

TARGETED GENETICS CORP /WA/

Form S-3/A

February 08, 2007

As filed with the Securities and Exchange Commission on February 8, 2007

Registration No. 333-140187

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**SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

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**AMENDMENT NO. 1**  
**TO**  
**FORM S-3**

**REGISTRATION STATEMENT UNDER**  
**THE SECURITIES ACT OF 1933**

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**TARGETED GENETICS CORPORATION**  
(Exact Name of Registrant as Specified in Its Charter)

**Washington**

(State or Other Jurisdiction of Incorporation or  
Organization)

**91-1549568**

(I.R.S. Employer Identification No.)

**1100 Olive Way, Suite 100**  
**Seattle, Washington 98101**  
**(206) 623-7612**

(Address, Including Zip Code, and Telephone Number, Including Area Code, of  
Registrant's Principal Executive Offices)

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**H. Stewart Parker**  
**President and Chief Executive Officer**  
**Targeted Genetics Corporation**  
**1100 Olive Way, Suite 100**  
**Seattle, Washington 98101**  
**(206) 623-7612**

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

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**Copies to:**

**Stephen M. Graham**  
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**719 Second Avenue, Suite 900**  
**Seattle, Washington 98104**  
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Approximate date of commencement of proposed sale to the public: **From time to time after this Registration Statement becomes effective.**

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

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If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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**Targeted Genetics Corporation hereby undertakes to amend this registration statement on such date or dates as may be necessary to delay its effective date until Targeted Genetics Corporation shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this registration statement shall become effective on such date as the Commission, acting pursuant to Section 8(a), may determine.**

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**The information in this preliminary prospectus is not complete and may be changed. The selling shareholders named in this preliminary prospectus may not sell these securities until the Registration Statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and the selling shareholders named in this preliminary prospectus are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.**

**SUBJECT TO COMPLETION, DATED FEBRUARY 8, 2007**

**2,943,000 Shares**

**TARGETED GENETICS CORPORATION**

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**Common Stock**

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On January 11, 2007, the selling shareholders listed on page 15, or the Selling Shareholders, acquired 2,180,000 shares of our common stock and warrants to purchase up to 763,000 shares of our common stock directly from us in a private placement that was exempt from the registration requirements of the federal securities laws. Under this prospectus, the Selling Shareholders and their transferees may offer and resell up to 2,943,000 shares of our common stock for their own accounts. We will not receive any of the proceeds from the sale of these shares by the Selling Shareholders, but we will receive proceeds from the exercise of warrants, if exercised for cash.

Our common stock is quoted on the NASDAQ Capital Market under the symbol "TGEN." On February 7, 2007, the last reported sale price of our common stock was \$4.01 per share.

The Selling Shareholders may sell their shares from time to time on the NASDAQ Capital Market or otherwise. They may sell the shares at prevailing market prices or at prices negotiated with purchasers. The Selling Shareholders will be responsible for any commissions or discounts due to brokers or dealers. The amount of these commissions or discounts cannot be known now because they will be negotiated at the time of the sales. We will pay certain of the other offering expenses.

You should read this prospectus carefully before you invest.

**Investing in this stock involves a high degree of risk.  
See "Risk Factors" beginning on page 4.**

**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.**

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The date of this prospectus is \_\_\_\_, 2007.

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*You should rely only on the information provided or incorporated by reference in this prospectus. Neither we nor the Selling Shareholders have authorized anyone to provide you with additional or different information or representations. You should not assume that the information in this prospectus is accurate as of any date other than its date, regardless of the time of delivery of this prospectus or any sale of common stock.*

*This prospectus is an offer to sell and a solicitation of an offer to buy the securities offered by this prospectus only in jurisdictions where the offer or sale is permitted.*

In this prospectus, “Targeted Genetics,” “we,” “us” and “our” refer to Targeted Genetics Corporation and its subsidiaries. References to the “Securities Act,” refer to the Securities Act of 1933, as amended.

## Prospectus Summary

The following summary is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus and incorporated by reference herein. Before you decide to invest in our common stock, you should read the entire prospectus carefully.

### About This Prospectus

This prospectus is part of a registration statement on Form S-3 filed by us with the Securities and Exchange Commission, or SEC, to register 2,943,000 shares of our common stock, consisting of 2,180,000 shares of common stock currently issued and outstanding, or the Common Shares, as well as up to 763,000 shares of common stock, or the Warrant Shares, issuable upon exercise of warrants, or the Warrants. Together the Common Shares and the Warrant Shares are referred to in this prospectus as the “Shares.” The Common Shares and Warrants were sold to the Selling Shareholders in connection with our private placement, which closed on January 11, 2007, as described in Current Reports on Form 8-K filed by us with the SEC on January 8, 2007 and January 11, 2007. The Shares are being registered for resale or other disposition by the Selling Shareholders. We will not receive any proceeds from the sale or other disposition of the Common Shares registered hereunder, or interests therein. We will, however, receive proceeds from the exercise of any Warrants, if the exercise price is paid in cash. If all of the Warrants are exercised for cash, we will receive proceeds of approximately \$4.1 million, which we currently intend to use for general corporate purposes.

### About Targeted Genetics Corporation

This summary does not contain all the information about us that may be important to you. You should read the more detailed information and consolidated financial statements and related notes that are incorporated by reference and are considered to be a part of this prospectus.

We are a clinical-stage biotechnology company focused on the development of targeted molecular therapies for the prevention and treatment of acquired and inherited diseases with unmet medical need. Our product development efforts target inflammatory arthritis, AIDS prophylaxis, congestive heart failure and Huntington's disease.

We develop gene therapy products and technologies for treating both acquired and inherited diseases. Our gene therapy product candidates are designed to treat disease by appropriately modifying cellular function at a genetic level. This involves introducing genetic material into target cells and expressing it in a manner that provides the desired effect. We have assembled a broad base of proprietary intellectual property that we believe gives us the potential to address the significant diseases that are the primary focus of our business. Our proprietary intellectual property includes gene therapy uses of certain genes, methods of transferring genetic material into cells, processes to manufacture our AAV-based product candidates and other proprietary technologies and processes. In addition, we have established expertise and development capabilities focused in the areas of preclinical research and development, manufacturing and manufacturing process scale-up, quality control, quality assurance, regulatory affairs and clinical trial design and implementation.

We have two product candidates in clinical trials. The first, tgAAC94, is an AAV-based product candidate being developed for the treatment of inflammatory arthritis. The second is an AAV-based prophylactic vaccine candidate for high-risk populations in developing nations to protect against HIV-AIDS. We are developing this program in collaboration with the International AIDS Vaccine Initiative, or IAVI, a non-profit organization, the Columbus Children's Research Institute at Children's Hospital in Columbus, Ohio, or CCRI, and The Children's Hospital of Philadelphia, or CHOP. The National Institute of Allergy and Infectious Disease, or NIAID, has awarded a \$21.75 million contract to us and our scientific collaborators at CHOP and CCRI. We have a subcontract with CHOP to complete work related to the NIAID contract, under which we may receive up to \$18.2 million over the five-year

period of the contract. As of December 31, 2006, we have earned approximately \$1.5 million under this subcontract. The purpose of the NIAID award is to develop AAV-based vaccines against HIV strains most prevalent in North America and Europe.

