightening of global credit markets, there may be a disruption or delay in the performance of our third-party contractors, suppliers or collaborators. If such third parties are unable to satisfy their commitments to us, our business would be adversely affected. 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.

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:

- 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.

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, including Dr. Anzalone, our CEO. 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. We may need to terminate additional employees, including senior management and technical employees, or such employees may seek other employment which may result in the loss of valuable know-how and that development efforts could be negatively affected.

Members of our senior management team and Board may have a conflict of interest in also serving as officers and/or directors of our subsidiaries.

While we expect that our officers and directors who also serve as officers and/or directors of our subsidiaries will comply with their fiduciary duties owed to our stockholders, they may have conflicting fiduciary obligations to our stockholders and the minority stockholders of our subsidiaries. Specifically, Dr. Anzalone, our CEO and President, is the founder, CEO and a board member of each of Nanotope, a regenerative medicine company in which the Company owns a 23% interest, and Leonardo, a drug delivery company

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in which the Company owns a 4.9% interest. Dr. Anzalone owns a noncontrolling interest in the stock of each of Nanotope and Leonardo. To the extent that any of our directors choose to recuse themselves from particular Board actions to avoid a conflict of interest, the other members of our Board of Directors will have a greater influence on such decisions.

Our efforts pertaining to the pharmaceutical industry are subject to additional risks.

Our subsidiary, Calando, as well as minority investments Nanotope and Leonardo, are focused on technology related to new and improved pharmaceutical candidates. 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 may be unacceptable, even though preclinical trial results were promising;

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

the necessary regulatory bodies, such as the U.S. Food and Drug Administration, may not approve our potential product for the intended use; and

manufacturing and distribution may be 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. Additionally, clinical trials can take years to complete site selection and the enrollment of patients. If the subsidiaries technology is not cost effective or if the associated drug products do not achieve wide market acceptance, the value of a subsidiary would be materially and adversely affected.

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 U.S. Both private and government entities are seeking ways to reduce or contain healthcare costs. Numerous proposals that would affect changes in the U.S. 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 our minority investments, Nanotope and Leonardo, to market products successfully (either on their own or in partnership with other companies) 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 the products of these companies. Cost containment measures instituted by healthcare providers and any general healthcare reform could affect their 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 or any anticipated milestone or royalty payments. We cannot predict the effect of future legislation or regulation concerning the healthcare industry and third party coverage and reimbursement on our business.

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

Our investments in our subsidiaries and noncontrolling interests were the result of negotiation with subsidiary management and equity holders, and the investment valuations may not have been 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 few comparable public companies to provide meaningful valuation comparisons. 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 different than previously determined by us, which could materially and adversely impair the value of our Common Stock.

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Risks Related to Our Intellectual Property

If Unidym is unable to raise additional cash or pay its debts, Unidym may lose rights to critical intellectual property.

Unidym is required to meet certain financial covenants pursuant its Rice University license agreement. The Rice license includes financial covenants tested quarterly for compliance. If Unidym fails to meet the financial covenants, the Rice license may terminate. If this should happen, the value of Unidym s intellectual property portfolio would be significantly and adversely affected and Unidym would likely lose patent protection for its products and licensing opportunities for the majority of its CNT intellectual portfolio.

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. 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 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.

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 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.

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Risks Related to Regulation of Our Products

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, we cannot be assured that the 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.

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

The federal 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, federal government export regulations could restrict sales of these products in other countries. If the federal government places burdensome export controls on our technology or products, our business would be materially and adversely affected. If the federal government determines that we have not complied with the applicable export regulations, we may face penalties in the form of fines or other punishment.

Risks Related to our Stock

Stockholder equity interest may be substantially diluted in any additional financing.

Our certificate of incorporation authorizes the issuance of 145,000,000 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 September 30, 2010, 71,720,137 shares of Common Stock and no shares of Preferred Stock were issued and outstanding. As of September 30, 2010, 8,123,338 shares were reserved for issuance upon exercise of outstanding options. As of September 30, 2010, there were warrants outstanding to purchase 25,672,595 shares of Common Stock. The issuance of additional securities in financing transactions by us or through the exercise of options or warrants will 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 Common Stock price has fluctuated significantly over the last several years and may continue to do so in the future, without regard to our results of operations and prospects.

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.

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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 Capital Market, our securities historically were relatively thinly traded. Investor trading pattern could serve to exacerbate the volatility of the price of the stock. For example, mandatory sales of our Common Stock by institutional holders could be triggered if an investment in our Common Stock no longer satisfies their investment standards and guidelines. 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 the 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 the 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 unless and until 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 the 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, 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.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our corporate headquarters is located in Pasadena, California, and Unidym operates from a facility in Sunnyvale, California. The following table summarizes the company s leased facilities:

	Lab/Office Space	Monthly Rent	Lease Commencement	Lease Term
Arrowhead				
Pasadena, CA	7,388 sq ft	$ 18,470	March 1, 2006	62 Months
Unidym				
Sunnyvale, CA	20,500 sq ft	$ 26,650	October 1, 2008	60 Months

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ITEM 3. LEGAL PROCEEDINGS

None.

ITEM 4. [REMOVED AND RESERVED]

PART II

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

Price Range of Common Stock

Our Common Stock is traded on the NASDAQ Stock Market under the symbol ARWR . The following table sets forth the high and low sales prices for a share of the Company s Common Stock during each period indicated.

	Fiscal Year Ended September 30,			
	2010		2009	
	High	Low	High	Low
1st Quarter	$ 0.70	$ 0.51	$ 1.78	$ 0.77
2nd Quarter	1.17	0.51	1.20	0.36
3rd Quarter	1.85	1.03	0.70	0.40
4th Quarter	1.17	0.85	0.71	0.31

Shares Outstanding

At December 13, 2010, an aggregate of 71,806,694 shares of the Company s Common Stock were issued and outstanding, and were owned by 279 stockholders of record, based on information provided by the Company s transfer agent.

Dividends

The Company has never paid dividends on its Common Stock and does not anticipate that it will do so in the foreseeable future.

Sales of Unregistered Securities

All information under this Item has been previously reported on our Current Reports on Form 8-K.

Repurchases of Equity Securities

We did not repurchase any shares of our Common Stock during fiscal 2010 or fiscal 2009.

ITEM 6. SELECTED FINANCIAL DATA

As a Smaller Reporting Company, we are not required to provide this information.

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

Description of Business

Unless otherwise noted, (1) the term Arrowhead refers to Arrowhead Research Corporation, a Delaware corporation formerly known as InterActive Group, Inc., (2) the terms the Company, we, us, and our, refer to the ongoing business operations of Arrowhead and its Subsidiaries, whether conducted through Arrowhead or a subsidiary of Arrowhead, (3) the term Subsidiaries refers collectively to Calando Pharmaceuticals, Inc. (Calando), Unidym, Inc. (Unidym), Agonn Systems, Inc. (Agonn) and Tego Biosciences Corporation (Tego), and (4) the term Common Stock refers to Arrowhead s Common Stock and the term stockholder(s) refers to the holders of Common Stock.

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Overview

Arrowhead Research Corporation is a development stage nanotechnology holding company with an emphasis in nanomedicine. Since our inception, we have incurred significant losses as we fund our investments in early stage technologies. Historically, Arrowhead has relied upon issuances of capital stock to raise capital to fund operations, and we expect to continue to seek such investment going forward. Calando is currently conducting a Phase I clinical trial for its lead drug candidate, CALAA-01, an siRNA therapeutic based on RONDEL, Calando s proprietary siRNA delivery system technology. We expect continued development in RONDEL and CALAA-01, as well as investing in future drug candidates. Arrowhead does not intend to independently fund clinical trials through submission of a New Drug Application for FDA approval, and is working to employ its partnering strategies intended to decrease costs and maximize the Company s ability to bring products to market. Arrowhead has been focused on entering strategic partnering agreements for continued development of Calando and Unidym.

Critical Accounting Policies and Estimates

Management makes certain judgments and uses certain estimates and assumptions when applying accounting principles generally accepted in the United States in the preparation of our Consolidated Financial Statements. We evaluate our estimates and judgments on an ongoing basis and base our estimates on historical experience and on assumptions that we believe to be reasonable under the circumstances. Our experience and assumptions form the basis for our judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may vary from what we anticipate and different assumptions or estimates about the future could change our reported results. We believe the following accounting policies are the most critical to us, in that they are important to the portrayal of our consolidated financial statements and require our most difficult, subjective or complex judgments in the preparation of our consolidated financial statements. For further information, see *Note 1, Organization and Significant Accounting Policies*, to our Consolidated Financial Statements which outlines our application of significant accounting policies and new accounting standards.

Revenue Recognition

Revenue from product sales are recorded when persuasive evidence of an arrangement exists, title has passed and delivery has occurred, a price is fixed and determinable, and collection is reasonably assured.

We may generate revenue from product sales, technology licenses, collaborative research and development arrangements, and research grants. Revenue under technology licenses and collaborative agreements typically consists of nonrefundable and/or guaranteed technology license fees, collaborative research funding, and various milestone and future product royalty or profit-sharing payments.

Revenue associated with up-front license fees and research and development funding payments, under collaborative agreements, is recognized ratably over the relevant periods specified in the agreement, generally the research and development period. Revenue from substantive milestones and future product royalties is recognized as earned based on the completion of the milestones and product sales, as defined in the respective agreements. Payments received in advance of recognition as revenue are recorded as deferred revenue.

Impairment of Long-lived Assets

We review long-lived assets for impairment whenever events or changes in business circumstances indicate that the carrying amount of assets may not be fully recoverable or that our assumptions about the useful lives of these assets are no longer appropriate. If impairment is indicated, recoverability is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset.

Stock-Based Compensation

We recognize stock-based compensation expense based on the grant date fair value using the Black-Scholes options pricing model, which requires us to make assumptions regarding certain variables including the risk-free interest rate, expected stock price volatility, and the expected life of the award. The assumptions used in calculating stock-based compensation expense represent management s best estimates, but these estimates involve inherent uncertainties, and if factors change or the Company used different assumptions, its stock-based compensation expense could be materially different in the future.

