#### U.S. SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

#### FORM 10-K/A

#### x AMENDMENT NO. 1 TO THE ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2008

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

Commission file number: 0-21214

# ORTHOLOGIC CORP. (Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 86-0585310 (IRS Employer Identification No.)

1275 West Washington Street, Suite 101, Tempe, Arizona 85281 (Address of principal executive offices) Registrant's telephone number including area code: (602) 286-5520

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

Title of each class

Name of each exchange on which registered

NASDAQ Global Market

NASDAQ Global Market

Common Stock, par value \$.0005 per share

Rights to purchase 1/100 of a share of Series A Preferred Stock

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by 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 check mark if the registrant is not required to file reports pursuant to Section 13 or Section 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  $\ddot{}$ .

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "small reporting company" in Rule 12b-2 of the Exchange Act. Large accelerated filer " Accelerated filer " Non-accelerated filer " Ion not check if a smaller reporting company) 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 the voting and non-voting common equity held by non-affiliates of the registrant, based upon the closing sale price of the registrant's common stock as reported on the NASDAQ Global Market on June 30, 2008 was approximately \$40,300,000. Shares of common stock held by each officer and director and by each person who owns 10% or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily conclusive.

Documents incorporated by reference: Portions of the registrant's proxy statement related to its 2009 annual meeting of stockholders to be held on May 8, 2009 are incorporated by reference into Part III of this Form 10-K.

The number of outstanding shares of the registrant's common stock on February 28, 2009 was 40,775,411.

#### EXPLANATORY NOTE

OrthoLogic Corp. is filing this Amendment No. 1 on Form 10-K/A (this "Form 10-K/A"), which amends its Annual Report on Form 10-K for the year ended December 31, 2008, as originally filed with the Securities and Exchange Commission on March 13, 2009 (the "Original Filing"), for the purpose of correcting the Report of Independent Registered Public Accounting Firm to remove reference to the work of other auditors. The unqualified opinion expressed in the Report of Independent Registered Public Accounting Firm remains unchanged.

Other than the revision described above, the inclusion of an updated Consent of Independent Registered Public Accounting Firm, attached as Exhibit 23.1 hereto, and the updated certifications of our Principal Executive Officer and Principal Financial and Accounting Officer, pursuant to Sections 302 and 906 of the Sarbanes Oxley Act of 2002, attached as Exhibits 31.1, 31.2 and 32.1 hereto, this Form 10-K/A contains no other changes to the Original Filing.

This Form 10-K/A continues to describe conditions as of the date of the Original Filing, and we have not updated the disclosures contained herein, other than as described above, to reflect events that have occurred subsequent to that date. Other events occurring after the date of the Original Filing or other information necessary to reflect subsequent events will be disclosed in reports filed with the SEC subsequent to the Original Filing.

#### ORTHOLOGIC CORP. dba Capstone Therapeutics FORM 10-K/A ANNUAL REPORT YEAR ENDED DECEMBER 31, 2008

#### TABLE OF CONTENTS

PAGE

PART I		2
<u>Item 1.</u>	Business	2 2
Item 1A.	Risk Factors	7
Item 1B.	Unresolved Staff Comments	17
<u>Item 2.</u>	Properties	17
<u>Item 3.</u>	Legal Proceedings	17
<u>Item 4.</u>	Submission of Matters to a Vote of Security Holders	17
PART II		17
<u>Item 5.</u>	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchase of Equity Securities	17
<u>Item 6.</u>	Selected Financial Data	18
<u>Item 7.</u>	Management's Discussion and Analysis of Financial Condition	21
	and Results of Operations	•
Item 7A.	Quantitative and Qualitative Disclosures about Market Risk	26
<u>Item 8.</u>	Financial Statements and Supplementary Data	26
<u>Item 9.</u>	Changes in and Disagreements with Accountants on	26
	Accounting and Financial Disclosure	
<u>Item 9A(T).</u>	Controls and Procedures	27
Item 9B.	Other Information	27
PART III		27
<u>Item 10.</u>	Directors, Executive Officers and Corporate Governance	27
<u>Item 11.</u>	Executive Compensation	28
<u>Item 12.</u>	Security Ownership of Certain Beneficial Owners and	28
	Management and Related Stockholders Matters	
<u>Item 13.</u>	Certain Relationships and Related Transactions, and Director Independence	28
<u>Item 14.</u>	Principal Accountant Fees and Services	28
PART IV		28
<u>Item 15.</u>	Exhibits and Financial Statement Schedules	28
<u>SIGNATURES</u>		S-1
EXHIBIT INDEX		E-1
FINANCIAL STATEMENTS		F-1
		• •

# Table of Contents

# PART I

Item 1.

Business

Overview of the Business

On October 1, 2008, OrthoLogic Corp. began doing business under the trade name of Capstone Therapeutics.

OrthoLogic Corp., referred to herein as "OrthoLogic", "Capstone Therapeutics", "Capstone", "the Company", "we", "us", or " a biotechnology company committed to developing a pipeline of novel therapeutic peptides aimed at helping patients with under-served medical conditions. The Company is focused on development and commercialization of two product platforms: AZX100 and Chrysalin® (TP508 or rusalatide acetate).

AZX100

AZX100, a novel 24-amino acid peptide, is believed to relax smooth muscle which modulates blood pressure and the function of blood vessels, airways, sphincters, the gastrointestinal tract and the genitourinary tract. Sustained abnormal contraction of any of these muscles is called a spasm. Any disorders known to be associated with excessive constriction or inadequate dilation of smooth muscle represent potential applications for AZX100.

AZX100 is also believed to inhibit the fibrotic phenotype of fibroblasts and smooth muscle cells in a mechanism similar to that which causes vasorelaxation. Through phenotypic modulation of fibroblasts and smooth muscle cells, AZX100 may inhibit the scarring that results from wound healing and may mitigate fibrotic disease states in the dermis, blood vessels, lungs, liver and other organs.

AZX100 is currently being evaluated for medically and commercially significant applications, such as treatment of pulmonary disease, prevention of hypertrophic and keloid scarring and intimal hyperplasia. We are executing a development plan for this peptide which included filing an IND for dermal scarring in 2007 and commencement of Phase 1 safety studies in this indication in the first quarter of 2008. Our Phase 1a study was completed in May 2008. The study's Safety Committee reviewing all safety-related aspects of the Phase 1a trial was satisfied with the profile of AZX100. We initiated a second safety study in dermal scarring (Phase 1b), which was completed in the fourth quarter of 2008. The study's Safety Committee reviewing all safety-related aspects of the Phase 1b trial was satisfied with the profile of AZX100. The Company is preparing to initiate Phase 2 human clinical efficacy studies of AZX100 in dermal scarring in the first quarter of 2009. We expect to continue to perform further pre-clinical studies supporting multiple indications for AZX100 in 2009.

#### Chrysalin

Chrysalin (TP508), a novel synthetic 23-amino acid peptide, is believed to produce angiogenic and other tissue repair effects in part by 1) activating or upregulating endothelial nitric oxide synthase (eNOS); 2) cytokine modulation resulting in an anti-inflammatory effect; 3) inhibiting apoptosis (programmed cell death); and 4) modulating angiogenic factors. It may have therapeutic value in diseases associated with endothelial dysfunction.

We have conducted clinical trials for two potential Chrysalin applications: acceleration of fracture repair and diabetic foot ulcer healing. We previously conducted a pilot human study for spine fusion, and pre-clinical testing for cartilage defect repair, cardiovascular repair, dental bone repair, and tendon repair. Currently, we are focusing our efforts on pre-clinical studies in vascular applications, such as acute myocardial infarction and chronic myocardial ischemia. If successful, these studies will provide additional support for partnering future development of Chrysalin. We are not currently planning additional pre-clinical studies in fracture repair, wound healing, spine fusion, cartilage

defect repair, dental bone repair or tendon repair.

# Table of Contents

# **Company History**

Prior to November 26, 2003, we developed, manufactured and marketed proprietary, technologically advanced orthopedic products designed to promote the healing of musculoskeletal bone and tissue, with particular emphasis on fracture healing and spine repair. Our product lines included bone growth stimulation and fracture fixation devices including the OL1000 product line, SpinaLogic® and OrthoFrame/Mayo, which we sometimes refer to as our "Bone Device Business."

On November 26, 2003, we sold our Bone Device Business.

On August 5, 2004, we purchased substantially all of the assets and intellectual property of Chrysalis Biotechnology, Inc. ("CBI"), including its exclusive worldwide license for Chrysalin for all medical indications. We became a development stage company commensurate with the acquisition. Subsequently, our efforts were focused on research and development of Chrysalin with the goal of commercializing our product candidates.

On February 27, 2006, we purchased certain assets and assumed certain liabilities of AzERx, Inc. Under the terms of the transaction, OrthoLogic acquired an exclusive license for the core intellectual property relating to AZX100.

Our development activities for Chrysalin and AZX100 represent a single operating segment as they share the same product development path and utilize the same Company resources. As a result, we have determined that it is appropriate to reflect our operations as one reportable segment. Through December 31, 2008, we have incurred \$113 million in net losses as a development stage company.

#### Competition

The biopharmaceutical industry is characterized by intense competition and confidentiality. We may not be aware of the other biotechnology, pharmaceutical companies or public institutions that are developing pharmaceuticals that compete with our potential products. We also may not be aware of all the other competing products our known competitors are pursuing. In addition, these biotechnology companies and public institutions compete with us in recruiting for research personnel and subjects, which may affect our ability to complete our research studies.

#### Chrysalin

#### Vascular Endothelial Dysfunction (VED)

Impaired nitric oxide (NO) production reduces the responsiveness of endothelial cells to angiogenic factors and causes loss of endothelial function in ischemic and inflamed blood vessels contributing to a number of chronic diseases. We hypothesize that Chrysalin may produce angiogenic and other tissue repair effects by activating or upregulating nitric oxide synthetase (NOS) in endothelial cells, and if so, that it may have potential therapeutic value in tissues and diseases exhibiting endothelial dysfunction. Currently, we are evaluating multiple VED indications for development potential. While the potential product markets are significant in size, the markets are characterized by intense competition by both large and small companies with a variety of competing technologies.

#### Table of Contents

Clinical indications associated with VED include the broad areas of coronary artery disease (CAD). Insufficient blood supply to the myocardium can result in myocardial ischemia, injury or infarction, or all three. Atherosclerosis of the larger coronary arteries is the most common anatomic condition that causes diminished coronary blood flow.

Pharmacologic therapies in development for acute myocardial infarction include stem cell-based approaches, selective kinase inhibitors, thrombin-activatable plasminogen and other peptides.

Pharmacologic therapies commonly used in treating myocardial ischemia include 1) aspirin and anticoagulants; 2) ß blockers; 3) nitrates; and 4) calcium channel blockers. Also, the use of angiotensin-converting enzyme (ACE) inhibitors recently has been shown to be beneficial in the treatment of myocardial ischemia. Invasive treatments such as percutaneous transluminal coronary angioplasty (PTCA) and coronary artery bypass surgery (CABG) may be indicated as well.

We are in the preliminary stages of examining these disease states and the suitability of Chrysalin as a therapeutic agent to treat vascular disorders.

#### AZX100

**Dermal Scarring** 

#### Approved

There is no approved pharmacologic treatment for scarless healing. In the setting of keloid or hypertrophic scarring the scars are often excised and treated with steroids with variable results.