In December 2004, we formed a collaboration with Celladon Corporation, or Celladon, to evaluate AAV-based delivery of the SERCA2a gene and phospholamban gene variants, which may have a therapeutic benefit in the treatment of congestive heart failure. We are also partnered with Sirna Therapeutics, Inc., or Sirna, a wholly-owned subsidiary of Merck & Co., Inc., in a collaboration formed in January 2005, to develop short interfering RNA, AAV-based therapies for the treatment of Huntington's disease.

The development of pharmaceutical products, including our potential inflammatory arthritis, prophylactic AIDS vaccine, congestive heart failure, and Huntington's disease product candidates discussed above, involves extensive preclinical development followed by human clinical trials that take several years or more to complete. The length of time required to completely develop any product candidate varies substantially according to the type, complexity and novelty of the product candidate, the degree of involvement by a development partner and the intended use of the product candidate. Our commencement and rate of completion of clinical trials may vary or be delayed for many reasons, including those discussed in the section entitled "Risk Factors" presented below.

We were incorporated in the state of Washington in 1989. Our executive offices are located at 1100 Olive Way, Suite 100, Seattle, Washington 98101, and our telephone number is (206) 623-7612.

For more information about us, you should read this prospectus, including the information described in the section of this prospectus entitled "Where You Can Find More Information," together with our consolidated financial statements and related notes.

## **RISK FACTORS**

An investment in our common stock involves a high degree of risk. You should carefully consider the following risk factors related to the Shares offered by this prospectus and to our business. You should also carefully consider the other information in this prospectus and in the documents incorporated by reference herein. If any of the following risks actually occurs, our business, financial condition or results of operations may suffer. As a result, the trading price of our common stock could decline, and you could lose all or a substantial portion of your investment in our common stock.

### **Risks Related to Our Business**

*If we are unable to raise additional capital when needed, we will be unable to conduct our operations and develop our potential products.*

Because internally generated cash flow will not fund development and commercialization of our product candidates, we will require substantial additional financial resources. Our future capital requirements will depend on many factors, including:

- the rate and extent of scientific progress in our research and development programs;
- the timing, costs and scope of, and our success in, conducting clinical trials, obtaining regulatory approvals and pursuing patent prosecutions;
- competing technological and market developments;
- the timing and costs of, and our success in, any product commercialization activities and facility expansions, if and as required; and
- the existence and outcome of any litigation or administrative proceedings involving intellectual property.



We estimate that our cash and cash equivalents on hand, which includes the net proceeds of approximately \$8.1 million received from the Selling Shareholders in the January 11, 2007 private placement of the Shares, plus the expected funding from our partners, will be sufficient to fund our operations into the fourth quarter of 2007. Prior to that time, we will need to raise additional capital to continue to fund operations at their current level. This estimate is based on our ability to perform planned research and development activities and the receipt of expected funding from our partners. In addition, as of December 31, 2006, we owed to Biogen Idec Inc., or Biogen Idec, approximately \$1.5 million in aggregate principal amount pursuant to a note. The terms of the note require us to make annual interest payments and scheduled principal payments of \$1.0 million in August 2007 and \$0.5 million in August 2008. We will need to raise additional capital to perform planned research and development activities and make these scheduled payments. Additional sources of financing could involve one or more of the following:

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- entering into additional product development collaborations;
- mergers and acquisitions;
- issuing equity in the public or private markets;
- extending or expanding our current collaborations;
- selling or licensing our technology or product candidates;
- borrowing under loan or equipment financing arrangements; or
- issuing debt.

Additional funding may not be available to us on reasonable terms, if at all. Our ability to issue equity, and our ability to issue it at the current market price, may be adversely affected by the fact that we are presently ineligible under SEC rules to utilize Form S-3 for primary offerings of our securities because the aggregate market value of our outstanding common stock held by non-affiliates is less than \$75.0 million.

The perceived risk associated with the possible sale of a large number of shares of our common stock could cause some of our shareholders to sell their stock, thus causing the price of our stock to decline. In addition, actual or anticipated downward pressure on our stock price due to actual or anticipated sales of stock could cause some institutions or individuals to engage in short sales of our common stock, which may itself cause the price of our stock to decline.

If our stock price declines, we may be unable to raise additional capital. A sustained inability to raise capital could force us to go out of business. Significant declines in the price of our common stock could also impair our ability to attract and retain qualified employees, reduce the liquidity of our common stock and result in the delisting of our common stock from the NASDAQ Capital Market.

The funding that we expect to receive from our collaborations depends on continued scientific progress under the collaborations and our collaborators' ability and willingness to continue or extend the collaboration. If we are unable to successfully access additional capital, we may need to scale back, delay or terminate one or more of our development programs, curtail capital expenditures or reduce other operating activities. We may also be required to relinquish some rights to our technology or product candidates or grant or take licenses on unfavorable terms, either of which would reduce the ultimate value to us of our technology or product candidates.

***We expect to continue to operate at a loss and may never become profitable.***

Substantially all of our revenue has been derived under collaborative research and development agreements relating to the development of our potential product candidates. We have incurred, and will continue to incur for the foreseeable future, significant expense to develop our research and development programs, conduct preclinical studies and clinical trials, seek regulatory approval for our product candidates and provide general and administrative support for these activities. As a result, we have incurred significant net losses since inception, and we expect to continue to incur substantial additional losses in the future. As of September 30, 2006, we had an accumulated deficit of \$284.8 million. We may never generate profits and, if we do become profitable, we may be unable to sustain or increase profitability.

***All of our product candidates are in early-stage clinical trials or preclinical development, and if we are unable to successfully develop and commercialize our product candidates we will be unable to generate sufficient capital to maintain our business.***

In November 2005, IAVI initiated a Phase II trial for our HIV/AIDS vaccine product candidate in South Africa. In March 2006, we initiated a Phase I/II trial for our inflammatory arthritis product candidate in the United States and Canada. We will not generate any product revenue for at least several years and then only if we can successfully develop and commercialize our product candidates. Commercializing our potential products depends on successful completion of additional research and development and testing, in both preclinical development and clinical trials. Clinical trials may take several years or more to complete. The commencement, cost and rate of completion of our clinical trials may vary or be delayed for many reasons. If we are unable to successfully complete preclinical and clinical development of some or all of our product candidates in a timely manner, we may be unable to generate sufficient product revenue to maintain our business.

Even if our potential products succeed in clinical trials and are approved for marketing, these products may never achieve market acceptance. If we are unsuccessful in commercializing our product candidates for any reason, including greater effectiveness or economic feasibility of competing products or treatments, the failure of the medical community or the public to accept or use any products based on gene delivery, inadequate marketing and distribution capabilities or other reasons discussed elsewhere in this section, we will be unable to generate sufficient product revenue to maintain our business.

***Failure to recruit subjects could delay or prevent clinical trials of our potential products, which could delay or prevent the development of potential products.***

Identifying and qualifying subjects to participate in clinical trials of our potential products is critically important to our success. The timing of our clinical trials depends on the speed at which we can recruit subjects to participate in testing our product candidates. We have experienced delays in some of our clinical trials, and we may experience similar delays in the future. If subjects are unwilling to participate in our gene therapy trials because of negative publicity from adverse events in the biotechnology or gene therapy industries or for other reasons, including competitive clinical trials for similar patient populations, the timeline for recruiting subjects, conducting trials and obtaining regulatory approval of potential products will be delayed. These delays could result in increased costs, delays in advancing our product development, delays in testing the effectiveness of our technology or termination of the clinical trials altogether.