Derivative Liabilities

We account for warrants and other derivative financial instruments as either equity or liabilities based upon the characteristics and provisions of each instrument. Warrants classified as equity are recorded as additional paid-in capital on our consolidated

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balance sheet and no further adjustments to their valuation are made. Some of our warrants were determined to be ineligible for equity classification because of provisions that may result in an adjustment to their exercise price. Warrants classified as derivative liabilities and other derivative financial instruments that require separate accounting as liabilities are recorded on our consolidated balance sheet at their fair value on the date of issuance and are revalued on each subsequent balance sheet date until such instruments are exercised or expire, with any changes in the fair value between reporting periods recorded as other income or expense. We estimate the fair value of these liabilities using option pricing models that are based on the individual characteristics of the warrants or instruments on the valuation date, as well as assumptions for expected volatility, expected life and risk-free interest rate. Changes in the assumptions used could have a material impact on the resulting fair value. The primary input affecting the value of our derivatives liabilities is the Company s stock price. For example, a 50% change in the value of the Company s stock price would affect the value of the derivative liability by approximately $1.4 million to $1.5 million, depending on other inputs.

Intellectual Property

Intellectual property consists of patents and patent applications internally developed, licensed from universities or other third parties or obtained through acquisition. Patents and patent applications are reviewed for impairment whenever events or circumstances indicate that the carrying amount may not be recoverable, and any impairment found is written off. Licensed or internally developed patents are amortized over the life of the patent. Purchased patents are amortized over three years.

Results of Operations

The Company had a net loss of $7.0 million for the year ended September 30, 2010, compared to a net loss of $19.3 million for the year ended September 30, 2009, a decrease of $12.3 million.

The decrease in the fiscal 2010 net loss versus the fiscal 2009 net loss was the result of a number of factors. During the second half of fiscal 2009 several cost reduction initiatives were undertaken to streamline operations and reduce costs. The number of employees at Arrowhead and its Subsidiaries decreased from an average of 43 employees during fiscal 2009 to an average of 19 employees during fiscal 2010. Altogether, research and development costs decreased $7.8 million, general and administrative costs decreased $1.4 million, consulting costs decreased $0.9 million, salary and salary-related costs decreased $2.6 million, and stock-based compensation decreased $1.1 million. Additionally, there was a non-cash gain of $1.8 million related to a derivative liability recorded in association with the June 2010 equity issuance (see Note 11 to the accompanying consolidated financial statements). These decreased expenses were partially offset by a decrease in revenue of $3.1 million.

Unidym began a cost reduction program during fiscal 2009 and reduced its operating expenses to a level which continued into fiscal 2010. Prior to 2009, Unidym was pursuing a business plan based on building a vertically integrated company that would manufacture both carbon nanotubes and carbon nanotube films. Due to the changes in the economic environment in late 2008, Unidym changed its manufacturing strategy to focus on the use of outside manufacturing availability rather than expand its internal capabilities. In line with this strategy, Unidym closed its Texas operations in January 2009, and reduced its Texas workforce. Unidym consolidated its Northern California operations into one facility in 2009 and also decreased the number of management and technical staff. This resulted in a reduction in personnel and other costs later in the year, and such cost reductions were maintained into 2010. Development costs at Unidym have been substantially reduced and the pace of development will depend on the cash resources and partnership opportunities available to Unidym.

Calando also reduced expenses in fiscal 2009 due to a change in business strategy. Rather than incur the significant expense of running multiple clinical trials, Calando decided to seek partners for further development of its technology. Beginning in fiscal 2008 and continuing into fiscal 2009, Calando reduced its management and technical staff culminating with the closure of its lab facility in Pasadena, California in June 2009 after a partnership for one of its drug delivery technologies and its associated clinical candidate was signed, significantly reducing its costs. In fiscal 2008, the Phase I trial for CALAA-01 was initiated, and in fiscal 2009, significant expense was incurred for manufacture of the components for CALAA-02, preparation for an IND for CALAA-02 and the continuation of Calando s clinical trials. Expenses in fiscal 2010 were primarily related to the Phase I clinical trials related to CALAA-01, but were somewhat limited as the accrual of patients was suspended for several months in 2010 as Calando developed a new stability assay. The enrollment of patients in the CALAA-01 clinical trial resumed in May 2010 and was in progress at the end of fiscal 2010. Continued clinical and preclinical development of Calando s drug candidates will depend on the cash resources available to Calando.

Revenues

The Company generated revenue of $620,000 and $3,758,000 for the years ended September 30, 2010 and 2009, respectively. The revenue for the year ended September 30, 2010 was primarily related to Unidym s sale of carbon nanotubes, CNT inks and CNT films, which accounted for approximately $415,000 in revenue. Revenue from license fees and royalties, primarily from Unidym, were $155,000, and other revenue was $50,000. These revenue compare to fiscal 2009 revenue which consisted of a license fee of $1,750,000 related to the license of IT-101 from

Calando to Cerulean, the sale of approximately $678,000 in IT-101 inventory to Cerulean, $203,000 from grants to fund research for the development of carbon nanotube applications, $503,000 from license fees

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applicable to Unidym technology, $602,000 from the sale and delivery of carbon nanotubes to third parties and $37,000 of collaboration services revenue. The primary reason for the reduction in revenue in fiscal 2010 is that the Company did not enter into any significant partnership agreements in 2010.

Operating Expenses

The analysis below details the operating expenses and discusses the expenditures of the Company within the major expense categories. For purposes of comparison, the amounts for the years ended September 30, 2010 and 2009 are shown in the table below.

Salary & Wage Expenses - Fiscal 2010 compared to Fiscal 2009

Arrowhead employs management, administrative and technical staff at the Arrowhead corporate offices and the Subsidiaries. Salary and wage expense consists of salary, benefits, and non-cash charges related to equity-based compensation from the issuance of stock options. Salary and benefits are allocated to two major categories: general and administrative compensation expense and research and development compensation expense depending on the primary activities of each employee. The following table provides details of salary and related expenses for fiscal 2010 and fiscal 2009.

(in thousands)

	Year Ended September 30, 2010	% of Expense Category	Year Ended September 30, 2009	% of Expense Category	Increase (Decrease) $	Increase (Decrease) %
G&A compensation-related	$ 1,451	34%	$ 2,852	36%	$ (1,401)	-49%
Stock-based compensation	1,582	37%	2,676	33%	(1,094)	-41%
R&D compensation-related	1,265	29%	2,482	31%	(1,217)	-49%
Total	$ 4,298	100%	$ 8,010	100%	$ (3,712)	-46%

The Company reduced the number of employees across all its entities during fiscal 2009. Arrowhead and its subsidiaries employed 19 people at September 30, 2009, a reduction of 48 employees during fiscal 2009. During fiscal 2010, the headcount remained relatively flat, but cost reductions were realized for a full year in 2010, compared to a partial year in fiscal 2009. The employee reductions resulted from the change in business strategy at both Unidym and Calando as described above.

Research and development (R&D) compensation-related expense decreased in fiscal 2010 compared to fiscal 2009 due primarily to Unidym s reduction in research scientists and process engineers and the closure of Unidym s Texas facility. Calando has also reduced laboratory personnel in connection with its decision in 2009 to license its small molecule platform and associated drug candidate and close its laboratory facility. Two Calando employees have been retained to manage the CALAA-01 clinical study and to facilitate the partnership arrangements for Calando s technology.

Stock-based compensation is a non-cash charge related to grant-date fair value of stock options, which is recognized over the vesting period. During fiscal year 2009, the number of options outstanding decreased as a result of options being cancelled following employee terminations. Also, in July 2009, 4,005,000 options issued to officers, directors and certain employees were cancelled to facilitate a financing by the Company in the fourth quarter of fiscal 2009. In total, 5.6 million stock options were cancelled in fiscal 2009. These options had a weighted average exercise price of $3.88, and reduced expense considerably. During fiscal 2010, 5.3 million options were granted at a weighted average exercise price of $0.68, and a correspondingly lower fair value resulted in lower compensation expense in fiscal 2010.

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General & Administrative Expenses Fiscal 2010 compared to Fiscal 2009

The following table provides details of our general and administrative expenses for the fiscal years 2010 and 2009.

(in thousands)

	Year Ended September 30, 2010	% of Expense Category	Year Ended September 30, 2009	% of Expense Category	Increase (Decrease) $	Increase (Decrease) %
Professional/outside services	$ 1,445	45%	$ 2,217	49%	$ (772)	-35%
Recruiting/relocation	18	1%	32	1%	(14)	-44%
Patent expense	401	13%	652	14%	(251)	-38%
Facilities and related	278	9%	281	6%	(3)	-1%
Travel	240	8%	387	8%	(147)	-38%
Business insurance	267	8%	414	9%	(147)	-36%
Depreciation	85	3%	132	3%	(47)	-36%
Communication and technology	138	4%	197	4%	(59)	-30%
Office expenses	107	3%	168	4%	(61)	-36%
Other	204	6%	87	2%	117	134%
Total	$ 3,183	100%	$ 4,567	100%	$ (1,384)	-30%

Professional/outside services include legal, accounting and other outside services retained by Arrowhead and its subsidiaries. All periods include normally occurring legal and accounting expenses related to SEC compliance and other corporate matters. Professional/outside services expense was $1,445,000 during the year ended September 30, 2010, compared to $2,217,000 in the comparable prior period. The decrease in professional fees primarily relates to a reduction in expenses at Arrowhead due to lower legal and printing fees, and lower fees at Calando, primarily due to the non-recurrence of expenses associated with a financing in the prior period. Additionally, the prior year included certain legal fees related to the licensing of IT-101 at Calando, which were not repeated. These reductions were somewhat offset by higher costs related to NASDAQ fees associated with increased shares outstanding.

Recruiting/relocation fees were $18,000 during the year ended September 30, 2010, compared to $32,000 in the comparable prior period. Recruiting/relocation fees during in fiscal 2010 were related to relocation fees at Arrowhead, while costs in the prior year primarily related to relocation costs at Unidym. Recruiting and relocation expense in both periods was relatively insignificant as the company has not been actively recruiting new employees. These costs will vary depending on hiring needs of the Company.

Patent expense was $401,000 during the year ended September 30, 2010, compared to $652,000 in the comparable prior period. During the year ended September 30, 2010, patent expense decreased at all entities with majority of the reduction relating to Calando and Unidym, which decreased $74,000 and $88,000 respectively. Patent expense during the year ended September 30, 2009 was primarily related to patent costs at Calando of $320,000 prior to the license agreements to Cerulean, and $237,000 at Unidym for patent costs related to Nanoconduction, which were not repeated. The Company expects to continue to invest in patent protection as the Company extends and maintains protection for its current portfolios and files new patent applications as its product applications are improved. The cost will vary depending on the needs of the Company.

Facilities and related expense within general and administrative expenses primarily relate to rental costs associated with the Company s headquarters in Pasadena, California. As there were no significant changes to the lease during fiscal 2010, expenses did not change significantly.

