

INOVIO BIOMEDICAL CORP

Form 424B5

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FILE NO. 333-134084

PROSPECTUS SUPPLEMENT NO. 4

(To Prospectus dated May 25, 2006)

INOVIO BIOMEDICAL CORPORATION

4,595,094 Shares of Common Stock

We are selling 4,595,094 shares of our common stock to investors pursuant to this prospectus supplement and the accompanying prospectus. We will sell our common stock to these investors at the negotiated price of \$3.52 per share of common stock.

Our common stock is listed on the American Stock Exchange, or AMEX, under the symbol INO. On May 11, 2007, the last reported sale price for our common stock on the American Stock Exchange was \$3.72 per share.

We anticipate that the net proceeds to us after expenses of this offering will be approximately \$16.1 million. We expect the total offering expenses to be approximately \$70,000.

Purchase of our securities involves a high degree of risk. See Risk Factors beginning at page 3 of the accompanying prospectus and on page S-5 of this prospectus supplement.

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

Closing of our sale of shares pursuant this prospectus supplement is subject to the satisfaction of certain conditions, including approval by AMEX of the listing on AMEX of the shares. We expect to deliver the shares being sold under this prospectus supplement within three trading days of the closing following satisfaction of these conditions.

The date of this prospectus supplement is May 14, 2007.

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with different information. You should assume that the information appearing in this prospectus supplement is accurate only as of the date on the front cover of this prospectus supplement. Our business, financial condition, results of operations and prospects may have changed since that date.

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THE OFFERING

Common Stock to be sold	4,595,094 shares
Common Stock to be outstanding after this offering	43,419,662(1)
Use of proceeds	We expect to use the net proceeds from this offering for general corporate purposes and working capital, including for clinical trials expenses, research and development, general and administrative expenses, manufacturing and potential acquisitions of companies and technologies that complement our business.
AMEX Symbol	INO

(1) The number of shares of common stock shown above to be outstanding after this offering is based on 38,824,568, the number of shares of our common stock outstanding on May 4, 2007 and excludes shares of common stock issuable upon exercise or conversion of our warrants, options and convertible preferred stock outstanding at May 4, 2007.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering. The second part is the accompanying prospectus, which gives more general information, some of which may not apply to this offering. If the description of this offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement. **In addition, you should review the risks of investing in our common shares discussed beginning on page 3 of the accompanying prospectus and immediately below in this prospectus supplement prior to making an investment decision.**

We incorporate important information into this prospectus supplement and the accompanying prospectus by reference to our filings with the Securities and Exchange Commission. You may request a copy of these filings, at no cost, upon request Shareholder Relations at Inovio Biomedical Corporation, 11494 Sorrento Valley Road, San Diego, CA 92121-1318, telephone number (858) 597-6006.

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RISK FACTORS

You should carefully consider and evaluate all of the information in this Prospectus Supplement in combination with the more detailed description of our business in our annual report on Form 10-K for the year ended December 31, 2006, which we filed with the Securities and Exchange Commission on March 16, 2007, and in our quarterly report on Form 10-Q for the three months ended March 31, 2007 we filed with the Securities and Exchange Commission on May 9, 2007, for a more complete understanding of the risks associated with an investment in our securities. The following risk factors are not the only risks that could potentially face our company. Additional issues not now known to us or that we may currently deem immaterial may also impair our ability to commercialize our technology and the therapies we believe are derivable therefrom resulting in our business outlook being compromised and the trading price of our common stock declining.

We Have a History of Losses, We Expect to Continue to Incur Losses and We May Not Achieve or Maintain Profitability. As of March 31, 2007, we had an accumulated deficit of \$132,840,637. We have operated at a loss since 1994, and we expect this to continue for some time. The amount of the accumulated deficit will continue to increase, as it will be expensive to continue clinical, research and development efforts. If these activities are successful and if we receive approval from the FDA to market equipment, then even more funding will be required to market and sell the equipment. The outcome of these matters cannot be predicted at this time. We are evaluating potential partnerships as an additional way to fund operations, but there is no assurance we will be able to secure partnerships that will provide the required funding, if at all. We will continue to rely on outside sources of financing to meet our capital needs beyond next year.

Further, there can be no assurance, assuming we successfully raise additional funds, that we will achieve positive cash flow. If we are not able to secure additional funding, we will be required to further scale back our research and development programs, preclinical studies and clinical trials, general, and administrative activities and may not be able to continue in business. Including the cash proceeds received from financings, various licensing payments, the exercise of employee stock options and investor warrants, we believe we have sufficient funds to fund operations through the beginning of the third quarter of 2008.

Our Ability to Utilize Our Net Operating Losses and Certain Other Tax Attributes May Be Limited. As disclosed in our annual report on Form 10-K for the 2006 fiscal year, we have significant net operating loss (NOL) carryforwards for both federal and state income tax purposes. We also have federal research tax carryforwards which begin to expire at the end of 2007 unless previously utilized. Under Section 382 of the Internal Revenue Code, if a corporation undergoes an ownership change, the corporation's ability to use its pre-change NOLs, research tax credit carryforwards and other pre-change tax attributes to offset its post-change income may be limited. An ownership change is generally defined as a greater than 50% change in its equity ownership by value over a three-year period. We believe that there are built-in gains inherent in the value of our assets that, when recognized, may increase this annual limitation during the five-year period from the date of an ownership change. We are currently assessing the extent of these built-in gains. Any limitation on our net operating loss carryforwards that could be used to offset post-ownership change in taxable income would adversely affect our liquidity and cash flow, as and when we become profitable.