***The regulatory approval process for our product candidates is costly, time-consuming and subject to unpredictable changes and delays, and our product candidates may never receive regulatory approval.***

No gene therapy products have received regulatory approval for marketing from the U.S. Food and Drug Administration, or FDA. Because our product candidates involve new and unproven technologies, we believe that the regulatory approval process may proceed more slowly compared to clinical trials involving traditional drugs. The FDA and applicable state and foreign regulators must conclude at each stage of clinical testing that our clinical data suggest acceptable levels of safety in order for us to proceed to the next stage of clinical trials. In addition, gene therapy clinical trials conducted at institutions that receive funding for recombinant DNA research from the National Institutes of Health, or NIH, are subject to review by the NIH's Office of Biotechnology Activities Recombinant DNA Advisory Committee, or RAC. Although NIH guidelines do not have regulatory status, the RAC review process can impede the initiation of the trial, even if the FDA has reviewed the trial and approved its initiation. Moreover, before a clinical trial can begin at an NIH-funded institution, that institution's Institutional Biosafety Committee must review the proposed clinical trial to assess the safety of the trial.

The regulatory process for our product candidates is costly, time-consuming and subject to unpredictable delays. The clinical trial requirements of the FDA, NIH and other agencies and the criteria these regulators use to determine the safety and efficacy of a product candidate vary substantially according to the type, complexity, novelty and intended use of the potential products. In addition, regulatory requirements governing gene therapy products have changed frequently and may change in the future. Accordingly, we cannot predict how long it will take or how much it will cost to obtain regulatory approvals for clinical trials or for manufacturing or marketing our potential products. Some or all of our product candidates may never receive regulatory approval. A product candidate that appears promising at an early stage of research or development may not result in a commercially successful product. Our clinical trials may fail to demonstrate the safety and efficacy of a product candidate or a product candidate may generate unacceptable side effects or other problems during or after clinical trials. Should this occur, we may have to delay or discontinue development of the product candidate, and the partner, if any, that supports development of such product candidate may terminate its support. Delay or failure to obtain, or unexpected costs in obtaining, the regulatory approval necessary to bring a potential product to market will decrease our ability to generate sufficient product revenue to maintain our business.

***If we are unable to obtain or maintain licenses for necessary third-party technology on acceptable terms or to develop alternative technology, we may be unable to develop and commercialize our product candidates.***

We have entered into exclusive and nonexclusive license agreements that give us and our partners rights to use technologies owned or licensed by commercial and academic organizations in the research, development and commercialization of our potential products. For example, we have a gene therapy technology license agreement with Amgen Inc., or Amgen, as the successor to Immunex Corporation, or Immunex, under which we have licensed rights to certain Immunex proprietary technology specifically applicable to gene therapy applications. In a February 2004 letter, Amgen took the position that we are not licensed, either exclusively or nonexclusively, to use Immunex intellectual property covering TNFR:Fc or therapeutic uses for TNFR:Fc. We have responded with a letter confirming our confidence that the gene therapy technology license agreement provides us with an exclusive worldwide license to use the gene construct coding for TNFR:Fc for gene therapy applications. We have had and continue to have further communications with Amgen regarding our differences. Notwithstanding our confidence, it is possible that a resolution of those differences, through litigation or otherwise, could cause delay or discontinuation of our development of tgAAC94 or our inability to commercialize any resulting product.

We believe that we will need to obtain additional licenses to use patents and unpatented technology owned or licensed by others for use, compositions, methods, processes to manufacture compositions, processes to manufacture and purify gene delivery product candidates and other technologies and processes for our present and potential product candidates. If we are unable to maintain our current licenses for third-party technology or obtain additional licenses on acceptable terms, we may be required to expend significant time and resources to develop or license replacement technology. If we are unable to do so, we may be unable to develop or commercialize the affected product candidates. In addition, the license agreements for technology for which we hold exclusive licenses typically contain provisions that require us to meet minimum development milestones in order to maintain the license on an exclusive basis for some or all fields of the license. We also have license agreements for some of our technologies, which may require us to sublicense certain of our rights. If we do not meet these requirements, our licensor may convert all or a portion of the license to a nonexclusive license or, in some cases, terminate the license.

In many cases, patent prosecution of our licensed technology is controlled solely by the licensor. If our licensors fail to obtain and maintain patent or other protection for the proprietary intellectual property we license from them, we could lose our rights to the intellectual property or our exclusivity with respect to those rights, and our competitors could market competing products using the intellectual property. Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues and is complicated by the rapid pace of scientific discovery in our industry. Disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under our collaborative development relationships;
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates.

***Litigation involving intellectual property, product liability or other claims and product recalls could strain our resources, subject us to significant liability, damage our reputation or result in the invalidation of our proprietary rights.***

As our product development efforts progress, most particularly in potentially significant markets such as HIV/AIDS, congestive heart failure or inflammatory arthritis therapies, the risk increases that others may claim that our processes and product candidates infringe on their intellectual property rights. In addition, administrative proceedings, litigation or both may be necessary to enforce our intellectual property rights or determine the rights of others. Defending or pursuing these claims, regardless of their merit, would be costly and would likely divert management's attention and resources away from our operations. If there were to be an adverse outcome in litigation or an interference proceeding, we could face potential liability for significant damages or be required to obtain a license to the patented process or technology at issue, or both. If we are unable to obtain a license on acceptable terms, or to develop or obtain alternative technology or processes, we may be unable to manufacture or market any product or potential product that uses the affected process or technology.

Clinical trials and the marketing of any potential products may expose us to liability claims resulting from the testing or use of our products. Gene therapy treatments are new and unproven, and potential known and unknown side effects of gene therapy may be serious and potentially life-threatening. Product liability claims may be made by clinical trial participants, consumers, healthcare providers or other sellers or users of our products. Although we currently maintain liability insurance, the costs of product liability and other claims against us may exceed our insurance coverage. In addition, we may require increased liability coverage as additional product candidates are used in clinical trials or commercialized. Liability insurance is expensive and may not continue to be available on acceptable terms. A product liability or other claim or product recall not covered by or exceeding our insurance coverage could significantly harm our financial condition. In addition, adverse publicity resulting from a product recall or a liability claim against us, one of our partners or another gene therapy company could significantly harm our reputation and make it more difficult to obtain the funding and collaborative partnerships necessary to maintain our business.

***If we lose our collaborative partners, we may be unable to develop our potential products.***

A portion of our operating expenses are funded through our collaborative agreements with third parties. We currently have strategic partnerships with two biotechnology companies, Sirna and Celladon, one public health organization, IAVI, and through a contract with a U.S. government agency, NIAID, that provide for funding, collaborative development, intellectual property rights or expertise to develop certain of our product candidates. With limited exceptions, each collaborator has the right to terminate its obligation to provide research funding at any time for scientific or business reasons. In addition, to the extent that funding is provided by a collaborator for non-program-specific uses, the loss of significant amounts of collaborative funding could result in the delay, reduction or termination of additional research and development programs, a reduction in capital expenditures or business development and other operating activities, or any combination of these measures. For example, we have a collaboration and license agreement with Celladon that may be terminated at will by Celladon subject to a notice provision in the agreement. We expect Celladon to provide us with funding to reimburse research and development and manufacturing expenses that we incur in connection with the collaboration.