Travel expense was $240,000 during the year ended September 30, 2010, compared to $387,000 in the comparable prior period. Travel expense includes recurring expenses related to travel by Company personnel to and from Company locations in Pasadena and Northern California. Travel expense is also incurred as the Company pursues business initiatives and collaborations throughout the world with other companies and for marketing, investor relations, fund raising and public relations purposes. During the year ended September 30, 2010, travel expense decreased $147,000, compared to the year ended September 30, 2009, primarily due to a reduction of travel costs at Unidym of $142,000 due to the reduction in the number of employees, mainly as a result of the closure of its Texas facility. Travel expenses can fluctuate from quarter to quarter and from year to year depending on current projects and activities.

Business insurance expense was $267,000 during the year ended September 30, 2010, compared to $414,000 in the comparable prior period. The decrease in the cost of business insurance is primarily related to a refund received in June 2010 of $55,000 at Calando related to an adjustment in clinical insurance costs from a previous year based on the number of enrolled patients. Also, business insurance is lower due to generally lower rates in insurance markets and a reduction in coverage for clinical trials with the termination of the Phase II clinical study for IT-101, and the reduction in the number of facilities at Unidym requiring insurance. This expense can fluctuate as a result of changes in the market and the status of clinical trials and other business operations.

Depreciation expense was $85,000 during the year ended September 30, 2010, compared to $132,000 in the comparable prior period. The decrease in depreciation expense is primarily related to the closure of the Calando facility in 2009 and the disposal of the related fixtures, furniture and equipment.

Communication and technology expense was $138,000 during the year ended September 30, 2010, compared to $197,000 in the comparable prior period. The decrease in communication and technology cost is due to lower technology consulting expense at Unidym due to the closure of its Texas facility, and generally lower telephone and software maintenance cost at Arrowhead and Calando.

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Office expense was $107,000 during the year ended September 30, 2010, compared to $168,000 in the comparable prior period. The reduction in office expense is primarily related to the closing of the facilities and the reduction in employees.

Research and Development Expenses Fiscal 2010 compared to Fiscal 2009

Most of Arrowhead s R&D expenses for fiscal 2010 and fiscal 2009 were related to research and development activities by Arrowhead s Subsidiaries. The following table provides details of R&D expenses for fiscal 2010 and 2009:

(in thousands)

	Year Ended September 30, 2010	% of Expense Category	Year Ended September 30, 2009	% of Expense Category	Increase (Decrease) $	Increase (Decrease) %
Outside labs & contract services	$ 215	19%	$ 3,950	45%	$ (3,735)	-95%
License, royalty & milestones	121	11%	207	2%	(86)	-42%
Purchased in process R&D		0%	2,292	26%	(2,292)	-100%
Laboratory supplies & services	9	1%	295	3%	(286)	-97%
Facilities and related	391	35%	1,225	14%	(834)	-68%
Sponsored research	33	3%	195	2%	(162)	-83%
Depreciation-R&D-related	254	23%	476	5%	(222)	-47%
Other research expenses	88	8%	253	3%	(165)	-65%
Total	$ 1,111	100%	$ 8,893	100%	$ (7,782)	-88%

Outside lab and services expense was $215,000 during the year ended September 30, 2010, compared to $3,950,000 in the comparable prior period. The decrease of $3,735,000 during the year is primarily related to the curtailment of certain outside lab services at Calando and, to a lesser extent, reduction of costs at Unidym. The reduction at Calando was a result of the advanced state of the IT-101 Phase I clinical trial, the decision to close the IT-101 Phase II clinical trials in connection with the agreement with Cerulean, completion of preparatory work for the CALAA-01 Phase I clinical trial and the suspension of development efforts for CALAA-02. During fiscal 2009, process development and preclinical expenses for Calando s drug candidate CALAA-02, together with the clinical trial expenses for CALAA-01 (Phase I) and IT-101 (Phase I and II) totaled approximately $2.9 million. However, the expenses were significantly reduced by June 30, 2009 when the Calando facility was closed. Unidym s R&D expenses are also declining as a result of streamlining its R&D effort and the closure of its production facility in Texas. Unidym continues to focus on the production and sale of CNT-based inks and is seeking to establish partnerships for both CNT production and coating of film. Outside laboratory & contract services expenses will continue to fluctuate depending upon where a particular project is in its development, approval or trial process.

Licensing fees, milestones and royalties consist primarily of amounts paid by Unidym under the terms of its license agreement with Rice University and Calando for the license for siRNA targets from Alnylam, and licensing arrangements with Caltech. This expense decreased primarily due to reduced fees owed to Caltech, and also due to the nonrepeat of other one-time fees from fiscal 2009.

In fiscal 2009, purchased In-Process R&D expense resulted from the exchange of Arrowhead stock for Unidym stock. As a result of these exchanges, Arrowhead increased its ownership position in Unidym. The purchased in-process research and development expense equals the estimated fair value of the Arrowhead stock issued to purchase Unidym shares from Unidym s minority shareholders. Arrowhead s purchase of the Unidym shares is accounted for as an additional Investment in Subsidiaries by Arrowhead. However, the additional investment by Arrowhead does not result in a corresponding increase in Unidym s asset or capital accounts. The additional investment was expensed in consolidation as purchased in-process research and development in accordance with guidance by the FASB. This determination was made in light of the risks inherent in the technical development and the uncertainty of acceptance of Unidym s products. Effective October 1, 2009, with the Company s adoption of new guidance issued by the FASB, such transactions are no longer expensed, but are recorded as a part of equity.

Laboratory supplies and services expense was $9,000 during the year ended September 30, 2010, compared to $295,000 in the comparable prior period. Laboratory supplies and services consist primarily of materials, supplies and services consumed in the laboratory. The decrease in laboratory supplies and services expense was due to a reduction of $223,000 at Unidym due to the closure of the Texas facility, and a reduction of $60,000 at Calando due to the closure of its laboratory.

Facilities expense was $391,000 during the year ended September 30, 2010, compared to $1,225,000 in the comparable prior period. The decrease in facilities related expenses primarily related to the closure of Unidym s Texas facilities and Menlo Park, California facility, as well as Calando s lab facility.

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Sponsored research expense was $33,000 during the year ended September 30, 2010, compared to $195,000 in the comparable prior period. Sponsored research expense decreased the year ended September 30, 2010, as compared to the prior year, due to lower funding to the research project at Duke University, the only sponsored research agreement currently in place.

Depreciation expense was $254,000 during the year ended September 30, 2010, compared to $476,000 in the comparable prior period. The decrease in depreciation expense is primarily due to the disposal of laboratory equipment and leasehold improvements related to closure of Unidym s and Calando s laboratory facilities in fiscal 2009.

The table below sets forth the approximate amount of Arrowhead s cash expenses for research and development projects at each Subsidiary for the periods described below.

Name of Subsidiary / Project	Project expenses for year ended September 30, 2010	Project expenses for year ended September 30, 2009	Project expenses from inception of Project through September 30, 2010
Calando Pharmaceuticals, Inc. / CALAA-01 & IT 101	$ 1.2 Million	$ 6.5 Million	$ 41.3 Million
Unidym, Inc. / Thin Film Carbon Nanotubes	$ 3.8 Million	$ 7.0 Million	$ 29.9 Million
Total of all listed Subsidiaries	$ 5.0 Million	$ 13.5 Million	$ 71.2 Million

Consulting Expenses

For fiscal 2010, consulting fees and related travel totaled approximately $514,000. Fiscal 2009 consulting fees were $1,461,000, $945,000 of which related to Calando and was primarily related to consulting for clinical trials which was significantly reduced in fiscal 2010. With the completion of the Phase II trial for IT-101 and its ultimate licensing to a third party for development, consulting for clinical studies has decreased significantly. Consulting expense at Unidym decreased by $154,000 primarily due to elimination of consultants associated with the closure of the Texas facility.

Other Income / Expense

Other income increased from $416,000 in fiscal 2009 to $1,418,000 in fiscal 2010. The main reason for the increase was due to a gain recorded on the change in the value of derivative liabilities. This was driven by a decrease in the value of derivative liabilities related to warrants issued in June 2010, that contain antidilution protection (see Note 11 Fair Value Measurements & Derivative Instruments). These warrants decreased in value between the date of their issuance and September 30, 2010 primarily due to the decrease in Arrowhead stock price which resulted in a lower fair value of the derivative liability and a gain of $1.7 million during the year ended September 30, 2010. This gain was partially offset by the non-recurrence of a one-time gain from the sale of our equity interests in Ensysce BioSciences, Inc., which occurred in fiscal 2009.

Liquidity and Cash Resources

As a development stage company, Arrowhead has historically financed its operations through the sale of securities of Arrowhead and its Subsidiaries. Development activities at our Subsidiaries, in particular Calando and Unidym, has required significant capital investment since the Company s inception in 2003 and is expected to continue to require significant cash investment in fiscal 2011 to continue development.

At September 30, 2010, Arrowhead had cash on hand of approximately $6.8 million on a consolidated basis. Cash and cash equivalents increased during the 2010 fiscal year by $4.8 million to $6.8 million at September 30, 2010 from $2.0 million at September 30, 2009.

Cash used in operating activities was $7.6 million, which represents the on-going expenses of Arrowhead and its Subsidiaries. Cash outlays were primarily composed of the following: salary costs were $2.7 million, general and administrative costs were $3.0 million, research and development costs were $0.9 million and consulting costs were $0.6 million. Approximately $0.4 million was used in the funding of working capital, primarily due to the reduction of accounts payable balances. Finally, $0.7 million was used to fund operating expenses at Arrowhead s two minority interest companies, Nanotope and Leonardo. It is expected that these funds will be repaid, or converted to equity in the future. Cash expenses were partially offset by cash received from revenues of $0.7 million.

Cash provided from financing activities was $12.0 million. As further described below, there were two significant equity financings during fiscal 2010 with total net proceeds of $11.1 million. In addition, warrants were exercised during the year which yielded proceeds of $1.1 million. Proceeds from financing activities also include $0.6 million related to cash investments in Unidym. Finally, payments on capital lease obligations were $0.7 million.

Cash flow from discontinued operations was $0.4 million, related to the sale of the Company s intellectual property assets of Tego Biosciences to Luna Innovations Inc. The Company s operation of Tego has ceased, however the asset purchase agreement with Luna Innovations, Inc. allows for certain royalties and milestone payments.

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The Company s strategic plan includes focusing on near term revenue opportunities, conserving cash and seeking sources of new capital. To execute this plan, the Company will seek to accomplish one or more of the following on favorable terms: the out-license of technology, sale of a subsidiary, sale of non-core assets, funded joint development or partnership arrangements and sale of securities. The Company is actively involved in discussions with third parties regarding several of these alternatives. However, until such time as one or more of these efforts can be accomplished, the Company will continue to conserve cash while investing in its core operations.