#### In Development

Among potential competing products are recombinant transforming growth factor beta 3 (TGF ß3) and antiTGFß1 antibodies. Renovo is conducting Phase 3 clinical trials in Europe and the U.S. with recombinant TGFß3 (Juvista) for various scar prevention indications, including a recently accepted IND for keloid revisions. While preliminary efficacy has been shown in healing in healthy individuals, like other therapeutics, TGFß3 addresses upstream signaling and only one fibrotic pathway and may have limited effectiveness in scar inhibition. AZX100 inhibits fibrotic responses induced by multiple mediators, suggesting it may be more effective than TGFß3 at scarless healing. Renovo has also begun clinical trials using a TGFß1 antibody, which like TGFß3, blocks part of the signaling cascade resulting in scar formation. AZX100 may be more effective than TGFß1 antibodies through more comprehensive inhibition of multiple scarring cascades.

#### Asthma

Asthma ranks as the third highest reason for preventable hospitalizations in the U.S. with 470,000 hospitalizations and more than 5,000 deaths each year (American Academy of Allergy Asthma and Immunology Report). Acute asthma accounts for an estimated two-million emergency department visits annually. There are many competitors with asthma products approved or in development. AZX100 has been shown to relax ex vivo airway smooth muscle and may be developed for the treatment of asthmatic attacks. Specific markets include severe acute asthma and asthma that is refractory to current therapies. Severe asthma has been defined as asthma that is refractory to current therapies. Severe asthma has been defined as asthma that is refractory to current approach is to use adrenergic agonists, which activate the cAMP/PKA pathway. AZX100 is a mimetic of the molecule downstream of this pathway and hence may be more sensitive and specific for the treatment of severe asthma. In addition, patients with severe asthma usually are treated in an emergency room; hence efficacy can be closely monitored and outcomes

will be apparent in a short timeframe after treatment. Recent data has demonstrated that one out of every six asthmatics has a mutation in the adrenergic receptor. These patients do not respond to adrenergic agonists and in fact do worse when treated with adrenergic agonists. This patient population would be potentially effectively treated with the AZX100 compound in that it acts downstream of the receptors.

# Intimal Hyperplasia

Intimal hyperplasia is the universal response of a vessel to injury. It is characterized by the thickening of the Tunica intima of a blood vessel as a complication of a reconstruction procedure or endarterectomy, the surgical removal of plaque from an artery that has become narrowed or blocked. Scar tissue forms at the point where a blood vessel is manipulated; as it slowly builds up, significant restenosis may develop. Intimal hyperplasia is an important reason for late bypass graft failure, particularly in vein and synthetic vascular grafts. Patients with end-stage renal disease (approximately 300,000 in the U.S. alone) suffer from intimal hyperplasia due to multiple vein insertions. We are not aware of any existing therapy that effectively modulates this healing response.

#### Marketing and Sales

Neither Chrysalin nor AZX100 are currently available for sale and we do not expect them to be available for sale for some time into the future. Thus, we currently have no marketing or sales staff. External consultants and members of our staff provide some technical marketing support relating to the development of, and market need for, new potential products and additional therapeutic applications of products already under research.

#### Research and Development

Our Pre-clinical, Clinical, Chemical Materials and Controls, Regulatory and Quality Assurance departments (research and development) consist of approximately 18 employees who are assisted by consultants from the academic and medical practitioner fields. Our employees have extensive experience in the areas of biomaterials, animal modeling, cellular and molecular biology, clinical trial design and data management. Our Clinical department designs, initiates, monitors and manages our clinical trials. Our staff has been focused on clinical trials to advance AZX100 to NDA status in a dermal indication, pre-clinical studies investigating AZX100's potential for the treatment of pulmonary diseases and intimal hyperplasia, pre-clinical work on Chrysalin in vascular indications and exploring the science behind and potential of AZX100 and Chrysalin. We are executing a development plan for AZX100 which included filing an IND for dermal scarring in 2007 and commencement of Phase 1 safety studies in this indication in the first quarter of 2008. Our Phase 1a study was completed in May 2008. The study's Safety Committee reviewing all safety-related aspects of the Phase 1a trial was satisfied with the profile of AZX100. We initiated a second safety study in dermal scarring (Phase 1b), which was completed in the fourth quarter of 2008. The study's Safety Committee reviewing all safety-related aspects of the Phase 2 human clinical efficacy studies of AZX100 in dermal scarring in the first quarter of 2009.

We incurred \$10.7 million and \$9.6 million, in 2008 and 2007, respectively, on research efforts on Chrysalin and AZX100. Given the overlapping nature of our research efforts it is not possible to clearly separate research expenditures between Chrysalin and AZX100; however, the substantial majority of expenditures were AZX100 related in 2008 and 2007.

# Manufacturing

Currently, third parties certified under Good Manufacturing Practices manufacture Chrysalin and AZX100 for us in limited amounts for our clinical and pre-clinical studies. We use a primary manufacturer for the peptides used in our human clinical trials, but secondary manufacturers are available as needed. Our current Chrysalin and AZX100 formulation and manufacturing work is focused on an injectable formulation.

#### Patents, Licenses and Proprietary Rights

As part of our purchase of CBI on August 5, 2004, the license agreements between CBI and OrthoLogic for the development, use, and marketing of the therapeutic products utilizing Chrysalin were replaced by a direct license agreement between OrthoLogic and the University of Texas. Under this direct license, we expanded our current license for Chrysalin from a license for only orthopedic indications to a license for any and all indications. Subsequently, we entered into an agreement whereby the University of Texas assigned to us certain patents previously exclusively licensed to us. We must pay the University of Texas royalties on future sales of products, sublicense fees and various other fees in connection with filing and maintaining Chrysalin-related patents. This obligation will expire upon the expiration of the subject patents. Chrysalin has been patented in the United States and in some other countries for a number of methods of use, including cardiovascular, chronic wounds, and orthopedic indications. A composition of matter patent covering European countries expired in 2007 and the corresponding United States patent expires in 2011. Our other patents for Chrysalin expire between 2021 and 2026.

As part of the February 27, 2006 AzERx transaction, we acquired a license from AzTE, an affiliate of Arizona State University, for worldwide rights to AZX100 for all indications. Under the license agreement with AzTE, we are required to pay patent filing, maintenance and other related patent fees as well as royalties on future sales of products that contain AZX100. These obligations will end on the expiration of the last patent. The license is supported by patents that expire from 2021 to 2024.

As part of the February 27, 2006 AzERx transaction we also acquired a non-exclusive license from Washington University for transduction domain carrier patents which form part of AZX100. Under the license, we are required to pay license maintenance payments and royalties on future sales of products that contain the licensed technology. These obligations will end on the expiration of the last patent.

Chrysalin, Capstone Therapeutics and OrthoLogic are registered United States domestic trademarks of OrthoLogic Corp.

#### Insurance

Our business entails the risk of product liability claims. We maintain a product liability and general liability insurance policy and an umbrella excess liability policy. There can be no assurance that liability claims will not exceed the coverage limit of such policies or that such insurance will continue to be available on commercially reasonable terms or at all. Consequently, product liability claims or claims arising from our clinical trials could have a material adverse effect on our business, financial condition and results of operations. We have not experienced any material liability claims to date resulting from our clinical trials.

#### Employees

As of December 31, 2008, we had twenty-six permanent employees in our operations, including eighteen employees in research and development and eight in administration. As a research and development business, we believe that the success of our business will depend in part on our ability to identify, attract and retain qualified research personnel,

both as employees and as consultants. We face competition from private companies and public institutions for qualified research personnel. None of our employees are represented by a union and we consider our relationship with our employees to be good.

#### Table of Contents

Additional Information about OrthoLogic

OrthoLogic Corp. was incorporated as a Delaware corporation in July 1987 as IatroMed, Inc. We changed our name to OrthoLogic Corp. in July 1991. Effective October 1, 2008, OrthoLogic Corp. began doing business as Capstone Therapeutics. Our executive offices are located at 1275 West Washington Street, Suite 101, Tempe, Arizona 85281, and our telephone number is (602) 286-5520.

Our website address is www.capstonethx.com. Our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, as well as any amendments to those reports, are available free of charge through our website as soon as reasonably practical after we file or furnish them to the U.S. Securities and Exchange Commission. Once at our website, go to the "Investors" section to locate these filings.

In March 2004, we adopted a code of ethics that applies to all of our employees and has particular sections that apply only to our principal executive officer and senior financial officers. We posted the text of our code of ethics on our website in the "Investors" section of our website under "Code of Ethics." In addition, we will promptly disclose on our website (1) the nature of any amendment to our code of ethics that applies to our principal executive officer and senior financial officers, and (2) the nature of any waiver, including an implicit waiver, from a provision of our code of ethics that is granted to one of these specified officers, the name of such officer who is granted the waiver and the date of the waiver.

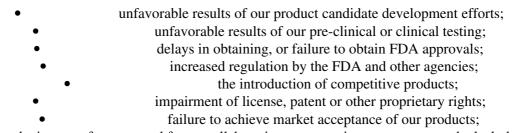
In this document, references to "we", "our" and the "Company" refer to OrthoLogic Corp., now doing business as Capstone Therapeutics. References to our "Bone Device Business" refer to our former business line of bone growth stimulation and fracture fixation devices, including the OL1000 product line, SpinaLogic®, OrthoFrame® and OrthoFrame/Mayo.

Item 1A.

**Risk Factors** 

Risks

The Company may from time to time make written or oral forward-looking statements, including statements contained in our filings with the Securities and Exchange Commission and our reports to stockholders. The safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995 protects companies from liability for their forward looking statements if they comply with the requirements of that Act. This Annual Report on Form 10-K contains forward-looking statements made pursuant to that safe harbor. These forward-looking statements relate to future events or to our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance or achievements by the use of words such as "may," "could," "expect," "intend," "plan," "seek," "anticipate," "believe," "estimate," "predict," "potential," "continu of these terms or other comparable terminology. You should not place undue reliance on forward-looking statements since they involve known and unknown risks, uncertainties and other factors which are, in some cases, beyond our control and which could materially affect actual results, levels of activity, performance or achievements. Factors that may cause actual results to differ materially from current expectations, which we describe in more detail in this section titled "Risks," include, but are not limited to:



- the impact of present and future collaborative or partnering agreements or the lack thereof;
   failure to successfully implement our drug development strategy; and
- failure in the future to meet the requirements for continued listing on the NASDAQ Markets.

If one or more of these or other risks or uncertainties materialize, or if our underlying assumptions prove to be incorrect, actual results may vary significantly from what we projected. Any forward-looking statement you read in this Annual Report on Form 10-K reflects our current views with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, business strategy and liquidity. We assume no obligation to publicly update or revise these forward-looking statements for any reason, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

#### Risks Related to Our Business

We are a biopharmaceutical company with no revenue generating operations and high investment costs.

We expect to incur losses for a number of years as we expand our research and development projects. Our current level of funds is not sufficient to support all research expenses to achieve commercialization of any of our product candidates. On November 26, 2003, we sold all of our revenue generating operations. We are now focused on developing and testing the product candidates of AZX100 and Chrysalin and have allocated most of our resources to bringing these product candidates to the market, either through clinical trials or partnering efforts. We may invest in other peptide or small molecule-based therapeutics in the future, but there can be no assurance that opportunities of this nature will occur at acceptable terms, conditions or timing. We currently have no pharmaceutical products being sold or ready for sale and do not expect to be able to introduce any pharmaceutical products for at least several years. As a result of our significant research and development, clinical development, regulatory compliance and general and administrative expenses and the lack of any products to generate revenue, we expect to incur losses for at least the next several years and expect that our losses will increase if we expand our research and development activities and incur significant expenses for clinical trials. Our cash reserves are the primary source of our working capital. There can be no assurance that our cash resources will be sufficient to cover our future operating requirements, or should there be a need, other sources of cash will be available, or if available, at acceptable terms.