***If we do not attract and retain qualified personnel, we may be unable to develop and commercialize some of our potential products.***

Our future success depends in large part on our ability to attract and retain key technical and management personnel. All of our employees, including our executive officers, can terminate their employment with us at any time. We have programs in place designed to retain personnel, including competitive compensation packages and programs to create a positive work environment. Other companies, research and academic institutions and other organizations in our field compete intensely for employees, however, and we may be unable to retain our existing personnel or attract additional qualified employees and consultants. If we experience significant turnover or difficulty in recruiting new personnel, our research and development of product candidates could be delayed and we could experience difficulty in generating sufficient revenue to maintain our business.

***If our partners or scientific consultants terminate, reduce or delay our relationships with them, we may be unable to develop our potential products.***

Our partners provide funding, manage regulatory filings, aid and augment our internal research and development efforts and provide access to important intellectual property and know-how. Their activities include, for example, support in processing the regulatory filings of our product candidates and funding clinical trials. Our outside scientific consultants and contractors perform research, develop technology and processes to advance and augment our internal efforts and provide access to important intellectual property and know-how. Their activities include, for example, clinical evaluation of our product candidates, product development activities performed under our research collaborations, research under sponsored research agreements and contract manufacturing services. Collaborations with established pharmaceutical and biotechnology companies and academic, research and public health organizations often provide a measure of validation of our product development efforts in the eyes of securities analysts, investors and the medical community. The development of certain of our potential products, and therefore the success of our business, depends on the performance of our partners, consultants and contractors. If they do not dedicate sufficient time, regulatory or other technical resources to the research and development programs for our product candidates or if they do not perform their obligations as expected, we may experience delays in, and may be unable to continue, the preclinical or clinical development of those product candidates. Each of our collaborations and scientific consulting relationships concludes at the end of the term specified in the applicable agreement unless we and our partners agree to extend the relationship. Any of our partners may decline to extend the collaboration, or may be willing to extend the collaboration only with a significantly reduced scope. Competition for scientific consultants and partners in gene therapy is intense. We may be unable to successfully maintain our existing relationships or establish additional relationships necessary for the development of our product candidates on acceptable terms, if at all. If we are unable to do so, our research and development programs may be delayed or we may lose access to important intellectual property or know-how.

***The success of our clinical trials and preclinical studies may not be indicative of results in a large number of subjects of either safety or efficacy.***

The successful results of our technology in preclinical studies using animal models may not be predictive of the results that we will see in our clinical trials. In addition, results in early-stage clinical trials are based on limited numbers of subjects and generally test for drug safety rather than efficacy. Our reported progress and results from our early phases of clinical testing of our product candidates may not be indicative of progress or results that will be achieved from larger populations, which could be less favorable. Moreover, we do not know if the favorable results we have achieved in clinical trials will have a lasting or repeatable effect. If a larger group of subjects does not experience positive results or if any favorable results do not demonstrate a beneficial effect, our product candidates that we advance to clinical trials may not receive approval from the FDA for further clinical trials or commercialization. For example, in March 2005, we discontinued the development of tgAAVCF, our product candidate for the treatment of cystic fibrosis, following the analysis of Phase II clinical trial data in which tgAAVCF

failed to achieve the efficacy endpoints of the trial.

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***We may be unable to adequately protect our proprietary rights domestically or overseas, which may limit our ability to successfully market any product candidates.***

Our success depends substantially on our ability to protect our proprietary rights and operate without infringing on the proprietary rights of others. We own or license patents and patent applications, and will need to license additional patents, for genes, processes, practices and techniques critical to our present and potential product candidates. If we fail to obtain and maintain patent or other intellectual property protection for this technology, our competitors could market competing products using those genes, processes, practices and techniques. The patent process takes several years and involves considerable expense. In addition, patent applications and patent positions in the field of biotechnology are highly uncertain and involve complex legal, scientific and factual questions. Our patent applications may not result in issued patents and the scope of any patent may be reduced both before and after the patent is issued. Even if we secure a patent, the patent may not provide significant protection and may be circumvented or invalidated.

We also rely on unpatented proprietary technology and technology that we have licensed on a nonexclusive basis. While we take precautions to protect our proprietary unpatented technology, we may be unable to meaningfully protect this technology from unauthorized use or misappropriation by a third party. Our competitors could also obtain rights to our nonexclusively licensed proprietary technology. In any event, other companies may independently develop equivalent proprietary information and techniques. If our competitors develop and market competing products using our unpatented or nonexclusively licensed proprietary technology or substantially similar technology, our products, if successfully developed, could suffer a reduction in sales or be forced out of the market.

***If we do not develop adequate development, manufacturing, sales, marketing and distribution capabilities, either alone or with our business partners, we will be unable to generate sufficient product revenue to maintain our business.***

Our potential products require significant development of new processes and design for the advancement of the product candidate through manufacture, preclinical and clinical testing. We may be unable to continue development or meet critical milestones with our partners due to technical or scientific issues related to manufacturing or development. We currently do not have the physical capacity to manufacture large-scale quantities of our potential products. This could limit our ability to conduct large clinical trials of a product candidate and to commercially launch a successful product candidate. In order to manufacture product at such scale, we will need to expand or improve our current facilities and staff or supplement them through the use of contract providers. If we are unable to obtain and maintain the necessary manufacturing capabilities, either alone or through third parties, we will be unable to manufacture our potential products in quantities sufficient to sustain our business. Moreover, we are unlikely to become profitable if we, or our contract providers, are unable to manufacture our potential products in a cost-effective manner.

In addition, we have no experience in sales, marketing and distribution. To successfully commercialize any products that may result from our development programs, we will need to develop these capabilities, either on our own or with others. We intend to enter into collaborations with other entities to utilize their mature marketing and distribution capabilities, but we may be unable to enter into marketing and distribution agreements on favorable terms, if at all. If our current or future collaborative partners do not commit sufficient resources to timely marketing and distributing our future products, if any, and we are unable to develop the necessary marketing and distribution capabilities on our own, we will be unable to generate sufficient product revenue to sustain our business.

***Post-approval manufacturing or product problems or failure to satisfy applicable regulatory requirements could prevent or limit our ability to market our products.***

Commercialization of any products will require continued compliance with FDA and other federal, state and local regulations. For example, our current manufacturing facility, which is designed for manufacturing our AAV vectors

for clinical and development purposes, is subject to the Good Manufacturing Practices requirements and other regulations of the FDA, as well as to other federal, state and local regulations such as the Occupational Health and Safety Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act and the Environmental Protection Act. Any future manufacturing facility that we may construct for large-scale commercial production will also be subject to regulation. We may be unable to obtain regulatory approval for or maintain in operation this or any other manufacturing facility. In addition, we may be unable to attain or maintain compliance with current or future regulations relating to manufacture, safety, handling, storage, record keeping or marketing of potential products. If we fail to comply with applicable regulatory requirements or discover previously unknown manufacturing, contamination, product side effects or other problems after we receive regulatory approval for a potential product, we may suffer restrictions on our ability to market the product or be required to withdraw the product from the market.