The Company s management anticipates that the Company will be able to satisfy the cash requirements of its operations through at least the next twelve months with current cash resources. The Company anticipates that further equity financings, and/or asset sales and license agreements will be necessary to continue to fund operations in the future.

Recent Financing Activity:

On December 11, 2009, the Company sold an aggregate of 5,083,430 units in a private placement transaction with accredited investors. Each unit consisted of one share of Arrowhead Common Stock and a warrant to purchase an additional share of Common Stock exercisable at $0.509 per share. The unit price was $0.634, based upon the closing bid price on the Company s Common Stock on December 11, 2009, which was $0.509, plus $0.125 for the purchase of the warrant. The warrants became exercisable on June 12, 2010 and remain exercisable until December 11, 2014. The redemption feature provided for in the warrants has been met and may be called for redemption by the Company beginning on December 12, 2010. Gross proceeds of the offering were approximately $3.2 million.

On June 17, 2010, the Company executed definitive agreements for a private placement offering with certain institutional and accredited investors, by which the Company sold 6,592,989 units consisting of one share of the Company s common stock and a warrant to purchase 0.5 shares of Common Stock, exercisable at $1.65 per share. The unit price was $1.312 per unit. The warrants become exercisable on December 22, 2010 and remain exercisable until December 22, 2015. The Company received gross proceeds of approximately $8.7 million, and net proceeds of approximately $7.9 million, after deduction of placement agent commissions and offering fees and expenses.

Off-Balance Sheet Arrangements

As of September 30, 2010, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a Smaller Reporting Company, we are not required to provide this information.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this item is included in Item 15 of this Annual Report Form 10-K.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES.

Our Chief Executive Officer and our Chief Financial Officer, after evaluating our disclosure controls and procedures (as defined in Securities Exchange Act of 1934 (the Exchange Act) Rules 13a-15(e) and 15d-15(e)) as of the end of the period covered by this Annual Report on Form 10-K (the Evaluation Date) have concluded that as of the Evaluation Date, our disclosure controls and procedures are effective to ensure that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and to ensure that information required to be disclosed by us in such reports is accumulated and communicated to our management, including our chief executive officer and chief financial

officer where appropriate, to allow timely decisions regarding required disclosure.

Management s Annual Report on Internal Control over Financial Reporting

Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in

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accordance with generally accepted accounting principles in the United States. This process includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of the internal control over financial reporting to future periods are subject to risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

Management s Assessment of the Effectiveness of our Internal Control over Financial Reporting

Management has evaluated the effectiveness of our internal control over financial reporting as of September 30, 2010. In conducting its evaluation, management used the framework set forth in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our evaluation under such framework, management has concluded that our internal control over financial reporting was effective as of September 30, 2010.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting that occurred during the fourth quarter of the year ended September 30, 2010, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION
None

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT.
Board of Directors:

The names and ages of our directors serving as of September 30, 2010 are provided below. Directors are elected annually for a one year term. Biographical information regarding these officers is set forth under the following table.

Name	Age	Position with Arrowhead
Christopher Anzalone	41	Chief Executive Officer & President and Director
R. Bruce Stewart	72	Executive Chairman of the Board
Mauro Ferrari	51	Director
Edward W. Frykman	74	Director
Douglass Given (1)	58	Director
Charles P. McKenney	72	Director

(1) Douglass Given was appointed to the Board of Directors on November 23, 2010

Dr. Christopher Anzalone has been President, Chief Executive Officer and Director of the Company since December 1, 2007. In 2005, Dr. Anzalone formed and served as CEO of the Benet Group LLC, private equity firm focused on creating and building new nano-biotechnology

companies from university-generated science. While at The Benet Group, Dr. Anzalone was founding CEO in two portfolio companies, Nanotope Inc., a tissue regeneration company, and Leonardo Biosystems Inc., a cancer drug delivery company. Dr. Anzalone remains CEO of Nanotope. Prior to his tenure at Benet Group, from 1999 until 2003, he was a partner at the Washington, DC-based private equity firm Galway Partners, LLC, where he was in charge of sourcing, structuring, and building new business ventures and was founding CEO of NanoInk, Inc., a leading nanolithography company. Dr. Anzalone holds a Ph.D. in Biology from UCLA and a B.A. in Government from Lawrence University. We believe Dr. Anzalone s qualifications to serve on the Board include his deep understanding of the business through his role as Chief Executive Officer; in addition Dr. Anzalone has extensive experience in nanotechnology, biotechnology, company-building and venture capital.

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R. Bruce Stewart has been Executive Chairman of the Board of the Company since December 1, 2007. Mr. Stewart was Arrowhead s Chief Executive Officer and Chairman of the Board of the Company from January 2004 to November 30, 2007. Mr. Stewart was the Chairman of the Board of Arrowhead s predecessor company since its inception in May 2003 and devoted much of his time from early in 2003 to development of its plan of operations. Mr. Stewart founded Acacia Research Corporation in March 1991, and was employed by Acacia Research Corporation in various capacities until January 2003, serving as its President from inception through January 1997, Chairman until April 2000, and as a senior advisor until January 2003. We believe Mr. Stewart s qualifications to serve on the Board includes his long tenure as Chief Executive Officer and as a member of the Board during which time he gained an extensive understanding of the Company s operations, strategy and finances, as well as his extensive experience in the field of finance.

Dr. Mauro Ferrari was appointed to the Arrowhead Board of Directors in 2010. Dr. Ferrari is the President and CEO of The Methodist Hospital Research Institute (TMHRI). He is also the President of The Alliance for NanoHealth. Dr. Ferrari is an internationally recognized expert in nanomedicine and biomedical nanotechnology. Prior to assuming leadership of TMHRI, Dr. Ferrari was Professor and Chairman of The Department of NanoMedicine and Biomedical Engineering at The University of Texas Health Science Center at Houston, Professor of Experimental Therapeutics at the MD Anderson Cancer Center, Adjunct Professor of Bioengineering at Rice University, and Adjoint Professor of Biomedical Engineering at the University of Texas in Austin. His previous academic appointments include professorships at UC Berkeley and Ohio State University.

From 2003 to 2005, he served as Special Expert on Nanotechnology and Eminent Scholar at The National Cancer Institute, where he led in the development of the NCI s program in Nanotechnology, which remains the largest program in NanoMedicine in the world. Dr. Ferrari has been serving as the Editor-in-Chief for Biomedical Microdevices: BioMEMS and Biomedical Nanotechnology since 1997. We believe Dr. Ferrari s qualifications to serve on the Board include his extensive training and experience in the fields of nanotechnology, biotechnology and biomedical applications. Dr. Ferrari has significant technical training, several academic appointments and numerous published articles and patents. Additionally, Dr. Ferrari has extensive experience in developmental stage organizations having founded several startup companies.

Edward W. Frykman has been a director of the Company since January 2004. Mr. Frykman was an Account Executive with Crowell, Weedon & Co., a position he held from 1992 until 2008 when he retired. Before his service at Crowell, Weedon & Co., Mr. Frykman served as Senior Vice President of L.H. Friend & Co. Both Crowell Weedon & Co. and L.H. Friend & Co. are investment brokerage firms located in Southern California. In addition, Mr. Frykman was a Senior Account Executive with Shearson Lehman Hutton, where he served as the Manager of the Los Angeles Regional Retail Office of E. F. Hutton & Co. Mr. Frykman was a director in Arrowhead s predecessor company since its inception in May 2003 until January 2004, when he became a director of the Company. Mr. Frykman is also a director of Acacia Research Corporation, a publicly-held corporation based in Newport Beach, California. We believe Mr. Frykman s qualifications to serve on the Board include his long tenure as a member of the Board which enabled Mr. Frykman to gain a deep understanding of the company s operations, strategy and finances. Mr. Frykman also has extensive experience in the fields of finance and public company oversight.

Douglass Given, MD, PhD, MBA, is an Investment Partner at Bay City Capital and has been with the firm since October 2000. He was formerly Chief Executive Officer and a director of NeoRx, Corporate Sr. Vice President and Chief Technical Officer of Mallinckrodt, and Chief Executive Officer and a director of Progenitor and Mercator Genetics. He held positions as Vice President at Schering Plough Research Institute, Vice President at Monsanto/G.D. Searle Research Laboratories, and Medical Advisor at Lilly Research Laboratories. Dr. Given is the Chairman of VIA Pharmaceuticals, and Chairman of Vivaldi Biosciences. He is Chairman of the Visiting Committee to the Division of Biological Sciences and the Pritzker School of Medicine at the University of Chicago, a member of the Johns Hopkins Bloomberg School of Public Health Advisory Board, and a member of the Harvard School of Public Health AIDS Initiative International Advisory Council.

Dr. Given holds an MD with honors and a PhD from the University of Chicago, and an MBA from the Wharton School, University of Pennsylvania. He was a fellow in Internal Medicine and Infectious Diseases at Harvard Medical School and Massachusetts General Hospital. We believe Dr. Given s qualifications to serve on the Board include his extensive experience in finance and business transactions, particularly investments in the life sciences industry as well as directorship roles in start-up biotechnology companies. Dr. Given also has significant leadership roles, including CEO and Senior Vice President, at several large pharmaceutical companies.

Charles P. McKenney has been a director of the Company since April 2004. Mr. McKenney has maintained a government affairs law practice in Pasadena, California since 1989, representing businesses and organizations in their relations with state and local government regarding their obligations under state and local land use and trade practices laws. From 1973 through 1989, he served as Attorney for Corporate Government Affairs for Sears, Roebuck and Co., helping organize and carry out Sears s western state and local government relations programs. Mr. McKenney has served two terms on the Pasadena, California, City Council as well as on several city boards and committees, including three city Charter Reform Task Forces. We believe Mr. McKenney s qualifications to serve on the Board include his long tenure as a member of the Board resulting in a deep understanding in the Company s operations, strategy and finances. Mr. McKenney also has extensive experience providing strategic legal and advisory services to developmental stage organizations.

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Executive Officers:

The names and ages of our executive officers and the positions held by each are as follows:

Name	Age	Position with Arrowhead
Christopher Anzalone	41	Chief Executive Officer & President and Director
R. Bruce Stewart	72	Executive Chairman of the Board
Kenneth A. Myszkowski	44	Chief Financial Officer
Mark Tilley	50	President & CEO, Unidym, Inc.
John Miller	32	Vice President, Business Development

Dr. Christopher Anzalone (see Board of Directors)

R. Bruce Stewart (see Board of Directors)

Kenneth A. Myszkowski, Chief Financial Officer, joined Arrowhead in 2009. Prior to joining Arrowhead, Mr. Myszkowski served as the corporate controller for Broadwind Energy, a public energy company which provides products and services to the wind energy industry. Previous to his position at Broadwind, Mr. Myszkowski was controller for Epcor USA, the U.S. headquarters for Epcor Utilities, Inc., a public energy company. Prior to Epcor, Mr. Myszkowski was controller for two start-up ventures: NanoInk, specializing in Dip Pen Nanolithography, a nanofabrication technology, and Delphion, which provided on-line tools for intellectual property research. Mr. Myszkowski also held several corporate roles at FMC Corporation, and Premark International, both Fortune 500 conglomerates. He began his career in the audit practice of Arthur Andersen & Co. in Chicago, Illinois. Mr. Myszkowski received his undergraduate degree from the University of Illinois, and his MBA from the University of Chicago Booth School of Business. He is a certified public accountant.