We may not receive any revenue from our product candidates until we receive regulatory approval and begin commercialization of our product candidates. We cannot predict when that will occur or if it will occur.

We caution that our future cash expenditure levels are difficult to forecast because the forecast is based on assumptions about the number of research projects we pursue, the pace at which we pursue them, the quality of the data collected and the requests of the FDA to expand, narrow or conduct additional clinical trials and analyze data. Changes in any of these assumptions can change significantly our estimated cash expenditure levels.

Our product candidates have reached various stages of development but may not be successfully developed or commercialized.

If we fail to commercialize our product candidates, we will not be able to generate revenue. We currently do not sell any products. We have implemented a strategic shift in our development approach to our Chrysalin-based product candidates. We currently intend to pursue development partnering or licensing opportunities for our Chrysalin-based product candidates, a change from our previous development history of independently conducting human clinical trials necessary to advance our Chrysalin-based product candidates to market. Our product candidates have reached the following stages of development:

Chrysalin:

Acceleration of Fracture Repair Diabetic Foot Ulcer Healing	Phase 3 / Phase 2b human clinical trials Phase 1/2 human clinical trials
Spine Fusion	Phase 1/2 human clinical trials
Cartilage Defect Repair	Late stage pre-clinical trials
Tendon Repair	Early stage pre-clinical trials
Cardiovascular Rep	pair Pre-clinical trials
Dental Bone Repa	hir Pre-clinical trials

#### AZX100:

• Scarring

IND filed in 2007, Phases 1 and 1b safety studies completed in 2008.

We are subject to the risk that:

- the FDA finds some or all of our product candidates ineffective or unsafe;
  - we do not receive necessary regulatory approvals;
- we are unable to get some or all of our product candidates to market in a timely manner;
- we are not able to produce our product candidates in commercial quantities at reasonable costs;
- our products undergo post-market evaluations resulting in marketing restrictions or withdrawal of our products; or
  - the patients, insurance and/or physician community does not accept our products.

In addition, our product development programs may be curtailed, redirected or eliminated at any time for many reasons, including:

- adverse or ambiguous results;
- undesirable side effects which delay or extend the trials;
- inability to locate, recruit, qualify and retain a sufficient number of patients for our trials;

regulatory delays or other regulatory actions;

- difficulties in obtaining sufficient quantities of the particular product candidate or any other components needed for our pre-clinical testing or clinical trials;
  - change in the focus of our development efforts; and
     re-evaluation of our clinical development strategy.

We cannot predict whether we will successfully develop and commercialize any of our product candidates. If we fail to do so, we will not be able to generate revenue.

Our product candidates are all based on the same two chemical peptides, Chrysalin and AZX100. If one of our Chrysalin or AZX100 product candidates reveals safety or fundamental efficacy issues in clinical trials, it could impact the development path for our other current product candidates for that peptide.

Should the results of ongoing pre-clinical studies or human clinical trials show negative safety or efficacy data, it may impact the development of our AZX100 product candidates, or partnering opportunities for Chrysalin product candidates.

If we cannot protect the Chrysalin patents, the AZX100 patents, or our intellectual property generally, our ability to develop and commercialize our products will be severely limited.

Our success will depend in part on our ability to maintain and enforce patent protection for Chrysalin and AZX100 and each product resulting from Chrysalin or AZX100. Without patent protection, other companies could offer substantially identical products for sale without incurring the sizable discovery, development and licensing costs that we have incurred. Our ability to recover these expenditures and realize profits upon the sale of products would then be diminished.

Certain key Chrysalin methods of use patents have expired and other patents will expire during the development period of our Chrysalin product candidates. We believe our current patents covering formulations and specific indications are adequate to protect the value of the Chrysalin product candidates. However, if our current patents are not adequate, the value of our Chrysalin product candidates may be materially adversely impacted.

Chrysalin and AZX100 are patented and there have been no successful challenges to the patents. However, if there were to be a challenge to these patents or any of the patents for product candidates, a court may determine that the patents are invalid or unenforceable. Even if the validity or enforceability of a patent is upheld by a court, a court may not prevent alleged infringement on the grounds that such activity is not covered by the patent claims. Any litigation, whether to enforce our rights to use our or our licensors' patents or to defend against allegations that we infringe third party rights, will be costly, time consuming, and may distract management from other important tasks.

As is commonplace in the biotechnology and pharmaceutical industry, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. To the extent our employees are involved in research areas which are similar to those areas in which they were involved at their former employers, we may be subject to claims that such employees and/or we have inadvertently or otherwise used or disclosed the alleged trade secrets or other proprietary information of the former employers. Litigation may be necessary to defend against such claims, which could result in substantial costs and be a distraction to management and which may have a material adverse effect on us, even if we are successful in defending such claims.

We also rely in our business on trade secrets, know-how and other proprietary information. We seek to protect this information, in part, through the use of confidentiality agreements with employees, consultants, advisors and others. Nonetheless, we cannot assure that those agreements will provide adequate protection for our trade secrets, know-how or other proprietary information and prevent their unauthorized use or disclosure. The risk that other parties may breach confidentiality agreements or that our trade secrets become known or independently discovered by competitors, could adversely affect us by enabling our competitors, who may have greater experience and financial resources, to copy or use our trade secrets and other proprietary information in the advancement of their products, methods or technologies.

Our success also depends on our ability to operate and commercialize products without infringing on the patents or proprietary rights of others.

Third parties may claim that we or our licensors or suppliers are infringing their patents or are misappropriating their proprietary information. In the event of a successful claim against us or our licensors or suppliers for infringement of the patents or proprietary rights of others, we may be required to, among other things:

•	pay substantial damages;
٠	stop using our technologies;
•	stop certain research and development efforts;
•	develop non-infringing products or methods; and
•	obtain one or more licenses from third parties.

A license required under any such patents or proprietary rights may not be available to us, or may not be available on acceptable terms. If we or our licensors or suppliers are sued for infringement, we could encounter substantial delays in, or be prohibited from, developing, manufacturing and commercializing our product candidates.

The loss of our key management and scientific personnel may hinder our ability to execute our business plan.

As a small company our success depends on the continuing contributions of our management team and scientific personnel, and maintaining relationships with the network of medical and academic centers in the United States that conduct our clinical trials. The resignation or retirement of members of senior management or scientific personnel could materially adversely affect our business prospects.

Reliance on Outside Suppliers and Consultants

We rely on outside suppliers and consultants for the manufacture of Chrysalin and AZX100 and technical assistance in our research and development efforts. The inability of our suppliers to meet our production quality requirements in a timely manner, or the lack of availability of experienced consultants to assist in our research and development efforts, could have a material effect on our ability to perform research or clinical trials.

We face an inherent risk of liability in the event that the use or misuse of our products results in personal injury or death.

The use of our product candidates in clinical trials may expose us to product liability claims, which could result in financial losses. Our clinical liability insurance coverage may not be sufficient to cover claims that may be made against us. In addition, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts or scope to protect us against losses. Any claims against us, regardless of their merit, could severely harm our financial condition, strain our management and other resources and adversely impact or eliminate the prospects for commercialization of the product which is the subject of any such claim.

•

#### Risks of our Industry

We are in a highly regulated field with high investment costs and high risks.

Chrysalin has been in the human testing phase for three potential products and earlier pre-clinical testing phases for four other potential products. AZX100 has completed Phase 1 safety studies and Phase 2 dermal scarring efficacy studies are planned for early 2009. The FDA and comparable agencies in many foreign countries impose substantial limitations on the introduction of new pharmaceuticals through costly and time-consuming laboratory and clinical testing and other procedures. The process of obtaining FDA and other required regulatory approvals is lengthy, expensive and uncertain. Chrysalin and AZX100 are new drugs and are subject to the most stringent level of FDA review.

Even after we have invested substantial funds in the development of our Chrysalin and AZX100 products and even if the results of our future clinical trials are favorable, there can be no guarantee that the FDA will grant approval of Chrysalin and/or AZX100 for the indicated uses or that it will do so in a timely manner.

If we successfully bring one or more products to market, there is no assurance that we will be able to successfully manufacture or market the products or that potential customers will buy them if, for example, a competitive product has greater efficacy or is deemed more cost effective. In addition, the market in which we will sell any such products is dominated by a number of large corporations that have vastly greater resources than we have, which may impact our ability to successfully market our products or maintain any technological advantage we might develop. We also would be subject to changes in regulations governing the manufacture and marketing of our products, which could increase our costs, reduce any competitive advantage we may have and/or adversely affect our marketing effectiveness.

The pharmaceutical industry is subject to stringent regulation, and failure to obtain regulatory approval will prevent commercialization of our products.

Our research, development, pre-clinical and clinical trial activities and the manufacture and marketing of any products that we may successfully develop are subject to an extensive regulatory approval process by the FDA and other regulatory agencies in the United States and abroad. The process of obtaining required regulatory approvals for drugs is lengthy, expensive and uncertain, and any such regulatory approvals may entail limitations on the indicated usage of a drug, which may reduce the drug's market potential.

In order to obtain FDA approval to commercialize any product candidate, an NDA must be submitted to the FDA demonstrating, among other things, that the product candidate is safe and effective for use in humans for each target indication. Our regulatory submissions may be delayed, or we may cancel plans to make submissions for product candidates for a number of reasons, including:

- negative or ambiguous pre-clinical or clinical trial results;
  - changes in regulations or the adoption of new regulations;
    - unexpected technological developments; and
- developments by our competitors that are more effective than our product candidates.

Consequently, we cannot assure that we will make our submissions to the FDA in the timeframe that we have planned, or at all, or that our submissions will be approved by the FDA. Even if regulatory clearance is obtained, post-market evaluation of our products, if required, could result in restrictions on a product's marketing or withdrawal of a product from the market as well as possible civil and criminal sanctions.

#### Table of Contents

Clinical trials are subject to oversight by institutional review boards and the FDA to ensure compliance with the FDA's good clinical practice regulations, as well as other requirements for good clinical practices. We depend, in part, on third-party laboratories and medical institutions to conduct pre-clinical studies and clinical trials for our products and other third-party organizations to perform data collection and analysis, all of which must maintain both good laboratory and good clinical practices. If any such standards are not complied with in our clinical trials, the FDA may suspend or terminate such trial, which would severely delay and possibly end the development of a product candidate.

We also currently and in the future will depend upon third party manufacturers of our products, which are and will be required to comply with the applicable FDA Good Manufacturing Practice regulations. We cannot be certain that our present or future manufacturers and suppliers will comply with these regulations. The failure to comply with these regulations may result in restrictions in the sale of, or withdrawal of the products from the market. Compliance by third parties with these standards and practices are outside of our direct control.

In addition, we are subject to regulation under state and federal laws, including requirements regarding occupational safety, laboratory practices, environmental protection and hazardous substance control, and may be subject to other local, state, federal and foreign regulation. We cannot predict the impact of such regulations on us, although they could impose significant restrictions on our business and require us to incur additional expenses to comply.

If our competitors develop and market products that are more effective than ours, or obtain marketing approval before we do, our commercial opportunities will be reduced or eliminated.

Competition in the pharmaceutical and biotechnology industries is intense and is expected to increase. Several biotechnology and pharmaceutical companies, as well as academic laboratories, universities and other research institutions, are involved in research and/or product development for indications targeted for use by either Chrysalin or AZX100. Many of our competitors have significantly greater research and development capabilities, experience in obtaining regulatory approvals and manufacturing, marketing, financial and managerial resources than we have.