## **Risks Related to Our Industry**

***Adverse events in the field of gene therapy could damage public perception of our potential products and negatively affect governmental approval and regulation.***

Public perception of our product candidates could be harmed by negative events in the field of gene transfer. For example, in 2003, fourteen subjects in a French academic clinical trial being treated for x-linked severe combined immunodeficiency in a gene therapy trial using a retroviral vector showed correction of the disease, although three of the subjects subsequently developed leukemia. Serious adverse events, including patient deaths, have occurred in clinical trials. Adverse events in our clinical trials and the resulting publicity, as well as any other adverse events in the field of gene therapy that may occur in the future, could result in a decrease in demand for any products that we may develop. The commercial success of our product candidates will depend in part on public acceptance of the use of gene therapy for preventing or treating human diseases. If public perception is influenced by claims that gene therapy is unsafe, our product candidates may not be accepted by the general public or the medical community. The public and the medical community may conclude that our technology is unsafe.

Future adverse events in gene therapy or the biotechnology industry could also result in greater governmental regulation, unfavorable public perception, stricter labeling requirements and potential regulatory delays in the testing or approval of our potential products. Any increased scrutiny could delay or increase the costs of our product development efforts or clinical trials.

***Our use of hazardous materials exposes us to liability risks and regulatory limitations on their use, either of which could reduce our ability to generate product revenue.***

Our research and development activities involve the controlled use of hazardous materials, including chemicals, biological materials and radioactive compounds. Our safety procedures for handling, storing and disposing of these materials must comply with federal, state and local laws and regulations, including, among others, those relating to solid and hazardous waste management, biohazard material handling, radiation and air pollution control. We may be required to incur significant costs in the future to comply with environmental or other applicable laws and regulations. In addition, we cannot eliminate the risk of accidental contamination or injury from hazardous materials. If a hazardous material accident were to occur, we could be held liable for any resulting damages, and this liability could exceed our insurance and financial resources. Accidents unrelated to our operations could cause federal, state or local regulatory agencies to restrict our access to hazardous materials needed in our research and development efforts, which could result in delays in our research and development programs. Paying damages or experiencing delays caused by restricted access could reduce our ability to generate revenue and make it more difficult to fund our operations.

***The intense competition and rapid technological change in our market may result in failure of our potential products to achieve market acceptance.***

We face increasingly intense competition from a number of commercial entities and institutions that are developing gene therapy technologies. Our competitors include early-stage and more established gene delivery companies, other biotechnology companies, pharmaceutical companies, universities, research institutions and government agencies developing gene therapy products or other biotechnology-based therapies designed to treat the diseases on which we focus. We also face competition from companies using more traditional approaches to treating human diseases, such as surgery, medical devices and pharmaceutical products. If our product candidates become commercial gene therapy products, they may affect commercial markets of the analogous protein or traditional pharmaceutical therapy. This may result in lawsuits, demands, threats or patent challenges by others in an effort to reduce our ability to compete. In addition, we compete with other companies to acquire products or technology from research institutions or universities. Many of our competitors have substantially more resources, including research

and development personnel, capital and infrastructure, than we do. Many of our competitors also have greater experience and capabilities than we do in:

- research and development;
- clinical trials;
- obtaining FDA and other regulatory approvals;
- manufacturing; and
- marketing and distribution.

In addition, the competitive positions of other companies, institutions and organizations, including smaller competitors, may be strengthened through collaborative relationships. Consequently, our competitors may be able to develop, obtain patent protection for, obtain regulatory approval for, or commercialize new products more rapidly than we do, or manufacture and market competitive products more successfully than we do. This could limit the prices we could charge for the products that we are able to market or result in our products failing to achieve market acceptance.

Gene therapy is a rapidly evolving field and is expected to continue to undergo significant and rapid technological change and competition. Rapid technological development by our competitors, including development of technologies, products or processes that are more effective or more economically feasible than those we have developed, could result in our actual and proposed technologies, products or processes losing market share or becoming obsolete.

***Healthcare reform measures and the unwillingness of third-party payors to provide adequate reimbursement for the cost of our products could impair our ability to successfully commercialize our potential products and become profitable.***

Sales of medical products and treatments depends substantially, both domestically and abroad, on the availability of reimbursement to the consumer from third-party payors. Our potential products may not be considered cost-effective by third-party payors, who may not provide coverage at the price set for our products, if at all. If purchasers or users of our products are unable to obtain adequate reimbursement, they may forego or reduce their use of our products. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize a sufficient return on our investment.

Increasing efforts by governmental and third-party payors, such as Medicare, private insurance plans and managed care organizations, to cap or reduce healthcare costs will affect our ability to commercialize our product candidates and become profitable. We believe that third-party payors will attempt to reduce healthcare costs by limiting both coverage and level of reimbursement for new products approved by the FDA. There have been and will continue to be a number of federal and state proposals to implement government controls on pricing, the adoption of which could affect our ability to successfully commercialize our product candidates. Even if the government does not adopt any such proposals or reforms, their announcement could impair our ability to raise capital.

## **Risks Related to Our Common Stock**

***If we sell additional shares, our stock price may decline as a result of the dilution that will occur to existing shareholders.***

Until we are profitable, we will need significant additional funds to develop our business and sustain our operations. Any additional sales of shares of our common stock are likely to have a dilutive effect on our then-existing shareholders. Subsequent sales of these shares in the open market could also have the effect of lowering our stock price, thereby increasing the number of shares we may need to issue in the future to raise the same dollar amount and consequently further diluting our outstanding shares. These future sales could also have an adverse effect on the market price of our shares and could result in additional dilution to the holders of our shares.

The perceived risk associated with the possible sale of a large number of shares could cause some of our shareholders to sell their stock, thus causing the price of our stock to decline. In addition, actual or anticipated downward pressure on our stock price due to actual or anticipated sales of stock could cause some institutions or individuals to engage in short sales of our common stock, which may itself cause the price of our stock to decline.

If our stock price declines, we may be unable to raise additional capital. A sustained inability to raise capital could force us to go out of business. Significant declines in the price of our common stock could also impair our ability to attract and retain qualified employees, reduce the liquidity of our common stock and result in the delisting of our common stock from the NASDAQ Capital Market.

***Concentration of ownership of our common stock may give certain shareholders significant influence over our business.***

A small number of investors own a significant number of shares of our common stock. As of January 18, 2007, Elan International Services, Ltd., or Elan, held approximately 1.2 million shares and Biogen Idec held approximately 2.2 million shares of our common stock. Together these holdings represent approximately 25% of our common shares outstanding as of January 18, 2007. This concentration of stock ownership may allow these shareholders to exercise significant control over our strategic decisions and block, delay or substantially influence all matters requiring shareholder approval, such as:

- election of directors;
- amendment of our charter documents; or
- approval of significant corporate transactions, such as a change of control of us.

The interests of these shareholders may conflict with the interests of other holders of our common stock with regard to such matters. Furthermore, this concentration of ownership of our common stock could allow these shareholders to delay, deter or prevent a third party from acquiring control of us at a premium over the then-current market price of our common stock, which could result in a decrease in our stock price.

Both Biogen Idec and Elan have sold shares of our common stock and may continue to do so. Sales of significant value of stock by these investors may introduce increased volatility to the market price of our common stock. In accordance with the termination agreement that we entered into with Elan in March 2004, Elan is only permitted to sell quantities of our stock equal to 175% of the volume limitation set forth in Rule 144(e)(1) promulgated under the Securities Act.