A Small Number of Licensing Partners Account for a Substantial Portion of Our Revenue in Each Period and Our Results of Operations and Financial Condition Could Suffer if We Lose These Licensing Partners or Fail to Add Additional Licensing Partners in the Future.

We derive a significant portion of our revenue from a limited number of licensing partners in each period. Accordingly, if we fail to sign additional future contracts with major licensing partners, if a licensing contract is delayed or deferred, or if an existing licensing contract expires or is cancelled and we fail to replace the contract with new business, our revenue could be adversely affected. Until commercialization of our Medpulsar® Electroporation Therapy System, we expect that a limited number of licensing partners will continue to account for a substantial portion of our revenue in each quarter in the foreseeable future. During the three months ended March 31, 2007, one licensing partner, Merck, accounted for approximately 78% of our consolidated revenue. During the three months ended March 31, 2006, Merck accounted for approximately 60% of our consolidated revenue.

If We Cannot Maintain Our Existing Corporate and Academic Arrangements and Enter into New Arrangements, We May Be Unable to Develop Products Effectively, or at All. Our strategy for the research, development and commercialization of our product candidates may result in us entering into contractual arrangements with corporate collaborators, academic institutions

and others. We have entered into sponsored research, license and/or collaborative arrangements with several entities, including Merck, Wyeth, Vical, Valentis, the U.S. Navy, Chiron and the University of South Florida, as well as numerous other institutions that conduct clinical trials work or perform pre-clinical research for us. Our success depends upon our collaborative partners performing their responsibilities under these arrangements and complying with the regulations and requirements governing clinical trials. We cannot control the amount and timing of

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resources our collaborative partners devote to our research and testing programs or product candidates, or their compliance with regulatory requirements which can vary because of factors unrelated to such programs or product candidates. These relationships may in some cases be terminated at the discretion of our collaborative partners with only limited notice to us.

Merck can terminate its May 2004 license and collaboration agreement with us at any time in its sole discretion, without cause, by giving ninety days' advance notice to us. If this agreement is terminated by Merck at any time during the first two years of the collaboration term, then Merck shall continue, for a six-month period beginning on the date of such termination, to make payments previously approved by the project's joint collaboration committee in relation to scientists and outside contractors engaged by us in connection with the agreement. During the three months ended March 31, 2007, Merck accounted for approximately 78% of our consolidated revenue. During the three months ended March 31, 2006, Merck accounted for approximately 60% of our consolidated revenue.

We may not be able to maintain our existing arrangements, enter into new arrangements or negotiate current or new arrangements on acceptable terms, if at all. Some of our collaborative partners may also be researching competing technologies independently from us to treat the diseases targeted by our collaborative programs.

Changes in Foreign Exchange Rates May Affect Our Future Operating Results. In January 2005, we acquired Inovio AS, a Norwegian company. During the three months ended March 31, 2007, Inovio AS contributed approximately \$2,309 to our revenue, which amounted to approximately 0.5% of our total revenue. Inovio AS conducts its operations primarily in foreign currencies, including the Euro, Norwegian Kroner and Swedish Krona. In September 2006, we established Inovio Asia Pte. Ltd., a company incorporated in the Republic of Singapore, which conducts its operations primarily in Singapore dollars. Fluctuation in the values of these foreign currencies relative to the U.S. dollar will affect our financial results which are reported in U.S. dollars and will cause U.S. dollar translation of such currencies to vary from one period to another. We cannot predict the scope of any fluctuations in the values of these foreign currencies relative to the U.S. dollar nor the effect of exchange rate fluctuations upon our future operating results.

Sales of Substantial Amounts of Our Shares, or Even the Availability of Our Shares for Sale, in the Open Market Could Cause the Market Price of our Shares to Decline. Under our registration statement that the Securities and Exchange Commission, or the SEC, declared effective on May 25, 2006, we have registered with the SEC an aggregate of \$75,000,000 of our equity securities that we may issue from time to time, in one or more offerings at prices and on terms that we will determine at the time of each offering. Under that so-called "shelf" registration statement, we have registered multiple kinds of our equity securities, including our common stock, preferred stock, warrants and a combination of these securities, or units. Through March 31, 2007, we have taken-down from our shelf registration statement, issued and sold, an aggregate of 4,210,284 shares of our common stock valued at \$10,199,982 and warrants to purchase up to 1,425,919 shares of our common stock valued at \$4,092,388 and, if those warrants are fully exercised at their exercise price of \$2.87, we will have issued an additional 1,425,919 shares of our common stock under that shelf registration statement. In other words, the shares of common stock we have sold in offerings from our shelf registration statement represent approximately 14% of the value of the aggregate equity securities from our shelf registration statement at March 31, 2007 (19% if the warrants we have sold from our shelf registration statement are fully exercised). Upon completion of the sale and issuance of the shares offered via this prospectus supplement, we will have sold securities in offerings from our shelf registration statement representing approximately 35% of the value of the aggregate equity securities from our shelf registration statement at (41% if the warrants we have sold from our shelf registration statement are fully exercised).

