ORTHOLOGIC CORP
Form S-8
August 09, 2005

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

Form S-8
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

ORTHOLOGIC CORP.
(Exact name of Registrant as specified in charter)

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

1275 West Washington Street, Tempe, AZ 85281
(602) 286-5520
(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)

ORTHOLOGIC CORP.
Letter of Stock Option Grant, OrthoLogic Corp., dated March 3, 2005
(Dr. James M. Pusey)
Letter of Restricted Stock Grant, OrthoLogic Corp., dated March 3, 2005
(Dr. James M. Pusey)
(Full Title of the Plans)

Dr. James M. Pusey, Chief Executive Officer
OrthoLogic Corp.
1275 West Washington Street
Tempe, Arizona 85281
(602) 286-5520
(Name, address, including zip code, and telephone number, including area code, of agent for service)

The Commission is requested to send copies of all communications to:
Steven P. Emerick
Quarles & Brady Streich Lang LLP
One Renaissance Square
Two North Central Avenue
Phoenix, Arizona 85004-2391
(602) 229-5200

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	**Amount to be registered**	**Proposed maximum offering price per share**	**Proposed maximum aggregate offering price**	**Amount of registration fee**
		$5.88(2)	$1,764,000(2)	$207.63

Common Stock, $.0005 par value per share	300,000 shares (1)			
Common Stock, $.0005 par value per share	200,000 shares (3)	$4.13(4)	$826,000(4)	$97.23

(1) Shares of OrthoLogic common stock issuable upon the exercise by Dr. James M. Pusey of an option to purchase such shares pursuant to a Letter of Stock Option Grant, dated March 3, 2005. The grant letter provides for the possible adjustment of the number, price and kind of shares covered by options granted or to be granted in the event of certain capital or other changes affecting Registrant s Common Stock. Pursuant to Rule 416(a) of the Securities Act of 1933, this Registration Statement therefore covers, in addition to the above-stated shares, an indeterminate number of shares that may become subject to the grant

letter by means of stock splits, stock dividends or similar transactions.

(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(h) under the Securities Act of 1933, based on the exercise price of the option.

(3) Shares of OrthoLogic common stock previously issued to Dr. James M. Pusey pursuant to a Letter of Restricted Stock Grant, dated March 3, 2005. The grant letter provides for the possible adjustment of the number, price and kind of shares covered thereby in the event of certain capital or other changes affecting Registrant s Common Stock. Pursuant to Rule 416(a) of the Securities Act of 1933, this Registration Statement therefore

covers, in addition to the above-stated shares, an indeterminate number of shares that may become subject to the grant letter by means of stock splits, stock dividends or similar transactions.

(4) Estimated solely for the purpose of calculating the amount of the registration fee, pursuant to Rule 457(c) under the Securities Act of 1933, on the basis of the average of the high and low sales prices as reported on the Nasdaq National Market on August 5, 2005, for shares of the Registrant s Common Stock.

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EXPLANATORY NOTE

The Registrant has prepared this Registration Statement in accordance with the requirements of Form S-8 under the Securities Act of 1933, as amended (the Securities Act), to register (i) the issuance of up to 300,000 shares of OrthoLogic common stock upon the exercise of an option to purchase such shares granted to Dr. James M. Pusey under a Letter of Stock Option Grant dated March 3, 2005 (the Option Grant Letter), and (ii) resales of 200,000 shares of OrthoLogic common stock previously issued to Dr. James M. Pusey (the Selling Stockholder) under a Letter of Restricted Stock Grant dated March 3, 2005 (the Restricted Stock Grant Letter). Accordingly, this Registration Statement also includes a reoffer prospectus that has been prepared in accordance with the requirements of Part I of Form S-3 and, pursuant to General Instruction C of Form S-8, may be used for reofferings and resales on a continuous or delayed basis of 200,000 shares of OrthoLogic common stock that have been issued to the Selling Stockholder under the Restricted Stock Grant Letter.

PART I
INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The documents containing the information required by Part I of Form S-8 will be sent or given to the Selling Stockholder as specified by Rule 428(b)(1) promulgated under the Securities Act. Such documents are not required to be and are not filed with the Securities and Exchange Commission (the SEC) either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 promulgated under the Securities Act. These documents and the documents incorporated by reference in this Registration Statement pursuant to Item 3 of Part II of this Form S-8, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

Under the cover of this Form S-8 is a reoffer prospectus prepared in accordance with the requirements of Part I of Form S-3. The reoffer prospectus may be used for reofferings and resales on a continuous or delayed basis of 200,000 shares of OrthoLogic common stock that have been issued to the Selling Stockholder under the Restricted Stock Grant Letter.

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REOFFER PROSPECTUS
200,000 Shares
OrthoLogic Corp.
Common Stock

This reoffer prospectus is being used in connection with the offering from time to time by Dr. James M. Pusey (the Selling Stockholder) of an aggregate of 200,000 shares of our common stock that have been issued to him pursuant to a Letter of Restricted Stock Grant dated March 3, 2005 (the Restricted Stock Grant Letter). We will not receive any of the proceeds from any such offering.

The Selling Stockholder may offer the shares issued pursuant to the Restricted Stock Grant Letter (the Restricted Stock) from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at other negotiated prices. The Selling Stockholder may sell none, some or all of the shares of Restricted Stock offered by this reoffer prospectus.

Our common stock is quoted on The Nasdaq National Market under the symbol OLGC . The last reported sale price of our common stock on August 5, 2005 on The Nasdaq National Market was $4.15 per share. The mailing address of our principal executive office is 1275 West Washington Street, Tempe, Arizona, 85281. Our telephone number is (602) 286-5520.

INVESTING IN OUR COMMON STOCK INVOLVES RISKS. CONSIDER CAREFULLY THE RISK FACTORS BEGINNING ON PAGE P-7 OF THIS REOFFER PROSPECTUS.

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

The date of this reoffer prospectus is August 9, 2005.