Mark Tilley, President and Chief Executive Officer, Unidym, a majority-owned subsidiary of the Company. Prior to joining Arrowhead, he spent 9 years at DSM N.V.; a Netherlands-based specialty performance materials and life sciences company. Most recently, he served as Senior Investment Manager with DSM s Corporate Venturing Arm and served on the boards of CreAgri, Novomer, Van Technologies, Harland Medical Systems and InMat. Prior to his work with DSM Ventures, Dr. Tilley was Vice President of Research and Business Development for DSM Desotech, an operating division of DSM that is the global market leader in fiber optic coatings and stereo lithographic resins. During his tenure, he led marketing and technical teams, and built a nano-enabled flat panel displays materials business that was acquired by JSR in 2005. Dr. Tilley also co-founded Kriya Materials B.V., a venture capital backed nano-materials and coatings company based in the Netherlands.

John Miller, Vice President, Business Development joined Arrowhead in May 2004 and has been instrumental in monitoring the intellectual property landscape and licensing patents held by Arrowhead and its subsidiaries, as well as identifying and developing new business ideas for Arrowhead. Mr. Miller founded NanoPolaris (now Unidym) and guided its development through the acquisition of three nanotechnology companies. Prior to joining the Company, from 2002 until 2004, Mr. Miller was a founder and Managing Editor of Nanotechnology Law & Business, a peer-reviewed, quarterly journal. He has published various articles on legal and policy issues in nanotechnology and co-authored The Handbook of Nanotechnology Business, Policy, and Intellectual Property Law (John Wiley, 2004). John is a member of the California bar and federal courts in the Northern District of California. He graduated Order of the Coif from Stanford Law School.

Section 16(a) Beneficial Ownership Reporting Compliance

Under Section 16(a) of the Securities Exchange Act of 1934, the Company s directors and officers and its significant stockholders (defined by statute as stockholders beneficially owning more than ten percent (10%) of the Common Stock) are required to file with the SEC and the Company reports of ownership, and changes in ownership, of common stock. Based solely on a review of the reports received by it, the Company believes that, during the fiscal year ended September 30, 2010, all of its officers, directors and significant stockholders complied with all applicable filing requirements under Section 16(a) except as follows: Form 3 for Ken Myszkowski was not filed timely to report his initial ownership position when he was appointed Chief Financial Officer of the Company, and Form 4s for Edward W. Frykman, Leroy T. Rahn and Charles P. McKenney were not filed timely for automatic director grants on June 16, 2010.

Code of Ethics

We have adopted a code of conduct that applies to our Chief Executive Officer, Chief Financial Officer, and to all of our other officers, directors and employees. The code of conduct is available at the Corporate Governance section of the Investor Relations page on our website at www.arrowheadresearch.com. Any waivers from or amendments to the code of conduct, if any, will be posted on our website.

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Corporate Governance

The Audit Committee of the Board is currently comprised of three directors and operates under a written charter adopted by the Board. The members of the Audit Committee are Edward W. Frykman, Charles P. McKenney and Douglass Given. All members of the Audit Committee are independent, as defined in Rule 10A-3 under the Exchange Act and Rule 4200(a)(14) of the NASDAQ Marketplace Rules, and financially literate. The Board has determined that Mr. Frykman is an audit committee financial expert in accordance with the applicable regulations.

ITEM 11. EXECUTIVE COMPENSATION.

Executive Officers

Summary Compensation Table

The following table summarizes compensation paid, awarded or earned for services rendered during fiscal 2010 and fiscal 2009 by our Chief Executive Officer, and our two most highly paid executive officers serving the Company as of September 30, 2010. We refer to those persons collectively as our Named Executive Officers .

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($)(1)	All Other Compensation ($)(2)	Total ($)
Christopher Anzalone President & Chief Executive Officer	2010	400,000			307,133		707,133
	2009	394,485			967,296		1,316,781
Ken Myszkowski Chief Financial Officer	2010	185,096	27,419		36,520	1,731	250,766
	2009						
Mark Tilley President and CEO of Unidym, Inc.	2010	192,000			43,522	1,538	237,060
	2009	170,665			112,054		282,719

(1) Amounts shown do not reflect compensation actually received by the named executive officer. Instead, the amounts are shown are the compensation cost recognized by the Company, as determined pursuant to FASB guidance. The assumptions used to calculate the value of the stock underlying the option awards are set forth in Note 10 of the Notes to the Consolidated Financial Statements attached hereto.

(2) Amounts consist of 401(k) matching contributions.

Outstanding Equity Awards at Fiscal Year-End

The following table provides information, with respect to the Named Executive Officers, concerning the Outstanding Equity Awards of the Company s stock as of September 30, 2010.

	Option Awards (1)			
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date

Christopher Anzalone	25,000		2.13	6/11/2018
	499,884	626,616	0.51	10/8/2019
	140,813	422,437	0.52	3/4/2020
	10,417	489,583	0.99	8/16/2020
Ken Myszkowski	44,268	205,732	0.70	11/16/19
	20,000	60,000	0.52	3/4/2020
	2,500	117,500	0.99	8/16/2020
Mark Tilley	25,000		1.11	10/23/2018
	62,569	78,431	0.51	10/8/2019
	25,000	75,000	0.52	3/4/2020
	2,500	117,500	0.99	8/16/2020

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(1) All option awards were granted under the 2000 Stock Option Plan or the 2004 Equity Incentive Plan of the Company. Options are priced at the market closing price on the day of the award. Options have various vesting parameters, but generally vest within 48 months or less after the award is granted.

Director Compensation

Directors who are also employees of the Company receive no separate compensation from the Company for their service as members of the Board. Non-employee directors currently receive a cash retainer of $20,000 per year. Additionally, non-employee directors who have served on the Board for at least six months receive an automatic grant of non-qualified stock options to purchase 40,000 shares of common stock upon re-election each year. Dr. Ferrari has waived his right to cash compensation and has waived his right to received stock option grants. The following table sets forth the total compensation paid to our non-employee directors in fiscal 2010.

Name	Fee Earned or Paid in Cash ($) (1)	Option Awards ($) (2) (3)	Total ($)
Edward Frykman	$ 20,000	$ 37,718	$ 57,718
Leroy Rahn (4)	$ 20,000	$ 37,718	$ 57,718
Charles McKenney	$ 20,000	$ 40,181	$ 60,181
Mauro Ferrari	$	$ 35,771	$ 35,771
Douglass Given (5)	$	$	$

(1) Each non-employee director received $5,000 per quarter for his service as a director. There are no additional payments for being a member of a committee. Mr. Ferrari and Mr. Given have declined to receive cash compensation.

(2) Amounts shown do not reflect compensation actually received by directors. Instead, the amounts shown are the fair value recognized by the Company in fiscal 2010 for option awards as determined pursuant to FASB guidance. The assumptions used to calculate the value of option awards are set forth under Note 10 to the Consolidated Financial Statements attached hereto.

(3) Annual option grant to non-employee directors vest one year from date of grant. At September 30, 2010, Mr. Frykman had outstanding option grants to purchase 265,000 shares at prices ranging from $0.49 to $2.02; Mr. Rahn had outstanding option grants to purchase 265,000 shares at prices ranging from $0.49 to $2.02; Mr. McKenney has outstanding option grants to purchase 240,000 shares at prices ranging from $0.49 to $2.02; and Mr. Ferrari had outstanding option grants to purchase 248,438 shares at prices ranging from $0.96 to $2.87.

(4) Mr. Rahn resigned as a director of the Company on August 17, 2010.

(5) Mr. Given was appointed to the Board of Directors on November 23, 2010.

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ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The following table sets forth the beneficial ownership of the Company s Common Stock as of November 30, 2010, by (i) each of the named executive officers named in the table under Executive Compensation and Related Information, (ii) each director, (iii) all current directors and executive officers as a group, and (iv) the sole holder of greater than 5% of our total shares outstanding known to us. The persons and entities named in the table have sole voting and investment power with respect to all shares beneficially owned, subject to community property laws, where applicable and the address of each stockholder is c/o Arrowhead Research Corporation, 201 South Lake Avenue, Suite 703, Pasadena, California 91101.

	Number and Percentage of Shares Beneficially Owned (1)	
	Shares	**Percentage**
5% Beneficial Owners		
M. Robert Ching (2)	7,108,863	9.9%
Executive Officers and Directors		
R. Bruce Stewart (3)	1,107,794	1.5%
Chris Anzalone (4)	1,647,376	2.3%
Kenneth Myszkowski (5)	123,433	*
Mark Tilley (6)	174,097	*
Edward Frykman (7)	234,684	*
Charles McKenney (8)	135,300	*
Leroy Rahn (9)	164,684	*
Mauro Ferrari (10)	267,948	*
All executive officers and directors as a group (8 persons) (11)	3,855,316	5.4%

* Less than 1%

(1) Based on 71,806,694 common shares issued and outstanding as of November 30, 2010. Shares not outstanding but deemed beneficially owned by virtue of the right of a person to acquire them as of November 30, 2010, or within sixty days of such date, are treated as outstanding only when determining the percentage owned by such individual and when determining the percentage owned by a group.

(2) Includes 2,558,026 shares issuable upon the exercise of common stock purchase warrants that are exercisable within 60 days of November 30, 2010.

(3) Includes 596,294 shares issuable upon the exercise of stock options that are exercisable within 60 days of November 30, 2010.

(4) Includes 983,918 shares issuable upon the exercise of stock options, and 321,729 shares issuable upon the exercise of common stock purchase warrants that are exercisable within 60 days of November 30, 2010.

(5) Includes 108,433 shares issuable upon the exercise of stock options that are exercisable within 60 days of November 30, 2010.

(6) Includes 163,297 shares issuable upon the exercise of stock options, and 5,400 shares issuable upon the exercise of common stock purchase warrants that are exercisable within 60 days of November 30, 2010.

(7) Includes 164,684 shares issuable upon the exercise of stock options that are exercisable within 60 days of November 30, 2010.