In addition to the shares and warrants we have issued from our shelf registration statement, we have also issued 2,201,644 shares of our common stock and 938,475 warrants to purchase up to 938,475 shares of our common stock in other recent offerings.

Sales of substantial amounts of our stock at any one time or from time to time by the investors to whom we have issued them, or even the availability of these shares for sale, could cause the market price of our common stock to decline.

We Will Have a Need For Significant Funds In The Future And There Is No Guarantee That We Will Be Able To Obtain The Funds We Need. Developing a new medical device and conducting clinical trials is expensive. Our product development efforts may not lead to commercial products, either because our product candidates fail to be found safe or effective in

clinical trials or because we lack the necessary financial or other resources or relationships to pursue our programs through commercialization. Our capital and future revenue may not be sufficient to support the expenses of our operations, the development of a commercial infrastructure and the conduct of our clinical trials and pre-clinical research.

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Our plans for continuing clinical trials, conducting research, furthering development and, eventually, marketing our human-use equipment will involve substantial costs. The extent of our costs will depend on many factors, including some of the following:

- The progress and breadth of pre-clinical testing and the size or complexity of our clinical trials and drug delivery programs, all of which directly influence cost;
- Higher than expected costs involved in complying with the regulatory process to get our human-use products approved, including the number, size, and timing of necessary clinical trials and costs associated with the current assembly and review of existing clinical and pre-clinical information;
- Higher than expected costs involved in patenting our technologies and defending them and pursuing our intellectual property strategy;
- Changes in our existing research and development relationships and our ability to enter into new agreements;
- Changes in or terminations of our existing collaboration and licensing arrangements;
- Faster than expected rate of progress and changes in the scope and the cost of our research and development and clinical trial activities;
- An increase or decrease in the amount and timing of milestone payments we receive from collaborators;
- Higher than expected costs of preparing an application for FDA approval of our MedPulser® Electroporation Therapy System;
- Higher than expected costs of developing the processes and systems to support FDA approval of our MedPulser® Electroporation Therapy System;
- An increase in our timetable and costs for the development of marketing operations and other activities related to the commercialization of our MedPulser® Electroporation Therapy System and our other product candidates;
- A change in the degree of success in our Phase III clinical trial of our MedPulser® Electroporation Therapy System and in our other clinical trials;
- Higher than expected costs to further develop and scale up our manufacturing capability of our human-use equipment; and
- Competition for our products and our ability, and that of our partners, to commercialize our products.

We plan to fund operations by several means. We will attempt to enter into contracts with partners that will fund either general operating expenses or specific programs or projects. Some funding also may be received through government grants. However, we may not be able to enter into any such contracts or may not receive such grants or, if we do, our partners and the grants may not provide enough funding to meet our needs.

In the past, we have raised funds through the public and private sale of our stock, and we are likely to do this in the future. Sale of our stock to new private or public investors usually results in existing stockholders becoming diluted. The greater the number of shares sold, the greater the

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dilution. A high degree of dilution can make it difficult for the price of our stock to increase, among other things. Dilution also weakens a stockholder's voting power.

We cannot assure you that we will be able to raise additional capital to fund operations, or that we will be able to raise additional capital under terms that are favorable to us.

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If We Are Unable To Develop Commercially Successful Products, Including Our Medpulser® Electroporation Therapy System, In Various Markets For Multiple Indications, Particularly For The Treatment Of Head And Neck Cancer, Our Business Will Be Harmed And We May Be Forced To Curtail Or Cease Operations. Our ability to achieve and sustain operating profitability depends on our ability to successfully commercialize our MedPulser® Electroporation Therapy System in Europe and in the US for use in treating solid tumors, particularly for the treatment of head and neck cancer, and other indications. This will depend in large part on our ability to commence, execute and complete clinical programs and obtain regulatory approvals for our MedPulser® Electroporation Therapy System. While we have received various regulatory approvals which apply to Europe for our MedPulser® Electroporation Therapy System for use in treating solid tumors, the products related to such regulatory approval have not yet been commercialized. The FDA has been notified that most of our study population will be from non-English speaking sites in Eastern Europe whose outcome data may be considered to be unlike the United States, Canada and Western Europe. Further clinical trials are still necessary before we can seek regulatory approval to sell our products in the United States for treating solid tumors. We cannot assure you we will receive approval for our MedPulser® Electroporation Therapy System for the treatment of head and neck cancer or other types of cancer or indications in the United States or in other countries or, if approved, that we will achieve a significant level of sales. If we fail to commercialize our products, we may be forced to curtail or cease operations.

We have commenced additional clinical studies in different indications, such as breast cancer, and are also in the pre-clinical stages of research and development with other new product candidates using our electroporation technology. These new indications and product candidates will require significant costs to advance through the development stages. If such product candidates are advanced through clinical trials, the results of such trials may not gain FDA approval. Even if approved, our products may not be commercially successful.

We cannot assure you that we will successfully develop any products. If we fail to develop or successfully commercialize any products, we may be forced to curtail or cease operations. Additionally, much of the commercialization efforts for our products must be carried forward by a licensing partner. We may not be able to obtain such a partner.