You should rely only on the information contained or incorporated by reference in this reoffer prospectus. We have not authorized anyone to provide you with additional information or information different from that contained or incorporated by reference in this reoffer prospectus. This reoffer prospectus is not an offer to sell or solicitation of an offer to buy these shares of common stock in any circumstance under which the offer or solicitation is unlawful. You should assume that the information in this reoffer prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this reoffer prospectus or of any sale of our common stock. Unless the context otherwise requires, references to OrthoLogic, Company, we, our and us in this reoffer prospectus refer to OrthoLogic Corp.

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We own or have rights to use trademarks or trade names that we use in conjunction with the operation of our business. All other trademarks, service marks and trade names referred to in this reoffer prospectus are the property of their respective owners.

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THE COMPANY

OrthoLogic is a drug development company focused on the healing of musculoskeletal, orthopedic, dermal and cardiovascular tissue through therapeutic biopharmaceutical approaches. Our research and clinical trials are focused on the potential commercialization of several therapeutics comprising the Chrysalin® Product Platform, a series of product candidates aimed at treating both traumatic and chronic indications. Chrysalin, or TP508, is a 23-amino acid synthetic peptide representing a receptor-binding domain of the human thrombin molecule, a naturally occurring molecule in the body, and has the potential to accelerate the natural cascade of healing events in tissue repair. We continue to explore other biopharmaceutical compounds that can complement our research activity internally and broaden our potential pipeline for successful products.

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, for $2.5 million in cash and $25.0 million in OrthoLogic common stock plus an additional $7.0 million in OrthoLogic common stock upon the occurrence of certain triggering events. We became a development stage entity commensurate with the acquisition.

The Chrysalin technology represents the ability to potentially accelerate tissue repair by the initiation of the body s entire natural healing cascade. Chrysalin has been shown to recruit cells to the site of tissue injury, turn on the synthesis of specific growth factors known to be crucial for tissue healing, and stimulate revascularization of damaged tissue.

OrthoLogic owns the exclusive worldwide license for Chrysalin for all medical indications. We are pursuing the following potential medical applications for Chrysalin:

fracture repair;

diabetic ulcer healing; and

cartilage defect repair.

Preclinical research, as well as a Phase 1/2 pilot clinical safety study has been conducted in the following indications:

spine fusion;

cardiovascular repair, and

ligament and tendon repair.

We continue to explore other biopharmaceutical or peptide-based compounds that can complement the research activities internally and broaden the potential pipeline for successful products.

OUR LEAD PRODUCT CANDIDATES

Acceleration of Fracture Repair

Every broken bone is called a fracture and approximately 30 million fractures are treated every year throughout the developed world, as reported by medical reimbursement records in countries with national healthcare systems. The treatment of a fracture depends on the severity of the break. Simple fractures often heal themselves, with more complex closed fractures potentially amenable to treatment by manipulation (also called reduction) without requiring surgery. Fractures that break the skin (or open fractures) or where the fragments cannot be lined up correctly usually require surgery. Sometimes plates, screws or pins are used for mechanical stabilization, occasionally with the use of bone grafts, all of which are invasive, expensive and time consuming procedures.

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Chrysalin is a substance that, when injected through the skin into the fracture site at the time of fracture reduction, has been shown in preliminary clinical trials to accelerate the healing of the fracture. Chrysalin does this by mimicking certain stimulatory aspects of the thrombin molecule. Fractures that heal faster lead to earlier return of function for the patient and potentially improved clinical outcomes.

In pre-clinical animal studies, a single injection of Chrysalin into the fracture gap accelerated fracture healing by up to 50% as measured by mechanical testing. In late 1999, we initiated a combined Phase 1/2 human clinical trial to evaluate the safety of Chrysalin and its effect on the rate of healing in adult subjects with unstable distal radius fractures (fractures around and in the wrist joint). We presented the results of this Phase 1/2 human clinical trial for fracture repair at the 57th Annual Meeting of the American Society for Surgery of the Hand in October 2002. The data from x-ray evaluations revealed that a single injection of Chrysalin into the fracture gap resulted in a trend toward accelerated fracture healing compared with the saline placebo control. There were no reportable adverse events attributable to Chrysalin in the study.

We completed patient enrollment in our pivotal Phase 3 human clinical trial evaluating the efficacy of Chrysalin in patients with unstable and/or displaced distal radius (wrist) fractures in May 2005. We enrolled a total of 503 study patients in 27 health centers throughout the United States. The primary efficacy endpoint in the trial is to measure how quickly wrist fractures in patients injected with Chrysalin heal, as measured by the removal of immobilization. Accelerated removal of immobilization allows patients to initiate hand therapy and regain full function of their wrists and hands sooner. The clinical trial s secondary efficacy endpoints include radiographic analysis of healing, as well as clinical, functional, and patient outcome parameters. To date, there have been no adverse events related to Chrysalin reported in this Phase 3 trial. We are currently collecting the data for the Phase 3 study and, data permitting, expect to release initial efficacy results in the first half of 2006.

We are also conducting a Phase 2b human clinical trial to establish the lower dose range of Chrysalin versus a placebo control, as well as provide information to support our potential future fracture repair new drug application (NDA). Enrollment is proceeding in the study with a goal of 500 patients in approximately 60 sites. Currently, there are more than 40 sites that are actively enrolling patients and several additional sites are seeking approval from their respective Institutional Review Boards (IRBs) to conduct the Phase 2b trial.

Diabetic Ulcer Healing

Our diabetic ulcer healing studies are focused on healing diabetic foot ulcers, a common problem for diabetic patients. Diabetic patients suffer from open wound foot ulcers because diabetes related nerve damage causes the patient to lose sensation. Patients thus may not notice an injury to the foot and neglect the injury. This and the diminished blood flow to extremities caused by diabetes cause a diabetic patient s wounds to heal more slowly or not at all.

Current standard treatment for diabetic foot ulcer wounds focuses on sanitation of the wound and non-use of the foot to allow for the body s natural healing processes to occur. These treatments require high patient compliance and effectively heal only approximately 33% of these ulcers. Wounds that do not respond to treatment can result in amputation of the affected limb.