***Market fluctuations or volatility could cause the market price of our common stock to decline and limit our ability to raise capital.***

The stock market in general and the market for biotechnology-related companies in particular have experienced extreme price and volume fluctuations, often unrelated to the operating performance of the affected companies. The market price of the securities of biotechnology companies, particularly companies such as ours without earnings and product revenue, has been highly volatile and is likely to remain so in the future. Any report of clinical trial results that are below the expectations of financial analysts or investors could result in a decline in our stock price. We believe that in the past, similar levels of volatility have contributed to the decline in the market price of our common stock, and may do so again in the future. Trading volumes of our common stock can increase dramatically, resulting in a volatile market price for our common stock. The trading price of our common stock could decline significantly as a result of sales of a substantial number of shares of our common stock, or the perception that significant sales could occur. In addition, the sale of significant quantities of stock by Elan, Biogen Idec or other holders of significant

amounts of shares of our stock, could adversely impact the price of our common stock.

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## USE OF PROCEEDS

We will not receive any proceeds from the sale or other disposition by the Selling Shareholders of the Common Shares registered hereunder, or interests therein. We will, however, receive proceeds from the exercise of any Warrants, if the exercise price is paid in cash. If all of the Warrants are exercised for cash, we will receive proceeds of approximately \$4.1 million, which we currently intend to use for general corporate purposes.

## SELLING SHAREHOLDERS

The following table provides information regarding the Selling Shareholders and the number of Shares each Selling Shareholder is offering, including the Warrant Shares held by each Selling Shareholder. We have prepared this table based on information furnished to us by or on behalf of the Selling Shareholders. Under the rules of the SEC, beneficial ownership includes shares over which the indicated beneficial owner exercises voting or investment power. Beneficial ownership is determined under Section 13(d) of the Exchange Act and generally includes voting or investment power with respect to securities and including any securities that grant the Selling Shareholder the right to acquire common stock within 60 days of January 18, 2007. Unless otherwise indicated in the footnotes below, we believe that the Selling Shareholders have sole voting and investment power with respect to all shares beneficially owned. The percentage ownership data is based on 13,107,235 shares of our common stock issued and outstanding as of January 18, 2007. Since the date on which they provided us with the information below, the Selling Shareholders may have sold, transferred or otherwise disposed of some or all of their Shares in transactions exempt from the registration requirements of the Securities Act.

The Shares may be sold by the Selling Shareholders, by those persons or entities to whom they transfer, donate, devise, pledge or distribute their Shares or by other successors in interest. The information regarding shares beneficially owned after this offering assumes the sale of all Shares offered by each of the Selling Shareholders. The Selling Shareholders may sell less than all of the Shares listed in the table. In addition, the Shares listed below may be sold pursuant to this prospectus or in privately negotiated transactions. Accordingly, we cannot estimate the number of Shares the Selling Shareholders will sell under this prospectus.

Except as described in this prospectus, the Selling Shareholders have not held any position or office or had any other material relationship with us or any of our predecessors or affiliates within the past three years.

The Selling Shareholders have represented to us that they purchased the Common Shares (and the right to acquire shares pursuant to exercise of the Warrants) for their own account, for investment only and not with a view toward selling or distributing them in violation of the Securities Act, except in sales either registered under the Securities Act, or sales that are exempt from registration. In recognition of the fact that the Selling Shareholders, even though purchasing their shares for investment, may wish to be legally permitted to sell their Shares when they deem appropriate, we agreed with the Selling Shareholders to file a registration statement to register the resale of the Shares. We have also agreed to prepare and file all amendments and supplements necessary to keep the registration statement effective until the earlier of (i) the date on which the Selling Shareholders may resell all the Shares covered by the registration statement without registration pursuant to Rule 144(k) under the Securities Act or any successor rule thereto and (ii) the date on which the Selling Shareholders have sold all the Shares covered by the registration statement.



| Name of Selling Shareholders                    | Shares Beneficially Owned Before Offering (1) |                |                          | Shares Beneficially Owned After Offering (1) |                |  |
|---|---|----------------|--------------------------|--|----------------|--|
|   | Number  | Percentage (%) | Shares Offered Hereby(2) | Number                                       | Percentage (%) |  |
| SRB Greenway Capital, L.P. (3)                  | 85,050  | *              | 85,050                   | 0  | -              |  |
| SRB Greenway Capital, Q.P., L.P. (3)            | 831,600                                       | 6.2            | 831,600                  | 0  | -              |  |
| SRB Greenway Offshore Operating Fund, L.P. (3)  | 28,350  | *              | 28,350                   | 0  | -              |  |
| Millennium Partners, L.P.                       | 339,945                                       | 2.6            | 337,500                  | 2,445  | *              |  |
| PGE Partner Fund LP (4)                         | 78,840  | *              | 78,840                   | 0  | -              |  |
| PGE Partner Fund II LP (4)                      | 29,160  | *              | 29,160                   | 0  | -              |  |
| Special Situations Fund III, Q.P., L.P. (5)     | 708,750                                       | 5.3            | 708,750                  | 0  | -              |  |
| Special Situations Life Sciences Fund, L.P. (5) | 506,250                                       | 3.8            | 506,250                  | 0  | -              |  |
| Tang Capital Partners, L.P.                     | 337,500                                       | 2.6            | 337,500                  | 0  | -              |  |

\* Less than 1%.

- (1) Includes an aggregate of 763,000 shares of common stock issuable under the Warrants that are exercisable after July 11, 2007, which Warrant Shares are deemed outstanding for computing the percentage ownership of the Selling Shareholder holding Warrant Shares before the offering and after giving effect to the offering, but are not deemed outstanding for computing the beneficial ownership of any other Selling Shareholder.
- (2) We do not know when or in what amounts a Selling Shareholder may offer Shares for sale. The Selling Shareholders may not sell any or all of the Shares offered by this prospectus. Because the Selling Shareholders may offer all or some of the Shares pursuant to this offering and because there are currently no agreements, arrangements or undertakings with respect to the sale of any of the Shares, we cannot estimate the number of Shares that will be held by the Selling Shareholders after completion of this offering. However, for purposes of this table, we have assumed that, after completion of this offering, none of the Shares covered by this prospectus will be held by the Selling Shareholders.
- (3) SRB Greenway Capital, L.P, SRB Greenway Capital, Q.P., L.P. and SRB Greenway Offshore Operating Fund, L.P. are affiliated entities. BC Advisors, LLC (“BCA”) is the general partner of SRB Management, L.P. (“SRB Management”). SRB Management is the general partner of SRB Greenway Capital, L.P., SRB Greenway Capital (Q.P.), L.P. and SRB Greenway Offshore Operating Fund, L.P. Steven R. Becker is the sole principal of BCA. Through his control of BCA, Mr. Becker possesses sole voting and investment control over the portfolio securities of each of the funds listed above.
- (4) PGE Partner Fund LP and PGE Partner Fund II LP are affiliated entities. In addition, each entity is an affiliate of Pacific Growth Equities, LLC, our exclusive placement agent in the private placement in which the Selling Shareholders purchased the Common Shares and Warrants.
- (5) Special Situations Fund III, Q.P., L.P. and Special Situations Life Sciences Fund, L.P. are affiliated entities. MGP Advisors Limited (“MGP”) is the general partner of Special Situations Fund III, QP, L.P. AWM Investment Company, Inc. (“AWM”) is the general partner of MGP and the investment adviser to Special Situations Fund III, QP, L.P. and Special Situations Life Sciences Fund, L.P. Austin W. Marx and David M. Greenhouse are the principal owners of MGP and AWM. Through their control of MGP and AWM, Messrs. Marx and Greenhouse share voting and investment control over the portfolio securities of each of the funds listed above.