Our competitors may succeed in developing products that are more effective than the ones we have under development or that render our proposed products or technologies noncompetitive or obsolete. In addition, certain of such competitors may achieve product commercialization before we do. If any of our competitors develops a product that is more effective than one we are developing or plan to develop, or is able to obtain FDA approval for commercialization before we do, we may not be able to achieve significant market acceptance for certain products of ours, which would have a material adverse effect on our business.

For a summary of the competitive conditions relating to indications which we are currently considering for Chrysalin and AZX100, see Part I, Item 1 in this Report titled "Competition".

Our product candidates may not gain market acceptance among physicians, patients and the medical community, including insurance companies and other third party payors. If our product candidates fail to achieve market acceptance, our ability to generate revenue will be limited.

Even if we obtain regulatory approval for our products, market acceptance will depend on our ability to demonstrate to physicians and patients the benefits of our products in terms of safety, efficacy, and convenience, ease of administration and cost effectiveness. In addition, we believe market acceptance depends on the effectiveness of our marketing strategy, the pricing of our products and the reimbursement policies of government and third-party payors. Physicians may not prescribe our products, and patients may determine, for any reason, that our product is not useful to them. Insurance companies and other third party payors may determine not to reimburse for the cost of the therapy. If any of our product candidates fails to achieve market acceptance, our ability to generate revenue will be limited.

Healthcare reform and restrictions on reimbursements may limit our financial returns.

Our ability to successfully commercialize our products may depend in part on the extent to which government health administration authorities, private health insurers and other third party payors will reimburse consumers for the cost of these products. Third party payors are increasingly challenging both the need for, and the price of, novel therapeutic drugs and uncertainty exists as to the reimbursement status of newly approved therapeutics. Adequate third party reimbursement may not be available for our drug products to enable us to maintain price levels sufficient to realize an appropriate return on our investments in research and product development, which could restrict our ability to commercialize a particular drug candidate.

#### Risks Related to Our Common Stock and Warrants

If we fail to meet the requirements for continued listing on the NASDAQ Stock Markets, our common stock could be delisted from trading, which would adversely affect the liquidity of our common stock and our ability to raise additional capital.

Our common stock is currently listed on the NASDAQ Global Market. We are required to meet specified financial requirements to maintain our listing on the NASDAQ Stock Markets. One such requirement is that we maintain a minimum bid price of at least \$1.00 per share for our common stock. In 2008, our common stock closed at prices that are below the minimum bid price requirement and on August 11, 2008, we received a notice from NASDAQ, dated August 8, 2008, that the minimum bid price for our common stock had closed under \$1.00 per share for over 30 business days, causing a violation of the continuing listing standard of the NASDAQ Global Market. If, after the periods provided by NASDAQ rules, our stock price remains below the minimum bid price, or if we fail to satisfy any other continued listing requirement of the NASDAQ Stock Markets in the future, our common stock could be delisted from the NASDAQ Stock Markets. A delisting of our common stock from the NASDAQ Stock Markets would make it more difficult for our shareholders to sell our stock in the public market and would likely result in decreased liquidity and increased volatility for our common stock. Our securities may also trade at a lower market price than they otherwise would.

If we fail to satisfy any of the NASDAQ Stock Markets' continued listing requirements, we cannot assure you that we would be successful in regaining compliance with those requirements in the future. In the event of delisting, trading, if any, could continue to be conducted on the over the counter market in the so called "pink sheets" or on the OTC Bulletin Board. Selling our common stock would be more difficult because, among other things, smaller quantities of shares would likely be bought and sold, transactions could be delayed, security analysts' coverage of us could be reduced and shareholders may find it more difficult to obtain accurate quotations as to the market value of our common stock. Also, a delisting (or a notice or other action indicating the possible future delisting of our common stock) could have a material adverse effect on the price for our shares and our ability to issue additional securities or to secure additional financing. In addition, delisting from the NASDAQ Stock Markets may subject our common stock to "penny stock" rules under the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended. These rules impose additional sales practice and other requirements on broker-dealers who sell and/or make a market in securities deemed penny stocks under SEC rules. Consequently, the delisting of our securities and the applicability of the penny stock rules may adversely affect the liquidity and price of our common stock.

.

Our stock price is volatile and fluctuates due to a variety of factors.

Our stock price has varied significantly in the past (from a high of \$9.32 to a low of \$0.40 during the period of January 1, 2004 through December 31, 2008) and may vary in the future due to a number of factors, including:

- announcement of the results of, or delays in, preclinical and clinical studies;
  - fluctuations in our operating results;
  - developments in litigation to which we or a competitor is subject;
- announcements and timing of potential acquisitions, divestitures, capital raising activities or issuance of preferred stock;
  - announcements of technological innovations or new products by us or our competitors;
     FDA and other regulatory actions;
    - developments with respect to our or our competitors' patents or proprietary rights;
      - public concern as to the safety of products developed by us or others;
- changes in stock market analyst recommendations regarding us, other drug development companies or the pharmaceutical industry generally; and
  - failure in the future to meet the requirements for continued listing on the NASDAQ markets.

In addition, the stock market has from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the market price of our stock.

Additional authorized shares of our common stock available for issuance may have dilutive and other material effects on our stockholders.

We are authorized to issue 100,000,000 shares of common stock. As of December 31, 2008, there were 40,775,411 shares of common stock issued and outstanding. However, the total number of shares of our common stock issued and outstanding does not include shares reserved in anticipation of the exercise of options, warrants or additional investment rights. As of December 31, 2008, we had stock options outstanding to purchase approximately 2,990,304 shares of our common stock, the exercise price of which ranges between \$1.02 per share to \$7.83 per share, warrants outstanding to purchase 46,706 shares of our common stock with an exercise price of \$6.39, warrants outstanding to purchase 357,423 shares of our common stock with an exercise price of \$1.91, and we have reserved shares of our common stock for issuance in connection with the potential exercise thereof. To the extent additional options are granted and exercised or additional stock is issued, the holders of our common stock will experience further dilution. At December 31, 2008, 30,302 shares remain available to grant under the 2005 Equity Incentive Plan. In addition, in the event that any future financing or consideration for a future acquisition should be in the form of, be convertible into or exchangeable for, equity securities, investors will experience additional dilution.

Certain provisions of our amended and restated certificate of incorporation and bylaws will make it difficult for stockholders to change the composition of our board of directors and may discourage takeover attempts that some of our stockholders may consider beneficial.

Certain provisions of our amended and restated certificate of incorporation and bylaws may have the effect of delaying or preventing changes in control if our board of directors determines that such changes in control are not in the best interests of the Company and our stockholders. These provisions include, among other things, the following:

•

- a classified board of directors with three-year staggered terms;
- advance notice procedures for stockholder proposals to be considered at stockholders' meetings;
  - the ability of our board of directors to fill vacancies on the board;
    - a prohibition against stockholders taking action by written consent; and
- super majority voting requirements for the stockholders to modify or amend our bylaws and specified provisions of our amended and restated certificate of incorporation.

These provisions are not intended to prevent a takeover, but are intended to protect and maximize the value of our stockholders' interests. While these provisions have the effect of encouraging persons seeking to acquire control of our company to negotiate with our board of directors, they could enable our board of directors to prevent a transaction that some, or a majority, of our stockholders might believe to be in their best interests and, in that case, may prevent or discourage attempts to remove and replace incumbent directors. In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law, which prohibits business combinations with interested stockholders do not include stockholders whose acquisition of our securities is pre-approved by our board of directors under Section 203.

We may issue additional shares of preferred stock that have greater rights than our common stock and also have dilutive and anti-takeover effects.

We are permitted by our amended and restated certificate of incorporation to issue up to 2,000,000 shares of preferred stock. We can issue shares of our preferred stock in one or more series and can set the terms of the preferred stock without seeking any further approval from our common stockholders or other security holders. Any preferred stock that we issue may rank ahead of our common stock in terms of dividend priority or liquidation rights and may have greater voting rights than our common stock.

In connection with a Rights Agreement dated as of June 19, 2007 between us and the Bank of New York, (the "Rights Agreement"), our board approved the designation of 1,000,000 shares of Series A Preferred Stock. The Rights Agreement and the exercise of rights to purchase Series A Preferred Stock pursuant to the terms thereof may delay, defer or prevent a change in control because the terms of any issued Series A Preferred Stock would potentially prohibit our consummation of certain extraordinary corporate transactions without the approval of the Board. In addition to the anti-takeover effects of the rights granted under the Rights Agreement, the issuance of preferred stock, generally, could have a dilutive effect on our stockholders.

We have not previously paid dividends on our common stock and we do not anticipate doing so in the foreseeable future.

We have not in the past paid any dividends on our common stock and do not anticipate that we will pay any dividends on our common stock in the foreseeable future. Any future decision to pay a dividend on our common stock and the amount of any dividend paid, if permitted, will be made at the discretion of our board of directors.

-----

Developments in any of these areas, which are more fully described elsewhere in "Item 1 - Business," and "Item 7 - Management's Discussion and Analysis of Financial Condition and Results of Operations" could cause our results to differ materially from results that have been or may be projected by us.

Table of Contents	
Item 1B.	Unresolved Staff Comments
None.	
Item 2.	Properties
facility designed and constructed we leased prior to our November divestiture, we occupied approxocher companies. This lease ex 17,000 square feet of space in the	we leased a facility in Tempe, Arizona, which is an approximately 100,000 square foot d for industrial purposes and is located in an industrial district. It is the same facility er 2003 divestiture of our bone growth stimulation device business. Following the stimately 20% of the building capacity and subleased some portions of the building to pired December 31, 2007. In July 2007, we entered into a new five-year lease for the same Tempe facility, which became effective at the end of our current lease. We tained and adequate for use through the end of our lease term.
Item 3.	Legal Proceedings
None.	
Item 4.	Submission of Matters to a Vote of Security Holders
None.	

#### PART II

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

#### Market Information

Our common stock commenced trading on NASDAQ on January 28, 1993 and is currently trading on the NASDAQ Global Market under the symbol "CAPS." The following table sets forth, for the fiscal periods indicated, the range of high and low sales prices of our common stock.

		200	)8		2007				
	High			Low	High	Ι	LOW		
First									
Quarter	\$	1.34	\$	0.79	\$ 1.80	\$	1.35		
Second									
Quarter	\$	1.09	\$	0.79	\$ 1.64	\$	1.40		
Third									
Quarter	\$	0.99	\$	0.72	\$ 1.60	\$	1.35		
Fourth									
Quarter	\$	0.95	\$	0.40	\$ 1.59	\$	1.28		

As of February 28, 2009, 40,775,411 shares of our common stock were outstanding and held by approximately 982 stockholders of record.

Dividends.

We have never paid a cash dividend on our common stock. We do not intend to pay any cash dividends on our common stock in the foreseeable future.

Recent Sales of Unregistered Securities.

None.

Issuer Purchases of Equity Securities.

On March 5, 2008, we announced that our Board of Directors had approved a stock repurchase program for up to five percent of our then outstanding common shares. The shares may be repurchased from time to time in open market transactions or privately negotiated transactions at our discretion, subject to market conditions and other factors. There were approximately 41.8 million shares of common stock outstanding at March 5, 2008.

During the year ended December 31, 2008, we purchased a total of 1,131,622 shares at a total cost of \$1,041,000.

The following table summarizes information regarding shares purchased during the three months ended December 31, 2008.