We believe topical treatment of the wound with Chrysalin will promote new tissue growth necessary for healing. In 2001, CBI conducted a multicenter Phase 1/2 double blind human clinical trial with 60 patients, the results of which were presented at the Wound Healing Society in May of 2002. CBI found no drug related adverse events or patient sensitivity to Chrysalin in the trial and complete wound closure occurred in 70% of Chrysalin-treated ulcers relative to 33% in placebo controls.

Our preclinical studies and initial Phase 1/2 human clinical trial evaluated Chrysalin as a potential product for diabetic ulcer healing in a saline formulation. We are currently developing a gel formulation for a Chrysalin-based product candidate for diabetic ulcer healing. The start date for our next human clinical trial for this indication will depend on successful completion of the gel formulation work and formulation-bridging preclinical studies, as well as the submission of a formulation amendment and clinical trial protocol to the existing and active Investigational New Drug (IND) application for this indication.

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Cartilage Defect Repair

Cartilage tissue is the smooth, slippery cushion that exists where two bones meet to make a joint. Because damaged cartilage generally does not heal but slowly breaks down over time, the result can lead to a complete wearing away of the cartilage, leading to osteoarthritis.

The primary purpose of exploring Chrysalin s potential role in cartilage defect repair is to develop a technique to restore, rather than entirely replace, the original cartilage damaged due to acute traumatic events. These techniques, if successful, may also provide a novel approach for partial resurfacing of damaged joint (or articular) cartilage due to osteoarthritis. We have completed several steps necessary to submit an IND application for a Chrysalin-based product candidate for cartilage defect repair. Data permitting, we plan to submit an IND to the U.S. Food and Drug Administration (FDA) to begin a human clinical trial for this indication.

Spine Fusion

Spine fusion surgery is most commonly performed to treat degenerative disk disease, spinal instability and other disorders of the spine that are believed to be the cause of back and neck pain. The surgery involves the fusing of one or more vertebrae of the spine by placement of bone graft material around the targeted area of the spine during surgery. The body then heals the grafts over several months, which fuses the vertebrae together with newly formed bone so there is no longer movement between the vertebrae.

The bone used for the graft in this procedure is taken from another bone in the patient, usually from the iliac crest (hip bone) and is called autograft bone. In some procedures the patients and physicians elect to use allograft bone which is bone processed from cadavers. Autograft bone is currently the primary type of bone graft used in spinal fusion surgery. Allograft bone is often used but has not been an effective stand-alone substitute for autograft bone because it has no bioactive component to stimulate bone growth. The benefit of using allograft bone is it does not require a separate surgical procedure from the same patient to harvest the bone for the graft. Recently, a new alternative, bone morphegenic protein (BMP), which does have bioactive properties, has become commercially available as an alternative to autograft bone. While BMP appears to be as effective as autograft in fusing bone, BMP is expensive because it requires recombinant DNA technology to manufacture and currently costs up to $5,000 per dose. Recombinant DNA technology is a complex, multi-step process that requires growing the BMP proteins in cells in a laboratory, extracting the BMP proteins from the host cells and processing them for distribution to the patient.

Our potential solution to this problem is to combine Chrysalin, either in saline or in a sustained release formulation, with commercially available allograft bone for use in spinal fusion surgery as an alternative to autograft. A recently completed pre-clinical study, which was presented at the North American Spine Society meeting in October 2004 in Chicago, showed that Chrysalin, in several different formulations combined with allograft bone, caused varying degrees of bone formation in spine fusion tests.

Our preclinical studies on spine fusion address questions of safety when the Chrysalin peptide is used for spine fusion surgeries. We are currently collecting data from our pilot Phase 1/2 clinical trial for spine fusion, which completed enrollment in the spring of 2004. We expect to have preliminary results late this summer. To date, there have been no adverse events in this trial that were reported to be related to Chrysalin and patient follow-up has been excellent.

Cardiovascular Repair

Coronary artery disease is the narrowing of the arteries that carry blood through the heart and is a leading cause of mortality in the United States and other parts of the western world. The narrowing is usually caused by fatty deposits inside the artery walls that restrict the passage of blood carrying oxygen to the heart muscle. This oxygen insufficiency is the primary cause of chest pain (commonly referred to as angina) and, if left untreated, can lead to heart failure and, ultimately, death. The most common treatments for the disease are a regimen of pharmaceuticals that reduce the patient s cholesterol (slowing the buildup of deposits along artery walls) and surgical procedures to

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increase the blood flow through the arteries. Up to 15% of patients, however, either cannot undergo the treatments or do not achieve sufficient blood flow after the treatment.

A potentially new treatment for coronary artery disease is therapeutic angiogenesis, the growing of new blood vessels to deliver blood to the diseased heart. In pre-clinical animal studies conducted over the last two years, Chrysalin injections into the damaged heart appear to trigger a complex sequence of events that culminates in the body s growth of new blood vessels, enhancing blood delivery to the heart muscle. We are evaluating various delivery mechanisms for a Chrysalin product candidate for myocardial revascularization, as well as completing a series of preclinical studies to support clinical development for this indication.

Dental Bone Repair

We have focused on the use of Chrysalin in two dental bone repair situations: dental implants and maxillo-facial reconstruction. For some patients who need dental implants to replace missing teeth, the patient s bones in the jaw are not strong enough to hold the implanted teeth or supporting structure. The standard treatment in these cases is to insert bone graft material into or above the jaw bones and wait for the body to naturally grow bone around the graft material. This process can take a year or longer, during which a patient must use a temporary external plate with the temporary teeth. In a 2004 pre-clinical study done by CBI in conjunction with Louisiana State University, the incorporation of Chrysalin together with a commercially available bonegraft material into the space above a rabbit s jaw bones resulted in a significant increase in new bone formation. This could translate in a shorter wait for patients to complete their dental implant surgery.

Based on CBI s 2004 pre-clinical study, we are evaluating the use of Chrysalin with synthetic bone graft material on maxillo-facial defects to increase bone formation following maxillo-facial reconstruction surgery. Maxillo-facial reconstruction is a surgical procedure to reconstruct the face or head after a traumatic event. We do not have additional studies ongoing at this time.