## PLAN OF DISTRIBUTION

The Selling Shareholders, which as used in this prospectus includes donees, pledgees, transferees or other successors-in-interest selling Shares or interests in Shares received after the date of this prospectus from a Selling Shareholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of the Shares or interests in the Shares on any stock exchange, market or trading facility on which the Shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The Selling Shareholders may use any one or more of the following methods when disposing of Shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the Shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales effected after the date the registration statement of which this prospectus is a part is declared effective by the SEC;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- agreement between broker-dealers and the Selling Shareholders to sell a specified number of the Shares at a stipulated price per share; and
- a combination of any such methods of sale.

The Selling Shareholders may, from time to time, pledge or grant a security interest in some or all of the Shares owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the Shares, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of Selling Shareholders to include the pledgee, transferee or other successors-in-interest as Selling Shareholders under this prospectus. The Selling Shareholders also may transfer the Shares in other circumstances, in which case the transferees, pledgees or other successors-in-interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of the Shares or interests therein, the Selling Shareholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The Selling Shareholders may also sell Shares short and deliver Shares to close out their short positions, or loan or pledge the Shares to broker-dealers that in turn may sell these securities. The Selling Shareholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities that require the delivery to such broker-dealer or other financial institution of Shares offered by this prospectus, which Shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the Selling Shareholders from the sale of the Shares offered by them will be the purchase price of the Shares less discounts or commissions, if any. Each of the Selling Shareholders reserves the right to accept

and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of Shares to be made directly or through agents. We will not receive any of the proceeds from this offering. Upon any exercise of the Warrants by payment of cash, however, we will receive the exercise price of the Warrants.

The Selling Shareholders also may resell all or a portion of the Shares in open market transactions in reliance on Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule.

The Selling Shareholders and any underwriters, broker-dealers or agents that participate in the sale of the Shares or interests therein may be deemed “underwriters” within the meaning of Section 2(11) of the Securities Act. Specifically, the Selling Shareholders who are registered broker-dealers are deemed to be “underwriters” within the meaning of the Securities Act. In addition, Selling Shareholders who are affiliates of registered broker-dealers may be deemed to be “underwriters” within the meaning of the Securities Act if such Selling Shareholder (i) did not acquire the Shares in the ordinary course of business or (ii) had any agreement or understanding, directly or indirectly, with any person to distribute the Shares. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the Shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act, and such Selling Shareholders may be subject to certain additional regulations and statutory liabilities under the Securities Act and the Exchange Act. To our knowledge and based on information we received from the Selling Shareholders, (i) each Selling Shareholder that is a registered broker-dealer or affiliated with a registered broker-dealer acquired the Shares in the ordinary course of business, (ii) such Selling Shareholder did not have any agreement or understanding, directly or indirectly, with any person to distribute the Shares, and (iii) no such Selling Shareholder received any securities as underwriting compensation. However, Pacific Growth Equities, LLC, an affiliate of Pacific Growth Equity Management, LLC, received a warrant to purchase approximately 25,000 shares of our common stock as part of its compensation for acting as the placement agent in connection with the private placement. We are also not aware of any underwriting plan or agreement, underwriters’ or dealers’ compensation, or passive market making or stabilizing transactions involving the purchase or distribution of the Shares.

Any discounts, commissions, concessions or profit the Selling Shareholders earn on any resale of the Shares may be underwriting discounts and commissions under the Securities Act. Selling Shareholders who are “underwriters” within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the Shares to be sold, the names of the Selling Shareholders, the respective purchase prices and public offering prices, the names of any agents, dealers or underwriters, any applicable commissions or any discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or a post-effective amendment to the registration statement that includes this prospectus, or, if appropriate, a filing pursuant to the Exchange Act.

In order to comply with the securities laws of some states, if applicable, the Shares may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the Shares may not be sold unless they have been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the Selling Shareholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of Shares in the market and to the activities of the Selling Shareholders and their affiliates. In addition, to the extent applicable, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the Selling Shareholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The Selling Shareholders may indemnify any broker-dealer that participates in transactions involving the sale of the Shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the Selling Shareholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the Shares offered by this prospectus.

We have agreed with the Selling Shareholders to keep the registration statement of which this prospectus constitutes a part effective until the earlier of:

- such time as all of the Shares covered by this prospectus have been disposed of pursuant to and in accordance with the registration statement, and
- the date on which the Shares may be sold pursuant to Rule 144 of the Securities Act.

## LEGAL MATTERS

The validity of the Shares covered by this prospectus was passed upon by Orrick, Herrington & Sutcliffe LLP, Seattle, Washington.

## EXPERTS

Ernst & Young LLP, an independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2005, and management's assessment of the effectiveness of our internal control over financial reporting as of December 31, 2005, as set forth in their reports, which are incorporated by reference in this prospectus and registration statement. Our consolidated financial statements and management's assessment are, and audited consolidated financial statements and management's assessments to be included in subsequently filed documents will be, incorporated by reference in reliance on Ernst & Young LLP's reports (to the extent covered by consents filed with the SEC), given on their authority as experts in accounting and auditing.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain forward-looking statements that involve risks and uncertainties. Forward-looking statements include statements about our product development and commercialization goals and expectations, potential market opportunities, our plans for and anticipated results of our clinical development activities and the potential advantage of our product candidates, our future cash requirements and the sufficiency of our cash and cash equivalents to meet these requirements, our ability to raise capital when needed and other statements that are not historical facts. Words such as "may," "will," "believes," "estimates," "expects," "anticipates," "plans" and "intends," or statements concerning "potential" or "opportunity" and other words of similar meaning or the negative thereof, may identify forward-looking statements, but the absence of these words does not mean that the statement is not forward-looking. In making these statements, we rely on a number of assumptions and make predictions about the future. Our actual results could differ materially from those stated in, or implied by, forward-looking statements for a number of reasons, including the risks described in the section entitled "Risk Factors" beginning on page 4 of this prospectus.

You should not unduly rely on these forward-looking statements, which speak only to our expectations as of the date of this prospectus. We undertake no obligation to publicly revise any forward-looking statement after the date of this prospectus to reflect circumstances or events occurring after the date of this prospectus or to conform the statement to actual results or changes in our expectations. You should, however, review the factors, risks and other information we provide in the reports we file from time to time with the SEC, including after the date of this prospectus.

## WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. The SEC's website contains reports, proxy statements and other information regarding issuers, such as us, that file electronically with the SEC. You may also read and copy any document we file with the SEC at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of the documents at prescribed rates by writing to the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information about its public reference room.