	Total Number		Total number of shares purchased as part of publicly	Maximum number of shares that may yet be purchased
	of shares	Average price	announced	under the
		01	announceu	
Month	purchased	paid per share	program	program
November 1 - 30	18,804	\$ 0.48	18,804	
December 1 - 31	30,022	\$ 0.50	30,022	950,000

Item 6.

Selected Financial Data

#### SELECTED FINANCIAL DATA

The selected financial data for each of the five years in the period ended December 31, 2008, is derived from our audited financial statements. The selected financial data should be read in conjunction with the financial statements, related notes to the financial statements and other financial information appearing elsewhere in this annual report on Form 10-K and particularly the discussion in "Management's Discussion and Analysis of Financial Condition and Results of Operations." We sold our bone growth stimulation device business ("Bone Device Business") on November 26, 2003. On August 5, 2004, we purchased substantially all the assets and the intellectual property of CBI. We became a development stage company commensurate with the CBI acquisition. On February 27, 2006, we purchased certain assets and assumed certain liabilities of AzERx. The financial data as presented in the following schedule reflects the gain on the sale of the bone growth stimulation device business as discontinued operations and reflects the purchased net assets of CBI and AzERx from the dates of those respective acquisitions.

Research and Development expenses in 2004, 2005 and 2006 include expenditures related to Phase 3 and Phase 2b Chrysalin clinical trials in distal radial fracture.

On March 15, 2006, we reported results of our Phase 3 fracture repair human clinical trial. For the primary endpoint, time to removal of immobilization, no statistically significant difference was observed between placebo and a single injection of Chrysalin.

# Table of Contents

On August 29, 2006, we reported the results of interim analysis of data from our Phase 2b dose-ranging clinical trial of Chrysalin in unstable, displaced distal radius (wrist) fractures and termination of the Phase 2b study. In the dataset of 240 subjects as a group that were evaluable in the Phase 2b interim analysis, treatment with Chrysalin did not demonstrate benefit compared to placebo in the primary efficacy endpoint of time to removal of immobilization.

In 2006 we implemented a strategic shift in our development approach to our Chrysalin-based product candidates, to pursue development partnering or licensing opportunities for our Chrysalin-based product candidates, a change from our previous development history of independently conducting human clinical trials necessary to advance our Chrysalin-based product candidates to market.

Research and Development expenses in 2007 include regulatory required expenses related to the completion of the Phase 3 and Phase 2b distal radial fracture studies and expenses to file an IND in dermal scarring for AZX100. Research and Development expenses in 2008 include expenditures to complete Phase 1a and Phase 1b safety clinical trials in dermal scarring for AZX100.

#### STATEMENTS OF OPERATIONS DATA (A Development Stage Company) (in thousands, except per share amounts)

	Years Ended December 31,									
		2008		2007	,	2006(1)	,	2005(2)	2	.004(3)
Operating expenses										
General and administrative	\$	2,991	\$	3,738	\$	6,558	\$	4,910	\$	3,306
Research and development		10,693		9,641		19,661		25,444		17,116
Purchased in-process research and										
development		-		-		8,471		-		25,840
Other		-		-		-		(250)		(347)
Total operating expenses		13,684		13,379		34,690		30,104		45,915
Interest and other income, net		(2,082)		(3,278)		(3,883)		(2,640)		(1,464)
Loss from continuing operations before taxes		11,602		10,101		30,807		27,464		44,451
Income taxes expense (benefit)		(363)				1,106		(108)		(642)
Loss from continuing operations		11,239		10,101		31,913		27,356		43,809
Discontinued operations										
Net gain on the sale of the bone device										
business net of taxes \$0, \$0, \$0, \$96, (\$363)										
respectively		-		-		-		(154)		(2,048)
NET LOSS	\$	11,239	\$	10,101	\$	31,913	\$	27,202	\$	41,761
Per Share Information:								, i i i i i i i i i i i i i i i i i i i		
Net loss from continuing operations basic and										
diluted	\$	0.27	\$	0.24	\$	0.78	\$	0.72	\$	1.22
					,					
Net (income) from discontinued operations										
basic and diluted	\$	-	\$	-	\$	-	\$	-	\$	(0.06)
										(
Net loss basic and diluted	\$	0.27	\$	0.24	\$	0.78	\$	0.72	\$	1.16
					·					
Basic and diluted shares outstanding		41,078		41,644		40,764		38,032		35,899

1. Research and development expenses in 2006 include recognition of a \$2,100,000 Chrysalin patent cost impairment loss. Operating expenses in 2006 included \$8,471,000 of purchased in-process research and development costs associated with the AzERx acquisition in February 2006. Income tax expenses in 2006 included the recording of a \$1,106,000 valuation allowance for a deferred tax asset related to a Alternative Minimum Tax credit carryover.

- 2. Total operating expenses in 2005 were reduced by \$250,000 as a result of a final settlement payment received from the buyer of the CPM business. A net gain of \$154,000 was recognized on the sale of the Bone Device Business due to receipt of the entire escrow deposit outstanding.
- 3. On August 5, 2004, we completed the acquisition of CBI. OrthoLogic expensed in-process research and development and acquisition costs of \$25.8 million.

A net gain of \$2,048,000 was recognized on the sale of the Bone Device Business primarily due to a decrease in the risk related to the potential exposure of the representations and warranties provided in the governing asset purchase agreement.

#### BALANCE SHEET DATA (in thousands)

			Dec	cember 31,		
	2008	2007		2006	2005	2004
Working capital	\$ 44,865	\$ 37,684	\$	52,533	\$ 78,423	\$ 88,955
Total assets	\$ 49,514	\$ 61,862	\$	72,589	\$ 88,343	\$ 115,184
Long term liabilities, less current maturities	\$ -	\$ -	\$	-	\$ 183	\$ 137
Stockholders' equity	\$ 47,522	\$ 59,461	\$	69,148	\$ 84,178	\$ 110,930

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

#### **OVERVIEW OF BUSINESS**

#### **Company History**

Prior to November 26, 2003, we developed, manufactured and marketed proprietary, technologically advanced orthopedic products designed to promote the healing of musculoskeletal bone and tissue, with particular emphasis on fracture healing and spine repair. Our product lines included bone growth stimulation and fracture fixation devices including the OL1000 product line, SpinaLogic® and OrthoFrame/Mayo, which we sometimes refer to as our "Bone Device Business."

On November 26, 2003, we sold our Bone Device Business. Our principal business remains focused on tissue repair, although through biopharmaceutical approaches rather than through the use of medical devices.

On August 5, 2004, we purchased substantially all of the assets and intellectual property of Chrysalis Biotechnology, Inc. ("CBI"), including its exclusive worldwide license for Chrysalin for all medical indications. We became a development stage entity commensurate with the acquisition. Subsequently, all of our collective efforts were focused on research and development of our Chrysalin Product Platform, with the goal of commercializing our products. We currently own exclusive worldwide rights to Chrysalin.

On February 27, 2006 we purchased certain assets and assumed certain liabilities of AzERx, Inc. Under the terms of the transaction, we acquired an exclusive license for the core intellectual property relating to AZX100, a 24-amino acid synthetic peptide. We have an exclusive worldwide license to AZX100.

On October 1, 2008, OrthoLogic Corp. began doing business under the trade name of Capstone Therapeutics.

Chrysalin, Capstone Therapeutics and OrthoLogic are registered United States domestic trademarks of OrthoLogic Corp.

Our development activities for the Chrysalin and AZX100 represent a single operating segment as they share the same product development path and utilize the same Company resources. As a result, we have determined that it is appropriate to reflect our operations as one reportable segment. Through December 31, 2008, we have incurred \$113 million in net losses as a development stage company.

# Description of the business

OrthoLogic is a biotechnology company committed to developing a pipeline of novel peptides and other molecules aimed at helping patients with under-served conditions. We are focused on the development and commercialization of two product platforms: Chrysalin® (TP508) and AZX100.

#### Chrysalin

Chrysalin (TP508), a novel synthetic 23-amino acid peptide, is believed to produce angiogenic and other tissue repair effects by activating or upregulating nitric oxide synthase (NOS) and the production of nitric oxide in endothelial cells, and if so, it may have potential therapeutic value in tissues and diseases exhibiting endothelial dysfunction. We have conducted clinical trials for two potential Chrysalin-based products, acceleration of fracture repair, and diabetic foot ulcer. We previously conducted a pilot study for spine fusion. We have conducted pre-clinical testing for cartilage defect repair, cardiovascular repair (including acute myocardial infarction and myocardial ischemia), dental bone repair and tendon repair.

The development of each of our potential Chrysalin-based product candidates is based on our collective knowledge and understanding of how Chrysalin contributes to the repair of tissue. While there are important differences in each of the product candidates in terms of purpose (acute myocardial infarction, myocardial ischemia, fracture repair, diabetic foot ulcer healing, etc.) each product candidate is focused on accelerating and enhancing tissue repair.

Chrysalin-based Product Candidates

- We believe that the results of our efforts to date support that Chrysalin may have potential therapeutic value in tissues and diseases exhibiting endothelial dysfunction.
- •We are continuing pre-clinical experiments tying Chrysalin to potential modulation of the health of endothelial tissue in blood vessels and other mechanism-of-action studies.
- We are focusing our efforts on vascular product candidates and are not currently planning additional pre-clinical or clinical studies in fracture repair, wound healing, spine fusion, cartilage defect repair, dental bone repair or tendon repair.
- Although we do not currently plan to re-enter clinical trials with Chrysalin, we will perform pre-clinical and clinical studies which we believe would serve to strengthen our portfolio and partnering possibilities.

#### AZX100

AZX100, our second peptide, is a novel synthetic pre-clinical 24-amino acid peptide. AZX100 relaxes smooth muscle, which modulates blood pressure and the function of blood vessels, airways, sphincters, the gastrointestinal tract and the genitourinary tract. Sustained abnormal contraction of any of these muscles is called spasm. Any disorders known to be associated with excessive constriction or inadequate dilation of smooth muscle represent potential applications for AZX100.

AZX100 may also inhibit the fibrotic phenotype of fibroblasts and smooth muscle cells in a mechanism similar to that which causes vasorelaxation. Through phenotypic modulation of fibroblasts and smooth muscle cells, AZX100 may inhibit the scarring that results from wound healing and disease states in the dermis, blood vessels, lungs, liver and other organs.

#### Table of Contents

We are executing a development plan for this peptide which included the filing of an IND for a dermal indication in 2007, completion of Phase 1a and Phase 1b safety studies in 2008, and includes the commencement of Phase 2 efficacy studies in dermal scarring in the first quarter of 2009. The first safety study included 30 healthy subjects and was completed in mid 2008. Our second safety study for dermal scarring (Phase 1b), which included 40 subjects, was completed in the fourth quarter of 2008. The studies' Safety Committee reviewing all safety-related aspects of the clinical trials was satisfied with the profile of AZX100.

#### Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires that management make a number of assumptions and estimates that affect the reported amounts of assets, liabilities, and expenses in our financial statements and accompanying notes. Management bases its estimates on historical experience and various other assumptions believed to be reasonable. Although these estimates are based on management's best knowledge of current events and actions that may impact the Company in the future, actual results may differ from these estimates and assumptions. Our critical accounting policies are those that affect, or could affect, our financial statements materially and involve a significant level of judgment by management.