Ligament and Tendon Repair

Ligaments are the soft tissues that connect bone to bone. Tendons are the soft tissue that connects muscles to bone. Ligaments and tendons are crucial to the biomechanical functions of the body. Injuries to ligaments and tendons are very common, and typically these injuries are treated either conservatively with rehabilitation techniques or with surgical techniques. These injuries are often slow to heal or do not heal completely. Our research is focused on determining if Chrysalin accelerates ligament and tendon tissue repair, resulting in better restoration of function. We are currently completing our first pre-clinical study of Chrysalin for tendon repair in collaboration with an academic institution.

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FORWARD-LOOKING STATEMENTS AND RISK FACTORS

All statements other than statements of historical facts included or incorporated by reference into this reoffer prospectus, including statements regarding our future financial position, business strategy, budgets, projected costs, and plans and objectives for future operations are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are subject to risks and uncertainties that could cause actual results to differ materially from those anticipated as of the date of this reoffer prospectus. Forward-looking statements generally can be identified by the use of forward-looking words such as may, could, expect, intend, pla seek, anticipate, believe, estimate, predict, potential, continue, or the negative of these terms or other comp 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. Some of the factors that could cause such a variance may be disclosed elsewhere in this reoffer prospectus and documents incorporated by reference into this reoffer prospectus, and include the following:

unfavorable results of our product candidate development efforts;

unfavorable results of our pre-clinical or clinical testing;

delays in obtaining, or failure to obtain FDA approvals;

increased regulation by the FDA and other agencies;

the introduction of competitive products;

impairment of license, patent or other proprietary rights;

failure to achieve market acceptance of our products;

the impact of present and future collaborative agreements; and

failure to successfully implement our drug development strategy.

We urge you to consider these factors and to review carefully the description of risks below for a more complete discussion of the risks of an investment in our securities. The forward-looking statements included in this reoffer prospectus or incorporated by reference into this reoffer prospectus are made only as of the date of this reoffer prospectus or the date of the incorporated document, and we undertake no obligation to publicly update these statements to reflect subsequent events or circumstances.

Risks of 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. There is no assurance that our current level of funds will be sufficient to support all research expenses to achieve commercialization of any of our product candidates. In November 2003, we sold our bone growth stimulation device business, which was our revenue generating operation. We are now focused solely on developing and testing the product candidates in our Chrysalin Product Platform. We currently have no pharmaceutical products being sold or ready for sale and do not expect to be able to market 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 as 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. At the end of 2004, our cash and investments were approximately $103.6 million. At June 30, 2005, our cash and investments were $91.1 million. Based on current research and development plans, we anticipate that 2005 cash

expenditures will be approximately $26.0 to $28.0 million, which we expect will be offset by the receipt of $7.0 million in cash from an indemnity escrow established in connection with the sale of our bone growth stimulation device business in November 2003. As we accelerate our development work, particularly for indications other than our most advanced indication, fracture repair, we will need additional funding to continue our development program, through the sale of equity or debt securities, joint ventures, licensing agreements, or other sources of funding.

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We do not expect to receive any revenue from product sales 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 repeat clinical trials and analyze data. Changes in any of these assumptions can change significantly our estimated cash expenditure levels.

Our product candidates are in various stages of development and 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. Our product candidates are at the following stages of development:

Acceleration of Fracture Repair	Phase 3 human clinical trials
Dermal Wound Healing	Phase 1/2 human clinical trials
Cartilage Defect Repair	Late stage pre-clinical trials
Tendon and Ligament Repair	Early stage pre-clinical trials
Cardiovascular Repair	Pre-clinical trials
Spine Fusion	Phase 1/2 human clinical trials

We are subject to the risk that:

- some or all of our product candidates are determined to be 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
- patients, health insurance and/or physicians do 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 peptide, Chrysalin. If one of our product candidates reveals safety or fundamental inefficacy issues in clinical trials, it could impact the development path for all our other current product candidates.

The development of each of our product candidates in the Chrysalin Product Platform is based on our knowledge and understanding of how the thrombin molecule contributes to tissue repair. While there are important differences in each of the product candidates in terms of their purpose (fracture repair, diabetic ulcer healing, cartilage repair, etc.), each product candidate is focused on accelerating tissue repair and is based on the ability of

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Chrysalin to mimic specific attributes of the human thrombin molecule to stimulate the body s natural healing processes.

Since we are developing the product candidates in the Chrysalin Product Platform in parallel, we expect to learn from the results of each trial and apply some of our findings to the development of the other product candidates in the platform. If one of the product candidates has negative clinical trial results or is shown to be ineffective, it could impact the development path or future development of the other product candidates in the platform. If we find that one of the biopharmaceutical product candidates is unsafe, it could impact the development of our other product candidates in clinical trials.

A portion of our rights to Chrysalin are sublicensed and if the license is invalid or unenforceable, we may lose our rights to use the Chrysalin technology, which would ultimately prevent us from commercializing and selling any Chrysalin-based products.

We co-own the principal patents underlying Chrysalin and indirectly license all other rights to the patents from the other co-owner through a license with the University of Texas, the licensee from the co-owner. If we lose our rights to Chrysalin under the license agreement, we would be unable to continue our product development programs and our business and prospects would be materially harmed.

If we cannot protect the Chrysalin 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 each product resulting from Chrysalin. 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.

Chrysalin is patented and there have been no successful challenges to the Chrysalin patent. However, if there were to be a challenge to the patent 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. To the extent that consultants, key employees or other third parties apply technological information independently developed by them or by others to our proposed products, disputes may arise as to the proprietary rights to such information, which may not be resolved in our favor. 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;

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.

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

As a small company with 40 employees, 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. We are most highly dependent on the services of Dr. James Ryaby, our Senior Vice-President and Chief Scientific Officer, whom we consider our key scientific employee. A long time employee of OrthoLogic, Dr. Ryaby oversees all of our clinical trials. Like all companies in our field, we face intense competition in our hiring efforts with other pharmaceutical and biotechnology companies, as well as universities and nonprofit research organizations, and we may have to pay higher salaries to attract and retain qualified personnel. The loss of one or more members of our current management team or any of our scientific personnel, could delay our business plan. The loss of Dr. Ryaby could cause a substantial delay in implementing our business plan. We do not maintain key man insurance on Dr. Ryaby.