The Market For Our Stock Is Volatile, Which Could Adversely Affect An Investment In Our Stock. Our share price and volume are highly volatile. This is not unusual for biomedical companies of our size, age, and with a discrete market niche. It also is common for the trading volume and price of biotechnology stocks to be unrelated to a company's operations, i.e. to go up or down on positive or no news. Our stock has exhibited this type of behavior in the past, and may well exhibit it in the future. The historically low trading volume of our stock, in relation to many other biomedical companies of our size, makes it more likely that a severe fluctuation in volume, either up or down, will affect the stock price.

Some factors that we would expect to depress the price of our stock include:

- Adverse clinical trial results;
- Our inability to obtain additional capital;
- Announcement that the FDA denied our request to approve our human-use product for commercialization in the United States, or similar denial by other regulatory bodies which make independent decisions outside the United States (to date, the EU is the only foreign jurisdiction in which we have sought approval for commercialization);
- Announcement of legal actions brought by or filed against us for patent or other matters, especially if we receive negative rulings or outcomes in such actions;
- Cancellation of corporate partnerships or other material agreements;
- Public concern as to the safety or efficacy of our human-use products including public perceptions regarding gene therapy in general;

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- Stockholders' decisions, for whatever reasons, to sell large amounts of our stock;
- Adverse research and development results;
- Declining working capital to fund operations, or other signs of apparent financial uncertainty;
- Significant advances made by competitors that adversely affect our potential market position; and

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- The loss of key personnel and the inability to attract and retain additional highly-skilled personnel.

Additionally, our clinical trials are open-ended and, therefore, there is the possibility that information regarding the success (or setbacks) of our clinical trials maybe be obtained by the public prior to a formal announcement by us. These factors, as well as the other factors described in this prospectus, could significantly affect the price of our stock.

If We Do Not Have Enough Capital To Fund Operations, Then We Will Have To Cut Costs. If we are unable to raise additional funds under acceptable terms, then we will have to take measures to cut costs, such as:

- Delay, scale back or discontinue one or more of our oncology or gene delivery programs or other aspects of operations, including laying off some personnel or stopping or delaying clinical trials;
- Sell or license some of our technologies that we would not otherwise give up if we were in a better financial position;
- Sell or license some of our technologies under terms that are less favorable than they otherwise might have been if we were in a better financial position; and
- Consider merging with another company or positioning ourselves to be acquired by another company.

If it became necessary to take one or more of the above-listed actions, then we may receive a lower valuation, which could impact our stock price. Further, the effects on our operations, financial performance and stock price may be significant if we do not or cannot take one or more of the above-listed actions in a timely manner when needed.

Pre-Clinical And Clinical Trials Of Human-Use Equipment Are Unpredictable. If We Experience Unsuccessful Trial Results, Our Business Will Suffer. Before any of our human-use equipment can be sold, the FDA or applicable foreign regulatory authorities must determine that the equipment meets specified criteria for use in the indications for which approval is requested, including obtaining appropriate regulatory approvals. Satisfaction of regulatory requirements typically takes many years, and involves compliance with requirements covering research and development, testing, manufacturing, quality control, labeling and promotion of drugs for human use. To obtain regulatory approvals, we must, among other requirements, complete clinical trials demonstrating that our product candidates are safe and effective for a particular cancer type or other disease. Regulatory approval of a new drug is never guaranteed. The FDA will make this determination based on the results from our pre-clinical testing and clinical trials and has substantial discretion in the approval process. Despite the time and experience exerted, failure can occur at any stage, and we could encounter problems causing us to abandon clinical trials.

We have completed Phase II clinical trials and are conducting two Phase III clinical trials of our lead product candidate, the MedPulser® Electroporation Therapy System, for the treatment of recurrent and second primary head and neck cancers. In addition, we are conducting two Phase IV (or Pre-Marketing) clinical trials of our MedPulser® Electroporation Therapy System for the treatment of new and recurrent head and neck cancers and new and recurrent primary skin cancers, and have started a Phase I clinical trial of our MedPulser® Electroporation Therapy System for the treatment of breast cancer. Current or future clinical trials may demonstrate the MedPulser® Electroporation Therapy System is neither safe nor effective.

Any delays or difficulties we encounter in our pre-clinical research and clinical trials, in particular the Phase III clinical trials of our MedPulser® Electroporation Therapy System for the treatment of recurrent head and neck cancer, may delay or preclude regulatory approval. Our product development costs will increase if we experience delays in testing or regulatory approvals or if we need to perform more extensive or larger clinical trials than planned. Any such events

could also delay or preclude the commercialization of our MedPulser® Electroporation Therapy System or any other product candidates.

Clinical trials are unpredictable, especially human-use trials. Results achieved in early stage clinical trials may not be repeated in later stage trials, or in trials with more patients. When early positive results were not repeated in later stage trials, pharmaceutical and biotechnology companies have suffered significant setbacks. Not only are commercialization timelines pushed back, but some companies, particularly smaller biotechnology companies with limited cash reserves, have discontinued business after releasing news of unsuccessful clinical trial results.

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We cannot be certain the results we observed in our pre-clinical testing will be confirmed in clinical trials or the results of any of our clinical trials will support FDA approval. If we experience unexpected, inconsistent or disappointing results in connection with a clinical or pre-clinical trial our business will suffer.