Income Taxes: SFAS No. 109 "Accounting for Income Taxes" requires that a valuation allowance be established when it is more likely than not that all or a portion of a deferred tax asset will not be realized. Changes in valuation allowances from period to period are included in the tax provision in the period of change. In determining whether a valuation allowance is required, we take into account all evidence with regard to the utilization of a deferred tax asset included in past earnings history, expected future earnings, the character and jurisdiction of such earnings, unsettled circumstances that, if unfavorably resolved, would adversely affect utilization of a deferred tax asset, carryback and carryforward periods, and tax strategies that could potentially enhance the likelihood of realization of a deferred asset. We have evaluated the available evidence about future taxable income and other possible sources of realization of deferred tax assets and have established a valuation allowance for all of our deferred tax assets of approximately \$45 million at December 31, 2008. The valuation allowance includes an allowance recorded in 2006 for a previously recorded deferred tax asset related to a Alternative Minimum Tax credit carryover of \$1,106,000.

Patents: On November 2, 2006, we announced that we have no immediate plans to re-enter clinical trials for Chrysalin-based product candidates and a strategic shift in our development approach to our Chrysalin product platform. We currently intend to pursue development partnering or licensing opportunities for our Chrysalin-based product candidates, a change from its previous development history of independently conducting human clinical trials necessary to advance our Chrysalin-based product candidates to market. SFAS No. 142 requires an impairment loss be recognized for an amortizable intangible asset whenever the net cash in-flow to be generated from an asset is less than its carrying cost. We are unable to determine the timing or amount of net cash in-flow to be generated from Chrysalin-based product candidates. Accordingly, due to this uncertainty, we recognized an impairment loss for the amount of unamortized Chrysalin product platform patent costs of \$2,100,000 in 2006. The impairment loss was included in research and development expenses in 2006.

Stock based compensation: Effective January 1, 2006, we adopted SFAS No. 123 (revised 2004), "Share-Based Payment", (SFAS 123(R)). SFAS 123(R) requires all share-based payments, including grants of stock options, restricted stock units and employee stock purchase rights, to be recognized in our financial statements based on their respective grant date fair values. Under this standard, the fair value of each employee stock option and employee stock purchase right is estimated on the date of grant using an option pricing model that meets certain requirements. We

currently use the Black-Scholes option pricing model to estimate the fair value of our share-based payments. The determination of the fair value of share-based payment awards utilizing the Black-Scholes model is affected by our stock price and a number of assumptions, including expected volatility, expected life, risk-free interest rate and expected dividends. We use the historical volatility adjusted for future expectations. The expected life of the stock options is based on historical data and future expectations. The risk-free interest rate assumption is based on observed interest rates appropriate for the terms of our stock options and stock purchase rights. The dividend yield assumption is based on our history and expectation of dividend payouts. The fair value of our restricted stock units is based on the fair market value of our common stock on the date of grant. Stock-based compensation expense recognized in our financial statements in 2006 and thereafter is based on awards that are ultimately expected to vest. The amount of stock-based compensation expense in 2006 and thereafter will be reduced for estimated forfeitures. Forfeitures are required to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. We will evaluate the assumptions used to value stock awards on a quarterly basis. If factors change and we employ different assumptions, stock-based compensation expense may differ significantly from what we have recorded in the past. To the extent that we grant additional equity securities to employees, our stock-based compensation expense will be increased by the additional compensation resulting from those additional grants.

#### Table of Contents

Results of Operations Comparing Years Ended December 31, 2008 and 2007

General and Administrative ("G&A") Expenses: G&A expenses related to our ongoing development operations decreased by \$747,000 from \$3,738,000 in 2007, to \$2,991,000 in 2008. Our G&A expenses during 2008 were lower than 2007 primarily as a result of general cost containment efforts.

Research and Development Expenses: Research and development expenses were \$10,693,000 for 2008 compared to \$9,641,000 for 2007. Our research and development expenses increased by \$1,052,000 in 2008, compared to 2007, primarily due to costs related to our Phase 1 clinical trials in dermal scarring and our previously announced completion of a pre-clinical study to assess the effects of Chrysalin in a model of acute myocardial infarction (heart attack), partially offset by a decline in AZX100 pre-clinical costs related to the filing of an IND in a dermal scarring indication, which was completed as of December 31, 2007. Given the overlapping nature of our research efforts it is not possible to clearly separate research expenditures between Chrysalin and AZX100; however, the substantial majority of our research and development expenses in 2008 and 2007 are directed towards AZX100 development efforts.

Interest and Other Income, Net: Interest and other income, net decreased from \$3,278,000 in 2007 to \$2,082,000 in 2008, due to the decrease in interest rates between the two periods and reduction in the amount available for investment.

Net Loss: We incurred a net loss in 2008 of \$11.2 million compared to a net loss of \$10.1 million in 2007. The increase in the net loss for 2008 compared to 2007 resulted primarily from costs related to our Phase 1 clinical trials in dermal scarring in 2008, reduced interest income, due to the decrease in interest rates between the two periods and reduction in the amount available for investment, partially offset by lower general and administrative expenses, due to general cost containment efforts, reduced AZX100 pre-clinical costs related to the filing of an IND for a dermal scarring indication, which was completed as of December 31, 2007, and reversal of a \$363,000 income tax reserve in the fourth quarter of 2008.

#### Table of Contents

Results of Operations Comparing Years Ended December 31, 2007 and 2006.

General and Administrative ("G&A") Expenses: G&A expenses related to our ongoing development operations decreased by \$2,820,000 to \$3,738,000 in the year ended December 31, 2007 from \$6,558,000 in 2006. Our administrative expenses during the year ended December 31, 2007 were lower than 2006, primarily as a result of a decrease of non-cash stock compensation expense of \$1,433,000, reduced costs in 2007 reflecting management changes and staff reductions which occurred in the first half of 2006, and general cost containment efforts.

Research and Development Expenses: Research and development expenses were \$9,641,000 for the year ended December 31, 2007 compared to \$19,661,000 in 2006. Our research and development expenses decreased by \$10,020,000 in the year ended December 31, 2007 compared to 2006, primarily due to a \$5.5 million decline in clinical costs related to our fracture repair Phase 3 and Phase 2b clinical trials, which were substantially completed as of December 31, 2006 and a Chrysalin patent impairment loss of \$2.1 million recorded in 2006.

Interest and Other Income, Net: Interest and other income net decreased from \$3,883,000 in the year ended December 31, 2006 to \$3,278,000 in 2007, due to a reduction in the cash and investments available for investment during 2007.

Net Loss: We incurred a net loss in 2007 of \$10.1 million compared to a net loss of \$31.9 million in 2006. The \$21.8 million decrease in the net loss in the year ended December 31, 2007 compared to the same period in 2006, results primarily from \$8.5 million of purchased in-process research and development costs in 2006, a decrease of \$2.0 million in non-cash stock compensation expense, reduced costs in 2007 reflecting management changes and staff reductions which occurred in the first half of 2006, a \$5.5 million decline in clinical costs related to our fracture repair Phase 3 and Phase 2b clinical trials, which were substantially completed as of December 31, 2006, a Chrysalin product platform patent impairment loss of \$2.1 million recorded in 2006, and the recognition in 2006 of income tax expense related to the recording of a valuation allowance of \$1.1 million for a deferred tax asset related to a Alternative Minimum Tax credit carryover.

#### Liquidity and Capital Resources

We have historically financed our operations through operating cash flows and the public and private sales of equity securities. However, with the sale of our Bone Device Business in November 2003, we sold all of our revenue producing operations. Since that time, we have relied on our cash and investments to finance all our operations, the focus of which was research and development of our Chrysalin and AZX100 product candidates. We received approximately \$93.0 million in cash from the sale of our Bone Device Business. On December 1, 2005, we received the additional \$7.2 million, including interest, from the escrow balance related to the sale of the Bone Device Business. On February 27, 2006, we entered into an agreement with Quintiles (see Note 15 to our Annual Report on Form 10-K filed with the Securities Exchange Commission on March 5, 2008), which provided an investment by Quintiles in our common stock, of which \$2,000,000 was received on February 27, 2006 and \$1,500,000 was received on July 3, 2006. We also received net proceeds of \$4,612,000 from the exercise of stock options during our development stage period. At December 31, 2008, we had cash and cash equivalents of \$23.1 million, short-term investments of \$22.7 million and long-term investments of \$2.2 million.

We announced that we have no immediate plans to re-enter clinical trials for Chrysalin-based product candidates and a strategic shift in our development approach for Chrysalin-based product candidates. We currently intend to pursue development partnering or licensing opportunities for our Chrysalin-based product candidates, a change from our previous development history of independently conducting human clinical trials necessary to advance our Chrysalin-based product candidates to market. We will continue to explore Chrysalin's therapeutic value in tissues and diseases exhibiting endothelial dysfunction as well as the science behind and potential of Chrysalin. We will also

continue research and development expenditures for further pre-clinical studies supporting multiple indications for AZX100 and plan to commence a Phase 2 human clinical trial for dermal scarring with AZX100 in the first quarter of 2009.

#### Table of Contents

Our future research and development expenses may vary significantly from prior periods depending on the Company's decisions on its future Chrysalin and AZX100 development plans. Our future interest and other income may vary significantly from prior periods based on changes in interest rates and amounts available for investment.

On March 5, 2008, we announced a stock repurchase program and at December 31, 2008, we had repurchased 1,131,622 shares of our common stock, at a total cost of \$1,041,000, and had allocated approximately \$1,000,000 to fund possible future stock repurchases.

We anticipate that our cash and short-term investments will be sufficient to meet our presently projected cash and working capital requirements for the next year. However, the timing and amounts of cash used will depend on many factors, including our ability to continue to control our expenditures related to our research and development programs, including our planned AZX100 dermal scarring clinical trials. If we decide to expand our clinical trials or if we consider other opportunities in the market, our expense levels may change, which could require us to seek other sources of capital. If additional funding is required, we would be required to seek new sources of funds, including raising capital through the sales of securities or licensing agreements. These sources of funds may not be available or could only be available at terms that would have a material adverse impact on our existing stockholders' interests.

#### Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We had no debt and no derivative instruments at December 31, 2008. Our investment portfolio is used to preserve our capital until it is required to fund our operations. Our investment instruments are classified as held-to-maturity. We do not own derivative financial instruments in our investment portfolio. We maintain a non-trading investment portfolio of investment grade securities that limits the amount of non-US Government obligations credit exposure of any one issue, issuer or type of instrument. Due to the short duration and conservative nature of these instruments, we do not believe that we have a material exposure to interest rate risk.

Our long-term investment at December 31, 2008 is a U.S. Government obligation and matures in February 2010.

Item 8.

Financial Statements and Supplementary Data

Balance sheets as of December 31, 2008 and December 31, 2007, statements of operations, stockholders' equity and cash flows for each of the years in the two-year period ended December 31, 2008, and the statements of operations and cash flow for the period of August 5, 2004 through December 31, 2008, together with the related notes and the reports of Ernst & Young, LLP, our independent registered public accounting firm, are set forth on the "F" pages of this Form 10-K.

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

None.

Table of Contents

Item 9A(T).

Controls and Procedures

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rules 13a - 15(e) and 15d - 15(e) promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based on this evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this annual report.

Management's Annual Report on Internal Control Over Financial Reporting

The management of OrthoLogic Corp. (a development stage company) is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a - 15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in Internal Control - Integrated Framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2008.

This annual report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to temporary rules of the Securities Exchange Commission that permit the Company to provide only management's report in this annual report.

Management's Annual Report on Changes in Internal Controls

There have not been any changes in our internal controls over financial reporting during the fiscal quarter ended December 31, 2008, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B.

Other Information

None

# PART III

Item 10.

Directors, Executive Officers and Corporate Governance

The information required herein is incorporated by reference pursuant to General Instruction G(3) of Form 10-K, since the Registrant will file its definitive proxy statement with the Securities and Exchange Commission for the 2009 Annual Meeting of Stockholders to be held on May 8, 2009, no later than 120 days after the close of its fiscal year ended December 31, 2008.