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, and the sale of any approved products, 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.

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

Our stock price has varied significantly in the past (from a low of $3.28 to a high of $8.96 since January 1, 2003) 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, and conversions 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; and

changes in stock market analyst recommendations regarding us, other drug development companies or the pharmaceutical industry generally.

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.

Risks of our Industry

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.

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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.

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, usually universities, 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 our development 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, who are required to maintain compliance with the applicable FDA Good Manufacturing Practice regulations. We cannot be certain that our present or future manufacturers and suppliers will continue to comply with these regulations. 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. We endeavor to monitor compliance by conducting periodic audits using independent third party vendors.

The results of our late stage clinical trials may be insufficient to obtain FDA approval, which could result in a substantial delay in our ability to generate revenue.

Positive results from pre-clinical studies and early clinical trials do not ensure positive results in more advanced clinical trials. If we are unable to demonstrate that a product candidate will be safe and effective in advanced clinical trials involving larger numbers of patients, we will be unable to submit the New Drug Application (NDA) necessary to receive approval from the FDA to commercialize that product.

We are currently conducting a Phase 3 human clinical trial on Chrysalin for fracture repair indications. If we fail to achieve the primary endpoint in this Phase 3 clinical trial or the results are ambiguous, we will have to determine whether to redesign our Chrysalin fracture repair product candidate and our protocols and continue with additional testing, or cease activities in this area. Redesigning the product candidate could be extremely costly and time-consuming. A substantial delay in obtaining FDA approval or termination of the Chrysalin fracture repair product candidate could result in a delay in our ability to generate revenue.

Patients may discontinue their participation in our clinical studies, which may negatively impact the results of these studies and extend the timeline for completion of our development programs.

As with all clinical trials, we are subject to the risk that patients enrolled in our clinical studies may discontinue their participation at any time during the study as a result of a number of factors, including, withdrawing their consent or experiencing adverse clinical events, which may or may not be judged related to our product

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candidates under evaluation. We are subject to the risk that if a large number of patients in any one of our studies discontinue their participation in the study, the results from that study may not be positive or may not support an NDA for regulatory approval of our product candidates.

In addition, the time required to complete clinical trials is dependent upon, among other factors, the rate of patient enrollment. Patient enrollment is a function of many factors, including:

the size of the patient population;

the nature of the clinical protocol requirements;

the diversion of patients to other trials or marketed therapies;

our ability to recruit and manage clinical centers and associated trials;

the proximity of patients to clinical sites; and

the patient eligibility criteria for the study.

Even if we obtain marketing approval, our products will be subject to ongoing regulatory oversight, which may affect our ability to successfully commercialize any products we may develop.

Even if we receive regulatory approval of a product candidate, the approval may be subject to limitations on the indicated uses for which the product is marketed or require costly post-marketing follow-up studies. After we obtain marketing approval for any product, the manufacturer and the manufacturing facilities for that product will be subject to continual review and periodic inspections by the FDA and other regulatory agencies. The subsequent discovery of previously unknown problems with the product, or with the manufacturer or facility, may result in restrictions on the product or manufacturer, including withdrawal of the product from the market.

If we fail to comply with applicable regulatory requirements, we may be subject to fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

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 various treatments for or involving fracture repair, diabetic ulcer healing, cartilage defect repair, cardiovascular repair and ligament and tendon repair. 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. We are currently aware of the following development efforts by our competitors:

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Acceleration of Fracture Repair: While there is currently no drug product approved by the FDA for acceleration of fracture repair, at least one large pharmaceutical company, Pfizer, Inc., received FDA clearance to begin human clinical trials in the United States for this indication.

Diabetic Ulcer Healing: To our knowledge, there are two corporate sponsored clinical trials underway on new drug substances for diabetic ulcer healing. These early stage clinical trials are being conducted by Genentech on recombinant human vascular endothelial growth factor, and by King Pharmaceuticals on an adenosine A2A receptor agonist. One gene therapy company, Selective Genetics, has initiated an early stage human clinical trial on platelet derived growth factors in the United States for the diabetic ulcer indication.

Cartilage Defect Repair: Several products with bioactive components are in the development stage for this indication, including Bone Morphegenic Proteins (BMPs). However, we believe no company has yet received FDA authorization to begin human clinical trials in the United States for this indication.

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.

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.

We caution that the foregoing list of important factors is not exclusive. We do not undertake to update any forward-looking statement that may be made from time to time by or on behalf of us. The foregoing list of important factors is not exclusive and may not be up to date.

Developments in any of these areas could cause our results to differ materially from results that have been or may be projected by us.

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USE OF PROCEEDS

We will not receive any proceeds from the sale of the common stock pursuant to this reoffer prospectus. All proceeds from the sale of the common stock pursuant to this reoffer prospectus will be made for the account of the Selling Stockholder, as described below.

SELLING STOCKHOLDER

The following table sets forth information as of August 5, 2005 with respect to the beneficial ownership of our common stock both before and immediately following the offering by Dr. James M. Pusey (the Selling Stockholder identified and referred to throughout this reoffer prospectus). Beneficial ownership includes shares which may be acquired upon exercise of options that are exercisable within sixty days of the date as of which such beneficial ownership is determined. For purposes of the table below, we have assumed that after completion of the offering none of the shares covered by this reoffer prospectus will be held by the Selling Stockholder. All of the shares being offered under this reoffer prospectus were issued under the terms of a Letter of Restricted Stock Grant, dated March 3, 2005 between us and the Selling Stockholder.

NAME AND ADDRESS OF SELLING STOCKHOLDER	RELATIONSHIP TO ORTHOLOGIC	NUMBER OF SHARES OWNED PRIOR TO THE OFFERING	NUMBER OF SHARES BEING OFFERED	NUMBER OF SHARES OWNED AFTER THE OFFERING
Dr. James M. Pusey 1275 West Washington St. Tempe, Arizona 85281	President, Chief Executive Officer and Director	700,000(1)	200,000	500,000(1)

(1) Includes 500,000 shares Dr. Pusey has a right to acquire upon exercise of stock options granted to him in March 2005, 10% of which vested immediately upon effectiveness of the grants, and the remainder of which vest monthly in equal amounts over a period of 48 months, subject to his continued employment with OrthoLogic.