(8) Includes 125,100 shares issuable upon the exercise of stock options that are exercisable within 60 days of November 30, 2010.

(9) Includes 164,684 shares issuable upon the exercise of stock options that are exercisable within 60 days of November 30, 2010.

(10) Includes 248,438 shares issuable upon the exercise of stock options that are exercisable within 60 days of November 30, 2010.

(11) Includes 2,554,848 shares issuable upon the exercise of stock options, and 327,129 shares issuable upon the exercise of common stock purchase warrants that are exercisable within 60 days of November 30, 2010.

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EQUITY COMPENSATION PLAN INFORMATION

The following table provides information as of September 30, 2010 with respect to shares of our Common Stock that may be issued under our equity compensation plans.

	Equity Compensation Plan Information		
Plan Category	**Number of securities to be issued upon exercise of outstanding options, warrants and rights**	**Weighted average exercise price of outstanding options, warrants and rights**	**Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))**
Equity compensation plans approved by security holders (1)	8,123,338	$ 1.06	3,140,097
Equity compensation plans not approved by security holders	N/A	N/A	
Total	8,123,338		3,140,097

(1) Includes 6,591,338 shares subject to the 2004 Equity Incentive Plan and 1,532,000 shares subject to the 2000 Option Plan.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

A majority of the members of the Board are independent directors, as defined by the NASDAQ Marketplace Rules. The Board has determined that all of the Company s directors are independent, except Mr. Stewart, the Company s Executive Chairman and former Chief Executive Officer and Dr. Anzalone, the Company s Chief Executive Officer. Independent directors do not receive consulting, legal or other fees from the Company, other than Board compensation.

Nanotope and Leonardo were co-founded by the Company s President and Chief Executive Officer, Dr. Christopher Anzalone, through The Benet Group, since dissolved, and Dr. Anzalone owns approximately 14.2% and 15.9% of the outstanding voting securities of Nanotope and Leonardo, respectively. Dr. Anzalone does not hold options, warrants or any other rights to acquire securities of Nanotope or Leonardo. Dr. Anzalone has the right to appoint a representative to the Board of Directors of each Nanotope and Leonardo. Dr. Anzalone is serving as the President and Chief Executive Officer of Nanotope. Dr. Anzalone has not received any compensation for his work on behalf of Nanotope or Leonardo since joining the Company on December 1, 2007.

On December 11, 2009, the Company sold an aggregate of 5,083,430 units in a private placement transaction with accredited investors. Each unit consisted of one share of Arrowhead Common Stock and a warrant to purchase an additional share of Common Stock exercisable at $0.509 per share. The unit price was $0.634, based upon the closing bid price on the Company s Common Stock on December 11, 2009, which was $0.509, plus $0.125 for the purchase of the warrant, Dr. Anzalone, Arrowhead s President and CEO, participated in this transaction on the same terms, investing $100,000.

During fiscal 2010, a portion of Arrowhead employee salary costs, including Dr. Anzalone s salary and administrative overhead was charged to Nanotope and Leonardo for management and administrative services provided by Arrowhead to Nanotope and Leonardo. During fiscal 2010, the charge for services provided to Nanotope and Leonardo were $166,204 and $250,190, respectively. In addition, Arrowhead made cash advances to Nanotope of $300,000 during fiscal 2010. The majority of the balance due Arrowhead is expected to be repaid in cash or converted to equity

in fiscal 2011. In addition, the CEO of Leonardo, Bruce Given, is the brother of Doug Given, a member of Arrowhead s Board of Directors; Doug Given has no financial interest in Leonardo.

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ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The Audit Committee regularly reviews and determines whether specific projects or expenditures with our independent auditors, Rose, Snyder & Jacobs (RS&J), may potentially affect their independence. The Audit Committee s policy is to pre-approve all audit and permissible non-audit services provided by RS&J. Pre-approval is generally provided by the Audit Committee for up to one year, detailed to the particular service or category of services to be rendered and is generally subject to a specific budget. The Audit Committee may also pre-approve additional services of specific engagements on a case-by-case basis. All engagements of our independent registered public accounting firm in 2010 and 2009 were pre-approved by the audit committee.

The following table sets forth the aggregate fees invoiced by RS&J for the fiscal years ended September 30, 2010, and September 30, 2009:

	Year Ended September 30,	
	2010	2009
Audit fees (1)	$ 126,200	$ 117,000
Audit-related fees (2)	76,300	43,500
Tax fees (3)	47,050	56,900
All other fees (4)		57,500
Total	$ 249,550	$ 364,900

(1) Fees invoiced by RS&J include year-end audit and quarterly reviews of Form 10-Q.
(2) Fees invoiced by RS&J related to Arrowhead Comfort Letter and Consents, and other agreed-upon procedures.
(3) This category consists of professional services rendered by RS&J for tax return preparation.
(4) Fees in 2009 related to Sarbanes-Oxley compliance work.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

The following documents are filed as part of this Annual Report on Form 10-K:

(1) Financial Statements.

See Index to Financial Statements and Schedule on page F-1.

(2) Financial Statement Schedules.

See Index to Financial Statements and Schedule on page F-1. All other schedules are omitted as the required information is not present or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the consolidated financial statements or notes thereto.

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(3) Exhibits.

The following exhibits are filed (or incorporated by reference herein) as part of this Annual Report on Form 10-K:

Exhibit Number	Document Description
3.1	Certificate of Incorporation of InterActive, Inc., a Delaware corporation, dated December 15, 2000. (1)
3.2	Certificate of Amendment of Certificate of Incorporation of InterActive Group, Inc., dated December 12, 2003 (effecting, among other things a change in the corporation s name to Arrowhead Research Corporation). (2)
3.3	Certificate of Amendment to Certificate of Incorporation of Arrowhead Research Corporation, dated January 25, 2005. (3)
3.4	Certificate of Amendment to Certificate of Incorporation of Arrowhead Research Corporation, dated October 13, 2009. (18)
3.5	Bylaws. (1)
3.6	Amendment No. 1 to the Bylaws of Arrowhead Research Corporation. (19)
4.1	Form of Registration Rights Agreement, July and August 2009. (4)
4.2	Form of Registration Rights Agreement, dated December 11, 2009. (18)
4.3	Form of Warrant to Purchase Common Stock expiring January 24, 2011. (5)
4.4	Form of Common Stock Warrant expiring in July and August 2013. (6)
4.5	Form of Common Stock Warrant expiring in September 2013. (7)
4.6	Form of Warrant to Purchase Capital Stock expiring June 2014. (4)
4.7	Form of Warrant to Purchase Capital Stock expiring December 11, 2014. (18)
4.8	Form of Warrant to Purchase Common Stock expiring May 2017. (8)
4.9	Form of Warrant to Purchase Common Stock, dated June 2010. (21)
4.10	Form of Warrant to Purchase Shares of Capital Stock of Arrowhead Research Corporation expiring September 16, 2015. (23)
4.11	Form of Common Stock Certificate. (9)
10.1**	Arrowhead Research Corporation (fka InterActive, Inc.) 2000 Stock Option Plan. (1)
10.2**	Arrowhead Research Corporation 2004 Equity Incentive Plan, as amended. (24)
10.3**	Executive Incentive Plan, adopted December 12, 2006. (11)
10.4**	Compensation Policy for Non-Employee Directors, as amended. (11)
10.5**	Severance Agreement dated May 24, 2007 by and between Arrowhead and R. Bruce Stewart. (8)
10.6**	Amendment to Severance Agreement between Arrowhead and R. Bruce Stewart, effective May 12, 2009. (18)
10.7**	Employment Agreement, between Arrowhead and Dr. Christopher Anzalone, dated June 11, 2008. (12)
10.8**	Amendment to Employment Agreement between Arrowhead and Dr. Christopher Anzalone, effective May 12, 2009. (18)
10.9	Insert Therapeutics, Inc. Amended and Restated Investors Rights Agreement, dated April 17, 2008. (13)
10.10	Second Amended and Restated Investors Rights Agreement, dated as of July 23, 2008, by and between Nanotope, Inc. and the Investors and Stockholders listed therein. (14)
10.11	Form of Unsecured Convertible Promissory Note Agreement dated November 26, 2008. (15)
10.12	Exchange Agreement dated February 25, 2009 by and among Arrowhead and several holders of Unidym, Inc. Series A Preferred Stock. (16)
10.13	Form of Subscription Agreement dated July 17, 2009 and August 6, 2009. (4)

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10.14	Platform Agreement, dated as of June 23, 2009, by and between Calando Pharmaceuticals, Inc. and Cerulean Pharma Inc. (17)
10.15	IT-101 Agreement, dated as of June 23, 2009, by and between Calando Pharmaceuticals, Inc. and Cerulean Pharma, Inc. (17)
10.16	IP Transfer and Waiver Agreement, dated as of June 25, 2009, by and between Unidym, Inc. and TEL Venture Capital. (17)
10.17	Subscription Agreement for Series C-1 Preferred Stock, dated as of June 25, 2009, by and between Arrowhead Research Corporation and Unidym, Inc. (17)
10.18	Exchange Agreement, dated as of June 25, 2009, by and between Arrowhead Research Corporation and TEL Venture Capital. (17)
10.19	Subscription Agreement for Series C-1 Preferred Stock, dated as of July 30, 2009, by and between Arrowhead Research Corporation and Unidym, Inc. (17)
10.20	Form of Subscription Agreement, dated as of September 30, 2009, by and between Arrowhead Research Corporation and Unidym, Inc. (18)
10.21	Second Amended and Restated Investors Rights Agreement among Unidym, Inc., Investors and the stockholders party thereto, dated September 30, 2009. (18)
10.22	Form of Subscription Agreement between Arrowhead Research Corporation and certain investors dated December 11, 2009. (19)
10.23**	Amendment to Employment Agreement between Arrowhead and R. Bruce Stewart, effective May 27, 2010. (20)
10.24	Form of Subscription Agreement between Arrowhead and certain Investors, dated June 17, 2010. (21)
10.25	Series D Preferred Stock Purchase Agreement between Arrowhead and Unidym, Inc., dated June 29, 2010. (22)
10.26	Form of Exchange Agreement between Arrowhead and certain stockholders, dated September 16, 2010. (23)
21.1	List of Subsidiaries.*
23.1	Consent of Independent Public Registered Accounting Firm.*
24.1	Power of Attorney (contained on signature page)
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
32.1	Certification by Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*
32.2	Certification by Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*

* Filed herewith

** Indicates compensation plan, contract or arrangement.
Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.

(1) Incorporated by reference from the Schedule 14C, filed by the registrant on December 22, 2000.
(2) Incorporated by reference from the Schedule 14C, filed by the registrant on December 22, 2003.
(3) Incorporated by reference from the Quarterly Report on Form 10-QSB for the quarter ended December 31, 2004, filed by the registrant on February 11, 2005.
(4) Incorporated by reference from the Current Report on Form 8-K, filed by the registrant on July 17, 2009.
(5) Incorporated by reference from the Current Report on Form 8-K, filed by registrant on January 18, 2006.
(6) Incorporated by reference from the Current Report on Form 8-K, filed by the registrant on August 26, 2008.