We have five ongoing clinical studies in patients with head and neck, cutaneous/subcutaneous, and breast cancer. In each study, patients are potentially at a high risk of morbidity complications and mortality due to the nature and late stage of their disease. The following serious adverse events (SAEs) that were related to treatment with bleomycin and the MedPulser® Electroporation Therapy System have been reported: sudden death (suspected heart attack), sudden death (suspected internal bleeding), sudden death (unknown cause), hemorrhage, obstruction of the airway (pharynx/nasopharynx), edema, pain, weight loss (anorexia) and carotid artery injury. The safety issues will have to be well-managed as bleeding is a potential SAE that can occur anytime until the wound is healed. Because our studies are controlled and ongoing, we cannot assure you that these or other SAEs will not delay or prevent approval of our product by the FDA.

In addition, any of our clinical trials for our treatment may be delayed or halted at any time for various reasons, including:

- The electroporation-mediated delivery of drugs or other agents may be found to be ineffective or be considered to cause harmful side effects, including death;
- Our clinical trials may take longer than anticipated for any of a number of reasons, including a scarcity of subjects that meet the physiological or pathological criteria for entry into the study and a scarcity of subjects that are willing to participate through the end of the trial, or follow-up visits;
- The reported clinical data may change over time as a result of the continuing evaluation of patients or the current assembly and review of existing clinical and pre-clinical information;
- Data from various sites participating in the clinical trials may be incomplete or unreliable, which could result in the need to repeat the trial or abandon the project; and
- Pre-clinical and clinical data can be interpreted in many different ways, and the FDA and other regulatory authorities may interpret our data differently than we do, which could halt or delay our clinical trials or prevent regulatory approval.

If any of the above events arise during our clinical trials or data review, then we would expect this to have a serious negative impact on our company and your investment.

Despite the FDA's designation of our MedPulser® Electroporation Therapy System as a Fast Track product, such FDA designation is independent of the FDA's Priority Review and Accelerated Approval designations and we may encounter delays in the regulatory approval process due to additional information requirements from the FDA, unintentional omissions from our PMA for our MedPulser® Electroporation Therapy System, or other delays in the FDA's review process. We may encounter delays or rejections in the regulatory approval process because of additional government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical trials and FDA regulatory review.

A majority of our operating expenses relate to our clinical trials. A delay in our clinical trials, for whatever reason, will probably require us to spend additional funds to keep our product(s) moving through the regulatory process. If we do not have or cannot raise additional funds, then the testing of our human-use products could be discontinued. In the event our clinical trials are not successful, we will have to determine whether to continue to fund our programs to address the deficiencies, or whether to abandon our clinical development programs for our products in tested indications. Loss of our human-use product line would be a significant setback for our company.

Because there are so many variables inherent in clinical trials, we cannot predict whether any of our future regulatory applications to conduct clinical trials will be approved by the FDA or other regulatory authorities, whether our clinical trials will commence or proceed as planned, and whether the trials will ultimately be deemed to be successful. To date, our experience has been that submission and approval of clinical protocols

has taken longer than desired or expected.

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Our Business Is Highly Dependent On Receiving Approvals From Various United States And International Government Agencies And Will Be Dramatically Affected If Approval To Manufacture And Sell Our Human-Use Equipment Is Not Granted Or Is Not Granted In A Timely Manner. The production and marketing of our human-use equipment and the ongoing research, development, pre-clinical testing, and clinical trial activities are subject to extensive regulation. Numerous governmental agencies in the U.S. and internationally, including the FDA, must review our applications and decide whether to grant regulatory approval. All of our human-use equipment must go through an approval process, in some instances for each indication for which we want to label it for use (such as use for dermatology, use for transfer of a certain gene to a certain tissue, or use for administering a certain drug to a certain tumor type in a patient having certain characteristics). These regulatory processes are extensive and involve substantial costs and time.

We have limited experience in, and limited resources available for regulatory activities. Failure to comply with applicable regulations can, among other things, result in non-approval, suspensions of regulatory approvals, fines, product seizures and recalls, operating restrictions, injunctions and criminal prosecution.

Any of the following events can occur and, if any did occur, any one could have a material adverse effect on our business, financial conditions and results of operations:

- As mentioned earlier, clinical trials may not yield sufficiently conclusive results for regulatory agencies to approve the use of our products;
- There can be delays, sometimes long, in obtaining approval for our human-use devices, and indeed, we have experienced such delays in obtaining FDA approval of our clinical protocols;
- The rules and regulations governing human-use equipment such as ours can change during the review process, which can result in the need to spend time and money for further testing or review;
- If approval for commercialization is granted, it is possible the authorized use will be more limited than we believe is necessary for commercial success, or that approval may be conditioned on completion of further clinical trials or other activities; and
- Once granted, approval can be withdrawn, or limited, if previously unknown problems arise with our human-use product or data arising from its use.

We Could Be Substantially Damaged If Physicians And Hospitals Performing Our Clinical Trials Do Not Adhere To Protocols Or Promises Made In Clinical Trial Agreements. We work and have worked with a number of hospitals to perform clinical trials, primarily in the field of oncology. We depend on these hospitals to recruit patients for our trials, to perform the trials according to our protocols, and to report the results in a thorough, accurate and consistent manner. Although we have agreements with these hospitals which govern what each party is to do with respect to each protocol, patient safety, and avoidance of conflict of interest, there are risks that the terms of the contracts will not be followed, such as the following:

Possible Deviations from Protocol. The hospitals or the physicians working at the hospitals may not perform the trials correctly. Deviations from our protocol may make the clinical data not useful and the trial could become essentially worthless.