Pursuant to Rule 416 promulgated under the Securities Act of 1933, as amended, the registration statement of which this reoffer prospectus is a part also covers any additional shares of common stock which become issuable in connection with the shares identified in the table above through any stock split, stock dividend, or similar transaction effected without the receipt of consideration, which results in an increase in the number of outstanding shares of common stock.

PLAN OF DISTRIBUTION

We will not receive any of the proceeds from the sale of the common stock by the Selling Stockholder pursuant to this reoffer prospectus. The aggregate proceeds to the Selling Stockholder from the sale of the common stock will be the purchase price of the common stock less any discounts and commissions. The Selling Stockholder reserves the right to accept and, together with his agents, to reject, any proposed purchase of common stock to be made directly or through agents. This reoffer prospectus covers the resale of shares of our common stock by the Selling Stockholder. As used in this reoffer prospectus, Selling Stockholder includes holders of shares of our common stock received from the Selling Stockholder after the date of this reoffer prospectus and who received such shares by gift or by other transfer by the Selling Stockholder to an immediate family member of such stockholder, by will or through operation of the laws of descent and distribution, and their respective administrators, guardians, receivers, executors or other persons acting in a similar capacity.

The common stock may be sold from time to time to purchasers:

directly by the Selling Stockholder and his successors, which includes his transferees, pledgees or donees or their successors; or

through underwriters, broker-dealers or agents who may receive compensation in the form of discounts, concessions or commissions from the Selling Stockholder or the purchasers of the common stock. These

discounts, concessions or commissions may be in excess of those customary in the types of transactions involved.

The Selling Stockholder and any underwriters, broker-dealers or agents who participate in the distribution of the common stock may be deemed to be underwriters within the meaning of the Securities Act of 1933, as

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amended. As a result, any profits on the sale of the common stock by the Selling Stockholder and any discounts, commissions or concessions received by any such broker-dealers or agents may be deemed to be underwriting discounts, and underwriters within the meaning of the Securities Act will be subject to prospectus delivery requirements of the Securities Act. If the Selling Stockholder is deemed to be an underwriter, the Selling Stockholder may be subject to certain statutory liabilities, including, without limitation, liabilities under Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Securities Exchange Act of 1934, as amended. If the common stock is sold through underwriters, broker-dealers or agents, the Selling Stockholder will be responsible for underwriting discounts or commissions or agent s commissions.

The common stock may be sold in one or more transactions at:

fixed prices;

prevailing market prices at the time of sale;

prices related to such prevailing market prices;

varying prices determined at the time of sale; or

negotiated prices.

These sales may be effected in transactions:

on any national securities exchange or quotation service on which the common stock may be listed or quoted at the time of the sale;

in the over-the-counter market;

otherwise than on such exchanges or services or in the over-the-counter market;

through the writing and exercise of options, whether such options are listed on an options exchange or otherwise; or

through the settlement of short sales.

These transactions may include block transactions or crosses. Crosses are transactions in which the same broker acts as an agent on both sides of the trade.

In connection with the sales of the common stock or otherwise, the Selling Stockholder may enter into hedging transactions with broker-dealers or other financial institutions. These broker-dealers or other financial institutions may in turn engage in short sales of the common stock in the course of hedging their positions. The Selling Stockholder may also sell the common stock short and deliver common stock to close out short positions, or loan or pledge common stock to broker-dealers that in turn may sell the common stock.

Broker-dealers engaged by the Selling Stockholder may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholder (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The Selling Stockholder does not expect these commissions and discounts to exceed what is customary in the types of transactions involved.

The Selling Stockholder may from time to time pledge or grant a security interest in some or all of the shares of common stock owned by him and, if he defaults in the performance of his secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time under this reoffer prospectus, or under an amendment to this reoffer prospectus under Rule 424(b)(3) or other applicable provision of

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the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this reoffer prospectus.

We understand that the Selling Stockholder has entered into an agreement with a broker-dealer pursuant to Rule 10b5-1 under the Securities Exchange Act of 1934, as amended, pursuant to which the broker-dealer is obligated, upon the lapsing of the restrictions on shares covered by this reoffer prospectus from time to time, to sell a specified percentage of such shares within a specified time following such lapse. This arrangement is subject to change or termination by the Selling Stockholder as permitted under Rule 10b5-1 and other applicable law and regulation.

At the time a particular offering is made, if required, a reoffer prospectus supplement will be distributed, which will set forth the name of the Selling Stockholder, the aggregate amount and type of securities being offered, the price at which the securities are being sold and other material terms of the offering, including the name or names of any underwriters, broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the Selling Stockholder and any discounts, commissions or concessions allowed or reallowed to broker-dealers.

We cannot be certain that the Selling Stockholder will sell any or all of the common stock pursuant to this reoffer prospectus. Further, we cannot assure you that the Selling Stockholder will not transfer, devise or gift the common stock by other means not described in this reoffer prospectus, including sales under Rule 144 of the Securities Act. The common stock may be sold in some states only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification is available and complied with.

The Selling Stockholder and any other person participating in the sale of the common stock will be subject to the Exchange Act. The Exchange Act rules include, without limitation, Regulation M, which may limit the timing of purchases and sales of any of the common stock by the Selling Stockholder and any other such person. In addition, Regulation M may restrict the ability of any person engaged in the distribution of the common stock and the ability of any person or entity to engage in market-making activities with respect to the common stock.

We have agreed to pay substantially all expenses incidental to the registration, offering and sale of the common stock to the public, other than commissions, fees and discounts of underwriters, brokers, dealers and agents.