#### Table of Contents

Item 11.

**Executive Compensation** 

The information required herein is incorporated by reference pursuant to General Instruction G(3) of Form 10-K, since the Registrant will file its definitive proxy statement with the Securities and Exchange Commission for the 2009 Annual Meeting of Stockholders to be held on May 8, 2009, no later than 120 days after the close of its fiscal year ended December 31, 2008.

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

The information required herein is incorporated by reference pursuant to General Instruction G(3) of Form 10-K, since the Registrant will file its definitive proxy statement with the Securities and Exchange Commission for the 2009 Annual Meeting of Stockholders to be held on May 8, 2009, no later than 120 days after the close of its fiscal year ended December 31, 2008.

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

The information required herein is incorporated by reference pursuant to General Instruction G(3) of Form 10-K, since the Registrant will file its definitive proxy statement with the Securities and Exchange Commission for the 2009 Annual Meeting of Stockholders to be held on May 8, 2009, no later than 120 days after the close of its fiscal year ended December 31, 2008.

Item 14. Principal Accountant Fees and Services

The information required herein is incorporated by reference pursuant to General Instruction G(3) of Form 10-K, since the Registrant will file its definitive proxy statement with the Securities and Exchange Commission for the 2009 Annual Meeting of Stockholders to be held on May 8, 2009, no later than 120 days after the close of its fiscal year ended December 31, 2008.

#### PART IV

Item 15.	Exhibits and Financial Statement Schedules
(a)	The following documents are filed as part of this report:
1.	Financial Statements.
-	cial statements of OrthoLogic Corp. and Report of Independent Registered Public Accounting n the "F" pages of this report:
Report of Independe	ent Registered Public Accounting Firm.

Balance Sheets - December 31, 2008 and 2007.

Statements of Operations - Each of the years in the two-year period ended December 31, 2008 and for the period of August 5, 2004 through December 31, 2008.

Statements of Stockholders' Equity - Each of the years in the two-year period ended December 31, 2008.

Statements of Cash Flows - Each of the years in the two-year period ended December 31, 2008 and for the period of August 5, 2004 through December 31, 2008.

#### Table of Contents

Notes to Financial Statements.

- 2. Financial Statement Schedules have been omitted since they are not applicable.
- 3. All management contracts and compensatory plans and arrangements are specifically identified on the attached Exhibit Index.

 (b)
 Exhibits

 See the Exhibit Index following the signature page of this report, which Index is incorporated herein by reference.

(c)	Financial Statements and Schedules - See Item $15(a)(1)$ and Item $15(a)(2)$ above.
29	

#### Table of Contents

#### SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

By

## ORTHOLOGIC CORP.

Date: September 18, 2009

/s/ John M. Holliman, III John M. Holliman, III Executive Chairman

S-1

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date		
/s/ John M. Holliman, III John M. Holliman, III	Executive Chairman (Principal Executive Officer) and Director	September 18, 2009		
/s/ Fredric J. Feldman Fredric J. Feldman, Ph.D.	Director	September 18, 2009		
/s/ Elwood D. Howse, Jr. Elwood D. Howse, Jr.	Director	September 18, 2009		
/s/ William M. Wardell William M. Wardell, MD, Ph.D.	Director	September 18, 2009		
/s/ Augustus A. White, III Augustus A. White III, MD.	Director	September 18, 2009		
/s/ Randolph C. Steer Randolph C. Steer, MD, Ph.D.	President	September 18, 2009		
/s/ Les M. Taeger Les M. Taeger	Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	September 18, 2009		

S-2

## OrthoLogic Corp. Exhibit Index to Annual Report on Form 10-K For the Year Ended December 31, 2008

Exhibit No.	Description	Incorporated by Reference To:	Filed Herewith
2.1	Asset Purchase Agreement and Plan of Reorganization by and between OrthoLogic Corp. and Chrysalis Biotechnology, dated April 28, 2004 (*)	Exhibit 2.1 to the Company's Registration Statement on Form S-4 filed with the SEC on June 3, 2004 ("June 2004 S-4")	
2.2	Amendment No. 1 to Asset Purchase Agreement and Plan of Reorganization by and between OrthoLogic Corp. and Chrysalis Biotechnology, dated June 1, 2004 (*)	Exhibit 2.2 to the Company's June 2004 S-4	
2.3	Amendment No. 2 to Asset Purchase Agreement and Plan of Reorganization between OrthoLogic Corp. and Chrysalis Biotechnology, Inc., dated August 5, 2004 (*)	Exhibit 2.1 to the Company's Current Report on Form 8-K filed on August 6, 2004	
2.4	Asset Purchase Agreement and Plan of Reorganization by and between OrthoLogic Corp. and AzERx, Inc., dated February 23, 2006 (*)	Exhibit 10.1 to the Company's Registration Statement on Form S-3 filed with the SEC on April 25, 2006	
3.1	Restated Certificate of Incorporation, executed April 15, 2005	Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2005, filed with the SEC on May 10, 2005 ("March 2005 10-Q")	
3.2	Amended and Restated Certificate of Designation of Series A Preferred Stock, executed June 19, 2007	Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on June 25, 2007 ("June 25th 2007 8-K")	
3.3	Bylaws of the Company	Exhibit 3.4 to the Company's Amendment No. 2 to Registration Statement on Form S-1 (No. 33-47569) filed with the SEC on January 25, 1993 ("January 1993 S-1")	
4.1	Class A Warrant Agreement dated February 24, 2006, between OrthoLogic Corp. and PharmaBio Development Inc. (d/b/a NovaQuest)	Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the SEC on March 3, 2006	
4.2	Form of Additional Class A Warrant Agreement related to the Common Stock and Warrant Purchase Agreement by and between OrthoLogic Corp. and PharmaBio Development, Inc.	Exhibit 4.8 to the Company's Registration Statement on Form S-3 filed with the SEC on April 13, 2006 ("April 2006 S-3")	
43	<b>L</b> '		

	Class A Warrant Agreement dated June	Exhibit 4.1 to the Company's Current
	30, 2006 by and between OrthoLogic	Report on Form 8-K filed with the SEC
	Corp. and PharmaBio Development, Inc	on July 6, 2006
4.4	Amended and Restated Class B Warrant	Exhibit 4.5 to the Company's
	Agreement dated February 24, 2006, and	Amendment No. 1 to Registration
	amended and restated as of June 30,	Statement on Form S-3 filed with the
	2006, related to the Common Stock and	SEC on September 22, 2006 ("September
	Warrant Purchase Agreement by and	2006 S-3/A")
	between OrthoLogic Corp. and	
	PharmaBio Development, Inc. (2)	

E- 1

4.5	Amended and Restated Class C Warrant Agreement dated February 24, 2006, and amended and restated as of June 30, 2006, related to the Common Stock and Warrant Purchase Agreement by and between OrthoLogic Corp. and PharmaBio Development, Inc.	Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007, filed with the SEC on May 7, 2007
4.6	Amended and Restated Class D Warrant Agreement dated February 24, 2006, and amended and restated as of June 30, 2006, related to the Common Stock and Warrant Purchase Agreement by and between OrthoLogic Corp. and PharmaBio Development, Inc.	Exhibit 4.6 to the Company's Annual Report on Form 10-K for the year ended December 31, 2007, filed with the SEC on March 5, 2008.
4.7	Rights Agreement, dated as of June 19, 2007, between OrthoLogic Corp. and the Bank of New York	Exhibit 4.1 to the June 25th 2007 8-K
10.1	Form of Indemnification Agreement(**)	Exhibit 10.16 to the Company's January 1993 S-1
10.2	1997 Stock Option Plan of the Company, as amended and approved by the stockholders (1)	Exhibit 4.3 to the Company's Registration Statement on Form S-8, filed with the SEC on March 2, 2005
10.3	Single-tenant Lease dated June 12, 1997, by and between the Company and Chamberlain Development, L.L.C.	Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 1997, filed with the SEC on November 14, 1997
10.4	Patent License Agreement between the Board of Regents of The University of Texas System through its component institution The University of Texas Medical Branch at Galveston and Chrysalis Biotechnology, Inc., dated April 27, 2004 and exhibits thereto (2)	Exhibit 10.1 to the Company's Amendment No. 1 to its Registration Statement on Form S-4, filed July 14, 2004
10.5	Form of Incentive Stock Option Grant Letter for use in connection with the Company's 1997 Stock Option Plan (***)	Exhibit 10.1 to the Company's Current Report on Form 8-K filed on January 4, 2005
10.6	Form of Non-qualified Stock Option Grant Letter for use in connection with the Company's 1997 Stock Option Plan (***)	Exhibit 10.1 to the Company's Current Report on Form 8-K filed on January 19, 2006
10.7	Patent Assignment Agreement dated June 28, 2005, between the Company and the University of Texas	Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2005, filed with the SEC on August 9, 2005 (the "June 2005 10-Q")
10.8	Director Compensation Plan, effective June 10, 2005 (1)	Exhibit 10.2 to the June 2005 10-Q
10.9	Letter of Stock Option Grant to Dr. James M. Pusey for 200,000 shares	Exhibit 10.3 to the March 4th, 2005 8-K

Letter of Stock Option Grant to	Exhibit 10.4 to the March 4th, 2005 8-K
Dr. James M. Pusey for 300,000 shares of the Company's common stock, dated March 3, 2005 (1)	Exhibit 10.4 to the March 4th, 2003 8-K
Employment Agreement between the Company and Dana Shinbaum, dated October 17, 2005 (1)	Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on October 27, 2005
Employment Agreement dated January 10, 2006 between the Company and Les M. Taeger (1)	Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on January 11, 2006 (the "January 11th 8-K")

E- 2

10.13	Intellectual Property, Confidentiality and Non-Competition Agreement between the Company and Les M. Taeger dated January 10, 2006 (1)	Exhibit 10.2 to the January 11th 8-K
10.14	Separation Agreement and Release dated April 5, 2006 by and between OrthoLogic Corp. and James M. Pusey (1)	Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on April 11, 2006
10.15	Common Stock and Warrant Purchase Agreement by and between OrthoLogic Corp. and PharmaBio Development, Inc., dated February 24, 2006.	Exhibit 10.1 to the Company's April 2006 S-3
10.16	Registration Rights Agreement by and between OrthoLogic Corp. and PharmaBio Development, Inc., dated February 24, 2006	Exhibit 10.2 to the Company's April 2006 S-3
10.17	Registration Rights Agreement by and between OrthoLogic Corp., AzERx, Inc., and Certain Shareholders, dated February 27, 2006	Exhibit 10.3 to the Company's April 2006 S-3
10.18	Amended and Restated License Agreement dated February 23, 2006 by and between OrthoLogic Corp. and Arizona Science Technology Enterprises, LLC	Exhibit 10.5 to the Company's Registration Statement on Form S-3 filed with the SEC on April 25, 2006
10.19	2005 Equity Incentive Plan (2005 Plan) (1)	Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on May 18, 2006
10.20	Form of Incentive Stock Option Grant Letters for Grants under the 2005 Plan (***)	Exhibit 10.1 to the Company's Report on Form 10-Q for the quarterly period ended June 30, 2006, filed on August 8, 2006 ("June 2006 10-Q")
10.21	Form of Non-Qualified Stock Options Grant Letter for Grants under the 2005 Plan (***)	Exhibit 10.2 to the Company's June 2006 10-Q
10.22	Form of Restricted Stock Grant Letters for Grants under the 2005 Plan	Exhibit 10.4 to the Company's Current Report on Form 8-K filed with the SEC on May 18, 2006
10.23	Amendment to Employment Agreement dated January 10, 2006 between OrthoLogic Corp. and Les Taeger (1)	Exhibit 10.3 to the Company's June 2006 10-Q
10.24	Employment Agreement between Randolph C. Steer, MD, Ph.D., President, and OrthoLogic Corp., effective May 12, 2006 (1)	Exhibit 10.7 to the Company's June 2006 10-Q
10.25	Management Service Agreement between Valley Venture III, Management LLC, John M. Holliman, III, Executive Chairman and OrthoLogic	Exhibit 10.8 to the Company's June 2006 10-Q