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(7) Incorporated by reference from the Current Report on Form 8-K, filed by the registrant on September 11, 2008.
(8) Incorporated by reference from the Current Report on Form 8-K, filed by the registrant on May 30, 2007.
(9) Incorporated by reference from Amendment No. 2 to the Registration Statement on Form S-1, filed by the registrant on September 11, 2009.
(10) Incorporated by reference from the definitive Schedule 14C filed by registrant on September 4, 2009.
(11) Incorporated by reference from the Annual Report on Form 10-K, filed by the registrant on December 14, 2006.
(12) Incorporated by reference from the Current Report on Form 8-K, filed by the registrant on June 13, 2008.
(13) Incorporated by reference from the Current Report on Form 8-K, filed by the registrant on April 23, 2008.
(14) Incorporated by reference from the Current Report on Form 8-K, filed by the registrant on July 25, 2008.
(15) Incorporated by reference from the Current Report on Form 8-K, filed by the registrant on December 3, 2008.
(16) Incorporated by reference from the Quarterly Report on Form 10-Q, filed by the registrant on May 15, 2009.
(17) Incorporated by reference from the Quarterly Report on Form 10-Q, filed by the registrant on August 10, 2009.
(18) Incorporated by reference from the Annual Report on Form 10-K, filed by the registrant on December 22, 2009.
(19) Incorporated by reference from the Current Report on Form 8-K, filed by the registrant on April 27, 2010.
(20) Incorporated by reference from the Current Report on Form 8-K, filed by the registrant on May 28, 2010.
(21) Incorporated by reference from the Current Report on Form 8-K, filed by the registrant on June 18, 2010.
(22) Incorporated by reference from the Current Report on Form 8-K, filed by the registrant on July 2, 2010.
(23) Incorporated by reference from the Current Report on Form 8-K, filed by the registrant on September 22, 2010
(24) Incorporated by reference from the Schedule 14C, filed by the registrant on April 30, 2010.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized, on this 22nd day of December 2010.

ARROWHEAD RESEARCH CORPORATION

By: /s/ Christopher Anzalone
Christopher Anzalone

Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

Signature	Title	Date
/s/ Christopher Anzalone **Christopher Anzalone**	Chief Executive Officer, President and Director (Principal Executive Officer)	December 22, 2010
/s/ Kenneth A. Myszkowski **Kenneth A. Myszkowski**	Chief Financial Officer (Principal Financial and Accounting Officer)	December 22, 2010
/s/ Edward W. Frykman **Edward W. Frykman**	Director	December 22, 2010
/s/ Mauro Ferrari **Mauro Ferrari**	Director	December 22, 2010
/s/ Douglass Given **Douglass Given**	Director	December 22, 2010
/s/ Charles P. Mckenney **Charles P. McKenney**	Director	December 22, 2010
/s/ R. Bruce Stewart **R. Bruce Stewart**	Executive Chairman & Director	December 22, 2010

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INDEX TO FINANCIAL STATEMENTS AND SCHEDULE

As a result of the change in control resulting from the stock exchange transaction (the Share Exchange) with the owners of Arrowhead Research Corporation, a California corporation (ARC), the financial statements of the Company are deemed to be the historical financial statements of ARC.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Arrowhead Research Corporation

We have audited the accompanying consolidated balance sheets of Arrowhead Research Corporation (a Delaware corporation) and Subsidiaries (the Company) as of September 30, 2010 and 2009 and the related consolidated statements of operations, stockholders equity and cash flows for the years ended September 30, 2010, and 2009 and for the period from May 7, 2003 (inception) through September 30, 2010. These consolidated financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Arrowhead Research Corporation and Subsidiaries as of September 30, 2010 and 2009, and the consolidated results of their operations and their cash flows for the years ended September 30, 2010 and 2009, and for the period from May 7, 2003 (inception) through September 30, 2010 in conformity with accounting principles generally accepted in the United States of America.

Rose, Snyder & Jacobs

A Corporation of Certified Public Accountants

Encino, California

December 17, 2010

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Arrowhead Research Corporation and Subsidiaries

(A Development Stage Company)

Consolidated Balance Sheets

	September 30, 2010	September 30, 2009
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	$ 6,847,162	$ 2,020,224
Trade receivable, net of allowance for doubtful accounts of $90,789 at September 30, 2010 and $30,789 at September 30, 2009	58,864	144,148
Other receivables	871,819	3,109
Prepaid expenses	239,097	316,074
Other current assets	114,833	
TOTAL CURRENT ASSETS	8,131,775	2,483,555
PROPERTY AND EQUIPMENT		
Computers, office equipment and furniture	335,784	374,991
Research equipment	752,850	932,683
Software	150,445	150,445
Leasehold improvements	78,594	94,317
	1,317,673	1,552,436
Less: Accumulated depreciation and amortization	(1,176,404)	(1,025,392)
NET PROPERTY AND EQUIPMENT	141,269	527,044
OTHER ASSETS		
Rent deposit	34,735	109,648
Patents	2,046,836	2,362,460
Investment in Nanotope Inc., equity basis	1,812,927	2,032,467
Investment in Leonardo Biosystems Inc., at cost	187,000	187,000
TOTAL OTHER ASSETS	4,081,498	4,691,575
TOTAL ASSETS	**$ 12,354,542**	**$ 7,702,174**
LIABILITIES AND STOCKHOLDERS EQUITY		
CURRENT LIABILITIES		
Accounts payable	$ 681,563	$ 1,013,281
Accrued expenses	471,236	420,077
Accrued payroll and benefits	191,425	160,846
Accrued severance	23,500	23,500
Capital lease obligation		726,534
Derivative liability	2,408,522	
Note payable	500,000	
TOTAL CURRENT LIABILITIES	4,276,246	2,344,238
LONG-TERM LIABILITIES		
Note payable		500,000

TOTAL LONG-TERM LIABILITIES		500,000
Commitments and contingencies		
STOCKHOLDERS EQUITY		
Arrowhead Research Corporation shareholders equity:		
Preferred stock, $0.001 par value; 5,000,000 shares authorized; no shares issued or outstanding		
Common stock, $0.001 par value; 145,000,000 shares authorized; 71,720,137 and 56,411,774 shares issued and outstanding as of September 30, 2010 and September 30, 2009, respectively	71,735	56,428
Additional paid-in capital	119,716,834	110,070,327
Subscription receivable		(300,000)
Accumulated deficit during the development stage	(110,742,867)	(104,968,819)
Total Arrowhead Research Corporation stockholders equity	9,045,702	4,857,936
Noncontrolling interest	(967,406)	
TOTAL STOCKHOLDERS EQUITY	8,078,296	4,857,936
TOTAL LIABILITIES AND STOCKHOLDERS EQUITY	**$ 12,354,542**	**$ 7,702,174**

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

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Arrowhead Research Corporation and Subsidiaries

(A Development Stage Company)

Consolidated Statements of Operations

	Year Ended September 30,		May 7, 2003 (Inception) to
	2010	2009	September 30, 2010
REVENUE	**$ 620,097**	**$ 3,758,147**	**$ 8,127,736**
OPERATING EXPENSES			
Salaries	4,297,930	8,010,099	44,332,468
Consulting	514,041	1,461,351	8,346,198
General and administrative expenses	3,183,077	4,567,091	26,247,904
Research and development	1,111,473	8,892,516	54,731,631
Patent amortization	315,625	387,095	2,102,091
TOTAL OPERATING EXPENSES	**9,422,146**	**23,318,152**	**135,760,292**
OPERATING LOSS	(8,802,049)	(19,560,005)	(127,632,556)
OTHER INCOME (EXPENSE)			
Loss on equity of investments - Nanotope	(219,540)	(225,804)	(560,073)
Gain on sale of stock in subsidiary			2,292,800
Gain on sale of equity of investments - Ensysce		700,000	700,000
Gain/(loss) on sale of fixed assets, net	10,881	(77,374)	(66,493)
Realized and unrealized gain in marketable securities			382,264
Interest income (expense), net	(48,025)	(155,560)	2,761,930
Change in value of derivative liability	1,761,385		1,761,385
Other income	(87,032)	174,253	90,858
TOTAL OTHER INCOME	**1,417,669**	**415,515**	**7,362,671**
LOSS FROM CONTINUING OPERATIONS	**(7,384,380)**	**(19,144,490)**	**(120,269,885)**
Gain/(loss) from discontinued operations	(2,658)	(163,962)	(7,567,525)
Gain/(loss) on disposal of discontinued operations	430,000		789,375
INCOME (LOSS) FROM DISCONTINUED OPERATIONS	**427,342**	**(163,962)**	**(6,778,150)**
Provision for income taxes			(1,600)
NET LOSS	(6,957,038)	(19,308,452)	(127,049,635)
Less: Net loss attributable to noncontrolling interests	1,182,990	60	16,470,728
NET LOSS ATTRIBUTABLE TO ARROWHEAD	**$ (5,774,048)**	**$ (19,308,392)**	**$ (110,578,907)**
Earnings per share - basic and diluted:			
Loss from continuing operations attributable to Arrowhead common shareholders	$ (0.10)	$ (0.43)	
Income from discontinued operations attributable to Arrowhead common shareholders	0.01		
Net loss attributable to Arrowhead shareholders	$ (0.09)	$ (0.43)	

Weighted average shares outstanding - basic and diluted	64,342,448	45,169,015

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

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Arrowhead Research Corporation and Subsidiaries

(A Development Stage Company)