WHERE YOU CAN FIND MORE INFORMATION

REGISTRATION STATEMENT

We have filed with the Securities and Exchange Commission a registration statement on Form S-8 under the Securities Act with respect to our common stock offered in this reoffer prospectus. This reoffer prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules to the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and its exhibits and schedules. Statements contained in this reoffer prospectus as to the contents of any contract or other document are not necessarily complete and, in each instance, reference is made to the copy of that contract or document filed as an exhibit to the registration statement, each of these statements being qualified in all respects by that reference. The registration statement, including exhibits to the registration statement, may be inspected and copied at the public reference facilities maintained by the SEC at its Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549 at prescribed rates. You should call 1-800-SEC-0330, for more information on the public reference room. The SEC also maintains a website (http://www.sec.gov) that contains reports, proxy and information statements and other information regarding registrants, including us, which file electronically with the SEC. The registration statement, including all exhibits and amendments to the registration statement, is available on that website.

OTHER INFORMATION

Government Filings

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We are subject to the information reporting requirements of the Securities Exchange Act of 1934, as amended. As such, we file annual, quarterly and special reports, proxy statements and other documents with the SEC. These reports, proxy statements and other documents may be inspected and copied at the public reference facilities maintained by the SEC at its Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of such material by mail from the public reference facilities of the SEC s Washington, D.C. offices, at prescribed rates. Please call the SEC at (202) 551-8090 for further information on its public reference facilities. In addition, the SEC maintains a website that contains reports, proxy and information statements and other information regarding registrants, including us, that file electronically with the SEC at the address http://www.sec.gov. Information contained on the SEC website is not part of this reoffer prospectus.

Nasdaq

Our common stock is listed on The Nasdaq National Market. Material filed by us can also be inspected and copied at the offices of the National Association of Securities Dealers, Inc. at 1735 K Street, N.W., Washington, D.C. 20006.

OrthoLogic Corp.

Most of our SEC filings also are available at our website at http://www.orthologic.com. Information contained on our website is not part of this reoffer prospectus. We will provide you without charge, upon your oral or written request, with a copy of any or all reports, proxy statements and other documents we file with the SEC, as well as any or all of the documents incorporated by reference in this reoffer prospectus or the registration statement (other than exhibits to such documents unless such exhibits are specifically incorporated by reference into such documents). Requests for such copies should be directed to:

OrthoLogic Corp.
Attention: Corporate Secretary
1275 West Washington Street
Tempe, Arizona 85281
Telephone number: (602) 286-5520

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference in this reoffer prospectus certain information we file with the SEC, which means that:

- incorporated documents are considered a part of this reoffer prospectus;
- we can disclose important information to you by referring you to those documents; and
- certain information that we file after the date of this reoffer prospectus with the SEC will automatically update and supersede information contained in this reoffer prospectus and the registration statement.

We incorporate by reference into this reoffer prospectus the following documents, and filings we make after the initial filing of the registration statement but before it becomes effective, and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this reoffer prospectus (other than current reports or portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K) until we sell all of the securities that we have registered under the registration statement of which this is a part:

- Our Annual Report on Form 10-K, as amended, for the year ended December 31, 2004;
- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2005 and June 30, 2005;
- Our Current Reports on Form 8-K filed with the SEC on January 4, 2005, February 11, 2005, February 22, 2005, March 4, 2005, April 15, 2005, April 21, 2005, June 16, 2005 and July 8, 2005; and
- The description of our common stock contained in our Registration Statement on Form 8-A dated January 28, 1993, and any further amendment or report updating that description.

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LEGAL MATTERS

Certain legal matters in connection with the OrthoLogic common stock offered by this reoffer prospectus have been passed upon for us by Quarles & Brady Streich Lang, LLP, Phoenix, Arizona.

EXPERTS

The financial statements, the related financial statement schedule and management s report on the effectiveness of internal control over financial reporting incorporated in this prospectus by reference from the Company s Annual Report on Form 10-K have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports, (which reports (1) express an unqualified opinion on the financial statements and include an explanatory paragraph relating to the sale of our bone stimulation device business in 2003 for which the gain on the sale, the results of operations prior to the sale, and any subsequent income recognized related to the sale are included in income from discontinued operations, (2) express an unqualified opinion on management s assessment regarding the effectiveness of internal control over financial reporting, and (3) express an unqualified opinion on the effectiveness of internal control over financial reporting) which are incorporated herein by reference, and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

INDEMNIFICATION

Section 145 of the General Corporation Law of the State of Delaware, or DGCL, empowers a Delaware corporation to indemnify any person who was or is a party, or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation) by reason of the fact that such person is or was an officer or director of such corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise. The indemnity may include expenses (including attorneys fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided that such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person s conduct was unlawful.

A Delaware corporation may indemnify past or present officers and directors of such corporation or of another corporation or other enterprise at the former corporation s or enterprise s request, in an action by or in the right of the corporation to procure a judgment in its favor under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in defense of any action referred to above, or in defense of any claim, issue or matter therein, the corporation must indemnify such person against the expenses (including attorneys fees) which such person actually and reasonably incurred in connection therewith. Section 145 further provides that any indemnification shall be made by the corporation only as authorized in each specific case upon a determination that indemnification of such person is proper because he has met the applicable standard of conduct (i) by the stockholders, (ii) by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, (iii) by a committee of such directors designated by majority vote of such directors, even though less than a quorum, or (iv) by independent legal counsel in a written opinion, if there are no such disinterested directors, or if such disinterested directors so direct. Section 145 further provides that indemnification pursuant to its provisions is not exclusive of other rights of indemnification to which a person may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise.

We have directors and officers insurance which provides for indemnification of our officers and directors and certain other persons against liabilities and expenses incurred by any of them in certain stated proceedings and under certain stated conditions. We have also entered into separate indemnification agreements with each of our directors and certain officers that may require us, among other things, to indemnify such directors and officers against certain liabilities that may arise by reason of their status or service as directors or officers to the maximum extent permitted under Delaware law.

Our restated certificate of incorporation provides that indemnification shall be to the fullest extent permitted by the DGCL for all current or former directors or officers.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or

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otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933, as amended, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933, as amended, and will be governed by the final adjudication of such issue.

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PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The SEC allows us to incorporate by reference in this reoffer prospectus certain information we file with the SEC, which means that:

- incorporated documents are considered a part of this reoffer prospectus;
- we can disclose important information to you by referring you to those documents; and
- certain information that we file after the date of this reoffer prospectus with the SEC will automatically update and supersede information contained in this reoffer prospectus and the registration statement.