Potential for Conflict of Interest. Physicians working on protocols may have an improper economic interest in our company, or other conflict of interest. When a physician has a personal stake in the success of the trial, such as when a physician owns stock, or rights to purchase stock of the trial sponsor, it can create suspicion that the trial results were improperly influenced by the physician's interest in economic gain. Not only can this put the clinical trial results at risk, but it can also cause serious damage to a company's reputation.

Patient Safety and Consent Issues. Physicians and hospitals may fail to secure formal written consent as instructed or report adverse effects that arise during the trial in the proper manner, which could put patients at unnecessary risk. Physicians and hospital staff may fail to observe proper safety measures such as the mishandling of used medical needles, which may result in the transmission of infectious and deadly diseases, such as HIV. This increases our liability, affects the data, and can damage our reputation.

If any of these events were to occur, then it could have a material adverse effect on our ability to receive regulatory authorization to sell our human-use equipment, and on our reputation. Negative events that arise in the performance of clinical trials sponsored by biotechnology companies with our size and limited cash reserves have resulted in companies

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going out of business. While these risks are always present, to date, our contracted physicians and clinics have been successful in collecting significant data regarding the clinical protocols under which they have operated, and we are unaware of any conflicts of interest or improprieties regarding our protocols.

Even If Our Products Are Approved By Regulatory Authorities, If We Fail To Comply With On-Going Regulatory Requirements, Or If We Experience Unanticipated Problems With Our Products, These Products Could Be Subject To Restrictions Or Withdrawal From The Market. Any product for which we obtain marketing approval, along with the manufacturing processes, post-approval clinical data and promotional activities for such product, will be subject to continual review and periodic inspections by the FDA and other regulatory bodies. Even if regulatory approval of a product is granted, the approval may be subject to limitations on the indicated uses for which the product may be marketed or to certain requirements resulting in costly post-marketing testing and surveillance to monitor the safety or efficacy of the product. Later discovery of previously unknown problems with our products, including unanticipated adverse events of unanticipated severity or frequency regarding manufacturer or manufacturing processes or failing to comply with regulatory requirements, may result in restrictions on such products or manufacturing processes, withdrawal of the products from the market, voluntary or mandatory recall, fines, suspension of regulatory approvals, product seizures or detention, injunctions or the imposition of civil or criminal penalties.

Failure To Comply With Foreign Regulatory Requirements Governing Human Clinical Trials And Marketing Approval For Our Human-Use Equipment Could Prevent Us From Selling Our Products In Foreign Markets, Which May Adversely Affect Our Operating Results And Financial Conditions. For the purposes of marketing our MedPulser® Electroporation Therapy System outside the United States, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country and may require additional testing. The time required to obtain approvals outside the United States may differ from that required to obtain FDA approval. We may not obtain foreign regulatory approval on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other countries or by the FDA. Failure to comply with these regulatory requirements or to obtain required approvals could impair our ability to develop these markets and could have a material adverse effect on our results of operations and financial condition.

Our Ability To Achieve Significant Revenues From Sales Or Leases Of Human-Use Products Will Depend On Establishing Effective Sales, Marketing And Distribution Capabilities Or Relationships And We Currently Lack Substantial Experience In These Areas. To market our products, we will need to develop sales, marketing and distribution capabilities. In order to develop or otherwise obtain these capabilities, we may have to enter into marketing, distribution or other similar arrangements with third parties in order to sell, market and distribute our products successfully. To the extent that we enter into any such arrangements with third parties, our product revenue is likely to be lower than if we marketed and sold our products directly, and our revenues will depend upon the efforts of these third parties.

We have limited experience in sales, marketing and distribution of clinical and human-use products and we currently have no sales, marketing or distribution capability. If we decide to market and sell our human-use products directly, we must develop a marketing and sales capability. This would involve substantial costs, training and time. We may be unable to develop sufficient sales, marketing and distribution capabilities to commercialize our products successfully. Regardless of whether we elect to use third parties or seek to develop our own marketing capability, we may not be able to successfully commercialize any product.

We Rely On Collaborative And Licensing Relationships To Fund A Portion Of Our Research And Development Expenses. If We Are Unable To Maintain Or Expand Existing Relationships, Or Initiate New Relationships, We Will Have To Defer Or Curtail Research And Development Activities In One Or More Areas. Our partners and collaborators fund a portion of our research and development expenses and assist us in the research and development of our human-use equipment. These collaborations and partnerships help pay the salaries and other overhead expenses related to research. In the past, we have encountered operational difficulties after the termination of an agreement by a former partner. Because this partnership was terminated, we did not receive significant milestone payments which we had expected and were forced to delay some clinical trials as well as some product development.

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Our clinical trials to date have used our equipment together with the anti-cancer drug bleomycin. We do not currently intend to package bleomycin together with the equipment for sale, but if it should be necessary or desirable to do this, we would need a reliable source of the drug. At this time we do not have a reliable long-term source of bleomycin for inclusion with equipment or alone. If it becomes necessary or desirable to include bleomycin in our package, we would have to form a relationship with another provider of this generic drug before any product could be launched.

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We also rely on scientific collaborators at companies and universities to further expand our research and to test our equipment. In most cases, we lend our equipment to a collaborator, teach him or her how to use it, and together design experiments to test the equipment in one of the collaborator's fields of expertise. We aim to secure agreements that restrict collaborators' rights to use the equipment outside of the agreed upon research, and outline the rights each of us will have in any results or inventions arising from the work.