The SEC allows us to "incorporate by reference" into this prospectus the information and reports we file with the SEC. This means that we can disclose important information to you by referring to another document. The information that we incorporate by reference is considered to be part of this prospectus, and later information that we file with the SEC automatically updates and supersedes this information. We incorporate by reference the following documents:

- Our annual report on Form 10-K for the year ended December 31, 2005, which contains audited consolidated financial statements for the most recent fiscal year for which such statements have been filed;
- Our quarterly reports on Form 10-Q for the quarters ended March 31, 2006, June 30, 2006 and September 30, 2006;
- Our current reports on Form 8-K filed on January 19, 2006, January 25, 2006, March 8, 2006, March 10, 2006, March 15, 2006, March 16, 2006, April 28, 2006, May 9, 2006, May 12, 2006, June 2, 2006, June 16, 2006, June 21, 2006, June 28, 2006, August 18, 2006, September 5, 2006, September 20, 2006, November 1, 2006, November 7, 2006, November 15, 2006, December 14, 2006, January 8, 2007 and January 11, 2007; and
- The description of our common stock contained in our registration statements on Form 8-A filed on April 26, 1994 and October 22, 1996 under Section 12(g) of the Exchange Act, including any amendments or reports filed for the purpose of updating that description.

We also incorporate by reference into this prospectus all documents we file under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (a) after the initial filing date of the registration statement of which this prospectus is a part and before the effectiveness of the registration statement and (b) after the effectiveness of the registration statement and before the Shares offered by this prospectus have been sold. The most recent information that we file with the SEC automatically updates and supersedes older information. The information contained in any such filing will be deemed to be a part of this prospectus as of the date on which the document is filed, and any older information that has been modified or superseded will not be deemed to be a part of this prospectus. Unless specifically stated to the contrary, none of the information that we disclose under Item 9 or 12 of any Current Report on Form 8-K that we may from time to time furnish to the SEC will be incorporated by reference into, or otherwise included in, this prospectus.

Upon request, we will provide to each person who receives this prospectus a copy of the information that has been incorporated by reference into this prospectus. Please direct your request, either in writing or by telephone, to the Secretary, Targeted Genetics Corporation, 1100 Olive Way, Suite 100, Seattle, Washington 98101, (206) 623-7612.

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front of this prospectus.

NO PERSON HAS BEEN AUTHORIZED IN CONNECTION WITH ANY OFFERING MADE UNDER THIS PROSPECTUS TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATION OTHER THAN THOSE CONTAINED IN THIS PROSPECTUS. IF GIVEN OR MADE, SUCH INFORMATION OR REPRESENTATIONS MUST NOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY US OR THE SELLING SHAREHOLDERS. NEITHER THE DELIVERY OF THIS PROSPECTUS NOR ANY SALE MADE UNDER THIS PROSPECTUS WILL, UNDER ANY CIRCUMSTANCES, IMPLY THAT THERE HAS BEEN NO CHANGE IN OUR AFFAIRS OR THAT THE INFORMATION IN THIS PROSPECTUS IS CORRECT AS OF ANY TIME SUBSEQUENT TO THE DATE AS OF WHICH THE INFORMATION IS GIVEN. THIS PROSPECTUS DOES NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY ANY OF THE SECURITIES OFFERED UNDER THIS PROSPECTUS TO ANYONE IN ANY JURISDICTION IN WHICH THE OFFER OR SOLICITATION IS NOT AUTHORIZED OR IN WHICH THE PERSON MAKING THE OFFER OR SOLICITATION IS NOT QUALIFIED TO DO SO OR TO ANYONE TO WHOM IT IS UNLAWFUL TO MAKE THE OFFER OR SOLICITATION.

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**PART II****INFORMATION NOT REQUIRED IN PROSPECTUS****Item 14. Other Expenses of Issuance and Distribution**

The following table lists the costs and expenses payable by the registrant in connection with the sale of the shares of common stock covered by this registration statement. All amounts are estimates except for the SEC registration fee:

|                                  |                  |
|----------------------------------|------------------|
| SEC registration fee             | \$ 1,298         |
| Printing and engraving expenses  | 5,000            |
| Legal fees and expenses          | 15,000           |
| Accounting fees and expenses     | 15,000           |
| Transfer agent fees and expenses | 5,000            |
| Miscellaneous fees and expenses  | 5,000            |
| <b>Total</b>                     | <b>\$ 46,298</b> |

**Item 15. Indemnification of Directors and Officers**

Sections 23B.08.500 through 23B.08.600 of the Washington Business Corporation Act, or WBCA, authorize a court to award, or a corporation's board of directors to grant, indemnification to directors and officers on terms sufficiently broad to permit indemnification under certain circumstances for liabilities arising under the Securities Act. Section 10 of the registrant's bylaws provides for indemnification of the registrant's directors, officers, employees and agents to the maximum extent permitted by Washington law. The registrant maintains a liability insurance policy for this purpose.

Section 23B.08.320 of the WBCA authorizes a corporation to limit a director's liability to the corporation or its shareholders for monetary damages for acts or omissions as a director, except in certain circumstances involving intentional misconduct, knowing violations of law or illegal corporate loans or distributions, or any transaction from which the director personally receives a benefit in money, property or services to which the director is not legally entitled. Article 11 of the registrant's Restated Articles of Incorporation contains provisions implementing, to the fullest extent permitted by Washington law, these limitations on a director's liability to the registrant and its shareholders.

The registrant has entered into indemnification agreements with certain of its officers and directors. The indemnification agreements provide the registrant's officers and directors with indemnification to the fullest extent permitted by applicable law.

## Item 16. Exhibits

| <u>Exhibit No.</u> | <u>Description</u>   |
|--------------------|--|
| 5.1*               | Opinion of Orrick, Herrington & Sutcliffe LLP, counsel to Targeted Genetics Corporation, regarding the legality of the shares of common stock being registered |
| 23.1               | Consent of Independent Registered Public Accounting Firm   |
| 23.2*              | Consent of Orrick, Herrington & Sutcliffe LLP (contained in Exhibit 5.1)   |
| 24.1*              | Power of attorney  |

\* Previously filed.

## Item 17. Undertakings

(a) 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;
  - (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; and
  - (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 (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the registration statement is on Form S-3 or Form F-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, 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 that remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

Each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statement relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

- (b) The undersigned registrant hereby undertakes that, for the purpose of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered herein and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 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 SEC such indemnification is against public policy as expressed in the Securities Act 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 and will be governed by the final adjudication of such issue.

**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-3 and has duly caused this Amendment No. 1 to registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Seattle, state of Washington, on the 8<sup>th</sup> day of February, 2007.

**TARGETED GENETICS CORPORATION**

By: /s/ H. Stewart Parker

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H. Stewart Parker  
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Amendment No. 1 to registration statement has been signed by the following persons in the capacities indicated below on the 8<sup>th</sup> day of February, 2007.

**Signature**

**Title**

/s/ H. Stewart Parker  
H. Stewart Parker

President, Chief Executive Officer and Director  
(Principal Executive Officer)

/s/ David J. Poston  
David J. Poston

Vice President Finance and Chief Financial Officer  
(Principal Financial and Accounting Officer)

\* /s/ Jack L. Bowman  
Jack L. Bowman

Director

\* /s/ Jeremy L. Curnock Cook  
Jeremy L. Curnock Cook

Director

\* /s/ Joseph M. Davie  
Joseph M. Davie

Director

\* /s/ Roger L. Hawley  
Roger L. Hawley

Director

Nelson L. Levy

Director

\* /s/ MICHAEL S. PERRY  
Michael S. Perry

Director

\* By: /s/ David J. Poston

Attorney-in-Fact

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David J. Poston



**EXHIBIT INDEX**

| <b><u>Exhibit<br/>Number</u></b> | <b><u>Description</u></b>   |
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\* Previously filed.

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