We incorporate by reference into this reoffer prospectus the following documents, and filings we make after the initial filing of the registration statement but before it becomes effective, and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this reoffer prospectus (other than current reports or portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K) until we sell all of the securities that we have registered under the registration statement of which this is a part:

- Our Annual Report on Form 10-K, as amended, for the year ended December 31, 2004;
- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2005 and June 30, 2005;
- Our Current Reports on Form 8-K filed with the SEC on January 4, 2005, February 11, 2005, February 22, 2005, March 4, 2005, April 15, 2005, April 21, 2005, June 16, 2005 and July 8, 2005; and
- The description of our common stock contained in our Registration Statement on Form 8-A dated January 28, 1993, and any further amendment or report updating that description.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 145 of the General Corporation Law of the State of Delaware, or DGCL, empowers a Delaware corporation to indemnify any person who was or is a party, or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation) by reason of the fact that such person is or was an officer or director of such corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise. The indemnity may include expenses (including attorneys fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided that such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person s conduct was unlawful.

A Delaware corporation may indemnify past or present officers and directors of such corporation or of another corporation or other enterprise at the former corporation s request, in an action by or in the right of the corporation to procure a judgment in its favor under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in defense of any action referred to above, or in defense of any claim, issue or matter therein, the corporation must indemnify such person against the expenses (including attorneys fees) which such person actually and reasonably incurred in connection therewith. Section 145 further provides that any indemnification shall be made by the corporation only as authorized in each specific case upon a determination that indemnification of such person is proper because he has met the applicable standard of conduct (i) by the

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stockholders, (ii) by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, (iii) by a committee of such directors designated by majority vote of such directors, even though less than a quorum, or (iv) by independent legal counsel in a written opinion, if there are no such disinterested directors, or if such disinterested directors so direct. Section 145 further provides that indemnification pursuant to its provisions is not exclusive of other rights of indemnification to which a person may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise.

We have directors and officers insurance which provides for indemnification of our officers and directors and certain other persons against liabilities and expenses incurred by any of them in certain stated proceedings and under certain stated conditions. We have also entered into separate indemnification agreements with each of our directors and certain officers that may require us, among other things, to indemnify such directors and officers against certain liabilities that may arise by reason of their status or service as directors or officers to the maximum extent permitted under Delaware law.

Our restated certificate of incorporation provides that indemnification shall be to the fullest extent permitted by the DGCL for all current or former directors or officers.

Item 7. Exemption from Registration Claimed.

Exemption from the registration provisions of the Securities Act of 1933, as amended, for the issuance of the shares being offered pursuant to the prospectus contained in this registration statement is claimed under Section 4(2) of the Securities Act of 1933, as amended, among others, on the basis that such transactions did not involve any public offering and the purchaser was sophisticated with access to the kind of information registration would provide.

Item 8. Exhibits.

See the Exhibit Index which is incorporated herein by reference.

Item 9. Undertakings.

The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (1)(i) and (1)(ii) do not apply if the registration statement is on Form S-3, Form S-8 or Form F-3, and the information required to be included in a

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post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Securities and Exchange Commission by the Registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934, as amended, that are incorporated by reference in the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act of 1933, as amended, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering; and

(4) That, for purposes of determining any liability under the Securities Act of 1933, as amended, each filing of the Registrant s annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934, as amended, that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933, as amended, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933, as amended, and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Tempe, State of Arizona, on August 9, 2005.

ORTHOLOGIC CORP.
(Registrant)

By: /s/ James M. Pusey
James M. Pusey
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints James M. Pusey and Sherry A. Sturman and each of them, his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, and any other regulatory authority, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Person	Title	Date
/s/ James. M. Pusey James M. Pusey	President, Chief Executive Officer and Director (Principal Executive Officer)	August 9, 2005
/s/ John M. Holliman, III John M. Holliman, III	Chairman of the Board of Directors and Director	August 9, 2005
/s/ Fredric J. Feldman Fredric J. Feldman	Director	August 9, 2005
/s/ Elwood D. Howse, Jr. Elwood D. Howse, Jr.	Director	August 9, 2005

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Person	Title	Date
/s/ Augustus A. White, III	Director	August 9, 2005
Augustus A. White, III		
/s/ Stuart H. Altman, Ph.D.	Director	August 9, 2005
Stuart H. Altman, Ph.D.		
/s/ Michael D. Casey	Director	August 9, 2005
Michael D. Casey		
/s/ Sherry A. Sturman	Senior Vice President and Chief Financial Officer (Principal	August 9, 2005
Sherry A. Sturman	Financial and Accounting Officer)	

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ORTHOLOGIC CORP.
EXHIBIT INDEX
TO
FORM S-8 REGISTRATION STATEMENT

Exhibit Number	Description	Incorporated Herein by Reference To	Filed Herewith
4.1	Rights Agreement dated as of March 4, 1997, between the Company and Bank of New York, and Exhibits A, B, and C thereto	Exhibit 4.1 to the Company s Registration Statement on Form 8-A filed with the Securities and Exchange Commission on March 6, 1997	
4.2	1987 Stock Option Plan of the Company, as amended and approved by stockholders	Exhibit 4.4 to the Company s Form 10-Q for the quarter ended June 30, 1997 (June 1997 10-Q)	
4.3	1997 Stock Option Plan of the Company	Exhibit 4.3 to the Company s Registration Statement on Form S-8 filed March 2, 2005	
4.4	First Amendatory Agreement to March 4, 1997 Rights Agreement	Exhibit 10.1 to the Company s Form 8-K filed August 24, 1999	
4.5	Amendment No. 2 to March 4, 1997 Rights Agreement	Exhibit 4.1 to the Company s Form 8-K filed October 20, 2003	
5.1	Opinion of Quarles & Brady Streich Lang LLP		X
23.1	Consent of Deloitte & Touche LLP		X
23.2	Consent of Quarles & Brady Streich Lang LLP		Included in Exhibit 5.1
24.1	Powers of Attorney		See signature page