Nevertheless, there is always potential that:

- Our equipment will be used in ways we did not authorize, which can lead to liability and unwanted competition;
- We may determine that our technology has been improperly assigned to us or a collaborator may claim rights to certain of our technology, which may require us to pay license fees or milestone payments and, if commercial sales of the underlying product are achieved, royalties;
- We may lose rights to inventions made by our collaborators in the field of our business, which can lead to expensive legal fights and unwanted competition;
- Our collaborators may not keep our confidential information to themselves, which can lead to loss of our right to seek patent protection and loss of trade secrets, and expensive legal fights; and
- Collaborative associations can damage a company's reputation if they fail and thus, by association or otherwise, the scientific or medical community may develop a negative view of us.

We cannot guarantee that any of the results from these collaborations will be successful. We also cannot be sure that we will be able to continue to collaborate with individuals and institutions that will further develop our products, or that we will be able to do so under terms that are not overly restrictive. If we are not able to maintain or develop new collaborative relationships, it is likely that our research pace will slow down and that it will take longer to identify and commercialize new products, or new indications for our existing products.

We Rely Heavily On Our Patents And Proprietary Rights To Attract Partnerships And Maintain Market Position. The strength of our patent portfolio is an important factor that will influence our success. Patents give the patent holder the right to prevent others from using its patented technology. If someone infringes upon the patented material of a patent holder, the patent holder has the right to initiate legal proceedings against that person to protect its patented material. These proceedings, however, can be lengthy and costly. We perform an ongoing review of our patent portfolio to confirm that our key technologies are adequately protected. If we determine that any of our patents require either additional disclosures or revisions to existing information, we may ask that such patents be reexamined or reissued, as applicable, by the United States Patent and Trademark Office.

The patenting process, enforcement of issued patents, and defense against claims of infringement are inherently risky. Because we rely heavily on patent protection, we face the following significant risks:

Possibility of Inadequate Patent Protection for Product. The United States Patent and Trademark Office or foreign patent offices may not grant patents of meaningful scope based on the applications we have already filed and those we intend to file. If we do not have patents that adequately protect our human-use equipment and indications for its use, then we will not be competitive.

Potential That Important Patents Will Be Judged Invalid. Some of the issued patents we now own or license may be determined to be invalid. If we have to defend the validity of any of our patents, the costs of such defense could be substantial, and there is no guarantee of a successful outcome. In the event an important patent related to our drug delivery technology is found to be invalid, we may lose competitive position and may not be able to receive royalties for products covered in part or whole by that patent under license agreements.

Danger of Being Charged With Infringement. Although we are not currently aware of any parties intending to pursue infringement claims against us, there is the possibility that we may use a patented technology owned by another person and/or be charged with infringement. Defending or indemnifying a third party against a charge of infringement can involve lengthy and costly legal actions, and there can be no guarantee of a successful outcome. Biotechnology companies comparable to us in size and financial position have discontinued business after fighting

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and losing infringement battles. If we or our partners were prevented from using or selling our human-use equipment, then our business would be materially adversely affected.

Freedom to Operate Issues. We are aware that patents related to electrically-assisted drug delivery have been granted to, and patent applications have been filed by our potential competitors. We or our partners have received licenses from some of these patents, and will consider receiving additional licenses in the future. Nevertheless, the competitive nature of our field of business and the fact that others have sought patent protection for technologies similar to ours make these potential issues significant.

In addition to patents, we also rely on trade secrets and proprietary know-how. We try to protect this information with appropriate confidentiality and inventions agreements with our employees, scientific advisors, consultants, and collaborators. We cannot be sure that these agreements will not be breached, that we will be able to protect ourselves if they are breached, or that our trade secrets will not otherwise become known or be independently discovered by competitors. If any of these events occurs, then we face the potential of losing control over valuable company information, which could negatively affect our competitive position.

If We Are Not Successful In Developing Our Current Products, Our Business Model May Change As Our Priorities And Opportunities Change And Our Business May Never Develop To Be Profitable Or Sustainable. There are many products and programs that seem promising to us which we could pursue. However, with limited resources, we may decide to change priorities and shift programs away from those that we have been pursuing for the purpose of exploiting our core technology of electroporation. The choices we make will be dependent upon numerous factors, for which we cannot predict. We cannot be sure that our business model, as it currently exists or as it may evolve, will enable us to become profitable or to sustain operations.

Serious And Unexpected Side Effects Attributable To Gene Therapy May Result In Governmental Authorities Imposing Additional Regulatory Requirements Or A Negative Public Perception Of Our Products. The MedPulser® DNA Delivery System and any of our other Gene Therapy or DNA Vaccine product candidates under development could be broadly described as gene therapies. A number of clinical trials are being conducted by other pharmaceutical companies involving gene therapy, including compounds similar to, or competitive with, our product candidates. The announcement of adverse results from these clinical trials, such as serious unwanted and unexpected side effects attributable to treatment, or any response by the FDA to such clinical trials, may impede the progress of our clinical trials, delay or prevent us from obtaining regulatory approval, or negatively influence public perception of our product candidates, which could harm our business and results of operations and reduce the value of our stock.