	Corp., effective May 12, 2006 (1)	
10.26	Amendment No.1 to Registration Rights Agreement dated June 30, 2006 by and between PharmaBio Development, Inc., and OrthoLogic Corp.	Exhibit 10.4 to the Company's September 2006 S-3/A
10.27	Separation Agreement and Release dated November 17, 2006 by and between OrthoLogic Corp., and James T. Ryaby, Ph.D. (1)	Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on November 24, 2006 ("November 24th 8-K")
10.28	Consulting Agreement dated November 17, 2006 by and between James T. Ryaby, Ph.D., and OrthoLogic Corp. (1)	Exhibit 10.2 to the Company's November 24th 8-K

# E- 3

(1)

10.29	Lease Agreement dated July 19, 2007, by and between the Company and Phoenix Investors #13, L.L.C.	Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on July 23, 2007	
10.30	Amendment #1 to Employment Agreement dated May 21, 2007, between Randolph C. Steer, MD, Ph.D., President, and OrthoLogic Corp.	Exhibit 10.30 to the Company's Annual Report on Form 10-K for the year ended December 31, 2007, filed with the SEC on March 5, 2008.	
10.31	Amendment #2 to Employment Agreement dated February 21, 2008, between Randolph C. Steer, MD, Ph.D., President, and OrthoLogic Corp.	Exhibit 10.31 to the Company's Annual Report on Form 10-K for the year ended December 31, 2007, filed with the SEC on March 5, 2008.	
10.32	Amendment No. 3, dated November 4, 2008, to the Management Services Agreement effective May 12, 2006 by and between AGP Management, LP, John M. Holliman, III, Executive Chairman, and OrthoLogic Corp. (1)	Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2008, filed with the SEC on November 6, 2008 (the "November 6, 2008 10-Q")	
10.33	Amendment No. 3, dated November 4, 2008, to the Employment Agreement effective May 12, 2006, between Randolph C. Steer, MD, Ph.D., President, and OrthoLogic Corp. (1)	Exhibit 10.2 to the Company's November 6, 2008 10-Q	
16.1	Letter from Deloitte and Touche, LLP, to the SEC dated June 19, 2006	Exhibit 16.1 to the Company's Current Report on Form 8-K filed with the SEC on June 20, 2006	
<u>23.1</u>	Consent of independent registered public accounting firm.		Х
<u>31.1</u>	Certification of Principal Executive Officer Pursuant to Rule 13a -14(a) of the Securities Exchange Act of 1934, as amended		Х
<u>31.2</u>	Certification of Principal Financial and Accounting Officer Pursuant to Rule 13a - 14(a) of the Securities Exchange Act of 1934, as amended		Х
<u>32.1</u>	Certification of Principal Executive Officer and Principal Financial and Accounting Officer Pursuant to 18 U.S.C. Section 1350****		

Management contract or compensatory plan or arrangement.

(2)Portions of this agreement have been redacted and filed under confidential treatment request with the Securities and Exchange Commission.

\* Upon the request of the Securities and Exchange Commission, OrthoLogic Corp. agrees to furnish supplementally a copy of any schedule to the Asset Purchase Agreement and Plan of Reorganization between the Company and Chrysalis Biotechnology, Inc., dated as of April 28, 2004, as amended and the Asset Purchase Agreement and Plan of Reorganization by and between the Company and AzERx, Inc., dated February 23, 2006.

\*\* OrthoLogic has entered into separate indemnification agreements with each of its current directors and executive officers that differ only in party names and dates. Pursuant to the instructions accompanying Item 601 of Regulation S-K, OrthoLogic has filed the form of such indemnification agreement.

\*\*\* OrthoLogic from time to time issues stock options to its employees, officers and directors pursuant to its 1997 and 2005 Stock Option Plan, as amended. The incentive stock option grant letters and non-qualified stock option grant letters that evidence these issuances differ only in such terms as the identity of the recipient, the grant date, the number of securities covered by the award, the price(s) at which the recipient may acquire the securities and the vesting schedule. Pursuant to the instructions accompanying Item 601 of Regulation S-K, OrthoLogic has filed the form of such incentive stock option grant letter and non-qualified stock option grant letter. \*\*\*\* Furnished herewith.

E- 4

## FINANCIAL STATEMENTS

#### Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of OrthoLogic Corp. (dba Capstone Therapeutics)

We have audited the accompanying balance sheets of OrthoLogic Corp. (dba Capstone Therapeutics) (a development stage company) (the Company) as of December 31, 2008 and 2007, and the related statements of operations, stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2008, and for the period August 5, 2004 (inception) through December 31, 2008. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of OrthoLogic Corp. (dba Capstone Therapeutics) (a development stage company) as of December 31, 2008 and 2007 and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2008 and for the period from August 5, 2004 (inception) through December 31, 2008, in conformity with U.S. generally accepted accounting principles.

Ernst & Young LLP

Phoenix, Arizona March 10, 2009, except for the period from August 5, 2004 (inception) through December 31, 2005 as to which the date is September 18, 2009

## ORTHOLOGIC CORP (dba Capstone Therapeutics) (A Development Stage Company) BALANCE SHEETS (in thousands, except share and per share data)

	Dee	cember 31, 2008	De	ecember 31, 2007
ASSETS				
Current assets				
Cash and cash equivalents	\$	23,088	\$	20,943
Short-term investments		22,675		18,236
Prepaids and other current assets		1,094		906
Total current assets		46,857		40,085
Furniture and equipment, net		436		318
Long-term investments		2,221		21,459
Total assets	\$	49,514	\$	61,862
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities				
Accounts payable	\$	1,063	\$	702
Accrued compensation		648		824
Other accrued liabilities		281		875
Total current liabilities		1,992		2,401
Stockholders' Equity				
Common Stock \$.0005 par value; 100,000,000 shares authorized; 40,775,411 shares				
in 2008 and 41,758,065 shares in 2007 issued and outstanding		20		21
Additional paid-in capital		188,314		189,013
Accumulated deficit		(140,812)		(129,573)
Total stockholders' equity		47,522		59,461
Total liabilities and stockholders' equity	\$	49,514	\$	61,862

See notes to financial statements

## ORTHOLOGIC CORP. (dba Capstone Therapeutics) (A Development Stage Company) STATEMENTS OF OPERATIONS (in thousands, except per share data)

	Y	Years ended December 31, 2008 2007			As a Development Stage Company August 5, 2004- December 31, 2008	
OPERATING EXPENSES						
General and administrative	\$	2,991	\$	3,738	\$	20,075
Research and development		10,693		9,641		73,519
Purchased in-process research and development		-		-		34,311
Other		-		-		(375)
Total operating expenses		13,684		13,379		127,530
Interest and other income, net		(2,082)		(3,278)		(12,634)
Loss from continuing operations before taxes		11,602		10,101		114,896
Income tax benefit		(363)		-		(7)
Loss from continuing operations		11,239		10,101		114,889
Discontinued Operations						
Net gain on the sale of the bone device business, net of taxes of \$267		-		-		(2,202)
NET LOSS	\$	11,239	\$	10,101	\$	112,687
Per Share Information:						
Net loss, basic and diluted	\$	0.27	\$	0.24		
Basic and diluted shares outstanding		41,078		41,644		

See notes to financial statements

### ORTHOLOGIC CORP. (dba Capstone Therapeutics) (A Development Stage Company) STATEMENTS OF STOCKHOLDERS' EQUITY (in thousands)

	Common Stock		Additional		Accumulated		
	Shares	Ar	nount	Paid in Capital		Deficit	Total
Balance December 31,							
2006	41,564	\$	21	\$ 188,236	\$	(119,109) \$	69,148
Adoption of FIN 48	-		-	-		(363)	(363)
Stock option compensation cost	-		-	534	L	-	534
Compensation earned on							
stock awards	194		-	243		-	243
Net loss	-		-	-		(10,101)	(10,101)
Balance December 31,							
2007	41,758		21	189,013		(129,573)	59,461
Stock option							
compensation cost	-		-	177		-	177
Compensation earned on	1.40			1.6			164
stock awards	149		-	164	•	-	164
Common stock purchased	(1.120)		(1)	(1.0.40			(1,0,11)
and retired	(1,132)		(1)	(1,040	))	-	(1,041)
Net loss	-		-		•	(11,239)	(11,239)
Balance December 31,	40 775	¢	20	¢ 100.21	¢	$(140.912)$ $\phi$	17 522
2008	40,775	\$	20	\$ 188,314	- \$	(140,812) \$	47,522

See notes to financial statements

### ORTHOLOGIC CORP. (dba Capstone Therapeutics) (A Development Stage Company) STATEMENTS OF CASH FLOWS (in thousands)

	Years Ended December 31,			As a Development Stage Company August 5th 2004 - December 31,		
		2008		2007	2008	
OPERATING ACTIVITIES						
Net loss	\$	(11,239)	\$	(10,101)	\$ (112,687)	
Non cash items:						
Deferred tax expense		-		-	770	
Depreciation and amortization		131		169	3,565	
Non-cash stock compensation		341		777	4,061	
Gain on sale of bone device business		-		-	(2,298)	
In-process research and development		-		-	34,311	
Change in other operating items:						
Prepaids and other current assets		(189)		1,044	614	
Accounts payable		361		(919)	92	
Accrued liabilities		(768)		(384)	(2,085)	
Cash flows used in operating activities		(11,363)		(9,414)	(73,657)	
INVESTING ACTIVITIES						
Expenditures for furniture and equipment, net		(250)		(178)	(943)	
Proceeds from sale of assets		-		-	7,000	
Cash paid for assets of AzERx/CBI		-		-	(4,058)	
Cash paid for patent assignment rights		-		-	(650)	
Purchases of investments		(29,757)		(51,395)	(227,046)	
Maturities of investments		44,556		63,883	260,088	
Cash flows provided by investing activities		14,549		12,310	34,391	
FINANCING ACTIVITIES						
Net proceeds from stock option exercises		-		-	4,612	
Net proceeds from sale of stock		-		-	3,376	
Common stock purchases		(1,041)			(1,041)	
Cash flows (used in) provided by financing activities		(1,041)		-	6,947	
NET INCREASE (DECREASE) IN CASH AND CASH						
EQUIVALENTS		2,145		2,896	(32,319)	
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR		20,943		18,047	55,407	
CASH AND CASH EQUIVALENTS, END OF YEAR	\$	23,088	\$	20,943	\$ 23,088	
	·			,	, -	
Supplemental Disclosure of Non-Cash Investing Activities AzERx /						
CBI Acquisitions						
Current assets acquired	\$	-	\$	-	\$ 29	

Current assets acquired	\$ - \$	- \$	29
Patents acquired	-	-	2,142
Liabilities acquired, and accrued acquisition costs	-	-	(457)
Original investment reversal	-	-	(750)

In-process research and development acquired	-	-	34,311
Common stock issued for acquisitions	-	-	(31,217)
Cash paid for acquisitions			