Consolidated Statement of Stockholders Equity

from inception to September 30, 2010

	Common Stock				Accumulated Deficit		
	Shares	Amount	Additional Paid-in Capital	Subscription Receivable	during the Development Stage	Noncontrolling interest	Totals
Initial Issuance of Stock:							
Common stock & warrants issued for cash @ $0.001 per unit	3,000,000	$ 3,000	$	$	$	$	$ 3,000
Common stock & warrants issued for cash @ $1.00 per unit	1,680,000	1,680	1,678,320				1,680,000
Stock issuance cost charged to additional paid-in capital			(168,000)				(168,000)
Net loss for period from inception to September 30, 2003					(95,238)		(95,238)
Balance at September 30, 2003	**4,680,000**	**4,680**	**1,510,320**		**(95,238)**		**1,419,762**
Exercise of stock options	75,000	75	14,925				15,000
Common stock & warrants issued for cash @ $1.00 per unit	475,000	475	474,525				475,000
Common stock & warrants issued for marketable securities @ $1.00 per unit	500,000	500	499,500				500,000
Stock issuance cost charged to additional paid-in capital			(96,500)				(96,500)
Common stock and warrants issued for cash @ $1.50 per unit	6,608,788	6,609	9,906,573				9,913,182
Common stock issued in reverse acquisition	705,529	706	(151,175)				(150,469)
Common stock issued as a gift for $1.09 per share	150,000	163	162,587				162,750
Common stock and warrants issued as stock issuance cost @ $1.50 per unit	356,229	356	533,988				534,344
Stock issuance cost charged to additional paid-in capital			(991,318)				(991,318)
Exercise of stock option @ $0.20 per share	75,000	75	14,925				15,000
Exercise of stock options @ $1.00 per share	6,000	6	5,994				6,000
Stock-based compensation			175,653				175,653
					(2,528,954)	1,777,699	(751,255)

Net loss for the year ended September 30, 2004						
Balance at September 30, 2004	**13,631,546**	**13,645**	**12,059,997**	**(2,624,192)**	**1,777,699**	**11,227,149**
Exercise of warrants @ $1.50 per share	13,812,888	13,813	20,705,522			20,719,335
Exercise of stock options @ $1.00 per share	25,000	25	24,975			25,000
Common stock issued to purchase Insert Therapeutics share @ $3.98 per share	502,260	502	1,999,498			2,000,000
Common stock issued for services	12,500	12	49,988			50,000
Stock-based compensation			508,513			508,513
Change in percentage of ownership in subsidiary			230,087			230,087
Net loss for the year ended September 30, 2005				(6,854,918)	121,491	(6,733,427)
Balance at September 30, 2005	**27,984,194**	**27,997**	**35,578,580**	**(9,479,110)**	**1,899,190**	**28,026,657**
Exercise of stock options	115,794	116	341,421			341,537
Common stock issued @ $4.88 per share	204,854	205	999,795			1,000,000
Common stock issued @ $3.84 per share	15,000	15	57,585			57,600
Common stock issued @ $3.50 per share	5,590,000	5,590	19,539,410			19,545,000
Common stock issued @ $5.91 per share	25,364	25	149,975			150,000
Common stock issued to purchase Calando Pharmaceuticals, Inc. @ $5.17 per share	208,382	208	1,077,125			1,077,333
Stock-based compensation			1,369,478			1,369,478
Net loss for the year ended September 30, 2006				(18,997,209)	(964,752)	(19,961,961)
Balance at September 30, 2006	**34,143,588**	**34,156**	**59,113,369**	**(28,476,319)**	**934,438**	**31,605,644**
Exercise of stock options	186,164	186	434,541			434,727
Common stock issued @ $5.78 per share, net	2,849,446	2,849	15,149,366			15,152,215
Arrowhead s increase in proportionate share of Insert Therapeutics equity			2,401,394			2,401,394
Common stock issued for purchase of Carbon Nanotechnologies, Inc. @ $3.77 per share	1,431,222	1,431	5,398,569			5,400,000
Stock-based compensation			2,175,544			2,175,544
Net loss for the year ended September 30, 2007				(29,931,118)	(781,829)	(30,712,947)
Balance at September 30, 2007	**38,610,420**	**38,622**	**84,672,783**	**(58,407,437)**	**152,609**	**26,456,577**
Exercise of stock options	105,357	106	289,921			290,027
Common stock issued at approximately $1.80 per share, net	3,863,989	3,867	6,956,718			6,960,585

Arrowhead s increase in proportionate share of Unidym s equity			1,720,962			1,720,962
Common stock issued @ $2.72 per share to Rice University	50,000	50	135,950			136,000
Common stock issued @ $2.83 per share to purchase shares of Unidym, Inc.	70,547	71	199,929			200,000
Common stock issued @ $2.95 per share to purchase MASA Energy, LLC	105,049	105	309,895			310,000
Common stock issued @ $2.19 per share to Unidym for the acquisition of Nanoconduction	114,155	114	249,886			250,000
Common stock issued @ $2.18 per share	15,000	15	32,685			32,700
Stock-based compensation			3,187,397			3,187,397
Net loss for the year ended September 30, 2008				(27,089,030)	(152,609)	(27,241,639)
Balance at September 30, 2008	**42,934,517**	**42,950**	**97,756,126**	**(85,496,467)**		**12,302,609**
Common Stock issued @ $0.55 per share to Unidym stockholder in exchange for Unidym s shares	2,058,393	2,059	1,131,617			1,133,676
Common Stock issued @ $0.52 per share to TEL Ventures in exchange for Unidym s shares	2,222,222	2,222	1,156,111			1,158,333
Reclassification of former Unidym mezzanine debt to equity			2,000,000			2,000,000
Arrowhead s increase in proportionate share of Calando s equity			2,120,250			2,120,250
Common stock issued @ $0.30 per share	9,196,642	9,197	2,749,796			2,758,993
Change in percentage of ownership in subsidiary			16,297			16,297
Stock-based compensation			2,676,170			2,676,170
Issuance of Series D Preferred Stock for Subscription in Unidym			300,000	(300,000)		
Amortization of discount on Unidym Series D Preferred Stock			163,960	(163,960)		
Net loss for the year ended September 30, 2009				(19,308,392)		(19,308,392)
Balance at September 30, 2009	**56,411,774**	**56,428**	**110,070,327**	**(300,000)**	**(104,968,819)**	**4,857,936**
Exercise of stock options	6,875	7	7,624			7,631
Issuance of Series D Preferred Stock for Subscription in Unidym				300,000		300,000
Issuance of Unidym s common stock to minority shareholders			245,345		54,655	300,000

Common stock issued @ $0.63 per share	5,083,430	5,083	3,217,813				3,222,896
Common stock issued @ $1.312 per share	6,592,989	6,593	3,692,078				3,698,671
Common Stock issued to Calando stockholders in exchange for Calando s shares	1,220,000	1,220	(160,667)			159,447	
Common Stock issued to Unidym stockholders in exchange for Unidym s shares	153,176	153	(1,435)			1,282	
Stock-based compensation			1,582,149				1,582,149
Exercise of warrants	2,251,893	2,251	1,063,600			200	1,066,051
Net loss for the year ended September 30, 2010					(5,774,048)	(1,182,990)	(6,957,038)
Balance at September 30, 2010	**71,720,137**	**$ 71,735**	**$ 119,716,834**	**$**	**$ (110,742,867)**	**$ (967,406)**	**$ 8,078,296**

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

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Arrowhead Research Corporation and Subsidiaries

(A Development Stage Company)

Consolidated Statements of Cash Flows

	Year ended September 30,		May 7, 2003 (Date of inception) to September 30, 2010
	2010	2009	
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net Loss	$ (6,957,038)	$ (19,308,452)	$ (127,049,635)
Plus: Net loss attributable to noncontrolling interests	1,182,990	60	16,470,728
Net loss attributable to Arrowhead	(5,774,048)	(19,308,392)	(110,578,907)
(Income)/loss from discontinued operation	(427,342)	163,962	6,779,750
Realized and unrealized gain on investment		(700,000)	(1,082,263)
Gain from sale of subsidiary			(306,344)
(Gain)/loss on disposal of fixed assets	(10,881)	77,374	66,493
Stock issued as gift to Caltech			162,750
Stock issued as gift to Rice University			136,000
Stock issued for professional services			232,700
Stock issued for in-process research and development			13,166,347
Change in percentage of ownership in subsidiary		16,297	16,297
Change in value of derivative liability	(1,761,385)		(1,761,385)
Purchased in-process research and development - Nanoconduction		2,292,009	2,685,208
Stock-based compensation	1,582,149	2,676,170	11,674,904
Depreciation and amortization	654,689	994,604	5,392,334
Gain on sale of stock in subsidiary			(2,292,800)
Non-cash loss from equity investment	219,540	225,804	560,073
Noncontrolling interest	(1,182,990)	(60)	(17,470,916)
Gain on renegotiation of accrued severance		(726,500)	(726,500)
(Increase) decrease of cash flow from:			
Receivables	85,282	(60,658)	(62,815)
Other receivables	(868,710)		(868,710)
Other prepaid expenses	76,978	64,859	(241,574)
Other current assets	(114,833)		(114,833)
Deposits	74,913	144,641	(36,795)
Accounts payable	(331,718)	(328,659)	47,694
Accrued expenses	51,158	(326,536)	81,699
Accrued severance and other liabilities	30,579	(318,448)	958,614
NET CASH USED IN OPERATING ACTIVITIES OF CONTINUING OPERATIONS	(7,696,619)	(15,113,533)	(93,582,979)
CASH FLOWS FROM INVESTING ACTIVITIES OF CONTINUING OPERATIONS:			
Purchase of marketable securities - US Treasury Bills			(18,575,915)
Purchase of property and equipment	(5,407)	(40,245)	(3,555,925)
Purchase of MASA Energy, LLC			(250,000)
Minority equity investment			(2,000,000)
Cash paid for interest in Nanotechnica			(4,000,000)
Cash paid for interest in Aonex			(5,000,000)
Cash paid for interest in Insert			(10,150,000)
Cash paid for interest in Calando		(800,000)	(8,800,000)

Cash paid for interest in Unidym		(2,137,003)	(14,138,003)
Cash paid/obtained for interest in Tego		1,700,000	(801,000)
Cash obtained from interest in Nanotechnica			4,000,000
Cash obtained from interest in Aonex			5,001,250
Cash obtained from interest in Insert			10,529,594
Cash obtained from interest in Calando		800,000	8,800,000
Cash obtained from interest in Unidym		2,137,003	14,138,003
Cash paid/obtained from interest in Tego		(1,700,000)	801,000
Proceeds from sale of marketable securities - US Treasury Bills			18,888,265
Proceeds from sale of investments		700,000	1,269,913
Proceeds from sale of subsidiary (net)			359,375
Proceeds from sale of fixed assets	63,000	79,375	142,375
Payment for patents			(303,440)
Restricted cash			50,773
NET CASH PROVIDED BY (USED IN) INVESTING ACTIVITIES OF CONTINUING OPERATIONS	57,593	739,130	(3,593,735)
CASH FLOWS FROM FINANCING ACTIVITIES OF CONTINUING OPERATIONS:			
Payments of capital leases	(726,534)	(810,456)	(1,677,000)
Proceeds from issuance of Calando debt		2,516,467	2,516,467
Proceeds from sale of stock in subsidiary			