The U.S. Senate has held hearings concerning the adequacy of regulatory oversight of gene therapy clinical trials, as well as the adequacy of research subject education and protection in clinical research in general, and to determine whether additional legislation is required to protect volunteers and patients who participate in such clinical trials. The Recombinant DNA Advisory Committee, or RAC, which acts as an advisory body to the National Institutes of Health, has expanded its public role in evaluating important public and ethical issues in gene therapy clinical trials. Implementation of any additional review and reporting procedures or other additional regulatory measures could increase the costs of or prolong our product development efforts or clinical trials.

As of March 31, 2007, to our knowledge, there have not been any serious adverse events in any gene therapy clinical trials in which our technology was used. In the future, if one or a series of serious adverse events were to occur during a gene therapy clinical trial in which our technology was used, we would report all such events to the FDA and other regulatory agencies as required by law. Such serious adverse events, whether treatment-related or not, could result in negative public perception of our treatments and require additional regulatory review or other measures, which could increase the cost of or prolong our gene therapy clinical trials or require us to halt our clinical trials altogether.

The FDA has not approved any gene therapy product or gene-induced product for sale in the United States. The commercial success of our products will depend in part on public acceptance of the use of gene therapy products or gene-induced products, which are a new type of disease treatment for the prevention or treatment of human diseases. Public attitudes may be influenced by claims that gene therapy products or gene-induced products are unsafe, and these treatment methodologies may not gain the acceptance of the public or the medical community. Negative public reaction to gene therapy products or gene-induced products could also result in greater government regulation and stricter clinical trial oversight.

We Cannot Predict The Safety Profile Of The Use Of Our Medpulsar® Electroporation Therapy System When Used In Combination With Other Therapies. Our current trials involve the use of our MedPulsar® Electroporation Therapy System in combination with bleomycin, an anti-cancer drug. While the data we have evaluated to date suggest the MedPulsar® Electroporation Therapy System does not increase the adverse effects of other therapies, we cannot predict if this outcome will continue to be true or whether possible adverse side effects directly attributable to other drugs will compromise the safety profile of our MedPulsar® Electroporation Therapy System when used in certain combination therapies or if used off-label with other drugs by physicians.

There Is A Possibility That Our Technology Will Become Obsolete Or Lose Its Competitive Advantage. The drug delivery business is very competitive, fast moving and intense, and expected to be increasingly so in the future. Other companies and research institutions are developing drug delivery systems that, if not similar in type to our systems, are designed to address the same patient or subject population. Therefore, we cannot promise that our products will be the best, the safest, the first to market, or the most economical to make or use. If competitors' products are better than ours, for whatever reason, then we could become less profitable from product sales and our products could become obsolete.

There are many reasons why a competitor might be more successful than us, including:

Financial Resources. Some competitors have greater financial resources and can afford more technical and developmental setbacks than we can.

Greater Experience. Some competitors have been in the biomedical business longer than we have. They have greater experience than us in critical areas like clinical testing, obtaining regulatory approval and sales and marketing. This experience or their name recognition may give them a competitive advantage over us.

Superior Patent Position. Some competitors may have better patent protection over their technology than we have or will have in order to protect our technology. If we cannot use our patents to prevent others from copying our technology or developing similar technology, or if we cannot obtain a critical license to another's patent that we need to manufacture and use our equipment, then we would expect our competitive position to weaken.

Faster to Market. Some companies with competitive technologies may move through stages of development, approval, and marketing faster than us. If a competitor receives FDA approval before us, then it will be authorized to sell its products before we can sell ours. Because the first company to market often has a significant advantage over others, a second place position could result in less than anticipated sales.

Reimbursement Allowed. In the U.S., third party payers, such as Medicare, may reimburse physicians and hospitals for competitors' products but not for our own human-use products. This would significantly affect our ability to sell our human-use products in the U.S. and would have a negative impact on revenue and our business as a whole. Outside of the U.S., reimbursement and funding policies vary widely.

Any Acquisition We Might Make May Be Costly And Difficult To Integrate, May Divert Management Resources Or Dilute Stockholder Value. We have considered and made strategic acquisitions in the past, including the acquisition of Inovio AS, and in the future, may acquire or invest in complementary companies, products or technologies. As part of our business strategy, we may acquire assets or businesses principally relating to or complementary to our current operations, and we have in the past evaluated and discussed such opportunities with interested parties. Any acquisitions we undertake will be accompanied by issues commonly encountered in business acquisitions, which could adversely affect us, including:

- Potential exposure to unknown liabilities of acquired companies;

- The difficulty and expense of assimilating the operations and personnel of acquired businesses;
- Diversion of management time and attention, and other resources;
- Loss of key employees and customers as a result of changes in management;
- Incurrence of amortization expenses related to intangible assets or large impairment charges such as the charges in excess of \$3.3 million we incurred in our 2005 results of operations related to the write-off of in-process research and development that we acquired in our acquisition of Inovio AS;
- Increased legal, accounting and other administrative costs associated with negotiation, documentation and reporting any such acquisition; and

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- Possible dilution to our stockholders.

In addition, geography and/or language barriers may make the integration of businesses more difficult. We may not be successful in overcoming these risks or any other problems encountered in connection with any of our acquisitions.

Economic, Political, Military Or Other Events In The United States Or In Other Countries Could Interfere With Our Success Or Operations And Harm Our Business. The September 11